

S3-Leitlinie

Verhinderung von Zwang – Prävention und Therapie aggressiven Verhaltens bei Erwachsenen

Leitlinienreport zur Version 3.0

Federführende Fachgesellschaft:

Deutsche Gesellschaft für Psychiatrie und Psychotherapie,
Psychosomatik und Nervenheilkunde e. V. (DGPPN)

AWMF-Registernummer: [038-022](#)

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Leitlinienreport

1. Geltungsbereich und Zweck

Begründung für die Auswahl des Leitlinienthemas

- o Aggressives Verhalten ist ein im Zusammenhang mit psychischen Erkrankungen im Vergleich zur Allgemeinbevölkerung gehäuft auftretendes Phänomen (Fazel et al. 2009a, Witt et al. 2013). Angesichts der Tatsache, dass der Beginn der Psychiatrie in den Geschichtsbüchern auf die Befreiung der Geisteskranken in der Pariser Salpêtrière aus ihren Ketten datiert wird, ist der Umgang mit Gewalt und Zwang wohl das älteste Problem psychiatrischer Institutionen. Während dies über lange Zeit weitgehend tabuisiert wurde, steht heute der Anspruch der psychisch erkrankten Menschen auf eine bestmögliche Versorgung unter den Aspekten sowohl der Sicherheit als auch der Menschenwürde und Überlegungen der Sicherheit für die Beschäftigten im Gesundheitswesen im Vordergrund. Damit wird der Umgang mit Aggressivität und Zwang heutzutage zu einem wichtigen Aspekt der Behandlungsqualität. Diese Herausforderung wird zeitgemäß mit der Erstellung von Leitlinien und deren Implementierung in die klinische Praxis angenommen. 2005 publizierte das britische National Institute of Clinical Excellence (NICE) nach umfangreichen Vorarbeiten die "Clinical Practice Guidelines for Violence: The short term management of disturbed/violent behaviour in psychiatric in-patient settings and emergency departments" unter Beteiligung von psychisch erkrankten Menschen, deren Angehörigen und zahlreichen professionellen Gruppen. Im Jahre 2015 erschien eine Aktualisierung dieser Leitlinie (NICE 2015). Die hier vorliegende S3-Leitlinie wurde im Auftrag der Deutschen Gesellschaft für Psychiatrie und Psychotherapie, Psychosomatik und Nervenheilkunde erstellt und stellt eine Aktualisierung und Erweiterung der im Jahre 2018 erschienenen S3-Leitlinie „Verhinderung von Zwang: Prävention und Therapie aggressiven Verhaltens bei Erwachsenen (AWMF-Register Nr. 038-022) dar.

Zielorientierung der Leitlinie

- o Diese Leitlinie soll den Professionellen in Kliniken und gemeindepsychiatrischen Institutionen, den psychisch erkrankten Menschen und ihren Angehörigen gleichermaßen einen Überblick über den gegenwärtigen Stand des Wissens und eine gute klinische Praxis vermitteln. Letztere leitet sich einerseits aus den wissenschaftlichen Erkenntnissen, andererseits aus ethischen Überlegungen und den gesetzlichen Bestimmungen ab. Im Hinblick auf die unterschiedlichen Zielgruppen wurde versucht, eine möglichst allgemeinverständliche Sprache zu benutzen und unnötigen Einsatz von Fachterminologie zu vermeiden. Ein Ziel aller Leitlinien ist die Implementierung in die klinische Praxis und damit auch die Verbesserung dieser Praxis.

Ziele der Leitlinie

Ziel dieser Behandlungsleitlinie ist es, Empfehlungen zu Diagnose und Therapie von aggressivem Verhalten auf der Basis aktueller wissenschaftlicher Erkenntnisse und guter Versorgungspraxis zur Verfügung zu stellen. Es soll damit die Grundlage geschaffen werden, Zwangsmaßnahmen und Zwangsunterbringungen zu reduzieren oder zu vermeiden. Falls deren Anwendung unumgänglich ist, ist die Menschenwürde zu wahren und Rechtssicherheit zu gewährleisten. Interventionen sind so kurz und so wenig eingreifend wie möglich zu halten und psychische oder physische Traumata zu vermeiden.

- o Den Mitarbeitenden der Leitliniengruppe war bei der Erarbeitung der Leitlinie bewusst, dass dieses Thema in der Öffentlichkeit, aber auch innerhalb der Psychiatrie außerordentlich kontrovers diskutiert wird. Sowohl die Psychiatrie-Erfahrenen selbst als auch deren Angehörige, politisch Verantwortliche auf verschiedenen Ebenen (CPT, Antwort der Bundesregierung 2005, Gesundheitsministerkonferenz 2007), die Vertreter verschiedener Medien kritisieren z. T. konstruktiv und fundiert, z. T. polemisch und wenig faktenorientiert, die in der psychiatrischen Versorgung tätigen Professionellen und die von ihnen praktizierten (Zwangs-)Behandlungen. Die vorliegende Leitlinie fasst das aktuell verfügbare, wissenschaftlich gesicherte Wissen zum Thema „Umgang mit aggressivem Verhalten in der Psychiatrie“ in verschiedene Evidenzgrade eingeteilt zusammen. Es sollte berücksichtigt werden, dass aus dieser Leitlinie abgeleitete Empfehlungen stets im Einzelfall zu überprüfen sind. Eine individuelle Behandlung, möglichst im Konsens mit dem Betroffenen, ist erstrebenswert. Beim Thema „Aggressives Verhalten“ sind Auslöser, Ursachen und Interaktionen komplex ineinander verwoben. Nicht nur psychisch erkrankte Menschen können sich aggressiv verhalten, auch psychiatrische Einrichtungen können im Sinne sog. „institutionelle Gewalt“ Zwang ausüben und Aggressionen hervorrufen. Auch kann es vorkommen, dass sich Mitarbeitende sowie Angehörige z. B. verbal aggressiv verhalten.

Patientenzielgruppe

- o In der Leitlinie soll es um die Behandlung erwachsener Menschen vom 18. Lebensjahr mit psychischen Erkrankungen (Erkrankungen aus dem Kapitel F der ICD-10) gehen, die im Rahmen ihrer Erkrankung aggressiv oder gewalttätig werden oder die von Zwangsmaßnahmen betroffen werden. Die Situation bei Kindern und Jugendlichen wird in der Leitlinie nicht berücksichtigt. Die Leitlinie berücksichtigt verschiedene psychiatrische Settings (ambulant, teilstationär und stationär). Der Schwerpunkt liegt auf der Behandlung psychisch erkrankter Menschen außerhalb des Maßregelvollzugs. Wo Erkenntnisse aus forensischen Populationen hierfür relevant sind, werden sie aufgeführt.

Versorgungsbereich

- o Die Problematik aggressiven Verhaltens ebenso wie die der Zwangsmaßnahmen betrifft in erster Linie psychiatrische Krankenhäuser. Mit

zunehmender Deinstitutionalisierung ist aber immer deutlicher geworden, dass Krankenhausbehandlung nur einen vergleichsweise kleinen Ausschnitt der psychiatrischen Versorgung darstellt, die heute überwiegend als Gemeindepsychiatrie stattfindet. Demzufolge ist die Problematik des Umgangs mit Aggression und Gewalt genauso wie die sog. "institutionelle Gewalt" immer weniger auf Krankenhäuser beschränkt, sondern auch in sonstigen gemeindepsychiatrischen Institutionen, in der ambulanten Versorgung und im häuslichen Bereich bzw. Wohnumfeld von Bedeutung. Die auch heute noch vielfach zu beobachtende Gewohnheit, dass aggressives Verhalten von psychisch erkrankten Menschen in betreuten Wohneinrichtungen als zwingender Grund für eine Krankenhauseinweisung angesehen wird und folglich auch allein das Krankenhaus der Ort ist, an dem institutionelle Gewalt stattfindet, erscheint fragwürdig und wird vermutlich angesichts künftiger unter Kostendruck stattfindender Veränderungen des Versorgungssystems so nicht mehr zu halten sein. Allerdings bezieht sich die gegenwärtig vorliegende wissenschaftliche Literatur entsprechend dem Schwerpunkt der Forschungskapazitäten noch unverhältnismäßig stark auf den stationären Bereich, weshalb auch diese Leitlinie unvermeidlich bzgl. der vorliegenden Evidenz dort ihren Schwerpunkt hat. Dennoch können unter Berücksichtigung der anderen rechtlichen und institutionellen Rahmenbedingungen eine Reihe von Ergebnissen und Empfehlungen auf den außerklinischen bis hin zum häuslichen Bereich übertragen werden.

Anwenderzielgruppe/Adressaten

Zielgruppen der vorliegenden Leitlinie sind:

- Die in der Versorgung psychisch erkrankter Menschen Tätigen (u. a. Psychiaterinnen und Psychiater, Nervenärztinnen und Nervenärzte, klinische Psychologinnen und Psychologen, ärztliche und psychologische Psychotherapeutinnen und Psychotherapeuten, Pflegefachpersonen, Künstlerische Therapeutinnen und Therapeuten)
- Menschen mit psychischen Erkrankungen und Menschen aus deren Umfeld

Die Leitlinie dient außerdem der Information von:

- Allgemeinärztinnen und Allgemeinärzten, Sozialarbeiterinnen und Sozialarbeiter, Ergotherapeutinnen und Ergotherapeuten, Rettungskräften
- Politischen Entscheidungsträgern, Medien und der Allgemeinen Öffentlichkeit

2. Zusammensetzung der Leitliniengruppe: Beteiligung von Interessensgruppen

Repräsentativität der Leitliniengruppe: Beteiligte Berufsgruppen

S2k S3

Die Leitlinie wurde von der Leitliniensteuerungsgruppe bestehend aus Ärztinnen und Ärzten (darunter jeweils eine Vertreter*in aus Österreich/Schweiz),, , einem Psychologen, einer Fachkrankenschwester, einer Betroffenenvertreterin, einem Angehörigenvertreter und einer Juristin koordiniert. Dabei wurden diese von wissenschaftlichen Hilfskräften und weiter medizinischen Dokumentarin unterstützt.

Name, Rolle	Klinik, Fachgesellschaft oder Organisation
PD Dr. med. Sophie Hirsch Ärztin	ZfP Südwürttemberg, Abteilung Psychiatrie I der Universität Ulm Ravensburg/Ulm
Thomas Klein, M. Sc. Psychologe	ZfP Südwürttemberg, Abteilung Psychiatrie I der Universität Ulm Ravensburg/Ulm
Prof. Dr. med. Tilman Steinert Arzt	ZfP Südwürttemberg, Abteilung Psychiatrie I der Universität Ulm Ravensburg/Ulm
Prof. Dr. med. Thomas Pollmächer Arzt	Kbo-Donau-Altmühl-Klinikum, Zentrum für psychische Gesundheit Ingolstadt
PD Dr. med. Anastasia Theodoridou Ärztin, Vertreterin für die Schweiz	Psychiatrie Baselland Liestal
Prim. Clin. Assoc. Prof. PD DDr. Gernot Fugger, MBA Arzt, Vertreter für Österreich	Universitätsklinikum St. Pölten - Lilienfeld St. Pölten
Prof. Dr. med. Jürgen L. Müller Arzt, Vertreter für die forensische Psychiatrie	Asklepios Klinik für Forensische Psychiatrie und Psychotherapie Asklepios Fachklinikum Göttingen
PD Dr. med. Jakov Gather Arzt, Vertreter für die Ethik in der Psychiatrie	LWL-Universitätsklinikum Bochum Bochum
Brigitte Richter Betroffenenvertreterin	Pandora Selbsthilfe Nürnberg
Prof. Dr. jur. Tanja Henking, LL.M. Juristin	Hochschule für angewandte Wissenschaften Würzburg-Schweinfurt Fakultät Angewandte Sozialwissenschaften Würzburg
Karl-Heinz Möhrmann Angehörigenvertreter	Landesverband Bayern der Angehörigen psychisch Kranker e. V. München
Dorothea Sauter Vertreterin für die Pflege	LWL-Klinik für Psychiatrie, Psychotherapie und psychosomatische Medizin Münster

Die resultierenden Empfehlungen wurden in der Konsensusgruppe abgestimmt. In dieser waren die nachfolgend genannten wissenschaftlichen Fachgesellschaften und Organisationen (jeweils mit ihren Mandatsträgern und Berufszugehörigkeit aufgeführt) vertreten. Es wurden Organisationen und Verbände um Beteiligung gebeten, die nach Einschätzung der DGPPN Bezugspunkte zum Thema der Leitlinie haben. Einige antworteten nicht bzw. teilten mit, dass sie nicht teilnehmen könnten.

Nicht direkt in die Leitlinienerstellung einbezogene Experten aus der Betreuung geistig behinderter Menschen (Dr. Michael Seidel) und aus dem gerontopsychiatrischen Bereich (Prof. Dr., Dr. Katharina Geschke, PD Dr. Christine Thomas) wurden beratend hinzugezogen und erhielten relevante Teile des Leitlinientexts mit Empfehlungen vorab zu einem Review.

Wir bedanken uns herzlich für ihre Mitarbeit an diesen Leitlinien!

In der Konsensuskonferenz vertretene Organisationen und ihre Vertreter

Beteiligte Fachgesellschaft und Organisation (alphabetisch)	Personen
Akademie für Ethik in der Medizin e.V. (AEM)	Dr. Matthé Scholten
Akademische Fachgesellschaft Psychiatrische Pflege des Schweizerischen Vereins für Pflegewissenschaft (VfP)	Prof. Dr. Dirk Richter
Aktion Psychisch Kranke e. V. (APK)	Matthias Rosemann Prof. Dr. Peter Brieger Prof. Dr. Katarina Stengler
Arbeitskreis der ChefärztInnen der Kliniken für Psychiatrie und Psychotherapie an Allgemeinkrankenhäusern (ACKPA)	Dr. Lieselotte Mahler Dr. Richard Serfling
Berufsverband Deutscher Nervenärzte (BVDN)	Dr. Roland Urban
Berufsverband Deutscher Psychiater (BVDP)	Dr. Roland Urban
Berufsverband Deutscher Psychologinnen und Psychologen e. V. (BDP)	Paola Delgado-Klamroth Ralph Schliewenz
Betreuungsgerichtstag e. V. (BGT)	Prof. Dr. Dagmar Brosey Annette Loer
Bundesarbeitsgemeinschaft Gemeindepsychiatrischer Verbände e. V. (BAG-GPV)	Dr. Klaus Obert
Bundesarbeitsgemeinschaft Künstlerische Therapien e.V. (BAG KT)	Mona Dittrich Tina Mallon
Bundesdirektorenkonferenz Psychiatrischer Krankenhäuser e. V. (BDK)	Prof. Dr. Birgit Janssen Prof. Dr. Florian Metzger Dr. Sylvia Claus
Bundesfachverband Leitender Krankenpflegepersonen in der Psychiatrie e. V. (BFLK)	Heidrun Lundie

Bundesinitiative Ambulante Psychiatrische Pflege e. V. (BAPP)	Peter Roddau
Bundesnetzwerk Selbsthilfe seelische Gesundheit e. V. (Netz G)	Rudolf Starzengruber
Bundesverband der Angehörigen psychisch Kranker e. V. (BApK)	Siegfried Haller
Bundesverband der Ärztinnen und Ärzte des Öffentlichen Gesundheitsdienstes e. V. (BVÖGD)	Dr. Matthias Albers Monica Schol-Tadic
Bundesverband der Berufsbetreuer/innen e. V. (BdB)	Dr. Anja Pfeifer Dominic Bauer
Dachverband Gemeindepsychiatrie e.V. (DVGP)	Nils Greve Tina Lindemann
Deutsche Alzheimer Gesellschaft e. V. Selbsthilfe Demenz (DAIzG)	Prof. Dr. René Thyrian Saskia Weiß
Deutsche Fachgesellschaft für Psychiatrische Pflege e. V. (DFPP)	Gernot Walter Prof. Dr. André Nienaber Dorothea Sauter
Deutsche Gesellschaft für Biologische Psychiatrie e.V. (DGBP)	Prof. Dr. Oliver Pogarell Prof. Dr. Alkomiet Hasan
Deutsche Gesellschaft für Bipolare Störung (DGBS)	Dorothea Schweigard Horst Harich
Deutsche Gesellschaft für Gerontopsychiatrie und -psychotherapie (DGGPP)	Dr. Jochen Tenter
Deutsche Gesellschaft für Psychiatrie und Psychotherapie, Psychosomatik und Nervenheilkunde e. V. (DGPPN)	Prof. Dr. Thomas Pollmächer
Deutsche Gesellschaft für Soziale Psychiatrie e. V. (DGSP)	Dr. Wassili Hinüber Dr. Stephan Debus
Deutsche Gesellschaft für Suchtforschung und Suchttherapie e. V. (DG-Sucht)	Prof. Dr. Oliver Pogarell
Deutschsprachige Gesellschaft für Psychotraumatologie (DeGPT)	Dr. Beate Eisenführ
Die Deutsche Gesellschaft für Pflegewissenschaft e. V. (DGP)	Prof. Markus Witzmann Dr. Michael Mayer
Hilfe für Angehörige und Freunde psychisch Erkrankter (HPE Österreich)	Edwin Ladinser
Österreichische Gesellschaft für Psychiatrie, Psychotherapie und Psychosomatik (ÖGPP)	Prim. Priv.-Doz. DDr. Gernot Fugger, MBA Dr. Matthäus Fellingner
Pandora Selbsthilfe e.V.	Brigitte Richter
Schweizerische Gesellschaft für Psychiatrie, Psychotherapie und Psychosomatik (SGPP)	Anastasia Theodoridou
Schweizerische Gesellschaft für Sozialpsychiatrie (SOPSY)	Matthias Jäger Ralf-Peter Gebhardt

Repräsentativität der Leitliniengruppe: Beteiligung von Patienten . **S2k**

S3

Patientenvertreterinnen waren von Anfang an als Mitglieder der Leitliniensteuerungsgruppe und Autoren an der Erarbeitung der Leitlinie beteiligt (Brigitte Richter), auch ein Angehöriger (Karl-Heinz Möhrmann). So war es möglich, die Sicht psychisch erkrankter Menschen und ihrer Angehörigen bereits bei der Erstellung der Leitlinientexte und der Ableitung der Empfehlungen mit einfließen zu lassen.

In der Konsensuskonferenz waren zwei Betroffenenverbände vertreten: Bundesnetzwerk Selbsthilfe seelische Gesundheit e. V. (Netz G) und Pandora Selbsthilfe e.V.. Die trialogische Deutsche Gesellschaft für Bipolare Störung (DGBS) wurde ebenfalls durch eine Betroffenenvertreterin vertreten. Der Bundesverband der Angehörigen psychisch Kranker e. V. (BApK) und die Hilfe für Angehörige und Freunde psychisch Erkrankter (HPE Österreich) waren ebenfalls in der Konsensuskonferenz vertreten.

5 von höchstens 33 Stimmen (15%) in der Konsensuskonferenz hielten also Betroffene bzw. ihre Angehörigen, starker Konsens gegen psychisch erkrankte Menschen und ihre Angehörigen war nicht möglich.

3. Methodologische Exaktheit

Recherche, Auswahl und Bewertung wissenschaftlicher Belege (Evidenzbasierung)

Formulierung von Schlüsselfragen

In mehreren vorbereitenden Treffen wurde die inhaltliche Struktur der Leitlinie mit der Task Force Patientenautonomie der DGPPN, Professor Falkai, Professor Maier und dem Koordinator dieser Leitlinie, Professor Steinert, diskutiert und abgestimmt.

Folgende Schlüsselfragen sollten mit dieser Leitlinie beantwortet werden:

Welcher Zusammenhang besteht zwischen psychischer Erkrankung, Aggression/Gewalt und Zwang? Wie häufig und unter welchen Bedingungen kommt aggressives Verhalten im Rahmen psychischer Erkrankungen vor?

Wie kann man Zwang im Rahmen psychischer Erkrankungen vermeiden? Welche Interventionen sind geeignet Zwang in psychiatrischen Institutionen zu reduzieren?

Wie kann man aggressives Verhalten und gewalttätige Übergriffe im Rahmen psychischer Erkrankungen vermeiden? Welche pharmakologischen und nicht-pharmakologischen Interventionen sind geeignet aggressives Verhalten im Rahmen psychischer Erkrankungen zu behandeln? Welche strukturellen

Bedingungen können zur Verhinderungen aggressiven Verhaltens in psychiatrischen Kliniken verhindern?

Verwendung existierender Leitlinien zum Thema . S2e S3

Vor den eigenen systematischen Literaturrecherchen wurde eine Recherche nach anderen Leitlinien, die sich mit den Themen Zwang und Gewalt befassen, durchgeführt. Berücksichtigt wurden psychiatrische Leitlinien, die sich mit aggressivem Verhalten beschäftigten. Ausgeschlossen wurden Leitlinien für Kinder- und Jugendliche, Leitlinien, die reines selbstschädigendes/suizidales Verhalten betrachteten und Leitlinien, welche nur Diagnostik/Evaluation aggressiven Verhaltens beinhalteten.

Dazu wurde die internationale Leitliniensammlung guidelines.gov mit den trunkierten Stichworten *aggress** und *violence** durchsucht. Die nachfolgend genannten Leitlinien wurden berücksichtigt.

Großbritannien

National Institute of Clinical Excellence (NICE): NICE Guideline NG10 "Violence and Aggression Short-term management in mental health, health and community settings Updated edition", 2015.

Frankreich

Troubles du Comportement chez les Traumatisés Crâniens: Quelles options thérapeutiques ?

Außerdem wurde die deutsche Leitliniensammlung auf AWMF.org durchgesehen. Alle psychiatrischen S3-Leitlinien, die Angaben zum Umgang mit aggressivem Verhalten enthielten, wurden berücksichtigt.

Deutschland

- Leitlinie Demenz AWMF-Registrierungsnummer: 038-013 S3
- Leitlinie Delir im höheren Lebensalter - Eine transsektoral umsetzbare, interdisziplinär-interprofessionelle Leitlinie zu Delir-Prävention, -Diagnostik und – Therapie beim alten Menschen AWMF-Registrierungsnummer: 109-001 S3
- Leitlinie Bipolare Störung AWMF-Registernummer 038/018 S3
- Leitlinie Schizophrenie AWMF-Registernummer 038/009 S3
- Leitlinie Psychosoziale Therapien bei schweren psychischen Erkrankungen Registrierungsnummer: 038-020 S3
- Alkoholbezogene Störungen: Screening, Diagnose und Behandlung AWMF Registernummer 076-001 S3

Es wurden Leitlinienadaptionen durchgeführt aus den S3-Leitlinien Schizophrenie und Delir im höheren Lebensalter sowie aus der NAGS-Leitlinie (Netzwerk für Aggressions- und Gewaltprävention, Sicherheitsmanagement Deutschland e.V.). Die Qualität dieser Leitlinien wurden mit Hilfe des Agree-II-Instruments bewertet.

S3-Leitlinien Schizophrenie Living Guideline	Punkte (erreicht / gesamt möglich)
Domäne 1: Geltungsbereich und Zweck	17/21

S3-Leitlinien Schizophrenie Living Guideline	Punkte (erreicht / gesamt möglich)
Domäne 2: Beteiligung von Interessengruppen	18/21
Domäne 3: Genauigkeit der LL-Entwicklung	52/56
Domäne 4: Klarheit der Gestaltung	18/21
Domäne 5: Anwendbarkeit	23/28
Domäne 6: Redaktionelle Unabhängigkeit	13/14
Gesamtbewertung	6/7, zur Adaptation geeignet
S3-LL Derlir im höheren Lebensalter	
Domäne 1: Geltungsbereich und Zweck	21/21
Domäne 2: Beteiligung von Interessengruppen	17/21
Domäne 3: Genauigkeit der LL-Entwicklung	56/56
Domäne 4: Klarheit der Gestaltung	17/21
Domäne 5: Anwendbarkeit	22/28
Domäne 6: Redaktionelle Unabhängigkeit	13/14
Gesamtbewertung	6/7, zur Adaptation geeignet
NAGS-LL	
Domäne 1: Geltungsbereich und Zweck	14/21
Domäne 2: Beteiligung von Interessengruppen	11/21
Domäne 3: Genauigkeit der LL-Entwicklung	16/56
Domäne 4: Klarheit der Gestaltung	16/21
Domäne 5: Anwendbarkeit	13/28
Domäne 6: Redaktionelle Unabhängigkeit	5/14
Gesamtbewertung	2/7, zur Adaptation geeignet i. S. einer Expertenmeinung

Wenn Leitlinienadaptation durchgeführt wurden, ist dies bei den entsprechenden Hintergrundtexten und Empfehlungen in der Leitlinie explizit aufgeführt.

Systematische Literaturrecherche S2e S3

Es wurde primär entschieden, zu insgesamt drei Themen systematische Reviews durchzuführen:

- Medikation zur Behandlung aggressiven Verhaltens (als Update der letzten Leitlinie)
- Reduktion von freiheitsbeschränkenden Zwangsmaßnahmen (neu)
- Mitarbeiterschulungen und Deeskalationstechniken (als Update der letzten Leitlinie).

Im Verlauf wurde entschieden, ein viertes systematisches Review durchzuführen zu häuslicher Gewalt gegen Angehörige psychisch erkrankter Menschen, da hier in der alten Leitlinie eine thematische Lücke entdeckt wurde.

Zu den übrigen Themen wurde auf bereits bestehende Reviews zurückgegriffen und es wurden orientierende Suchen durchgeführt. Zusätzlich wurden die Experten der Leitliniensteuerungsgruppe und die externen Experten vor Beginn der Erstellung der jeweiligen Kapitel angeschrieben und gebeten, relevante Literatur aus ihren Forschungsgebieten einzureichen.

Als methodische Unterstützung wurde das Recherchemanual der AWMF sowie die wissenschaftliche Bibliothek Weissenau und die Universitätsbibliothek der Universität Ulm mit einbezogen.

Für jedes der im Rahmen der Leitlinie erstellten Reviews und für jede jeweils abgefragte Datenbank wurde ein eigener Suchstring erstellt. Suchstrings konnten nicht einfach von einer auf die andere Datenbank übernommen werden, da die verschiedenen Datenbanken nicht auf die gleichen Thesauri zugreifen und nicht dieselben Operatoren verstehen.

Die systematische Suche wurde so geplant, durchgeführt und dokumentiert, dass sie jederzeit repliziert und nachvollzogen werden kann.

Auswahl der Datenbanken

Zu Beginn des systematischen Reviews wurde festgelegt, welche Datenbanken herangezogen und durchsucht werden sollen. Entsprechend der Empfehlungen des Deutschen Cochrane Zentrums, der Arbeitsgemeinschaft der Wissenschaftlichen Medizinischen Fachgesellschaften (AWMF) und des Ärztlichen Zentrums für Qualität in der Medizin (ÄZQ) wurden mindestens zwei unterschiedliche Datenbanken durchsucht: Medline und Cinahl (Deutsches Cochrane Zentrum 2013). Medline ist die Datenbank der US-amerikanischen National Library of Medicine und enthält Zitationen und Zusammenfassungen internationaler biomedizinischer Zeitschriftenartikel. Medline wurde über die Oberfläche Pubmed im Internet kostenlos abgerufen (US National Library of Medicine 2017a). Da es sich bei Zwangsmaßnahmen vor allem im angloamerikanischen Bereich um ein Thema handelt, das vorwiegend von pflegewissenschaftlicher und weniger von medizinischer Seite beforscht wird, wurde die Suche in Medline um eine Suche in Cinahl ergänzt. Die kostenpflichtige Datenbank Cinahl wurde über eine Lizenz des Universitätsklinikums Ulm über die Oberfläche EbscoHost verwendet. Bei Cinahl handelt es sich nach Angaben der Betreiber um die Datenbank mit der größten Sammlung an pflege- und gesundheitswissenschaftlichen Artikeln. Durch die Kombination dieser beiden Datenbanken soll eine möglichst umfassende Suche mit Ergebnissen von Wissenschaftlerinnen und Wissenschaftlern aus verschiedenen Disziplinen und Ländern erreicht werden.

Für das systematische Review über Gewalt gegen Angehörige wurden weitere psychologische Datenbanken (PsycINFO, PsycDEXPLUS) sowie die mehr europäisch ausgerichtete Datenbank EMBASE einbezogen.

Neben Primärliteratur wurden bei der systematischen Suche auch systematische Reviews anderer Autoren gefunden. Die Literaturverzeichnisse der Reviews mit klar beschriebener und gut nachvollziehbarer Methodik wurden durchgesehen und so

weitere wichtige, durch die systematische Datenbankabfrage noch nicht erfasste Arbeiten eingeschlossen, eine für systematische Reviews ebenfalls empfohlene Methode („Referenzrecherche“, Horsley et al. 2011). Eingeschlossen wurde dann nur die jeweilige Primärliteratur aus der systematischen Datenbankabfrage und der Referenzrecherche. Das heißt, die Reviews selbst wurden ausgeschlossen, um zu vermeiden, dass eine Originalstudie zwei- oder mehrfach eingeschlossen wird, wenn sie in mehreren Reviews eingeschlossen wurde.

Auswahl des Literaturverwaltungsprogramms

Zum Sammeln und Ordnen der Literaturstellen wurde das Literaturverwaltungs- und Wissensmanagementprogramm Citavi in der Version 5.3 mit einer Serverlizenz verwendet.

PICO-Schema und Suchstring

Die Erstellung des Suchstrings erfolgte aus der formulierten Fragestellung und den vorab festgelegten Ein- und Ausschlusskriterien mit Hilfe des PICO-Schemas als Zwischenschritt (Liberati et al. 2009). PICO steht für Person, Intervention, Comparison (Vergleichsintervention bzw. -gruppe) und Outcome (Endpunkt). Die Ein- und Ausschlusskriterien, wurden danach sortiert, ob sie sich auf den zu untersuchenden Personenkreis P (z. B. erwachsene Menschen mit einer schweren psychischen Erkrankung), die zu untersuchende Intervention I (z. B. Interventionen zur Reduktion von Zwang) oder den gesuchten klinischen Endpunkt O (Outcome, z. B. Dauer der Zwangsmaßnahme) bezogen.

Nach Möglichkeit wurde jedes Ein- und Ausschlusskriterium mit einem oder mehreren Stichwörtern umschrieben. Diese Stichwörter waren in englischer Sprache, da die verwendeten Datenbanken vornehmlich englischsprachige Literatur bzw. Literatur, bei welcher zumindest Titel und Zusammenfassung („Abstract“) auf Englisch erschienen sind, enthalten. Die Stichwörter wurden trunkiert, um auch ähnliche Wörter finden zu können. Mit den Stichwörtern wurden der Titel und die Zusammenfassung eines Artikels durchsucht. Zusätzlich zu den Stichwörtern wurden Schlagwörter verwendet. Die Gesamtheit der Schlagwörter, die einem Artikel zugeordnet werden, skizziert das Thema des Artikels. Die Schlagwörter, die in einer bestimmten Datenbank verwendet werden, werden in einem sogenannten Thesaurus gesammelt. Für Medline sind dies die Medical Subject Headings (MeSH-Terms). Für den umfangreichen Thesaurus der MeSH-Terms wurde eine von der amerikanischen Nationalbibliothek für Medizin angebotene Suchmaschine verwendet (US National Library of Medicine 2017b). Durch die Eingabe der Stichwörter wurden die zugehörigen Schlagwörter gefunden. Ein Schlagwort befindet sich stets in einer logischen Ordnung innerhalb des Thesaurus, es gibt weitere Ober- und enger Unterbegriffe. Ober- und Unterbegriffe wurden durchgesehen und ebenfalls der Suche als Schlagwort hinzugefügt, sofern dies sinnvoll erschien.

Allgemeines Schema für die Sammlung von Stich- und Schlagworten zur Beschreibung der Ein- und Ausschlusskriterien nach dem PICO-Schema in einer Tabelle

Person	Intervention	Comparison	Outcome
Stichworte zu Person	Stichworte zur Intervention	Stichworte zur Vergleichsintervention	Stichworte zum Endpunkt
...	...	...	...

Schlagworte zu Person	Schlagworte zur Intervention	Schlagworte zur Vergleichsintervention	Schlagworte zum Endpunkt
...	...	...	...

Die einzelnen Stich- und Schlagwörter wurden zur Konstruktion des Suchterms mit Operatoren miteinander verbunden. Dabei wurden in dieser Dissertation die Booleschen Operatoren *AND* (und) und *OR* (oder) verwendet. Werden Wörter mit *AND* verknüpft, werden nur Artikel gefunden, die sowohl das eine als auch das andere Wort enthalten. Werden sie mit *OR* verknüpft, werden sowohl Artikel, die nur das eine, als auch solche, die nur das andere oder beide Wörter enthalten, gefunden. Auf ausschließende Operatoren wie *NOT* (nicht) oder *XOR* (entweder, oder) wurde entsprechend der Literatur zur Konstruktion von Suchen verzichtet, da so häufig fälschlicherweise Artikel ausgeschlossen werden, in welchen ein Wort oder ein Wortteil zufällig in anderem Zusammenhang erscheint (Deutsches Cochrane Zentrum 2013). Die Inhalte innerhalb der Spalten der PICO-Tabelle wurden mit *OR* verknüpft, die Spalten miteinander dann mit *AND*. Des Weiteren wurden Klammern gesetzt, damit *OR* vor *AND* Operatoren durchgeführt werden, wie für die Suche nach dem oben erstellten PICO-Schema erforderlich. Ohne Klammern werden *AND*- vor *OR*-Operatoren ausgeführt, ähnlich der Regelung „Punkt vor Strich“ in der Mathematik.

Suchstrategien und –terme wurden vor Beginn der Suchen im schriftlichen Umlaufverfahren konsentiert. Dazu wurden diese in einer Cloud und per E-Mail den Mitgliedern der Leitliniensteuerungsgruppe zur Verfügung gestellt. Pro Suche hatte die Steuerungsgruppe 4 Wochen Zeit zu kommentieren, eine Woche vor Ablauf der Frist erfolgte eine Erinnerung per E-Mail. Die Suchbegriffe wurden dazu übersichtlich dem PICO-Schema (PICO = Patient, Intervention, Comparison, Outcome, entsprechend den Ein- und Ausschlusskriterien unserer Leitlinie) zugeordnet, um zu vermeiden, dass lange, unübersichtliche Suchbefehle bewertet werden müssen. Stillschweigen wurde bei der Konsentierung der Suchterme ausnahmsweise als Zustimmung gewertet.

Auswahl der Suchergebnisse

Nach Abschluss der Suche wurden die Ergebnisse in das Literaturverwaltungsprogramm Citavi importiert. Dubletten (hier Artikel, die sowohl über Cinahl als auch über Medline gefunden wurden) wurden mit Hilfe von Citavi entfernt. Das Ein- und Ausschließen der Artikel erfolgte anhand der Ein- und Ausschlusskriterien in drei Schritten. Im ersten Schritt wurde der Titel des gefundenen Artikels gelesen und es wurde entschieden, ob der Artikel gleich anhand des Titels ausgeschlossen werden musste. Im zweiten Schritt wurde, wenn der Artikel nicht anhand seines Titels ausgeschlossen wurde, die Zusammenfassung geprüft. Im dritten Schritt wurde der ganze Artikeltext gelesen und abhängig von den Ein- und Ausschlusskriterien ein- oder ausgeschlossen (Fulltext-Screening“). Die Artikel wurden von zwei Personen unabhängig voneinander gelesen und ein- bzw. ausgeschlossen. Bei Uneinigkeit der Personen erfolgte der Ein- oder Ausschluss nach Diskussion zwischen beiden.

Ein- und Ausschlusskriterien, Suchstrategien und Suchterme, Suchzeitpunkte sowie Rater der einzelnen Reviews:

Medikamente (Rater: Sophie Hirsch, Thomas Klein):

Rapid Tranquilisation

Zuerst wurde eine systematische Literatursuche nach Reviews und Primärstudien ab September 2016 durchgeführt. Der Suchzeitpunkt wurde so ausgewählt, dass er direkt an die Literatursuche seit der letzten Leitlinienaktualisierung anknüpfte. Durchsucht wurde die Datenbank Pubmed. Zudem wurde awmf.org und guidelines.gov zur Identifikation bereits bestehender Leitlinien durchsucht. Wenn es nahezu zeitgleich mehrere Reviews zur selben Fragestellung gab, die sich in ihrer Literaturlauswahl zwar überschneiden, aber nicht völlig identisch waren, wurde folgendermaßen vorgegangen:

- Einzelstudien und Reviews dürfen nicht noch einmal mit bewertet werden, wenn sie schon in einem anderen Review enthalten sind. Teilweise wurden besonders wichtige Studien oder Studien mit zusätzlichen Outcomes und Informationen neben der Hauptfragestellung des Reviews erneut zitiert.
- Wenn mehrere Reviews zur gleichen Zeit erschienen sind, gilt es zu prüfen, ob diese genau die gleiche Fragestellung betreffen und dieselben Datenbanken/Suchstrategien bemüht wurden. In der Regel wird das methodisch beste Review gewählt und die übrigen nur mit dem Hinweis „Doppelpublikation“ aufgeführt. Die in dem Review nicht enthaltenen Einzelstudien, die evtl. in einem anderen Review aufgeführt sind, werden nach einer entsprechenden Handsuche einzeln zitiert. Im Zweifel sollen auch in diesem Fall lieber Originalstudien als Reviews verwendet werden.
- Wenn Reviews methodisch unzureichend sind, muss man sich im Zweifelsfall auf die einzelnen Zitationen beziehen und soll das Review als Hilfe nicht heranziehen.

Die systematische Suche nach dem Vorbild der für diese Leitlinie erstellte systematischen Reviews (Zwangsmaßnahmen, Angehörigenarbeit, Deeskalation) wurde nach folgendem Schema durchgeführt:

Textwörter [Titel/Abstract] und MeSH-Terms [MeSH]

P(erson)	I(intervention)	C	O(utcome)
mental*	rapid tranquil*		violence*
psychiatr*	adrenergic		aggression*
schizo*	anticonvuls*		anger*
autis*	neurolept*		agitation*
delir*	antipsychotic*		hostile*
dement*	mood stabilis*		aggression[MeSH Terms]
intellect*	benzodiazepin*		violence[MeSH Terms]
brain injur*	lithium		anger[MeSH Terms]
Bipolar	psychotrop*		psychomotor agitation[MeSH Terms]
Affective psychosis, bipolar[MeSH Terms]	adrenergic beta antagonists[MeSH Terms]		hostility[MeSH Terms]

Behavior disorder, disruptive[MeSH Terms]	anticonvulsants[MeSH Terms]		
Impulse control disorders[MeSH Terms]	anti dyskinesia agents[MeSH Terms]		
mood disorders[MeSH Terms]	central nervous system depressants[MeSH Terms]		
Neurocognitive disorders[MeSH Terms]	psychotropic drugs[MeSH Terms]		
Neurodevelopmental disorders[MeSH Terms]	Estrogenic agents[MeSH Terms]		
Personality disorders[MeSH Terms]	Gestagenic agents[MeSH Terms]		
Paranoid Disorders[MeSH Terms]	Antiandrogens[MeSH Terms]		
Psychotic Disorders[MeSH Term]	neurotransmitter agents[MeSH Terms]		
Schizophrenia[MeSH Term]			
Post traumatic stress disorder[MeSH Terms]			

Diese Suche war erneut als Update der vorangegangenen S3-Leitlinie angelegt und beinhaltete daher Ergebnisse ab September 2016 bis hin zum Abfragezeitpunkt im August 2024. Daraus ergab sich folgender Suchstring:

(mental*[Title/Abstract] OR psychiatr*[Title/Abstract] OR schizo*[Title/Abstract] OR autis*[Title/Abstract] OR delir*[Title/Abstract] OR dement*[Title/Abstract] OR intellect*[Title/Abstract] OR brain injur*[Title/Abstract] OR bipolar[Title/Abstract] OR Affective psychosis, bipolar[MeSH Terms] OR Behavior disorder, disruptive[MeSH Terms] OR Impulse control disorders[MeSH Terms] OR mood disorders[MeSH Terms] OR Neurocognitive disorders[MeSH Terms] OR Neurodevelopmental disorders[MeSH Terms] OR Personality disorders[MeSH Terms] OR Paranoid Disorders[MeSH Terms] OR Psychotic Disorders[MeSH Term] OR Schizophrenia[MeSH Term] OR Post traumatic stress disorder[MeSH Terms]) AND (violen*[Title/Abstract] OR aggress*[Title/Abstract] OR anger*[Title/Abstract] OR agitat*[Title/Abstract] OR hostil*[Title/Abstract] OR aggression[MeSH Terms] OR violence[MeSH Terms] OR anger[MeSH Terms] OR psychomotor agitation[MeSH Terms] OR hostility[MeSH Terms]) AND (rapid tranquil*[Title/Abstract] OR adrenergic[Title/Abstract] OR anticonvuls*[Title/Abstract] OR neurolept*[Title/Abstract] OR antipsychotic*[Title/Abstract] OR mood stabili*[Title/Abstract] OR benzodiazepin*[Title/Abstract] OR lithium[Title/Abstract] OR psychotrop*[Title/Abstract] OR adrenergic beta antagonists[MeSH Terms] OR

anticonvulsants[MeSH Terms] OR anti dyskinesia agents[MeSH Terms] OR central nervous system depressants[MeSH Terms] OR psychotropic drugs[MeSH Terms] OR Estrogenic agents[MeSH Terms] OR Gestagenic agents[MeSH Terms] OR Antiandrogens[MeSH Terms] OR neurotransmitter agents[MeSH Terms]) AND ("2016/09/01" Date - Publication) : "3000"[Date - Publication])

Die Suche beschränkte sich hier ebenfalls auf die Pubmed-Datenbank. Erneut wurde von aggregierter Evidenz ausgegangen und erst alle systematischen Reviews gesichtet, dann noch die neuesten Einzelstudien ab September 2016, die noch nicht in identifizierten Reviews enthalten gewesen waren. Die Suche bei Medline am ergab 2597 Treffer. Nach Entfernung der Dubletten verblieben 2557 Artikel zum Title-Abstract-Screening (Schritt 1 des Ein- und Ausschlussprozesses). Davon wurden noch 886 Publikationen im Volltextsreening (Schritt 2) vollständig auf das Erfüllen der Einschlusskriterien geprüft und letztendlich 9 der durch die systematische Datenbankrecherche identifizierten Artikel in das Review zur qualitativen Synthese eingeschlossen. Die jeweilige Anzahl an Studien bei der Recherche, dem Screening (1. Abstract und 2. Volltextscreening) und dem Ein- und Ausschluss sind in Abbildung 1 dargestellt.

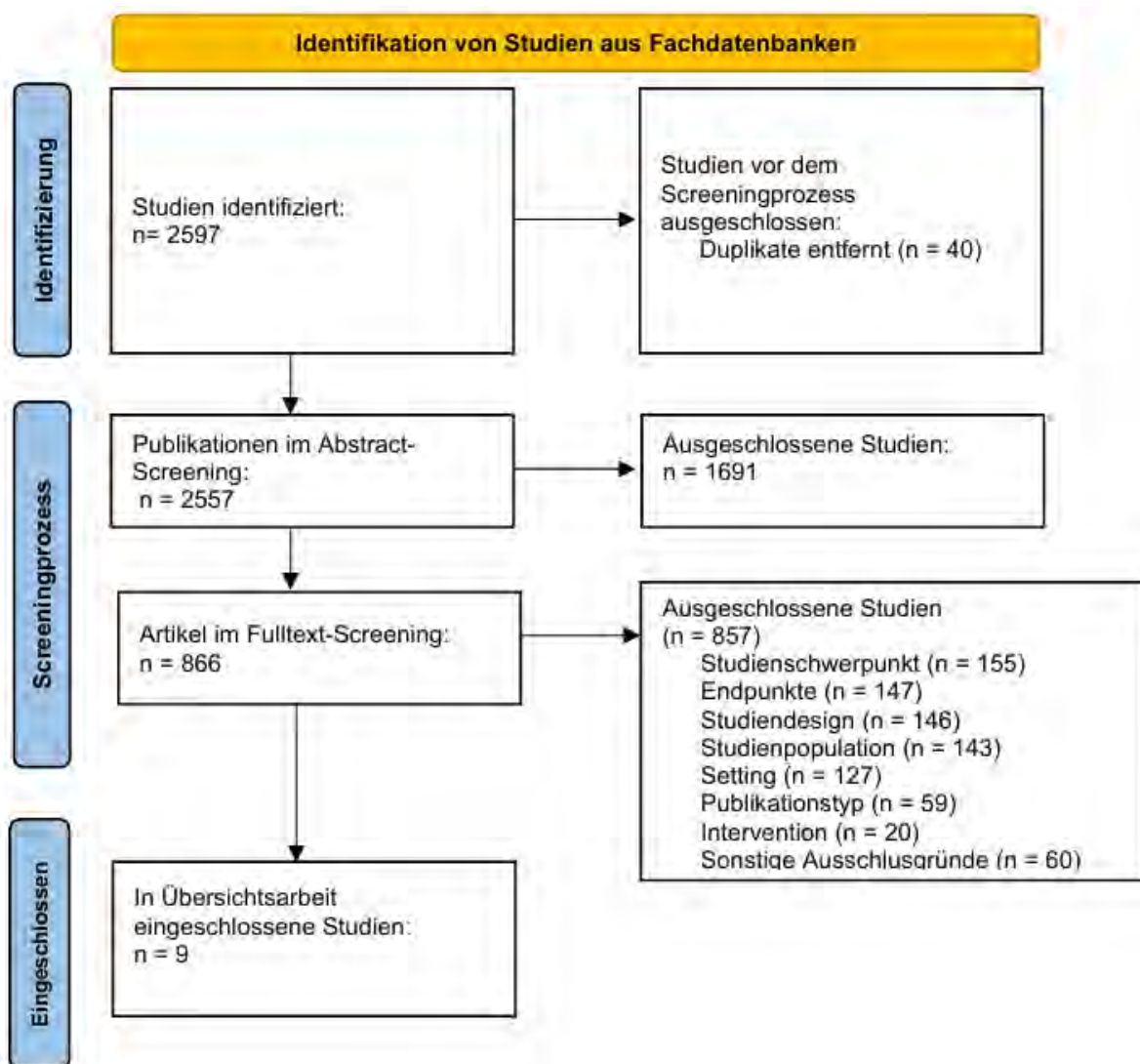


Abbildung 1: Das Flow-Chart beschreibt den zur Erstellung des systematischen Reviews zu Medikamenten zur Rapid Tranquilisation durchgeführten mehrstufigen Ein- und Ausschlussprozess. Die Anzahl der gefunden, ein- und ausgeschlossenen Artikel sowie der von ihnen beschriebenen Studien sind aufgeführt.

Behandlung rezidivierenden aggressiven Verhaltens

Es wurde eine Suche nach Reviews und Primärstudien durchgeführt. Durchsucht wurde die Datenbank Pubmed ab September 2016, um an die Suche der vorangegangenen S3-Leitlinie anzuknüpfen. Zudem wurden awmf.org und guidelines.gov zur Identifikation bereits bestehender Leitlinien durchsucht. Wenn es nahezu zeitgleich mehrere Reviews zur selben Fragestellung gab, die sich in ihrer Literaturlauswahl zwar überschneiden, aber nicht völlig identisch waren, wurde folgendermaßen vorgegangen:

- Einzelstudien und Reviews dürfen nicht noch einmal mit bewertet werden, wenn sie schon in einem anderen Review enthalten sind. Teilweise wurden besonders wichtige Studien oder Studien mit zusätzlichen Outcomes und Informationen neben der Hauptfragestellung des Reviews erneut zitiert.
- Wenn mehrere Reviews zur gleichen Zeit erschienen sind, gilt es zu prüfen, ob diese genau die gleiche Fragestellung betreffen und dieselben Datenbanken/Suchstrategien bemüht wurden. In der Regel wird das am methodisch beste Review gewählt und die übrigen nur mit dem Hinweis „Doppelpublikation“ aufgeführt. Die in dem Review nicht enthaltenen Einzelstudien, die evtl. in einem anderen Review aufgeführt sind, werden nach einer entsprechenden Handsuche einzeln zitiert. Im Zweifel sollen auch in diesem Fall lieber Originalstudien als Reviews verwendet werden.
- Wenn Reviews methodisch unzureichend sind, muss man sich im Zweifelsfall auf die einzelnen Zitationen beziehen und soll das Review als Hilfe nicht heranziehen.

Die systematische Suche nach dem Vorbild der für diese Leitlinie erstellten systematischen Reviews (Zwangsmaßnahmen, Angehörigenarbeit, Deeskalation) wurde nach folgendem Schema durchgeführt:

Textwörter [Titel/Abstract] und MeSH-Terms [MeSH]

P(erson)	I(intervention)	C	O(utcome)
mental*	rapid tranquil*		violence*
psychiatr*	adrenergic		aggression*
schizo*	anticonvuls*		anger*
autis*	neurolept*		agitation*
delir*	antipsychotic*		hostile*
dement*	mood stabiliz*		aggression[MeSH Terms]
intellect*	benzodiazepin*		violence[MeSH Terms]
brain injur*	lithium		anger[MeSH Terms]
bipolar	psychotrop*		psychomotor agitation[MeSH Terms]
Affective psychosis, bipolar[MeSH Terms]	adrenergic beta antagonists[MeSH Terms]		hostility[MeSH Terms]

Behavior disorder, disruptive[MeSH Terms]	anticonvulsants[MeSH Terms]		
Impulse control disorders[MeSH Terms]	anti dyskinesia agents[MeSH Terms]		
mood disorders[MeSH Terms]	central nervous system depressants[MeSH Terms]		
Neurocognitive disorders[MeSH Terms]	psychotropic drugs[MeSH Terms]		
Neurodevelopmental disorders[MeSH Terms]	Estrogenic agents[MeSH Terms]		
Personality disorders[MeSH Terms]	Gestagenic agents[MeSH Terms]		
Paranoid Disorders[MeSH Terms]	Antiandrogens[MeSH Terms]		
Psychotic Disorders[MeSH Term]	neurotransmitter agents[MeSH Terms]		
Schizophrenia[MeSH Term]			
Post traumatic stress disorder[MeSH Terms]			

Diese Suche war als Update der vorangegangenen S3-Leitlinie angelegt und beinhaltete daher Ergebnisse ab September 2016 bis hin zum Abfragezeitpunkt im August 2024. Daraus ergab sich folgender Suchstring:

(mental*[Title/Abstract] OR psychiatr*[Title/Abstract] OR schizo*[Title/Abstract] OR autis*[Title/Abstract] OR delir*[Title/Abstract] OR dement*[Title/Abstract] OR intellect*[Title/Abstract] OR brain injur*[Title/Abstract] OR bipolar[Title/Abstract] OR Affective psychosis, bipolar[MeSH Terms] OR Behavior disorder, disruptive[MeSH Terms] OR Impulse control disorders[MeSH Terms] OR mood disorders[MeSH Terms] OR Neurocognitive disorders[MeSH Terms] OR Neurodevelopmental disorders[MeSH Terms] OR Personality disorders[MeSH Terms] OR Paranoid Disorders[MeSH Terms] OR Psychotic Disorders[MeSH Term] OR Schizophrenia[MeSH Term] OR Post traumatic stress disorder[MeSH Terms]) AND (violen*[Title/Abstract] OR aggress*[Title/Abstract] OR anger*[Title/Abstract] OR agitat*[Title/Abstract] OR hostil*[Title/Abstract] OR aggression[MeSH Terms] OR violence[MeSH Terms] OR anger[MeSH Terms] OR psychomotor agitation[MeSH Terms] OR hostility[MeSH Terms]) AND (rapid tranquil*[Title/Abstract] OR adrenergic[Title/Abstract] OR anticonvuls*[Title/Abstract] OR neurolept*[Title/Abstract] OR antipsychotic*[Title/Abstract] OR mood stabili*[Title/Abstract] OR

benzodiazepin*[Title/Abstract] OR lithium[Title/Abstract] OR
 psychotrop*[Title/Abstract] OR adrenergic beta antagonists[MeSH Terms] OR
 anticonvulsants[MeSH Terms] OR anti dyskinesia agents[MeSH Terms] OR
 central nervous system depressants[MeSH Terms] OR psychotropic drugs[MeSH
 Terms] OR Estrogenic agents[MeSH Terms] OR Gestagenic agents[MeSH Terms]
 OR Antiandrogens[MeSH Terms] OR neurotransmitter agents[MeSH Terms]) AND
 ("2016/09/01"[Date - Publication] : "3000"[Date - Publication])

Die Suche beschränkte sich hier ebenfalls auf die Pubmed-Datenbank. Es wurde von aggregierter Evidenz ausgegangen und erst alle systematischen Reviews gesichtet, dann noch die neuesten Einzelstudien ab September 2016, die noch nicht in den identifizierten Reviews enthalten gewesen waren. Die Ergebnisse der Literatursuche werden in Abbildung 2 dargestellt.

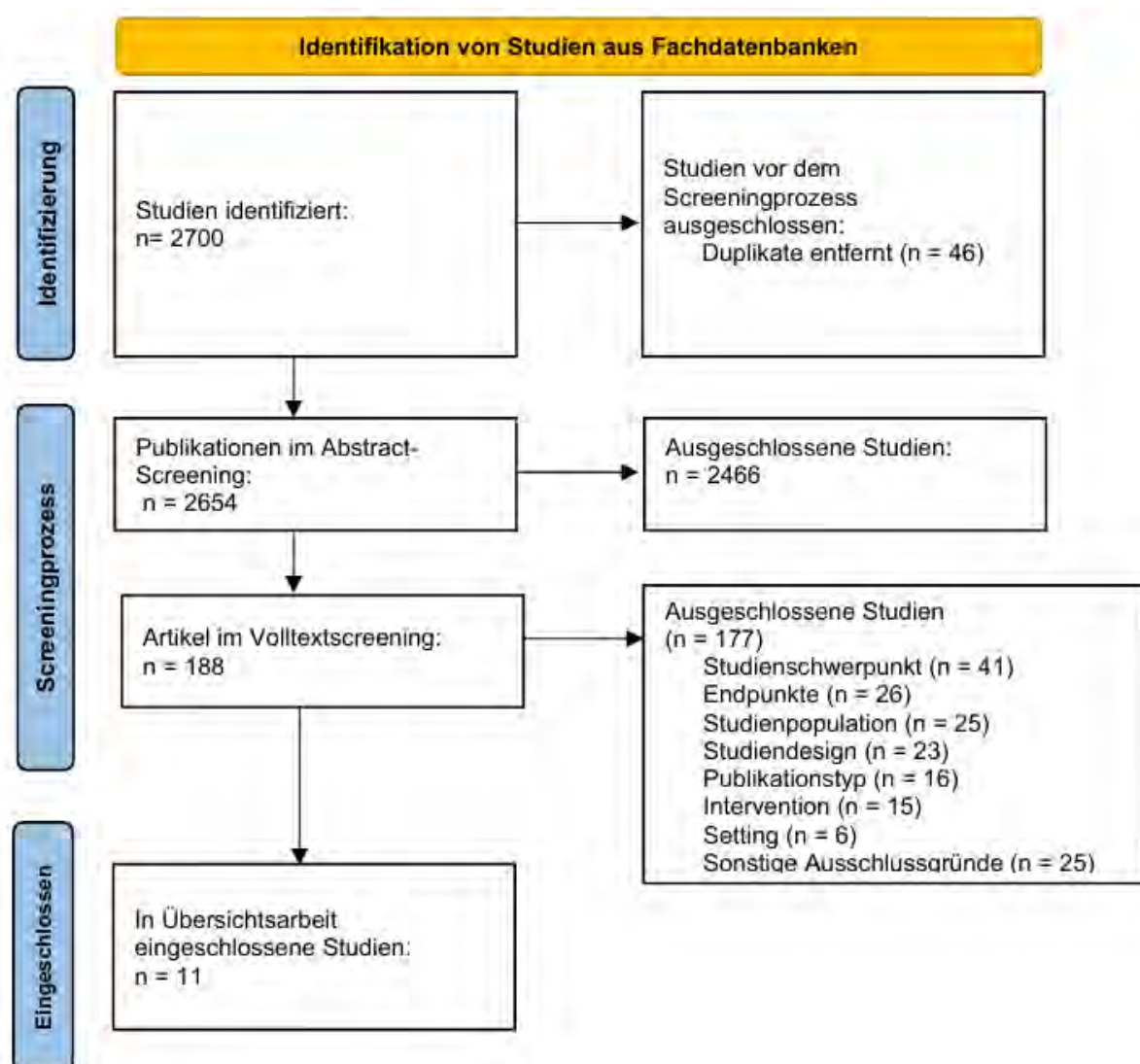


Abbildung 2: Das Flow-Chart beschreibt den zur Erstellung des systematischen Reviews zu Medikamenten zur Behandlung von rezidivierender Aggression durchgeführten mehrstufigen Ein- und Ausschlussprozess. Die Anzahl der gefunden, ein- und ausgeschlossenen Artikel sowie der von ihnen beschriebenen Studien sind aufgeführt.

Freiheitsbeschränkende Maßnahmen (Rater: Sophie Hirsch, Thomas Klein, Erich Flammer (extern)):

Ein- und Ausschlusskriterien

Eingeschlossen wurden alle Studien, welche Interventionen zur Reduktion von mechanischen Zwangsmaßnahmen bei erwachsenen Patientinnen und Patienten mit einer psychischen Erkrankung untersuchten. Es wurden nur Patientinnen und Patienten mit schweren psychischen Erkrankungen (im Sinne von „severe mental illness“, also Psychose/Schizophrenie, bipolare Störung), Suchterkrankungen und schweren Persönlichkeitsstörungen (vornehmlich Borderline-Persönlichkeitsstörung) eingeschlossen. Dabei wurde es als ausreichend erachtet, wenn die Diagnosen klinisch gestellt wurden, da bereits zu Beginn der Arbeit zu erwarten war, dass vor allem klinische Beobachtungsstudien gefunden würden. Ausgeschlossen wurden grundsätzlich alle Patientinnen und Patienten ohne psychische Erkrankung. Ausgeschlossen wurden daher Studien, die Patientinnen und Patienten, bei denen nur ein neurologisches, chirurgisches oder internistisches Krankheitsbild beschrieben war, beschreiben, also auch die Literatur über aggressives Verhalten im Rahmen epileptischer Anfälle bzw. in postiktalen Zuständen. Studien, in denen nur oder vornehmlich Kinder und Jugendliche unter 18 Jahren untersucht wurden, wurden ebenso wenig eingeschlossen. In Ländern, in denen Kinder und Jugendliche in der Erwachsenenpsychiatrie mit behandelt werden, fanden sich teilweise Studien mit gemischten Populationen, die dann in die Arbeit aufgenommen wurden, wenn der Anteil der Kinder und der Anteil der Erwachsenen nachvollziehbar berichtet wurde und erwachsene Menschen überwogen. Grundsätzlich wurden nur Studien aufgenommen, die die Reduktion oder Vermeidung von mechanischen Zwangsmaßnahmen untersuchen (Fixierung, Isolierung, Festhalten). Nicht eingeschlossen wurden Studien, die sich mit der Häufigkeit von Zwangseinweisungen oder Zwangsbehandlungen beschäftigen. Es waren sowohl Studien geeignet, bei denen die Häufigkeit von Zwangsmaßnahmen als (primärer) Endpunkt untersucht wurde, als auch Studien, die die Dauer der einzelnen Zwangsmaßnahme oder die kumulierte Dauer aller Zwangsmaßnahmen als (primären) Endpunkt zum Inhalt hatten. Alle Interventionen auf pflegerischer, therapeutischer, organisatorischer und politischer Ebene (beispielsweise auch Gesetzesänderungen) wurden eingeschlossen. Wesentlich war, dass die Intervention auf die Reduktion von Zwangsmaßnahmen abzielte oder zumindest auf Aggression und Gewalt, wenn Zwangsmaßnahmen als Surrogatparameter verwendet wurden. Reine Medikamentenstudien wurden ausgeschlossen. Studien über Interventionen, die primär auf eine bessere Behandlung einer bestimmten Patientengruppe abzielten und in der Folge zu weniger Zwangsmaßnahmen führten, wurden nicht eingeschlossen. Häufig war dies bei Studien über delirante Zustände mit konsekutiver Fixierung der Fall. Ebenfalls ausgeschlossen wurden Studien, in denen mechanische Zwangsmaßnahmen als eine Nebenwirkung einer anderen, auf einen anderen Endpunkt abzielende Intervention mit gemessen wurden. Ein häufiges Beispiel hierfür war die Fragestellung, ob die Einführung eines Rauchverbots auf Station aufgrund strengerer Nichtrauchergesetze in Europa zu vermehrten Zwangsmaßnahmen führte. Artikel, die überhaupt keine Intervention beinhalteten, sondern lediglich den Verlauf über die Zeit beschrieben, wurden ebenfalls ausgeschlossen. Nicht eingeschlossen wurden zudem Untersuchungen reiner Assoziationen klinischer, soziodemographischer oder sonstiger Parameter mit der Häufigkeit von Zwangsmaßnahmen (wie Erkrankung der Patientinnen und Patienten, Besetzung der Schicht, Herkunft oder Alter der Beteiligten), ohne dass eine Intervention stattfand oder sich zumindest die äußeren

Umstände, wie beispielsweise gesetzliche Vorgaben oder das politische System, bedeutsam änderten. Eingeschlossen wurden nur Studien, in denen mechanische Zwangsmaßnahmen als Sicherungsmaßnahmen im engeren Sinne verstanden wurden und aus Sicht der Durchführenden als „Ultima Ratio“ eingesetzt wurden. Ausgeschlossen wurden daher ebenso Studien, in denen Fixierung als „verhaltenstherapeutische Maßnahme“ gezielt eingesetzt und wieder ausgeschlichen wurde.

PICO-Schema und Suchstring

Die zu untersuchende Vergleichsintervention C wurde bei diesem Review nicht extra abgebildet, da mit wenigen kontrollierten Studien mit Vergleichsinterventionen gerechnet wurde.

Die Tabelle 1 zeigt die Stich- und Schlagwörter, welche zur Suche verwendet wurden, nach dem PICO-Schema geordnet.

Tabelle: (Verkürztes) PICO-Schema. PICO steht für Person, Intervention, Comparison und Outcome (Person, Intervention, Vergleichsintervention und Endpunkt) und ermöglicht eine systematische, reproduzierbare Suche mit guter Sensitivität und Spezifität. Die Tabelle enthält trunkierte Stichwörter, mit denen Titel und Zusammenfassung der Artikel in den Datenbanken durchsucht wurden, sowie Schlagwörter, mit denen der Thesaurus von Medline, die Medical Subject Headings, durchsucht wurde.

P	I	O
mental*	Reduc*	Restrain*
psychiatr*	Eliminat*	Seclu*
schizo*	Prevent*	Coerci*
autis*	Human right*	containment
delir*	Crisis intervention	
dement*	De-escalat*	
intellect*		
brain injur*		
bipolar		
Affective psychosis, bipolar[MeSH Terms]	Human Rights[MeSH]	Restraint, physical[MeSH]
Behavior disorder, disruptive[MeSH Terms]	Patient Advocacy[MeSH]	Coercion[MeSH]
Impulse control disorders[MeSH Terms]		
mood disorders[MeSH Terms]		
Neurocognitive disorders[MeSH Terms]		
Neurodevelopmental disorders[MeSH Terms]		
Personality disorders[MeSH Terms]		
Paranoid Disorders[MeSH Terms]		
Psychotic Disorders[MeSH Term]		

Schizophrenia[MeSH Term]		
Post traumatic stress disorder[MeSH Terms]		

Folgende Suchstrings wurden verwendet:

Medline:

(Reduc[Title/Abstract] OR Eliminat*[Title/Abstract] OR Prevent*[Title/Abstract] OR Human right*[Title/Abstract] OR "Crises intervention"[Title/Abstract] OR De-escalat*[Title/Abstract] OR Human Rights[MeSH] OR Patient Advocacy[MeSH]) AND (Restraining*[Title/Abstract] OR Seclu*[Title/Abstract] OR Coerci*[Title/Abstract] OR containment[Title/Abstract] OR Restraint, physical[MeSH] OR Coercion[MeSH]) AND (mental*[Title/Abstract] OR psychiatr*[Title/Abstract] OR schizo*[Title/Abstract] OR autis*[Title/Abstract] OR delir*[Title/Abstract] OR dement*[Title/Abstract] OR intellect*[Title/Abstract] OR brain injur*[Title/Abstract] OR bipolar[Title/Abstract] OR Affective psychosis, bipolar[MeSH Terms] OR Behavior disorder, disruptive[MeSH Terms] OR Impulse control disorders[MeSH Terms] OR mood disorders[MeSH Terms] OR Neurocognitive disorders[MeSH Terms] OR Neurodevelopmental disorders[MeSH Terms] OR Personality disorders[MeSH Terms] OR Paranoid Disorders[MeSH Terms] OR Psychotic Disorders[MeSH Term] OR Schizophrenia[MeSH Term] OR Post traumatic stress disorder[MeSH Terms])*

Cinahl

AB (Reduc OR Eliminat* OR Prevent* OR Human right* OR "Crises intervention" OR De-escalat*) AND (Restraining* OR Seclu* OR Coerci* OR containment) AND (mental* OR psychiatr* OR schizo* OR autis* OR delir* OR dement* OR intellect* OR brain injur* OR bipolar) OR TI (Reduc* OR Eliminat* OR Prevent* OR Human right* OR "Crises intervention" OR De-escalat*) AND (Restraining* OR Seclu* OR Coerci* OR containment) AND (mental* OR psychiatr* OR schizo* OR autis* OR delir* OR dement* OR intellect* OR brain injur* OR bipolar)*

Die Suche bei Medline am 27.11.2024 ergab 2138 Treffer. Nach Entfernung der Dubletten verblieben 2111 Artikel zum Title-Abstract-Screening (Schritt 1 des Ein- und Ausschlussprozesses). Davon wurden noch 110 Publikationen im Volltextscreening (Schritt 2) vollständig auf das Erfüllen der Einschlusskriterien geprüft und letztendlich 55 der durch die systematische Datenbankrecherche identifizierten Artikel in das Review zur qualitativen Synthese eingeschlossen. Die jeweilige Anzahl an Studien bei der Recherche, dem Screening (1. Abstract- und 2. Volltextscreening) und dem Einschluss werden in Abbildung 3 dargestellt.

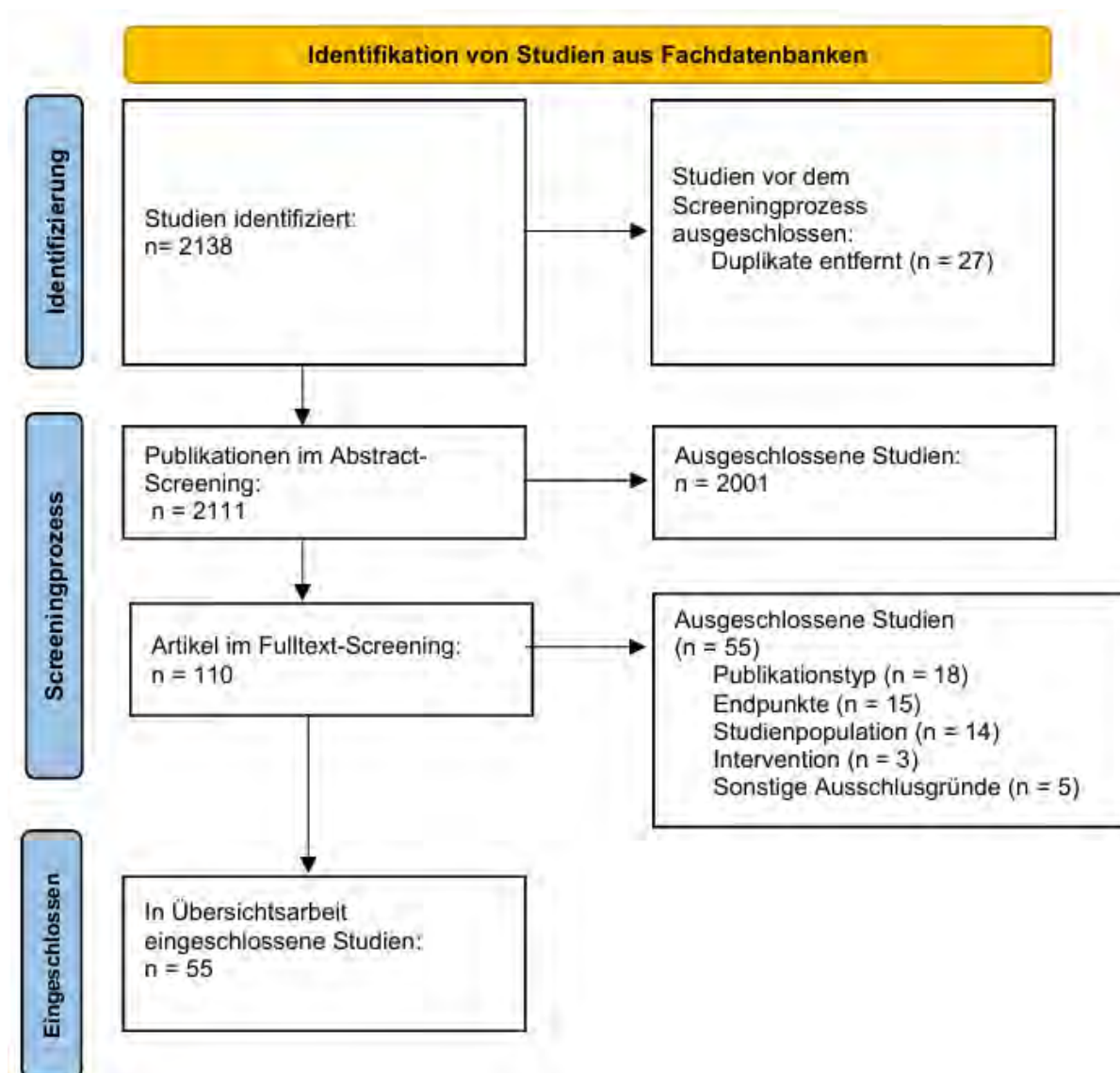


Abbildung 3: Das Flow-Chart beschreibt den zur Erstellung des systematischen Reviews zu freiheitsbeschränkenden Maßnahmen durchgeführten mehrstufigen Ein- und Ausschlussprozess. Die Anzahl der gefunden, ein- und ausgeschlossenen Artikel sowie der von ihnen beschriebenen Studien sind aufgeführt.

Alle 110 Artikel, die das Volltextscreening durchlaufen haben, sind im Anhang aufgeführt. Die eingeschlossenen Artikel werden im Anhang in Evidenztabelle aufgeführt. Insgesamt wurden im Volltextscreening 55 Artikel ausgeschlossen.

Tabelle: Häufige Ausschlussgründe beim Volltextscreening. Die linke Spalte enthält häufige Ausschlussgründe, die rechte Spalte enthält die Anzahl der Artikel, die deshalb ausgeschlossen wurden, sowie deren Anteil an allen ausgeschlossenen Artikeln in Prozent. Die Differenz zu 100 Prozent ist durch Rundungen bedingt.

Ausschlussgrund	Anzahl Artikel (%)
Falscher Publikationstyp (z. B. Hintergrundartikel, Einzelfallberichte)	18 (32,7)
Reduktion von Zwang nicht als primäres Outcome oder Surrogatparameter für die Reduktion von Gewalt	15 (27,3)

definiert, sondern als Teil der Intervention, Nebenwirkung oder Outcome einer Sekundäranalyse	
unpassende Personengruppe, vor allem Kinder, Menschen mit geistiger Behinderung, hirnorganischer Störung oder Demenz	14 (25,5)
keine klar umschriebene Intervention berichtet	3 (5,5)
Sonstiges	5 (4,5)
Σ	55 (9,1)

Deeskalationsmaßnahmen und Mitarbeiterschulungen (Rater: Thomas Klein, Sophie Hirsch):

PICO-Schema und Suchstring

Anhand des (bereits erwähnten) PICO-Schemas wurde (ebenfalls) ein Suchstring erstellt, dessen Schwerpunkt *evidenzbasierte* Trainingsprogramme und Mitarbeiterschulungen zum Umgang mit aggressivem Verhalten bei Menschen mit psychischen Erkrankungen sein sollten. Zur besseren Vergleichbarkeit der Personengruppen der einzelnen Reviews des Updates der vorangegangenen S3-Leitlinie wurden sowohl für das Review zu Trainingsprogrammen, als auch im Rahmen der Reviews zur Reduktion freiheitsbeschränkender Maßnahmen und Medikation zur Behandlung aggressiven Verhaltens dieselben trunkierten Such- und Schlagwörter zur Beschreibung des gesuchten Personenkreises verwendet. Dies entspricht dem „P“ („Person“) gemäß PICO- Schema.

Weiter wurde anstelle der zu untersuchenden Vergleichsintervention „C“ („Comparison“) das PICO-Schema modifiziert und um englischsprachige Trainingsbegriffe und MeSH-Terms (Medical Subject Headings) diesbezüglich erweitert. Auf diese Weise entstand folgende Tabelle mit Stich- und Schlagworten:

P (Person)	I (Intervention)	C (Comparison)	O (Outcome)	Trainings- begriffe
mental*	hold*		violen*	train*
psychiatr*	restrain*		aggress*	teach*
schizo*	seclu*		anger*	educat*
autis*	self-defen*		agitat*	learn*
delir*	self-protec*		hostil*	
dement*	defen*		injur*	
intellect*	breakawa*		seclu*	
brain injur*	conflict-resol*		coerci*	
bipolar*	conflict solv*		restrain*	
	de-escalat*		sick*	
	coerci*		distress*	
	prevent*			
MeSH-Terms (Medical Subject Headings) als Thesauri von <i>Medline</i>				

affective psychosis, bipolar	physical restraint		aggression	education [Subheading]
behavior disorder, disruptive			violence	
impulse control disorders			anger	
mood disorders			psychomotor agitation	
neurocognitive disorders			hostility	
neurodevelopmental disorders			physical restraint	
personality disorders				
paranoid disorders				
psychotic disorders				
Schizophrenia				
post traumatic stress disorders				

Terms]))) AND (((((((((((((((((((((violen*[Title/Abstract]) OR prevent*[Title/Abstract]) OR distress*[Title/Abstract]) OR sick*[Title/Abstract]) OR restrain*[Title/Abstract]) OR coerci*[Title/Abstract]) OR seclu*[Title/Abstract]) OR injur*[Title/Abstract]) OR hostil*[Title/Abstract]) OR agitat*[Title/Abstract]) OR anger*[Title/Abstract]) OR aggress*[Title/Abstract]) OR aggression[MeSH Terms]) OR physical restraint[MeSH Terms]) OR hostility[MeSH Terms]) OR psychomotor agitation[MeSH Terms]) OR anger[MeSH Terms]) OR violence[MeSH Terms]))) AND (((((train*[Title/Abstract]) OR learn*[Title/Abstract]) OR educat*[Title/Abstract]) OR teach*[Title/Abstract]) OR education[MeSH Subheading]))

Auswahl der Suchergebnisse

Im nächsten Schritt wurden mit Hilfe dieser konfigurierten Suchstrings die Datenbank Medline durchsucht und die gefundenen Ergebnisse in das Literaturverwaltungsprogramm Rayyan importiert und übernommen. Anschliessend erfolgte unter Berücksichtigung der bereits im Vorfeld festgelegten Ein- und Ausschlusskriterien zunächst die Durchsicht der Titel und Zusammenfassungen der Suchergebnisse (Title/Abstract-Screening). Konnte so eine Publikation nicht eindeutig für passend oder unpassend erklärt werden, musste im nächsten Schritt der gesamte Artikel im sogenannten Volltext-Screening gelesen und erneut anhand der Ein- und Ausschlusskriterien als geeignet oder ungeeignet bewertet werden.

Ein- und Ausschlusskriterien

Eingeschlossen wurden alle Studien, welche mindestens eine Trainings-/Schulungsmaßnahme des Personals als Intervention zum Management von aggressivem Verhalten bei Patientinnen und Patienten mit einer psychischen Erkrankung beinhalteten. Dabei wurden rein präventive Maßnahmen beispielsweise im Sinne von Beruhigung des aggressiven Patienten durch äußere Einflüsse wie dem Offen-stehen-lassen einer Türe, einer bestimmten Wandfarbe oder bestimmten Gegenständen im Umfeld des Patienten, ohne einen aktiven Trainingsaspekt der Mitarbeiter ausgeschlossen. Weiter wurden reine Medikamentenstudien zum Management bei aggressivem Verhalten ausgeschlossen. Eingeschlossen wurden nur Patientinnen und Patienten, welche unter einer psychischen Erkrankung gemäß internationaler Klassifikation psychischer und Verhaltensstörungen der ICD-10-WHO (World Health Organisation) leiden (vgl. Horst Dilling: *Internationale Klassifikation psychischer Störungen. ICD-10 V (F). Klinisch-diagnostische Leitlinien*. 10. Auflage. Hogrefe, 2015, ISBN 978-3-456-85560-8). Zu diesen Patientinnen und Patienten mit psychischen Störungen wurden unter anderem Menschen mit einer Psychose/Schizophrenie und bipolaren Störung gezählt. Weiter gehörten Menschen mit Verhaltensauffälligkeiten und Persönlichkeitsstörungen (beispielsweise Borderline-Persönlichkeitsstörung) dazu, ebenso wie neurokognitive Störungen, um so nicht zuletzt auch den geriatrisch-psychiatrischen Personenkreis mit abzudecken. Da im Vorfeld des systematischen Reviews davon auszugehen war, dass veröffentlichte Publikationen insbesondere auf Daten aus Beobachtungsstudien beruhen würden, wurde bezüglich des Formenkreises der psychischen Störungen eine klinische Diagnosestellung als ausreichend erachtet. Folglich war eines der Ausschlusskriterien Patientinnen und Patienten, bei denen keine psychische Störung gemäß internationaler Klassifikation vorlag. Ein weiteres Ausschlusskriterium waren Studien und Publikationen, in welchen insbesondere oder ausschließlich Kinder und Jugendliche vor Vollendung des 18. Lebensjahres als Patientenklientel untersucht wurden. Hierbei galt es jedoch zu beachten, dass Veröffentlichungen, in welchen

sowohl Kinder und Jugendliche, als auch Erwachsene zum Patientenkontext gehörten, klar und nachvollziehbar der Anteil der erwachsenen Patienten gegenüber dem Anteil minderjähriger Patienten überwiegen musste. Ausgeschlossen wurden in diesem Sinne auch Publikationen welche aggressives Verhalten in Tieren/ Tierversuchen zum Thema hatten.

Weiter wurden nur Studien eingeschlossen, die örtlich klar einer psychiatrischen/medizinischen Institution zuzuordnen waren, sowie Orte im Sinne einer Betreuungseinrichtung und des gesundheitlichen Versorgungssystems. Ausgeschlossen wurden daher Studien, welche beispielsweise aggressives Verhalten unter Soldaten in militärischen Lagern untersuchten.

Darüber hinaus wurden lediglich Studien berücksichtigt, welche neben dem Titel und der Zusammenfassung auch in der Publikation selbst in deutscher oder englischer Sprache veröffentlicht wurden. D. h. ausgeschlossen wurde alle nicht-deutsch- und nicht-englischsprachige Literatur.

Nicht mit eingeschlossen wurden zudem Veröffentlichungen im Sinne vom Leserbriefen, Kommentaren und Zeitschriftenaufsätzen, welche beispielsweise lediglich eine Empfehlung zur Einführung einer Trainingsmaßnahme abgaben, ohne jedoch konkret eine Intervention zu beschreiben oder deren Wirksamkeit zu messen. Ausgeschlossen wurden außerdem Peer-Reviews zur Fragestellung, um so Wiederholungen der einzelnen Studien zu vermeiden und das Risiko der internen Bias zu vermindern.

In Abbildung 4 wird die Anzahl der Studien im Verlauf von Literaturrecherche bis zum Screeningprozess sowie dem finalen Einschluss in die Datensynthese dargestellt.

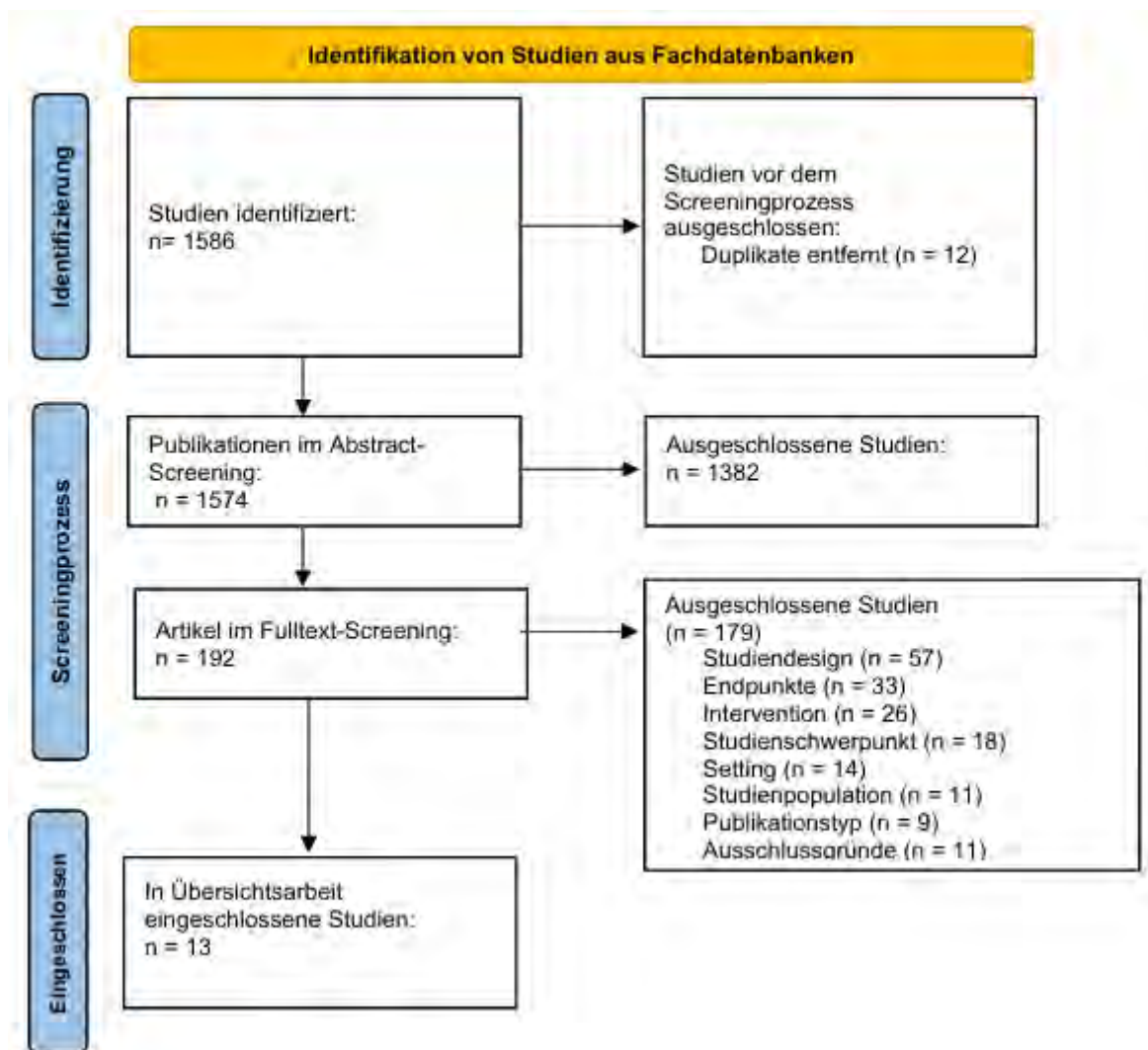


Abbildung 4: Das Flow-Chart beschreibt den zur Erstellung des systematischen Reviews zu Deeskalationsmaßnahmen und Mitarbeiterschulungen durchgeführten mehrstufigen Ein- und Ausschlussprozess. Die Anzahl der gefundenen, ein- und ausgeschlossenen Artikel sowie der von ihnen beschriebenen Studien sind aufgeführt.

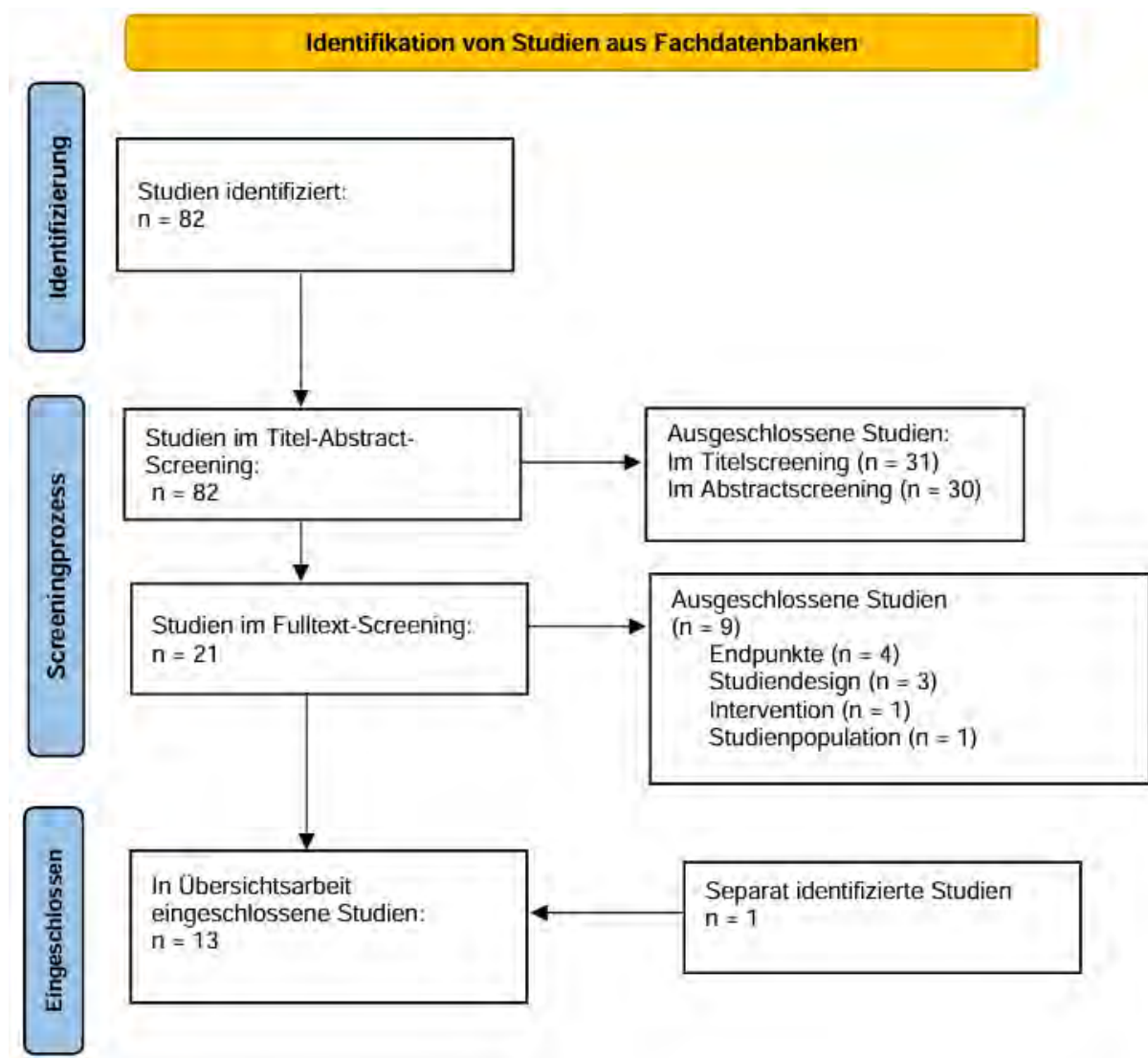
Offene Türen

Eine Literatursuche zur Öffnung psychiatrischer Studien wurde durchgeführt, um die Literaturrecherche von Steinert et al. (2019) zu aktualisieren. Anhand des folgenden Suchstrings wurde PubMed auf relevante Literatur durchsucht:

(psychiatr) AND („open door“ OR „open ward“) OR „locked ward“*

Um zeitliche Lücken zu vermeiden, deckte die Suche den gesamten Zeitraum von 2018 bis zum Suchzeitpunkt 2024 ab. Artikel, die bereits im ursprünglichen Review von Steinert et al. (2019) eingeschlossen worden waren, wurden im Screening-Prozess ausgeschlossen. Die systematische Literatursuche ergab 82 Treffer. Nach dem Screening der Titel konnte die Anzahl der Treffer auf 51 reduziert werden, das Screening der Abstracts ergab 21 verbleibende Artikel. Nach einer Sichtung der jeweiligen Volltexte verblieben 12 Artikel mit quantitativ-empirischen Daten, aus denen anschließend die Informationen zum Studiendesign und relevanten

Ergebnissen entnommen wurden. Eine weitere Studie (Mann et al. 2021), die mit o.g. Suchterms nicht ermittelt werden konnte, wurde zusätzlich eingeschlossen, da sie thematisch einschlägige quantitative Daten präsentierte.



Bei der Bewertung der Evidenzqualität der eingeschlossenen Studien mittels GRADE wurden in der Regel Studien aus der aktualisierten Suche sowie der ursprünglichen Übersichtsarbeit von Steinert et al. (2019) nicht berücksichtigt, für die keine Outcomes berichtet wurden, die für die Leitlinie relevant gewesen wären, oder die notwendige Daten nicht liefern konnten.

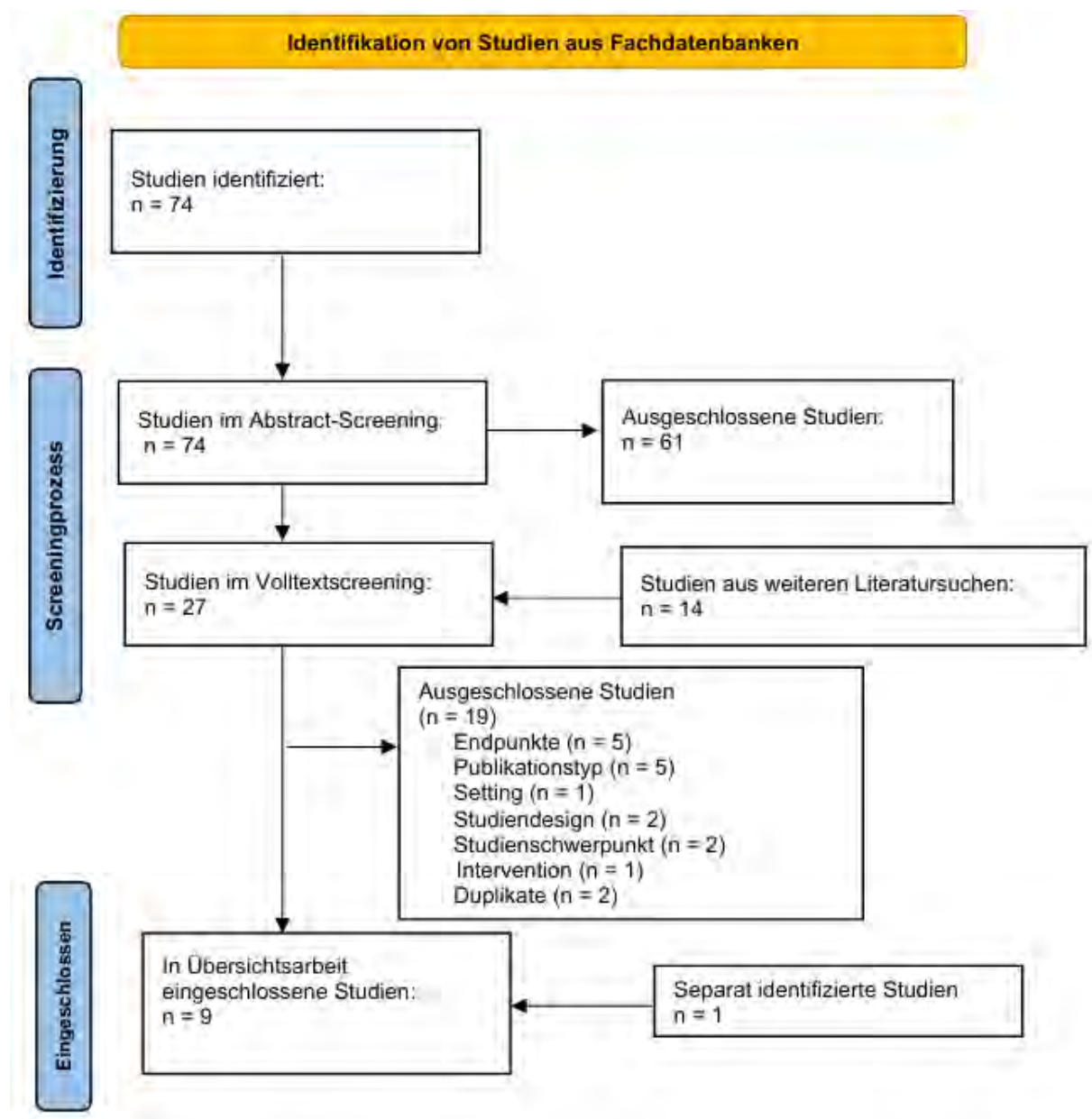
Ethikberatung

Die Literatursuche zum Thema „**Klinische Ethikberatung im psychiatrischen Kontext**“ erfolgte in drei Schritten:

1. Ausgangspunkt war das Literaturreview *Clinical ethics consultations: a scoping review of reported outcomes* (Bell 2022). Von den darin genannten psychiatrischen Artikeln wurden 4 Studien berücksichtigt. Siehe unten.

2. In PubMed wurde mit den Suchbegriffen "*Ethics Consultation*" (Mesh) AND *psychiatr*"* recherchiert, was 74 Treffer ergab. Nach Abstract-Screening wurden 13 Studien in die Übersichtsarbeit eingeschlossen.
3. Eine advanced Google Scholar-Suche mit Abstract-Screening ergab 10 zusätzliche Studien.

Von den insgesamt 27 Treffern wurden 2 Duplikate entfernt. Anschließend erfolgte ein Full-Text-Screening nach Einschlusskriterien: Reviews, theoretische Grundlagen und Aktualität. Die 4 psychiatrischen Studien aus Bell 2022 wurden ebenfalls berücksichtigt. Für die Einführung in die Thematik wurde zusätzlich der Übersichtsartikel *Developing and evaluating complex interventions* (Craig et al., 2008) herangezogen. Die Auswertung schließt somit 9 Studien ein:



Auswahl der Evidenz

S2e S3

Grundsätzlich wurden alle Studientypen außer Einzelfallberichte eingeschlossen. Nicht eingeschlossen wurden ferner rein theoretische Abhandlungen, normative Stellungnahmen oder Gerichtsurteile. Ebenfalls ausgeschlossen wurde graue Literatur wie beispielsweise unveröffentlichte Dissertationen. Bezüglich der Sprachen wurden primär keine Einschränkungen gemacht (im Verlauf mussten eine japanische und eine türkische Studie wegen Übersetzungsproblemen ausgeschlossen werden). Alle Artikel, die inhaltlich und methodisch den Einschlusskriterien entsprachen, wurden eingeschlossen. Jeweils die methodisch am höchsten bewerteten Studie (s. u. „Bewertung der Evidenz“) wurde für die Ableitung der Empfehlung verwendet. Widersprüchliche Ergebnisse wurden im Hintergrundtext dargestellt. Die jeweiligen die Empfehlung begründenden Literaturstellen und die Begründungen für die Ableitung einer entsprechenden starken Empfehlung/Empfehlung/eines Vorschlags finden sich direkt bei den entsprechenden Empfehlungen in der Leitlinie.

Bewertung der Evidenz **S2e S3**

- o Die Qualität der Evidenz wurde als das Ausmaß an Vertrauen definiert, dass der wahre Effekt einer Intervention in der Nähe des geschätzten Effekts in der wissenschaftlichen Evidenz liegt. Zur Einstufung der Evidenzqualität wurde GRADE (Grading of Recommendations Assessment, Development and Evaluation) verwendet, ein international anerkanntes Bewertungssystem, das die Qualität der Evidenz in vier Stufen, sog. Evidenzgrade, einteilt: *hoch*, *moderat*, *niedrig* und *sehr niedrig*.

Bedeutung der Evidenzklassifizierung

⊕ ⊕ ⊕ ⊕

Wir sind sehr zuversichtlich, dass der tatsächliche Effekt nahe an der Schätzung des Effekts liegt.

⊕ ⊕ ⊕

Wir sind hinsichtlich der Effektschätzung mäßig zuversichtlich: Der tatsächliche Effekt dürfte nahe an der geschätzten Wirkung liegen, es besteht jedoch die Möglichkeit, dass er erheblich davon abweicht.

⊕ ⊕

Unser Vertrauen in die Effektschätzung ist begrenzt: Der tatsächliche Effekt kann erheblich von der geschätzten Wirkung abweichen.

⊕

Wir haben sehr wenig Vertrauen in die Effektschätzung: Der tatsächliche Effekt unterscheidet sich wahrscheinlich erheblich von der geschätzten Wirkung

- o Randomisierte kontrollierte Studien gehen in der Regel mit hoher Evidenzqualität in die Bewertung ein, während Beobachtungsstudien zunächst niedriger eingestuft werden. Die Qualität kann jedoch herabgestuft werden, etwa aufgrund eines hohen Risk of Bias, Inkonsistenz der Ergebnisse über Studien hinweg, indirekte Evidenz (d. h. Übertragung der Ergebnisse auf studienferne Zielgruppen oder Behandlungssettings), Ungenauigkeit der Ergebnisschätzung oder Verzerrungen der Effekte aufgrund der Tendenz,

erwünschte Ergebnisse eher zu veröffentlichen („Publikationsbias“). Bei starken Effekten, Hinweisen auf eine Dosis-Wirkungsbeziehung oder der Identifikation von störenden Einflussfaktoren auf die Effektstärke besteht allerdings auch die Möglichkeit zur Heraufstufung des Evidenzgrades. Eine Besonderheit des GRADE-Systems ist die Einstufung der Evidenzqualität auf Ebene der relevanten Ergebnismaße (z. B. Häufigkeit oder Dauer von Zwangsmaßnahmen, Aggressionsniveau) anstatt auf Ebene der einzelnen Studien. Dies ermöglicht den studienübergreifenden Überblick über die Gesamtqualität der Evidenz bezüglich der Wirksamkeit untersuchter Interventionen.

Das Bewertungssystem ist im Internet unter <https://www.gradeworkinggroup.org/> abrufbar.

Erstellung von Evidenztabelle **S2e S3**

Tabellen mit den einzelnen im Rahmen der systematischen Evidenzrecherche und –bewertung eingeschlossenen Studien finden sich im Anhang dieses Leitlinienreport.

Formulierung der Empfehlungen und strukturierte Konsensfindung

Die einzelnen Kapitel wurden von der Koordinatorin und dem Redakteur bzw. beauftragten Experten aus der Leitliniensteuerungsgruppe erstellt. Die Autoren stellten die aktuellen wissenschaftlichen Daten zusammen und formulierten die Entwurfstexte. **Anhand der Texte wurden von den Leitlinienkoordinator*innen Vorschläge für Empfehlungen gemacht.** Die Entwürfe wurden allen Mitgliedern der Leitliniensteuerungsgruppe mithilfe einer Cloud online sowie per E-Mail zur Kommentierung zur Verfügung gestellt. Die Kommentare und Korrekturvorschläge wurden von der Redakteurin eingearbeitet. **So entstanden in einem mehrstufigen Prozess im Sinne eines Delphiverfahrens Texte und Empfehlungen, die dann in zwei Treffen der Leitliniensteuerungsgruppe diskutiert, mittels Handzeichen abgestimmt und zur Vorstellung bei der Konsensusgruppe verabschiedet wurden.**

Formale Konsensfindung: Verfahren und Durchführung

S2k S3

Strukturierte Konsensfindung in Vorbefragung und Konsensuskonferenz

Die ausgearbeiteten Empfehlungsentwürfe wurden der Konsensusgruppe vorgelegt, die sich aus Forschenden (aus den Bereichen Sozialpsychiatrie, Patientenautonomie, Pflegewissenschaften, Medizinethik und -recht), Anwenderinnen und Anwendern (Ärztinnen und Ärzten, Psychologinnen und Psychologen, Pflegenden, gesetzlich Betreuenden) sowie Patientinnen und Patienten und Angehörigen zusammensetzten, die als stimmberechtigte Mandatsträgerinnen und -träger ihrer jeweiligen Fachgesellschaft oder Selbsthilfe- oder Berufsverbänden an den Abstimmungen der Empfehlungen in den Konsensuskonferenzen teilnahmen. Insgesamt wurden sechs Online-Konsensuskonferenzen mit bis zu 35 Mandatierten durchgeführt.

Da aus zeitlichen Gründen eine Vorauswahl der Empfehlungen getroffen werden musste, die in den Abstimmungen diskutiert werden konnten, wurden den Mandatierten die Empfehlungen zur Vorabstimmung in mehreren Onlinebefragungen über die Plattform SoSci-Survey zur Verfügung gestellt, für deren Beantwortung sie in der Regel vier Wochen Zeit hatten. Die Onlinebefragungen umfassten im Durchschnitt zwischen 10 und 15 Empfehlungen. Bei jeder Empfehlung konnten die Mandatierten angeben, ob sie dieser zustimmen, sie ablehnen oder sich enthalten möchten. Außerdem gab es die Möglichkeit, im Sinne einer ersten DELPHI-Runde, Änderungs- oder Alternativvorschläge zu Leitlinienempfehlungen einbringen. Die Rückmeldungen konnten sowohl in anonymisierter Form als auch unter Nennung des Namens und der Fachgesellschaft/Organisation gemacht werden. Diese Option gab es in den ersten Onlinebefragungen nur im Falle der Ablehnung einer Empfehlung. Da aber der Wunsch vonseiten der Mandatierten bestand, auch bei Zustimmung Vorschläge zu Umformulierungen machen zu können, wurde diese Möglichkeit auf alle drei Bewertungen erweitert. Die Formulierungsvorschläge aus der Vorbefragung wurden zur Vorbereitung in die abgefragten Empfehlungen eingearbeitet, wobei die Veränderungen farblich hervorgehoben wurden.

Die Empfehlungen, bei denen online kein starker Konsens (mindestens 95% Zustimmung und höchstens redaktionelle Anmerkungen) erzielt werden oder bei inhaltlichen Anmerkungen wurden in einer strukturierten Konsenskonferenz nach dem Typ der National Institutes of Health (NIH – Typ) unter neutraler Moderation durch eine AWMF-Leitlinienberaterin (hier: Frau Dr. Monika Nothacker, stellvertr. Leitung AWMF-IMWi) besprochen und final abgestimmt. Die Konsensuskonferenz fand online über Zoom statt. Dabei wurde die Empfehlung vorgestellt, ggf. zusammen mit der Evidenzgrundlage und die eingegangenen Kommentare aus dem Online-Survey besprochen und geklärt, ggf. schon ein geänderter Empfehlungsvorschlag genannt sowie weitere Nachfragen beantwortet. Es konnten begründete Änderungsvorschläge eingebracht werden, die ggf. zusammengefasst wurden und dann formal mit Hilfe des Abstimmungstools aus Zoom abgestimmt wurden. Bei jeder Empfehlung konnten die Mandatierten angeben, ob sie dieser zustimmen, sie ablehnen oder sich enthalten möchten. Eine Empfehlung galt nach diesem Verfahren mit inhaltlicher Diskussion als angenommen, d. h. positiv abgestimmt bei Zustimmung von >75%, ein starker Konsens war definiert bei Zustimmung von >95%. Enthaltungen wurden nicht mitgezählt. Bei den Abstimmungen wurde in Bezug auf moderate Interessenkonflikte das besprochene Management beachtet.

Die Stärke des Konsenses ist bei den jeweiligen Empfehlungen direkt in der Leitlinie vermerkt. Ebenso ist vermerkt, ob dieser Konsensus bereits in der Onlineumfrage (erste DELPHI-Runde) oder erst in der synchronen Konsensuskonferenz nach Diskussion und Abstimmung in Zoom erzielt werden konnte. Auch nach Abschluss der Konsensuskonferenz konnten mit entsprechender Begründung (z. B. andere Nutzen-Schaden-Abwägung der Evidenz) Sondervoten eingebracht werden. Diese sind ebenfalls direkt bei den Empfehlungen vermerkt.

Im Folgenden wird der Umgang mit verschiedenen Abstimmungsergebnissen dargestellt:

Konsensstärke	Abstimmungsergebnis	Umgang
Starker Konsens	> 95 % der Teilnehmenden	Annahme der Empfehlung
Konsens	> 75–95 % der Teilnehmenden	
Mehrheitliche Zustimmung	> 50–75 % der Teilnehmenden	
Kein Konsens	≤ 50 % der Teilnehmenden	
		Ablehnung der Empfehlung

Falls Empfehlungen nachbesprochen werden mussten, z. B. weil sich inhaltliche Fragen in der Konsensuskonferenz ergeben hatten, wurden diese bis zur nächsten Konsensuskonferenz geklärt und die Empfehlung darin erneut angesprochen sowie zur Abstimmung gestellt. Die Empfehlungen die konsentiert aus der Konsensuskonferenz hervorgegangen waren, wurden redaktionell nachbearbeitet und in den Leitlinientext überführt.

Berücksichtigung von Nutzen, Nebenwirkungen-relevanten Outcomes

Klinische Relevanz

Die klinische Relevanz kann die Einstufung einer Empfehlung beeinflussen. Als Resultat eines Expertenkonsenses kann zum Beispiel eine Empfehlung auch ohne hierarchisch hochstehende Evidenzklasse einem hohen Empfehlungsgrad zugeordnet werden, wenn dies die Lösung eines Versorgungsproblems erfordert (www.versorgungsleitlinien.de).

Entsprechende Herauf- und Herabstufungen finden sich direkt bei den jeweiligen Empfehlungen.

Formulierung der Empfehlungen und Vergabe von Evidenzgraden und/oder Empfehlungsgraden

S2e S3

Starke Empfehlung, Soll- Empfehlung, Empfehlungsgrad A: Eine Behandlungsmethode erhält die Empfehlungsstärke A, wenn zu der Methode Studien der Kategorie 1 oder 2 vorliegen (s. o. „Evidenzgrade“).

Empfehlung, Sollte-Empfehlung, Empfehlungsgrad B: Eine Behandlungsmethode erhält die Empfehlungsstärke B, wenn zu der Methode Studien der Kategorie 3 oder 4 vorliegen. (Wenn eine Studie der Kategorie 1 oder 2 vorliegt, aus der die Empfehlung für eine Methode extrapoliert werden muss, bspw. weil andere Populationen oder Settings untersucht wurden, dann erhält sie ebenfalls die Empfehlungsstärke B)

Vorschlag, Kann-Empfehlung, Empfehlungsgrad 0: Eine Behandlungsmethode erhält die Empfehlungsstärke C, wenn zu der Methode Studien der Kategorie 5 vorliegen. (Wenn Studien der Kategorie 3 oder 4 vorliegen, aus der die Empfehlung für eine Methode extrapoliert werden muss, dann erhält sie ebenfalls die Empfehlungsstärke C)

Abweichungen sind bei entsprechendem Expertenkonsens möglich, wobei hier ethische, kulturelle, wirtschaftliche Aspekte sowie Sicherheit und Patientenpräferenzen mit einbezogen werden.

Expertenkonsens

Wenn es für eine Behandlungsmethode keine experimentellen wissenschaftlichen Studien gibt, diese nicht möglich sind oder nicht angestrebt werden, das Verfahren aber dennoch allgemein üblich ist und innerhalb der Konsensusgruppe eine Übereinkunft über das Verfahren erzielt werden konnte, so erhält diese Methode die Empfehlungsstärke Expertenkonsens.

Statement

Allgemeine Begriffsdefinitionen, Studienergebnisse, Expertenmeinungen und deren Erklärung, die aber nicht direkt in eine Empfehlung münden.

Bei S3-Leitlinien empfiehlt die AWMF-Leitlinienkommission einen Anteil an evidenzbasierten Empfehlungen von mindestens 50%. Der Anteil an evidenzbasierten Empfehlungen liegt bei der vorliegenden Leitlinie bei 47,25% evidenzbasierte Empfehlungen. Viele ethisch und rechtliche Fragstellungen, die in der Leitlinie betrachtet werden, sind einer quantitativen Untersuchung aus Sicherheitsgründen (z. B. Fixierung im Notfall ja oder nein) oder aus methodischen Gründen (normative Festlegungen) nicht zugänglich. Da es sich aber gerade hier um kontroverse Themen handelt, zu denen auf jeden Fall konsensbasierte Empfehlungen abgegeben werden sollten, wurden in Relation viele konsensbasierte Empfehlungen verabschiedet. Es erscheint trotz der diskutierten ethischen und methodischen Limitationen wichtig, Felder in denen mit Evidenz etwas ausgesagt werden kann (Medikation, Psychotherapie, komplexe organisatorische Interventionen), durch eine S3-Leitlinie zu würdigen in der Hoffnung, dass mehr hochwertige Studien mit innovativen Designs (Arbeit mit aggregierten Routinedaten und Registern, nachträglicher Studieneinschluss und Randomisierung) in Zukunft verfügbar sein werden.

4. Externe Begutachtung und Verabschiedung

o Pilottestung

Auf eine Pilotierung wurde verzichtet, da es sich bei der Leitlinie um ein Update einer bestehenden Leitlinie handelt und es im Rahmen der deutschlandweiten Implementierung der Vorgängerleitlinie eine umfassende quantitative und qualitative Begleitforschung (PreVCo-Studie) gegeben hatte.

Bechdorf A, Bühling-Schindowski F, Weinmann S et al. DGPPN-Pilotstudie zur Implementierung der S3-Leitlinie „Verhinderung von Zwang: Prävention und Therapie aggressiven Verhaltens bei Erwachsenen“. Nervenarzt. 2022;93:450-458.

Steinert T, Baumgardt J, Bechdorf A et al. Implementation of guidelines on prevention of coercion and violence (PreVCo) in psychiatry: a multicentre randomised controlled trial. Lancet Reg Health Eur. 2023;35:100770.

Hirsch S, Baumgardt J, Bechdorf A et al. Umsetzung der DGPPN-S3-Leitlinie zur Prävention von Gewalt und Zwang: Prä-post-Analyse der randomisierten kontrollierten PreVCo-Studie Psychiatr Prax. 2025;52:141-149.

Jaeger S, Kampmann M, Baumgardt J et al. Barriers and Facilitators-Lessons Learned From a Randomised Trial to Implement Clinical Practice Guidelines for the Prevention of Coercion in Psychiatry. Int J Ment Health Nurs. 2025;34:e70011.

o Verabschiedung durch die Vorstände der herausgebenden Fachgesellschaften/Organisationen **S2k S2e S3**

Die Leitlinie wurde zur öffentlichen Konsultation auf der Website der DGPPN veröffentlicht. In der offenen Konsultationsphase vom 12.01. bis 08.02.2026, die es den beteiligten Fachgesellschaften ermöglicht hat, Änderungen an der Leitlinie vorzuschlagen, wurden die folgenden Anmerkungen eingereicht:

Kapitel/ Seite	Entwurfstext der Leitlinie	Vorgeschlagene Änderung	Begründung (mit Literaturangaben)	Umgang mit vorgeschlagener Änderung/Kommentar
BVDP				
II Abkürzungen		PICO fehlt, RCT doppelt, ICD sollte (auch) Originaltitel sein	Abkürzung ICD erschließt sich nicht ohne englisches Original	Wurde ergänzt, korrigiert bzw. gestrichen: International Classification of Diseases (Internationale statistische Klassifikation der Krankheiten u. Verwandter Gesundheitsprobleme), Version 10; Person, Intervention, Comparison, Outcome; Randomised Controlled Trial;
III.2 S 8, Ziele		In Zeile 1 sollten auch die Psychiatrischen Praxen genannt werden	In den Praxen werden die meisten psychiatr Pat versorgt	Wurde ergänzt
BAG KT				
III.3 Zielgruppen und Geltungsbereich Seite 10	Die in der Versorgung psychisch erkrankter Menschen Tätigen (u. a. Psychiaterinnen und Psychiater, Nervenärztinnen und Nervenärzte, klinische Psychologinnen und	Die in der Versorgung psychisch erkrankter Menschen Tätigen (u. a. Psychiaterinnen und Psychiater, Nervenärztinnen und Nervenärzte, klinische Psychologinnen und Psychologen, ärztliche und psychologische	Künstlerische Therapeutinnen und -therapeuten stellen eine eigenständige Berufsgruppe mit Ausbildungen auf akademischem Niveau dar und umfassen die Professionen Kunst-, Musik-, Poesie-, Tanz- und Theatertherapie. Sie sind	Kann so übernommen werden

	Psychologen, ärztliche und psychologische Psychotherapeutinnen und Psychotherapeuten, Sozialarbeiterinnen und Sozialarbeiter, Pflegefachpersonen, Spezial- und Kreativtherapeutinnen und -therapeuten)	Psychotherapeutinnen und Psychotherapeuten, Sozialarbeiterinnen und Sozialarbeiter, Pflegefachpersonen, Spezial- und Kreativtherapeutinnen und -therapeuten Künstlerische Therapeutinnen und -therapeuten)	im Bereich der akademischen Gesundheitsberufe angesiedelt und in ihrem Berufsbild klar von anderen Professionen im Gesundheitswesen abzugrenzen, welche sich häufig unter dem wenig spezifischen Sammelbegriff der Kreativ- oder Spezialtherapien finden. Vor diesem Hintergrund bitten wir nachdrücklich um eine entsprechende Änderung. Literaturangabe: Positionspapier der BAG KT 09/2021, abrufbar unter https://www.bagkt.de/media/documents/2021-10-22-PM-Positionspapier-KT-in-das-Gesundheitswesen-integrieren.pdf?m=1759847500&	
DVE				
III.3, S. 10	Zielgruppen der vorliegenden Leitlinie sind: Die in der Versorgung psychisch erkrankter Menschen Tätigen (u. a. Psychiaterinnen und Psychiater, Nervenärztinnen und Nervenärzte, klinische Psychologinnen und Psychologen, ärztliche und psychologische	Der DVE distanziert sich ausdrücklich von der Bezeichnung „Spezialtherapeut:innen“. Wir möchten dringend darum bitten, ihn gänzlich aus der Leitlinie zu streichen und durch die Namen der gemeinten Berufsgruppen zu ersetzen, was auch die Identifikation mit den Inhalten der Leitlinie erhöht.	Der Begriff ist inhaltlich nicht festgelegt und wird von verschiedenen Akteur:innen für die unterschiedlichsten Professionen verwendet, z. T. sogar für nicht therapeutische Berufsgruppen wie die Pflege oder die soziale Arbeit. Im psychiatrischen Kontext wird er häufig für Ergotherapeut:innen und Kunsttherapeut:innen verwendet. Diese Konstellation kann jedoch hier noch nicht einmal gemeint sein, da die Kunsttherapeut:innen wahrscheinlich bei den Kreativtherapeut:innen zu verorten wären, die in dieser	Die Benennung wurde auf Anraten der Bundesarbeitsgemeinschaft Künstlerische Therapien (BAG KT) bereits wie oben geändert.

	Psychotherapeutinnen und Psychotherapeuten, Sozialarbeiterinnen und Sozialarbeiter, Pflegefachpersonen, Spezial- und Kreativtherapeutinnen und -therapeuten)		Aufzählung als weiterer undefinierter Sammelbegriff der Adressat:innen noch folgen. Zu den weiteren Gründen, weshalb sich der DVE vom Begriff Spezialtherapeut:innen distanziert, verweisen wir auf den offenen Brief unseres Verbandes, der hier frei zugänglich ist: https://www.dve.info/service/meldungen/ergotherapeutinnen-sind-keine-spezialtherapeutinnen-ergotherapeutinnen-sind-ergotherapeutinnen?highlight=offener%20brief	
III.3, S. 10	Die Leitlinie dient außerdem der Information von: - Allgemeinärztinnen und Allgemeinärzten, Ergotherapeutinnen und Ergotherapeuten - Politischen Entscheidungsträgern, Medien und der Allgemeinen Öffentlichkeit	Die Leitlinie dient außerdem der Information von: - Allgemeinärztinnen und Allgemeinärzten, Ergotherapeutinnen und Ergotherapeuten - Politischen Entscheidungsträgern, Medien und der Allgemeinen Öffentlichkeit	III.3, S. 10	Keine Änderung. Da die Ergotherapeut*innen nicht an der Erarbeitung der LL beteiligt waren kann sie nach Statuten der AWMF nur ihrer Information dienen
BVDP				

III.3 S 10 Zielgrup pen		warum werden nicht auch die gesetzl Betreuer und vergleichbare Personen aus dem juristischen Bereich sowie Rettungskräfte angegeben?		Gesetzliche Betreuer sind unter „Menschen aus deren Umfeld“ subsumiert. Richtern wollten wir bewusst keine Empfehlungen geben (richterliche Unabhängigkeit). Rettungskräfte habe ich bei den zu informierenden Berufsgruppen mitaufgenommen. Da sie nicht an der Erarbeitung der LL beteiligt waren kann sie nach Statuten der AWMF nur ihrer Information dienen
ackpa				
III.1 / S. 7	Aggressives Verhalten ist ein im Zusammenhang mit bestimmten psychischen Erkrankungen im Vergleich zur Allgemeinbevölkerung ein gehäuft auftretendes Phänomen (Fazel et al.2009a, Witt et al. 2013).		In Anbetracht der gesellschaftlich und fachlich zunehmenden Diskussion um Gefährdungspotenziale im Rahmen psychischer Erkrankungen empfehle ich dringend, einen anderen Einleitungssatz zu wählen und unmittelbar auch die Problematik der hohen Betroffenheit von Gewalt bei Personen mit psychischen Erkrankungen einzusteigen (Goldman-Mellor & Qin 2024, Khalifeh et al. 2015)	Nicht geändert, da an anderer Stelle (eigenes Kapitel V.2.4) ausführlich diskutiert

III.2 / S 9	Überschrift „Ziele der Leitlinie“		Dopplung zur Kapitelüberschrift	Nicht geändert, da die zweite Überschrift in endgültiger Formatierung Überschrift des Kastens sein wird, statt der sonst üblichen Überschrift „Empfehlung, Statement, Expertenkonsens“
DVE				
IV, S. 13	Die Literaturverzeichnisse der Reviews mit klar beschriebener und gut nachvollziehbarer Methodik wurden durchgesehen und so weitere wichtige, durch die systematische Datenbankabfrage noch nicht erfasste Arbeiten eingeschlossen („Referenzrecherche“, Horsley et al. 2011). Eingeschlossen wurde dann nur die jeweilige Primärliteratur aus der systematischen Datenbankabfrage um doppelten Studienauswertungen zu vermeiden.	Gelb markierten Satz so formulieren, dass er verständlich ist. Zur besseren Nachvollziehbarkeit wäre auch ein Flowchart hilfreich (optional).	Missverständlich – wurden die in der Datenbankrecherche nicht gefundenen, erst bei der Referenzrecherche entdeckten Arbeiten nun eingeschlossen oder nicht?	Keine Änderung. Genauere methodische Ausführungen und FlowCharts finden sich im Leitlinienreport.
ackpa				

V.2.2 / S. 37 und S. 40			Zwei Absätze zu Menschen mit Demenzerkrankungen im gleichen Kapitel	Nicht geändert, da sich dies einmal als Unterüberschrift auf Häufigkeiten und das andere Mal auf Prädiktoren bezieht
DVE				
V2.2, S 40	Menschen mit Demenzerkrankungen Bei Menschen mit Demenzerkrankungen in Japan waren neben psychotischen Symptomen auch Überforderungssituationen oder Situationen, in denen Betroffene mit ihren eigenen Fehlern konfrontiert wurden oder stereotypes Verhalten unterbrochen wurde, mit aggressivem Verhalten korreliert (Mori und Ueno 2011). In einer indischen Befragung ging dem aggressiven Verhalten meist eine eindeutige Drohung des Menschen mit psychischer Erkrankung voraus. Die Menschen mit psychischer Erkrankung waren meist schon am Tag vor der Tat vermehrt	„Psychische Erkrankung“ ersetzen durch „Demenz“, falls es bei Raveendranathan et al. (2012) um Demenz geht. Raveendranathan et al. (2012) im Literaturverzeichnis ergänzen.	Geht es bei Raveendranathan (2012) um Demenz oder um psychische Erkrankungen allgemein? Falls Letzteres, wäre der Satz an dieser Stelle falsch verortet. Geht es um Demenz, wäre es klarer, von Demenz zu sprechen. Die Arbeit von Raveendranathan et al. (2012) fehlt im Literaturverzeichnis.	Tatsächlich geht es um Menschen mit psychischen Erkrankungen und der Absatz steht an der falschen Stelle und wird über die Überschrift „Menschen mit Demenzerkrankungen“ verschoben

	irritierbar gewesen (Raveendranathan et al. 2012).			
BVDP				
V.3 Ethnisch e Vielfalt S47		Zeile 3 sozio -kultureller Hintergrund	Ist eine Einschränkung auf „kulturell“ belegt?	Sozio wurde ergänzt
ackpa				
V.3 / S. 49 (!)	Häufigkeit aggressiven Verhaltens Vor mehreren Jahrzehnten wurde bei mehr als 15.000 Aufnahmen mit einem Anteil an Ausländerinnen und Ausländern von 6,2 % gezeigt, dass Tötlichkeiten und kriminelles Verhalten bei Deutschen häufiger vorkamen als bei Ausländerinnen und Ausländern (29 % aus der Türkei, 20 % aus Italien, 17 % aus Jugoslawien, Häfner 1980).		Im Sinne der sprachlichen Genauigkeit und der Diskriminierungssensibilität schlage ich vor, den Begriff „Ausländer:innen“ je nach gemeinter Population mit Menschen mit Migrationsgeschichte /Migrant:innen oder Menschen ohne deutsche Staatsangehörigkeit zu ersetzen.	Tatsächlich wird in dem Artikel von Ausländern gesprochen. Da es sich bei der Population um Gastarbeiter in den 1970er Jahren handelt, ist von der Definition nach Nationalität/Staatsangehörigkeit auszugehen (s. Häfner, Heinz (1980): Psychiatrische Morbidität von Gastarbeitern in Mannheim. Epidemiologische Analyse einer Inanspruchnahmepopulation. In: <i>Nervenarzt</i> 51, S. 672–683.)

				Vorschlag (auch Gastarbeiter ergänzt, da schon der Artikel 1980 differenziert diskutiert, dass für sie weniger aversive Bedingungen als für Geflüchtete herrschen): Vor mehreren Jahrzehnten wurde bei mehr als 15.000 Aufnahmen mit einem Anteil an Ausländerinnen und Ausländern von 6,2 % gezeigt, dass Tötlichkeiten und kriminelles Verhalten bei Deutschen häufiger vorkamen als bei Gastarbeiter*innen ohne deutsche Staatsangehörigkeit (29 % aus der Türkei, 20 % aus Italien, 17 % aus Jugoslawien, Häfner 1980).
BVDP				
VI.4 Amok... S.72		Im letzten Absatz als Autor nur NEUZNER angegeben	Warum wird nicht auch Erstbeschreiber GAUPP (Z.f.d.g.Neuro. u Psychiatr.1920) genannt? Weil er später unerfreulicher Nazi war? Warum wird im Lit-Verz auch NEUZNER nicht mehr erwähnt S 305?	Der Satz lautet: "Das historische Beispiel der Psychiatrie eines Amoklaufs ist der Fall des Hauptlehrers Wagner 1913, der eine umfangreiche Kontroverse um psychiatrische

				Diagnosen, Begutachtungen und die Frage der Schuldfähigkeit auslöste (Neuzner 1996)." Neuzner wurde im Literaturverzeichnis nun ergänzt. Der Hintergrundtext ist keine historische Arbeit zu einem Krankheitsbild Wagners. Es geht um Amok. Herr Gaupp hat das nicht als „Amok“ beschrieben und zum Phänomen Amok gibt es noch weit mehr historische Quellen, die wir teilweise erwähnen. Gaupp war nicht der Erstbeschreiber von Amok. Es ging dabei um Fragen psychogener Psychosen und Schuldunfähigkeit, beides in unserem Satz richtig erwähnt, was aber nicht Gegenstand des LL-Kapitels ist. Deshalb halten wir es nach nochmaliger kritischer Durchsicht für richtig, hier Gaupp nicht direkt zu zitieren. Politische Überlegungen spielen dabei keine Rolle.
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ÖGPP				
VII.2 Seite 93	<i>Eine besondere Heilbehandlung (medizinische Behandlungen mit potenziell schwerer oder nachhaltiger Beeinträchtigung, z. B. Depotantipsychotika, EKT, Behandlung mit Clozapin, Lumbalpunktion, ...) darf immer nur mit der schriftlichen Einwilligung der Patientinnen und Patienten oder des gesetzlichen Vertreters durchgeführt werden.</i>	Streichung von „Behandlung mit Clozapin“ Streichung von „Lumbalpunktion“	Im §36 UbG und in der Judikatur dazu werden keine pharmakologischen Einzelsubstanzen angeführt. Es wird vielmehr betont, dass der Einsatz von Wirkstoffen stets nur im Rahmen der Beurteilung des Einzelfalls (Indikation, Schwere, Risikokonstellation) als besondere Heilbehandlung eingestuft werden soll (Kopetzky Ch, Erläuterungen zu §36 UbG. in Kopetzky, Grundriss des Unterbringungsgesetzes, 4. Aufl. 2024, Österreich Verlag) Wir schlagen daher vor, kein singuläres Arzneimittel als Beispiel anzuführen, da dies im Sinne des UbG eine verkürzte und potenziell irreführende Information darstellen könnte. Lumbalpunktion stellt keine „Heilbehandlung“ sondern einen diagnostischen Eingriff dar, passt daher nicht in diese Aufzählung	Nach erneuter RS mit dem Mandatsträger der ÖGPP wie folgt geändert: <i>Eine besondere Heilbehandlung (medizinische Behandlungen mit potenziell schwerer oder nachhaltiger Beeinträchtigung, Beurteilung stets im Einzelfall, z. B. Depotantipsychotika, EKT, ...) darf immer nur mit der schriftlichen Einwilligung der Patientinnen und Patienten oder des gesetzlichen Vertreters durchgeführt werden.</i>
VII.2	<i>Formal existiert in Österreich auch eine</i>	Streichung des gelb markierten Passus	Die „Unterbringung auf Verlangen“ ist ein in Österreich geltendes	Nach erneuter RS mit dem Mandatsträger der ÖGPP

Seite 94	<i>Unterbringung auf Verlangen, also auf ausdrücklichen Wunsch von entscheidungsfähigen Patientinnen und Patienten, die aber nur einen Bruchteil der Unterbringungen im Lande ausmacht und nur von einem Teil der Abteilungen durchgeführt wird.</i>		Bundesrecht (§4 - §7 des Unterbringungsgesetzes in der aktuell gültigen Version) und kann daher nicht nur von „einem Teil der Abteilungen“ vollzogen werden. Es ist daher davon auszugehen, dass an sämtlichen österreichischen Fachabteilungen Patient:innen dieses Recht eingeräumt wird. Unterbringungsgesetz in der aktuell gültigen Version https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=10002936	wurde der kritische Teil gestrichen: <i>Formal existiert in Österreich auch eine Unterbringung auf Verlangen, also auf ausdrücklichen Wunsch von entscheidungsfähigen Patientinnen und Patienten, die aber nur einen Bruchteil der Unterbringungen im Lande ausmacht.</i>
BVDP				
VIII.3.1 Aufgabe n vor Aufnahme	letzter Absatz:	ist es wirklich sinnvoll, Zigaretten einzupacken ?	VIII.3.1 Aufgaben vor Aufnahme	Zigaretten gestrichen.
ÖGPP				
IX.2 S.120	Seite 120	<i>In Österreich wird die Psychiatrie in weiten Teilen offen geführt (Steinert und Scharfegger 2018)</i> <i>Quelle Steinert und Scharfegger 2018</i>	„In Österreich wird die Psychiatrie teilweise offen geführt.“	Nach erneuter RS mit dem Mandatsträger der ÖGPP wie folgt geändert: In Österreich wird die Psychiatrie in weiten Teilen offen geführt. In rund der Hälfte der österreichischen

				Bundesländer (z. B. Salzburg, Steiermark, Kärnten, Tirol, Oberösterreich) werden geschlossene Stationen (oder geschlossene Teilbereiche) vorgehalten.
IX.2 S. 127	<i>Psychiatrische Stationen sollten – eingebettet in ein geeignetes organisatorisches und therapeutisches Gesamtkonzept – in der Regel mit offenen Stationstüren geführt werden.</i>	Streichung der Empfehlung auf Grund nicht vergleichbarer Daten	Die Autoren weisen selbst auf die inkonsistente Studienlage und die mangelnde Vergleichbarkeit der einzelnen Studien hin. Siehe auch Anmerkung zu Seite 120 Eine diesbezügliche Empfehlung ist aus Sicht der ÖGPP (auch als „schwache Empfehlung“) problematisch. Unterschiedliche Praktiken in verschiedenen Regionen (die mit unterschiedlichen Rahmenbedingungen untrennbar verbunden sind) könnten gegeneinander ausgespielt werden können.	Das sollte erlaubt Ausnahmen in etwa 30% (z. B. bestimmte forensische Stationen, psychiatrische Notaufnahme- und Intensivstationen, geriatrische Demenzstationen) der Fälle und heißt nicht, dass alle Stationen offen geführt werden sollen. Die Empfehlung wurde ausführlich diskutiert und in der Konferenz mit großer Mehrheit angenommen. Keine Änderung.
DVE				
X.1, S. 165	Aggressives Verhalten bei Menschen mit psychischen Erkrankungen spielte lange Zeit	Bitte nach diesem Satz ergänzen: „Das betrifft auch andere Berufsgruppen.“	Ist auch für andere Berufsgruppen relevant, z. B. Ergotherapie oder Sozialarbeit.	Wird ergänzt. Aggressives Verhalten bei Menschen mit psychischen

	in der Fachweiterbildung für Ärztinnen und Ärzte sowie in der Ausbildung für Pflegende eine lediglich marginale Rolle.		Aktuelle Studie als Beleg (allerdings zu Kindern und Jugendlichen): https://onlinelibrary.wiley.com/doi/10.1111/inm.70207 Manevich Lozovsky N, Bluvstein I, Itzhaki M. Violence Directed at Healthcare Staff by Children and Adolescents Treated in In-Patient Psychiatric Wards: Emotional Labor, PTSD Symptoms, and Physical and Mental Fatigue. Int J Ment Health Nurs. 2025 Dec;34(6):e70207. doi: 10.1111/inm.70207. PMID: 41451980; PMCID: PMC12742275.	Erkrankungen spielte lange Zeit in der Fachweiterbildung für Ärztinnen und Ärzte, in der Ausbildung für Pflegende und andere Berufsgruppen im Gesundheits- und Sozialwesen eine lediglich marginale Rolle.
X.2.1, S. 189	An der Begleitung von freiheitsbeschränkenden Maßnahmen können grundsätzlich auch andere Berufsgruppen beteiligt werden. Beispielsweise können Physiotherapeuten Menschen, die länger fixiert sind, sinnvolle Angebote machen.	Gelb markierten Satz ändern in: „Beispielsweise können Physio- oder Ergotherapeuten und -therapeutinnen Menschen, die länger fixiert sind, sinnvolle Angebote machen.“	Ergotherapie zusätzlich benennen für individuell angepasste und subjektiv bedeutsame Aktivitäten aller Art (nicht nur Bewegung).	Wird ergänzt. An der Begleitung von freiheitsbeschränkenden Maßnahmen können grundsätzlich auch andere Berufsgruppen beteiligt werden. Beispielsweise können Physio- oder Ergotherapeutinnen und -therapeuten Menschen, die länger fixiert sind, sinnvolle Angebote machen.
X.3, S. 208	Schwache Empfehlung Es sollten als Alternativen zur Isolierung entsprechende	Schwache Empfehlung Es sollten als Alternativen zur Isolierung entsprechende	Da es sich hier um eine Empfehlung handelt, lässt sich nachträglich wahrscheinlich nichts mehr ändern.	Keine Änderung, da ausführliche Diskussion in

	Rückzugsräume mit der Möglichkeit zur Beruhigung und Beschäftigung angeboten werden. Teitelbaum et al. 2007 aus Israel, Llyod et al. 2014 aus Australien 100 % Zustimmung in der Onlineabstimmung	Rückzugsräume mit der Möglichkeit zur Beruhigung und Beschäftigung angeboten werden, z. B. spezielle Sensorikräume nach dem Konzept der Sensory Modulation, die bei Bedarf von qualifizierten Fachkräften begleitet werden sollte.	Spätestens für die nächste Überarbeitung der Leitlinie empfehlen wir, die Empfehlung so spezifisch zu formulieren, dass sie den Inhalt des vorhergehenden Abschnitts wiedergibt (siehe unser Ergänzungsvorschlag, gelb markiert). Begründung: In der jetzigen Formulierung könnte es sich bei den Rückzugsräumen um alles Mögliche handeln, z. B. Lesecken o. ä. Für eilige Leser:innen, die bevorzugt nur die Empfehlungen lesen, gehen hier wichtige Informationen verloren.	der Konsensusgruppe und Abstimmung mit 100%.
ackpa				
X.3 / S. 221	Kernelemente sind multiprofessionelle und hierarchieübergreifende Zusammenarbeit,	Kernelemente sind interprofessionelle und hierarchieübergreifende Zusammenarbeit,		Nicht geändert, da multiprofessionell gemeint war
X.5 / S. 236	Auch in einer deutschen Studie zeigten sich nach Zwangsmaßnahmen deutliche Symptome einer posttraumatischen Störung (Wulschleger et al. 2021).	Auch in einer deutschen Studie zeigten sich nach Zwangsmaßnahmen deutliche Symptome einer posttraumatischen Störung, die durch die Durchführung einer strukturierten Nachbesprechung mit der betroffenen Person signifikant reduziert werden konnten (Wulschleger et al. 2021).	Wie besprochen fände ich es überaus sinnvoll, die Studie auch in der Empfehlung direkt aufzuführen als RCT, das die Reduktion von PTBS durch NB nachweist.	Modifiziert übernommen, wie auch schon in der Konsultationsfassung an anderer Stelle steht (s. S. 228). Kritische Rezeption der Studie im Cochrane-Review (Välimäki et al. 2025) wird an dieser Stelle ergänzt:

				„Auch in einer deutschen Studie zeigten sich nach Zwangsmaßnahmen deutliche Symptome einer posttraumatischen Störung. Durch die Durchführung einer strukturierten Nachbesprechung mit der betroffenen Person konnten Hyperarousal und Intrusionen signifikant reduziert werden (Wullschleger et al. 2021). Die Studie wurde als einzige in ein Cochrane Review zu Nachbesprechungen bei Menschen mit Schizophrenie eingeschlossen. Es wurden keine Belege dafür gefunden, dass Nachbesprechungen nach Zwangsmaßnahmen die peritraumatische Belastung insgesamt verringerten (MD -1,62, 95 % KI -7,47 bis 4,23; 1 Studie, 82 Teilnehmer; sehr geringe Evidenzstärke) oder die Zufriedenheit mit der Versorgung erhöhten bzw.
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				das Zwangserleben im Vergleich mit der Standardbehandlung verringerten (Välimäki et al. 2025).“ [Anmerkung: Die Häufigkeit von PTBS als Diagnose wurde gar nicht erhoben.]
ÖGPP				
XI.1, Seite 258	<i>Bei aggressiven Erregungszuständen vor dem Hintergrund von Intoxikationen mit Alkohol, Mischintoxikationen, Intoxikation mit unbekannten Substanzen oder diagnostisch unklaren Zustandsbildern ist besondere Zurückhaltung gegenüber einer sedierenden Medikation und eine intensive Überwachung angezeigt. In dieser Situation sollte Haloperidol als Monotherapie eingesetzt werden.</i>	Vorschlag einer Umformulierung: Statt „intensive Überwachung“ schlagen wir „angemessene medizinische Überwachung“ vor,	Die Formulierung könnte missverstanden werden, dass diese Patient:innen nur an einer Intensivstation in ausreichender Qualität behandelt werden können. Nicht alle derartige Patient:innen benötigen eine Überwachung an einer Intensivstation.	Keine Änderung. Empfehlung, die mit großer Mehrheit in der Konsensuskonferenz angenommen wurde. Weiterhin steht die Leitliniensteuerungsgruppe hinter der Formulierung „intensiver Überwachung.“
DGGPP				
XI.2.3 Seite 276	Haloperidol soll nur bei zusätzlichem Delir verwendet werden.	Als zweite Wahl kann Haloperidol verwendet werden.	Wir stimmen zu, dass eine eindeutige abschließende Empfehlung für das zweitbeste Antipsychotikum bei	Die Empfehlung wurde so belassen. Der Dissens

			Demenz und aggressivem Verhalten nach aktueller Studienlage nicht möglich ist. Gleichzeitig gibt es keine Evidenz dafür, dass Haloperidol nur bei aggressivem Verhalten bei Delir bei Demenz wirksam ist und bei aggressivem Verhalten bei Demenz (ohne Delir) nicht wirksam ist. Haloperidol ist bei Unruhe und Aggressivität bei Demenz zugelassen (0,5-5 mg/Tag oral, Überprüfung nach 6 Wochen), wenngleich ein erhöhtes Mortalitätsrisiko bei älteren Patienten mit Demenz beschrieben wird (Fachinformation). In der Cochrane-Metaanalyse von 2021 wurde für Haloperidol eine signifikante Wirksamkeit auf agitiertes und aggressives Verhalten im Vergleich zu Placebo nachgewiesen. Die Effektgrößen der Wirkung von Risperidon und Haloperidol sind vergleichbar.	wurde im Vorfeld ausführlich mit dem Leitlinienkoordinator der S3-Leitlinie Demenz diskutiert und in der Leitlinie dargelegt. Die Entscheidung gegen eine allgemeine Haloperidolempfehlung erfolgte vor dem Hintergrund der in Beobachtungsstudien (zugegebenermaßen nicht in RCTs oder Cochrane-Reviews) vermuteten schlechteren Verträglichkeit und vor dem Hintergrund, dass bei der Messung von Aggressivität in den RCTs zu Demenz häufig Surrogatmarker (Skalen für Agitation) verwendet werden, in Studien mit Aggressivität als Endpunkt in anderen Populationen (z. B. Psychose) Haloperidol eher weniger antiaggressiv wirksam war als andere Antipsychotika. In einem Review speziell zu Aggressivität bei Demenz wurden sogar eher
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				Olanzapin oder Aripirapazol als zweite Wahl empfohlen: Maher et al. (2011). Off-Label Use of Atypical Antipsychotics: An Update. In: Comparative Effectiveness Review Number 43, AHRQ Publication No. 11-EHC087-EF. Von einer Empfehlung sahen wir wegen der Rote-Hand-Briefe sowie bei Olanzapin wegen der anticholinergen Wirkung allerdings ab.
XI.2.3 Seite 278	Hintergrundtext zu Stimmungsstabilisierern	Wir empfehlen eine deutlich differenziertere und zurückhaltendere Einschätzung der Wirksamkeit von Carbamazepin.	Zu Carbamazepin sind placebokontrollierte RCTs zur Behandlung von agitiertem Verhalten mit kleinen Fallzahlen (n=21, mittlere Dosis: 400 mg; n=43, mittlere Dosis: 300 mg) über jeweils sechs Wochen durchgeführt worden. Es zeigte sich Wirksamkeit von Carbamazepin auch bei Demenzkranken, bei denen Antipsychotika nicht zu einer Symptomverbesserung führten hatten. In den Studien zeigte sich eine gute Verträglichkeit. Es fehlen jedoch kontrollierte Studien, die einen längeren Therapiezeitraum abbilden. Sultana J, Chang CK, Hayes RD, et al.: Associations between risk of	Der Hintergrundtext wurde, wie folgt, angepasst: „ Zu Carbamazepin lagen drei ältere placebokontrollierte RCTs zur Behandlung von agitiertem Verhalten mit kleinen Fallzahlen (12 bis 51 Teilnehmende), kurzem Follow-up (4-8 Wochen) vor (Cooney et al. 1996, Tariot et al. 1998, Olin et al. 2001). Die Aussagesicherheit wurde bei hohem

			mortality and atypical antipsychotic use in vascular dementia: a clinical cohort study. <i>Int J Geriatr Psychiatry</i> 2014; 29: 1249-1254. Tariot PN, Erb R, Podgorski CA, et al.: Efficacy and tolerability of carbamazepine for agitation and aggression in dementia. <i>Am J Psychiatry</i> 1998; 155: 54-61. Bis 2016 gab es daher in der S3-Leitlinie Demenzen eine Kann-Empfehlung für Carbamazepin bei Agitation und Aggression. Bei der Aktualisierung dieser Leitlinie 2023 wurde diese Empfehlung jedoch aufgrund nicht ausreichender Evidenzlage herausgenommen. So kommt ein neueres systematisches Review mit der Fragestellung, ob Antiepileptika Wirkung bei der Behandlung von psychischen und Verhaltenssymptomen haben, zu dem Schluss, dass Carbamazepin hierzu nicht eingesetzt werden sollte. In vier Studien (n = 97) wurde Carbamazepin untersucht. Nur eine dieser Studien zeigte eine Verbesserung im Vergleich zu Placebo auf der Brief Psychiatric Rating Scale (Effektstärke: 1,13; 95%-KI: 0,54–1,73). Nebenwirkungen traten bei Patienten, die Carbamazepin erhielten (20/27; 74 %), häufiger auf als bei Patienten unter Placebo (5/24; 21 %).	Verzerrungsrisiko und teils unvollständigem Reporting als gering eingestuft (Reviews: Gallagher & Herrmann 2014, Benjamin et al. 2024). Es zeigte sich in den Primärstudien Wirksamkeit von Carbamazepin auch bei Demenzzkranken, bei denen Antipsychotika nicht zu einer Symptomverbesserung geführten hatten. In den Studien zeigte sich eine gute Verträglichkeit. Die Studienergebnisse wurden aber in dem neueren Review kritischer bewertet, da die Effektstärken nicht signifikant verschieden von 0 waren und Nebenwirkungen unter Carbamazepin deutlich häufiger waren als unter Placebo (Benjamin et al. 2024).“ Cooney, C; Mortimer, A; Smith, A; Newton, K; Wrigley, M (1996): Carbamazepine use in aggressive behaviour associated with senile dementia. In: <i>Int J Geriatr Psychiatry</i>. 11: S. 901–5.
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			Benjamin, S., Ho, J. M.-W., Tung, J., Dholakia, S., An, H., Antoniou, T., Sanger, S., & Williams, J. W. (2024). Anticonvulsants in the Treatment of Behavioral and Psychological Symptoms in Dementia: A Systematic Review. <i>The American journal of geriatric psychiatry</i>, 32(10), 1259-1270.	Tariot, PN; Erb, R; Podgorski, CA; et al. (1998): Efficacy and tolerability of carbamazepine for agitation and aggression in dementia. In: <i>Am J Psychiatry</i>; 155(1): S. 54–61. Olin, JT; Fox, LS; Pawluczyk, S; Taggart, NA; Schneider, LS (2001): A pilot randomized trial of carbamazepine for behavioral symptoms in treatment-resistant outpatients with Alzheimer disease. In: <i>Am J Geriatr Psychiatry</i>. 9(4): S. 400–5. Benjamin, Sophiya; Ho, Joanne Man-Wai; Tung, Jennifer; et al. (2024): Anticonvulsants in the Treatment of Behavioral and Psychological Symptoms in Dementia: A Systematic Review. In: <i>Am J Geriatr Psychiatry</i> 32: 10, S: 1259-1270.
	Schwache EmpfehlungBei rezidivierendem aggressivem Verhalten bei Demenz kann ein Behandlungsversuch mit Carbamazepin unternommen werden, wenn Antipsychotika sich als nicht ausreichend wirksam erwiesen haben. Die Behandlung erfolgt Off-Label.Begründung für Herabstufung des Empfehlungsgrades: Gute Hinweise für Wirksamkeit, aber ungünstiges	s.o.Empfehlung sollte gestrichen werden.	s.o.Es gibt keine guten Hinweise für die Wirksamkeit von Carbamazepin. Auch die häufig komplexen Situationen bei Aggressivität und gleichzeitiger Pflegebedürftigkeit bei Demenz, konsekutiver Hilflosigkeit im Versorgungssystem und der Gefahr, dass weniger geeignete Medikamente verwendet werden, sind keine Begründung für eine Kann-Empfehlung	Die Empfehlung haben wir allerdings belassen, da für die Konsensus- und Leitliniensteuerungsgrupp, neben stehende Gründe weiter Bestand hatten.

	Nebenwirkungsprofil. Inkonsistente Ergebnisse.			
ÖGPP				
XII.2 Seite 300	<i>Die Inanspruchnahme der Volksanwaltschaft ist kostenlos und gilt als ein niedrighschwelliges Angebot mit hohem Ansehen. In den Einrichtungen bietet sie Sprechstunden an, sodass sich Menschen in der Unterbringungssituation an sie wenden können. Nach der Aufnahme der Beschwerde und Einholen des Einverständnisses der betroffenen Person wird versucht, das Anliegen mit den Behandlern oder den Betreuenden zu klären.</i>	Streichung der gelb markierten Passage	Die Volksanwaltschaft bietet nach unseren Informationen keine „Sprechstunden“ in psychiatrischen Einrichtungen an. Die Volksanwaltschaft überprüft die Arbeit der öffentlichen Verwaltung, wie zum Beispiel Behörden, Ämter und Dienststellen des Bundes, der Länder und Gemeinden (https://volksanwaltschaft.gv.at/die-volksanwaltschaft/aufgaben/). Die Volksanwaltschaft hält zu diesem Zweck Sprechstage für Bundesländer oder Teile von Bundesländern ab, nicht aber für einzelne Institutionen (https://volksanwaltschaft.gv.at/die-volksanwaltschaft/sprechstage/) Das beschriebene Vorgehen (Anliegen der Patient:innen mit den Behandlern zu klären) entspricht dem Vorgehen der Patienten-anwaltschaft (https://vertretungsnetz.at/home/). Die Patienten-anwaltschaft (Verein Vertretungsnetz) hält	Streichung wurde durchgeführt. Die Passage lautet nun: Die Inanspruchnahme der Volksanwaltschaft ist kostenlos mit hohem Ansehen. Nach der Aufnahme der Beschwerde und Einholen des Einverständnisses der betroffenen Person wird versucht, das Anliegen mit den Behandlern oder den Betreuenden zu klären.

			Sprechstunden in psychiatrischen Einrichtungen ab.	
BVDP				
Im gesamten Text bitte darauf achten, dass neben der „Gemeindepsychiatrie“ (gibt es zu der eine Definition, die ich übersehen habe?) auch jeweils eindeutig die Praxen der niedergelassenen Psychiaterinnen und Psychiater erwähnt werden.	Im gesamten Text bitte darauf achten, dass neben der „Gemeindepsychiatrie“ (gibt es zu der eine Definition, die ich übersehen habe?) auch jeweils eindeutig die Praxen der niedergelassenen Psychiaterinnen und Psychiater erwähnt werden.	Im gesamten Text bitte darauf achten, dass neben der „Gemeindepsychiatrie“ (gibt es zu der eine Definition, die ich übersehen habe?) auch jeweils eindeutig die Praxen der niedergelassenen Psychiaterinnen und Psychiater erwähnt werden.	Im gesamten Text bitte darauf achten, dass neben der „Gemeindepsychiatrie“ (gibt es zu der eine Definition, die ich übersehen habe?) auch jeweils eindeutig die Praxen der niedergelassenen Psychiaterinnen und Psychiater erwähnt werden.	Keine über die o. g. Änderungen hinausgehende Änderung. Das Thema wurde mehrmals in der Konsensuskonferenz diskutiert und an mancher Stelle wurde sich für das Hinzunehmen der Praxen, an anderer dagegen entschieden. Die ganze Leitlinie nochmal zu überarbeiten ist nach 2 Jahren Arbeit und nun im Rahmen von nur 2 Wochen nach der öffentlichen Konsultationsphase aus Gründen limitierter zeitlicher und personeller Ressourcen nicht mehr möglich.

elassen en Psychiat erinnen und Psychiat er erwähnt werden.				
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Aufgrund die Rückmeldung der Deutschsprachigen Gesellschaft für Psychotraumatologie (DeGPT) wurde am 12. Februar 2026 nach Ablauf der Frist nachgereicht.

Hier wurde die unscharfe Verwendung des Begriffes „Debriefing“ kritisiert, sodass dieser in der Leitlinie, wo dies inhaltlich sinnvoll war, durch den deutschen Begriff Nachbesprechung bzw. moderierte, strukturierte Nachbesprechung ersetzt wurde, um deutlich zu machen, dass damit nicht die (obsolete) Technik mit dem Ziel der Verhinderung von Traumafolgestörungen gemeint ist.

Des Weiteren wurde deutlich, dass insbesondere das Kapitel „X.I.3 Nachbetreuung für von Patientenübergriffen Betroffenen“ bei der nächsten Aktualisierung aktualisiert werden und die Relevanz der Führungsperson bei der Nachsorge ausreichend adressiert werden soll.

Die Empfehlungen wurden von der Fachgeseelschaft daraufhin mitgetragen.

Die Verabschiedung der Leitlinie durch alle Vorstände aller beteiligten Fachgesellschaften und Organisationen ist erfolgt.

5. Redaktionelle Unabhängigkeit

Finanzierung der Leitlinie

S2k S2e S3

Die Leitlinie wurde von der Deutschen Gesellschaft für Psychiatrie und Psychotherapie, Psychosomatik und Nervenheilkunde (DGPPN) in Auftrag gegeben. Es wurden 0,7 Vollzeitäquivalent (VK) für 18 Monate und 0,2 VK für 6 Monate für einen wissenschaftlichen Mitarbeiter (insgesamt 113.432,00Euro), eine Projektleitung 0,1 VK für 18 Monate (15.300,00 Euro) und eine wissenschaftliche Hilfskraft, geringfügig für 18 Monate (8.190,00 Euro) finanziert.

Zudem wurden eine AWMF-zertifizierte Leitlinienberatung (5.350,00), Reisemittel für Schulungen, Tagungen, Kongresse (2.250,00), Aufwandsentschädigung für Vertreter:innen von Betroffenen- und Angehörigenverbänden (4.960,00), Mittel für die MAGICapp-Lizenz (3.000 € + 19% USt. pro Jahr (siehe AWMF-Rahmenvertrag) für 18 Monate und eine Pauschale für Literaturbeschaffungen (4.000,00) und die Infrastruktur (28.930,5) sowie ein Lektorat (650,00) bezahlt.

Die DGPPN war durch Herrn Professor Pollmächer in der Leitliniensteuerungsgruppe und in der Konsensusgruppe mit einfacher Stimme vertreten. Ansonsten erfolgte keine Einflussnahme der finanzierenden Gesellschaft auf Inhalte der Leitlinie.

Andere Geldgeber gab es nicht.

Die Expertinnen und Experten der Leitliniensteuerungsgruppe arbeiteten ehrenamtlich bzw. verrichteten ihre Aufgaben im Rahmen ihrer hauptberuflichen Tätigkeit.

Darlegung von und Umgang mit potenziellen Interessenkonflikten

S2k S2e S3

Die Interessenkonflikte wurden elektronisch mit Hilfe des von der AWMF angebotenen Onlineportals erhoben. Die Erhebung fand unter den Mitgliedern der Leitliniensteuerungsgruppe (incl. Koordinatoren und wissenschaftlichem Mitarbeiter) und vor Abstimmung der Empfehlungen unter den Mitgliedern der Konsensusgruppe statt. Folgende mögliche Interessenskonflikte wurden dabei erhoben.

Nr.	Erklärung
1	Tätigkeit als Berater*in und/oder Gutachter*in
2	Mitarbeit in einem Wissenschaftlichen Beirat (advisory board)
3	Bezahlte Vortrags-/oder Schulungstätigkeit
4	Bezahlte Autor*innen-/oder Coautor*innenschaft
5	Forschungsvorhaben/Durchführung klinischer Studien
6	Eigentümer*inneninteressen (Patent, Urheber*innenrecht, Aktienbesitz)
7	Indirekte Interessen

Die Kategorisierung der angegebenen Interessenkonflikte wurde wie von der AWMF-Kommission Leitlinien vorgeschlagen wie folgt vorgenommen

Ausprägung Interessenkonflikt	Umstände für diese Kategorie	Konsequenz
Kein	-	-
Gering*	Einzelne Vorträge finanziert von der Industrie	Limitierung von Leitungsfunktion insgesamt (Koordination, ggf. Peer) oder für die thematisch befasste AG (Leitung, ggf. Peer)
Moderat*	Tätigkeit in einem industriefinanzierten Advisory Board/Wissenschaftlichen Beirat/als Gutachter*in Managementverantwortung industriefinanzierte Studie(n) Federführung bei <u>Fort-</u> /Weiterbildung mit direkter Industriefinanzierung bzw. für eine bestimmte Methode Regelmäßige Vortragstätigkeit für best. Firmen Aktienbesitz einzelner Firmen	wie bei gering <u>und</u> Keine Abstimmung für die thematisch relevanten Empfehlungen oder Doppelabstimmung
Hoch*	Eigentumsinteresse Arbeitsverhältnis bei der Industrie Hoher Aktienbesitz einzelner Firmen	wie bei gering und moderat <u>und</u> Keine Teilnahme an thematisch relevanten Beratungen und keine Abstimmung
* Gewertet werden in Bezug auf finanzielle Interessenkonflikte persönliche Zuwendungen sowie institutionelle Zuwendungen mit Entscheidungsverantwortung		

Es wurde vom Leitlinienkoordinator nach Prüfung der Formulare empfohlen, dass Mitglieder mit finanziellen Verbindungen in die pharmazeutische Industrie sich bei Abstimmungen zur medikamentösen Therapie enthalten. Dabei wurde dies aufgrund der besonders kritischen Fragestellungen bei unfreiwilliger medikamentöser Behandlung bereits bei mäßigen Interessenskonflikten empfohlen, wenn von Seiten des AWMF-Regelwerks noch eine Abstimmung gestattet gewesen wäre. Die Interessenskonflikte des Leitlinienkoordinators und der wissenschaftlichen Mitarbeiterin wurden zudem von der einem weiteren Mitglied der Steuerungsgruppe (Jakov Gather) überprüft.

Die angegebenen Interessenskonflikte sind in der untenstehenden Tabelle aufgeführt.

Tabelle zur Erklärung von Interessen und Umgang mit Interessenkonflikten

Im Folgenden sind die Interessenerklärungen als tabellarische Zusammenfassung dargestellt sowie die Ergebnisse der Interessenkonfliktbewertung und Maßnahmen, die nach Diskussion der Sachverhalte von der der LL-Gruppe beschlossen und im Rahmen der Konsensuskonferenz umgesetzt wurden.

Leitlinienkoordination: PD Dr. Sophie Hirsch, Prof. Dr. Tilman Steinert

Leitlinie: S3-Leitlinie Verhinderung von Zwang: Prävention und Therapie aggressiven Verhaltens bei Erwachsenen

Registernummer: 038-022

	Tätigkeit als Berater*in und/oder Gutachter*in	Mitarbeit in einem Wissenschaftlichen Beirat (advisory board)	Bezahlte Vortrags-/oder Schulungstätigkeit	Bezahlte Autor*innen-/oder Coautor*innenschaft	Forschungsvorhaben/Durchführung klinischer Studien	Eigentümer*inneninteressen (Patent, Urheber*innenrecht, Aktienbesitz)	Indirekte Interessen	Von COI betroffene Themen der Leitlinie, Einstufung bzgl. der Relevanz, Konsequenz
Dr. Albers, Matthias	Nein	Nein	Akademie für das Öffentliche Gesundheitswesen, verschiedene psychiatrische Kliniken, Ärztekammer Nordrhein, Alexianer KH Köln, DGSP Landesverband Niedersachsen	Nein	Nein	Nein	Mitglied: Bundesverband der Ärztinnen und Ärzte des Öffentlichen Gesundheitswesens, Sprecher des Fachausschuss Psychiatrie, Mitglied im erweiterten Vorstand, Mitglied: Bundesweites Netzwerk Sozialpsychiatrischer Dienste, Sprecher, Mitglied: Deutsche Gesellschaft für Soziale Psychiatrie DGSP Mitglied, Mitarbeit im Fachausschuss Migration, Mitglied: Deutsche Vereinigung für Rehabilitation, Fachausschuss "Psychische Beeinträchtigungen", Mitglied: Landesarbeitsgemeinschaft Sozialpsychiatrischer Dienste NRW, Vorstand, Mitglied: Aktion Psychisch Kranke, Mitglied, Mitglied: Arbeitsgemeinschaft für	COI: keine

	Tätigkeit als Berater*in und/oder Gutachter*in	Mitarbeit in einem Wissenschaftlichen Beirat (advisory board)	Bezahlte Vortrags-/oder Schulungstätigkeit	Bezahlte Autor*innen-/oder Coautor*innenschaft	Forschungsvorhaben/Durchführung klinischer Studien	Eigentümer*inneninteressen (Patent, Urheber*innenrecht, Aktienbesitz)	Indirekte Interessen	Von COI betroffene Themen der Leitlinie, Einstufung bzgl. der Relevanz, Konsequenz
							Methodik und Dokumentation in der Psychiatrie AMDP e.V., Mitglied Systemgruppe, Trainer, Mitglied: Marburger Bund, Mitglied: Ärztekammer Nordrhein, Ausschuss „Psychiatrie, Psychotherapie und Psychosomatik“, Wissenschaftliche Tätigkeit: Sozialpsychiatrie, Gemeindepsychiatrie, berufliche und medizinische Rehabilitation, psychische Erkrankungen und Wohnungslosigkeit, Klinische Tätigkeit: Versorgung von Personen mit erschwertem Zugang zum Regelsystem der gesundheitlichen Versorgung, Beteiligung an Fort-/Ausbildung: Jahrestagungen von BVÖGD, LAG SpD NRW, Fortbildungsveranstaltungen des Bundesweiten Netzwerks Sozialpsychiatrischer Dienste	
Bauer, Dominic	Nein	Nein	Nein	Nein	Nein	Nein	Mitglied: Bundesverband der Berufsbetreuer*innen - Beisitzer im Bundesvorstand	COI: keine
Prof. Dr. Brieger, Peter	Nein	IQTIG	Vorträge bei verschiedenen öffentlichen Trägern (Ministerien, Akademien, Behörden, Kliniken)	Nein	Innovationsfond G-BA, Innovationsfond G-BA, Bayerisches Staatsministerium für Gesundheit und Pflege, Innovationsfond G-BA	Psychiatrie-Verlag	Mitglied: Stellv. Vorstand Aktion Psychisch Kranke e.V., Mitglied: Vorstandsvorsitzender München Bündnis gegen Depression, Wissenschaftliche Tätigkeit: Suizid, Versorgungsforschung, Reha-Forschung, Bipolare Störungen, Klinische Tätigkeit: Versorgung, Beteiligung an Fort-/Ausbildung: Leitung Institut für Psychotherapie des kbo-Isar-Amper-Klinikum, Persönliche	COI: keine

	Tätigkeit als Berater*in und/oder Gutachter*in	Mitarbeit in einem Wissenschaftlichen Beirat (advisory board)	Bezahlte Vortrags-/oder Schulungstätigkeit	Bezahlte Autor*innen-/oder Coautor*innenschaft	Forschungsvorhaben/Durchführung klinischer Studien	Eigentümer*inneninteressen (Patent, Urheber*innenrecht, Aktienbesitz)	Indirekte Interessen	Von COI betroffene Themen der Leitlinie, Einstufung bzgl. der Relevanz, Konsequenz
							Beziehung: keine	
Prof. Dr. Brosey, Dagmar	Nein	Nein	Uniklinik Köln, St. Marien Hospital Herne, Vertretungsnetz Österreich, LVR-Klinik Bonn	zusammen mit Georg Dodegge	Nein	Nein	Mitglied: Mitwirkung in der AG Menschenrechte der Aktion Psychisch Kranke e.V., ehrenamtlich, Wissenschaftliche Tätigkeit: Betreuungsrecht, freiheitsentziehende Maßnahmen, Zwangsbehandlung, PsychKGs, Grundrechte, UN-BRK	COI: keine
Dr. Claus, Sylvia	Nein	Nein	Nein	Nein	Nein	Nein	Mitglied: Vorsitz der Bundesdirektorenkonferenz e.V. Vorstandsmitglied der DGPPN Supervisorin Verhaltenstherapie, Wissenschaftliche Tätigkeit: Regionale Versorgung im Globalbudget (SGBV §64b), Klinische Tätigkeit: Psychiatrisch-psychotherapeutisch F0-F9 Ärztliche Direktorin Pfalzkrankenhaus, Beteiligung an Fort-/Ausbildung: keine, Persönliche Beziehung: keine	Globalbudget ggf. relevant bei Kapitel 12.2 (Zwangseinweisungen), 13/14 (Zwangsmaßnahmen) COI: gering Konsequenz: Limitierung von Leitungsfunktion Verhaltenstherapie ggf. relevant bei Kapitel 12.3 (psychotherapeutische Interventionen) COI: gering Konsequenz: Limitierung von Leitungsfunktion
Dr. Debus, Stephan	Nein	Nein	Nein	Nein	Nein	Nein	Mitglied: DGSP, Sprecher im Fachausschuss: "Netzwerk: Psychiatrie ohne Gewalt" (NPOG), Mandatsträger für die "Deutsche Gesellschaft für Soziale Psychiatrie" (DGSP) Mitglied in der "Deutschen Gesellschaft für Semiotik" (DGS), Mitglied in "Internationale Arbeitsgemeinschaft Soteria" (IAS), Wissenschaftliche Tätigkeit: Erforschung des Sprachverhaltens in psychiatrischen Gefährdungssituationen und Rekonstruktion von expliziten	COI: keine

	Tätigkeit als Berater*in und/oder Gutachter*in	Mitarbeit in einem Wissenschaftlichen Beirat (advisory board)	Bezahlte Vortrags-/oder Schulungstätigkeit	Bezahlte Autor*innen-/oder Coautor*innenschaft	Forschungsvorhaben/Durchführung klinischer Studien	Eigentümer*inneninteressen (Patent, Urheber*innenrecht, Aktienbesitz)	Indirekte Interessen	Von COI betroffene Themen der Leitlinie, Einstufung bzgl. der Relevanz, Konsequenz
							und impliziten Durchführungsregeln von Zwangsmaßnahmen. Publikationen in Zeitschriften: "Psychiatrische Praxis", "Nervenheilkunde" und "Soziale Psychiatrie", Leiter des Forschungsprojektes "Simulation und Reduktion von Zwangsmaßnahmen in der Psychiatrie" (SRZP)., Beteiligung an Fort-/Ausbildung: Hochschullehrer an der MHH und Forschungs Kooperation mit der MHH-Pflegeakademie sowie der Johanniter Akademie in Hannover, Persönliche Beziehung: keine	
Delgado-Klamroth, Paola	Nein	Nein	Nein	Redakteurin im Auftrag der Sektion Klinische Psychologie im BDP für die Zeitschrift Klinische Psychologie und Psychotherapie (Hogrefe Verlag) sowie für den Report (Deutscher Psychologen Verlag)	Nein	Nein	Mitglied: Berufsverband Deutscher Psychologinnen und Psychologen (BDP e.V.): Beisitzerin Vorstand der Sektion Klinische (seit 01.24) Mitglied des Leitungsteams Fachgruppe Rehabilitation (seit 09.24) Ersatzdelegierte der BDP-Delegiertenkonferenz (seit 09.23) -Aktiv in der Arbeitsgruppe Psychotherapeutengesetz. -Redakteurin im Auftrag der Sektion Klinische Psychologie für die Zeitschrift Klinische Psychologie und Psychotherapie (Hogrefe Verlag) sowie für den Report (Deutscher Psychologen Verlag) Nachrichten aus der Sektion Leitung AG Geschlechtsspezifische Gewalt: Initiativen des BDP seit 24.02.25	COI: keine

	Tätigkeit als Berater*in und/oder Gutachter*in	Mitarbeit in einem Wissenschaftlichen Beirat (advisory board)	Bezahlte Vortrags-/oder Schulungstätigkeit	Bezahlte Autor*innen-/oder Coautor*innenschaft	Forschungsvorhaben/Durchführung klinischer Studien	Eigentümer*inneninteressen (Patent, Urheber*innenrecht, Aktienbesitz)	Indirekte Interessen	Von COI betroffene Themen der Leitlinie, Einstufung bzgl. der Relevanz, Konsequenz
							, Klinische Tätigkeit: Psychologische Beratung Psychoedukativen Gruppen in der Rehabilitation (Schmerzbewältigung und Achtsamkeitstraining/Entspannungstraining) Vorträge (Entspannung, Stressbewältigung, Schmerzbewältigung).	
Dippmar, Fabienne	Nein	Nein	Nein	Nein	Nein	MSCI World Socially Responsible USD (Acc), Technologie S US Select Sector , Core S 500 USD (Acc), DAX EUR, Crinetics Pharmaceuticals	Mitglied: BRK Erlangen + Fürth FSI Biologie Erlangen (Ak Events + Webseite) FAU Natfak Fakultätsrat + FSV, Wissenschaftliche Tätigkeit: Bachelorarbeit FAU Dr. Fuhrmann	COI: keine
Dittrich, Mona	SRH Hochschule Heidelberg	Nein	Nein	Nein	Nein	Nein	Mitglied: Deutsche Musiktherapeutische Gesellschaft Vereinszugehörigkeit seit 2019, Vorstandsmitglied seit 12.03.2024, Klinische Tätigkeit: Akutpsychiatrie	COI: keine
Dr. Eisenführ, Beate	Nein	Nein	Nein	Nein	Nein	Nein	Mitglied: Mitgliedschaft in der DeGPT, Mitglied: Mitgliedschaft in der DGPPN, Klinische Tätigkeit: Oberärztin auf einer psychiatrischen Station im Bundeswehrkrankenhaus (Patientenversorgung, Ausbildung von Ärzten, Stationsleitung)	COI: keine
Prim. DDr. Fellingner, Matthäus	Nein	Nein	Nein	Nein	Fonds des Bürgermeisters der Bundeshauptstadt Wien	Nein	Mitglied: European Psychiatric Association (EPA) /Fachgesellschaft, Mitglied: International Federation of	COI: keine

	Tätigkeit als Berater*in und/oder Gutachter*in	Mitarbeit in einem Wissenschaftlichen Beirat (advisory board)	Bezahlte Vortrags-/oder Schulungstätigkeit	Bezahlte Autor*innen-/oder Coautor*innenschaft	Forschungsvorhaben/Durchführung klinischer Studien	Eigentümer*inneninteressen (Patent, Urheber*innenrecht, Aktienbesitz)	Indirekte Interessen	Von COI betroffene Themen der Leitlinie, Einstufung bzgl. der Relevanz, Konsequenz
							Psychiatric Epidemiology (IFPE)/Fachgesellschaft, Mitglied: Austrian Association of Psychiatry, Psychotherapy and Psychosomatics (ÖGPP)/Fachgesellschaft, Mitglied: Verein für Psychiatrie und Neurologie/Fachgesellschaft, Mitglied: Young Psychiatrists Austria/Fachgesellschaft, Mitglied: D-A-CH-Inklusive Medizin/Fachgesellschaft, Mitglied: Verein Freiräume/Trialog, Mitglied: Hilfe für Angehörige psychisch Erkrankter (HPE) – Wien /Angehörigenverein, Wissenschaftliche Tätigkeit: Prävalenz und Reduktion von Zwangsmaßnahmen, Epidemiologie, Heavy Use, Behandlung/Versorgung schwerer psychiatrischer Erkrankungen , Beteiligung an Fort-/Ausbildung: Gestaltung Abteilungsinterner Fortbildungen, Beteiligung an Fort-/Ausbildung: Programmgestaltung: 25. Tagung: Subjektive Seite der Schizophrenie	
Prim. Priv.-Doz. DDr. Fugger, Gernot	Janssen Cilag Pharma GmbH bzw. Johnson Johnson	Ärztchamber Niederösterreich	MedAK Med. Fortbildungsakademie OÖ	MedAhead Gesellschaft für medizinische Information m.b.H.	Update Europe GmbH	Nein	Mitglied: Rechnungsprüfer Österreichische Gesellschaft für Neuropsychopharmakologie und Biologische Psychiatrie	Mitgliedschaft in Advisory Board COI: gering Konsequenz: Limitierung von Leitungsfunktion. Anmerkung: Aufgrund seiner Expertise war Herr Fugger ein wertvolles Mitglied der Steuergruppe trotz geringer Interessenkonflikte. Es wurde

	Tätigkeit als Berater*in und/oder Gutachter*in	Mitarbeit in einem Wissenschaftlichen Beirat (advisory board)	Bezahlte Vortrags-/oder Schulungstätigkeit	Bezahlte Autor*innen-/oder Coautor*innenschaft	Forschungsvorhaben/Durchführung klinischer Studien	Eigentümer*inneninteressen (Patent, Urheber*innenrecht, Aktienbesitz)	Indirekte Interessen	Von COI betroffene Themen der Leitlinie, Einstufung bzgl. der Relevanz, Konsequenz
								darauf geachtet, dass alle übrigen Mitglieder der Steuergruppe keine Interessenkonflikte hatten. Entscheidungen wurden immer im Einverständnis der gesamten Gruppe getroffen.
Priv.-Doz. Dr. Gather, Jakob	1) Deutsche Gesellschaft für Psychiatrie und Psychotherapie, Psychosomatik und Nervenheilkunde (DGPPN), 2) Deutsche Gesellschaft für Psychiatrie und Psychotherapie, Psychosomatik und Nervenheilkunde (DGPPN)	Nein	1) Deutsche Gesellschaft für Psychiatrie und Psychotherapie, Psychosomatik und Nervenheilkunde (DGPPN), 2) DGPPN, 3) Goethe-Universität Frankfurt am Main, Arbeitsstelle Medizinethik in der Klinkseelsorge, 4) FernUni Hagen, 5) Zentrum für Gesundheitsethik Hannover, 6) DGPPN, 7) LVR Klinik Köln, 8) kbo-Isar-Amper-Klinikum Haar, 9) FernUni Hagen, 10) Universitätsklinikum	Nein	1) Bundesministerium für Bildung und Forschung (BMBF), 2) Bundesministerium für Bildung und Forschung (BMBF), 3) Bundesministerium der Justiz (BMJ), FoRUM Forschungsförderung an der Medizinischen Fakultät der Ruhr-Universität Bochum	Nein	Mitglied: 1) Akademie für Ethik in der Medizin (AEM) a) Koordinator der interdisziplinären AG "Ethik in der Psychiatrie" in der Akademie für Ethik in der Medizin (AEM), Mitglied: 2) Deutsche Gesellschaft für Psychiatrie und Psychotherapie, Psychosomatik und Nervenheilkunde (DGPPN) a) Mitglied der Kommission "Ethik und Recht", Mitglied: 2) Deutsche Gesellschaft für Psychiatrie und Psychotherapie, Psychosomatik und Nervenheilkunde (DGPPN) b) Mitglied der Jury für den jährlich zu vergebenden "Ulrike-Fritz-Lindenthal-Preis - Förderpreis zur Entstigmatisierung und Autonomie psychisch kranker Menschen" in der DGPPN, Mitglied: 2) Deutsche Gesellschaft für Psychiatrie und Psychotherapie, Psychosomatik und Nervenheilkunde (DGPPN) c) Mitglied der Nachwuchsinitiative "Gen Psy", Mitglied: 3) Mitglied der FOSTREN COST Action "Fostering and	COI: keine

	Tätigkeit als Berater*in und/oder Gutachter*in	Mitarbeit in einem Wissenschaftlichen Beirat (advisory board)	Bezahlte Vortrags-/oder Schulungstätigkeit	Bezahlte Autor*innen-/oder Coautor*innenschaft	Forschungsvorhaben/Durchführung klinischer Studien	Eigentümer*inneninteressen (Patent, Urheber*innenrecht, Aktienbesitz)	Indirekte Interessen	Von COI betroffene Themen der Leitlinie, Einstufung bzgl. der Relevanz, Konsequenz
			Schleswig-Holstein (Kiel), 11) EvK Bielefeld, Klinik für Psychiatrie und Psychotherapie, 12) Klinik für Psychiatrie und Psychotherapie Klinikum Westfalen GmbH Knappschaftskrankenhaus Lütgendortmund, 13) ZNS Tage Köln (Diaplan GmbH), 14) DGPPN, 15) Internationales Symposium Forensische Psychologie und Psychiatrie, Zürich. , 16) Zentrum für Gesundheitsethik Hannover, 17) Forum für medizinische Fortbildung (FomF),				Strengthening Approaches to Reducing Coercion in European Mental Health Services" , Mitglied: 4) Mitglied der European Violence in Psychiatry Research Group (EviRPG), Mitglied: 5) Mitglied/ Koordinator des Arbeitskreises "Gewalt und Zwang in der Psychiatrie (Nord)" , Mitglied: 6) Landschaftsverband Westfalen-Lippe (Arbeitgeber) a) Arbeitskreis "Ethische Dilemmata in der Psychiatrie während der Covid-19 Pandemie in Einrichtungen des LWL" des LWL-Psychiatrieverbunds, Wissenschaftliche Tätigkeit: Ethik in der Psychiatrie, insbesondere Konzeption und Rechtfertigung von Zwang, Vorausverfügungen, Selbstbestimmung/ Einwilligungsfähigkeit, gesundheitliches Wohl, Sicherheit, klinische Ethikberatung, Diskriminierung und epistemische Ungerechtigkeit, Klinische Tätigkeit: Akutpsychiatrie, Forensische Psychiatrie , Beteiligung an Fort-/Ausbildung: 1) Mitausrichter des Workshops "Entscheidungsassistenz und Entscheidungsfindung bei nicht einwilligungsfähigen Patienten in der Psychiatrie" der DGPPN, Beteiligung an Fort-/Ausbildung: 2) Mitinitiator und Mitausrichter der jährlich stattfindenden "Netzwerktreffen klinische Ethikberatung in der Psychiatrie" in Zusammenarbeit mit der AEM	

	Tätigkeit als Berater*in und/oder Gutachter*in	Mitarbeit in einem Wissenschaftlichen Beirat (advisory board)	Bezahlte Vortrags-/oder Schulungstätigkeit	Bezahlte Autor*innen-/oder Coautor*innenschaft	Forschungsvorhaben/Durchführung klinischer Studien	Eigentümer*inneninteressen (Patent, Urheber*innenrecht, Aktienbesitz)	Indirekte Interessen	Von COI betroffene Themen der Leitlinie, Einstufung bzgl. der Relevanz, Konsequenz
							und der DGPPN , Beteiligung an Fort-/Ausbildung: 3) Mitinitiator und Mitausrichter der Schulung (Grund- und Moderationskurs) "Ethikberatung in der Psychiatrie" in Zusammenarbeit mit der Akademie für Ethik in der Medizin (AEM) und der Deutschen Gesellschaft für Psychiatrie und Psychotherapie, Psychosomatik und Nervenheilkunde (DGPPN)	
Dr. biol. hum. Gebhardt, Ralf-Peter	Nein	Nein	Nein	Nein	Nein	Nein	Mitglied: Vorstand Schweizerische Gesellschaft für Sozialpsychiatrie, Mitglied: Mitglied Patronatskomitee Selbsthilfe Thurgau, Klinische Tätigkeit: Sozialpsychiatrie	COI: keine
Dr. Geschke, Katharina	Nein	Nein	Telemedizinzentrum Hamm, IGP Basiskurs Palliativmedizin, Alzheimer Gesellschaft Wiesbaden e.V., medicproof , diaplan NeuroForum, Psychologisches Institut Uni Mainz, IGP Basiskurs Palliativmedizin, Akademie für Ärztliche Fortbildung in Rheinland-Pfalz, Akademie für	Intensivkurs Psychiatrie und Psychotherapie, Elsevier, InFo Neurologie und Psychiatrie, Springer	Ministerium für Arbeit, Soziales, Transformation und Digitalisierung (MASTD)RLP, Ministerium für Arbeit, Soziales, Transformation und Digitalisierung (MASTD)RLP	Nein	Mitglied: Marburger Bund Medizinische Gesellschaft Mainz Alzheimer Gesellschaft RLP Alzheimer Gesellschaft Wiesbaden DGPPN IGP(Palliativmedizin)RLP Deutsches Netzwerk Gedächtnisambulanzen Delir Netzwerk DGGPP DNVF GeSET DGGG European Delirium Association(EDA) DAGPP, Wissenschaftliche Tätigkeit: Versorgungsinnovationen für Menschen mit Demenz und deren Angehörige, Klinische Tätigkeit: Gerontopsychiatrie, Beteiligung an Fort-/Ausbildung: nein,	COI: keine

	Tätigkeit als Berater*in und/oder Gutachter*in	Mitarbeit in einem Wissenschaftlichen Beirat (advisory board)	Bezahlte Vortrags-/oder Schulungstätigkeit	Bezahlte Autor*innen-/oder Coautor*innenschaft	Forschungsvorhaben/Durchführung klinischer Studien	Eigentümer*inneninteressen (Patent, Urheber*innenrecht, Aktienbesitz)	Indirekte Interessen	Von COI betroffene Themen der Leitlinie, Einstufung bzgl. der Relevanz, Konsequenz
			Ärztliche Fortbildung in Rheinland-Pfalz, DAGPP e.V., IGP Basiskurs Palliativmedizin, Akademie für Ärztliche Fortbildung in Rheinland-Pfalz, Aktion Psychisch Kranke e.V., Ärztekammer des Saarlands, Akademie für Ärztliche Fortbildung in Rheinland-Pfalz, Heidelberger Medizinakademie				Persönliche Beziehung: nein	
Greve, Nils	Nein	Nein	dialog_mX GmbH, Marburg, Institut für Familientherapie Weinheim, APP Köln	Nein	Innovationsfonds	Psychiatrie-Verlag, Köln. Gesellschafter	Mitglied: Dachverband Gemeindepsychiatrie (Vorsitz), BAC GPV (Beisitzender), Mitglied bei DGPPN, Aktion Psychisch Kranke, DGSP, Wissenschaftliche Tätigkeit: Ergebnis- und Evaluationsbericht des Projektes GBV, Veröffentlichung durch den G-BA steht unmittelbar bevor, ebenso weitere Publikationen, Klinische Tätigkeit: Psychosozialer Trägerverein Solingen e. V. (wenige Patienten, Honorartätigkeit), Beteiligung an Fort-/Ausbildung: dialog_mX GmbH, Marburg: stellvertretende	COI: keine

	Tätigkeit als Berater*in und/oder Gutachter*in	Mitarbeit in einem Wissenschaftlichen Beirat (advisory board)	Bezahlte Vortrags-/oder Schulungstätigkeit	Bezahlte Autor*innen-/oder Coautor*innenschaft	Forschungsvorhaben/Durchführung klinischer Studien	Eigentümer*inneninteressen (Patent, Urheber*innenrecht, Aktienbesitz)	Indirekte Interessen	Von COI betroffene Themen der Leitlinie, Einstufung bzgl. der Relevanz, Konsequenz
							Leitung der Approbationsausbildung systemische Psychotherapie, Persönliche Beziehung: ---	
Haller, Siegfried	Nein	Nein	Nein	Nein	Nein	Nein	Mitglied: Bundesverband Angehöriger psychisch kranker Menschen (BAPK) Vorstandsmitglied, Wissenschaftliche Tätigkeit: Landesverband Angehöriger psychisch kranker Menschen in Sachsen e. V. (LVApK) Vorsitzender, Klinische Tätigkeit: Förderverein Zentrum für Drogenhilfe e.V. Mitglied	COI: keine
Harich, Horst	Nein	Nein	Nein	Nein	Nein	Nein	Mitglied: Deutsche Gesellschaft für Bipolare Störung	COI: keine
Prof. Dr. Hasan, Alkomiet	Teva, Abbvie	Boehringer-Ingelheim	Janssen, Rovi, Recordati, Boehringer-Ingelheim, Lundbeck, Otsuka	Nein	BMBF, DFG, GBA-Innovationsfonds	Nein	Mitglied: DGPPN, AGNP, DGBP, Wissenschaftliche Tätigkeit: Verhaltenstherapie, Versorgungsforschung, EBM, Klinische Forschung, Biologische Psychiatrie, Klinische Tätigkeit: Schizophrenie	Kapitel zu Medikamenten COI: moderat Konsequenz: Stimmenthaltung bei allen Empfehlungen im Medikamentenkapitel vereinbart, wegen Vulnerabilität der betroffenen Gruppe (nicht einwilligungsfähige Pat., die zur Medikamenteneinnahme gezwungen werden)
Henking, Tanja	Nein	Nein	Akademie für Ethik in der Medizin (AEM), Zentrum für Ethik, Führung und Organisationse ntwicklung im	Nein	1) Bundesre publik Deutschl and, 2) Bay" Ministeriu m für Gesundh eit und Pflege, 3) Deutsche	Nein	Mitglied: Akademie für Ethik in der Medizin e.V. (AEM), Mitglied: Deutscher Juristinnenbund (DJB), Mitglied: Ethiknetz Mainfranken e.V. (außerklinische Ethikberatung), Mitglied: Dialog Würzburg e.V., Mitglied: Mitglied der DGPPN-Kommission "Ethik	COI: keine

	Tätigkeit als Berater*in und/oder Gutachter*in	Mitarbeit in einem Wissenschaftlichen Beirat (advisory board)	Bezahlte Vortrags-/oder Schulungstätigkeit	Bezahlte Autor*innen-/oder Coautor*innenschaft	Forschungsvorhaben/Durchführung klinischer Studien	Eigentümer*inneninteressen (Patent, Urheber*innenrecht, Aktienbesitz)	Indirekte Interessen	Von COI betroffene Themen der Leitlinie, Einstufung bzgl. der Relevanz, Konsequenz
			Gesundheitswesen (ZefOG), in Kliniken auf Anfrage		Rentenversicherung Bund		und Recht", Mitglied: Mitglied der Projektgruppe "Ethik" der DGK, Wissenschaftliche Tätigkeit: Rechte von Menschen mit psychischer Erkrankung, Zwang, Reproduktionsmedizin, Schwangerschaftsabbruch, Kommentierung des §212, Sterbehilfe, Suizidhilfe, Rechtsfragen am Lebensanfang und Lebensende, Einwilligungsfähigkeit	
Dr. Hinüber, Wassili	Nein	Nein	Nein	Nein	Nein	Nein	Mitglied: Dt. Gesellschaft f. Soziale Psychiatrie Dt. Arbeitskreis Tageskliniken Psychiatrie, Psychosom. Psychother., Klinische Tätigkeit: Psychiater im Ruhestand	COI: keine
Dr. med. Hirsch, Sophie	Nein	Nein	Böhringer-Ingelheim	Nein	Nein	Nein	Mitglied: Mitglied in der DGPPN, Mitglied: Mitglied und Vorstandsmitglied (seit 2023) bei EViPRG (Europäische Initiative zur Erforschung von Zwang und Gewalt in der Psychiatrie), Mitglied: Stimmberechtigtes Mitglied bei der COST-Aktion FOSTREN (Europäisches Netzwerk zur Vermeidung von Zwang in der Psychiatrie), Wissenschaftliche Tätigkeit: Epidemiologie von Zwang und Gewalt in der Psychiatrie Vermeidung von Zwang und Gewalt in der Psychiatrie, Klinische Tätigkeit: Akut-Allgemeinpsychiatrie, Alterspsychiatrie	COI: keine
Prof. Dr.	Nein	Nein	Nein	Nein	Nein	Nein	Mitglied: Mitglied BDK	COI: keine

	Tätigkeit als Berater*in und/oder Gutachter*in	Mitarbeit in einem Wissenschaftlichen Beirat (advisory board)	Bezahlte Vortrags-/oder Schulungstätigkeit	Bezahlte Autor*innen-/oder Coautor*innenschaft	Forschungsvorhaben/Durchführung klinischer Studien	Eigentümer*inneninteressen (Patent, Urheber*innenrecht, Aktienbesitz)	Indirekte Interessen	Von COI betroffene Themen der Leitlinie, Einstufung bzgl. der Relevanz, Konsequenz
Janssen, Birgit							Mitglied LLPP Mitglied DGPPN, Wissenschaftliche Tätigkeit: Versorgungsforschung, Klinische Tätigkeit: Allgemeine Psychiatrie	
Prof. Dr. Jäger, Matthias	Nein	Nein	Zahlreiche Vorträge auf Kongressen, Tagungen und in Institutionen sowie in der Lehre, Fort- und Weiterbildung	Zahlreiche Publikationen: https://scholar.google.com/citations?hl=de=52a10FgAAAAJ=pubdate==AC8hv-oAAAAZ-qFgfveN4fWxgyac6PbGYRq_uY=ANZ5fUOWK-o-4YiIVBuUTtmLQrIhKf8j32kOp3_9ba1IVwCncNkduU5f3YnUdh-	Nein	Nein	Mitglied: ☐ Schweizerische Gesellschaft für Psychiatrie und Psychotherapie (SGPP) ☐ Ärztesgesellschaft Baselland (AeGBL) ☐ Berufsverband der Schweizer Ärzte und Ärztinnen (FMH) ☐ Schweizerische Vereinigung Psychiatrischer Chefärztinnen und Chefärzte (SVPC) ☐ Swiss Conference of Academic Psychiatry (SCAP), Delegierter für die SGPP ☐ Vorstandsmitglied der Schweizerischen Gesellschaft für Sozialpsychiatrie (SGSP) ☐ Deutsche Gesellschaft für Psychiatrie und Psychotherapie, Psychosomatik und Nervenheilkunde (DGPPN) ☐ Mitglied der Studienleitung Postgraduale Studiengänge in Psychotherapie (PSP) ☐ Mitglied Verwaltungsrat Triaplan AG, Integrierte Psychiatrie Uri, Schwyz und Zug, Wissenschaftliche Tätigkeit: Zahlreiche Publikationen: https://scholar.google.com/citations?hl=de=52a10FgAAAAJ=pubdate==AC8hv-oAAAAZ-qFgfveN4fWxgyac6PbGYRq_uY=ANZ5fUOWK-o-4YiIVBuUTtmLQrIhKf8j32kOp3_9ba1IVwCncNkduU5f3YnUdh-	COI: keine

	Tätigkeit als Berater*in und/oder Gutachter*in	Mitarbeit in einem Wissenschaftlichen Beirat (advisory board)	Bezahlte Vortrags-/oder Schulungstätigkeit	Bezahlte Autor*innen-/oder Coautor*innenschaft	Forschungsvorhaben/Durchführung klinischer Studien	Eigentümer*inneninteressen (Patent, Urheber*innenrecht, Aktienbesitz)	Indirekte Interessen	Von COI betroffene Themen der Leitlinie, Einstufung bzgl. der Relevanz, Konsequenz
							w5NPMLvlz3-pYxTtGIXMgTOWUIEN-yuAeaupCk8hmwvWEbv4LAIMlb2p45zizk0b3Ug=8091579898050358886 , Klinische Tätigkeit: Führung einer psychiatrischen Klinik mit umfassenden Grundversorgungsauftrag, Beteiligung an Fort-/Ausbildung: ☐ Mitglied der Studienleitung Postgraduale Studiengänge in Psychotherapie (PSP)	
Klein, Thomas	Nein	Nein	Nein	Nein	Nein	Nein	Mitglied: GLOHRA, Wissenschaftliche Tätigkeit: Methoden der Meta-Analyse, Global Mental Health, Psychotherapieforschung	COI: keine
Mag. Ladinsler, Edwin	Nein	Nein	Sicherheitsakademie	Nein	Nein	Nein	Mitglied: Mitglied bei HPE Wien, Hilfe für Angehörige psychisch erkrankter	COI: keine
Lindemann, Tina	Nein	Nein	Nein	Nein	Nein	Nein	Mitglied: Erweiterter Vorstand Deutsche Gesellschaft für Soziale Psychiatrie e.V.	COI: keine
Loer, Annette	Nein	BMJ	Gerichte BGT Betreuungsvereine	Beck-Verlag Reguvis-Verlag	Nein	Nein	Mitglied: Ehrenamtliches Vorstandsmitglied des Betreuungsgerichtstag e.V. , Wissenschaftliche Tätigkeit: Reform des Betreuungsrechts	COI: keine
Lundie, Heidrun	Nein	Nein	Nein	Nein	Nein	Nein	Mitglied: BFLK	COI: keine
Dr. Mahler, Lieselotte	Nein	Nein	Janssen, verschiedene Psychiatrische Kliniken	Psychiatrie Verlag	Charité Berlin, ZfP Südwürttemberg, Charité Berlin	Nein	Mitglied: DGPPN, Leitung Referat sexuelle Orientierungen und Geschlechtsidentitäten, Mitglied: EPA, Leitung Referat sexual orientations and gender identities, Wissenschaftliche	COI: keine

	Tätigkeit als Berater*in und/oder Gutachter*in	Mitarbeit in einem Wissenschaftlichen Beirat (advisory board)	Bezahlte Vortrags-/oder Schulungstätigkeit	Bezahlte Autor*innen-/oder Coautor*innenschaft	Forschungsvorhaben/Durchführung klinischer Studien	Eigentümer*inneninteressen (Patent, Urheber*innenrecht, Aktienbesitz)	Indirekte Interessen	Von COI betroffene Themen der Leitlinie, Einstufung bzgl. der Relevanz, Konsequenz
							Tätigkeit: Einstellung von Zwangsmaßnahmen bei psych. Fachpersonen, Reduktion von Zwang, Implementierung von Genesungsbegleitung, Klinische Tätigkeit: akutpsychiatrische Versorgung	
Dr. Mallon, Tina	Nein	Nein	Verband deutscher Musikschulen	Nein	IPA; Medizinische Hochschule Hannover; Universitätsmedizin Göttingen; Universität Oldenburg, Deutsche Alzheimer Gesellschaft	Nein	Mitglied: Deutsche Musiktherapeutische Gesellschaft / reguläres Mitglied, Wissenschaftliche Tätigkeit: Interprofessionelle Zusammenarbeit; Depression; Schmerz; Demenz; Trauma; Musiktherapie; Zwangsstörung; Flucht; Palliativversorgung, Klinische Tätigkeit: Musiktherapeutische Traumabehandlung; , Beteiligung an Fort-/Ausbildung: keine, Persönliche Beziehung: keine	COI: keine
Mayer, Michael	Nein	Nein	Bildungswerk Irsee, Psychiatrische Kliniken	Nein	Nein	Nein	Mitglied: Deutsche Fachgesellschaft Psychiatrische Pflege (DFPP e.V.), Mitglied: Deutsche Gesellschaft für Soziale Psychiatrie (DGSP e.V.), Mitglied: Deutsche Gesellschaft für Pflegewissenschaft (DGP e.V.), Mitglied: Verband der Pflegedienstleitungen Bayern (VdP Bayern), Beteiligung an Fort-/Ausbildung: Deeskalationstraining PAIR, Beteiligung an Fort-/Ausbildung: Konzeption und Weiterentwicklung Schulung zur Suizidprävention	COI: keine
Prof. Dr.	Nein	Nein	Nein	Nein	Nein	Nein	Mitglied:	COI: keine

	Tätigkeit als Berater*in und/oder Gutachter*in	Mitarbeit in einem Wissenschaftlichen Beirat (advisory board)	Bezahlte Vortrags-/oder Schulungstätigkeit	Bezahlte Autor*innen-/oder Coautor*innenschaft	Forschungsvorhaben/Durchführung klinischer Studien	Eigentümer*inneninteressen (Patent, Urheber*innenrecht, Aktienbesitz)	Indirekte Interessen	Von COI betroffene Themen der Leitlinie, Einstufung bzgl. der Relevanz, Konsequenz
Metzger, Florian							Bundesdirektorenkonferenz (Vorstand seit 10/23), Wissenschaftliche Tätigkeit: wissenschaftlicher und Lehrauftrag Universität Tübingen, Gerontopsychiatrie, Psychiatrie von Menschen mit intellektueller Entwicklungsstörung, stationsäquivalente Behandlung, Klinische Tätigkeit: Psychiatrie und Psychotherapie, Geriatrie, Beteiligung an Fort-/Ausbildung: Referententätigkeit Vitos-Akademie, Psychotherapeuten-Ausbildung AWKV Kassel, Psychotherapeuten-Ausbildung Universität Gießen	COI: keine
Möhrmann, Karl Heinz	AWMF bzw. federführende Institution Leitlinienentwicklung (wechselnde Zeiträume der Tätigkeit)	Nein	Polizeihochschule Fürstenfeldbruck (jährlich ca. 4 mal; ein halber Tag Umfang), Bildungszentrum Irsee des Bay. Bezirktags (jährlich einmal; ca. 2,5 Tage lang)	div. Vorträge vor versch. Gremien, Veröffentl. in Zeitschr. und Tagungsbänden (wechselnde Tätigkeit)	Nein	Aktienbesitz: Roche Holding Novartis Siemens Healthineers United Health Group	Mitglied: Gegenwärtig Landesverband Bayern der Angehörigen psychisch erkrankter Menschen e.V. (ApK Bayern; Siehe unter 1), Mitglied: Bundesverband der Angehörigen psychisch erkrankter Menschen e.V. (BApK; Siehe unter 1) , Mitglied: Ferner: Mitglied bei DGBS, Münchner Bündnis gg. Depression, Deutsche Gesellsch. f. Psychoedukation (DGPE), Gesellsch. zur Förderung empirisch begründeter Therapieansätze bei schizophr. Menschen (gfts), Fördermitgl. Bay. Landesverband Psychiatrie-Erfahrener e.V. (BayPE), Wissenschaftliche Tätigkeit: Publikationen zu angehörigenelevanten Themen in div. Zeitschriften und Tagungsbänden ,	COI: keine

	Tätigkeit als Berater*in und/oder Gutachter*in	Mitarbeit in einem Wissenschaftlichen Beirat (advisory board)	Bezahlte Vortrags-/oder Schulungstätigkeit	Bezahlte Autor*innen-/oder Coautor*innenschaft	Forschungsvorhaben/Durchführung klinischer Studien	Eigentümer*inneninteressen (Patent, Urheber*innenrecht, Aktienbesitz)	Indirekte Interessen	Von COI betroffene Themen der Leitlinie, Einstufung bzgl. der Relevanz, Konsequenz
							Wissenschaftliche Tätigkeit: Vortrag: „Hilfen für psychisch erkrankte Menschen ohne Krankheits- und Behandlungseinsicht“ bei DGPPN Jahrestagung 2022 Berlin, Wissenschaftliche Tätigkeit: Vortrag: „Psychisch erkrankte Menschen ohne Krankheits- und Behandlungseinsicht: ein Problem für Betroffene und Angehörige“ bei DGBS Jahrestagung 2023 Bielefeld, Klinische Tätigkeit: ---, Beteiligung an Fort-/Ausbildung: Jährl. Angehörigentagungen im Bildungszentrum Irsee des Bay. Bezirktags (1 x jährlich), Persönliche Beziehung: ---	
Prof. Dr. med. Müller, Jürgen L.	Gutachten für Gerichte , Asklepiosklinik	Nein	Nein	Nein	BMBF, BMBF	Nein	Mitglied: DGPPN, Vorstand Sprecher des Referats Forensische Psychiatrie, Mitglied: IAFPP Vorstand, Wissenschaftliche Tätigkeit: Forensische Psychiatrie	COI: keine
Dr. rer. medic. Nienaber, André	Nein	Zentrum für Psychosoziale Medizin Heidelberg	Nein	Psychiatrie Verlag Michael Löhr Michael Schulz	Nein	Nein	Mitglied: DGPPN - Leitung des Referats Psychiatrische Pflege, Mitglied: DFPP - AG Intensivbetreuung	COI: keine
Dr. med. Nothacker, Monika	IQTIG	-Advisory Board Member of Health Care Research Project INDiQ (measuring indication quality) Honoraria as described - Member of Steering Group National	Berlin School of Public Health, European Board of Gastroenterology, medical association bavaria, , INGUIDE	Nein	German Cancer Aid , BMG, Network University Medicine for Pandemic Preparedness 2.0 , G-BA Innovationfund, Canadian Public Health Agency	Nein	Mitglied: - German Network Evidence Based Medicine (member) - German Cancer Society (member until 12/2020) - Guidelines International Network/GRADE Working Group (member) - AWMF Vice Chair Woman ad hoc commission structures in health	COI: keine

	Tätigkeit als Berater*in und/oder Gutachter*in	Mitarbeit in einem Wissenschaftlichen Beirat (advisory board)	Bezahlte Vortrags-/oder Schulungstätigkeit	Bezahlte Autor*innen-/oder Coautor*innenschaft	Forschungsvorhaben/Durchführung klinischer Studien	Eigentümer*inneninteressen (Patent, Urheber*innenrecht, Aktienbesitz)	Indirekte Interessen	Von COI betroffene Themen der Leitlinie, Einstufung bzgl. der Relevanz, Konsequenz
		Cancer Plan no payment , IQTIG					care, Wissenschaftliche Tätigkeit: Guidelines and Guideline Methodology, Methodology of guidelines based performance measures/quality indicators, Klinische Tätigkeit: no clinical activity or clinical research, Beteiligung an Fort-/Ausbildung: Guideline seminars within Curriculum for guideline developers in Germany , Persönliche Beziehung: no	
Dr. Obert, Klaus	Nein	Nein	Beratung von Regionen bezüglich der Einrichtung Gemeindepsychiatrischer Verbünde	Nein	Nein	Nein	Mitglied: Bundesarbeitsgemeinschaft gemeindepsychiatrischer Verbünde Stellvertretender Vorsitzender, Wissenschaftliche Tätigkeit: Erarbeitung eines Buches zu "schwierigen Klient*innen in prekären Lebenslagen", erscheint im Juni 2025, Klinische Tätigkeit: Keine, Beteiligung an Fort-/Ausbildung: Keine, Persönliche Beziehung: Nein	COI: keine
Pernollet, Nadia	Nein	Nein	Nein	Nein	Nein	Nein	Nein	COI: keine
Dr. Pfeifer, Anja	Nein	Nein	Nein	Nein	Nein	Nein	Nein	COI: keine
Prof. Dr. med. Pogarell, Oliver	Mitglied der AG Psychiatrieberaterstattung nach BayPsychKHG	Johnson	Otsuka Lundbeck Janssen/Johnson Medice Stadapharm Bayerische	Nein	Bayer. StMGP: Naloxon-Take home in Bayern	Nein	Mitglied: BAS e.V.(1. Vorsitzender) DGPPN Referat Sucht DG-Sucht Psychiatriebeirat des StMGP Klinisches Ethikkomitee (KEK) des LMU Klinikums,	Mitgliedschaft im Advisory Board COI: gering Konsequenz: Limitierung von Leitungsfunktion

	Tätigkeit als Berater*in und/oder Gutachter*in	Mitarbeit in einem Wissenschaftlichen Beirat (advisory board)	Bezahlte Vortrags-/oder Schulungstätigkeit	Bezahlte Autor*innen-/oder Coautor*innenschaft	Forschungsvorhaben/Durchführung klinischer Studien	Eigentümer*inneninteressen (Patent, Urheber*innenrecht, Aktienbesitz)	Indirekte Interessen	Von COI betroffene Themen der Leitlinie, Einstufung bzgl. der Relevanz, Konsequenz
			Landesapothekerkammer (BLAK) Bayerische Landesärztekammer (BLÄK) BAS e.V.				Wissenschaftliche Tätigkeit: Suchtforschung, Neurophysiologie, Klinische Tätigkeit: 1. Leiter der Ambulanzen der Klinik 2. Suchtmedizin, Substitution 3. Verantwortlich für das Register Zwangsmaßnahmen gemäß BayPsychKHG, Ansprechpartner des AförU, Bayern, Beteiligung an Fort-/Ausbildung: Deutsche Gesellschaft für Schmerzmedizin, BLAEK, BLAK: Vorträge/Schulungen: Abhängigkeit (Drogen, Medikamente)	
Prof. Dr. Pollmächer, Thomas	Gemeinsamer Bundesausschuss	Nein	Nein	Nein	Nein	Nein	Mitglied: Deutsche Gesellschaft für Psychiatrie und Psychotherapie, Psychosomatik und Nervenheilkunde (DGPPN), Mitglied: Akademie für Ethik in der Medizin (AEM), Mitglied: Bundesdirektorenkonferenz (BDK), Wissenschaftliche Tätigkeit: Ethik und Recht in der Psychiatrie, Klinische Tätigkeit: Psychiatrie	COI: keine
Richter, Brigitte	nein	nein	DGBS	Nein	Nein	Nein	Mitglied: Pandora SH PE e.V. Nürnberg Außenbeauftragte, Wissenschaftliche Tätigkeit: Früherkennung Schizophrenie , Klinische Tätigkeit: keine, Beteiligung an Fort-/Ausbildung: keine, Persönliche Beziehung: keine	COI: keine
Prof. Dr. Richter, Dirk	Nein	Nein	Nein	Nein	Schweiz. Nationalfonds,	Nein	Mitglied: Akademische Fachgesellschaft Psychiatrische	COI: keine

	Tätigkeit als Berater*in und/oder Gutachter*in	Mitarbeit in einem Wissenschaftlichen Beirat (advisory board)	Bezahlte Vortrags-/oder Schulungstätigkeit	Bezahlte Autor*innen-/oder Coautor*innenschaft	Forschungsvorhaben/Durchführung klinischer Studien	Eigentümer*inneninteressen (Patent, Urheber*innenrecht, Aktienbesitz)	Indirekte Interessen	Von COI betroffene Themen der Leitlinie, Einstufung bzgl. der Relevanz, Konsequenz
					Projektleitung, Interessengemeinschaft		Pflege Schweiz, Wissenschaftliche Tätigkeit: 1)Wohn- und Arbeitsrehabilitation 2)Psychiatrische Epidemiologie 3)Aggression und Zwang in der Gesundheitsversorgung 4)Psychiatrische Krankheitsmodelle, Klinische Tätigkeit: /, Beteiligung an Fort-/Ausbildung: /, Persönliche Beziehung: /	
Roddau, Peter	Nein	Nein	Unterschiedliche Auftraggeber aus dem Gesundheitswesen Allgemein	Nein	Nein	Nein	Mitglied: BAPP e.V. Bundesinitiative Ambulante Psychiatrische Pflege Vorstandsmitglied, Klinische Tätigkeit: Psychiatrische häusliche Krankenpflege	COI: keine
Rosemann, Matthias	Nein	Nein	Nein, Nein, Nein, Nein, Nein, Nein, Nein, Nein	Nein	Nein	Nein	Mitglied: Patientenvertretung im Gemeinsamen Bundesausschuss, Mitglied: Steuerungsgruppe zum Psychiatrie-Dialog der Aktion Psychisch Kranke, Mitglied: Mitwirkung im Vorstand der Bundesarbeitsgemeinschaft Gemeindepsychiatrischer Verbünde	COI: keine
Sauter, Dorothea	IQTIG	(Dreiländerkongress, aber unbezahlt)	Fachhochschule der Diakonie (fortlaufende Tätigkeit)	Hogrefe-Verlag (fortlaufende Tätigkeit)	(nicht direkt entscheidungsverantwortlich)	Nein	Mitglied: Deutsche Fachgesellschaft Psychiatrische Pflege – Präsidentin (fortlaufende Mitgliedschaft), Mitglied: Mitgliedschaft DBfK, APK, DGSP, DG-Pflegewissenschaft u.a. (fortlaufende Mitgliedschaft), Wissenschaftliche Tätigkeit: Implementierungsbeauftragte für Leitlinienimplementierung der S3-	COI: keine

	Tätigkeit als Berater*in und/oder Gutachter*in	Mitarbeit in einem Wissenschaftlichen Beirat (advisory board)	Bezahlte Vortrags-/oder Schulungstätigkeit	Bezahlte Autor*innen-/oder Coautor*innenschaft	Forschungsvorhaben/Durchführung klinischer Studien	Eigentümer*inneninteressen (Patent, Urheber*innenrecht, Aktienbesitz)	Indirekte Interessen	Von COI betroffene Themen der Leitlinie, Einstufung bzgl. der Relevanz, Konsequenz
							LL VvZwang (Projekt PreVCo, www.prevco.de), Klinische Tätigkeit: Weiterentwicklung Pflegequalität / Implementierungsprojekte, Beteiligung an Fort-/Ausbildung: ---, Persönliche Beziehung: ---	
Dipl.-Psych. Schliewenz, Ralph	LWL-Amt für soziales Entschädigung srecht, Andante GGmbH, Jugendhilfe Olsberg	Nein	Pädagogischer Tag am ev. Gymnasium Lippstadt, Pädagogischer Tag am Archigymnasiu m Soest, Curriculum Lerntherapie der Deutschen Psychologen Akademie	Nein	Nein	Nein	Mitglied: Berufsverband Deutscher Psychologinnen und Psychologen (BDP); Vizepräsident; Mandatsträger in LL-Gruppen, Mitglied: National Coalition - Netzwerk zur Umsetzung der UN-Kinderrechtskonvention; Mitglied des erweiterten Vorstands, Wissenschaftliche Tätigkeit: Manuskripteinreichung "Kinderschutz und Kinderrechte"; Handbuch für ressourcenorientierte Psychologie in der Schule; Springer Nature, Klinische Tätigkeit: kinder- und jugendpsychiatrische Versorgung; Kinder- und Jugendlichenpsychotherapie, Schwerpunkt VT	COI: keine
Dr. med. Schol-Tadic, Monica	Gutachten nur im Rahmen der Diensttätigkeit im Gesundheitsamt	Nein	Tätigkeit im Rahmen der Tätigkeit im Gesundheitsamt (Bündnis gegen Depression, VHS, Gesundheitsta ge, Vorträge für Gemeinden)	Nein	Nein	Nein	Mitglied: Mitglied in der BAG GPV (Vorstand), Mitglied: Mitglied im Landesverband Hessen der Ärzte und Zahnärzte ÖGD (erweiterter Vorstand) und im BVÖG (Stellvertretende Fachausschusssprecherin FA Psychiatrie)	COI: keine

	Tätigkeit als Berater*in und/oder Gutachter*in	Mitarbeit in einem Wissenschaftlichen Beirat (advisory board)	Bezahlte Vortrags-/oder Schulungstätigkeit	Bezahlte Autor*innen-/oder Coautor*innenschaft	Forschungsvorhaben/Durchführung klinischer Studien	Eigentümer*inneninteressen (Patent, Urheber*innenrecht, Aktienbesitz)	Indirekte Interessen	Von COI betroffene Themen der Leitlinie, Einstufung bzgl. der Relevanz, Konsequenz
Dr. Scholten, Matthé	Nein	Nein	Nein	Nein	Nein	Nein	Mitglied: Mitglied der regionalen niederländischen Prüfungskommission für Sterbehilfe, Mitglied: Mitglied der Alzheimer Europe Arbeitsgruppe Ethik, Mitglied: Mitglied EU COST Action FOSTREN – Fostering and strengthening approaches to reducing coercion in European mental health services, Mitglied: Mitglied Akademie für Ethik in der Medizin, Mitglied: Mitglied International Association of Bioethics, Wissenschaftliche Tätigkeit: Medizinethik, Ethik in der Psychiatrie, Forschungsethik, Ethik der digitalen Gesundheitstechnologie	COI: keine
Schweigard, Dorothea	Nein	Nein	Amtsarztkurs Verwaltungsschule	Nein	Nein	Nein	Mitglied: Deutsche Gesellschaft für bipolare Störungen	COI: keine
Schwin-Haumesser, Andrea	Nein	Nein	Nein	Nein	Nein	Nein	Mitglied: Bundesverband der Berufsbetreuer*innen Rechtliche Betreuung	COI: keine
Prof. Dr. Seidel, Michael	Kienbaum Consultants International GmbH	Nein	Nein	Nein	Nein	Nein	Mitglied: Bundesarbeitsgemeinschaft Medizinische Zentren für Menschen mit Behinderungen (BAG MZEB) , Wissenschaftliche Tätigkeit: Gesundheitsversorgung von Menschen mit intellektuellen Beeinträchtigungen , Klinische Tätigkeit: Ruhestand , Persönliche Beziehung: keine	COI: keine
Dr. Serfling, Richard	LÄK Thüringen	Nein	Nein	Nein	Nein	Nein	Mitglied: Mitglied des Vorstandes der Thüringer Gesellschaft für Psychiatrie, Neurologie, Kinder –	COI: keine

	Tätigkeit als Berater*in und/oder Gutachter*in	Mitarbeit in einem Wissenschaftlichen Beirat (advisory board)	Bezahlte Vortrags-/oder Schulungstätigkeit	Bezahlte Autor*innen-/oder Coautor*innenschaft	Forschungsvorhaben/Durchführung klinischer Studien	Eigentümer*inneninteressen (Patent, Urheber*innenrecht, Aktienbesitz)	Indirekte Interessen	Von COI betroffene Themen der Leitlinie, Einstufung bzgl. der Relevanz, Konsequenz
							und Jugendpsychiatrie (TGPnk), Wissenschaftliche Tätigkeit: Beirat von EX-IN in Thüringen e.V., Klinische Tätigkeit: Vorsitzender (bis Dezember 2023) und Mitglied des Gemeindepsychiatrischen Verbundes Weimar/Weimar Land, Beteiligung an Fort-/Ausbildung: Mitglied des Unterstützernetzwerkes "Einrichtung von ambulanten Krisendiensten in Thüringen"	
Starzengruber, Rudolf	Nein	Nein	Nein	Nein	Nein	Nein	Nein	COI: keine
Prof. Dr. Steinert, Tilman	Nein, Steinert, Flammer u. Eisele wiss. Datenanalyse. Daten zu Zwangsmaßnahmen für Bundesland Schleswig-Holstein	LVR Institut	Vorträge im Auftrag von Kliniken und Universitäten	Versch. Autoren	GBA, Bundesministerium der Justiz	Nein	Mitglied: DGPPN, Mitglied der Kommission Ethik und Recht, Wissenschaftliche Tätigkeit: Zahlreiche Publikationen zum Thema Zwang	COI: keine
Prof. Dr. Stengler, Katarina	Nein	Nein	Sächsische Landesärztekammer	Universitätsklinikum Leipzig, Forum für medizinische Fortbildung	LIPSY rehapro / BMAS	Nein	Mitglied: DGPPN, Leiterin Referat Rehabilitation und Teilhabe, Mitglied: Aktion Psychisch Kranke e. V., Wissenschaftliche Tätigkeit: Psychosoziale Forschung, Arbeit und Beschäftigung, Teilhabe Zwangsstörungen, Klinische Tätigkeit: Gesamtverantwortung Zentrum für seelische Gesundheit und Klinik für Psychiatrie, Psychosomatik und Psychotherapie am Helios Park-	COI: keine

	Tätigkeit als Berater*in und/oder Gutachter*in	Mitarbeit in einem Wissenschaftlichen Beirat (advisory board)	Bezahlte Vortrags-/oder Schulungstätigkeit	Bezahlte Autor*innen-/oder Coautor*innenschaft	Forschungsvorhaben/Durchführung klinischer Studien	Eigentümer*inneninteressen (Patent, Urheber*innenrecht, Aktienbesitz)	Indirekte Interessen	Von COI betroffene Themen der Leitlinie, Einstufung bzgl. der Relevanz, Konsequenz
							Klinikum Leipzig , Beteiligung an Fort-/Ausbildung: Sächsische Landesärztekammer Sozialpsychiatrisches Curriculum	
Dr. Tenter, Jochen	Nein	Nein	DAGPP	Nein	Nein	Nein	Mitglied: Schatzmeister der DAGPP e.V., Wissenschaftliche Tätigkeit: keine, Klinische Tätigkeit: entfällt im Ruhestand, Beteiligung an Fort-/Ausbildung: nein, Persönliche Beziehung: nein	COI: keine
PD Dr. Theodoridou, Anastasia	Nein	Nein	Nein	Nein	Nein	Nein	Mitglied: Mitgliedschaft: DGPPN SGPP ZGPP AGZ FMH IEPA VSAO , Wissenschaftliche Tätigkeit: Früherkennung/-intervention Psychosen Evaluationsbericht im Auftrag des Bundesamtes für Justiz zum Kindes- und Erwachsenenschutzrecht (ZGB) Therapeutische Beziehung und Zwang in der Psychiatrie SGPP-Empfehlungen Prävention von freiheitsbeschränkenden Maßnahmen in der Psychiatrie, Klinische Tätigkeit: Allgemeinpsychiatrie	COI: keine
Priv.Do. Dr. Thomas, Christine	Nein	Roche	Nein	Nein	Nein	Nein	Mitglied: Deutsche Gesellschaft für Gerontopsychiatrie und -psychotherapie Beisitzerin im Vorstand, Mitglied:	COI: keine

	Tätigkeit als Berater*in und/oder Gutachter*in	Mitarbeit in einem Wissenschaftlichen Beirat (advisory board)	Bezahlte Vortrags-/oder Schulungstätigkeit	Bezahlte Autor*innen-/oder Coautor*innenschaft	Forschungsvorhaben/Durchführung klinischer Studien	Eigentümer*inneninteressen (Patent, Urheber*innenrecht, Aktienbesitz)	Indirekte Interessen	Von COI betroffene Themen der Leitlinie, Einstufung bzgl. der Relevanz, Konsequenz
							European Delirium Association, Mitglied: DGPPN, Mitglied: Dt. Gesellschaft für Neurologie, Mitglied: AKTIVER Lebensqualität erhalten e.V. , Wissenschaftliche Tätigkeit: Prävention, Diagnostik und Therapie gerontopsychiatrischer, neuropsychiatrischer und psychogeriatrischer Krankheitsbilder in ambulantem, teilstationären und stationären Setting sowie im KL-Dienst, EKT, ethische Fragen, Palliativmedizin, Klinische Tätigkeit: Diagnostik und Therapie gerontopsychiatrischer, neuropsychiatrischer und psychogeriatrischer Krankheitsbilder in ambulantem, teilstationären und stationären Setting sowie im KL-Dienst, EKT, klinisches Ethikkomitee, Beteiligung an Fort-/Ausbildung: Weiterbildungskurrikulum des Zentrum für Seelische Gesundheit, Klinikum Stuttgart, Beteiligung an Fort-/Ausbildung: Studenten- und PJ-Unterricht am Klinikum Stuttgart und an der Universität Tübingen , Beteiligung an Fort-/Ausbildung: Weiterbildungs-Workshop "Geriatrie" oder "Delir" bei der DGPPN-Kongress, , Beteiligung an Fort-/Ausbildung: Dt. Akademie für Gerontopsychiatrie und Psychotherapie , Beteiligung an Fort-/Ausbildung: Dt. Akademie für Gerontopsychiatrie und Psychotherapie , Beteiligung an	

	Tätigkeit als Berater*in und/oder Gutachter*in	Mitarbeit in einem Wissenschaftlichen Beirat (advisory board)	Bezahlte Vortrags-/oder Schulungstätigkeit	Bezahlte Autor*innen-/oder Coautor*innenschaft	Forschungsvorhaben/Durchführung klinischer Studien	Eigentümer*inneninteressen (Patent, Urheber*innenrecht, Aktienbesitz)	Indirekte Interessen	Von COI betroffene Themen der Leitlinie, Einstufung bzgl. der Relevanz, Konsequenz
							Fort-/Ausbildung: Entwicklung eines Delirsiegels für Krankenhäuser und Pflegeeinrichtungen	
Prof. Dr. Thyrian, René	Nein	Nein	Nein	Nein	PANEUCARE, GAIN, intersec-CN, iCreate, RoutineDeCM, AgeWell.de, Demenzbilder	Nein	Mitglied: Deutsche Alzheimer Gesellschaft (Vorstand) - Interessenvertretung Angehöriger und Menschen mit Demenz), Mitglied: Alzheimer Europe (Vorstand)- europäische Interessenvertretung nationaler Alzheimer Gesellschaften, Mitglied: INTERDEM - network of European researcher in psychosocial intervention (member), Mitglied: member Deutsche Gesellschaft für Psychiatrie, Psychotherapie, und Neurologie (DGGPPN), Mitglied: member Deutsche Gesellschaft für Psychologie (DGPs), Mitglied: member Deutscher Hochschulverband, Mitglied: member Deutsches Netzwerk Gedächtnisambulanzen (DNG), Wissenschaftliche Tätigkeit: early identification in primary care, care management, health inequity, intervention, non-pharmacological treatment, Health services research	COI: keine
Dr. Urban, Roland	keine	Kaiserin Friedrich-Stiftung für ärztl Fortbildung	Nein	Nein	Nein	Nein	Mitglied: Berufsverband Dtsch Nervenärzte, Vorstandsmitglied, Wissenschaftliche Tätigkeit: keine, Klinische Tätigkeit: Praxis, Beteiligung an Fort-/Ausbildung: Beirat Kaiserin Friedrich-Stiftung für ärztl Fortbildung, Persönliche	Mitgliedschaft im Advisory Board COI: gering Limitierung von Leitungsfunktion

	Tätigkeit als Berater*in und/oder Gutachter*in	Mitarbeit in einem Wissenschaftlichen Beirat (advisory board)	Bezahlte Vortrags-/oder Schulungstätigkeit	Bezahlte Autor*innen-/oder Coautor*innenschaft	Forschungsvorhaben/Durchführung klinischer Studien	Eigentümer*inneninteressen (Patent, Urheber*innenrecht, Aktienbesitz)	Indirekte Interessen	Von COI betroffene Themen der Leitlinie, Einstufung bzgl. der Relevanz, Konsequenz
							Beziehung: keine	
Walter, Gernot	Nein	DGPPN/GBAPreVCo Projekt BMJ: Evaluierung des Gesetzes zur Änderung der materiellen Zulässigkeitsvoraussetzungen von ärztlichen Zwangsmaßnahmen und zur Stärkung des Selbstbestimmungsrechts von Betreuten Sozialministerium Hessen „Selbstbestimmung und Zwangsvermeidung/ Zwangsverringerung im psychiatrischen Kontext“	CONNECTING Partnerschaft für Beratung Training	Hogrefe Verlag Psychiatrie rlag	Nein	Nein	Mitglied: 1) NAGS Deutschland e.V. Vorstandsmitglied 2) DFPP Präsidiumsmitglied 3 Grünes Haus e.V. 2. Vorsitzender, Wissenschaftliche Tätigkeit: Gewaltprävention Psychiatrische Pflege, Klinische Tätigkeit: Leitende Pflegekraft einer Abteilungspsychiatrie Personalmanagement, Personalentwicklung, Schulungen, im geringen Maß klinische Patientenversorgung , Beteiligung an Fort-/Ausbildung: Kursleitung: Multiplikatorenausbildung: Trainer und interner Berater für Aggressions- und Sicherheitsmanagement im Gesundheits- und Sozialwesen	COI: keine
Weiß, Saskia	Nein	Nein	Nein	Nein	Nein	Nein	Mitglied: keine, Wissenschaftliche Tätigkeit: keine, Klinische Tätigkeit: keine, Beteiligung an Fort-/Ausbildung: keine, Persönliche Beziehung: keine	COI: keine
Prof. Dr. Witzmann, Markus	Nein	Nein	Bildungswerk der Bayerischen Bezirke, Anthojo GmbH	Nein	Bay. Gesundheits- und Pflegeministerium , Bay. Gesundheits- und Pflegeministerium, Bay.	Nein	Mitglied: Deutsche Gesellschaft für Pflegewissenschaft e.V. (DGP) , Mitglied: Deutsche Fachgesellschaft für Psychiatrische Pflege e.V. (DfPP), Mitglied: BUNDESFACHVEREINIGUNG	COI: keine

6. Verbreitung und Implementierung

Konzept zur Verbreitung und Implementierung

Die Leitlinie soll im Internet auf der Seite der AWMF und der DGPPN frei zugänglich sein. Zudem soll sie in der MAGIC-App verfügbar sein.

Die Leitlinie wurde bereits auf verschiedenen internationalen und nationalen psychiatrischen Kongressen vorgestellt.

Alle bisherigen Erfahrungen (6-Core-Strategies, Safewards, Weddinger Modell) ergaben, dass es nicht ausreicht, Wissen und Materialien zur Verfügung stellen, um Zwang und Gewalt wirksam zu reduzieren. Stattdessen sind strukturierte Programme erforderlich, die auf verschiedenen Ebenen des Versorgungssystems ansetzen.

Aus den Empfehlungen der Vorgänger-Leitlinie wurden daher 12 Implementierungsempfehlungen und ein Interventions-Plan abgeleitet, der i. S. einer Fidelity-Skala (PreVCo-Rating-Tool) überprüfbar ist.

Steinert T, Hirsch S. S3-Leitlinie Verhinderung von Zwang: Prävention und Therapie aggressiven Verhaltens bei Erwachsenen. Nervenarzt. 2020;91:611-616.

Die Anwendbarkeit der Empfehlungen wurde in der PreVCo-Studie gezeigt. Online sind Materialien zur Implementierung der Leitlinie verfügbar (www.prevco.de), zudem gibt es eine Buchpublikation zur Unterstützung psychiatrischer Stationen bei der Implementierung:

Sauter D, Junghanss J, Bühling-Schindowski F. Gewalt und Zwang vermeiden. Leitliniengerechtes Handeln auf psychiatrischen Stationen“. „Psychosoziale Arbeitshilfen“ im Psychiatrie-Verlag 2024.

Unterstützende Materialien für die Anwendung der Leitlinie

Die Leitlinie soll in einer Langfassung, in einer Kurzfassung, die die Empfehlungen für den klinischen Alltag enthält sowie in der MAGIC-App erscheinen.

Diskussion möglicher organisatorischer und/oder finanzieller Barrieren gegenüber der Anwendung der Leitlinienempfehlungen

Neben zeitlichen und finanziellen Barrieren (Personal, Schulungen, Gebäude) spielen bei Zwang und Gewalt ganz besonders das Sicherheitsgefühl des Einzelnen und die Verantwortlichkeiten in der Gruppe eine Rolle. Hier müssen Strategien entwickelt werden, um Zwang und Gewalt gleichermaßen zu reduzieren und psychisch erkrankte Menschen und Mitarbeitende vor Verletzungen und Traumatisierungen zu bewahren. Neben Aufklärungsarbeit spielen Schulungen und Trainings sowie ideelle, finanzielle und praktische Unterstützungen durch das operative und das strategische Management eine wichtige Rolle.

7. Gültigkeitsdauer und Aktualisierungsverfahren

- o **Datum der letzten inhaltlichen Überarbeitung und Status** Die Leitlinie wurde am 02.03.26 inhaltlich fertiggestellt und konsentiert. Sie ist bis 01.03.2031 gültig.
- o **Aktualisierungsverfahren**
Die Leitlinie soll 2031 aktualisiert werden.

Ansprechpartner ist die DGPPN (sekretariat@dgppn.de).

Dabei sollen Updates für die vier systematischen Reviews erstellt werden.

Folgende bisher noch nicht vollständig untersuchte Bereiche sollen dann besondere Berücksichtigung finden, ggf. müssen in der Zwischenzeit Untersuchungen diesbezüglich durchgeführt und Daten gesammelt werden:

- o Debriefings
- o Einbezug von Angehörigen

Anhang – Evidenztabellen

Rapid Tranquilisation (Suche von September 2016 bis August 2024)

Artike l-Nr.	Studie n-Nr.	Sub- numm er	
1	1	1	Bak M, Weltens I, Bervoets C, De Fruyt J, Samochowiec J, Fiorillo A, Sampogna G, Bienkowski P, Preuss WU, Misiak B, Frydecka D, Samochowiec A, Bak E, Drukker M, Dom G. The pharmacological management of agitated and aggressive behaviour: A systematic review and meta-analysis. Eur Psychiatry. 2019 Apr;57:78-100. doi: 10.1016/j.eurpsy.2019.01.014. Epub 2019 Feb 2. PMID: 30721802.
2	2	1	Brankston G, Picheca L. Antipsychotic Drugs or Benzodiazepines for Rapid Tranquilization in Mental Health Facilities or Emergency Department Settings [Internet]. Ottawa (ON): Canadian Agency for Drugs and Technologies in Health; 2021 Aug. PMID: 36264874.
3	3	1	Citrome L, Preskorn SH, Lauriello J, Krystal JH, Kakar R, Finman J, De Vivo M, Yocca FD, Risinger R, Rajachandran L. Sublingual Dexmedetomidine for the Treatment of Acute Agitation in Adults With Schizophrenia or Schizoaffective Disorder: A Randomized Placebo-Controlled Trial. J Clin Psychiatry. 2022 Oct 3;83(6):22m14447. doi: 10.4088/JCP.22m14447. PMID: 36198061.
4	4	1	Muir-Cochrane E, Grimmer K, Gerace A, Bastiampillai T, Oster C. Safety and effectiveness of olanzapine and droperidol for chemical restraint for non-consenting adults: a systematic review and meta-analysis. Australas Emerg Care. 2021 Jun;24(2):96-111. doi: 10.1016/j.auec.2020.08.004. Epub 2020 Oct 10. PMID: 33046432.
5	5	1	Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis-induced aggression or agitation (rapid tranquillisation).

			Cochrane Database Syst Rev. 2017 Jul 31;7(7):CD009377. doi: 10.1002/14651858.CD009377.pub3. PMID: 28758203; PMCID: PMC6483410.
6	6	1	Ostinelli EG, Hussein M, Ahmed U, Rehman FU, Miramontes K, Adams CE. Risperidone for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Apr 10;4(4):CD009412. doi: 10.1002/14651858.CD009412.pub2. PMID: 29634083 ; PMCID: PMC6494596.
7	7	1	Ostinelli EG, Jajawi S, Spyridi S, Sayal K, Jayaram MB. Aripiprazole (intramuscular) for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Jan 8;1(1):CD008074. doi: 10.1002/14651858.CD008074.
8	8	1	Paris G, Bighelli I, Deste G, Sifakis S, Schneider-Thoma J, Zhu Y, Davis JM, Vita A, Leucht S. Short-acting intramuscular second-generation antipsychotic drugs for acutely agitated patients with schizophrenia spectrum disorders. A systematic review and network meta-analysis. Schizophr Res. 2021 Mar;229:3-11. doi: 10.1016/j.schres.2021.01.021. Epub 2021 Feb 17. PMID: 33607608.
9	9	1	Zaman H, Sampson S, Beck A, Sharma T, Clay F, Spyridi S, Zhao S, Gillies D. Benzodiazepines for Psychosis-Induced Aggression or Agitation. Schizophr Bull. 2018 Aug 20;44(5):966-969. doi: 10.1093/schbul/sby056. Erratum in: Schizophr Bull. 2018 Aug 20;44(5):1166. doi: 10.1093/schbul/sby098. PMID: 29788190; PMCID: PMC6101631.

Nummer	1
Studie	Bak M, Weltens I, Bervoets C, De Fruyt J, Samochowiec J, Fiorillo A, Sampogna G, Bienkowski P, Preuss WU, Misiak B, Frydecka D, Samochowiec A, Bak E, Drukker M, Dom G. The pharmacological management of agitated and aggressive behaviour: A systematic review and meta-analysis
Institution	Department of Psychiatry and Neuropsychology, Maastricht University and FACT, Mondriaan, Maastricht,
Studientyp	Systematic review and meta-analysis
Kontrollgruppe ja/nein	yes
Komplex ja/nein	no
Interventionstyp	Pharmacological treatment
n Patienten	
Effekt ja/nein auf Aggression	yes
Beschreibung Intervention	Antipsychotic treatment for rapid tranquilization
Beschreibung Kontrolle	Placebo, other antipsychotics
Beschreibung Patienten	Agitated Patients with psychiatric disorder or intoxication in an emergency department in general hospital, ward in mental hospital or mixed context
Beschreibung Outcomevariablen	PANNS-EC (Positive and Negative Symptom Scale – Excitement Components, ACES (Agitation-Calmness Evaluation Scale; a scale developed by Eli-Lilly pharmaceuticals) and the OASS (Overt Agitation Severity Scale)
Beschreibung Ergebnisse	Changes on PANNS-EC and ACES at 2 h showed the strongest changes for haloperidol plus promethazine, risperidon, olanzapine, droperidol and aripiprazole. However, incomplete data showed that the effect of risperidon is overestimated. Adverse effects are most prominent for haloperidol and haloperidol plus lorazepam. Olanzapine, haloperidol plus promethazine or droperidol are most effective and safe for use as rapid tranquilisation. Midazolam sedates most quickly. But due to increased saturation problems, midazolam is restricted to use within an emergency department of a general hospital.
Dauer Baseline/Intervention/Follow-up	
Funding	This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.
Qualitätsbemerkung	No Risk of Bias assessment reported, transferability of effects may be reduced
Nummer	2
Studie	Brankston G, Picheca L. Antipsychotic Drugs or Benzodiazepines for Rapid Tranquilization in Mental Health Facilities or Emergency

	Department Settings [Internet]. Ottawa (ON): Canadian Agency for Drugs and Technologies in Health; 2021 Aug. PMID: 36264874.
Institution	The Canadian Agency for Drugs and Technologies in Health (CADTH)
Studientyp	Systematic Review and Meta-analysis
Kontrollgruppe ja/nein	yes
Komplex ja/nein	no
Interventionstyp	Pharmacological treatment
n Patienten	
Effekt ja/nein auf Aggression	yes
Beschreibung Intervention	Rapid tranquilization achieved using any of the following (in any combination): • intramuscular antipsychotic drugs (e.g., zuclopenthixol acetate, loxapine, methotrimeprazine, aripiprazole, olanzapine, haloperidol [alone or in combination with promethazine]) • intramuscular benzodiazepines (e.g., lorazepam, diazepam)
Beschreibung Kontrolle	Other antipsychotic drugs and/or other benzodiazepines
Beschreibung Patienten	Adult inpatients exhibiting severe or acute agitation, aggressive behaviour, or psychosis-induced aggression within a mental health facility or emergency department setting; adult inpatients with confirmed or suspected substance induced psychosis/agitation during intoxication (e.g., alcohol, stimulants [cocaine/crystal methamphetamine], cannabis) within a mental health facility or emergency department setting. Subgroups of interest: • adults (18 to 64 years) • elderly (≥ 65 years) population • mixed population (adult and elderly)
Beschreibung Outcomevariablen	Clinical effectiveness (e.g., time to tranquilization, sedation, calm; level of agitation, aggression, calm); safety (e.g., side effects or adverse events [injury or mortality])
Beschreibung Ergebnisse	Improvement in Aggression or Agitation Scale: Direct comparisons of antipsychotic drugs in 1 SR showed the second-generation antipsychotic drug olanzapine was more effective at reducing agitation than the first generation antipsychotic drug haloperidol plus adjunctive medication. Another SR found the second-generation antipsychotic drug olanzapine more effective than aripiprazole in improvement in agitation at 2 hours. In contrast, 1 prospective observational study found no difference in the effectiveness of 2 doses of haloperidol and olanzapine for rapid tranquilization of patients with agitation
Dauer Baseline/Intervention/Follow-up	
Funding	CADTH receives funding from Canada's federal, provincial, and territorial governments, with the exception of Quebec.
Qualitätsbemerkung	
Nummer	3
Studie	Citrome L, Preskorn SH, Lauriello J, Krystal JH, Kakar R, Finman J, De Vivo M, Yocca FD, Risinger R, Rajachandran L. Sublingual Dexmedetomidine for the Treatment of Acute Agitation in Adults With Schizophrenia or Schizoaffective Disorder: A Randomized Placebo-Controlled Trial. J Clin Psychiatry. 2022 Oct 3;83(6):22m14447. doi: 10.4088/JCP.22m14447. PMID: 36198061.
Institution	- Department of Psychiatry and Behavioral Sciences, New York Medical College, Valhalla, New York - Kansas University School of Medicine-Wichita, Wichita, Kansas - Department of Psychiatry and Human Behavior, Thomas Jefferson University, Philadelphia, Pennsylvania - Department of Psychiatry, Yale University, New Haven, Connecticut - Segal Trials, Fort Lauderdale, Florida - Jupiter Point Pharma Consulting, LLC, Groton, Connecticut - BioXcel Therapeutics, Inc., New Haven, Connecticut
Studientyp	RCT
Kontrollgruppe ja/nein	yes
Komplex ja/nein	no
Interventionstyp	Psychopharmacological treatment
n Patienten	IV:254 , CG: 126
Effekt ja/nein auf Aggression	yes
Beschreibung Intervention	Sublingual dexmedetomidine 180 µg, sublingual dexmedetomidine 120 µg,
Beschreibung Kontrolle	Placebo
Beschreibung Patienten	- were aged 18–75 years with a diagnosis of schizophrenia or schizoaffective disorder,

	according to the criteria of the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition,²¹ as assessed by the Mini-International Neuropsychiatric Interview (MINI). -They had presented with acute agitation in outpatient clinics or mental health, psychiatric, or medical emergency services (including medical/psychiatric observation units) or as inpatients newly admitted for acute agitation or already hospitalized for underlying conditions. Participants were required to have a total score of ≥ 14 on the 5-item Positive and Negative Syndrome Scale-Excited Component (PEC)²³ scale at screening and baseline and a score of ≥ 4 on at least 1 PEC item at baseline. Participants provided informed consent prior to enrollment and had to be capable and willing to self-administer study medication.
Beschreibung Outcomevariablen	-The primary efficacy endpoint was the absolute change from baseline in the PEC total score at 2 hours postdose. - Secondary endpoints included the absolute change from baseline in the PEC total score at 10, 20, 30, 45, 60, and 90 minutes postdose. - The Clinical Global Impression-Improvement (CGI-I) scale, was used to rate overall clinical improvement at 30 minutes, 1, 2, and 4 hours postdose. -The Agitation-Calmness Evaluation Scale (ACES) was used to assess overall agitation predose (within 15 minutes of dosing) and 2, 4, and 8 hours postdose. The PEC response rate ($\geq 40\%$ reduction in total score from baseline at or before 2 hours postdose) - change from baseline in total PEC score from 10 minutes through 24 hours postdose were assessed. - The CGI-I response rate, defined as a score of 1 or 2 (very much or much improved) at 2 hours postdose was also assessed. Agitation/calmness was further assessed by measuring change from baseline for PEC total score at 4, 6, 8, and 24 hours postdose. -Safety and tolerability
Beschreibung Ergebnisse	At 2 hours postdose (Figure 2), the least squares mean (standard error [SE]) changes from baseline in PEC total score were -10.3 (0.4) for sublingual dexmedetomidine $180 \mu\text{g}$, -8.5 (0.4) for sublingual dexmedetomidine $120 \mu\text{g}$, and -4.8 (0.4) for placebo. Least squares mean (97.5% confidence interval [CI]) differences from placebo at 2 hours postdose were -5.5 (-6.7 to -4.3, $P < .001$) for sublingual dexmedetomidine $180 \mu\text{g}$ and -3.7 (-4.9 to -2.5, $P < .001$) for sublingual dexmedetomidine $120 \mu\text{g}$. Treatment effects were first observed at 20 minutes postdose with sublingual dexmedetomidine $180 \mu\text{g}$ (least squares mean difference, standard error [97.5% CI]: -1.2, 0.4 [-2.1 to -0.3], $P = .003$) and at 30 minutes postdose with sublingual dexmedetomidine $120 \mu\text{g}$ (least squares mean difference, SE [97.5% CI]: -1.3, 0.5 [-2.4 to -0.2], $P = .008$). -Participants in both sublingual dexmedetomidine treatment groups showed improvements compared with participants in the placebo group at all subsequent timepoints (45, 60, and 90 minutes postdose ($P < .001$)).
Dauer Baseline/Intervention/Follow-up	Participants were assessed at screening, treatment (day 1), follow-up (day 2), discharge (day 3), and end of study (day 7).
Funding	This study was funded by BioXcel Therapeutics Inc, New Haven, Connecticut.
Qualitätsbemerkung	Unclear Risk of bias
Nummer	4
Studie	Muir-Cochrane E, Grimmer K, Gerace A, Bastiampillai T, Oster C. Safety and effectiveness of olanzapine and droperidol for chemical restraint for non-consenting adults: a systematic review and meta-analysis. <i>Australas Emerg Care</i> . 2021 Jun;24(2):96-111. doi: 10.1016/j.auec.2020.08.004. Epub 2020 Oct 10. PMID: 33046432.
Institution	- College of Nursing & Health Sciences, Flinders University, South Australia, Australia - School of Health, Medical and Applied Sciences, Central Queensland University, South Australia, Australia - College of Medicine & Public Health, Flinders University, Adelaide, South Australia, Australia
Studientyp	Systematic review
Kontrollgruppe ja/nein	yes
Komplex ja/nein	no
Interventionstyp	Psychopharmacological treatment
n Patienten	
Effekt ja/nein auf Aggression	yes
Beschreibung Intervention	Chemical restraint (rapid tranquilisation) referring to drugs delivered under duress and without consent
Beschreibung Kontrolle	Any reported

Beschreibung Patienten	Adults with uncontrolled aggression, anxiety or violence, who are likely to cause harm to themselves or others, because of mental health disorders (with/without drug abuse)
Beschreibung Outcomevariablen	Any measure of aggression, agitation or violent behaviours.
	- There was no difference in median time to sedation, nor in the percentage of people calm (tranquil or asleep) at five or 10 min in either active intervention arm for either study. Considering time to calm/sedation. - Chan reported differences in median times to sedation between the control and droperidol arms as four minutes (95% CI 1–6), and control and olanzapine groups as five minutes (95% CI 1–6). - Taylor reported differences in median times to calm between the midazolam-droperidol group, and the droperidol and olanzapine groups as six (95% CI 3–8) minutes, and six (95% CI 3–7) minutes, respectively. - Considering the percentage of people who were tranquil or asleep at five and 10 min: Chan reported that compared with the control, the droperidol group was 1.61 (95% CI 1.23–2.11) times more likely to be sedated, whilst the olanzapine group was 1.66 (95% CI 1.27–2.17) times more likely to be sedated, at either time point. Taylor reported that within 10 min, significantly more people in the midazolam-droperidol group were adequately sedated compared with the droperidol (proportional difference 25.0% (95% CI 12.0–38.1%) and olanzapine groups (proportional difference 25.4% (95% CI 12.7–38.3%). - All drug arms (irrespective of method of delivery or dose) induced adverse events, ranging from 6.1% to 36.5%. There was a lower rate of adverse events for the lower dose administration of both drugs (droperidol adverse events for 5 mg (10.7%) and 10 mgs (16.2%); olanzapine adverse events 5 mg (8.3%) and 10 mg (20%)). There was no pattern to adverse events for droperidol, the likelihood of lower rates of adverse events comparing lower and higher doses was non-significant (OR 0.6 (95%CI 0.3–1.4), however for olanzapine, the lower dose incurred significantly reduced odds of adverse events (OR 0.4 (95%CI 0.2–0.8)).
Beschreibung Ergebnisse	
Dauer	
Baseline/Intervention/Follow-up	
Funding	No funding was received for this project.
Qualitätsbemerkung	
Nummer	5
Studie	Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2017 Jul 31;7(7):CD009377. doi: 10.1002/14651858.CD009377.pub3. PMID: 28758203; PMCID: PMC6483410.
Institution	- Department of Health Sciences, Università degli Studi di Milano, Milan, Italy. - Department of Clinical Psychology, The University of Manchester, Manchester, UK. - Systematic Review Solutions Ltd, Nottingham, UK. - Cochrane Schizophrenia Group, The University of Nottingham, Nottingham, UK
Studientyp	Systematic review and meta-analysis
Kontrollgruppe ja/nein	yes
Komplex ja/nein	no
Interventionstyp	Psychopharmacological treatment
n Patienten	700 participants
Effekt ja/nein auf Aggression	yes
Beschreibung Intervention	Rapid use of haloperidol alone, any dose via any route of administration
Beschreibung Kontrolle	a. Placebo or no intervention b. Other antipsychotic. Any dose via any route of administration. c. Benzodiazepine. Any dose via any route of administration. d. Anticonvulsant alone. Any dose via any route of administration. e. Combination of drugs. Any dose via any route of administration.
Beschreibung Patienten	People exhibiting agitation or aggression (or both) thought to be due to psychotic illness, regardless of age or sex.
Beschreibung Outcomevariablen	1. Tranquillisation or asleep - not tranquil or asleep by 30 minutes. 2. Tranquillisation or asleep - repeated need for rapid tranquillisation - within 24 hours. 3. Specific behaviours - threat or injury to others/self. 4. Global outcomes - overall improvement 5. Adverse effects - any serious, specific adverse effects. 6. Economic outcomes.
Beschreibung Ergebnisse	- Compared with placebo, more people in the haloperidol group were asleep at two hours (2 RCTs, n=220, RR 0.88, 95%CI 0.82 to 0.95, very low-quality evidence) and experienced dystonia (2 RCTs, n=207, RR 7.49, 95%CI 0.93 to 60.21, very low-quality evidence).

	- Compared with aripiprazole, people in the haloperidol group required fewer injections than those in the aripiprazole group (2 RCTs, n=473, RR 0.78, 95%CI 0.62 to 0.99, low-quality evidence). More people in the haloperidol group experienced dystonia (2 RCTs, n=477, RR 6.63, 95%CI 1.52 to 28.86, very low-quality evidence). - Four trials (n=207) compared haloperidol with lorazepam with no significant differences with regard to number of participants asleep at one hour (1 RCT, n=60, RR 1.05, 95%CI 0.76 to 1.44, very low-quality of evidence) or those requiring additional injections (1 RCT, n=66, RR 1.14, 95%CI 0.91 to 1.43, very low-quality of evidence). - Haloperidol's adverse effects were not offset by addition of lorazepam (e.g. dystonia 1 RCT, n=67, RR 8.25, 95%CI 0.46 to 147.45, very low-quality of evidence). - Addition of promethazine was investigated in two trials (n=376). More people in the haloperidol group were not tranquil or asleep by 20 minutes (1 RCT, n=316, RR 1.60, 95%CI 1.18 to 2.16, moderate-quality evidence). Acute dystonia was too common in the haloperidol alone group for the trial to continue beyond the interim analysis (1 RCT, n=316, RR 19.48, 95%CI 1.14 to 331.92, low-quality evidence).
Dauer Baseline/Intervention/Follow-up	
Funding	This project was supported by the National Institute for Health Research, via Cochrane Infrastructure funding to the Schizophrenia Group.
Qualitätsbemerkung	
Nummer	6
Studie	Ostinelli EG, Hussein M, Ahmed U, Rehman FU, Miramontes K, Adams CE. Risperidone for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Apr 10;4(4):CD009412. doi: 10.1002/14651858.CD009412.pub2. PMID: 29634083 ; PMCID: PMC6494596.
Institution	-Department of Health Sciences, Università degli Studi di Milano, Milan, Italy. -Queens Medical Centre, The University of Nottingham, Nottingham, UK. -Mental Health, Rathbone Hospital, Mersey Care NHS Foundation Trust, Liverpool, UK. -Lytham Hospital, LancashireCare NHS Foundation Trust, Lytham, UK. -Home, Oxford, UK. -Cochrane Schizophrenia Group, The University of Nottingham, Nottingham, UK
Studientyp	Systematic review and meta-analysis
Kontrollgruppe ja/nein	yes
Komplex ja/nein	no
Interventionstyp	Pharmacological treatment
n Patienten	582 participants
Effekt ja/nein auf Aggression	yes
Beschreibung Intervention	Risperidone given alone, any dose and mode of administration.
Beschreibung Kontrolle	-Other antipsychotic medications given alone, any dose and mode of administration - Placebo, active or non-active
Beschreibung Patienten	People exhibiting aggression or agitation (or both) thought to be due to psychosis, regardless of age and sex. Studies that also involved people with other diagnoses, such as drug or alcohol intoxication, organic problems including dementia, non-psychotic mental illnesses or learning disabilities, were included as long as the majority of participants (> 50%) were experiencing psychosis.
Beschreibung Outcomevariablen	Primary outcomes: 1. Not tranquil or asleep - by up to 30 minutes 2. Adverse events Secondary outcomes 1. Time to Tranquillisation or asleep 2. Specific behaviours (e.g. agitation, aggression) 3. Global outcomes (e.g. use of additional medication, use of restraints/seclusion) 4. Service outcomes (e.g. duration of hospital stay, re-admission) 5. Mental state 6. Adverse effects 7. Leaving the study early 8. Satisfaction with treatment 9. Acceptance of treatment 10. Quality of life 11. Economic outcomes
Beschreibung Ergebnisse	- The review now contains data from nine trials (total n = 582) reporting on five comparisons.

	- Due to risk of bias, small size of trials, indirectness of outcome measures and a paucity of investigated and reported 'pragmatic' outcomes, evidence was graded as very low quality. - None of the included studies provided useable data on primary outcome 'tranquillisation or asleep' by 30 minutes, repeated need for tranquillisation or any economic outcomes. - Risperidone versus haloperidol (up to 24 hours follow-up): For the outcome, specific behaviour - agitation, no clear difference was found between risperidone and haloperidol in terms of efficacy, measured as at least 50% reduction in the Positive and Negative Syndrome Scale - Psychotic Agitation Sub-score (PANSS-PAS) (RR 1.04, 95% CI 0.86 to 1.26; participants = 124; studies = 1; very low-quality evidence) and no effect was observed for need to use restraints (RR 2.00, 95% CI 0.43 to 9.21; participants = 28; studies = 1; very low-quality evidence). Incidence of adverse effects was similar between treatment groups (RR 0.94, 95% CI 0.54 to 1.66; participants = 124; studies = 1; very low-quality evidence). - Risperidone versus olanzapine: One small trial (n = 29) reported useable data for the comparison risperidone versus olanzapine. No effect was observed for agitation measured as PANSS-PAS endpoint score at two hours (MD 2.50, 95% CI -2.46 to 7.46; very low-quality evidence); need to use restraints at four days (RR 1.43, 95% CI 0.39 to 5.28; very low-quality evidence); specific movement disorders measured as Behavioural Activity Rating Scale (BARS) endpoint score at four days (MD 0.20, 95% CI -0.43 to 0.83; very low-quality evidence). - Risperidone versus quetiapine: One trial reported (n = 40) useable data for the comparison risperidone versus quetiapine. Aggression was measured using the Modified Overt Aggression Scale (MOAS) endpoint score at two weeks. A clear difference, favouring quetiapine was observed (MD 1.80, 95% CI 0.20 to 3.40; very low-quality evidence). No evidence of a difference between treatment groups could be observed for incidence of akathisia after 24 hours (RR 1.67, 95% CI 0.46 to 6.06; very low-quality evidence). Two participants allocated to risperidone and one allocated to quetiapine experienced myocardial ischaemia during the trial. - Risperidone versus risperidone + oxcarbazepine: One trial (n = 68) measured agitation using the Positive and Negative Syndrome Scale - Excited Component (PANSS-EC) endpoint score and found a clear difference, favouring the combination treatment at one week (MD 2.70, 95% CI 0.42 to 4.98; very low-quality evidence), but no effect was observed for global state using Clinical Global Impression - Improvement (CGI-I) endpoint score at one week (MD -0.20, 95% CI -0.61 to 0.21; very low-quality evidence). Incidence of extrapyramidal symptoms after 24 hours was similar between treatment groups (RR 1.59, 95% CI 0.49 to 5.14; very low-quality evidence). - Risperidone versus risperidone + valproic acid: Two trials compared risperidone with a combination of risperidone plus valproic acid. No clear differences between the treatment groups were observed for aggression (MOAS endpoint score at three days: MD 1.07, 95% CI -0.20 to 2.34; participants = 54; studies = 1; very low-quality evidence) or incidence of akathisia after 24 hours: RR 0.75, 95% CI 0.28 to 2.03; participants = 122; studies = 2; very low-quality evidence).
Dauer	
Baseline/Intervention/Follow-up	Main endpoint at 30 minutes, follow-up: up to 24 h and after 24 h
Funding	No funder reported
Qualitätsbemerkung	High Risk of Bias, Evidence quality reported low due to indirectness outcome quality
Nummer	7
Studie	Ostinelli EG, Jajawi S, Spyridi S, Sayal K, Jayaram MB. Aripiprazole (intramuscular) for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Jan 8;1(1):CD008074. doi: 10.1002/14651858.CD008074.
Institution	-Department of Health Sciences, Università degli Studi di Milano, Milan, Italy. -Department of Psychiatry, Rotherham, Doncaster and South Humber NHS Trust, Rotherham, UK. -Department of Rehabilitation Sciences, Faculty of Health Sciences, Cyprus University of Technology, Lemesos, Cyprus. -Psychiatry - UK LLP, Dewsbury, UK. -Wyvern Locked Rehabilitation Unit, Cygnet Hospital Derby, Derby, UK. -Department of Psychiatry, Melbourne Neuropsychiatry Centre, Melbourne, Australia
Studientyp	Systematic review and meta-analysis
Kontrollgruppe ja/nein	yes
Komplex ja/nein	no
Interventionstyp	Psychopharmacological treatment
n Patienten	707 participants included in analysis

Effekt ja/nein auf Aggression	yes
Beschreibung Intervention	Aripiprazole given alone, intramuscularly in any dose.
Beschreibung Kontrolle	-Other antipsychotic medications given alone, intramuscularly in any dose. -Placebo: Active or non-active, intramuscular, in any dose
Beschreibung Patienten	People exhibiting aggression or agitation (or both) thought to be due to psychosis, regardless of age and sex. Should studies have involved people with other diagnoses, such as drug or alcohol intoxication, organic problems including dementia, nonpsychotic mental illnesses or learning disabilities, would have been included these as long as the majority of participants (> 50%) were experiencing psychosis.
Beschreibung Outcomevariablen	Outcomes grouped by time: by 30 minutes, up to two hours, up to four hours, up to 24 hours, and over 24 hours Primary outcomes: 1. Tranquil or asleep - by up to 30 minutes 2. Repeated need for rapid tranquillisation Secondary outcomes 1. Time to tranquillisation or asleep 2. Specific behaviours (e.g. Agitation or Aggression) 3. Global state (e.g. Overall improvement, use of additional medication, use of restraints/seclusion) 4. Service use (e.g. duration of hospital stay, re-admission) 5. Mental state 6. Adverse effects 7. Leaving the study early 8. Satisfaction with treatment 9. Acceptance of treatment 10. Quality of life 11. Economic outcomes
Beschreibung Ergebnisse	- Due to limited comparisons, small size of trials and a paucity of investigated and reported 'pragmatic' outcomes, evidence was mostly graded as low or very low quality. - No trials reported useful data for one of our primary outcomes of tranquil or asleep by 30 minutes. Economic outcomes were also not reported in the trials. - When compared with placebo, fewer people in the aripiprazole group needed additional injections compared to the placebo group (2 RCTs, n = 382, RR 0.69, 95% CI 0.56 to 0.85, very low-quality evidence). Clinically important improvement in agitation at two hours favoured the aripiprazole group (2 RCTs, n = 382, RR 1.50, 95% CI 1.17 to 1.92, very low quality evidence). The numbers of non-responders after the first injection also favoured aripiprazole (1 RCT, n = 263, RR 0.49, 95% CI 0.34 to 0.71, low-quality evidence). Although no effect was found, more people in the aripiprazole compared to the placebo group experienced adverse effects (1 RCT, n = 117, RR 1.51, 95% CI 0.93 to 2.46, very low-quality evidence). - Aripiprazole required more injections compared to haloperidol (2 RCTs, n = 477, RR 1.28, 95% CI 1.00 to 1.63, very low-quality evidence), with no significant difference in agitation (2 RCTs, n = 477, RR 0.94, 95% CI 0.80 to 1.11, very low-quality evidence), and similar non-responders after first injection (1 RCT, n = 360, RR 1.18, 95% CI 0.78 to 1.79, low-quality evidence). Aripiprazole and haloperidol did not differ when taking into account the overall number of people that experienced at least one adverse effect (1 RCT, n = 113, RR 0.91, 95% CI 0.61 to 1.35, very low-quality evidence). - Compared to aripiprazole, olanzapine was better at reducing agitation (1 RCT, n = 80, RR 0.77, 95% CI 0.60 to 0.99, low-quality evidence) and had a more favourable effect on global state change scores (1 RCT, n = 80, MD 0.58, 95% CI 0.01 to 1.15, low-quality evidence), both at two hours. No differences were found in terms of experiencing at least one adverse effect during the 24 hours after treatment (1 RCT, n = 80, RR 0.75, 95% CI 0.45 to 1.24, very low-quality evidence). However, participants allocated to aripiprazole experienced less somnolence (1 RCT, n = 80, RR 0.25, 95% CI 0.08 to 0.82, low-quality evidence).
Dauer Baseline/Intervention/Follow-up	Endpoints at up to 30 minutes, up to two hours, up to four hours, up to 24 hours, and over 24 hours
Funding	No sources of external support supplied
Qualitätsbemerkung	Tendency of very low quality of evidence, high risk of bias
Nummer	8
Studie	Paris G, Bighelli I, Deste G, Sifakis S, Schneider-Thoma J, Zhu Y, Davis JM, Vita A, Leucht S. Short-acting intramuscular second-generation antipsychotic drugs for acutely agitated patients with schizophrenia spectrum disorders. A systematic review and network meta-analysis.

	Schizophr Res. 2021 Mar;229:3-11. doi: 10.1016/j.schres.2021.01.021. Epub 2021 Feb 17. PMID: 33607608.
Institution	-Department of Clinical and Experimental Sciences, University of Brescia, Brescia, Italy -Department of Psychiatry and Psychotherapy, School of Medicine, Klinikum rechts der Isar, Technical University of Munich, Munich, Germany -Department of Mental Health and Addiction Services, Spedali Civili Hospital, Brescia, Italy -Shanghai Key Laboratory of Psychotic Disorders, Shanghai Mental Health Center, Shanghai Jiao Tong University School of Medicine, Shanghai, China -Department of Psychiatry, College of Medicine, University of Illinois at Chicago, Chicago, IL, United States of America
Studientyp	Systematic review and meta-analysis
Kontrollgruppe ja/nein	yes
Komplex ja/nein	no
Interventionstyp	Psychopharmacological treatment
n Patienten	1964 participants
Effekt ja/nein auf Aggression	yes
Beschreibung Intervention	The interventions comprised all second-generation antipsychotics as long as they were administered in intramuscular short-acting formulations, placebo, and haloperidol as long as it was used as a third arm in trials comparing SGAs with each other or with placebo.
Beschreibung Kontrolle	Placebo or pseudo-placebo
Beschreibung Patienten	adult people (age ≥ 18 without upper limit, no restriction in setting or gender) diagnosed with schizophrenia, schizophreniform or schizoaffective disorder and who presented acute agitation
Beschreibung Outcomevariablen	The primary outcome was the number of patients having responded to treatment at 2 h, and the secondary outcome of the meta-analysis was the number of responders at 24 h (endpoint). Response was defined as a cut-off in terms of percentage reduction from baseline of an agitation score or an Improvement based on the Clinical Global Impression (CGI-I) Scale. If different criteria were available, reduction of at least 50% of the Excited Component of the Positive and Negative Syndrome Scale (PANSS-EC or PEC) was prioritised or, if not reported, of other published agitation scales, followed by at least "much improved" according to the CGI-I.
Beschreibung Ergebnisse	At 2 h after injection ziprasidone was associated with greater response than placebo (RR 2.51, 95% CI 1.50 to 4.22, moderate confidence in the estimate) and pseudoplacebo (RR 2.26, 95% CI 1.63 to 3.14, moderate confidence), while no significant differences emerged when compared with olanzapine, aripiprazole and haloperidol. Olanzapine was more effective in reducing agitation at 2 h than aripiprazole (RR 1.24, 95% CI 1.05 to 1.45, low confidence), pseudoplacebo (RR 1.80, 95% CI 1.22 to 2.66, low confidence) and placebo (RR 2.00, CI 95% 1.65 to 2.43, moderate confidence), but not than haloperidol or ziprasidone. Aripiprazole showed a higher response rate than placebo (RR 1.62, 95% CI 1.32 to 1.98, moderate confidence), whereas there was no significant difference when compared to the other antipsychotics. Olanzapine and aripiprazole revealed to be more effective than placebo at 24 h (RR 1.83, 95% CI 1.37 to 2.46 for olanzapine; RR 1.73, 95% CI 1.25 to 2.41 for aripiprazole). No study reported data for ziprasidone at 24 h.
Dauer	
Baseline/Intervention/Follow-up	Endpoints at 2 h and 24 h.
Funding	grant from Consorzio Bacino Imbrifero Montano Dell'Oglio, Italy
Qualitätsbemerkung	Low risk of bias in most domains, level of evidenced challenged by indirectness of effects
Nummer	9
Studie	Zaman H, Sampson S, Beck A, Sharma T, Clay F, Spyridi S, Zhao S, Gillies D. Benzodiazepines for Psychosis-Induced Aggression or Agitation. Schizophr Bull. 2018 Aug 20;44(5):966-969. doi: 10.1093/schbul/sby056. Erratum in: Schizophr Bull. 2018 Aug 20;44(5):1166. doi: 10.1093/schbul/sby098. PMID: 29788190; PMCID: PMC6101631.
Institution	-Bradford School of Pharmacy and Medical Sciences, University of Bradford, Bradford, UK -Division of Psychiatry, Cochrane Schizophrenia Group, Nottingham, UK -Department of Psychology and Psychotherapy, South London and Maudsley NHS Foundation Trust, Trust HQ, London, UK -Public Health and Epidemiology, Nordic Cochrane Centre, Copenhagen, Denmark -Department of Forensic Medicine, Monash University, Melbourne, Australia -Cambridgeshire and Peterborough NHS Foundation Trust, Cambridge, UK; 7 -Department of Rehabilitation Sciences, Faculty of Health Sciences, Cyprus University of Technology, Lemesos, Cyprus -The Ingenuity Centre, The University of Nottingham, Systematic Review Solutions Ltd, Nottingham, UK -Mental Health Education Centre, Western Sydney Local Health District - Mental Health, Sydney, Australia
Studientyp	Systematic review and meta-analysis

Kontrollgruppe ja/nein	yes
Komplex ja/nein	no
Interventionstyp	Pharmacological treatment
n Patienten	695 participants
Effekt ja/nein auf Aggression	no
Beschreibung Intervention	benzodiazepines, alone or in combination with other pharmacological agents
Beschreibung Kontrolle	placebo or antipsychotics alone or in combination (with other antipsychotics, benzodiazepines or antihistamines)
Beschreibung Patienten	people who were aggressive or agitated due to psychosis
Beschreibung Outcomevariablen	- Number of participants tranquil or asleep at follow-up 16h - Global state - Adverse effects/events - Satisfaction with treatment - Economic outcomes
Beschreibung Ergebnisse	Benzodiazepines Alone vs Placebo: One trial compared benzodiazepines alone (IM lorazepam) with placebo. There was no difference in the number sedated at 24 hours (very low quality of evidence). However, more people receiving placebo showed no improvement in global state in the medium term (1 to 48 h) (n = 102, 1 RCT, RR 0.62, 95% CI 0.40 to 0.97, very low quality of evidence). Benzodiazepines Alone vs Antipsychotics: Eleven trials compared benzodiazepines with antipsychotics. Compared with haloperidol there was no difference for sedation at 16 hours (n = 434, 8 RCTs, RR 1.13, 95% CI 0.83 to 1.54, low quality of evidence) or improvement (global state) in the medium term (n = 188, 5 RCTs, RR 0.89, 95% CI 0.71 to 1.11, low quality of evidence). In one small trial, fewer participants improved (global state) in the medium term when receiving lorazepam compared with olanzapine (n = 150, 1 RCT, RR 1.84, 95% CI 1.06 to 3.18, very low quality of evidence). People receiving benzodiazepines were less likely to experience extrapyramidal effects (EPS) in the medium term compared to people receiving haloperidol (n = 233, 6 RCTs, RR 0.13, 95% CI 0.04 to 0.41, low quality of evidence). Benzodiazepines Alone vs Combined Antipsychotics/ Antihistamines: When benzodiazepines (lorazepam or midazolam) were compared with combined antipsychotics/antihistamines (haloperidol plus promethazine), there was a higher risk of no improvement (global state) for benzodiazepines alone in the medium term (n = 200, 1 RCT, RR 2.17, 95% CI 1.16 to 4.05, low quality of evidence). However, for sedation in the medium term, the results were unclear: compared with combined antipsychotics/antihistamines, lorazepam led to a lower risk of sedation (n = 200, 1 RCT, RR 0.91, 95% CI 0.84 to 0.98, low quality of evidence); while, midazolam led to a higher risk of sedation (n = 200, 1 RCT, RR 1.13, 95% CI 1.04 to 1.23, low quality of evidence). Other Combinations: Benzodiazepines (lorazepam or clonazepam) plus antipsychotics (haloperidol or risperidone) vs benzodiazepines alone did not yield any clear differences for global state. When comparing combined benzodiazepines/antipsychotics (a haloperidol combination in all studies) with haloperidol alone, there was no difference in medium-term improvement for global state (n = 185, 4 RCTs, RR 1.17, 95% CI 0.93 to 1.46, low quality of evidence), but sedation was more likely in the short-term for people who received the combination therapy (n = 172, 3 RCTs, RR 1.75, 95% CI 1.14 to 2.67, very low quality of evidence). Only one trial compared combined benzodiazepines/antipsychotics with antipsychotics; however, this study did not report our primary outcomes. One small trial compared combined benzodiazepines/antipsychotics (midazolam and haloperidol) with combined antihistamines/ antipsychotics (promethazine and haloperidol). The combined benzodiazepines/antipsychotics group had a higher risk of no improvement (global state) (n = 60, 1 RCT, RR 25.00, 95% CI 1.55 to 403.99, very low quality of evidence) and higher levels of sedation in the medium term (n = 60, 1 RCT, RR 12.00, 95% CI 1.66 to 86.59, very low quality of evidence).
Dauer Baseline/Intervention/Follow-up	Follow-up 16h
Funding	No funding reported
Qualitätsbemerkung	High risk of bias, in general low or very low quality of evidence due to small sample sizes, inconsistencies in effects, and risk of bias (randomization, allocation concealment and blinding were not well conducted in the included trials, and 6 out of the 20 trials were supported by pharmaceutical institutes)

Behandlung rezidivierender Aggression (Suche von September 2016 bis August 2024)

Artike I-Nr.	Studie n-Nr.	Sub- numm er	
1	1	1	Buoli M, Rovera C, Esposito CM, Grassi S, Cahn W, Altamura AC. THE USE OF LONG-ACTING ANTIPSYCHOTICS FOR THE MANAGEMENT OF AGGRESSIVENESS IN SCHIZOPHRENIA: A CLINICAL OVERVIEW. Clin Schizophr Relat Psychoses. 2018 Jun 26. Epub ahead of print.
2	2	1	Faay MDM, Czobor P, Sommer IEC. Efficacy of typical and atypical antipsychotic medication on hostility in patients with psychosis-spectrum disorders: a review and meta-analysis. Neuropsychopharmacology. 2018 Nov;43(12):2340-2349.
3	3	1	Faden J, Citrome L. A systematic review of clozapine for aggression and violence in patients with schizophrenia or schizoaffective disorder. Schizophr Res. 2024 Jun;268:265-281. doi: 10.1016/j.schres.2023.11.008.
4	4	1	Iffland M, Livingstone N, Jorgensen M, Hazell P, Gillies D. Pharmacological intervention for irritability, aggression, and self-injury in autism spectrum disorder (ASD). Cochrane Database Syst Rev. 2023 Oct 9;10(10):CD011769. doi: 10.1002/14651858.CD011769.
5	5	1	Khalifa NR, Gibbon S, Völlm BA, Cheung NH-Y, McCarthy L. Pharmacological interventions for antisocial personality disorder. Cochrane Database of Systematic Reviews 2020, Issue 9. Art. No.: CD007667. DOI: 10.1002/14651858.CD007667.pub3.
6	6	1	Kongpakwattana K, Sawangjit R, Tawankanjanachot I, Bell JS, Hilmer SN, Chaiyakunapruk N. Pharmacological treatments for alleviating agitation in dementia: a systematic review and network meta-analysis. Br J Clin Pharmacol. 2018 Jul;84(7):1445-1456. doi: 10.1111/bcp.13604.
7	7	1	Krakowski M, Tural U, Czobor P. The Importance of Conduct Disorder in the Treatment of Violence in Schizophrenia: Efficacy of Clozapine Compared With Olanzapine and Haloperidol. Am J Psychiatry. 2021 Mar 1;178(3):266-274. doi: 10.1176/appi.ajp.2020.20010052
8	8	1	Marinheiro G, Dantas JM, Mutarelli A, Menegaz de Almeida A, Monteiro GA, Zerlotto DS, Telles JPM. Efficacy and safety of brexpiprazole for the treatment of agitation in Alzheimer's disease: a meta-analysis of randomized controlled trials. Neurol Sci. 2024 Oct;45(10):4679-4686. doi: 10.1007/s10072-024-07576-8.
9	9	1	Mühlbauer V, Möhler R, Dichter MN, Zuidema SU, Köpke S, Luijendijk HJ. Antipsychotics for agitation and psychosis in people with Alzheimer's disease and vascular dementia. Cochrane Database Syst Rev. 2021 Dec 17;12(12):CD013304. doi: 10.1002/14651858.
10	10	1	Stoffers-Winterling JM, Storebø OJ, Pereira Ribeiro J, Kongerslev MT, Völlm BA, Mattivi JT, Faltinsen E, Todorovac A, Jørgensen MS, Callesen HE, Sales CP, Schaug JP, Simonsen E, Lieb K. Pharmacological interventions for people with borderline personality disorder. Cochrane Database Syst Rev. 2022 Nov 14;11(11):CD012956. doi: 10.1002/14651858.
11	11	1	Wang G, Huang H, Wang Y, Yang Y, Li C, Luo S, Li Y. A randomized, prospective, active-controlled study comparing intramuscular long-acting paliperidone palmitate versus oral antipsychotics in patients with schizophrenia at risk of violent behavior. Prog Neuropsychopharmacol Biol Psychiatry. 2024 Feb 8;129:110897.

Nummer	1
Studie	Buoli M, Rovera C, Esposito CM, Grassi S, Cahn W, Altamura AC. THE USE OF LONG-ACTING ANTIPSYCHOTICS FOR THE MANAGEMENT OF AGGRESSIVENESS IN SCHIZOPHRENIA: A CLINICAL OVERVIEW. Clin Schizophr Relat Psychoses. 2018 Jun 26. Epub ahead of print.
Institution	Department of Psychiatry, University of Milan, Fondazione IRCCS Ca'Granda Ospedale Maggiore Policlinico, Via F. Sforza 35, 20122, Milan, Italy. University Medical Center Utrecht, Department of Psychiatry, Brain Center Rudolf Magnus, The Netherlands
Studientyp	Review, including 2 double-blind RCTs
Kontrollgruppe ja/nein	yes
n Patienten	442 (Citrome et al. 2016) + 329
Effekt ja/nein auf AGGRESSIVITÄT	yes
Beschreibung Intervention	441 mg OR 882 mg once monthly
Beschreibung Kontrolle	placebo
Beschreibung Patienten	Citrome et al. 2016: Patients aged 18-70 years with a diagnosis of schizophrenia and currently experiencing an acute exacerbation or relapse treated with different compounds, subjects with schizophrenia treated with aripiprazole
Beschreibung Outcomevariablen	Citrome et al. 2016: In post-hoc analyses, hostility and aggression were assessed by the Positive and Negative Syndrome Scale (PANSS) Hostility item (P7) and a specific

	antihostility effect was assessed by adjusting for positive symptoms of schizophrenia, somnolence, and akathisia. Ismail et al. 2017: Post-hoc analyses of all 5 Marder factors (PANSS sub-scales) and PEC. The PEC conceptualizes agitation and is equivalent to the Marder factor domain "uncontrolled hostility/excitement" with the addition of tension
Beschreibung Ergebnisse	Citrome et al. 2016: Of the 147 patients who received aripiprazole lauroxil 882 mg and with a baseline PANSS Hostility item P7 more than 1, there was a significant ($P < 0.05$) improvement versus placebo on the PANSS Hostility item P7 score by mixed-model repeated-measures at the end of the study, which remained significant when PANSS-positive symptoms and somnolence or akathisia were included as additional covariates (For 882 mg: $d = 0.24$, For 441 mg: no significant improvement). The proportion with PANSS Hostility item P7 more than 1 at endpoint was significantly ($P < 0.05$) lower with aripiprazole lauroxil versus placebo (53.6, 46.1, and 66.3% for 441, 882 mg, and placebo). A significant ($P < 0.05$) improvement was found with aripiprazole lauroxil versus placebo for change from baseline in the PANSS excited component score. The proportion of patients with aggressive behavior on the Personal and Social Performance scale was significantly ($P < 0.05$) lower for aripiprazole lauroxil: 30.0% for 441 mg versus 44.1% for placebo ($P = 0.006$) and 22.2% for 881 mg ($P < 0.001$ versus placebo). Treatment with aripiprazole lauroxil resulted in decreases in agitation and hostility in patients with schizophrenia and this antihostility effect appears to be independent of a general antipsychotic effect. Ismail et al. 2017: For all Marder factors and PEC scores, improvements from baseline with AOM 400 were achieved early and maintained. Significant improvements across factor scores with AOM 400 versus placebo were observed with MMRM analyses by week 1 for all but the Marder anxiety/depression and PEC scores, for which significant differences were seen by week 2. Last observation carried forward and OC analyses were consistent with these MMRM results (data not shown). We also calculated the mean percentage change by averaging the percentage change from baseline across patients in each treatment group. Mean percentage change from baseline to last visit in the AOM 400 group improved for all 5 Marder factors [9.3% (uncontrolled hostility/excitement)] and for PEC scores (14.1%). In contrast, improvements were not observed with placebo for the uncontrolled hostility/excitement score (worsening of 10.5%) or PEC (worsening of 2.3%),
Dauer	
Baseline/Intervention/Follow-up	/12 weeks
Funding	Otsuka Pharmaceutical Commercialization & Development, Inc, and H. Lundbeck A/S
Qualitätsbemerkung	
Nummer	2
Studie	Faay MDM, Czobor P, Sommer IEC. Efficacy of typical and atypical antipsychotic medication on hostility in patients with psychosis-spectrum disorders: a review and meta-analysis. <i>Neuropsychopharmacology</i> . 2018 Nov;43(12):2340-2349.
Institution	Department of Psychiatry, Brain Center Rudolf Magnus, University Medical Center Utrecht, Utrecht, The Netherlands; Department of Psychiatry and Psychotherapy, Semmelweis University, Budapest, Hungary; Department of Neuroscience and Department of Psychiatry, University Medical Center Groningen, Groningen, Netherlands; Department of Biological and Medical Psychology, University of Bergen, Bergen, Norway
Studientyp	Review & meta-analysis, including 18 RCTs, blinded or open-label
Kontrollgruppe ja/nein	yes
n Patienten	6799 (all atypical antipsychotics), 290 (clozapine)
Effekt ja/nein auf AGGRESSIVITÄT	yes
Beschreibung Intervention	Atypical antipsychotics (low dose, high dose, clozapine)
Beschreibung Kontrolle	Typical antipsychotics
Beschreibung Patienten	Patients diagnosed with a psychosis-spectrum disorder (schizophrenia, schizoaffective disorder or psychotic disorder not otherwise specified) according to the Diagnostic and Statistical Manual of Mental Disorders (DSM-III, DSM-III-R, DSM-IV, DSM-IV-TR or DSM-V) or International Classification of Diseases (ICD 9 or 10). Both in and out patients were included, but not patients under current treatment in forensic facilities
Beschreibung Outcomevariablen	studies reporting the hostility item of the PANSS or BPRS, the PANSS hostility/excitement factor score, the BPRS hostile/suspiciousness cluster or the Behavioural Agitation Score (BAS) derived from the BPRS; studies reporting sufficient information to compute common effect size statistics (means and SDs, exact p, t, or z values) or corresponding authors could supply these data upon request
Beschreibung Ergebnisse	Hedge's $g = 0.567$ (high dose); $g = 0.26$ (low dose); $g = 0.415$ (clozapine); positive score favours atypical antipsychotic/clozapine, all primary outcomes reached statistical significance, however heterogeneity was high
Dauer	
Baseline/Intervention/Follow-up	studies testing the antipsychotic for 4 weeks or more
Funding	Sponsored and non-sponsored studies were included, The results were not significant in the sensitivity analysis that excluded studies funded by for-profit organizations. (power

	issue?); IS has received funding from the Dutch Research Organization (ZonMW, HAMLETT study 848041003).
Qualitätsbemerkung	Very serious concerns (heterogeneity)
Nummer	3
Studie	Faden J, Citrome L. A systematic review of clozapine for aggression and violence in patients with schizophrenia or schizoaffective disorder. Schizophr Res. 2024 Jun;268:265-281. doi: 10.1016/j.schres.2023.11.008.
Institution	Lewis Katz School of Medicine at Temple University, Philadelphia, PA, United States of America, New York Medical College, Valhalla, NY, United States of America
Studientyp	systematic review
Kontrollgruppe ja/nein	yes
n Patienten	40 (clozapine), 39 (olanzapine), 38 (haloperidol), 41 (risperidone)
Effekt ja/nein auf AGGRESSIVITÄT	yes
Beschreibung Intervention	Clozapine, olanzapine
Beschreibung Kontrolle	Olanzapine, risperidone, haloperidol
Beschreibung Patienten	patients with schizophrenia or schizoaffective disorder
Beschreibung Outcomevariablen	MOAS total score at 12 weeks MOAS physical aggression subscale scores at 12 weeks reduction in hostility score at 14 weeks
Beschreibung Ergebnisse	The mean MOAS total score was 25.1, 32.7, and 40.9 for clozapine, olanzapine, and haloperidol, respectively. Clozapine was superior to both haloperidol and olanzapine ($p < 0.001$ for each), olanzapine was superior to haloperidol ($p < 0.001$). MOAS physical aggression subscale scores were consistent, with clozapine being statistically superior to both olanzapine and haloperidol ($p < 0.001$ for each), and olanzapine being superior to haloperidol ($p < 0.001$). Reduction in hostility scores over time was significant only for clozapine ($p = 0.019$), "significantly greater anti-aggressive effects than haloperidol ($p = 0.021$)" "significantly greater anti-aggressive effects than risperidone ($p = 0.012$)"
Dauer Baseline/Intervention/Follow-up	12 or 14 weeks
Funding	The manuscript is not funded. The authors have no other relevant affiliations or financial involvement with any organization or entity with a financial interest in or financial conflict with the subject matter or materials discussed in the manuscript apart from those disclosed. J. Faden has, in the past 5 years, served as a consultant to BioXcel and Noven and received grant funding from BioXcel. L. Citrome has, in the past 5 years, served as a Consultant: AbbVie/ Allergan, Acadia, Adamas, Alkermes, Angelini, Astellas, Avanir, Axsome, Biogen, BioXcel, Boehringer Ingelheim, Cadent Therapeutics, Cerevel, Clinilabs, COMPASS, Delpor, Eisai, Enteris BioPharma, HLS Therapeutics, Idorsia, INmune Bio, Impel, Intra-Cellular Therapies, Janssen, Karuna, Lundbeck, Luye, Lyndra, Maplight, Marvin, Medavante-ProPhase, Merck, Mitsubishi-Tanabe Pharma, Neumora, Neurocrine, Neurelis, Noema, Novartis, Noven, Otsuka, Ovid, Praxis, Recordati, Relmada, Reviva, Sage, Sumitomo/Sunovion, Supernus, Teva, University of Arizona, Vanda, Wells Fargo, and one-off ad hoc consulting for individuals/entities conducting marketing, commercial, or scientific scoping research. Speaker: AbbVie/Allergan, Acadia, Alkermes, Angelini, Axsome, BioXcel, Eisai, Idorsia, Intra-Cellular Therapies, Janssen, Lundbeck, Neurocrine, Noven, Otsuka, Recordati, Sage, Sunovion, Takeda, Teva, and CME activities organized by medical education companies such as Medscape, NACCME, NEI, Vindico, and Universities and Professional Organizations/Societies. Stocks (small number of shares of common stock): Bristol-Myers Squibb, Eli Lilly, J & J, Merck, Pfizer purchased >10 years ago, stock options: Reviva. Royalties/Publishing Income: Taylor & Francis (Editor-in-Chief, Current Medical Research and Opinion, 2022-date), Wiley (Editor-inChief, International Journal of Clinical Practice, through end 2019), UpToDate (reviewer), Springer Healthcare (book), Elsevier (Topic Editor, Psychiatry, Clinical Therapeutics).
Qualitätsbemerkung	
Nummer	4
Studie	Iffland M, Livingstone N, Jorgensen M, Hazell P, Gillies D. Pharmacological intervention for irritability, aggression, and self-injury in autism spectrum disorder (ASD). Cochrane Database Syst Rev. 2023 Oct 9;10(10):CD011769. doi: 10.1002/14651858.CD011769.
Institution	
Studientyp	Review and meta-analysis, including 131 studies involving 7014 participants in this review. We identified 26 studies as awaiting classification and 25 as ongoing. Most studies involved children (53 studies involved only children under 13 years), children and adolescents (37 studies), adolescents only (2 studies) children and adults (16 studies), or adults only (23 studies)
Kontrollgruppe ja/nein	yes
n Patienten	7014 participants

Effekt ja/nein auf AGGRESSIVITÄT	No, only on irritability
Beschreibung Intervention	Atypical antipsychotic, Neurohormone, ADHD-related medication, antidepressant, anticonvulsant, antidementia, antiparkinsonian, anxiolytic
Beschreibung Kontrolle	Placebo, typical antipsychotics, antidementia, antiparkinsonian, antidepressant
Beschreibung Patienten	people with autism spectrum disorder (ASD) with behaviours of concern, including irritability, aggression, and self-injury
Beschreibung Outcomevariablen	Irritability (Primary), Relapse, Improvement, Aggression, Self-Injury, several adverse effects, Quality of life, Tolerability/acceptability: loss to follow-up, several subgroup-analyses
Beschreibung Ergebnisse	At short-term follow-up (up to 6 months), atypical antipsychotics probably reduce irritability compared to placebo (standardised mean difference (SMD) -0.90, 95% confidence interval (CI) -1.25 to -0.55, 12 studies, 973 participants; moderate-certainty evidence), which may indicate a large effect. However, there was no clear evidence of a difference in aggression between groups (SMD -0.44, 95% CI -0.89 to 0.01; 1 study, 77 participants; very low-certainty evidence). At short-term follow-up, neurohormones may have minimal to no clear effect on irritability when compared to placebo (SMD -0.18, 95% CI -0.37 to -0.00; 8 studies; 466 participants; very low-certainty evidence), although the evidence is very uncertain. No data were reported for aggression. At short-term follow-up, ADHD-related medications may reduce irritability slightly (SMD -0.20, 95% CI -0.40 to -0.01; 10 studies, 400 participants; low-certainty evidence), which may indicate a small effect. No data were reported for aggression. At short-term follow-up, there was no clear evidence that antidepressants have an effect on irritability (SMD -0.06, 95% CI -0.30 to 0.18; 3 studies, 267 participants; low-certainty evidence). No data for aggression
Dauer Baseline/Intervention/Follow-up	all short term (< 6 months), 7 days up to 24 weeks
Funding	Different between studies, some of them Pharma funded; others like: Tehran University of Medical Sciences; hospital and an autism centre; Forest Laboratories, LLC, (Jersey City, New Jersey), Allergan; several conflicts of interest like Pharma sponsoring; being in the ethics committee that approved the study; working with the journal that published the results etc.
Qualitätsbemerkung	High quality (low RoB, not serious concerns in GRADE rating)
Nummer	5
Studie	Khalifa NR, Gibbon S, Völlm BA, Cheung NH-Y, McCarthy L. Pharmacological interventions for antisocial personality disorder. Cochrane Database of Systematic Reviews 2020, Issue 9. Art. No.: CD007667. DOI: 10.1002/14651858.CD007667.pub3.
Institution	
Studientyp	Systematic review including 11 RCTs, Data were available from only four studies involving 274 participants with AsPD. All the available data came from unreplicated, single reports, and did not allow independent statistical analysis to be conducted.
Kontrollgruppe ja/nein	yes
n Patienten	416 (60 four primary outcome of interest)
Effekt ja/nein auf AGGRESSIVITÄT	yes
Beschreibung Intervention	3 classes of drug were represented: antiepileptic; antidepressant; and dopamine agonist (anti-Parkinsonian) drugs.
Beschreibung Kontrolle	placebo
Beschreibung Patienten	Patients with anti-social personality disorder. The average age of participants ranged from 28.6 years to 45.1 years (overall mean age 39.6 years). Participants were predominantly (90%) male.
Beschreibung Outcomevariablen	Primary outcomes were aggression (six studies) global/state functioning (three studies), social functioning (one study), and adverse events (seven studies). Secondary outcomes were leaving the study early (eight studies), substance misuse (five studies), employment status (one study), impulsivity (one study), anger (three studies), and mental state (three studies). No study reported data on the primary outcome of reconviction or the secondary outcomes of quality of life, engagement with services, satisfaction with treatment, housing/accommodation status, economic outcomes or prison/service outcomes.
Beschreibung Ergebnisse	Primary outcome of interest: frequency of aggressive acts per week
Dauer Baseline/Intervention/Follow-up	One study (60 participants) reported very low-certainty evidence that phenytoin (300 mg/day), compared to placebo, may reduce the mean frequency of aggressive acts per week (phenytoin mean = 0.33, no standard deviation (SD) reported; placebo mean = 0.51, no SD reported) in male prisoners with aggression (skewed data) at endpoint (six weeks).
Funding	The 11 included studies were funded by a variety of sources, including research councils, charities, commercial organisations and government departments. Five studies were funded by grants from a single organisation (Arndt 1994; Leal 1994; Powell 1995; Hollander 2003; Gowin 2012), and six studies received financial support from two or more organisations (Barratt 1997; Stanford 2001; Stanford 2005; Ralevski 2007; Coccato 2009;

	Konstenius 2014). Six studies were funded by grants from major research councils such as the National Institute on Alcohol Abuse and Alcoholism (USA) (Powell 1995); the National Institute on Drug Abuse (USA) (Arndt 1994; Leal 1994; Gowin 2012); the National Institute of Mental Health (USA) (Coccaro 2009) and the Swedish Research Council (Konstenius 2014). Four studies received some of their funding from charitable organisations (Barratt 1997; Stanford 2001; Stanford 2005; Ralevski 2007) and two were funded by commercial laboratories (Hollander 2003; Coccaro 2009). We provide full details of study funding as a note in each of the Characteristics of included studies tables.
Qualitätsbemerkung	Certainty of evidence (GRADE): very low
Nummer	6
Studie	Kongpakwattana K, Sawangjit R, Tawankanjanachot I, Bell JS, Hilmer SN, Chaiyakunapruk N. Pharmacological treatments for alleviating agitation in dementia: a systematic review and network meta-analysis. Br J Clin Pharmacol. 2018 Jul;84(7):1445-1456. doi: 10.1111/bcp.13604.
Institution	School of Pharmacy, Monash University Malaysia, Selangor, Malaysia, Clinical Trials and Evidence Base Syntheses Research Unit (CTEBs RU), Department of Clinical Pharmacy, Faculty of Pharmacy, Mahasarakham University, Mahasarakham, Thailand, Department of Psychiatry, King Chulalongkorn Memorial Hospital, Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand, Centre for Medicine Use and Safety, Faculty of Pharmacy and Pharmaceutical Sciences, Monash University, Australia, Kolling Institute of Medical Research, Royal North Shore Hospital and University of Sydney, St Leonards, NSW, Australia, Center of Pharmaceutical Outcomes Research (CPOR), Department of Pharmacy Practice, Faculty of Pharmaceutical Sciences, Naresuan University, Phitsanulok, Thailand, Asian Centre for Evidence Synthesis in Population, Implementation and Clinical Outcomes (PICO), Health and Well-being Cluster, Global Asia in the 21st Century (GA21) Platform, Monash University Malaysia, Bandar Sunway, Selangor, Malaysia, and School of Pharmacy, University of Wisconsin, Madison, USA
Studientyp	systematic review and network meta-analysis, including 36 RCTs
Kontrollgruppe ja/nein	Yes
n Patienten	5585
Effekt ja/nein auf AGGRESSIVITÄT	Yes for agitation for risperidone and SSRI, aggression not reported, Dextromethorphan/quinidine is not approved in Germany
Beschreibung Intervention	risperidone, haloperidol, valproate, quetiapine, yokukansan, aripiprazole, citalopram, olanzapine, rivastigmine, sertraline, trazodone, dextromethorphan/Quinidine, donepezil, fluoxetine, fluvoxamine, galantamine, melatonin, memantine, oxcarbazepine, propranolol, topiramate
Beschreibung Kontrolle	Placebo
Beschreibung Patienten	Participants with dementia, 30.9% male; mean $\pm$ standard deviation age, 81.8 $\pm$ 4.9 years
Beschreibung Outcomevariablen	response for agitation at 8 weeks (CMAI, NPI-A, BEHAVE-AD-A or NBRs-A)
Beschreibung Ergebnisse	Dextromethorphan/quinidine [odds ratio (OR) 3.04; 95% confidence interval (CI), 1.63–5.66], risperidone (OR 1.96; 95% CI, 1.49–2.59) and selective serotonin reuptake inhibitors as a class (OR 1.61; 95% CI, 1.02–2.53) were found to be significantly more efficacious than placebo. Haloperidol appeared less efficacious than nearly all comparators. Most treatments had noninferior treatment continuation compared to placebo, except oxcarbazepine, which was inferior. Findings were supported by subgroup and sensitivity analyses.
Dauer Baseline/Intervention/Follow-up	8 weeks
Funding	The results were not significant in the sensitivity analysis that excluded studies funded by for-profit organizations. (power issue?)
Qualitätsbemerkung	
Nummer	7
Studie	Krakowski M, Tural U, Czobor P. The Importance of Conduct Disorder in the Treatment of Violence in Schizophrenia: Efficacy of Clozapine Compared With Olanzapine and Haloperidol. Am J Psychiatry. 2021 Mar 1;178(3):266-274. doi: 10.1176/appi.ajp.2020.20010052
Institution	Department of Psychiatry, Nathan Kline Institute for Psychiatric Research, Orangeburg, N.Y. (Krakowski, Tural); Department of Psychiatry and Psychotherapy, Semmelweis University, Budapest (Czobor)
Studientyp	RCT
Kontrollgruppe ja/nein	Yes
n Patienten	99
Effekt ja/nein auf AGGRESSIVITÄT	Yes
Beschreibung Intervention	Clozapine, olanzapine

Beschreibung Kontrolle	Olanzapine, haloperidol
Beschreibung Patienten	Patients with schizophrenia and conduct disorder
Beschreibung Outcomevariablen	MOAS total score at 12 weeks MOAS Physical assault score at 12 weeks (Odds ratios)
Beschreibung Ergebnisse	Clozapine was superior to haloperidol (4.12 (3.45–4.76)) and olanzapine (1.66 (1.43–2.00)) in reducing assaults; olanzapine was superior to haloperidol (2.44 (2.12–2.82)). Clozapine's greater antiaggressive efficacy over haloperidol was substantially more pronounced in patients with conduct disorder than in patients without conduct disorder. In patients with conduct disorder, clozapine was four times more likely than haloperidol to result in lower violence; in patients without conduct disorder, it was three times more likely to do so. Olanzapine's superiority over haloperidol was also more pronounced in patients with conduct disorder.
Dauer	12 weeks
Baseline/Intervention/Follow-up	Supported by NIMH grants MH-74767 and MH-85322.
Funding	The authors report no financial relationships with commercial interests.
Qualitätsbemerkung	
Nummer	8
Studie	Marinheiro G, Dantas JM, Mutarelli A, Menegaz de Almeida A, Monteiro GA, Zerlotto DS, Telles JPM. Efficacy and safety of brexpiprazole for the treatment of agitation in Alzheimer's disease: a meta-analysis of randomized controlled trials. <i>Neurol Sci.</i> 2024 Oct;45(10):4679-4686. doi: 10.1007/s10072-024-07576-8.
Institution	School of Medicine, Federal University of Ceará, Sobral, Brazil Department of Clinical Medicine, Federal University of Rio Grande Do Norte, Natal, Brazil School of Medicine, Federal University of Minas Gerais, Belo Horizonte, Brazil School of Medicine, Federal University of Mato Grosso, Sinop, Brazil Department of Medicine, State University of Campinas, Campinas, Brazil Department of Neurology, University of São Paulo, São Paulo, Brazil
Studientyp	Meta-analysis of 3 RCTs
Kontrollgruppe ja/nein	Yes
n Patienten	1,048 (658 brexpiprazole, 390 placebo)
Effekt ja/nein auf AGGRESSIVITÄT	Yes for agitation, no reporting for aggression
Beschreibung Intervention	Brexiprazole 0.5 mg to 3 mg
Beschreibung Kontrolle	Placebo
Beschreibung Patienten	patients with a diagnosis of probable Alzheimer's disease, defined by the criteria of the National Institute of Neurological and Communicative Disorders and Stroke and the Alzheimer's Disease and Related Disorders Association (NINCDSADRDA), aged 55 years or older
Beschreibung Outcomevariablen	Cohen Mansfield Agitation Inventory total score (CMAI), Clinical Global Impression–Severity of illness (CGI-S), Simpson-Angus Scale (SAS)
Beschreibung Ergebnisse	In patients with agitation and AD, brexpiprazole significantly improved the Cohen Mansfield Agitation Inventory total score (CMAI) at any dose (MD -3.05; 95% CI -5.12, -0.98; p<0.01; I2=19%) and at 2 mg (MD -4.36; 95% CI -7.02, -1.70; p<0.01; I2=0%) over 12 weeks. Brexpiprazole at any dose and 2 mg also showed benefit in the Clinical Global Impression–Severity of illness (CGI-S) score as related to agitation over 12 weeks (MD -0.20; 95% CI -0.36, -0.05; p<0.01; I2=35%). There is no significant difference between the groups in the incidence of at least one treatment-emergent adverse events (TEAEs; RR 1.14; 95% CI 0.95, 1.37; p=0.16; I2=45%) and all-cause mortality (RR 1.99; 95% CI 0.37, 10.84; p=0.42; I2=0%). Brexpiprazole at any dose significantly increased the Simpson-Angus Scale (SAS; MD 0.47; 95% CI 0.28, 0.66; p<0.01). Our results suggest that brexpiprazole is more efficacious than placebo in the treatment of agitation in AD patients.
Dauer	12 weeks
Baseline/Intervention/Follow-up	
Funding	No external funding for the meta-analysis, not reported for single studies.
Qualitätsbemerkung	High quality (low RoB, not serious concerns in GRADE rating)
Nummer	9
Studie	Mühlbauer V, Möhler R, Dichter MN, Zuidema SU, Köpke S, Luijendijk HJ. Antipsychotics for agitation and psychosis in people with Alzheimer's disease and vascular dementia. <i>Cochrane Database Syst Rev.</i> 2021 Dec 17;12(12):CD013304. doi: 10.1002/14651858.
Institution	DigiHealth Institute, Neu-Ulm University of Applied Sciences, Neu-Ulm, Germany. Institute for Health Services Research and Health Economics, Centre for Health and Society, Medical Faculty and University Hospital Düsseldorf, Heinrich-Heine University, Düsseldorf, Germany. German Center for Neurodegenerative Diseases (DZNE), Witten, Germany. Department of General Practice and Elderly Care Medicine, University of Groningen, University Medical Center Groningen, Groningen, Netherlands.

	Institute of Nursing Science, Faculty of Medicine and University Hospital Cologne, University of Cologne, Cologne, Germany
Studientyp	Systematic Review and Meta-Analysis including 24 studies
Kontrollgruppe ja/nein	Yes
n Patienten	6090 participants (12 to 652 per study)
Effekt ja/nein auf AGGRESSIVITÄT	Yes for agitation, aggression not reported separately
Beschreibung Intervention	Atypical and typical antipsychotics, haloperidol, risperidone, quetiapine
Beschreibung Kontrolle	Placebo
Beschreibung Patienten	Patients with dementia (Alzheimer's disease or vascular dementia)
Beschreibung Outcomevariablen	CMAI total score at endpoint (3 to 16 weeks) responders for agitation change in agitation (CGI-S) at endpoint (3 to 16 weeks) Extrapyramidal symptoms Somnolence Any adverse event Any serious adverse event
Beschreibung Ergebnisse	For typical antipsychotics (e.g. haloperidol, thiothixene), we are uncertain whether these drugs improve agitation compared with placebo (standardised mean difference (SMD) -0.36, 95% confidence interval (CI) -0.57 to -0.15, 4 studies, n = 361); very low-certainty evidence. Atypical antipsychotics (e.g. risperidone, olanzapine, aripiprazole, quetiapine) probably reduce agitation slightly (SMD -0.21, 95% CI -0.30 to -0.12, 7 studies, n = 1971; moderate-certainty evidence), but probably have a negligible effect on psychosis (SMD -0.11, 95% CI -0.18 to -0.03, 12 studies, n = 3364; moderate-certainty evidence). The findings from seven trials for risperidone were in line with those for the drug class.
Dauer Baseline/Intervention/Follow-up	3 weeks to 16 weeks
Funding	This review was supported by the National Institute for Health Research (NIHR), via Cochrane Infrastructure funding to the Cochrane Dementia and Cognitive Improvement group. Commercial funding was one of the extracted general study characteristics. Three studies were non-commercially funded (Auchus 1997; Devanand 1998; Schneider 2006 CATIE-AD). Nineteen trials were funded by pharmaceutical companies, and the funding source was unclear in two studies.
Qualitätsbemerkung	Severe limitations in study design except for EPMS; GRADE-rating high-moderate for EPMS, somnolence; moderate for change in agitation (CGI-S) at endpoint/ responders for agitation; very low for CMAI total score at endpoint (3 to 16 weeks)
Nummer	10
Studie	Stoffers-Winterling JM, Storebø OJ, Pereira Ribeiro J, Kongerslev MT, Völlm BA, Mattivi JT, Faltinsen E, Todorovac A, Jørgensen MS, Callesen HE, Sales CP, Schaug JP, Simonsen E, Lieb K. Pharmacological interventions for people with borderline personality disorder. Cochrane Database Syst Rev. 2022 Nov 14;11(11):CD012956. doi: 10.1002/14651858.
Institution	Department of Psychiatry and Psychotherapy, University Medical Center Mainz, Mainz, Germany. Psychiatric Research Unit, Psychiatry Region Zealand, Slagelse, Denmark. Child and Adolescent Psychiatric Department, Region Zealand, Roskilde, Denmark. Department of Psychology, University of Southern Denmark, Odense, Denmark. District Psychiatric Services Roskilde, Region Zealand Mental Health Services, Roskilde, Denmark. Department of Forensic Psychiatry, Center for Neurology, University Rostock, Rostock, Germany. Duncan MacMillan House, Nottinghamshire Healthcare NHS Foundation Trust, Nottingham, UK. Institute of Mental Health, Department of Psychiatry & Applied Psychology, Nottingham, UK. Region Zealand Psychiatry, Center for Evidence Based Psychiatry, Slagelse, Denmark. Research Unit, Mental Health Services, Copenhagen University Hospital, Psychiatry Region Zealand, Roskilde, Denmark
Studientyp	Systematic Review & meta-analysis including 46 RCTs
Kontrollgruppe ja/nein	yes
n Patienten	2769
Effekt ja/nein auf AGGRESSIVITÄT	Yes on anger, no on impulsivity
Beschreibung Intervention	Antipsychotics, Olanzapin, Trifluoperazine hydrochloride; Mood stabilisers, Valproic acid, Carbamazepine; Alprazolam; Antidepressants; Omega-3 fatty acids
Beschreibung Kontrolle	Asenapin, trifluoperazine hydrochloride; valproic acid plus eicosapentaenoic acid and docosahexaenoic acid, Carbamazepine; tranlycypromine sulfate, Sertraline; Placebo
Beschreibung Patienten	people of all ages with a formal diagnosis of BPD
Beschreibung Outcomevariablen	primary outcomes were BPD symptom severity, selfharm, suicide-related outcomes, and psychosocial functioning.

	Secondary outcomes were individual BPD symptoms, depression, attrition and adverse events Secondary outcomes of interest Anger, measured by CGI-BPD (inappropriate anger) and AIAQ. Assessed at baseline and at 2, 4, 8 and 12 weeks (EOT) Impulsivity, measured by CGI-BPD (impulsivity) and OAS-M (aggression). Assessed at baseline and at 2, 4, 8 and 12 weeks (EOT)
Beschreibung Ergebnisse	Antipsychotics, Antidepressants, Mood Stabilizers, Omega-3-Fatty-Acids positive as regards Anger, Naltrexone, Alprazolam not positive as regards Anger. Antipsychotics, Antidepressants, Mood Stabilizers, Alprazolam not positive as regards impulsivity
Dauer Baseline/Intervention/Follow-up	12 weeks
Funding	Seventeen trials were funded or partially funded by the pharmaceutical industry, 10 were funded by universities or research foundations, eight received no funding, and 11 had unclear funding
Qualitätsbemerkung	Serious to very serious concerns as regards endpoints anger and impulsivity
Nummer	11
Studie	Wang G, Huang H, Wang Y, Yang Y, Li C, Luo S, Li Y. A randomized, prospective, active-controlled study comparing intramuscular long-acting paliperidone palmitate versus oral antipsychotics in patients with schizophrenia at risk of violent behavior. Prog Neuropsychopharmacol Biol Psychiatry. 2024 Feb 8;129:110897.
Institution	Wuhan, Mental Health Center, Wuhan, China
Studientyp	RCT
Kontrollgruppe ja/nein	yes
n Patienten	134
Effekt ja/nein auf AGGRESSIVITÄT	yes
Beschreibung Intervention	intramuscular long-acting paliperidone palmitate
Beschreibung Kontrolle	Oral antipsychotics
Beschreibung Patienten	patients with schizophrenia at risk of violent behavior
Beschreibung Outcomevariablen	Changes in patients' risk for violent/aggressive behavior, were measured using VRAPP, MOAS (verbal, against property, physical) scales from baseline to endpoint (13, 25 and 49 weeks). Longitudinal data from multiple repeated measures were analyzed using linear mixed effects models.
Beschreibung Ergebnisse	The study protocol was completed by 77.6% of the patients overall. Significant improvements were observed in the risk assessment scores, MOAS total score of patients in the PP1M group from baseline to the end of treatment (all $P < 0.05$). Importantly, compared to patients in the OAP group, the improvements in these measures were also significantly greater in the PP1M group.
Dauer Baseline/Intervention/Follow-up	49 weeks
Funding	This study was supported by grants from the Wuhan Municipal Health Commission Science and Technology Program (Grant Number: WG17M01).
Qualitätsbemerkung	

Medikamente (Suche bis September 2016)

Bibliographic citation	
National Collaborating Centre for Mental Health (UK): Violence and Aggression: Short-Term Management in Mental Health, Health and Community Settings: Updated edition. London: British Psychological Society; 2015.	
Study type	Guideline
Evidence level	I-IV
Results / Effect size	
Source of Funding	

Bibliographic citation

Steinert T, Hamann K: External Validity of Studies on Aggressive Behavior in Patients with Schizophrenia: Systematic Review. Clin Pract Epidemiol Ment Health. 2012; 8: 74–80.	
Study type	Review
Evidence level	
Results / Effect size	In most of the studies, aggression or violence, respectively, were poorly defined. Only 5 (15.2%) studies used a cut-off score on an aggression scale. Only 6 studies (18.2%) reported the number of patients who refused to participate, and 16 (48.5%) reported the number of drop-outs. Only 3 studies (9.1%) reported a systematic comparison of participants and non-participants. We found that data which allow for the assessment of representativeness of the investigated samples are poorly reported. For most studies, doubts regarding external validity seem justified and generalisability is questionable due to possible selection bias.
Source of Funding	Not reported

Bibliographic citation	
Belgamwar RB, Fenton M: Olanzapine IM or velotab for acutely disturbed/agitated people with suspected serious mental illnesses. Cochrane Database of Systematic Reviews 2005; Issue 2. Art. No.: CD003729.	
Study type	Review
Evidence level	Ia
Results / Effect size	Four trials compared olanzapine IM with IM placebo (total n=769, 217 allocated to placebo). Fewer people given olanzapine IM had 'no important response' by 2 hours compared with placebo (4 RCTs, n=769, RR 0.49 CI 0.42 to 0.59, NNT 4 CI 3 to 5) and olanzapine IM was as acceptable as placebo (2 RCTs, n=354, RR leaving the study early 0.31 CI 0.06 to 1.55). When compared with placebo, people given olanzapine IM required substantially fewer additional injections following the initial dose (4 RCTs, n=774, RR 0.48 CI 0.40 to 0.58, NNT 4 CI 4 to 5). Olanzapine IM did not seem associated with extrapyramidal effects (4 RCT, n=570, RR experiencing any adverse event requiring anticholinergic medication in first 24 hours 1.27 CI 0.49 to 3.26). Two trials compared olanzapine IM with haloperidol IM (total n=482, 166 allocated to haloperidol). Studies found no differences between olanzapine IM and haloperidol by 2 hours for the outcome of 'no important clinical response' (2 RCTs, n= 482, RR 1.00 CI 0.73 to 1.38) neither was there a difference for needing repeat IM injections (2 RCTs, n=482, RR 0.99 CI 0.71 to 1.38). More people

	on haloperidol experienced akathisia over the five day oral period compared with olanzapine IM (1 RCT, n=257, RR 0.51 CI 0.32 to 0.80, NNT 6 CI 5 to 15) and fewer people allocated to olanzapine IM required anticholinergic medication by 24 hours compared with those given haloperidol IM (2 RCTs, n= 432, RR 0.20 CI 0.09 to 0.44, NNT 8 CI 7 to 11). Two trials compared olanzapine IM with lorazepam IM (total n=355, 119 allocated to lorazepam). For the outcome of 'no important clinical response' , there was no difference between people given olanzapine IM and those allocated to lorazepam at 2 hours (2 RCTs, n=355, RR 92 CI 0.66 to 1.30) but fewer people allocated to olanzapine IM required additional injections by 24 hours compared with those on lorazepam IM (2 RCTs, n=355, RR 0.68 CI 0.49 to 0.95, NNT 10 CI 6 to 59). People receiving IM olanzapine were less likely to experience any treatment emergent adverse events, than those on lorazepam (1 RCT, n=150, RR at 24 hours 0.62 CI 0.43 to 0.89, NNT 5 CI 4 to 17) and over the same time period there were no clear differences in the use of anticholinergic medication between groups (1 RCT, n=150, RR 1.16 CI 0.38 to 3.58). No studies reported outcomes related to hospital and service use. Nor did any report on issues of satisfaction with care or suicide, selfharm or harm to others. No studies evaluated the oro-dispersable form of olanzapine.
Source of Funding	All studies are funded by a company with a pecuniary interest in the result.

Bibliographic citation	
Gilles D, Sampson, S, Beck A, Rathbone J: Benzodiazepines for psychosis-induced aggression or agitation. Cochrane Database of Systematic Reviews 2013; Issue 4. Art. No.: CD003079.	
Study type	Review
Evidence level	Mixed Ia, IV
Results / Effect size	We included 21 trials with a total of n = 1968 participants. There was no significant difference for most outcomes in the one trial that compared benzodiazepines with placebo, although there was a higher risk of no improvement in people receiving placebo in the medium term (one to 48 hours) (n = 102, 1 RCT, RR 0.62, 95% CI 0.40 to 0.97, very low quality evidence).

	There was no difference in the number of participants who had not improved in the medium term when benzodiazepines were compared with antipsychotics (n = 308, 5 RCTs, RR 1.10, 95% CI 0.85 to 1.42, low quality evidence); however, people receiving benzodiazepines were less likely to experience extrapyramidal effects (EPS) in the medium term (n = 536, 8 RCTs, RR 0.15, 95% CI 0.06 to 0.39, moderate quality of evidence). Data comparing combined benzodiazepines and antipsychotics versus benzodiazepines alone did not yield any significant results. When comparing combined benzodiazepines/antipsychotics (all studies compared haloperidol) with the same antipsychotics alone (haloperidol), there was no difference between groups in improvement in the medium term (n = 155, 3 RCTs, RR 1.27, 95% CI 0.94 to 1.70, very low quality evidence) but sedation was more likely in people who received the combination therapy (n = 172, 3 RCTs, RR 1.75, 95% CI 1.14 to 2.67, very low quality evidence). However, more participants receiving combined benzodiazepines and haloperidol had not improved by medium term when compared to participants receiving olanzapine (n = 60, 1 RCT, RR 25.00, 95% CI 1.55 to 403.99, very low quality evidence) or ziprasidone (n = 60, 1 RCT, RR 4.00, 95% CI 1.25 to 12.75 very low quality evidence). When haloperidol and midazolam were compared with olanzapine, there was some evidence the combination was superior in terms of improvement, sedation and behaviour.
Source of Funding	Several trials were funded by pharmaceutical companies. Other sources of funding include support from the National Alliance for Research on Schizophrenia and Depression; a postgraduate scholarship from the National Health and Medicine Research Council and a research grant from the Australasian College for Emergency Medicine; a grant from the Gralnick Foundation, High Point Hospital, Port Chester, NY; funding from Fundação Oswaldo Cruz, the British Council, CAPES (Coordenação de Aperfeiçoamento de Pessoal de Nível Superior) and FAPERJ (Fundação de Amparo à Pesquisa do Estado do Rio de Janeiro); funding by intramural research grants from Fluid Research Fund (Christian Medical College, Vellore), and the Cochrane Schizophrenia Group general fund.

Bibliographic citation	
Andrezina R, Josiassen RC, Marcus RN, Oren DA, Manos G, Stock E, Carson WH, Iwamoto T: Intramuscular aripiprazole for the treatment of acute agitation in patients with schizophrenia or schizoaffective disorder: a double-blind, placebo-controlled comparison with intramuscular haloperidol. <i>Psychopharmacology</i> (2006) 188:281–292	
Study type	RCT
Evidence level	Ib
Number of Patients	448
Patient characteristics	All patients suffered from schizophrenia and agitation All patients > 18 years All patients in-patients Patients were also required to have Positive and Negative Syndrome Scale (PANSS) Excited Component (PEC) scores of ≥ 15 and ≤ 32 , and a score of ≥ 4 (moderate) on at least two of the five PEC items Give informed consent Exclusion criteria: other psychiatric or neurologic diseases, seizures, abnormal EEG, stroke, head trauma, significant risk of committing suicide, substance dependence, use of benzodiazepines, anticholinergic agents
Intervention	IM aripiprazole 9.75 mg
Comparison	IM haloperidol 6.5 mg or IM placebo
Length of Follow up	22 h
Outcome measures	Reduction from baseline on the PEC-score at 2h Secondary Outcomes: CGI-I, CGI-S, ACES, CABS, BPRS
Results / Effect size	Mean improvement in PEC at 2 h was significantly greater for IM aripiprazole (-7.27) vs placebo (-4.78 ; $p < 0.001$); IM aripiprazole was noninferior to IM haloperidol (-7.75) on PEC. All secondary efficacy measures showed significantly greater improvements at 2 h for IM aripiprazole and IM haloperidol over placebo. Mean number of injections/patient and percentage of patients requiring benzodiazepines were significantly lower for IM aripiprazole vs placebo ($p < 0.01$). IM aripiprazole was well tolerated. Extrapyramidal symptom-related adverse events were similar for aripiprazole (1.7%) and placebo (2.3%) and lower than with haloperidol (12.6%).
Source of Funding	Pharmaceutical companies: Bristol-Myers Squibb Company(Princeton, NJ) and Otsuka Pharmaceutical Co., Ltd. (Tokyo, Japan)

Bibliographic citation	
Zimbroff DL, Marcus RN, Manos G, Stock E, McQuade RD, Auby P, Oren DA: Management of Acute Agitation in Patients With Bipolar Disorder Efficacy and Safety of Intramuscular Aripiprazole. <i>Journal of Clinical Psychopharmacology</i> Volume 27, Number 2, April 2007.	
Study type	RCT

Evidence level	Ib
Number of Patients	301
Patient characteristics	All patients suffered from bipolar I disorder (manic or mixed episodes) and agitation All patients > 18 years All patients in-patients Patients were also required to have Positive and Negative Syndrome Scale (PANSS) Excited Component (PEC) scores of ≥ 15 and ≤ 32, and a score of ≥ 4 (moderate) on at least two of the five PEC items Give informed consent Exclusion criteria: other psychiatric or neurologic diseases, first manic episode, non-responder on other antipsychotics, significant medical history exposing patients to undue risk of significant adverse events (AEs) or interfering with safety/efficacy assessments, use of benzodiazepines, anticholinergic agents
Intervention	IM aripiprazole 9.75 mg per injection (n = 78), IM aripiprazole 15 mg per injection (n = 78)
Comparison	IM lorazepam 2 mg per injection (n = 70), or IM placebo (n = 75)
Length of Follow up	24 h
Outcome measures	Reduction from baseline on the PEC-score at 2h Secondary-Outcomes: CGI-I, CGI-S, ACES, CABS, YMRS, SAS, and BARS
Results / Effect size	Mean improvements in Positive and Negative Syndrome Scale Excited Component score at 2 hours were significantly greater with IM aripiprazole (9.75 mg, -8.7; 15 mg, -8.7) and IM lorazepam (-9.6) versus IM placebo (-5.8; $P_{0.001}$). For all other efficacy measures, all 3 active treatments showed significantly greater improvements over IM placebo at 2 hours ($P < 0.05$), with similar improvements across the active treatments. Significant differences over IM placebo were seen by 45 to 60 minutes for several efficacy parameters. Both IM aripiprazole doses were well tolerated; the safety profile was similar to oral aripiprazole. Oversedation (Agitation–Calmness Evaluation Scale score of 8 or 9) during 2 hours after first injection was less frequent with IM aripiprazole 9.75 mg (6.7%) and IM placebo (6.8%) versus IM aripiprazole 15 mg (17.3%) and IM

	lorazepam (19.1%). IM aripiprazole 9.75 and 15 mg are effective and well tolerated for acute agitation in bipolar disorder, although the low incidence of oversedation suggests a risk–benefit profile for IM aripiprazole 9.75 mg.
Source of Funding	Source of funding: none, conflicts of interests: yes

Bibliographic citation	
Tran-Johnson, TK; Sack, DA et al.: Efficacy and Safety of Intramuscular Aripiprazole in Patients With Acute Agitation: A Randomized, Double-Blind, Placebo-Controlled Trial. The Journal of Clinical Psychiatry 2007.	
Study type	RCT
Evidence level	Ib
Number of Patients	357
Patient characteristics	patients with acute agitation with a DSM-IV diagnosis of schizophrenia, schizoaffective disorder, or schizo-phreniform disorder
Intervention	IM aripiprazole 1 mg, 5.25 mg, 9.75 mg, or 15 mg
Comparison	IM haloperidol 7.5 mg; or placebo
Length of Follow up	24 h
Outcome measures	Reduction from baseline on the PEC-score at 2h Secondary Outcome ACES, CABS, CGI-S, CGI-I, BPRS
Results / Effect size	Intramuscular aripiprazole 5.25 mg, 9.75 mg, and 15 mg and IM haloperidol 7.5 mg demonstrated significantly greater reduction in the primary efficacy measure versus placebo. These changes were statistically significant as early as 45 minutes for the IM aripiprazole 9.75-mg group, with a trend toward significance ($p = .051$) at 30 minutes. Intramuscular haloperidol 7.5 mg first showed a significant reduction in PEC score versus placebo at 105 minutes. At 30 minutes, significantly more patients responded (defined as a greater than or equal to 40% reduction in PEC score) to IM aripiprazole 9.75 mg versus placebo (27% vs. 13%, $p = .05$). Intramuscular aripiprazole 9.75 mg significantly improved agitation, without oversedation, as measured by change in ACES score from baseline to 2 hours versus placebo ($p = .003$). No patient discontinued the study because of treatment-emergent adverse events. Extrapyramidal symptoms occurred most frequently in the IM haloperidol group. The most common adverse event in IM aripiprazole recipients was headache.
Source of Funding	Pharmaceutical companies: Bristol-Myers Squibb Company(Princeton, NJ) and Otsuka Pharmaceutical Co., Ltd. (Tokyo, Japan)

Bibliographic citation

Citrome, L.: Comparison of Intramuscular Ziprasidone, Olanzapine, or Aripiprazole for Agitation: A Quantitative Review of Efficacy and Safety. The Journal of Clinical Psychiatry 2007.	
Study type	Review
Evidence level	Ib
Results / Effect size	Using the a priori definitions of response at 2 hours after the first injection, NNT for response versus placebo (or placebo equivalent) in treating agitation for the pooled data at the recommended dose of ziprasidone 10-20 mg was 3 (95% CI = 2 to 4), for olanzapine 10 mg was 3 (95% CI = 2 to 3), and for aripiprazole 9.75 mg was 5 (95% CI = 4 to 8). Treatment-emergent adverse events occurring during the pivotal trials revealed statistically significant NNH versus placebo (or placebo equivalent) for aripiprazole for headache (NNH = 20, 95% CI = 11 to 170) and nausea (NNH = 17, 95% CI = 11 to 38), for ziprasidone in the treatment of headache (NNH = 15, 95% CI = 8 to 703), and for olanzapine in treatment-emergent hypotension (NNH = 50, 95% CI = 30 to 154). Olanzapine and aripiprazole had a more favorable extrapyramidal side effect profile compared to haloperidol. (There was no haloperidol treatment arm in the ziprasidone studies.)
Source of Funding	Source of funding: none, conflicts of interests: yes

Bibliographic citation	
Kittipeerachon M, Chaichan W. Intramuscular olanzapine versus intramuscular aripiprazole for the treatment of agitation in patients with schizophrenia: A pragmatic double-blind randomized trial. Schizophr Res. 2016 Oct;176(2-3):231-8. doi: 10.1016/j.schres.2016.07.017. Epub 2016 Jul 25.	
Study type	RCT
Evidence level	Ib
Number of Patients	80
Patient characteristics	adult patients (18-65years old) with schizophrenia experiencing agitation in a psychiatric hospital in Thailand, patients with a PANSS-EC score range of 22-35 entered the study, of whom 13% had a medical comorbidity and 40% a history of active substance abuse
Intervention	9, 75 mg Aripiprazole i.m. or 10 mg Olanzapine i.m.
Comparison	
Length of Follow up	24 h
Outcome measures	Excited Component of the Positive and Negative Syndrome Scale (PANSS-EC).
Results / Effect size	The 40 patients receiving IM olanzapine showed greater improvement than the 40 patients receiving IM aripiprazole in PANSS-EC scores at 2h after the injection (p=0.002) but not at 24h. The two treatments were well tolerated. Patients receiving IM olanzapine experienced greater somnolence

	than those receiving IM aripiprazole. There were no clinically relevant changes in vital signs in either group.
Source of Funding	All authors declare that they have no conflicts of interest.

Bibliographic citation	
Pratts M, Citrome L, Grant W, Leso L, Opler LA: A single-dose, randomized, double-blind, placebo-controlled trial of sublingual asenapine for acute agitation. Acta Psychiatr Scand. 2014 Jul;130(1):61-8.	
Study type	RCT
Evidence level	Ib
Number of Patients	120
Patient characteristics	Agitated adults 18–65 years (any diagnosis) presenting for treatment in an emergency department and found to have a score of ≥ 14 on the Positive and Negative Syndrome Scale-Excited Component (PANSS-EC)
Intervention	a single dose of a sublingual 10 mg tablet of asenapine
Comparison	placebo
Length of Follow up	None
Outcome measures	Reduction from baseline on the PEC-score at 2h
Results / Effect size	A total of 120 subjects were randomized, 60 each to sublingual asenapine or placebo. Mean (SE) baseline PANSS-EC scores for the asenapine-treated and placebo-treated subjects were 19.4 ± 0.66 and 20.1 ± 0.61 , respectively. Mean PANSS-EC scores at endpoint (LOCF) was 7.4 ± 0.65 for the asenapine-treated subjects and 14.7 ± 0.98 for the placebo-treated subjects. Change in PANSS-EC score at 2 h was statistically significantly greater for the asenapine-treated subjects compared with the placebo-treated subjects. NNT for response vs. placebo was 3 (95% CI 2–4).
Source of Funding	Investigator-initiated trial grant 39230 from Merck & Co., Inc.

Bibliographic citation	
Dorevitch A, Katz N, Zemishlany Z, Aizenberg D, Weizman A: Intramuscular flunitrazepam versus intramuscular haloperidol in the emergency treatment of aggressive psychotic behavior. American Journal of Psychiatry 1999; 156:142-144	
Study type	RCT
Evidence level	Ib
Number of Patients	28

Patient characteristics	actively psychotic inpatients, aged 20-60 years, who were under treatment with neuroleptic agents 13 men and 15 women 19 schizophrenia, seven schizoaffective disorder, and two bipolar disorder Inclusion Criteria: presence of active psychosis; disruptive or aggressive behavior, pronounced psychomotor agitation, or violent outbursts; and hospitalization in an acute ward
Intervention	1 mg i.m. of flunitrazepam
Comparison	5 mg i.m. of haloperidol
Length of Follow up	2 h
Outcome measures	OAS Measurements were made at baseline and at 15, 30, 45, 60, 90, and 120 minutes. All ratings were completed by the same rater, who was blind to the study medications. Overall response to treatment was defined as a reduction of at least 50% in Overt Aggression Scale score at 90 minutes. The BPRS and the CGI scale were also administered at baseline to assess the severity of psychotic symptoms.
Results / Effect size	Both flunitrazepam and haloperidol exhibited acute antiaggressive activity. This beneficial effect was obtained within 30 minutes.
Source of Funding	Not reported

Bibliographic citation	
Powney MJ, Adams CE, Jones H: Haloperidol for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database of Systematic Reviews 2012; Issue 11. Art. No.: CD009377. DOI: 10.1002/14651858.CD009377.pub2.	
Study type	Review
Evidence level	Ia
Results / Effect size	We included 32 studies comparing haloperidol with 18 other treatments. Few studies were undertaken in circumstances that reflect real world practice, and, with notable exceptions, most were small and carried considerable risk of bias. Compared with placebo, more people in the haloperidol group were asleep at two hours (2 RCTs, n = 220, risk ratio (RR) 0.88, 95% confidence interval (CI) 0.82 to 0.95). Dystonia was common (2 RCTs, n = 207, RR 7.49, CI 0.93 to 60.21). Compared with aripiprazole, people in the haloperidol group required fewer injections than those in the aripiprazole group (2 RCTs, n = 473, RR 0.78, CI 0.62 to 0.99). More people in the haloperidol group experienced dystonia (2 RCTs, n = 477, RR 6.63, CI 1.52 to 28.86). Despite three larger trials with ziprasidone (total n = 739), data remain patchy, largely because of poor design and reporting. Compared with zuclopenthixol acetate, more people who received haloperidol required more than three injections (1 RCT, n = 70, RR 2.54, CI 1.19 to 5.46). Three trials (n = 205) compared haloperidol with lorazepam. There were no significant differences between the groups with

	regard to the number of participants asleep at one hour (1 RCT, n = 60, RR 1.05, CI 0.76 to 1.44). However, by three hours, significantly more people were asleep in the lorazepam group compared with the haloperidol group (1 RCT, n = 66, RR 1.93, CI 1.14 to 3.27). There were no differences in numbers requiring more than one injection (1 RCT, n = 66, RR 1.14, CI 0.91 to 1.43). Haloperidol's adverse effects were not offset by addition of lorazepam (e.g. dystonia 1 RCT, n = 67, RR 8.25, CI 0.46 to 147.45; required antiparkinson medication RR 2.74, CI 0.81 to 9.25). Addition of promethazine was investigated in one larger and better graded trial (n = 316). More people in the haloperidol group were not tranquil or asleep by 20 minutes (RR 1.60, CI 1.18 to 2.16). Significantly more people in the haloperidol alone group experienced one or more adverse effects (RR 11.28, CI 1.47 to 86.35). Acute dystonia for those allocated haloperidol alone was too common for the trial to continue beyond the interim analysis (RR 19.48, CI 1.14 to 331.92).
Source of Funding	Not reported

Bibliographic citation	
Bieniek SA, Ownby RL, Penalver A, Domingues RA: A double-blinded study of lorazepam versus the combination of haloperidol and lorazepam in managing agitation. <i>Pharmacotherapy</i> 1998; 18:57-62	
Study type	RCT
Evidence level	Ib
Number of Patients	20
Patient characteristics	Men and women age 18-50 years who were seen on the PES with acutely agitated behavior, and who had met clinical criteria for the use of chemical restraints, were considered for the study. Patients were also required to show psychometric evidence of aggressive or agitated behavior, as defined by a minimum score of 4, with score of 2 or more on at least one item, of the Overt Aggression Scale (OAS). Additionally, a rating of at least 50 on a 100-point visual analog scale reflecting agitation and hostility from none to extreme was also required. Subjects were medically healthy, with no overt evidence of physical illness. Those known to be pregnant, positive for the human immunodeficiency virus, or had a history of seizures or severe head trauma were excluded. Also excluded were those with psychopathology due to a suspected general medical condition, or whose symptoms were initially judged to be solely related to alcohol or substance abuse.
Intervention	Lorazepam 2 mg i.m.
Comparison	Combination of haloperidol 5 mg i.m. and lorazepam 2 mg i.m.
Length of Follow up	180 minutes

Outcome measures	The Overt Aggression Scale (OAS), visual analog scales reflecting agitation and hostility, and the Clinical Global Impressions (CGI) severity scale were administered at baseline and 30, 60, 120, and 180 minutes after the injection. Planned data comparisons included categoric assignment of patients as improved, as defined by decreases in outcome measures 60 minutes after the injection, as well as continuous variables up to 180 minutes after the injection.
Results / Effect size	A significantly greater percentage of subjects receiving combined treatment improved on the specific measures 60 minutes after dosing ($p < 0.05$). Kaplan-Meier survival analyses showed significant between-group differences in survival curves plotted for the entire study period ($p < 0.05$). Repeated measures analyses of variance studying group differences showed that both groups improved over time, but between-group differences were not significant. The powers of these analyses were low due to the small sample. No serious adverse effects occurred in either treatment group.
Source of Funding	Not reported

Bibliographic citation	
Huf G, Alexander J, Gandhi P, Allen MH. Haloperidol plus promethazine for psychosis-induced aggression. <i>Cochrane Database of Systematic Reviews</i> 2016, Issue 11. Art. No.: CD005146. DOI: 10.1002/14651858.CD005146.pub3.	
Study type	Review
Evidence level	Ia
Results / Effect size	We found two new randomised controlled trials (RCTs) from the 2015 update searching. The review now includes six studies, randomising 1367 participants and presenting data relevant to six comparisons. When haloperidol plus promethazine was compared with haloperidol alone for psychosis-induced aggression for the outcome not tranquil or asleep at 30 minutes, the combination treatment was clearly more effective ($n=316$, 1 RCT, RR 0.65, 95% CI 0.49 to 0.87, high-quality evidence). There were 10 occurrences of acute dystonia in the haloperidol alone arm and none in the combination group. The trial was stopped early as haloperidol alone was considered to be too toxic. When haloperidol plus promethazine was compared with olanzapine, high-quality data showed both approaches to be tranquillising. It

	was suggested that the combination of haloperidol plus promethazine was more effective, but the difference between the two approaches did not reach conventional levels of statistical significance (n=300, 1 RCT, RR 0.60, 95% CI 0.22 to 1.61, high-quality evidence). Lower-quality data suggested that the risk of unwanted excessive sedation was less with the combination approach (n=116, 2 RCTs, RR 0.67, 95% CI 0.12 to 3.84). When haloperidol plus promethazine was compared with ziprasidone all data were of lesser quality. We identified no binary data for the outcome tranquil or asleep. The average sedation score (Ramsay Sedation Scale) was lower for the combination approach but not to conventional levels of statistical significance (n=60, 1 RCT, MD -0.1, 95% CI -0.58 to 0.38). These data were of low quality and it is unclear what they mean in clinical terms. The haloperidol plus promethazine combination appeared to cause less excessive sedation but again the difference did not reach conventional levels of statistical significance (n=111, 2 RCTs, RR 0.30, 95% CI 0.06 to 1.43). We found few data for the comparison of haloperidol plus promethazine versus haloperidol plus midazolam. Average Ramsay Sedation Scale scores suggest the combination of haloperidol plus midazolam to be the most sedating (n=60, 1 RCT, MD -0.6, 95% CI -1.13 to -0.07, low-quality evidence). The risk of excessive sedation was considerably less with haloperidol plus promethazine (n=117, 2 RCTs, RR 0.12, 95% CI 0.03 to 0.49, low-quality evidence). Haloperidol plus promethazine seemed to decrease the risk of needing restraints by around 12 hours (n=60, 1 RCT, RR 0.24, 95% CI 0.10 to 0.55, low-quality evidence). It may be that use of midazolam
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	with haloperidol sedates swiftly, but this effect does not last long. When haloperidol plus promethazine was compared with lorazepam, haloperidol plus promethazine seemed to more effectively cause sedation or tranquillisation by 30 minutes (n=200, 1 RCT, RR 0.26, 95% CI 0.10 to 0.68, high-quality evidence). The secondary outcome of needing restraints or seclusion by 12 hours was not clearly different between groups, with about 10% in each group needing this intrusive intervention (moderate-quality evidence). Sedation data were not reported, however, the combination group did have less 'any serious adverse event' in 24-hour follow-up, but there were not clear differences between the groups and we are unsure exactly what the adverse effect was. There were no deaths. When haloperidol plus promethazine was compared with midazolam, there was clear evidence that midazolam is more swiftly tranquillising of an aggressive situation than haloperidol plus promethazine (n=301, 1 RCT, RR 2.90, 95% CI 1.75 to 4.8, high-quality evidence). On its own, midazolam seems to be swift and effective in tranquillising people who are aggressive due to psychosis. There was no difference in risk of serious adverse event overall (n=301, 1 RCT, RR 1.01, 95% CI 0.06 to 15.95, high-quality evidence). However, 1 in 150 participants allocated haloperidol plus promethazine had a swiftly reversed seizure, and 1 in 151 given midazolam had swiftly reversed respiratory arrest.
Source of Funding	All studies were undertaken by researchers and clinicians who were already receiving support from their home institutions. Industry funding was not involved.

Barbui C. Intramuscular haloperidol plus promethazine is more effective and safer than haloperidol alone for rapid tranquillisation of agitated mentally ill patients. Evidence-Based Mental Health 2008;11(3):86–7.	
Study type	RCT
Evidence level	Ib
Number of Patients	316
Patient characteristics	316 adults presenting to the psychiatric emergency room with agitation or dangerous behaviour requiring intramuscular sedation, for whom an attending doctor was available to record the diagnosis and severity of the episode.
Intervention	Single intramuscular injection of haloperidol (5 or 10 mg) or haloperidol (5 or 10 mg) plus promethazine (up to 50 mg). In the haloperidol alone group, 29% received 5 mg and 71% received 10 mg. In the haloperidol plus promethazine group 50% received 5 mg haloperidol and 50% received 10 mg.
Comparison	
Length of Follow up	20 min for primary outcomes, 2 weeks for secondary outcomes
Outcome measures	<i>Primary outcome:</i> proportion of patients tranquil (calm and non-agitated with no threatening behaviour) or asleep at 20 min. <i>Secondary outcomes included:</i> tranquil or asleep at 40, 60 and 120 min; need for further medical attention within 24 h; adverse events.
Results / Effect size	Haloperidol plus promethazine increased the proportion of patients tranquil or asleep at 20 min compared with haloperidol alone (proportion tranquil or asleep: 72% with combined treatment vs 55% with haloperidol alone; RR 1.30, 95% CI 1.10 to 1.55). The combined treatment increased the proportion of patients asleep at 20 min (19% with combined treatment vs 8% with haloperidol alone; RR 2.33, 95% CI 1.26 to 4.27). There was no difference between interventions in the proportion of patients tranquil or asleep after 20 min (40 min: RR 1.07, 95% CI 0.95 to 1.20; 60 min: RR 1.07, 95% CI 0.97 to 1.17; 120 min: RR 1.03, 95% CI 0.96 to 1.11). Haloperidol plus promethazine increased the proportion of patients who did not need to have a doctor recalled (77% with combined treatment vs 65% with haloperidol alone; RR 1.18, 95% CI 1.02 to 1.36). Haloperidol alone increased the risk of serious adverse events compared with haloperidol plus promethazine (1% with combined treatment vs 7% with haloperidol alone; RR 0.09, 95% CI 0.01 to 0.68). Most of the serious adverse events in the haloperidol alone group were acute dystonia (10 cases vs none with haloperidol plus promethazine).
Source of Funding	Brazilian Research Council.

Bibliographic citation
Baldaçara L, Sanches M, Cruz Cordeiro D, Parolin Jackowski A: Rapid

tranquilization for agitated patients in emergency psychiatric rooms: a randomized trial of olanzapine, ziprasidone, haloperidol plus promethazine, haloperidol plus midazolam and haloperidol alone. Revista Brasileira de Psiquiatria 2011; vol 33 n° 1 mar2011	
Study type	RCT
Evidence level	Ib
Number of Patients	150
Patient characteristics	Patients with agitation caused by psychotic or bipolar disorder
Intervention	intramuscular olanzapine, ziprasidone, haloperidol plus promethazine, haloperidol plus midazolam and haloperidol alone
Comparison	
Length of Follow up	12 h
Outcome measures	Overt Agitation Severity Scale, Overt Aggression Scale and Ramsay Sedation Scale
Results / Effect size	All medications produced a calming effect within one hour of administration, but only olanzapine and haloperidol reduced agitation by less than 10 points, and only olanzapine reduced aggression by less than four points in the first hour. After twelve hours, only patients treated with haloperidol plus midazolam had high levels of agitation and aggression and also more side effects. Ziprasidone, olanzapine and haloperidol alone had more stable results for agitation control, while ziprasidone, haloperidol plus promethazine and olanzapine had stable results for aggression control.
Source of Funding	Funding: no. Conflicts of Interest: yes.

Bibliographic citation	
Huang CL, Hwang TJ, Chen YH, Huang GH, Hsieh MH, Chen HH, Hwu HG: Intramuscular olanzapine versus intramuscular haloperidol plus lorazepam for the treatment of acute schizophrenia with agitation: An open-label, randomized controlled trial. J Formos Med Assoc. 2015 May;114(5):438-45. doi: 10.1016/j.jfma.2015.01.018. Epub 2015 Mar 17.	
Study type	RCT
Evidence level	Ib
Number of Patients	67
Patient characteristics	Acutely agitated patients with schizophrenia or schizoaffective disorder
Intervention	10 mg IM olanzapine
Comparison	5 mg IM haloperidol plus 2 mg IM lorazepam
Length of Follow up	24 h
Outcome measures	Agitation was measured with Positive and Negative Syndrome Scale Excited Component (PANSS-EC) and Agitation Calmness Evaluation Scale (ACES) during the first 2 hours and at 24 hours after the first injection. Safety was assessed using the Simpsons Angus Scale and Barnes Akathisia Rating Scale and by recording adverse events at 24 hours following the first injection. The Clinical Global Impression-Severity scale was also rated.

Results / Effect size	The PANSS-EC scores decreased significantly at 2 hours after the first injection in both groups (olanzapine: -10.2, $p < 0.001$; haloperidol + lorazepam: -9.9, $p < 0.001$). Haloperidol plus lorazepam was not inferior to olanzapine in reducing agitation at 2 hours. There were no significant differences in PANSS-EC or ACES scores between the two groups within 2 hours following the first injection. The frequencies of adverse events and changes in Clinical Global Impression-Severity, Simpson's Angus Scale, and Barnes Akathisia Rating Scale scores from baseline to 24 hours showed no significant differences between the groups.
Source of Funding	The study was supported by a grant from Mr Ya-Jen Cheng's Foundation, Taipei, Taiwan. The preparation of this manuscript was supported by a grant from National Science Council (97-2314-B-002-129-MY3). Eli Lilly and Company supplied short-acting injectable olanzapine. The authors also acknowledge statistical assistance provided by the Taiwan Clinical Trial Bioinformatics and Statistical Center, Training Center, and Pharmacogenomics Laboratory (which was founded by the National Research Program for Biopharmaceuticals at the Ministry of Science and Technology of Taiwan; MOST 103-2325-B-002-033).

Bibliographic citation	
Walther S et al. Rapid Tranquilization of Severely Agitated Patients With Schizophrenia Spectrum Disorders. A Naturalistic, Rater-Blinded, Randomized, Controlled Study With Oral Haloperidol, Risperidone, and Olanzapine. J Clin Psychopharmacol 2014;34: 124Y128	
Study type	RCT
Evidence level	Ib
Number of Patients	43
Patient characteristics	severely agitated patients at acute care psychiatric units From February 2004 until September 2005, all patients admitted to the acute care inpatient units of the University Hospital of Psychiatry Bern, Switzerland, were screened for schizophrenia, schizoaffective, or schizophreniform disorder according to the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition criteria. Diagnoses were made based on psychiatric examination and review of all case files. Only subjects aged between 18 and 55 years were further evaluated. Subjects with relevant medical or neurological disorders, who were pregnant, or who had ongoing intake of illicit drugs and alcohol were excluded.
Intervention	Participants were randomly assigned to receive either daily haloperidol 15 mg, olanzapine 20 mg, or risperidone 2 to 6 mg over 5 days.
Comparison	
Length of Follow up	96 h

Outcome measures	Symptom severity was assessed using the Positive and Negative Syndrome Scale (PANSS). ¹⁸ We used the PANSS psychotic agitation subscale (PANSS-PAS) including PANSS items hallucinatory behavior (P3), excitement (P4), hostility (P7), uncooperativeness (G8), and poor impulse control (G14) to select subjects who were highly agitated. The PANSS-PAS was used in previous studies ¹⁰ and is similar to the PANSS excitement subscale used in comparable studies on agitation with a range of 5 to 35 points. Further assessments included the Abnormal Involuntary Movement Scale (AIMS) the Simpson Angus Scale for Parkinsonism (SAS) and the Barnes Akathisia Rating Scale (BARS).
Results / Effect size	All drugs were effective for rapid tranquilization within 2 hours. Over 5 days, the course differed between agents ($P < 0.001$), but none was superior. Dropouts occurred only in the risperidone and olanzapine groups. Men responded better to treatment than did women during the initial 2 hours ($P = 0.046$) as well as over the 5-day course ($P < 0.001$). No difference between drug groups was observed regarding diazepam or biperiden use.
Source of Funding	Source of funding: none, conflicts of interests: yes

Bibliographic citation	
Lavania S, Praharaj SK, Bains HS, Sinha V, Kumar A. Efficacy and Safety of Levosulpiride Versus Haloperidol Injection in Patients With Acute Psychosis: A Randomized Double-Blind Study. Clin Neuropharmacol. 2016 Jul-Aug;39(4):197-200. doi: 10.1097/WNF.0000000000000161.	
Study type	RCT
Evidence level	Ib
Number of Patients	60
Patient characteristics	drug-naive patients having acute psychosis
Intervention	intramuscular haloperidol (10-20 mg/d) or levosulpiride (25-50 mg/d) for 5 days
Comparison	
Length of Follow up	5 d
Outcome measures	All patients were rated on Brief Psychiatric Rating Scale (BPRS), Overt Agitation Severity Scale (OASS), Overt Aggression Scale-Modified (OAS-M) scores, Simpson Angus Scale (SAS), and Barnes Akathisia Rating Scale (BARS).
Results / Effect size	Repeated-measures ANOVA for BPRS scores showed significant effect of time ($P < 0.001$) and a trend toward greater reduction in scores in haloperidol group as shown by group $\times$ time interaction ($P = 0.076$). Repeated-measures ANOVA for OASS showed significant effect of time ($P < 0.001$) but no group $\times$ time interaction. Repeated-measures ANOVA for OAS-M scores showed significant effect of time ($P < 0.001$) and greater reduction in scores in haloperidol

	group as shown by group × time interaction ($P = 0.032$). Lorazepam requirement was much lower in haloperidol group as compared with those receiving levosulpiride ($P = 0.022$). Higher rates of akathisia and extrapyramidal symptoms were noted in the haloperidol group.
Source of Funding	Conflicts of Interest and Source of Funding: The authors have no conflicts of interest to declare.

Bibliographic citation	
Garza-Trevino ES, Hollister LE, Overall JE, Alexander WF: Efficacy of combinations of intramuscular antipsychotics and sedative-hypnotics for control of psychotic agitation. American Journal of Psychiatry 1989; 146:1598-1601	
Study type	RCT
Evidence level	Ib
Number of Patients	68
Patient characteristics	22 manic patients, 16 schizophrenic patients, 16 atypical psychotic patients, and 14 patients with miscellaneous diagnoses. All had baseline agitation ratings (100-mm scale) of 50 or greater; however, the median baseline score was 60.
Intervention	a combination of haloperidol, 5 mg, and lorazepam, 4 mg; 5 mg of haloperidol alone; or 4 mg of lorazepam alone.
Length of Follow up	Not reported for the RCT, 210 minutes in the pilot study
Outcome measures	100-mm scale
Results / Effect size	These analyses confirmed that the combination treatment was significantly ($p < 0.05$) superior to each of the components in producing rapid tranquilization after statistical correction for differences in baseline severity of agitation. In addition, these analyses confirmed that patients with higher baseline agitation scores were significantly ($p < 0.05$) less likely to reach the tranquilization criterion in 30 minutes.
Source of Funding	Not reported

Bibliographic citation	
Battaglia J MS, Rush J, Kang J, Mendoza R, Leedom L, Dubin W, McGlynn C, Goodman L: Haloperidol, lorazepam, or both for psychotic agitation? A multicenter, prospective, double-blind, emergency department study. The American Journal of Emergency Medicine 1997; 15:335-340	
Study type	RCT
Evidence level	Ib
Number of Patients	98
Patient characteristics	psychotic, agitated, and aggressive patients (73 men and 25 women)

Intervention	intramuscular injections of lorazepam (2 mg), haloperidol (5 mg), or both in combination (1 to 6 injections of the same study drug within 12 hours, based on clinical need)
Length of Follow up	At least 12 h after last injection
Outcome measures	ABS, MBPRS, CGI, Alertness Scale
Results / Effect size	Effective symptom reduction was achieved in each treatment group with significant ($P < .01$) mean decreases from baseline at every hourly ABS evaluation. Significant ($P < .05$) mean differences on the ABS (hour 1) and MBPRS (hours 2 and 3) suggest that tranquilization was most rapid in patients receiving the combination treatment. Study event incidence (side effects) did not differ significantly between treatment groups, although patients receiving haloperidol alone tended to have more extrapyramidal system symptoms. The superior results produced by the combination treatment support the use of lorazepam plus haloperidol as the treatment of choice for acute psychotic agitation.
Source of Funding	Supported in part by a grant from Wyeth-Ayerst Research.

Bibliographic citation	
Foster S, Kessel J, Berman ME, Simpson GE: Efficacy of lorazepam and haloperidol for rapid tranquillisation in a psychiatric emergency room setting. International Clinical Psychopharmacology 1997; 12:175-179	
Study type	RCT
Evidence level	Ib
Number of Patients	37
Patient characteristics	highly agitated patients exhibiting psychotic symptoms presenting at a psychiatric emergency room service
Intervention	Lorazepam (either intramuscular injection or oral concentrate)
Comparison	Haloperidol (either intramuscular injection or oral concentrate)
Length of Follow up	4 h
Outcome measures	BPRS, CGI
Results / Effect size	Both medications reduced symptom ratings on the Brief Psychiatric Rating Scale and Global Clinical Impression of Overall Symptom Severity Scale. Global Clinical Impression scores for the two medication groups did not differ significantly either at baseline or at 4 h after entry into the study. However, Global Clinical Impression scores of patients in the lorazepam group were less severe at intermittent ratings. The groups did not differ on the Brief Psychiatric Rating Scale at any rating time. No differences were found either in the number of doses administered or in the administration route selected.
Source of Funding	National Alliance for Research in Schizophrenia and Depression.

Bibliographic citation

Alexander J, Tharyan P, Adams CE, John T, Mol C, Philip J: Rapid tranquilisation of violent or agitated patients in a psychiatric emergency setting: a pragmatic randomised trial of intramuscular Lorazepam versus haloperidol plus promethazine. <i>British Journal of Psychiatry</i> 2004; 185:63-69	
Study type	Pragmatic, randomised clinical trial.
Evidence level	Ib
Number of Patients	200
Patient characteristics	Consecutive patients were assessed and were eligible for trial entry if the attending physician felt that intramuscular sedation was clearly indicated because of agitation, aggression or violent behaviour, and if the physician did not feel that either one of the interventions posed an additional risk for the patient. In keeping with prevailing clinical practice in this country, consent was obtained from a responsible relative if patients refused, or lacked capacity to consent to treatment by virtue of severe mental illness. For this trial relatives were fully informed and their written consent obtained; patients without a responsible relative were excluded.
Intervention	intramuscular lorazepam (4 mg)
Comparison	intramuscular haloperidol (10 mg) plus promethazine (25-50 mg) mix
Length of Follow up	2 weeks
Outcome measures	Patients were rated at each assessment point on whether they were tranquil or asleep; in addition, the time of onset of tranquillisation and sleep were noted. Participants were considered to be tranquil when they were calm and not exhibiting agitated, aggressive or dangerous behaviour. They were considered to be asleep if, on inspection, they appeared to be sound asleep and were not aroused by ambient disturbances; the depth of this apparent slumber was not assessed further. They were also rated on the Clinical Global Impression – Severity (CGI–S) scale at entry, and the CGI–Improvement (CGI–I) scale with respect to aggression and violence, the Simpson–Angus extrapyramidal side-effects rating scale and the Barnes Akathisia Scale at each assessment point; any other clinically important adverse effect, especially dystonia, was also noted. These assessments were conducted only on participants who were awake, as extrapyramidal symptoms are usually not apparent during sleep or, in the case of dystonia or akathisia, are likely to prevent sleep. Other outcomes within the first 4 h were the use of additional medication for control of agitated or aggressive behaviour, the use of physical restraints, the need for further medical attention and numbers absconding. Participants were also followed up 2 weeks later to check for adverse effects or adverse outcomes and compliance with oral medication. The primary outcome was ‘tranquil or asleep by 4 h’.
Results / Effect size	At blinded assessments 4 h later (99.5% follow-up), equal numbers in both groups (96%) were tranquil or asleep.

	However, 76% given the haloperidol-promethazine mix were asleep compared with 45% of those allocated lorazepam (RR=2.29,95% CI 1.59-3.39; NNT=3.2,95% CI 2.3-5.4). The haloperidol-promethazine mix produced a faster onset of tranquillisation/sedation and more clinical improvement over the first 2 h. Neither intervention differed significantly in the need for additional intervention or physical restraints, numbers absconding, or adverse effects.
Source of Funding	This trial was funded by intramural research grants from the Fluid Research Fund of the Christian Medical College, Vellore and the Cochrane Schizophrenia Group general fund.

Bibliographic citation	
Allen MH, Feifel D, Lesem MD et al (2011) Efficacy and safety of loxapine for inhalation in the treatment of agitation in patients with schizophrenia: a randomized, double-blind, placebo-controlled trial. J Clin Psychiatry 72:1313–1321	
Study type	RCT
Evidence level	Ib
Number of Patients	129
Patient characteristics	agitated patients with schizophrenia or schizoaffective disorder
Intervention	inhalation of 5 or 10 mg of loxapine
Comparison	placebo
Length of Follow up	6 d
Outcome measures	The primary efficacy measure was change on the Positive and Negative Syndrome Scale-excited component (PANSS-EC) 2 hours following treatment. Secondary outcomes included the Clinical Global Impressions-Improvement scale (CGI-I), Behavioral Activity Rating Scale (BARS), and time to first rescue medication.
Results / Effect size	Differences were statistically significant ($P < .05$) between placebo and both 5-mg and 10-mg doses on the CGI-I and the CGI-I responder analyses at 2 hours and in time to first rescue medication, and they were statistically significant ($P < .05$) between placebo and 10-mg loxapine on the PANSS-EC 20 minutes after administration continuing through 2 hours and in change from baseline BARS. Three serious adverse events occurred at least 6 days after treatment, but none were judged related to study treatment. The most common adverse events were sedation and dysgeusia (22% and 17%, respectively, in the 10-mg group, and 14% and 9%, respectively, in the placebo group).
Source of Funding	Alexza Pharmaceuticals, Inc.

Bibliographic citation	
Kwentus J, Riesenbergr RA, Marandi M et al (2012) Rapid acute treatment of agitation in patients with bipolar I disorder: a multicenter, randomized, placebo-controlled clinical trial with inhaled loxapine. Bipolar Disord 14:31–40	

Study type	RCT
Evidence level	Ib
Number of Patients	314
Patient characteristics	agitated patients with bipolar I disorder (manic or mixed episodes)
Intervention	inhaled loxapine 5 mg or 10 mg
Comparison	Inhaled placebo
Length of Follow up	24 h
Outcome measures	The primary efficacy endpoint was change from baseline in the Positive and Negative Syndrome Scale-Excited Component (PANSS-EC) score two hours after Dose 1. The key secondary endpoint was the Clinical Global Impression-Improvement score at two hours after Dose 1. Additional endpoints included the changes from baseline in the PANSS-EC from 10 min through 24 hours after Dose 1. Safety was assessed by adverse events, vital signs, physical examinations, and laboratory tests.
Results / Effect size	For the primary and key secondary endpoints, both doses of inhaled loxapine significantly reduced agitation compared with placebo. Reduced agitation, as reflected in PANSS-EC score, was evident 10 min after Dose 1 with both doses. Inhaled loxapine was well tolerated, and the most common adverse events were known effects of loxapine or minor oral effects common with inhaled medications (dysgeusia was reported in 17% of patients receiving active drug versus 6% receiving placebo).
Source of Funding	Alexza Pharmaceuticals

Bibliographic citation	
Lesem MD, Tran-Johnson TK, Riesenbergr RA et al (2011) Rapid acute treatment of agitation in individuals with schizophrenia: multicentre, randomised, placebo-controlled study of inhaled loxapine. Br J Psychiatry 198:51–58	
Study type	RCT
Evidence level	Ib
Number of Patients	233
Patient characteristics	Males and females 18-65 years old Schizophrenia and agitation PANSS > 14 and a score of >4 on at least one item Good general health Non-pregnant, non-lactating
Intervention	One, two or three doses of loxapine (5 or 10 mg)
Comparison	placebo
Length of Follow up	24 h
Outcome measures	Change from baseline in PANSS-EC 2h after dose one, CGI-I 2 h after dose one
Results / Effect size	Inhaled loxapine (5 and 10 mg) significantly reduced agitation compared with placebo as assessed by primary and key secondary end-points. Reduced PANSS-EC was evident 10 minutes after dose one with both 5 and 10 mg

	doses. Inhaled loxapine was well tolerated, and the most common adverse events were known effects of loxapine (e.g. sedation) or minor oral effects common with inhaled medications. Three people had wheezing or bronchospasm, one experienced severe sedation and one neck dystonia and oculogyration.
Source of Funding	Alexza Pharmaceuticals

Bibliographic citation	
Kishi T, Matsunaga S, Iwata N: Intramuscular olanzapine for agitated patients: A systematic review and meta-analysis of randomized controlled trials. J Psychiatr Res. 2015 Sep;68:198-209. doi: 10.1016/j.jpsychires.2015.07.005. Epub 2015 Jul 6.	
Study type	Review
Evidence level	Ia
Results / Effect size	We identified 13 RCTs (19 comparisons) as follows: 7 comparisons with 1059 patients for OLA-IM versus placebo; 5 comparisons with 613 patients for OLA-IM versus haloperidol (HAL)-IM; 2 comparisons with 108 patients for OLA-IM versus ziprasidone (ZIP)-IM; 2 comparisons with 110 patients for OLA-IM versus HAL-IM plus midazolam; and 3 comparisons with 412 patients for OLA-IM versus HAL-IM plus promethazine, 2 comparisons with 355 patients for OLA-IM versus lorazepam-IM (LOR-IM); and 1 comparison with 67 patients for OLA-IM versus HAL-IM plus LOR-IM. OLA-IM was superior to placebo in both Positive and Negative Syndrome Scale-Excited Component (PANSS-EC) and Agitation Calmness Evaluation Scale (ACES) scores 2 h after first injection, and had a comparable side effect profile, including over sedation, extrapyramidal symptoms, akathisia, and anticholinergic use. While there was no significant difference in PANSS-EC scores after 2 h between OLA-IM and HAL-IM, OLA-IM outperformed HAL-IM in ACES after 2 h. Compared with HAL-IM, OLA-IM was associated with fewer side effects, including anticholinergic use, akathisia, extrapyramidal symptoms, and dystonia, and marginally less QT prolongation compared with HAL-IM.
Source of Funding	No funding sources were received for this study.

Bibliographic citation	
Marder SR1, Sorsaburu S, Dunayevich E, Karagianis JL, Dawe IC, Falk DM, Dellva MA, Carlson JL, Cavazzoni PA, Baker RW: Case reports of postmarketing adverse event experiences with olanzapine intramuscular treatment in patients with agitation. J Clin Psychiatry. 2010 Apr;71(4):433-41. doi: 10.4088/JCP.08m04411gry. Epub 2010 Feb 9.	
Study type	Review of Case reports
Evidence level	III
Results / Effect size	The estimated worldwide patient exposure to olanzapine IM from January 1, 2004, through September 30, 2005, was

	539,000; 160 cases containing AEs were reported from patients with schizophrenia (30%), bipolar disorder (21%), unspecified psychosis (10%), dementia (8%), and depression (5%). Many reported concomitant treatment with benzodiazepines (39%) or other antipsychotics (54%). The most frequently reported events involved the following organ systems: central nervous (21%), cardiac (12%), respiratory (6%), vascular (6%), and psychiatric (5%). Eighty-three cases were considered serious, including 29 fatalities. In these fatalities, concomitant benzodiazepines or other antipsychotics were reported in 66% and 76% of cases, respectively. The most frequently reported events in the fatal cases involved the following organ systems: cardiovascular (41%), respiratory (21%), general (17%), and central nervous (10%). The majority of fatal cases (76%) included comorbid conditions and potentially clinically significant risk factors for AEs.
Source of Funding	Eli Lilly.

Bibliographic citation	
Wilson MP, MacDonald K, Vilke GM, Feifel D: A comparison of the safety of olanzapine and haloperidol in combination with benzodiazepines in emergency department patients with acute agitation. J Emerg Med. 2012 Nov;43(5):790-7. doi: 10.1016/j.jemermed.2011.01.024. Epub 2011 May 20.	
Study type	structured retrospective chart review
Evidence level	III
Number of Patients	96
Patient characteristics	The only inclusion criteria, aside from having received parenteral haloperidol, was documentation in the chart of vital signs and oxygen saturation monitoring before medication administration and within 4 h afterwards. Patients were excluded if they received haloperidol orally instead of intramuscularly, or if they received a long acting haloperidol decanoate injection. Patients who received multiple doses of haloperidol during an ED visit were entered in the analysis only once for the first dose of this medication.
Intervention	parenteral haloperidol either with or without benzodiazepines
Comparison	parental olanzapine either with or without benzodiazepines
Length of Follow up	4 h
Outcome measures	measurement of vital signs and ethanol levels
Results / Effect size	There were 96 patients (71 haloperidol, 25 olanzapine) who met inclusion criteria. No patient in the olanzapine + benzodiazepine group had hypotension, although one patient in the olanzapine-only group did (6.7%); 2 patients in the haloperidol + benzodiazepines group (5.1%) and 2 patients in the haloperidol-only group (6.3%) had hypotension. In alcohol-negative (ETOH-) patients, neither olanzapine alone nor olanzapine + benzodiazepines was associated with decreased oxygen saturations. In ETOH+

	patients, olanzapine alone was not associated with decreased oxygen saturations, but olanzapine + benzodiazepines were associated with lower oxygen saturations than haloperidol + benzodiazepines.
Source of Funding	Source of funding: none, conflicts of interests: yes

Bibliographic citation	
Currier GW, Chou JC, Feifel D, Bossie CA, Turkoz I, Mahmoud RA, Gharabawi GM: Acute treatment of psychotic agitation: A randomized comparison of oral treatment with risperidone and lorazepam versus intramuscular treatment with haloperidol and lorazepam. Journal of Clinical Psychiatry 2004; 65:386-94	
Study type	RCT
Evidence level	Ib
Number of Patients	162
Patient characteristics	patients exhibiting agitation associated with active psychosis
Intervention	oral treatment with 2 mg of risperidone plus 2 mg of lorazepam
Comparison	intramuscular treatment with 5 mg of haloperidol plus 2 mg of lorazepam
Length of Follow up	
Outcome measures	The change scores on a 5-item acute-agitation cluster from the Positive and Negative Syndrome Scale (hallucinatory behavior, excitement, hostility, uncooperativeness, and poor impulse control) were the main outcome measure.
Results / Effect size	Mean acute-agitation cluster scores were similar in the 2 groups at baseline. Mean score improvements at 30, 60, and 120 minutes after dosing were significant at each timepoint in both groups ($p < .0001$) and were similar in both groups ($p > .05$). Both treatments were well tolerated.
Source of Funding	Janssen Pharmaceutica Products, L.P., Titusville, N.J.

Bibliographic citation	
Barak Y, Mazeh D, Plopski I, Baruch Y: Intramuscular ziprasidone treatment of acute psychotic agitation in elderly patients with schizophrenia. American Journal of Geriatric Psychiatry 2006; 14:629-633	
Study type	Prospektive Studie ohne Vergleichsgruppe
Evidence level	III
Number of Patients	21
Patient characteristics	elderly patients (60 years of and older) admitted to a psychogeriatric ward for acute psychotic agitation six male and 15 female mean age 71.4 +/- 1.3 years (range: 60-81 years)
Intervention	three days of flexible-dose i.m. ziprasidone, after an initial dose of 10-20 mg, a subsequent dose of 10-20 mg could be given after 12 hours if needed (maximum daily dose: 40 mg)
Comparison	
Length of Follow up	3 d

Outcome measures	All treatment emergent side effects and adverse events along with the investigators' assessments of severity were systematically recorded as the primary outcome. The Brief Psychiatric Rating Scale (BPRS) and the Behavioral Activity Rating Scale (BARS) were the secondary outcomes.
Results / Effect size	There was one adverse event in a patient with untreated benign prostatic hypertrophy who developed urinary retention. Two side effects of mild severity that resolved spontaneously were observed: blurred vision and sedation. The BPRS decreased by 26.8 points after three days of treatment ($p = 0.001$). The BARS score, reflecting agitation, decreased significantly after each injection, reaching maximal decrease of 2.14 points at completion of study ($p = 0.001$).
Source of Funding	This study was supported with an independent research grant from Pfizer, Inc.

Bibliographic citation	
Kohen I, Preval H, Southard R, Francis A: Naturalistic study of intramuscular ziprasidone versus conventional agents in agitated elderly patients: retrospective findings from a psychiatric emergency service. American Journal of Geriatric Pharmacotherapy 2005; 3:240-245	
Study type	Naturalistic study
Evidence level	III
Number of Patients	35
Patient characteristics	Patients aged > 65 years who received a single 20 mg dose of IM ziprasidone for the treatment of acute agitation.
Intervention	a single 20-mg dose of IM ziprasidone
Comparison	IM haloperidol, with or without lorazepam
Length of Follow up	
Outcome measures	In some patients in the ziprasidone group, the effects of the drug on agitation were assessed prospectively by blinded psychiatrists using the Behavioural Activity Rating Scale (BARS) (1--difficult or unable to arouse to 7--violent, requires restraint). Also included in the analysis were data concerning use of rescue medication (oral or parenteral) other than the study drug within 2 hours of initial treatment, restraint time, and adverse events (changes in vital sign measurements and electrocardiography [ECG]).
Results / Effect size	The database revealed 15 patients who received ziprasidone (9 men, 6 women; age range, 65-87 years) and 20 patients who were included in the CT sample (13 men, 7 women; age range, 65-88 years). In the 6 cases rated on the BARS, the mean (SE) baseline score was high (6.8 [0.1]), with a decrease to 4.0 (0.4) ($P < 0.05$) at 45 minutes after study drug administration and to 2.8 (0.4) ($P < 0.01$) at 120 minutes. Rescue medication was needed in 4 ziprasidone cases and 2 CT cases ($P = NS$), and mean (SE) restraint times did not vary significantly between groups (ziprasidone [$n = 12$], 85 [15] minutes; CT [$n = 17$], 83 [12] minutes). No

	clinically significant effects on blood pressure or heart rate were noted, and no cardiac or other adverse events were reported. ECG results with ziprasidone (n = 3) or CT (n = 6) were unremarkable.
Source of Funding	Not reported

Bibliographic citation	
Greco KE, Tune LE, Brown FW, Van Horn WA: A retrospective study of the safety of intramuscular Ziprasidone in agitated elderly patients. Journal of Clinical Psychiatry 2005; 66:928-929	
Study type	retrospective study
Evidence level	III
Number of Patients	23
Patient characteristics	complaint of dementia (DSM-IV) with agitation
Intervention	intramuscular Ziprasidone
Outcome measures	QTc-Intervalls
Results / Effect size	There was no significant difference in the QTc interval between the baseline and the post-ziprasidone values. One patient had a QTc greater than 500 ms and 25% over baseline, and therefore the medication was discontinued. The mean prolongation of the QTc interval was only 0.5 ms. There were no episodes of torsades de pointes. Other medications that the patients were taking did not appear to affect the QTc interval in an expected manner.
Source of Funding	This study was supported by a fellowship from Summer Training on Aging Research Topics-Mental Health, San Diego, Calif., and a grant from the National Institute of Mental Health, Bethesda, Md.

Bibliographic citation	
Citrome L, Volavka J, Czobor P, Brook S, Loebel A, Mandel FS: Efficacy of ziprasidone against hostility in schizophrenia: Post hoc analysis of randomized, open-label study data. Journal of Clinical Psychiatry 2006; 67:638-642	
Study type	a randomized, rater-blinded, 6-week, open-label study
Evidence level	Ib
Number of Patients	572
Patient characteristics	inpatients diagnosed with DSM-IV schizophrenia or schizoaffective disorder
Intervention	sequential intramuscular and oral ziprasidone
Comparison	haloperidol
Length of Follow up	42 d
Outcome measures	The Brief Psychiatric Rating Scale (BPRS) was the principal outcome measure. To determine the effect of ziprasidone on hostility, post hoc analyses of scores on the hostility item from the BPRS were conducted. Introducing positive symptoms and akathisia as covariates tested specific antihostility effect.

Results / Effect size	Ziprasidone demonstrated specific antihostility effects over time throughout the 42-day study period and statistically significant superiority to haloperidol on this measure in the first week of treatment ($p = .0149$ at first evaluation [day 1, 2, or 3]; $p = .0358$ at day 7).
Source of Funding	Pfizer Inc., New York, N.Y., supported this work. The data were provided by Pfizer, Inc., to Dr. Citrome, and Dr. Czobor performed the statistical analyses independent of Pfizer, Inc.

Bibliographic citation	
Pascual JC, Madre M, Soler J, Barrachina J, Campins MJ, Alvarez E, Perez V: Injectable atypical antipsychotics for agitation in borderline personality disorder. <i>Pharmacopsychiatry</i> 2006; 39:117-118	
Study type	Naturalistic-open-label study, Case reports
Evidence level	III
Number of Patients	20
Patient characteristics	Patients with borderline personality disorder attended at the psychiatric emergency service
Intervention	10 mg Olanzapine, 20 mg Ziprasidone
Comparison	Patients with Psychotic disorder
Length of Follow up	6 h
Outcome measures	PANSS-EC, ACES Need for physical restraint, other medications Vital signs Spontaneously reported adverse effects
Results / Effect size	PANSS-EC scores in BPD-patients decreased significantly and they decreased significantly more than in the psychosis group. No serious adverse effects were observed. Two psychotic and one BPD-patient experienced over-sedation, one BPD-patient experienced well tolerated hypotension.
Source of Funding	Not reported.

Bibliographic citation	
Jayakody K, Gibson RC, Kumar A, Gunadasa S. Zuclopenthixol acetate for acute schizophrenia and similar serious mental illnesses. <i>Cochrane Database of Systematic Reviews</i> 2012, Issue 4. Art. No.: CD000525. DOI: 10.1002/14651858.CD000525.pub3.	
Study type	Review
Evidence level	Ia
Results / Effect size	We found no data for the primary outcome, tranquillisation. Compared with haloperidol, zuclopenthixol acetate was no more sedating at two hours ($n = 40$, 1 RCT, RR 0.60, 95% CI 0.27 to 1.34). People given zuclopenthixol acetate were not at reduced risk of being given supplementary antipsychotics ($n = 134$, 3 RCTs, RR 1.49, 95% CI 0.97 to 2.30) although additional use of benzodiazepines was less ($n = 50$, 1 RCT, RR 0.03, 95% CI 0.00 to 0.47). People given zuclopenthixol

	acetate had fewer injections over seven days compared with those allocated to haloperidol IM (n = 70, 1 RCT, RR 0.39, 95% CI 0.18 to 0.84, NNT 4, CI 3 to 14). We found no data on more episodes of aggression or harm to self or others. One trial (n = 148) reported no significant difference in adverse effects for people receiving zuclopenthixol acetate compared with those allocated haloperidol at one, three and six days (RR 0.74, 95% CI 0.43 to 1.27). Compared with haloperidol or clotiapine, people allocated zuclopenthixol did not seem to be at more risk of a range of movement disorders (< 20%). Three studies found no difference in the proportion of people getting blurred vision/dry mouth (n = 192, 2 RCTs, RR at 24 hours 0.90, 95% CI 0.48 to 1.70). Similarly, dizziness was equally infrequent for those allocated zuclopenthixol acetate compared with haloperidol (n = 192, 2 RCTs, RR at 24 hours 1.15, 95% CI 0.46 to 2.88). There was no difference between treatments for leaving the study before completion (n = 522, RR 0.85, 95% CI 0.31 to 2.31). One study reported no difference in adverse effects and outcome scores, when high dose (50-100 mg/injection) zuclopenthixol acetate was compared with low dose (25-50 mg/injection) zuclopenthixol acetate.
Source of Funding	Not reported.

Freiheitsbeschränkende Maßnahmen

Suche zwischen September 2016 und November 2024)

Artike l-Nr.	Studie n-Nr.	Sub- numm er	
1	1	1	Andersen C, Kolmos A, Andersen K, Sippel V, Stenager E. Applying sensory modulation to mental health inpatient care to reduce seclusion and restraint: a case control study
2	2	1	Atdjian, S., & Huckshorn, K. A. (2024). Toward the Cessation of Seclusion and Mechanical Restraint Use in Psychiatric Hospitals: A Call for Regulatory Action. <i>Psychiatric services</i> (Washington, D.C.), 75(1), 64–71. https://doi.org/10.1176/appi.ps.202100538
3	3	1	Badouin, J., Bechdorf, A., Bempohl, F., Baumgardt, J., & Weinmann, S. (2023). Preventing, reducing, and attenuating restraint: A prospective controlled trial of the implementation of peer support in acute psychiatry. <i>Frontiers in psychiatry</i> , 14, 1089484. https://doi.org/10.3389/fpsyt.2023.1089484
4	4	1	Baumgardt, J., Jäckel, D., Helber-Böhlen, H., Stiehm, N., Morgenstern, K., Voigt, A., Schöppe, E., Mc Cutcheon, A. K., Lecca, E. E. V., Löhr, M., Schulz, M., Bechdorf, A., & Weinmann, S. (2019). Preventing and Reducing Coercive Measures-An Evaluation of the Implementation of the Safewards Model in Two Locked Wards in Germany. <i>Frontiers in psychiatry</i> , 10, 340. https://doi.org/10.3389/fpsyt.2019.00340
5	5	1	Beaglehole, B., Beveridge, J., Campbell-Trotter, W., & Frampton, C. (2017). Unlocking an acute psychiatric ward: the impact on unauthorised absences, assaults and seclusions. <i>BJPsych bulletin</i> , 41(2), 92–96. https://doi.org/10.1192/pb.bp.115.052944
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Nummer	
Studie	Andersen C, Kolmos A, Andersen K, Sippel V, Stenager E. Applying sensory modulation to mental health inpatient care to reduce seclusion and restraint: a case control study
Institution	Psychiatric Unit, Institute of Regional Health Service, University of Southern Denmark, Odense, Denmark Institute of Clinical Research, University of Southern Denmark, Odense, Denmark Mental Health Psychiatric Unit, Aabenraa, Denmark
Studientyp	Clinical controlled trial
Kontrollgruppe ja/nein	yes
Komplex ja/nein	No
Interventionstyp	Design of psychiatric wards
n Patienten	Project n = 308 (discharged, dead), Control n = 339 (discharged, dead)
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Sensory Modulation
Beschreibung Kontrolle	TAU
Beschreibung Patienten	2 psychiatric open units with 17 beds and a secluded area, both men and women, age 18-65 years, various psychiatric illness such as schizophrenia, bipolar disorder, depression, admission to intervention/control according to geographical areas
Beschreibung Outcomevariablen	Data on restraint and forced medication
Beschreibung Ergebnisse	The use of belts decreased with 38% compared to control group, the use of forced medication decreased with 46% compared to control group, all together physical restraints and forced medication decreased significantly with 42 % (p> 0.05)
Dauer	
Baseline/Intervention/Follow-up	12 months / 2 months / 12 months (2 intervention + 10)
Funding	Psychiatric Research Fund in Region of South Denmark
Qualitätsbemerkung	Serious Risk of Bias
Nummer	2
Studie	Atdjian, S., & Huckshorn, K. A. (2024). Toward the Cessation of Seclusion and Mechanical Restraint Use in Psychiatric Hospitals: A Call for Regulatory Action. Psychiatric services (Washington, D.C.), 75(1), 64–71. https://doi.org/10.1176/appi.ps.202100538
Institution	Johns Hopkins University, Baltimore (Atdjian); Kevin Huckshorn & Associates Inc., Chapel Hill, North Carolina (Huckshorn).
Studientyp	Observational study
Kontrollgruppe ja/nein	no
Komplex ja/nein	yes
Interventionstyp	Complex treatment programs – Six Core Strategies
n Patienten	
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Six Core Strategies
Beschreibung Kontrolle	
Beschreibung Patienten	Patients of a 300-bed public psychiatric hospital with a 60% forensic population
Beschreibung Outcomevariablen	Number of seclusion and mechanical restraint episodes
Beschreibung Ergebnisse	Significant decrease in S-R use during the implementation of Six Core Strategies at a public psychiatric hospital while under U.S. Department of Justice (DOJ) monitoring and the resumption of high S-R use after DOJ monitoring and adherence to Six Core Strategies ended.
Dauer	
Baseline/Intervention/Follow-up	10 years
Funding	
Qualitätsbemerkung	Some concerns
Nummer	3
Studie	Badouin, J., Bechdolf, A., Bempohl, F., Baumgardt, J., & Weinmann, S. (2023). Preventing, reducing, and attenuating restraint: A prospective controlled trial of the implementation of peer support in acute psychiatry. Frontiers in psychiatry, 14, 1089484. https://doi.org/10.3389/fpsyt.2023.1089484

Institution	Department of Psychiatry, Psychotherapy and Psychosomatic Medicine, Vivantes Hospital Am Urban, Vivantes Hospital im Friedrichshain, Academic Hospital, Charité—University Medicine Berlin, Berlin, Germany Department of Psychiatry and Neuroscience, Charité Campus Mitte Charité—University Medicine Berlin, Berlin, Germany
Studientyp	Observational Study
Kontrollgruppe ja/nein	yes
Komplex ja/nein	no
Interventionstyp	Training and education program
n Patienten	n = 484 intervention, n = 439 control
Effekt ja/nein auf S/R	no
Beschreibung Intervention	Peer support in one locked ward
Beschreibung Kontrolle	TAU
Beschreibung Patienten	Two wards with high admission rates of intoxicated and acutely ill people
Beschreibung Outcomevariablen	percentage of cases subjected to restraint (of all cases treated), mean duration of restraint, and duration and number of events of restraint per case
Beschreibung Ergebnisse	In the control group, an increase in the proportion of patients subjected to measures of restraint was found between pre- and post-assessment, which was accompanied by a further increase in the mean number of events of restraint per patient within this group. In the intervention group, no significant change in the application of restraint was observed during the study period.
Dauer	3 months each—the first directly before the 12-month peer support implementation stage, the second directly after
Baseline/Intervention/Follow-up	
Funding	
Qualitätsbemerkung	Serious risk of bias
Nummer	4
Studie	Baumgardt, J., Jäckel, D., Helber-Böhlen, H., Stiehm, N., Morgenstern, K., Voigt, A., Schöppe, E., Mc Cutcheon, A. K., Lecca, E. E. V., Löhr, M., Schulz, M., Bechdolf, A., & Weinmann, S. (2019). Preventing and Reducing Coercive Measures-An Evaluation of the Implementation of the Safewards Model in Two Locked Wards in Germany. <i>Frontiers in psychiatry</i> , 10, 340. https://doi.org/10.3389/fpsyt.2019.00340
Institution	Department of Psychiatry, Psychotherapy and Psychosomatic Medicine, Vivantes Hospital Am Urban und Vivantes Hospital im Friedrichshain, Charité-Universitätsmedizin Berlin, Berlin, Germany. Department of Psychiatry and Psychotherapy, Center for Psychosocial Medicine, University Medical Center Hamburg-Eppendorf, Hamburg, Germany. Landschaftsverband Westfalen-Lippe, Hospital Gütersloh, Gütersloh, Germany. Diakonie University of Applied Sciences, Bielefeld, Germany. ORYGEN, National Center of Excellence of Youth Mental Health, University of Melbourne, Melbourne, VIC, Australia. Department for Psychiatry and Psychotherapy, University Hospital Cologne, Cologne, Germany. University Psychiatric Hospital Basel, Basel, Switzerland.
Studientyp	Observational study
Kontrollgruppe ja/nein	no
Komplex ja/nein	yes
Interventionstyp	Complex treatment programs – Safewards model
n Patienten	n = 103
Effekt ja/nein auf S/R	no
Beschreibung Intervention	The manualized 10 Safewards team interventions were introduced within a standardized all-day workshop
Beschreibung Kontrolle	
Beschreibung Patienten	Patients of two locked wards
Beschreibung Outcomevariablen	Frequency and duration of coercive interventions
Beschreibung Ergebnisse	In one ward, the number of patients exposed to coercive interventions in relation to the overall number of patients decreased significantly [$\chi^2 (1, 281) = 6.40, p = 0.01$]. Furthermore, the mean duration of coercive interventions overall declined significantly [$U(55,21) = -2.142, p = 0.032$] with an effect size of Cohen's $d = -0.282$ (95% CI: $-0.787, 0.222$) in that ward. Both aspects declined as well in the other ward, but not significantly."
Dauer	11 weeks before (t0) and 11 weeks after (t1) the implementation period of the Safewards Model
Baseline/Intervention/Follow-up	
Funding	
Qualitätsbemerkung	High risk of bias

Nummer	5
Studie	Beaglehole, B., Beveridge, J., Campbell-Trotter, W., & Frampton, C. (2017). Unlocking an acute psychiatric ward: the impact on unauthorised absences, assaults and seclusions. <i>BJPsych bulletin</i> , 41(2), 92–96. https://doi.org/10.1192/pb.bp.115.052944
Institution	Department of Psychological Medicine, University of Otago, Christchurch, New Zealand. Canterbury District Health Board, Christchurch, New Zealand.
Studientyp	Observational study
Kontrollgruppe ja/nein	no
Komplex ja/nein	no
Interventionstyp	Organizational and institutional interventions
n Patienten	
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	An acute psychiatric inpatient service changed from two locked and two unlocked wards to four open wards.
Beschreibung Kontrolle	
Beschreibung Patienten	Patients of an acute in-patient services to adults aged 18–65
Beschreibung Outcomevariablen	Rates of adverse events, including unauthorised absences, violent incidents and seclusion
Beschreibung Ergebnisse	Rates of unauthorised absences increased by 58% after the change in ward configuration ($P = 0.005$), but seclusion hours dropped by 53% ($P = 0.001$). A small increase in violent incidents was recorded but this was not statistically significant.
Dauer Baseline/Intervention/Follow-up	December 2011–May 2013 (18 months prior to the new ward configuration) and August 2013–January 2015 (18 months following the change in ward configuration)
Funding	
Qualitätsbemerkung	Low risk of bias
Nummer	6
Studie	Blair, E. W., Woolley, S., Szarek, B. L., Mucha, T. F., Dutka, O., Schwartz, H. I., Wisniewski, J., & Goethe, J. W. (2017). Reduction of Seclusion and Restraint in an Inpatient Psychiatric Setting: A Pilot Study. <i>The Psychiatric quarterly</i> , 88(1), 1–7. https://doi.org/10.1007/s11126-016-9428-0
Institution	The Institute of Living, Hartford Hospital, 200 Retreat Avenue, Hartford, CT, 06106, USA. ellen.blair@hhchealth.org. Burlingame Center for Psychiatric Research and Education, The Institute of Living, Hartford Hospital, 200 Retreat Avenue, Hartford, CT, 06106, USA. The Institute of Living, Hartford Hospital, 200 Retreat Avenue, Hartford, CT, 06106, USA.
Studientyp	Observational study
Kontrollgruppe ja/nein	no
Komplex ja/nein	yes
Interventionstyp	Complex treatment programs – Other
n Patienten	n = 3884 baseline, n = 8029 after implementation
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	The study intervention, which used evidence-based therapeutic practices for reducing violence/aggression, included routine use of the Brøset Violence Checklist, mandated staff education in crisis intervention and trauma informed care, increased frequency of physician reassessment of need for S/R, formal administrative review of S/R events and environmental enhancements (e.g., comfort rooms to support sensory modulation).
Beschreibung Kontrolle	
Beschreibung Patienten	Consecutive admissions to a 120-bed psychiatric service
Beschreibung Outcomevariablen	Frequency and duration of S/R events
Beschreibung Ergebnisse	Statistically significant associations were found between the intervention and a decrease in both the number of seclusions ($p < 0.01$) and the duration of seclusion per admission ($p < 0.001$).
Dauer Baseline/Intervention/Follow-up	October 2008–September 2009 baseline and October 2010–September 2012 after implementation
Funding	
Qualitätsbemerkung	Very high risk of bias
Nummer	7
Studie	Bowlan, N. M., O'Brien, H. P., Blackwood, C., Cross, W. F., & Walsh, P. (2025). Implementation and Evaluation of a High-Fidelity, Interprofessional Simulation Project Using Standardized Patients to Address Aggression in a Psychiatric Emergency Department. <i>Journal of the American Psychiatric Nurses Association</i> , 31(2), 121–127. https://doi.org/10.1177/10783903241308529

Institution	Nancy M. Bowllan, EdD, MSN, RN, University of Rochester Medical Center, Rochester, NY, USA. Heather Obrien, MS, RN NPD-BC, University of Rochester Medical Center, Rochester, NY, USA. Courtney Blackwood, MS, RN NE-BC, University of Rochester Medical Center, Rochester, NY, USA. Wendi F. Cross, PhD, University of Rochester Medical Center, Rochester, NY, USA. Patrick Walsh, PhD, MPH, University of Rochester Medical Center, Rochester, NY, USA.
Studientyp	Observational study
Kontrollgruppe ja/nein	no
Komplex ja/nein	no
Interventionstyp	Training and education program
n Patienten	
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Educational initiative that included Crisis Prevention Intervention (CPI) and Team Strategies and Tools to Enhance Performance and Patient Safety (TeamSTEPPS) interventions, high-fidelity simulation using standardized patients, observation, and debriefing.
Beschreibung Kontrolle	
Beschreibung Patienten	Patients of a psychiatric emergency department
Beschreibung Outcomevariablen	Episodes of S/R
Beschreibung Ergebnisse	Data collected over a 5-month period before and after simulation demonstrated a 35% reduction in restraints
Dauer	
Baseline/Intervention/Follow-up	
Funding	
Qualitätsbemerkung	Very high risk of bias
Nummer	8
Studie	Brathovde A. (2021). Improving the Standard of Care in the Management of Agitation in the Acute Psychiatric Setting. Journal of the American Psychiatric Nurses Association, 27(3), 251–258. https://doi.org/10.1177/1078390320915988
Institution	RWJ Barnabas Health Monmouth Medical Center, 300 Second Avenue, Long Branch, NJ 07740, USA.
Studientyp	Observational Study (pre-post, pre collected retrospectively)
Kontrollgruppe ja/nein	No
Komplex ja/nein	No
Interventionstyp	Risk assessment and early interventions
n Patienten	Pre n= 163 (discharges), post = 10 (discharges)
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Introducing BVC to improve BETA-Interventions (BETA = Best Practice in Evaluating and Treating Agitation), using BVC twice daily for the first 72 h of admission
Beschreibung Kontrolle	TAU
Beschreibung Patienten	28-bed involuntary adult inpatient-unit, patients meeting criteria for dangerousness to self, others, or property
Beschreibung Outcomevariablen	Areas of electronic health record documentation improvement, Restraints, Seclusions, Patients to staff assault rates, injury rates, changes in attitudes regarding violence risk assessment
Beschreibung Ergebnisse	6.5% reduction in restraint rates
Dauer	
Baseline/Intervention/Follow-up	2 months / 2 months
Funding	none
Qualitätsbemerkung	Very high risk of bias
Nummer	9
Studie	Celofiga, A., Kores Plesnicar, B., Koprivsek, J., Moskon, M., Benkovic, D., & Gregoric Kumerscak, H. (2022). Effectiveness of De-Escalation in Reducing Aggression and Coercion in Acute Psychiatric Units. A Cluster Randomized Study. Frontiers in psychiatry, 13, 856153. https://doi.org/10.3389/fpsy.2022.856153
Institution	Department of Psychiatry, University Medical Centre Maribor, Maribor, Slovenia. Faculty of Medicine, University of Maribor, Maribor, Slovenia. University Psychiatric Clinic Ljubljana, Ljubljana, Slovenia. Faculty of Medicine, University of Ljubljana, Ljubljana, Slovenia. Faculty of Computer and Information Science, University of Ljubljana, Ljubljana, Slovenia. Faculty of Natural Sciences and Mathematics, University of Maribor, Maribor, Slovenia.

	Child and Adolescent Psychiatry Unit, University Medical Centre Maribor, Maribor, Slovenia.
Studientyp	RCT
Kontrollgruppe ja/nein	yes
Komplex ja/nein	no
Interventionstyp	Training and education program
n Patienten	n = 1251 intervention, n = 1939 control
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Training in verbal and non-verbal de-escalation techniques for the staff teams
Beschreibung Kontrolle	TAU
Beschreibung Patienten	Patients of closed acute psychiatric wards
Beschreibung Outcomevariablen	Number of aggressive incidents and the restraint episodes for the baseline and intervention periods, severity of aggressive incidents and the duration of restraints
Beschreibung Ergebnisse	In the baseline study period, there were no significant differences in the incidence of aggressive behavior and physical restraints between the experimental and control groups. The incidence rates of aggressive events, severe aggressive events, and physical restraints per 100 treatment days decreased significantly after the intervention. Compared to the control group, the incidence rate of aggressive events was 73% lower in the experimental group (IRR = 0.268, 95% CI [0.221; 0.342]), while the rate of severe events was 86% lower (IRR = 0.142, 95% CI [0.107; 0.189]). During the intervention period, the incidence rate of physical restraints due to aggression in the experimental group decreased to 30% of the rate in the control group (IRR = 0.304, 95% CI [0.238; 0.386]). No reduction in the incidence of restraint used for reasons unrelated to aggression was observed. After the intervention, a statistically significant decrease in the severity of aggressive incidents ($p < 0.001$) was observed, while the average duration of restraint episodes did not decrease.
Dauer Baseline/Intervention/Follow-up	5 months baseline, 5 months intervention period
Funding	The research was conducted as part of a research project of the University Medical Centre Maribor (IRP 2018/1-09).
Qualitätsbemerkung	Some concerns
Nummer	10
Studie	Cibis, M. L., Wackerhagen, C., Müller, S., Lang, U. E., Schmidt, Y., & Heinz, A. (2017). Vergleichende Betrachtung von Aggressivität, Zwangsmedikation und Entweichungsraten zwischen offener und geschlossener Türpolitik auf einer Akutstation [Comparison of Aggressive Behavior, Compulsory Medication and Absconding Behavior Between Open and Closed door Policy in an Acute Psychiatric Ward]. <i>Psychiatrische Praxis</i> , 44(3), 141–147. https://doi.org/10.1055/s-0042-105181
Institution	Klinik für Psychiatrie und Psychotherapie, Campus Mitte, Charité - Universitätsmedizin Berlin. Universitäre Psychiatrische Kliniken (UPK), Basel, Schweiz.
Studientyp	Observational study
Kontrollgruppe ja/nein	no
Komplex ja/nein	no
Interventionstyp	Organizational and institutional interventions
n Patienten	n = 980
Effekt ja/nein auf S/R	no
Beschreibung Intervention	The acute care ward was closed throughout 1995 and 2002 and was opened only to admit individual patients or staff members, as well as cleaning personnel. In 2012 and 2013, it was closed for only about 10% of the time during the day (i.e., between 8 a.m. and 10 p.m.) [5]. The ward remained completely closed from 10 p.m. to 8 a.m.
Beschreibung Kontrolle	
Beschreibung Patienten	Patients of an acute psychiatric ward
Beschreibung Outcomevariablen	Numbers of absconding, coercive medication, fixation and special security actions
Beschreibung Ergebnisse	During the phase of opened doors we observed significantly reduced aggressive assaults ($p < 0,001$) and coercive medication ($p = 0,006$) compared to the closed setting, while the absconding rate did not change ($p = 0,20$).
Dauer Baseline/Intervention/Follow-up	1995 – 2002 closed door, 2012 – 2013 open door
Funding	
Qualitätsbemerkung	High Risk of Bias
Nummer	11
Studie	Czernin, K., BERPohl, F., Heinz, A., Wullschleger, A., & Mahler, L. (2020). Auswirkungen der Etablierung des psychiatrischen Behandlungskonzepts „Weddinger Modell“ auf

	mechanische Zwangsmaßnahmen [Effects of the Psychiatric Care Concept "Weddinger Modell" on Mechanical Coercive Measures]. Psychiatrische Praxis, 47(5), 242–248. https://doi.org/10.1055/a-1116-0720
Institution	Universitätsklinik für Kinder- und Jugendpsychiatrie, Medizinische Universität Wien Klinik für Psychiatrie und Psychotherapie, Campus Mitte (PUK Charité im SHK), Charité – Universitätsmedizin Berlin Klinik für Psychiatrie und Psychotherapie, Campus Mitte (PUK Charité im SHK), Charité – Universitätsmedizin Berlin Klinik für Psychiatrie und Psychotherapie, Campus Mitte (PUK Charité im SHK), Charité – Universitätsmedizin Berlin Klinik für Psychiatrie und Psychotherapie, Campus Mitte (PUK Charité im SHK), Charité – Universitätsmedizin Berlin
Studientyp	Controlled study
Kontrollgruppe ja/nein	yes
Komplex ja/nein	yes
Interventionstyp	Complex treatment programs – "Weddinger Modell"
n Patienten	n = 122 intervention, n = 235 control
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	The core approaches of the "Weddinger Modell" are the promotion of participation, transparency, and individualization of treatment in a multi-professional, dialogue-oriented collaboration with severely mentally ill patients.
Beschreibung Kontrolle	TAU
Beschreibung Patienten	Patients from three general psychiatric wards
Beschreibung Outcomevariablen	Number of cases affected by mechanical coercive measures, number of cases affected by a combination of restraint and seclusion, cumulative duration of coercive measures per case affected, and proportion of cumulative duration of coercive measures in relation to total length of stay. In addition, for each form of coercive measure, the number of cases affected, the number of measures taken, and their average and cumulative duration were recorded.
Beschreibung Ergebnisse	In the intervention group, there was a significant reduction in the maximum number of fixations and the duration of seclusion.
Dauer Baseline/Intervention/Follow-up	Four survey periods were selected in November, two before the establishment of the Wedding model (two consecutive days in 2005 and 2009) and two after (two consecutive days in 2011 and 2013).
Funding	
Qualitätsbemerkung	Critical risk of bias
Nummer	12
Studie	Dike, C. C., Lamb-Pagone, J., Howe, D., Beavers, P., Bugella, B. A., & Hillbrand, M. (2021). Implementing a program to reduce restraint and seclusion utilization in a public-sector hospital: Clinical innovations, preliminary findings, and lessons learned. Psychological services, 18(4), 663–670. https://doi.org/10.1037/ser0000502
Institution	Yale University School of Medicine, Connecticut Department of Mental Health and Addiction Services
Studientyp	Observations study (pre-post)
Kontrollgruppe ja/nein	No
Komplex ja/nein	Yes
Interventionstyp	Complex treatment programs - other
n Patienten	
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	[Similar to 6 CS]: Restraint and seclusion prevention team, case review mechanism, training, employee recognition, occupational therapy, comfort rooms, modified physician orders for restraint and seclusion, behavioral intervention service, use of data to inform practice, consumer roles in inpatient settings, debriefing techniques
Beschreibung Kontrolle	
Beschreibung Patienten	615-bed public sector psychiatric hospital with 27 units (forensic, addiction, general psychiatry)
Beschreibung Outcomevariablen	Annual restraint hours, annual staff injuries, annual Workmen's Compensation medical costs
Beschreibung Ergebnisse	Reduction in annual restraint hours by 89% (baseline 5,300 → intervention 570), annual staff injuries by 18% (225 → 184), annual Workmen's Compensation medical costs by 24% (\$780,937 → \$527,715).
Dauer Baseline/Intervention/Follow-up	4 years / 4 years
Funding	The Alternative to Restraint and Seclusion State Incentive Grant by the National Association of State Mental Health Program Directors
Qualitätsbemerkung	High Risk of Bias

Nummer	13
Studie	Dinsenbacher, L. L., Imfeld, L., Helfenstein, F., Moeller, J., Lang, U. E., & Huber, C. G. (2024). Specialized short term crisis intervention for patients with personality disorder: Effects on coercion and length of stay. The International journal of social psychiatry, 70(8), 1516–1524. https://doi.org/10.1177/00207640241277161
Institution	University Psychiatric Clinics (UPK), University of Basel, Switzerland Faculty of Medicine, University of Basel, Switzerland Clinical Trial Unit, Department of Clinical Research, Faculty of Medicine, University of Basel, Switzerland Division of Clinical Psychology and Epidemiology, Department of Psychology, University of Basel, Switzerland
Studientyp	Observational study
Kontrollgruppe ja/nein	no
Komplex ja/nein	no
Interventionstyp	Organizational and institutional interventions
n Patienten	n = 1752
Effekt ja/nein auf S/R	no
Beschreibung Intervention	Introduction of a new crisis intervention track for patients with personality disorder
Beschreibung Kontrolle	
Beschreibung Patienten	Patients with personality disorder admitted to adult psychiatry
Beschreibung Outcomevariablen	Frequency of coercive measures
Beschreibung Ergebnisse	Our data show a significant decrease in the median length of in-hospital stay and no significant reduction in the incidence rate of coercion among PD patients after the intervention.
Dauer	
Baseline/Intervention/Follow-up	January 2012 to December 2019
Funding	
Qualitätsbemerkung	Very high risk of bias
Nummer	14
Studie	Dixon, M., & Long, E. M. (2022). An Educational Intervention to Decrease the Number of Emergency Incidents of Restraint and Seclusion on a Behavioral Health Unit. Journal of continuing education in nursing, 53(2), 70–76. https://doi.org/10.3928/00220124-20220104-07
Institution	Lamar University, Dishman School of Nursing, Beaumont, Texas, USA.
Studientyp	Observational Study (pre-post)
Kontrollgruppe ja/nein	yes
Komplex ja/nein	No
Interventionstyp	Training and education program
n Patienten	
Effekt ja/nein auf S/R	Yes (keine Signifikanztestung)
Beschreibung Intervention	Implementing an educational intervention using De-escalate Anyone, Anywhere, Anytime training with a focus of understanding of a range of de-escalations techniques to use instead of restraint and seclusion
Beschreibung Kontrolle	TAU
Beschreibung Patienten	Inpatient behavioral health unit
Beschreibung Outcomevariablen	Incident rates of seclusion and restraint for the facility were based on the number of patient days and the number of incidents, the number of incidents per quarter per unit was divided by a time period of 3 months, resulting in a mean for the quarter
Beschreibung Ergebnisse	For the incidents of restraint on the unit the mean for the quarter was 6 pre-intervention compared to 2 post-intervention. For the units in the facility with no educational intervention, the incidence of restraint increased from a mean of 7preinterventio to 8.33 postintervention. For the incidents of seclusion on the unit the mean for the quarter was 4.33 pre-intervention compared to 1.667 post-intervention. For the units in the facility with no educational intervention, the incidence of seclusion decreased from a mean of 5 preinterventio to 3 postintervention.
Dauer	
Baseline/Intervention/Follow-up	3 months / (2 months) / 3 months
Funding	None
Qualitätsbemerkung	High risk of bias
Nummer	15
Studie	Duxbury, J., Baker, J., Downe, S., Jones, F., Greenwood, P., Thygesen, H., McKeown, M., Price, O., Scholes, A., Thomson, G., & Whittington, R. (2019). Minimising the use of

	physical restraint in acute mental health services: The outcome of a restraint reduction programme ('REsTRAIN YOURSELF'). International journal of nursing studies, 95, 40–48. https://doi.org/10.1016/j.ijnurstu.2019.03.016
Institution	Manchester Metropolitan University, United Kingdom. Leeds University, United Kingdom. University of Central Lancashire, United Kingdom. Advancing Quality Alliance (AQUA), United Kingdom. University of Manchester, United Kingdom. University of Liverpool, United Kingdom Broset Centre for Research and Education in Forensic Psychiatry, Norway.
Studientyp	Observational study
Kontrollgruppe ja/nein	yes
Komplex ja/nein	yes
Interventionstyp	Complex treatment program – Six Core Strategies
n Patienten	
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	REsTRAIN YOURSELF: adapted version of the Six Core Strategies
Beschreibung Kontrolle	TAU
Beschreibung Patienten	Patients of adult, mental health wards
Beschreibung Outcomevariablen	Number of physical restraint events
Beschreibung Ergebnisse	In total, 1680 restraint incidents were logged over the study period. The restraint rate was significantly lower on the intervention wards in the adoption phase (6.62 events/1000 bed-days, 95% CI 5.53-7.72) compared to the baseline phase (9.38, 95% CI 8.19-10.55). Across all implementation wards there was an average reduction of restraint by 22%, with some wards showing a reduction of 60% and others less so (8%). The association between ward type and study phase was statistically significant.
Dauer Baseline/Intervention/Follow-up	January 2015– February 2016
Funding	This study was funded by the Health Foundation as part of the 'Closing the Gap' funding stream 2014–2016.
Qualitätsbemerkung	Serious risk of bias
Nummer	
Studie	Fletcher, J., Spittal, M., Brophy, L., Tibble, H., Kinner, S., Elsom, S., & Hamilton, B. (2017). Outcomes of the Victorian Safewards trial in 13 wards: Impact on seclusion rates and fidelity measurement. International journal of mental health nursing, 26(5), 461–471. https://doi.org/10.1111/inm.12380
Institution	Melbourne School of Population and Global Health, The University of Melbourne, Mind Australia, Murdoch Children's Research Institute, School of Public Health and Preventive Medicine, Monash University, Melbourne, Victoria, Griffith Criminology Institute and Menzies Health Institute Queensland, Griffith University, Brisbane, Queensland, and 6School of Health Sciences, The University of Melbourne, Melbourne, Victoria, Australia
Studientyp	Clinical controlled trial, Observational trial (pre-post-folow-up)
Kontrollgruppe ja/nein	ja
Komplex ja/nein	ja
Interventionstyp	Complex treatment programs – Safewards model
n Patienten	Keine Stichprobenbeschreibung
Effekt ja/nein auf S/R	ja
Beschreibung Intervention	Implementing Safewards in Australia
Beschreibung Kontrolle	TAU
Beschreibung Patienten	Keine Stichprobenbeschreibung, gefördert wurden grundsätzlich adult acut, adolescent acute, aged acute and secure extended care units
Beschreibung Outcomevariablen	No. of seclusion events per 1000 occupied bed days per ward per month
Beschreibung Ergebnisse	pre/post: 1.03 [0.66;1.58] (p=0.931), seclusion was not significantly reduced immediately after implementation, fidelity was only moderate; post/follow-up: 0.64 [0.4; 1] (p=0.04), but in the follow-up period, where seclusion was reduced significantly [and fidelity "excellent"]
Dauer Baseline/Intervention/Follow-up	3 months (Dec-Feb) / 3 months (Jun-Aug) / 3 months (Dec-Feb)
Funding	Office of the Chief Mental Health Nurse, in the Department of Health and Human Services, Government of Vicatoria (Melbourne, Vic., Australia). This paper forms part of the work towards a PhD, which is support through an Australian Government Research training Program Scholarship.

Qualitätsbemerkung	Critical risk of bias
Nummer	17
Studie	Floris, E. J. R., & Delespaul, P. A. E. G. (2020). Monitoring risk assessment on an acute psychiatric ward: Effects on aggression, seclusion and nurse behaviour. PLoS one, 15(10), e0240163. https://doi.org/10.1371/journal.pone.0240163
Institution	Mondriaan Mental Health Care, Heerlen, The Netherlands. Department of Psychiatry and Psychology, School of Mental Health and Neuroscience, Maastricht University Medical Centre, Maastricht, The Netherlands.
Studientyp	Observational study
Kontrollgruppe ja/nein	no
Komplex ja/nein	no
Interventionstyp	Risk assessment and early interventions
n Patienten	n = 293 admissions (224 individual patients) during baseline, n = 252 admissions (208 individuals) during the post-implementation steady-state period
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Implementation of the Crisis Monitor, risk assessment tools
Beschreibung Kontrolle	
Beschreibung Patienten	Patients of an acute psychiatric admission ward
Beschreibung Outcomevariablen	Incidence and duration of seclusion episodes, administration of involuntary medication and the number of specific one-to-one treatment protocols
Beschreibung Ergebnisse	Contrary to expectations, no positive effects of risk assessment were found on aggression or on coercive interventions. Time spent in seclusion increased significantly with more than 10 hours on average after implementation.
Dauer Baseline/Intervention/Follow-up	October 2016 –April 2017 baseline, July 2017—January 2018 steady state post-intervention period
Funding	
Qualitätsbemerkung	High risk of bias
Nummer	18
Studie	Geoffrion, S., Goncalves, J., Giguère, C. É., & Guay, S. (2018). Impact of a Program for the Management of Aggressive Behaviors on Seclusion and Restraint Use in Two High-Risk Units of a Mental Health Institute. The Psychiatric quarterly, 89(1), 95–102. https://doi.org/10.1007/s11126-017-9519-6
Institution	Trauma Studies Centre, Institut Universitaire en Santé Mentale de Montréal, 7331 Hochelaga, Montreal, Quebec, H1N 3V2, Canada. University of Montreal, Pavillon Lionel-Groulx, 3150 Jean-Brillant, Montreal, Quebec, H3T 1N8, Canada
Studientyp	Observational study
Kontrollgruppe ja/nein	no
Komplex ja/nein	
Interventionstyp	Training and education program
n Patienten	
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Omega training: Teaching of fundamental values and principles and of pacification approach and the use of a grid for classifying behaviors and levels of dangerousness of potentially aggressive individuals
Beschreibung Kontrolle	
Beschreibung Patienten	Patients of a 12-bed emergency unit and a 12-bed intensive care unit
Beschreibung Outcomevariablen	Number and duration of S/R
Beschreibung Ergebnisse	In the intensive care unit, we confirmed an increase of both mean daily number and duration of S/R by admissions in pre-training, followed by a decrease during the training and post-training. In the emergency unit, a decreasing trend is seen during the entire period thus suggesting that the decrease in S/R may be independent of the training.
Dauer Baseline/Intervention/Follow-up	April 2010–December 2011 pre-training, January 2012–October 2012 during training, November 2012–July 2014 post training
Funding	This study was funded by the Canadian Institutes of Health Research.
Qualitätsbemerkung	Very high risk of bias
Nummer	19
Studie	Goulet, M. H., Larue, C., & Lemieux, A. J. (2018). A pilot study of "post-seclusion and/or restraint review" intervention with patients and staff in a mental health setting. Perspectives in psychiatric care, 54(2), 212–220. https://doi.org/10.1111/ppc.12225

Institution	Faculty of Nursing, Université de Montréal, Research Centre of Institut Universitaire en Santé Mentale de Montréal, Quebec Nursing Intervention Research Network, Montréal, Québec, Canada.
Studientyp	Observational study
Kontrollgruppe ja/nein	no
Komplex ja/nein	no
Interventionstyp	Behavioral and trauma therapy debriefings
n Patienten	n = 89 pre implementation, n = 106 post implementation
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Implementation of a "post-seclusion and/or restraint review" (PSRR) intervention
Beschreibung Kontrolle	
Beschreibung Patienten	Patients of an acute adult psychiatric care unit specialized in first-episode psychoses
Beschreibung Outcomevariablen	Use of seclusion and the time spent in seclusion
Beschreibung Ergebnisse	Both the use of seclusion and the time spent in seclusion were significantly reduced 6 months after the implementation of PSRR intervention.
Dauer Baseline/Intervention/Follow-up	6 months pre implementation, 6 months post implementation
Funding	
Qualitätsbemerkung	Very high risk of bias
Nummer	20
Studie	Griffin E. Seclusion Reduction on an Adult Inpatient Psychiatric Unit: A Quality Improvement Project. J Psychosoc Nurs Ment Health Serv. 2022 Jun;60(6):27-32. doi: 10.3928/02793695-20211118-05. Epub 2021 Dec 3. PMID: 34846230.
Institution	College of Nursing, Medical University of South Carolina, Charleston, South Carolina, USA
Studientyp	Observational study (pre-post)
Kontrollgruppe ja/nein	No
Komplex ja/nein	No
Interventionstyp	Behavioral and trauma therapy debriefings
n Patienten	
Effekt ja/nein auf S/R	Increase of the rates, average number; decrease of duration(keine Signifikanztestung)
Beschreibung Intervention	Implementation of a standard debriefing process based on the National association of State Mental Health Program Directors' Six Core Strategies for Reducing Seclusion and Restraint Use
Beschreibung Kontrolle	
Beschreibung Patienten	Pre-intervention (post-intervention) 83% (58%) of secluded patients were male, 58% had a psychiatric diagnosis in the psychotic disorder category, average age pre-intervention was 27 years.
Beschreibung Outcomevariablen	Rate of seclusion hours per 1,000 patient care hours and the average amount of time (minutes) patients spent in seclusion
Beschreibung Ergebnisse	Seclusion hours / 1,000 patient hours increased by 16% (0.38 to 0.44), Average number of monthly seclusions increased by 58% (2.4 to 3.8), Duration of each seclusion episode decreased by 10% (158 to 142 minutes)
Dauer Baseline/Intervention/Follow-up	5 months / 5 months
Funding	none
Qualitätsbemerkung	very high risk of bias
Nummer	21
Studie	Griffith, J. J., Meyer, D., Maguire, T., Ogloff, J. R. P., & Daffern, M. (2021). A Clinical Decision Support System to Prevent Aggression and Reduce Restrictive Practices in a Forensic Mental Health Service. Psychiatric Services, 72(8), 885–890. https://doi.org/10.1176/appi.ps.202000315
Institution	Centre for Forensic Behavioural Science, Swinburne University of Technology, Melbourne Forensicare, Melbourne
Studientyp	RCT
Kontrollgruppe ja/nein	yes
Komplex ja/nein	no
Interventionstyp	Risk assessment and early interventions
n Patienten	n = 77
Effekt ja/nein auf S/R	yes

Beschreibung Intervention	Implementation of an actuarial instrument (eDASA+APP) designed to rate the risk for aggression in the next 24 hours
Beschreibung Kontrolle	
Beschreibung Patienten	Men admitted to secure acute units for male patients
Beschreibung Outcomevariablen	Administration of as-needed medication
Beschreibung Ergebnisse	eDASA+APP implementation was associated with a significant reduction in the odds of an aggressive incident (OR=0.56, 95% confidence interval [95% CI]=0.45–0.70, $p<0.001$) and a significant decrease in the odds of administration of as-needed medication (OR=0.64, 95% CI=0.50–0.83, $p<0.001$).
Dauer Baseline/Intervention/Follow-up	2 months baseline, 2 months intervention phase 1, 2 months washout period, 2 months intervention period 2
Funding	
Qualitätsbemerkung	Some concern
Nummer	22
Studie	Haefner, J., Dunn, I., & McFarland, M. (2021). A Quality Improvement Project Using Verbal De-Escalation to Reduce Seclusion and Patient Aggression in an Inpatient Psychiatric Unit. <i>Issues in mental health nursing</i> , 42(2), 138–144. https://doi.org/10.1080/01612840.2020.1789784
Institution	School of Nursing, University of Michigan Flint, Flint, Michigan, USA. Tuerk House, Baltimore, Maryland, USA.
Studientyp	Observational study
Kontrollgruppe ja/nein	no
Komplex ja/nein	no
Interventionstyp	Training and education program
n Patienten	n = 388 prior to ignition of educational program, n = 342 after completion of the program modules
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	TeamSTEPPS: evidence based educational tool for improving de-escalation techniques
Beschreibung Kontrolle	
Beschreibung Patienten	Patients 18 years or older of a 37-bed psychiatry unit
Beschreibung Outcomevariablen	Rate of seclusion events
Beschreibung Ergebnisse	While there was not a statistically significant difference in the rate of seclusion events, ($p = 0.349$) there was a clinically significant reduction. The pre rate was 5.9%, and the post rate was 4.4%.
Dauer Baseline/Intervention/Follow-up	2 months prior to initiation of the educational program and 2 months following completion of the education modules
Funding	
Qualitätsbemerkung	High risk of bias
Nummer	23
Studie	Haines-Delmont A, Goodall K, Duxbury J, Tsang A. (2022) An Evaluation of the Implementation of a "No Force First" Informed Organisational Guide to Reduce Physical Restraint in Mental Health and Learning Disability Inpatient Settings in the UK. URL: https://pubmed.ncbi.nlm.nih.gov/35185645/ DOI: 10.3389/fpsyt.2022.749615
Institution	Department of Nursing, Faculty of Health, Psychology and Social Care, Manchester Metropolitan University, Manchester, United Kingdom.
Studientyp	Observational study
Kontrollgruppe ja/nein	no
Komplex ja/nein	yes
Interventionstyp	Complex treatment programs - other
n Patienten	n = 7084 pre implementation, n = 6551 post implementation
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	No Force First Guide – implementation of a bespoke, person-centred and recovery focused “No Force First” intervention to reduce the use of restraint in both mental health and learning disabilities settings
Beschreibung Kontrolle	
Beschreibung Patienten	Adult (≥ 18 years old) male and female patients admitted on 44 wards (adult mental health, psychiatric intensive care units (PICU), complex care (older people), forensic mental health (high/medium/low secure), learning disabilities (LD) Services)
Beschreibung Outcomevariablen	Incidence rates (number of events/per 1,000 patient-days) of physical restraint
Beschreibung Ergebnisse	A significant 17% reduction in incidence of physical restraint was observed [IRR = 0.83, 95% CI 0.77-0.88, $p < 0.0001$]. Significant reductions in rates of harm sustained and

	aggression/violence were also observed, but not concerning the use of medication during restraint. The prevalence of physical restraint was significantly higher in inpatients on forensic learning disability wards than those on forensic mental health wards both pre- (aPR = 4.26, 95% CI 2.91-6.23) and post-intervention (aPR = 9.09, 95% CI 5.09-16.23), when controlling for type of incident and type of violence/aggression. Physical assault was a significantly more prevalent risk factor of restraint use than other forms of violence/aggression, especially that directed to staff (not to other patients).
Dauer Baseline/Intervention/Follow-up	2015–2016 pre implementation, 2018–2019 post implementation
Funding	This work was supported by Mersey Care NHS Foundation Trust (Manchester Metropolitan University WorkTribe ref 230649).
Qualitätsbemerkung	Some concerns
Nummer	24
Studie	Harpøth A, Kennedy H, Terkildsen MD, Nørremark B, Carlsen AH, Sørensen LU. (2022) Do improved structural surroundings reduce restrictive practices in psychiatry? URL: https://pubmed.ncbi.nlm.nih.gov/36404331/ . DOI: 10.1186/s13033-022-00562-7
Institution	Department of Forensic Psychiatry, Aarhus University Hospital Psychiatry, Skejby, Denmark. Trinity College, Dublin University, Dublin, Ireland. National Forensic Mental Health Service, Dundrum, Ireland. Department of Clinical Medicine, Faculty of Health, Aarhus University, Aarhus, Denmark. DEFACTUM, Central Denmark Region, Aarhus, Denmark. Department of Forensic Psychiatry, Aarhus University Hospital Psychiatry, Skejby, Denmark. Department of Clinical Medicine, Faculty of Health, Aarhus University, Aarhus, Denmark.
Studientyp	Observational study
Kontrollgruppe ja/nein	
Komplex ja/nein	no
Interventionstyp	Design of psychiatric wards
n Patienten	n = 19567
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Relocation of a 170-year-old psychiatric university hospital to a new modern purpose-built university hospital.
Beschreibung Kontrolle	
Beschreibung Patienten	All patients of a psychiatric university hospital
Beschreibung Outcomevariablen	Total numbers of restrictive practices, mechanical restraint, and involuntary acute medication
Beschreibung Ergebnisse	At UH, RPs performed decreased from 4073 to 2585 after relocation, whereas they remained stable (from 3676 to 3631) at RH. Mechanical restraint and involuntary acute medication were aligned at both UH and RH. Using linear regression analysis, we found an overall significant decrease in the use of all restrictive practices at UH with an inclination of -9.1 observations (95% CI - 12.0; - 6.3 p < 0.0001) per month throughout the two-year follow-up. However, the decrease did not deviate significantly from the already downward trend observed one year before relocation. Similar analyses performed for RH showed a stable use of coercion.
Dauer Baseline/Intervention/Follow-up	November 2017 - November 2019
Funding	This work was funded by the Central Denmark Region Psychiatric Research Foundation (1-30-74-74-19) and the Department of Forensic Psychiatry, Aarhus University Hospital Psychiatry. Funders were not involved at any study
Qualitätsbemerkung	High risk of bias
Nummer	25
Studie	Harrington, A., Darke, H., Ennis, G. and Sundram, S. (2019), Evaluation of an alternative model for the management of clinical risk in an adult acute psychiatric inpatient unit. Int J Mental Health Nurs, 28: 1102-1112. https://doi.org/10.1111/inm.12621
Institution	North Western Mental Health, Melbourne, Victoria, Australia Psychiatry Monash Health, Monash University, Melbourne, Victoria, Australia Institute for Health and Social Science Research, Centre for Mental Health NursingInnovation, Rockhampton, Queensland, Australia School of Nursing and Midwifery, Central Queensland University, Rockhampton, Queensland, Australia Department of Psychiatry, University of Melbourne, Melbourne, Victoria, Australia Department of Psychiatry, School of Clinical Sciences, Monash University, Melbourne, Victoria, Australia Adult Psychiatry, Monash Health, Melbourne, Victoria, Australia
Studientyp	Observational study
Kontrollgruppe ja/nein	no

Komplex ja/nein	no
Interventionstyp	Risk assessment and early interventions
n Patienten	n = 1087 admissions before implementation, n = 965 admissions post-implementation
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Clinical Risk Management Initiative (CRMI): Risk assessments were completed on admission, at first psychiatrist consultant review, and when mental status was noted to have changed.
Beschreibung Kontrolle	
Beschreibung Patienten	Patients of an adult acute psychiatric inpatient unit
Beschreibung Outcomevariablen	Rates of seclusion
Beschreibung Ergebnisse	The new model was associated with significantly reduced rates of absconding (pre: 10.5/1000 occupied bed days, 95% CI [9.0, 12.1] compared with post: 6.5/1000 occupied bed days [5.2, 8.1], $P < 0.001$) and seclusion (pre: 43.7/1000 occupied bed days, 95% CI [40.6, 46.9] compared with post: 30.9/1000 occupied bed days [27.9, 34.1], $P < 0.0001$). Rates of aggression, deliberate self-harm, and sexually inappropriate behaviour were non-significantly decreased.
Dauer	
Baseline/Intervention/Follow-up	24 months before implementation, 18 months post-implementation
Funding	This project received funding for a project lead from North Western Mental Health.
Qualitätsbemerkung	High risk of bias
Nummer	26
Studie	Havilla S, Alanazi FK, Boon B, Patton D, Ho YC, Molloy L. Exploring the impact of a multilevel intervention focused on reducing the practices of seclusion and restraint in acute mental health units in an Australian mental health service. <i>Int J Ment Health Nurs.</i> 2024 Apr;33(2):442-451. doi: 10.1111/inm.13255. Epub 2023 Nov 14. PMID: 37964469
Institution	Illawarra Shoalhaven Local Health District Mental Health Service, Shellharbour, New South Wales, Australia. School of Nursing, University of Wollongong, Wollongong, New South Wales, Australia. School of Nursing and Midwifery, Royal College of Surgeons in Ireland, Dublin, Ireland. School of Nursing, College of Nursing, Taipei Medical University, Taipei, Taiwan ROC.
Studientyp	Observational study
Kontrollgruppe ja/nein	no
Komplex ja/nein	yes
Interventionstyp	Complex treatment programs – Six Core Strategies
n Patienten	
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Six Core Strategies
Beschreibung Kontrolle	
Beschreibung Patienten	Patients admitted to the inpatient units within Illawarra and Shoalhaven Local Health District (ISLHD)
Beschreibung Outcomevariablen	Rates of seclusion and restraint
Beschreibung Ergebnisse	There was a significant difference in the total number of seclusion events between pre- (Mean=6.22, SD=5.82) and post-implementation (Mean=2.55, SD=2.44, $p=0.002$, $d=0.94$), demonstrating a significantly lower number of seclusions was observed after the intervention. Similarly, a significant difference in restraint events between pre- (Mean=5.50, SD=3.77) and postimplementations (Mean=3.38, SD=3.21, $p=0.037$, $d=0.62$) was observed.
Dauer	
Baseline/Intervention/Follow-up	18 months
Funding	
Qualitätsbemerkung	High risk of bias
Nummer	27
Studie	Hernandez A, Riahi S, Stuckey MI, Mildon BA, Klassen PE. Multidimensional approach to restraint minimization: The journey of a specialized mental health organization. <i>Int J Ment Health Nurs.</i> 2017 Oct;26(5):482-490. doi: 10.1111/inm.12379. PMID: 28960744.
Institution	Ontario Shores Centre for Mental Health Science, 700 Gordon Street, Whitby, ON, L1N 5B9, Canada
Studientyp	Interrupted Time Series Analysis
Kontrollgruppe ja/nein	No
Komplex ja/nein	yes
Interventionstyp	Complex treatment programs – Six Core Strategies

n Patienten	
Effekt ja/nein auf S/R	partly
Beschreibung Intervention	Recovery rounds: implementation of an initiative, in which representatives from senior management, professional practice, peer support, and clinical ethics witnessed seclusion and restraint events, and rounded with clinical teams to discuss timely release and brainstorm prevention strategies
Beschreibung Kontrolle	TAU
Beschreibung Patienten	326-bed, recovery-based, tertiary level mental health-care facility specializing in treating individuals with complex, serious, and persistent mental health issues. Inpatient setting with subspecialized populations (forensic, adult, adolescent, double diagnosis, geriatric, neuropsychiatry)
Beschreibung Outcomevariablen	Number of incidents/month, total hours/month, average hours/incident/month for each seclusion and mechanical restraints
Beschreibung Ergebnisse	With implementation, there was a step decrease in average hours/seclusion (-28.3 hours/seclusion, $P < 0.001$) and total seclusion hours (-1264.5 hours, $P = 0.002$). The postimplementation rate of decrease of -0.9 hours/incident/month was different than the pre-implementation rate of increase of 0.7 hours/incident/month for mechanical restraint ($P = 0.03$). Pre-implementation, there was a rate of decrease of 6.1 incidents/month ($P < 0.001$) and 4.5 incidents/month ($P = 0.001$) for seclusion and mechanical restraint, respectively. Postimplementation, there was a rate of increase of 0.3 incidents/month and a rate of decrease of 0.05 incidents/month for seclusion and mechanical restraint, respectively, both of which were different than pre-implementation (seclusion: $P < 0.001$, mechanical restraint: $P = 0.002$).
Dauer	
Baseline/Intervention/Follow-up	14 months / 35 months
Funding	Not reported
Qualitätsbemerkung	High Risk of Bias
Nummer	28
Studie	Hirsch, S., Baumgardt, J., Bechdorf, A., Bühling-Schindowski, F., Cole, C., Flammer, E., Jaeger, S., Junghanss, J., Kampmann, M., Sauter, D., Muche, R., Vandamme, A., Steinert, T., & Mahler, L. (2025). Umsetzung der DGPPN-S3-Leitlinie zur Prävention von Gewalt und Zwang: Prä-post-Analyse der randomisierten kontrollierten PreVCo-Studie [Implementation of the guidelines on the prevention of violence and coercion: pre-post analysis of the randomized controlled PreVCo study]. Psychiatrische Praxis, 52(3), 141–149. https://doi.org/10.1055/a-2440-8795
Institution	ZfP Südwürttemberg, Versorgungsforschung Weissenau, Ravensburg Klinik I für Psychiatrie und Psychotherapie, Universität Ulm Klinik für Psychiatrie, Psychotherapie und Psychosomatik, Vivantes Klinikum Am Urban, Berlin Betriebliche Gesundheitsförderung und Heilmittel, Wissenschaftliches Institut der AOK, Berlin Arbeitsgruppe Sozialpsychiatrie, Charité Universitätsmedizin Berlin Institut für Epidemiologie und Medizinische Biometrie, Universität Ulm ZfP Südwürttemberg, Biberach Psychiatrie und Psychotherapie, Kliniken im TheodorWenzel-Werk, Berlin
Studientyp	Beobachtungsstudie
Kontrollgruppe ja/nein	no
Komplex ja/nein	yes
Interventionstyp	Complex treatment programs – Other
n Patienten	
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Realization of 3 out of 12 evidence- or consensus-based implementation recommendations
Beschreibung Kontrolle	TAU (waiting list)
Beschreibung Patienten	Patients of psychiatric wards that also treat patients admitted under civil or public law. Wards that primarily treated people with dementia or delirium, forensic psychiatric wards, and child and adolescent psychiatric wards were excluded.
Beschreibung Outcomevariablen	Number of coercive measures (isolation, restraint, and involuntary medication) per bed per month and the cumulative duration of coercive measures per bed per month
Beschreibung Ergebnisse	The number of coercive measures decreased significantly during the observation period.
Dauer	
Baseline/Intervention/Follow-up	June to August 2020 baseline, November 2020 to March 2021 or September 2021 to March 2022 respectively intervention period
Funding	Innovationsfonds beim Gemeinsamen Bundesausschuss — 01VSF19037
Qualitätsbemerkung	Low risk of bias
Nummer	29

Studie	Hochstrasser, L., Fröhlich, D., Schneeberger, A. R., Borgwardt, S., Lang, U. E., Stieglitz, R. D., & Huber, C. G. (2018). Long-term reduction of seclusion and forced medication on a hospital-wide level: Implementation of an open-door policy over 6 years. <i>European Psychiatry : the journal of the Association of European Psychiatrists</i> , 48, 51–57. https://doi.org/10.1016/j.eurpsy.2017.09.008
Institution	Universitäre Psychiatrische Kliniken Basel, Universität Basel, 27, Wilhelm Klein-Strasse, 4012 Basel, Switzerland Psychiatrische Dienste Graubünden, 220, Loëstrasse, 7000 Chur, Switzerland Albert Einstein College of Medicine, Department of Psychiatry and Behavioral Sciences, 3331, Bainbridge Avenue, Bronx, New York, NY 10467, USA Universität Basel, Fakultät für Psychologie, Abteilung für Klinische Psychologie und Psychiatrie, 60/62, Missionsstrasse, 4055 Basel, Switzerland
Studientyp	Observational study
Kontrollgruppe ja/nein	no
Komplex ja/nein	no
Interventionstyp	Organizational and institutional interventions
n Patienten	n = 132
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Physical introduction of "open doors" on a psychiatric intensive care unit (PICU)
Beschreibung Kontrolle	
Beschreibung Patienten	Patients > 18 years admitted on a psychiatric intensive care unit
Beschreibung Outcomevariablen	Frequency of seclusion and forced medication
Beschreibung Ergebnisse	Following door status change, the PICU was completely open on 51% of the days and partly open on 23% of the days. The mean number of open hours per day was 12.8 ± 3.9 h. The frequency of forced medication did not change, and the frequency of seclusion decreased significantly [χ^2 (1, N = 131) = 4.73, p = 0.036]
Dauer Baseline/Intervention/Follow-up	32 weeks (16 weeks after implementation of the new treatment concept but before door opening, 16 weeks after door opening)
Funding	
Qualitätsbemerkung	Some concerns
Nummer	30
Studie	Hochstrasser, L., Voulgaris, A., Möller, J., Zimmermann, T., Steinauer, R., Borgwardt, S., Lang, U. E., & Huber, C. G. (2018). Reduced Frequency of Cases with Seclusion Is Associated with "Opening the Doors" of a Psychiatric Intensive Care Unit. <i>Frontiers in psychiatry</i> , 9, 57. https://doi.org/10.3389/fpsy.2018.00057
Institution	Universitäre Psychiatrische Kliniken Basel, Universität Basel, Basel, Switzerland. Abteilung für Psychiatrie und Psychotherapie, Justizvollzugskrankenhaus Berlin, Berlin, Germany.
Studientyp	Observational study
Kontrollgruppe ja/nein	no
Komplex ja/nein	no
Interventionstyp	Organizational and institutional interventions
n Patienten	n = 157
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Open doors whenever possible
Beschreibung Kontrolle	
Beschreibung Patienten	Patients 18 years and older admitted on a psychiatric intensive care unit at a department of adult psychiatry
Beschreibung Outcomevariablen	Frequency of seclusion and forced medication
Beschreibung Ergebnisse	The frequency of forced medication did not change, and the frequency of seclusion decreased significantly [χ^2 (1, N = 131) = 4.73, p = 0.036].
Dauer Baseline/Intervention/Follow-up	16-week period before the door status was changed (doors locked; May 12, 2015, to August 31, 2015), 16-week period afterward (open doors whenever possible; September 1, 2015, to December 18, 2015)
Funding	
Qualitätsbemerkung	Some concerns
Nummer	31
Studie	Hvidhjelm, J., Brandt-Christensen, M., Delcomyn, C., Møllerhøj, J., Siersma, V., & Bak, J. (2022). Effects of Implementing the Short-Term Assessment of Risk and Treatability for Mechanical Restraint in a Forensic Male Population: A Stepped-Wedge, Cluster-Randomized Design. <i>Frontiers in psychiatry</i> , 13, 822295. https://doi.org/10.3389/fpsy.2022.822295

Institution	Clinical Mental Health and Nursing Research Unit, Mental Health Center Sct Hans, Copenhagen University Hospital - Mental Health Services CPH, Copenhagen, Denmark. Mental Health Centre Sct Hans, Copenhagen University Hospital - Mental Health Services CPH, Copenhagen, Denmark. Head of Centre, Competence Centre for Forensic Psychiatry, Mental Health Centre Sct Hans, Copenhagen University Hospital - Mental Health Services CPH, Copenhagen, Denmark. The Research Unit for General Practice and Section of General Practice, Department of Public Health, University of Copenhagen, Copenhagen, Denmark.
Studientyp	RCT
Kontrollgruppe ja/nein	yes
Komplex ja/nein	no
Interventionstyp	Risk assessment and early interventions
n Patienten	n = 50
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Implementation of Short-Term Assessment of Risk and Treatability (START)
Beschreibung Kontrolle	
Beschreibung Patienten	Male patients of a forensic department of a mental health center
Beschreibung Outcomevariablen	Occurrence of mechanical restraint use, total duration (in minutes) of mechanical restraint use, total coercive episodes, number of physical restraint episodes, episodes of acute forced medication
Beschreibung Ergebnisse	The rate of mechanical restraint use within the START period were 82% [relative risk (RR) = 0.18], lower than those outside of the START period.
Dauer Baseline/Intervention/Follow-up	May 2012 – April 2017
Funding	
Qualitätsbemerkung	Low risk of bias
Nummer	32
Studie	Indregard, A. R., Nussle, H. M., Hagen, M., Vandvik, P. O., Tesli, M., Gather, J., & Kunøe, N. (2024). Open-door policy versus treatment-as-usual in urban psychiatric inpatient wards: a pragmatic, randomised controlled, non-inferiority trial in Norway. <i>The Lancet. Psychiatry</i> , 11(5), 330–338. https://doi.org/10.1016/S2215-0366(24)00039-7
Institution	Department of Psychiatry, Lovisenberg Diaconal Hospital, Oslo, Norway Department of Medicine, Lovisenberg Diaconal Hospital, Oslo, Norway Department of Nursing and Health Promotion, Faculty of Health Sciences, Oslo Metropolitan University, Oslo, Norway Department of Mental Health and Suicide, Norwegian Institute of Public Health, Oslo, Norway SIFER, National Research Centre on Security, Prisons and Forensic Psychiatry, Oslo University Hospital and University of Oslo, Oslo, Norway Department of Psychiatry, Psychotherapy and Preventive Medicine, LWL University Hospital and Institute for Medical Ethics and History of Medicine, Ruhr University Bochum, Bochum, Germany Department of Interdisciplinary Health Sciences, Institute of Health and Society, Faculty of Medicine, University of Oslo, Oslo, Norway
Studientyp	RCT
Kontrollgruppe ja/nein	yes
Komplex ja/nein	no
Interventionstyp	Organizational and institutional interventions
n Patienten	n = 245 intervention, n = 311
Effekt ja/nein auf S/R	no
Beschreibung Intervention	Open door policy
Beschreibung Kontrolle	TAU
Beschreibung Patienten	Patients 18 years or older referred from the psychiatric intensive care unit to the acute psychiatric ward. Patients being under active criminal justice custody or serving a sentence or if they had a documented history of persistent violence even after achieving apparent stabilisation of psychotic symptoms, were excluded.
Beschreibung Outcomevariablen	Proportion of patient stays with one or more coercive measures, including involuntary medication, isolation or seclusion, and physical and mechanical restraints
Beschreibung Ergebnisse	The open-door policy was non-inferior to treatment-as-usual on all outcomes: the proportion of patient stays with exposure to coercion was 65 (26.5%) in open-door policy wards and 104 (33.4%) in treatment-as-usual wards (risk difference 6.9%; 95% CI -0.7 to 14.5), with a similar trend for specific measures of coercion. Reported incidents of violence against staff were 0.15 per patient stay in open-door policy wards and 0.18 in treatment-as-usual wards. There were no suicides during the randomised controlled trial period.
Dauer Baseline/Intervention/Follow-up	Feb 10, 2021 – Feb 1, 2022

Funding	South-Eastern Norway Regional Health Authority and The Research Council of Norway
Qualitätsbemerkung	Some concerns
Nummer	33
Studie	Kontio R, Pitkänen A, Joffe G, Katajisto J, Välimäki M. eLearning course may shorten the duration of mechanical restraint among psychiatric inpatients: a cluster-randomized trial. Nord J Psychiatry. 2014 Oct;68(7):443-9. doi: 10.3109/08039488.2013.855254. Epub 2013 Nov 25. PMID: 24274836
Institution	Raija Kontio, Ph.D., Assistant Chief of Department of Psychiatry, Hospital District of Helsinki and Uusimaa, Hyvinkää Hospital Region, Kellokoski Hospital, Finland.
Studientyp	RCT
Kontrollgruppe ja/nein	yes
Komplex ja/nein	no
Interventionstyp	Training and education program
n Patienten	
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	eLearning course comprising six modules with specific topics (legal and ethical issues, behaviour-related factors, therapeutic relationship and self-awareness, teamwork and integrating knowledge with practice) and specific learning methods.
Beschreibung Kontrolle	TAU
Beschreibung Patienten	Patients of acute, closed, adult inpatient wards practising seclusion and restraint
Beschreibung Outcomevariablen	Rates (incidents per 1000 occupied bed days) and durations of seclusion and restraint incidents
Beschreibung Ergebnisse	On the intervention wards, there were no statistically significant changes in the rates of seclusion and mechanical restraint. However, the duration of incidents involving mechanical restraints shortened from 36.0 to 4.0 h (median) ($P < 0.001$). No statistically significant changes occurred on the control wards.
Dauer Baseline/Intervention/Follow-up	2007–2008 pre intervention, 2008–2009 post intervention
Funding	European Commission (Belgium) - Funded project from the Leonardo da Vinci Programme (ref: FI-06-B-F-PP-160701), Hospital District of Helsinki and Uusimaa (Finland), The Pirkanmaa Hospital District (Finland)
Qualitätsbemerkung	Some concerns
Nummer	34
Studie	Korezelidou, A., Welte, A., Oster, A., & Mahler, L. (2025). Overcoming the lack of alternatives - Changes in the use of coercive measures after implementation of the recovery-oriented "Weddinger Modell" in acute psychiatric care. Journal of psychiatric research, 181, 405–410. https://doi.org/10.1016/j.jpsychires.2024.11.032
Institution	Universität Basel, Department of Public Health, Institute of Nursing Science, Bernoullistrasse 28, CH – 4056, Basel, Switzerland Charité – Berlin University Medicine, Department of Psychiatry and Neurosciences, Campus Charité Mitte, Charitéplatz 1, D - 10117, Berlin, Germany Clinics in the Theodor-Wenzel-Werk, Department of Psychiatry and Psychotherapy, Potsdamer Chaussee 69, D - 14129, Berlin, Germany University of Heidelberg, Department of General Practice and Health Services Research, Im Neuenheimer Feld 130.3, D - 69120, Heidelberg, Germany
Studientyp	Observational study
Kontrollgruppe ja/nein	no
Komplex ja/nein	yes
Interventionstyp	Complex treatment programs – "Weddinger Modell"
n Patienten	n = 1656
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	The Weddinger Modell consists of nine core elements: (I) assignment of patients to a multiprofessional therapeutic team (MTT), (II) interprofessional therapy planning and evaluation, (III) interprofessional visits, (IV) integration of peer support workers, (V) active dialogical work, (VI) normalization of the psychiatric setting, (VII) Flexibility of the treatment setting with treatment provider continuity, (VIII) guideline-based post-coercive review sessions, (IX) treatment agreements for future stays and crisis plans.
Beschreibung Kontrolle	
Beschreibung Patienten	Patients of two acute psychiatric wards
Beschreibung Outcomevariablen	Cases affected by coercive measures, cases affected by seclusion or restraint, and the number, total duration, and average individual duration of coercive measures
Beschreibung Ergebnisse	Cases affected by seclusion and the number of CM per case were significantly reduced after WM-MIP. No significant difference was found in terms of CM affected (total) or restraint affected, total CM duration, and average single CM duration per case.

Dauer Baseline/Intervention/Follow-up	The main implementation phase of the WM (WM-MIP) was defined as the period between May and August 2020. Cases treated between July 2019 and June 2021 were included.
Funding	
Qualitätsbemerkung	High risk of bias
Nummer	35
Studie	Lickiewicz, J., Adamczyk, N., Hughes, P. P., Jagielski, P., Stawarz, B., & Makara-Studzińska, M. (2021). Reducing aggression in psychiatric wards using Safewards-A Polish study. Perspectives in psychiatric care, 57(1), 50–55. https://doi.org/10.1111/ppc.12523
Institution	Department of Health Psychology, Jagiellonian University Medical College, Krakow, Poland. Faculty of Psychology, Krakow University, Krakow, Poland. School of Kinesiology, Applied Health and Recreation, Oklahoma State University, Stillwater, Oklahoma. Department of Nutrition and Drug Research, Faculty of Health Sciences, Institute of Public Health, Jagiellonian University Medical College, Krakow, Poland. Institute of Healthcare, State Higher School of Technology and Economics, Jaroslaw, Poland.
Studientyp	Observational study
Kontrollgruppe ja/nein	no
Komplex ja/nein	yes
Interventionstyp	Complex treatment programs – Safewards model
n Patienten	n = 50
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Three Safe wards strategies they thought could be utilized often and implemented easily and effectively: Positive words, Reassurance, and Clear Mutual Expectations
Beschreibung Kontrolle	
Beschreibung Patienten	Adult male patients with mental illness
Beschreibung Outcomevariablen	Frequency of applying direct coercive measures (mechanical restraints) and the number of patients restrained
Beschreibung Ergebnisse	Restraint use dropped by 24%, and the number of patients restrained dropped 34%. The duration of restraint remained at 2.8 days per episode.
Dauer Baseline/Intervention/Follow-up	16 months
Funding	Ministerstwo Nauki i Szkolnictwa Wyzszego, Grant/Award Number: K/ZDS/006182
Qualitätsbemerkung	High risk of bias
Nummer	36
Studie	Lombardo, C., Van Bortel, T., Wagner, A. P., Kaminskiy, E., Wilson, C., Krishnamoorthy, T., Rae, S., Rouse, L., Jones, P. B., & Kar Ray, M. (2018). PROGRESS: the PROMISE governance framework to decrease coercion in mental healthcare. BMJ open quality, 7(3), e000332. https://doi.org/10.1136/bmjog-2018-000332
Institution	Cambridgeshire and Peterborough NHS Foundation Trust, Fulbourn Hospital, Cambridge, UK. Institute for Health and Human Development, University of East London, London, UK. National Institute for Health Research Collaboration for Leadership in Applied Health Research and Care East of England, Cambridge, UK. Norwich Medical School, University of East Anglia, Norwich, UK. Department of Psychology, Anglia Ruskin University, Cambridge, UK. Faculty of Health, Social Care and Education, Department of Adult and Mental Health Nursing, Anglia Ruskin University, Chelmsford, UK. Faculty of Wellbeing, Education & Language Studies, The Open University, Milton Keynes, UK. Department of Psychiatry, University of Cambridge, Cambridge, UK. Addictions and Mental Health Services, Princes Alexandra Hospital, Metro South Health, Brisbane, Queensland, Australia.
Studientyp	Observational study
Kontrollgruppe ja/nein	no
Komplex ja/nein	yes
Interventionstyp	Complex treatment programs – Othe
n Patienten	
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	PROactive Management of Integrated Services and Environments (PROMISE) was developed to bring about culture change to decrease coercion in care
Beschreibung Kontrolle	

Beschreibung Patienten	Patients of generic adult wards and specialist wards off the %. Cambridgeshire and Peterborough NHS Foundation Trust (CPFT)
Beschreibung Outcomevariablen	Restraint numbers
Beschreibung Ergebnisse	Overall physical interventions reduced from 328 to 241 and 210 across consecutive years (2014, 2015–2016 and 2016–2017, respectively). Indeed, the 2016–2017 total would have been further reduced to 126 were it not for the perceived substantial care needs of one patient. Prone restraints reduced from 82 to 32 (2015–2016 and 2016–2017, respectively). During 2016–2017, each ward had a continuous 3-month period of no restraints and 4 months without prone restraints. Patient experience surveys (n=4591) for 2014–2017 rated overall satisfaction with care at 87%. Cambridgeshire and Peterborough NHS Foundation Trust (CPFT) reported fewer physical interventions and maintained high patient experience scores when using a five-pronged governance approach. It has a summative function to define where a team or an organisation is relative to goals and is formative in setting up the next steps relating to action, learning and future planning
Dauer Baseline/Intervention/Follow-up	2014, 2015–2016 and 2016–2017,
Funding	National Institute for Health Research (NIHR) Collaborations for Leadership in Applied Health Research and Care (CLAHRC) East of England (EoE) Programme.
Qualitätsbemerkung	Very high risk of bias
Nummer	37
Studie	Manning, T., Bell, S. B., Dawson, D., Kezbers, K., Crockett, M., & Gleason, O. (2022). The Utilization of a Rapid Agitation Scale and Treatment Protocol for Patient and Staff Safety in an Inpatient Psychiatric Setting. <i>The Psychiatric quarterly</i> , 93(3), 915–933. https://doi.org/10.1007/s1126-022-10001-y
Institution	School of Community Medicine, The University of Oklahoma, Tulsa, OK USA Oklahoma City Indian Clinic, 5208 W Reno Ave, Oklahoma City, OK USA Health Promotion Research Center, The University of Oklahoma Health Sciences Center, Stephenson Cancer Center, Oklahoma City, OK USA
Studientyp	Observational study
Kontrollgruppe ja/nein	no
Komplex ja/nein	no
Interventionstyp	Risk assessment and early interventions
n Patienten	n = 353 baseline phase, n = 389 intervention phase
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Implementation of the Modified Agitation Severity Scale (MASS)
Beschreibung Kontrolle	
Beschreibung Patienten	Patients of a high-acuity, adult psychiatric unit at a psychiatric hospital
Beschreibung Outcomevariablen	Seclusion and restraint events (both total incidents and minutes)
Beschreibung Ergebnisse	Although there was no decrease in seclusion events after implementation of the treatment protocol, there was a 44% decrease in restraint events and average restraint minutes per incident.
Dauer Baseline/Intervention/Follow-up	18 months before and after implementation
Funding	
Qualitätsbemerkung	High risk of bias
Nummer	38
Studie	Nikopaschos, F., Burrell, G., Clark, J., & Salgueiro, A. (2023). Trauma-Informed Care on mental health wards: the impact of Power Threat Meaning Framework Team Formulation and Psychological Stabilisation on self-harm and restrictive interventions. <i>Frontiers in psychology</i> , 14, 1145100. https://doi.org/10.3389/fpsyg.2023.1145100
Institution	Harrow Mental Health, Central and North West London NHS Foundation Trust (CNWL), London, United Kingdom.
Studientyp	Observational study
Kontrollgruppe ja/nein	no
Komplex ja/nein	no
Interventionstyp	Training and education program
n Patienten	n = 474 prior to the introduction of Trauma-Informed Care (TIC), n = 1813 following the introduction of TIC
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Model of trauma-informed Team Formulation, informed by the Power Threat Meaning Framework (PTMF)
Beschreibung Kontrolle	
Beschreibung Patienten	Patients admitted informally or under Section of the Mental Health Act to two adult acute wards

Beschreibung Outcomevariablen	Frequency of seclusion and restraint
Beschreibung Ergebnisse	Significant reductions were demonstrated in the monthly number of incidents of self-harm ($p < 0.01$; $r = 0.42$), seclusion ($p < 0.05$; $r = 0.30$) and restraint ($p < 0.05$; $d = 0.55$) following the introduction of TIC.
Dauer Baseline/Intervention/Follow-up	July 2017–June 2018 prior to the introduction of Trauma-Informed Care (TIC), July 2018–June 2022) following the introduction of TIC
Funding	
Qualitätsbemerkung	Very high risk of bias
Nummer	39
Studie	Nurenberg JR, Schleifer SJ, Shaffer TM et al. Animal-Assisted Therapy With Chronic Psychiatric Inpatients: Equine-Assisted Psychotherapy and Aggressive Behavior. <i>Psychiatric Services</i> 2015; 66:80–86; doi: 10.1176/appi.ps.201300524
Institution	Department of Psychiatry, Greystone Park Psychiatric Hospital, Morris Plains, New Jersey, Department of Psychiatry, Rutgers New Jersey Medical School, Newark, Department of Psychiatry, St. Elizabeths Hospital, Washington, D.C., Department of Training at Greystone Park Psychiatric Hospital, Department of Occupational Therapy at Greystone Park Psychiatric Hospital.
Studientyp	RCT
Kontrollgruppe ja/nein	yes
Komplex ja/nein	no
Interventionstyp	Psychotherapeutic services
n Patienten	90
Effekt ja/nein auf S/R	no
Beschreibung Intervention	Animal-assisted therapy (canine, equine)
Beschreibung Kontrolle	Enhanced social skills training, TAU
Beschreibung Patienten	Mean age 44, 37% were women, 61% were non-Latino Caucasian, 76% had diagnosis of schizophrenia or schizoaffective disorder, mean hospitalization length was 5.4 years!, 56% had civil commitment status or had been admitted on the basis of a finding of not guilty by reason of insanity, 63% had aggressive behavior primarily to the study
Beschreibung Outcomevariablen	Monthly seclusions or restraints, Einheit und Bezugsgröße nicht klar
Beschreibung Ergebnisse	Canine assisted (0.00 → 0.63), Equine assisted (0.21 → 0.06), Enhanced social skills (0.22 → 0.13), Regular hospital care (0.17 → 0.26), $F_{1,97} = 3.86$, $p > 0.1$
Dauer Baseline/Intervention/Follow-up	2 months preintake / 3 months postintake
Funding	Not reported
Qualitätsbemerkung	Some concerns
Nummer	40
Studie	Odgaard, A. S., Kragh, M., & Roj Larsen, E. (2018). The impact of modified mania assessment scale (MAS-M) implementation on the use of mechanical restraint in psychiatric units. <i>Nordic journal of psychiatry</i> , 72(8), 549–555. https://doi.org/10.1080/08039488.2018.1490816
Institution	Department of Affective Disorders, Q, Aarhus University Hospital, Risskov, Denmark. Department of Psychiatry, Psychiatry in the Region of Southern Denmark, Odense, Denmark. University of Southern Denmark, Institute of Clinical Research, Research Unit of Psychiatry, Odense, Denmark.
Studientyp	Comparative study
Kontrollgruppe ja/nein	yes
Komplex ja/nein	no
Interventionstyp	Risk assessment and early interventions
n Patienten	$n = 74$ scored with MAS-M, $n = 144$ not scored with MASS-M
Effekt ja/nein auf S/R	
Beschreibung Intervention	Scoring with the Danish assessment tool for psychiatric inpatients diagnosed with mania (MAS-M)
Beschreibung Kontrolle	No scoring with MASS-M
Beschreibung Patienten	Inpatients 18 years and older of psychiatry wards for affective disorders
Beschreibung Outcomevariablen	Episodes of mechanical restraints examined as binary variable (patient restrained y/n)
Beschreibung Ergebnisse	A total of 218 patients were included, 74 of whom were scored with MAS-M. Thirty-five episodes of mechanical restraint were recorded. A crude OR of 1.58 (95% CI: 0.75-3.30) of the association was estimated. The study showed a tendency toward patients scored with MAS-M being more frequently restrained with both belt and straps, however, in shorter duration, compared to the control group

Dauer Baseline/Intervention/Follow-up	2012-2015
Funding	This writing and publishing process was supported by the Department of Research, Unit Q, Aarhus University Hospital, Risskov, Denmark.
Qualitätsbemerkung	Serious risk of bias
Nummer	41
Studie	Putkonen, A., Kuivalainen, S., Louheranta, O., Repo-Tiihonen, E., Ryyänen, O.-P., Kautiainen, H., & Jari Tiihonen, B. (2013). Cluster-randomized controlled trial of reducing seclusion and restraint in secured care of men with schizophrenia. <i>Psychiatric Services</i> , 64(9), 850–855. http://dx.doi.org/10.1176/appi.ps.201200393
Institution	Department of Forensic Psychiatry, University of Eastern Finland (UEF), Kuopio. Niuvanniemi Hospital, Kuopio. Department of Clinical Neuroscience, Karolinska Institutet, Stockholm. Department of Public Health and Clinical Nutrition, Primary Health Care, UEF. Unit of Primary Health Care, Helsinki University Central Hospital. Department of General Practice, University of Helsinki in Finland.
Studientyp	RCT
Kontrollgruppe ja/nein	yes
Komplex ja/nein	yes
Interventionstyp	Complex treatment programs – Six Core Strategies
n Patienten	
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	
Beschreibung Kontrolle	
Beschreibung Patienten	Patients of four high-security wards for men with psychotic illness and a history of severe violence
Beschreibung Outcomevariablen	Incidence rate ratios (IRRs) of seclusion, restraints, or room observation days between the intervention and control wards
Beschreibung Ergebnisse	The proportion of patient-days with seclusion, restraint, or room observation declined from 30% to 15% for intervention wards (IRR=.88, 95% confidence interval [CI]=.86–.90, $p<.001$) versus from 25% to 19% for control wards (IRR=.97, CI=.93–1.01, $p=.056$). Seclusion-restraint time decreased from 110 to 56 hours per 100 patientdays for intervention wards (IRR=.85, CI=.78–.92, $p<.001$) but increased from 133 to 150 hours for control wards (IRR=1.09, CI=.94–1.25, $p=.24$). Incidence of violence decreased from 1.1% to .4% for the intervention wards and from .1% to .0% for control wards. Between-groups differences were significant for seclusion-restraint-observation days ($p=.001$) and seclusion-restraint time ($p=.001$) but not for violence ($p=.91$).
Dauer Baseline/Intervention/Follow-up	Trining for six months in applying six core strategies to prevent seclusion-restraint followed by six months of supervised intervention
Funding	
Qualitätsbemerkung	Low risk of bias
Nummer	42
Studie	Rowell, K. A., Akinbola, A., Hancock, M., Nyambayo, T., Jackson, Z., & Hunt, D. F. (2024). Reducing use of seclusion on a male medium secure forensic ward. <i>BMJ open quality</i> , 13(1), e002576. https://doi.org/10.1136/bmjopen-2023-002576
Institution	Forensic Psychology Department, Oxford Health NHS Foundation Trust, Oxford, UK kathryn.rowsell@oxfordhealth.nhs.uk. Forensic Psychology Department, Oxford Health NHS Foundation Trust, Oxford, UK. School of Psychology, University of Exeter Faculty of Health and Life Sciences, Exeter, UK.
Studientyp	Observational study
Kontrollgruppe ja/nein	no
Komplex ja/nein	yes
Interventionstyp	Complex treatment programs – Other
n Patienten	
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	A positive and safe Quality Improvement (QI) programme, focusing on reducing seclusions (frequency and/or duration) across selected wards in Oxford Health NHS Foundation Trust
Beschreibung Kontrolle	
Beschreibung Patienten	Patients of a male 15-bed secure forensic ward
Beschreibung Outcomevariablen	Duration (outcome measure) and frequency (balancing measure) of the use of seclusion
Beschreibung Ergebnisse	Our tests of change were applied over a 6-month period. During this period, we surpassed our original target of a reduction of frequency and duration by 10% and achieved a 33%

	reduction overall. Patients reported feeling safer on the ward, and the team reported improvements in relationships with patients.
Dauer Baseline/Intervention/Follow-up	Tests of change were applied over a 6-month period
Funding	
Qualitätsbemerkung	Very high risk of bias
Nummer	43
Studie	Schneeberger AR, Kowalinski E, Fröhlich D et al. Aggression and violence in psychiatric hospitals with and without open door policies: A 15-year naturalistic observation study. <i>Journal of psychiatric research</i> 2017;95:189-95.
Institution	Universitäre Psychiatrische Kliniken Basel, Universität Basel, Schweiz, Psychiatrische Dienste Graubünden, Chur, Schweiz, Albert Einstein College of Medicine, Department of Psychiatry and Behavioral Science, NY, USA, Klinik für Psychiatrie und Psychotherapie, UKE Hamburg, Deutschland, Clinical Trial Unit, Universitätsspital Basel, Schweiz, Klinik für Psychiatrie, Psychotherapie und Psychosomatik, Heidenheim, Deutschland, St. Marien—Hospital Hamm, Deutschland, Klinik für Psychiatrie und Psychotherapie, Campus Charité Mitte, Berlin, Deutschland, Montefiore Medica Center, NY, USA
Studientyp	Observational study
Kontrollgruppe ja/nein	Yes
Komplex ja/nein	no
Interventionstyp	Organizational and institutional interventions
n Patienten	Unmatched data set (with locked doors 246,195 vs. without locked doors 68,135 cases), matched data set (propensity score matching, sensitivity analysis, 63,134 vs. 63,134)
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Hospitals without locked doors
Beschreibung Kontrolle	Hospitals with locked (and unlocked) doors
Beschreibung Patienten	In the full dataset patients treated in hospitals without locked wards were on average two years older (49.1 vs. 47.5 years), more likely to be of female gender (51.5 vs. 49.1 %) and to be domiciled, living together with other people and less likely to be single. Main diagnosis were organic mental, substance use, schizophrenia spectrum, affective, neurotic and personality disorders, comorbidities were substance use and personality disorders as well as mental retardation.
Beschreibung Outcomevariablen	OR for aggressive behaviour only, bodily harm, damage to property, seclusion and restraint: Seclusion or restraint (open vs. locked hospital), Seclusion or restraint (partially locked vs. locked ward), Seclusion or restraint (open vs. locked ward)
Beschreibung Ergebnisse	OR for seclusion or restraint 0.487 (hospital type favoring hospitals without locked wards) OR for seclusion or restraint 0.647 (ward type favoring open wards, not significant for partially locked wards (OR 0.845))
Dauer Baseline/Intervention/Follow-up	14 years
Funding	Only income received from primary employers
Qualitätsbemerkung	Serious risk of bias (open vs. locked hospital), moderate risk of bias (partially locked vs. locked ward, open vs. locked ward)
Nummer	44
Studie	Shields, M. C., & Busch, A. B. (2020). The Effect of Centers for Medicare and Medicaid's Inpatient Psychiatric Facility Quality Reporting Program on the Use of Restraint and Seclusion. <i>Medical care</i> , 58(10), 889–894. https://doi.org/10.1097/MLR.0000000000001393
Institution	Center for Mental Health, Perelman School of Medicine, Leonard Davis Institute of Health Economics, McLean Hospital, Department of Health Care Policy, Harvard University
Studientyp	Clinical controlled trial
Kontrollgruppe ja/nein	No (zwei Gruppen werden verglichen, aber beide erhalten die Intervention)
Komplex ja/nein	no
Interventionstyp	Changes in legislation
n Patienten	
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	The Centers for Medicare and Medicaid's Inpatient Psychiatric Facility Quality Reporting Program=IPFQR program attempts to systematically measure and reduce restraint and seclusion. The IPFQR program is a public reporting program established by the Patient Protection and Affordable Care Act (ACA), psychiatric facilities are compelled to report on a suite of quality measures or face a 2% payment reduction.

Beschreibung Kontrolle	
Beschreibung Patienten	Psychiatric inpatients
Beschreibung Outcomevariablen	No of total patient hours in restraint/total 1000 patient days, No of total patient hours in seclusion/total 1000 patient days, probability of achieving zero hours in restraint, probability of achieving zero hours in seclusion
Beschreibung Ergebnisse	Results suggest the IPFQR program reduced duration of restraint by 48.96% (95% CI, 16.69%–68.73%) and seclusion by 53.54% (95% CI, 19.71%–73.12%). There was no change in odds of zero restraint and, among for-profits only, a decrease of 36.89% (95% CI, 9.32%–56.07%) in the odds of zero seclusion.
Dauer	
Baseline/Intervention/Follow-up	15 months / 4 years
Funding	Morgan Shields was supported by a T32 predoctoral training grant from the National Institute on Alcohol Abuse and Alcoholism (T32AA007567).
Qualitätsbemerkung	Moderate risk of bias (for duration), serious risk of bias (for zero restraint/seclusion)
Nummer	45
Studie	Sigrunarson, V., Moljord, I. E., Steinsbekk, A., Eriksen, L., & Morken, G. (2017). A randomized controlled trial comparing self-referral to inpatient treatment and treatment as usual in patients with severe mental disorders. <i>Nordic journal of psychiatry</i> , 71(2), 120–125. https://doi.org/10.1080/08039488.2016.1240231
Institution	Nidaros Community Mental Health Center, Division of Psychiatry, St. Olavs University Hospital, Trondheim, Norway. Department of Neuroscience, Faculty of Medicine, Norwegian University of Science and Technology, Trondheim, Norway. Department of Public Health and General Practice, Norwegian University of Science and Technology, Trondheim, Norway. Department of Psychiatry, St Olav University Hospital, Trondheim, Norway.
Studientyp	RCT
Kontrollgruppe ja/nein	yes
Komplex ja/nein	no
Interventionstyp	Psychotherapeutic services
n Patienten	n = 54
Effekt ja/nein auf S/R	no
Beschreibung Intervention	'Self-referral to inpatient treatment' (SRIT) for patients with severe mental disorders
Beschreibung Kontrolle	TAU
Beschreibung Patienten	Patients with severe mental disorders
Beschreibung Outcomevariablen	Patients under coercion, days under coercion
Beschreibung Ergebnisse	No significant differences were found between the two groups in days as inpatients, admissions, outpatient contacts or coercion.
Dauer	
Baseline/Intervention/Follow-up	12 months
Funding	The study was financed by St Olavs University Hospital, Trondheim, Norway.
Qualitätsbemerkung	Some concerns
Nummer	46
Studie	Steinert, T., Baumgardt, J., Bechdorf, A., Bühling-Schindowski, F., Cole, C., Flammer, E., Jaeger, S., Junghanss, J., Kampmann, M., Mahler, L., Mueche, R., Sauter, D., Vandamme, A., & Hirsch, S. (2023). Implementation of guidelines on prevention of coercion and violence (PreVCo) in psychiatry: a multicentre randomised controlled trial. <i>The Lancet regional health. Europe</i> , 35, 100770. https://doi.org/10.1016/j.lanepe.2023.100770
Institution	Ulm University, Germany. Centres for Psychiatry Suedwuerttemberg, Germany. Vivantes Klinikum am Urban, Germany. Charité Berlin University, Germany. Ulm University, Institute of Epidemiology and Medical Biometry, Germany.
Studientyp	RCT
Kontrollgruppe ja/nein	yes
Komplex ja/nein	yes
Interventionstyp	Complex treatment programs – Other
n Patienten	n = 3457 waiting list, n = 3860 intervention wards
Effekt ja/nein auf S/R	no
Beschreibung Intervention	Realization of 3 out of 12 evidence- or consensus-based implementation recommendations
Beschreibung Kontrolle	TAU (waiting list)
Beschreibung Patienten	

Beschreibung Outcomevariablen	Number of coercive measures (seclusion, restraint, forced medication) used per occupied bed and month in the final 3 months of the intervention period, cumulative duration of seclusion or restraint per occupied bed an month in the final 3 months of the intervention period
Beschreibung Ergebnisse	Neither the number of coercive measures used per month and bed nor their cumulative duration nor the number of assaults per bed and months differed significantly between the 27 intervention wards and the 27 control wards in the final 3 months of the intervention period. The median number of coercive measures used decreased by 45% (median 0.96 (IQR 1.34)–0.53 (IQR 0.59) from baseline until the end of the intervention period on the intervention wards and by 28% (median 0.98 (IQR 1.71)–0.71 (IQR 1.08) on waiting list wards.
Dauer Baseline/Intervention/Follow-up	3 months baseline, 24 months post allocation
Funding	The study was funded by the German Innovationsfonds beim Gemeinsamen Bundesausschuss (project no. 01VSF19037)
Qualitätsbemerkung	Low risk of bias
Nummer	47
Studie	Stensgaard, L., Andersen, M. K., Nordentoft, M., & Hjorthøj, C. (2018). Implementation of the safeguards model to reduce the use of coercive measures in adult psychiatric inpatient units: An interrupted time-series analysis. <i>Journal of psychiatric research</i> , 105, 147–152. https://doi.org/10.1016/j.jpsychires.2018.08.026
Institution	Copenhagen University Hospital, Mental Health Center Copenhagen, Denmark. Copenhagen University Hospital, Mental Health Center Copenhagen, Denmark.
Studientyp	Observational study
Kontrollgruppe ja/nein	no
Komplex ja/nein	yes
Interventionstyp	Complex treatment programs – Safewards model
n Patienten	
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Implementation of the Safewards model
Beschreibung Kontrolle	
Beschreibung Patienten	Patients of adult psychiatric inpatient units
Beschreibung Outcomevariablen	Overall use of coercive measures, mechanical restraint and forced sedation
Beschreibung Ergebnisse	A 2% (95% CI: 1%–4%, $p < 0.001$) decrease per quarter in the frequency of coercive measures and an 11% (95% CI: 8%–13%, $p < 0.001$) decrease per quarter in the frequency of forced sedation were found after the implementation of the Safewards model.
Dauer Baseline/Intervention/Follow-up	1/1/2012–31/3/2017
Funding	
Qualitätsbemerkung	High risk of bias
Nummer	48
Studie	Stoll, J., Westermair, A. L., Kübler, U., Reisch, T., Cattapan, K., Bridler, R., Maier, R., & Trachsel, M. (2022). A two-center pilot study on the effects of clinical ethics support on coercive measures in psychiatry. <i>BMC psychiatry</i> , 22(1), 370. https://doi.org/10.1186/s12888-022-04024-9
Institution	Institute of Biomedical Ethics and History of Medicine, University of Zurich, Zurich, Switzerland. Clinical Ethics Unit, University Hospital Basel and University Psychiatric Clinics Basel, Basel, Switzerland. Department of Psychosomatic Medicine, University Hospital and University of Basel, Basel, Switzerland. Sanatorium Kilchberg, Zurich, Switzerland. Psychiatriezentrum Münsingen, Münsingen, Switzerland. University Hospital of Psychiatry and Psychotherapy, University of Bern, Bern, Switzerland. Institute of Biomedical Ethics and History of Medicine, University of Zurich, Zurich, Switzerland. Clinical Ethics Unit, University Hospital Basel and University Psychiatric Clinics Basel, Basel, Switzerland.
Studientyp	Observational study
Kontrollgruppe ja/nein	no
Komplex ja/nein	no
Interventionstyp	Training and education program
n Patienten	
Effekt ja/nein auf S/R	yes

Beschreibung Intervention	Monthly moral case deliberation (MCD)
Beschreibung Kontrolle	
Beschreibung Patienten	Two acute wards of two different psychiatric hospitals in Switzerland. One acute ward specializing in geriatric psychiatry (> 65 years) and one open acute ward for adults specializing in psychotic disorders
Beschreibung Outcomevariablen	Patients subjected to any form of formal coercion
Beschreibung Ergebnisse	After implementation of MCD, formal coercion was less frequent (particularly seclusion, small effect size; 9.6 vs. 16.7%, $p = .034$, Cramér's $V = .105$) and less intense (particularly mechanical restraint, large effect size; 86.8 ± 45.3 vs. 14.5 ± 12.1 h, exact $p = .019$, $r = -.74$), and approval for coercive measures among healthcare practitioners was lower when controlling for the number of MCD sessions attended.
Dauer Baseline/Intervention/Follow-up	June 2019 to September 2020
Funding	Swiss Academy of Medical Sciences (SAMS)
Qualitätsbemerkung	Very high risk of bias
Nummer	49
Studie	Thomsen, C. T., Benros, M. E., Maltesen, T., Hastrup, L. H., Andersen, P. K., Giacco, D., & Nordentoft, M. (2018). Patient-controlled hospital admission for patients with severe mental disorders: a nationwide prospective multicentre study. <i>Acta psychiatrica Scandinavica</i> , 137(4), 355–363. https://doi.org/10.1111/acps.12868
Institution	Mental Health Centre Frederiksberg, Copenhagen University Hospital, Copenhagen, Denmark. Mental Health Centre Copenhagen, Copenhagen University Hospital, Copenhagen, Denmark. Department of Biostatistics, University of Copenhagen, Copenhagen, Denmark. Psychiatric Research Unit, Region Zealand, Slagelse, Denmark. Unit for Social and Community Psychiatry (World Health Organisation Collaborating Centre for Mental Health Services Development), Queen Mary University of London, London, UK.
Studientyp	Comparative study
Kontrollgruppe ja/nein	yes
Komplex ja/nein	no
Interventionstyp	Psychotherapeutic services
n Patienten	$n = 422$ intervention, $n = 2110$ control
Effekt ja/nein auf S/R	no
Beschreibung Intervention	Patient-controlled admission (PCA)
Beschreibung Kontrolle	TAU
Beschreibung Patienten	Adult psychiatric patients with severe mental disorder(s) without lack of informed consent.
Beschreibung Outcomevariablen	Use of any coercive measure (compulsory admission/involuntary detention, restraint or forced treatment)
Beschreibung Ergebnisse	No reduction in coercion (risk difference = 0.001; 95% CI: 0.038; 0.040) or self-harming behaviour (risk difference = 0.005; 95% CI: 0.008; 0.018) was observed in the PCA group compared with the TAU group. The PCA group had more in-patient bed days (mean difference = 28.4; 95% CI: 21.3; 35.5) and more medication use ($P < 0.0001$) than the TAU group. Before and after analyses showed reduction in coercion ($P = 0.0001$) and in-patient bed days ($P = 0.0003$).
Dauer Baseline/Intervention/Follow-up	2013–2016 (PCA patients during theyear after signing a contract were compared with the year before)
Funding	This project was funded by the Danish Ministry of Health and Mental Health Centre Frederiksberg.
Qualitätsbemerkung	Moderate risk of bias
Nummer	50
Studie	Välimäki, M., Lantta, T., Anttila, M., Vahlberg, T., Normand, S. L., & Yang, M. (2022). An Evidence-Based Educational Intervention for Reducing Coercive Measures in Psychiatric Hospitals: A Randomized Clinical Trial. <i>JAMA network open</i> , 5(8), e2229076. https://doi.org/10.1001/jamanetworkopen.2022.29076
Institution	Department of Nursing Science, University of Turku, Turku, Finland Xiangya Nursing School, Xiangya Research Center of Evidence-based Healthcare, Central South University, Hunan, China Now with Faculty of Health and Education, Department of Nursing, Manchester Metropolitan University, Manchester, UK Department of Biostatistics, University of Turku, Turku, Finland Department of Health Care Policy, Harvard Medical School, Boston, Massachusetts Department of Biostatistics, Harvard T.H. Chan School of Public Health, Boston, Massachusetts West China School of Public Health, Sichuan University, Chengdu, China

	Faculty of Design, Health, and Art, Swinburne University of Technology, Hawthorn, Victoria, Australia
Studientyp	RCT
Kontrollgruppe ja/nein	yes
Komplex ja/nein	no
Interventionstyp	Training and education program
n Patienten	n = 4163 intervention, n = 4186 control
Effekt ja/nein auf S/R	no
Beschreibung Intervention	VIOLIN is a multicomponent, 18-month educational intervention that aims to reduce coercive practices in psychiatric wards
Beschreibung Kontrolle	TAU
Beschreibung Patienten	Psychiatric patients 18 years or older. Hospital wards that specialized solely in forensic psychiatry, psychogeriatric care, or child and adolescent psychiatric care were excluded
Beschreibung Outcomevariablen	Occurrence of patient seclusion (events per total number of patients)
Beschreibung Ergebnisse	Of 28 psychiatric hospital wards screened (437 beds and 648 nurses), 27 wards completed the study. A total of 8349 patients were receiving care in the study wards, with 53% male patients and a mean (SD) age of 40.6 (5.7) years. The overall number of seclusions was 1209 (14.5%) in 2015 and 1349 (16.5%) in 2017. In the intervention group, the occurrence rate of seclusion at the ward level decreased by 5.3% from 629 seclusions among 4163 patients (15.1%) to 585 seclusions among 4089 patients (14.3%) compared with a 34.7% increase from 580 seclusions among 4186 patients (13.9%) to 764 seclusions among 4092 patients (18.7%) in the usual practice group. The adjusted rate ratio was 0.86 (95% CI, 0.40-1.82) in 2015 and 0.66 (95% CI, 0.31-1.41) in 2017 (P = .003). However, the number of forced injections increased in the intervention group from 317 events among 4163 patients (7.6%) in 2015 to 486 events among 4089 patients (11.9%) in 2017 compared with an increase in the usual practice group from 414 events among 4186 patients (9.9%) in 2015 to 481 events among 4092 patients (11.8%) in 2017. Seven adverse events were reported.
Dauer	May 1 to December 31, 2016: Education of staff and January 1 to October 31, 2017
Baseline/Intervention/Follow-up	maintanance period
Funding	Funded by grants 294298 and 307367 from the Academy of Finland, the Turku University Hospital, grant 13893 from State Research Funding, and grant 26003424 from University of Turku
Qualitätsbemerkung	Some concerns
Nummer	51
Studie	Van Melle, A. L., Noorthoorn, E. O., Widdershoven, G. A. M., Mulder, C. L., & Voskes, Y. (2020). Does high and intensive care reduce coercion? Association of HIC model fidelity to seclusion use in the Netherlands. BMC psychiatry, 20(1), 469. https://doi.org/10.1186/s12888-020-02855-y
Institution	Department of Medical Humanities, Medical Faculty, Amsterdam University Medical Centers, location VUmc, F-wing, De Boelelaan 1089a, 1081, HV, Amsterdam, The Netherlands. Institute for Medical Ethics and History of Medicine, Ruhr University Bochum, Bochum, Germany. GGNet Mental Health Centre, Apeldoorn, The Netherlands. Department of Medical Humanities, Medical Faculty, Amsterdam University Medical Centers, location VUmc, F-wing, De Boelelaan 1089a, 1081, HV, Amsterdam, The Netherlands. Parnassia Bavo Group, Rotterdam, The Netherlands. Erasmus Medical Center, Rotterdam, The Netherlands. Mental Healthcare Centre GGZ Breburg, Tilburg, The Netherlands. Tilburg School of Social and Behavioral Sciences, Tranzo Scientific Center for Care and Welfare, Tilburg University, Tilburg, The Netherlands.
Studientyp	Observational study
Kontrollgruppe ja/nein	no
Komplex ja/nein	no
Interventionstyp	Organizational and institutional interventions
n Patienten	
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	High and Intensive Care (HIC) focusing on hospitality at admission, care planning and risk assessment
Beschreibung Kontrolle	
Beschreibung Patienten	
Beschreibung Outcomevariablen	Frequency and time spent in seclusion and the number of times forced medication was used
Beschreibung Ergebnisse	Results showed that wards having a relatively high HIC monitor total score, indicating a high level of implementation of the model as compared to wards scoring lower on the

	monitor, had lower seclusion hours per admission hours (2.58 versus 4.20) and less forced medication events per admission days (0.0162 versus 0.0207).
Dauer Baseline/Intervention/Follow-up	2014
Funding	This study was made possible by financial support from the participating mental healthcare institutions. The funders also provided for an auditor to aid in data collection, but had no role in study design and analysis, decision to publish, or preparation of the manuscript. The national database on coercion was supported by grants 5159 and 5162 from the Dutch Ministry of Health, Welfare and Sports during 2013 and 2014.
Qualitätsbemerkung	Serious risk of bias
Nummer	52
Studie	Whitecross, F., Lee, S., Bushell, H., Kang, M., Berry, C., Hollander, Y., Sonmez, G., & Rauchberger, I. (2020). Implementing a psychiatric behaviours of concern team can reduce restrictive intervention use and improve safety in inpatient psychiatry. <i>Australasian psychiatry : bulletin of Royal Australian and New Zealand College of Psychiatrists</i> , 28(4), 401–406. https://doi.org/10.1177/1039856220917072
Institution	Alfred Health, Australia. Alfred Health, Australia; Monash Alfred Psychiatry Research Centre (MAPrc), Australia, and; Swinburne University of Technology, Australia. Alfred Health, Australia, and; Monash Alfred Psychiatry Research Centre (MAPrc), Australia.
Studientyp	Observational study
Kontrollgruppe ja/nein	no
Komplex ja/nein	no
Interventionstyp	Training and education program
n Patienten	n = 108 pre implementation, n = 89 post implementation
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Implementation of a psychiatric behaviour of concern (Psy-BOC) team
Beschreibung Kontrolle	
Beschreibung Patienten	Patients admitted to an adult inpatient psychiatry service
Beschreibung Outcomevariablen	Mean monthly seclusion episodes per 1000 occupied bed days, mean monthly seclusion hours per 1000 occupied bed days
Beschreibung Ergebnisse	In the 6-months post Psy-BOC implementation, 92 Psy-BOC responses occurred, most often for aggression episodes. When Psy-BOC responded, physical aggression episodes were less likely to use seclusion ($p=0.013$) or physical restraint ($p<0.001$) and more likely to use sensory modulation ($p=0.004$). A reduction of 23-50% in measured BOCs was also observed following Psy-BOC implementation.
Dauer Baseline/Intervention/Follow-up	6-month pre implementation, 6 months post implementation
Funding	
Qualitätsbemerkung	High risk of bias
Nummer	53
Studie	Wullschlegel, A., Berg, J., Bermpohl, F., & Montag, C. (2018). Can "Model Projects of Need-Adapted Care" Reduce Involuntary Hospital Treatment and the Use of Coercive Measures?. <i>Frontiers in psychiatry</i> , 9, 168. https://doi.org/10.3389/fpsyt.2018.00168
Institution	Department of Psychiatry and Psychotherapy, Berlin Institute of Health, Charité - Universitätsmedizin Berlin, Corporate Member of Freie Universität Berlin, Humboldt-Universität zu Berlin, Berlin, Germany.
Studientyp	Observational study
Kontrollgruppe ja/nein	no
Komplex ja/nein	no
Interventionstyp	Organizational and institutional interventions
n Patienten	n = 302
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	A model of flexible, assertive, need-adapted care. The core of the model is constituted by a specialized team, including psychiatrists, psychiatric nurses, a psychologist, a social worker, occupational and art therapists, that collectively bears the responsibility for patients and aims at a high personal and conceptual continuity of care. Treatment is not limited to acute crises and the model also allows for flexible, short and longer term multiprofessional outreach. A 24/7 phone availability is warranted.
Beschreibung Kontrolle	
Beschreibung Patienten	Patients admitted to acute wards, where coercive measures can take place and patients with drug-induced, schizophrenia spectrum, manic or bipolar psychoses.
Beschreibung Outcomevariablen	Number of patients subjected to detention and duration of detention, number of patients subject to seclusion or restraint, number of seclusions and restraints

Beschreibung Ergebnisse	Among patients treated on acute wards and patients with a diagnosis of psychosis, the number of patients subjected to provisional detention due to acute endangerment of self or others decreased significantly, as did the time spent under involuntary hospital treatment. The number of patients subjected to mechanical restraint, but not to isolation, on the ward decreased significantly, while the total number of coercive interventions remained unchanged.
Dauer	
Baseline/Intervention/Follow-up	4-year-observational period comparing the 2 years before and after inclusion
Funding	
Qualitätsbemerkung	High risk of bias
Nummer	54
Studie	Yakov, S., Birur, B., Bearden, M. F., Aguilar, B., Ghelani, K. J., & Fargason, R. E. (2018). Sensory Reduction on the General Milieu of a High-Acuity Inpatient Psychiatric Unit to Prevent Use of Physical Restraints: A Successful Open Quality Improvement Trial. <i>Journal of the American Psychiatric Nurses Association</i> , 24(2), 133–144. https://doi.org/10.1177/1078390317736136
Institution	University of Alabama at Birmingham, AL, USA.
Studientyp	Observational study
Kontrollgruppe ja/nein	no
Komplex ja/nein	no
Interventionstyp	Design of psychiatric wards
n Patienten	
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Sensory reduction interventions on a high-acuity inpatient milieu
Beschreibung Kontrolle	
Beschreibung Patienten	Patients admitted to a psychiatric intensive care unit (PICU)
Beschreibung Outcomevariablen	percentage of patient restraint hours per 1,000 patient hours during the 6-month period 1 year prior and during the 6-month period postintervention
Beschreibung Ergebnisse	Restraint rates dropped immediately following light and sound reduction interventions and by 72% at 11 months postimplementation. Mann-Whitney statistics for unpaired 6-month comparisons, 1-year pre- and postintervention showed significant reductions: Assault rates (median pre = 1.37, post = 0.18, U = 4, p = .02); Restraint rates (median pre = 0.50, post = 0.06, U = 0, p = .002).
Dauer	
Baseline/Intervention/Follow-up	6-month period 1 year prior and 6-month period postintervention
Funding	
Qualitätsbemerkung	High risk of bias
Nummer	55
Studie	Ye, J., Xia, Z., Wang, C., Liao, Y., Xu, Y., Zhang, Y., Yu, L., Li, S., Lin, J., & Xiao, A. (2021). Effectiveness of CRSCE-Based De-escalation Training on Reducing Physical Restraint in Psychiatric Hospitals: A Cluster Randomized Controlled Trial. <i>Frontiers in psychiatry</i> , 12, 576662. https://doi.org/10.3389/fpsy.2021.576662
Institution	Department of Nursing Administration, Affiliated Brain Hospital of Guangzhou Medical University (Guangzhou Huiai Hospital), Guangzhou, China. Department of Traditional Chinese Medicine, Affiliated Brain Hospital of Guangzhou Medical University (Guangzhou Huiai Hospital), Guangzhou, China. Department of Adult Psychiatry, Affiliated Brain Hospital of Guangzhou Medical University (Guangzhou Huiai Hospital), Guangzhou, China. Department of Early Intervention, Affiliated Brain Hospital of Guangzhou Medical University (Guangzhou Huiai Hospital), Guangzhou, China. Department of Cardiothoracic Surgery, Jingzhou Central Hospital, Jingzhou, China. Department of Intensive Care Unit, West China Hospital of Sichuan University, Chengdu, China.
Studientyp	RCT
Kontrollgruppe ja/nein	yes
Komplex ja/nein	no
Interventionstyp	Training and education program
n Patienten	
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	CRSCE-based de-escalation training program, aimed to reduce the use of PR, was designed with 5 modules (Communication, Response, Solution-Focused Technique, Care, and Environment)
Beschreibung Kontrolle	Routine training regarding restraint

Beschreibung Patienten	Secluded wards for mentally ill patients
Beschreibung Outcomevariablen	Frequency of and the duration of restraint
Beschreibung Ergebnisse	After CRSCE-based de-escalation training, the frequency (inpatients and patients admitted within 24 h) of and the duration of PR of experimental group, showed a descending trend and were significantly lower than those of control group ($P < 0.01$); compared to control group, the numbers of unexpected events (level II and level III) and injury caused by PR of experimental group had been markedly reduced ($P < 0.05$).
Dauer Baseline/Intervention/Follow-up	1 year
Funding	Guangdong Science of Medical Technique Program, the grant number is A2018440 and Guangzhou Health Science and Technology Project, the grant number is 20201A011046.
Qualitätsbemerkung	Some concerns
Nummer	56
Studie	Ye, J., Xiao, A., Yu, L., Guo, J., Lei, H., Wei, H., & Luo, W. (2018). Staff Training Reduces the Use of Physical Restraint in Mental Health Service, Evidence-based Reflection for China. Archives of psychiatric nursing, 32(3), 488–494. https://doi.org/10.1016/j.apnu.2017.11.028
Institution	Traditional Chinese Medicine Department, Affiliated Brain Hospital of Guangzhou Medical University, China Nursing Administration Department, Affiliated Brain Hospital of Guangzhou Medical University, China Medical Administration Department, Affiliated Brain Hospital of Guangzhou Medical University, China
Studientyp	Systematic review
Kontrollgruppe ja/nein	yes
Komplex ja/nein	no
Interventionstyp	Training and education program
n Patienten	
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Staff trainings
Beschreibung Kontrolle	
Beschreibung Patienten	Patients admitted to a psychiatric unit, a psychiatric hospital, an acute admission ward, or a mental health center
Beschreibung Outcomevariablen	Frequency of physical restraint
Beschreibung Ergebnisse	Eight studies (four randomized controlled trials and four quasi-experimental studies) published between June 2013 and May 2017 were selected. Risk ratios (RRs) with 95% confidence intervals (CIs) were used as the effect index for dichotomous variables. The standardized mean differences (SMDs) with 95% CIs were calculated as the pooled continuous effect. The outcome of meta-analysis suggested staff training reduced the duration ($IV = -0.88$; 95% CIs = -1.65 to -0.10 ; $Z = 2.22$; $p = 0.03$) and adverse effect (RR, 0.16; 95% CIs = 0.09 to 0.30; $Z = 5.96$; $p < 0.00001$) of physical restraint, but there were no statistical change in the frequency of physical restraint (RR, 0.74; 95% CIs = 0.43 to 1.28; $Z = 1.07$; $p = 0.28$). Noticeably, the result of pooled estimates from 3 RCTs suggested staff training had no effects on the incidence of physical restraint. (RR, 1.01; 95% CIs = 0.45 to 2.24; $Z = 0.02$; $p = 0.99$)
Dauer Baseline/Intervention/Follow-up	
Funding	This study was funded by the grant of Scientific Research Project of Twelfth Five-year Plan Internal Medicine of the Affiliated Brain Hospital of Guangzhou Medical University (No.GBH2014-HL07)
Qualitätsbemerkung	High risk of bias

Suche von September 2016 bis November 2024

Artike l-Nr.	Studie n-Nr.	Sub- numm er	
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Evidenztabelle

Nummer	1
Studie	Abderhalden, C.; Needham, I.; Dassen, T.; Halfens, R.; Haug, H. J.; Fischer, J. E. (2008): Structured risk assessment and violence in acute psychiatric wards: randomised controlled trial. In: The British journal of psychiatry : the journal of mental science 193 (1), S. 44–50. DOI: 10.1192/bjp.bp.107.045534.
Institution	University of Bern, Center of Psychiatry Rheinau
Studientyp	Cluster randomised controlled trial plus preference arm
Kontrollgruppe ja/nein	yes
Komplex ja/nein	no
Interventionstyp	Early Interventions// Structured Risk Assessment, BVC
n Patienten	2364
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Risk Assessment with BVC-CH, scores from 7-9 measures from a list, scores 10 or above interdisciplinary team meeting
Beschreibung Kontrolle	TAU
Beschreibung Patienten	acute psychiatric wards, psychiatric incl. Substance abuse, less personality disorders
Beschreibung Outcomevariablen	aggressive events (SOAS-R), coercive measures (dichotomous)
Beschreibung Ergebnisse	Coercive measures + 10% in control condition, -27% in intervention condition, - 60% in preference group
Dauer	
Baseline/Intervention/Follow-up	3 month baseline, 3 month intervention
Funding	Swiss National Science Foundation
Qualitätsbemerkung	no follow-up, no sample size calculation, just descriptive statistics, differences at baseline, no masking, no reporting about interventions done if risk assessment scores high

Nummer	2
Studie	Ala-Aho, S.; Hakko, H.; Saarento, O. (2003): Reduction of involuntary seclusions in a psychiatric ward. In: Duodecim; laaketieteellinen aikakauskirja 119 (20), S. 1969–1975.
Institution	Oulu University Hospital
Studientyp	Pretest-posttest-design
Kontrollgruppe ja/nein	no
Komplex ja/nein	yes
Interventionstyp	Complex
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Incidents discussed in team meetings, crises peaks linked to weekend leaves were reduced, de-escalation methods, continuous observation and structured week schedules for suicidal patients, pair of responsible nurses, personal treatment plan for every patient, better interdisciplinary interaction
Beschreibung Patienten	closed semi-acute wards, most patients suffered from psychosis

Beschreibung Outcomevariablen	Number of seclusion (mechanical restraint) events, reported by reason, month, day, time
Beschreibung Ergebnisse	No. Of restraint events decreased from 1.0% per treatment days in 1999 to 0.5 in 2000 and 0.4. in 2001.
Dauer	
Baseline/Intervention/Follow-up	2 years planning, 1 year team assessment, 2 further years complex intervention

Nummer	3
Studie	Ash, David; Suetani, Shuichi; Nair, Jayakrishnan; Halpin, Matthew (2015): Recovery-based services in a psychiatric intensive care unit - the consumer perspective. In: AUSTRALAS PSYCHIATRY 23 (5), S. 524–527. DOI: 10.1177/1039856215593397.
Institution	Central Adelaide Local Health Network
Studientyp	Pretest-posttest-design
Kontrollgruppe ja/nein	no
Komplex ja/nein	yes
Interventionstyp	Complex, Recoverybased
n Patienten	725?? (admissions)
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Recovery practices: meet and greet services, respectful communication, peer specialist, interdisciplinary team meetings, carer consultant, culturallysensitive care, collaborative care, sensory modulation, exercise facilities, group activities, safety-care plans, de-escalation strategies, debriefing, information about medication, exit-interview
Beschreibung Patienten	PICU, patients who are a risk to themselves or others, common diagnosis were schizophrenia, drug induced psychosis, mania
Beschreibung Outcomevariablen	Number of seclusion, admissions affected by seclusion, duration of seclusion events (average)
Beschreibung Ergebnisse	admissions affected by seclusion decreased from 28% in 2011-2012 to 15% in 2012-2013 ($p < 0.001$), number of seclusion decreased from 261 to 125, duration of seclusion events increased slightly from 4 to 4.2h
Dauer	
Baseline/Intervention/Follow-up	2 years during which the recovery-based interventions were introduced step by step
Funding	Not reported

Nummer	4
Studie	Belanger, S. (2001): The 'S&R challenge': reducing the use of seclusion and restraint in a state psychiatric hospital. In: Journal for healthcare quality : official publication of the National Association for Healthcare Quality 23 (1), S. 19–24.
Institution	Colorado Mental Health Institute at Pueblo
Studientyp	interrupted time series
Kontrollgruppe ja/nein	no
Komplex ja/nein	yes
Interventionstyp	Complex, S&R Challenge
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Leadership, implementing quality improvement teams, Debriefing after S/R event, new Documentation form, Training, stricter definition (time-out = seclusion, even just sitting in a chair in the dayhall),
Beschreibung Patienten	whole psychiatric hospital including adult, adolescent and forensic patients
Beschreibung Outcomevariablen	S/R hours per 1000 patient days, Number of S/R episodes, average length of S/R episodes, distribution of length of episodes
Beschreibung Ergebnisse	the number of S&R hours per 1000 patient days decreased by more than 90% (ca. 325 -> 25), episodes fell from ca. 9 to ca. 4 per day, average length of S/R episodes declined from 17.6 to 3.5 hours, high number of short episodes (< 1 hour) in adolescent unit
Dauer	
Baseline/Intervention/Follow-up	9 month baseline, 9 month intervention
Funding	not reported
Qualitätsbemerkung	unsufficient reporting about patient population, no sufficient pause between baseline and intervention data collecting

Nummer	5
Studie	Bell, A.; Gallacher, N. (2016): Succeeding in Sustained Reduction in the use of Restraint using the Improvement Model. In: BMJ quality improvement reports 5 (1). DOI: 10.1136/bmjquality.u211050.w4430.
Institution	NHS Fife Scotland
Studientyp	interrupted time series
Kontrollgruppe ja/nein	no

Komplex ja/nein	yes
Interventionstyp	Complex, PDSA Improvement model, staff patient feedback (after Scalan 2010, D'Orio et al 2007, Huckshorn 2014, Hellerstein 2007)
n Patienten	(593 occupied bed day per month)
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	policy change, data use (changing existing incident report tool), implement debriefs, training, involvement, increase the use of seated restraint, improvements were implemented in four steps (PDSA-cycles)
Beschreibung Intervention II	Staff and patient feedback
Beschreibung Patienten	acute admission ward
Beschreibung Outcomevariablen	restraints per 1000 bed days
Beschreibung Ergebnisse	Baseline (including the 4 PDSA-cycles) 4.18 restraints per 1000 patient days, after implementing staff and patient feedback 1.97 (= ca. 50% reduction)
Beschreibung sekundäre Ergebnisse	Baseline 22% of restraint incidents resulted in a staff debrief, after implementing staff and patient feedback 60%
Dauer	before baseline 1 year (bad reporting), baseline with PDSA 1-4 24 months, after implementing feedback 12 months
Baseline/Intervention/Follow-up	
Funding	Not reported
Qualitätsbemerkung	contamination due to the 4 PDSA before implementing staff and patient feedback, high variability of S/R events, insufficient reporting about patient population, no sufficient pause between baseline and intervention data collecting

Nummer	6
Studie	Blair, E. W.; Woolley, S.; Szarek, B. L.; Mucha, T. F.; Dutka, O.; Schwartz, H. I. et al. (2016): Reduction of Seclusion and Restraint in an Inpatient Psychiatric Setting: A Pilot Study. In: The Psychiatric quarterly. DOI: 10.1007/s11126-016-9428-0.
Institution	Institute of Living/Hartford Hospital, Burlingame Center for Psychiatric Research and Education/Institute of Living
Studientyp	Pretest-posttest-design
Kontrollgruppe ja/nein	no
Komplex ja/nein	yes
Interventionstyp	Complex, incl. Trauma-informed care
Untersuchungseinheit	episode of hospitalisation
n Patienten	11913?? (admissions, 3884 during baseline, 8029 during intervention)
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	routine use of BVC, education in crises intervention and trauma-informed care, increased frequency of physician reassessment of need for S/R, formal administrative review of S/R events, environmental enhancements (e.g. comfort rooms to support sensory modulation)
Beschreibung Patienten	psychiatric inpatient service of a large urban hospital, including 4.9% children < 12 y and 9.2% adults > 66 y
Beschreibung Outcomevariablen	seclusion/restraint events per 100 admissions, duration of mean seclusion and restraint events
Beschreibung Ergebnisse	statistical significant reduction in seclusion events (9.2 -> 4.4/100 = 52% reduction), not significant reduction of 6% in restraint events, significant increase in seclusion (337.7 -> 516.2 min) and restraint (286.0 -> 445.0 min) duration.
Beschreibung sekundäre Ergebnisse	Most common behavior in BVC associated with S/R irritability (96%), boisterousness (78%), verbal threats (63%), confusion (50%)
Dauer	
Baseline/Intervention/Follow-up	baseline one year, intervention period 2 years
Funding	Research Committee of the facility
Qualitätsbemerkung	insufficient reporting about patient population

Nummer	7
Studie	Murphy, Bennington-Davis (2005): Restraint and seclusion: The model for eliminating their use in healthcare.
Institution	Salem (OR) Hospital, Evolutions in Healthcare
Studientyp	interrupted time series
Kontrollgruppe ja/nein	no
Komplex ja/nein	yes
Interventionstyp	complex, engagement model
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Physical plant (new wallpaper was installed, comfortable and inviting common-room furniture replaced institutional pieces, warning or "no" signs were replaced with inspirational posters and pictures, comfort room was conceived), Staff deployment (Staff

	members were given incentives to be among patients rather than behind the counters of the nursing station or in offices, the unit paid for meals when staff members chose to eat alongside the patients, normalizing conversation during mealtimes was encouraged and adopted), Leadership and customer service (interactions among staff are as important and orchestrated as interactions between staff and patients), Language and vocabulary (Less stigmatizing, less judgmental alternatives replaced words and phrases like noncompliance, time-out, training, case management, denies, alleges, claims, and refuses), Rituals and traditions (organization became data-driven, financial and performance indicators were distributed to all staff, and the organization developed a shared vision), Community meeting for staff, physicians and patients together twice a day. Every episode of seclusion or restraint was treated as a system's issue. Staff notified the medical director and administrative director in the moment, any time, 24/7 who then apologized in person to the patient. Trauma-informed care (reduction of the revved-up autonomic nervous system, including tone of voice...), Admission process (decrease fear and anxiety, offer service rather than making demands, and put people at ease instead of increasing their need for defense), Physicians involved in the model, meetings and meals.
Beschreibung Intervention II	
Beschreibung Kontrolle	
Beschreibung Patienten	Salem Hospital is a nonprofit regional hospital with approximately 280 beds in operation. The psychiatry inpatient unit is housed in a free-standing building three blocks from the main hospital. Inpatient psychiatry is an acute adult and geriatric, locked, secure unit of 24 beds, with an average length of stay of eight days and a census that is nearly always at capacity. One-third of people admitted are experiencing their first psychiatric hospitalization. People are admitted acutely from emergency departments at Salem Hospital and other hospitals from around the state, med-surg floors, jail, therapist and physician offices, crisis centers, and directly from home or the streets. There are no exclusionary admitting criteria except for acute and active severe physical illness or acute intoxication requiring medical intervention. Primary diagnoses are schizophrenia or other psychosis and mood disorders. Of people admitted, 50% have coexisting substance abuse conditions. Payers include Medicaid, Medicare, and private insurance, and some patients have no means of payment.
Beschreibung Outcomevariablen	Seclusion events per year, annual hours of locked seclusion
Beschreibung Ergebnisse	Seclusion events fell from about 200 in 2000 to about 50 in 2001 8after implementation of Engagement Model), and further decreased to about 10 in 2002 and less than that in 2003 and 1 event in 2004 and 0 in 2005. Annual hours of locked seclusion fell from over 1400 in 2000 to about 250 in 2001, 36,9 in 2002, 2,25 in 2003 and 10 minutes in 2004.
Beschreibung sekundäre Ergebnisse	Employee injuries also decreased dramatically from over 60 in 2000 to about 30 in 2001 and 2(?) in 2005. Cost of workers compensation claims were about 5000\$ in 2001 and 2002 each and then fell to zero and remained zero.
Dauer	
Baseline/Intervention/Follow-up	6 years baseline for seclusion events, one year for annual hours, 5 years post-intervention
Funding	not reported

Nummer	8
Studie	Borckardt, J. J.; Madan, A.; Grubaugh, A. L.; Danielson, C. K.; Pelic, C. G.; Hardesty, S. J. et al. (2011): Systematic investigation of initiatives to reduce seclusion and restraint in a state psychiatric hospital. In: Psychiatric services (Washington, D.C.) 62 (5), S. 477–483. DOI: 10.1176/ps.62.5.pss6205_0477.
Institution	Medical University of South Carolina
Studientyp	interrupted time series, variable baseline design
Komplex ja/nein	yes
Interventionstyp	Complex, Engagement model
n Patienten	(89783 patient days)
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	engagement model: 1. trauma informed care , 2. languages and rules, including a team for every unit reviewing and modifying rules 3. therapeutic environment, painting, furniture, decoration etc. 4. patient involvement in treatment planning; the different steps were implemented randomly in different order in the different units
Beschreibung Intervention II	parallel AIDET to improve patient satisfaction and staff-patient communication
Beschreibung Kontrolle	
Beschreibung Patienten	high-acutely adult unit, geriatric unit, general adult unit, substance abuse unit, child and adolescent unit
Beschreibung Outcomevariablen	seclusion/restraint rate per patient day
Beschreibung Ergebnisse	A significant reduction of 82.3% (p=.008) in the rate of seclusion and restraint was observed between the baseline phase (January 2005 through February 2006) and the follow-up, postintervention phase (April 2008 through June 2008). After control for illness severity and nonspecific effects associated with an observation-only phase, changes to the physical environment were uniquely associated with a significant reduction in rate of seclusion and restraint during the intervention rollout period.

Beschreibung sekundäre Ergebnisse	patient ratings of the quality of care questionnaire improved after the interventions "environment", "involvement in treatment planning", but noch in trauma sensitivity trauma-informed care intervention, language and rules)
Dauer	
Baseline/Intervention/Follow-up	baseline 14 month, implementation phase 13 months, follow up period 3 months
Funding	none

Nummer	9
Studie	Boumans, C. E.; Egger, J. I. M.; Hutschemaekers, G. J. M. (2016): Could you please reduce your seclusion rates? To structure patient care by the methodical work approach. In: Tijdschrift voor psychiatrie 58 (2), S. 140–144.
Institution	Center for Psychosis and Substance Use Disorder, Centre for Excellence for Neuro Science/Vincent van Gogh Institute/Venray
Studientyp	Clinical Controlled trial
Kontrollgruppe ja/nein	yes
Komplex ja/nein	yes
Interventionstyp	Treatment planning with the Methodical Work Approach
n Patienten	678 (134 intervention, 544 control)
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Translation from problems into goals, search for means to reach the goals, treatment plan is set up with interdisciplinary team to match nursing and treatment plans, patient and his family, implementation of plan, evaluation readjustment
Beschreibung Intervention II	normal nursing and treatment plans, multidisciplinary team sessions
Beschreibung Patienten	combination of psychosis and substance abuse disorders, specialized intensive care for people with dangerous behaviour or non-response to treatment, almost all involuntarily, some had already been in forensic settings
Beschreibung Outcomevariablen	number of seclusion episodes per 1000 patient days, hours of seclusion per 1000 patient days, available from an electronic registration system, data available per quarter
Beschreibung Ergebnisse	the number of seclusion incidents per 1000 patient days decreased from 15 in the first quarter of the study period to three in the last quarter of the study period. The number of hours spent in seclusion by the patients of the experimental ward decreased from 934 hours/1000 patient days at the first measurement in 2008 to 62 hours/1000 patient days at the last measurement in 2010. On the control wards, the number of seclusion incidents per 1000 patient days was 11 during the first quarter of the study and 12 during the last quarter of the study. The first measurement in 2008 showed 398 hours spent in seclusion, whereas the last measurement in 2010 showed 356 hours spent in seclusion. There was a wide range, with 1016 hours spent in seclusion in the third quarter of 2009. The control wards showed no statistically-significant changes over time in the number of incidents or in the hours of seclusion. In contrast, the experimental ward differed statistically significantly from the control wards by a reduction in the number of seclusion incidents ($P < 0.01$) and a reduction in the number of seclusion hours ($P < 0.01$).
Dauer	
Baseline/Intervention/Follow-up	baseline 3 quarters, intervention 6 quarters
Funding	not reported
Qualitätsbemerkung	no randomisation, no follow-up, no sample size calculation, no masking, nothing about individual treatment plans reported, construction of a artificial control group

Nummer	10
Studie	Bowers L; Brennan G; Flood C; Lipang M; Oladapo P (2006): Preliminary outcomes of a trial to reduce conflict and containment on acute psychiatric wards: City Nurses. In: J PSYCHIATRIC MENT HEALTH NURS 13 (2), S. 165–172. DOI: 10.1111/j.1365-2850.2006.00931.x.
Institution	St. Bartholomew School of Nursing and Midwifery, City University
Studientyp	Pretest-posttest-design
Kontrollgruppe ja/nein	no
Komplex ja/nein	no
Interventionstyp	Supervision/Carer Consultant, City Nurses
n Patienten	(284 shift reports at baseline, 1315 during the intervention, this represents a response rate of 56%)
Effekt ja/nein auf S/R	no
Beschreibung Intervention	City nurses work three days per week with the team on the wards, using the working model (Positive appreciation, emotional regulation, effective structure...) to reach low-conflict, low-containment and high-nursing standards
Beschreibung Patienten	acute psychiatric wards
Beschreibung Outcomevariablen	Patient-staff Conflict Checklist Shift Report (PCC-SR, This tick box checklist is completed at the end of each shift, and consists of 21 conflict behaviour items and 9 containment measures, for which definitions

	are provided.), Ward Atmosphere Scale (WAS), Attitude to Personality Disorder Questionnaire (APDQ), Maslach Burnout Inventory (MBI), Ward Structure Questionnaire (WSQ), Interaction–Observation Checklist (IOC)
Beschreibung Ergebnisse	At the level of main outcomes, conflict significantly decreased, but containment did not. The more detailed information on individual items shows that significant falls in aggression, absconding and self-harm were achieved. There was no significant alteration in medication-related conflict. The picture in relation to general rule breaking was more mixed, with refusal to get out of bed decreasing, but refusal to attend to personal hygiene increasing. With respect to containment measures, use of intermittent observation decreased. However, a new Trust policy released in 2003 discouraged the use of intermittent observation, therefore this fall cannot be credited to the intervention. Door locking increased during the intervention. Seclusion and restraint did not change significantly.
Beschreibung sekundäre Ergebnisse	There were no significant changes in the APDQ, MBI, MSQ and WSQ before and after the intervention. The WAS showed improvements in: the amount of support patients gave to each other and staff gave to patients; the degree of autonomy and independence of patients in making their own decisions; how much patients were orientated towards leaving hospital; and how much patients were expected to be concerned with their personal problems and feelings. Interaction rates significantly altered before and after the intervention. Positive interaction between staff and patients increased from a mean rate of 0.065 to 0.139 per observation ($z=-3.19, P=0.001$), as did interactions rated as neutral (before=0.142, after=0.237, $z=-3.98, P<0.001$).
Dauer Baseline/Intervention/Follow-up	3 month baseline, 1 year intervention
Funding	Square Smile Appeal and Henry Smith Charity
Qualitätsbemerkung	many scales, tests, nothing reported about adjustment for multiple testing, vague dscription

Nummer	11
Studie	Bowers L; Flood C; Brennan G; Allan T (2008): A replication study of the city nurse intervention: reducing conflict and containment on three acute psychiatric wards. In: J PSYCHIATR MENT HEALTH NURS 15 (9), S. 737–742. DOI: 10.1111/j.1365-2850.2008.01294.x.
Institution	St. Bartholomew School of Nursing and Midwifery, City University
Studientyp	Clinical Controlled trial
Kontrollgruppe ja/nein	yes
Komplex ja/nein	no
Interventionstyp	Supervision/Carer Consultant, City Nurses
n Patienten	?? (630 shift reports during baseline on experimental and 550 on control wards, 1444 during the intervention on experimental wards and 2692 on controls, this represents a respond rate of 58%)
Effekt ja/nein auf S/R	no
Beschreibung Intervention	City nurses work three days per week with the team on the wards, using the working model (Positive appreciation, emotional regulation, effective structure...) to reach low-conflict, low-containment and high-nursing standards
Beschreibung Patienten	acute psychiatric wards
Beschreibung Outcomevariablen	Patient–staff Conflict Checklist Shift Report (PCC-SR, This tick box checklist is completed at the end of each shift, and consists of 21 conflict behaviour items and 9 containment measures, for which definitions are provided.), Ward Atmosphere Scale (WAS), Attitude to Personality Disorder Questionnaire (APDQ), Maslach Burnout Inventory (MBI), Ward Structure Questionnaire (WSQ), Interaction–Observation Checklist (IOC)
Beschreibung Ergebnisse	On the primary outcome measures of total conflict and total containment, no significant change occurred on the experimental or control wards. The majority of conflict and containment items were also unchanged.
Beschreibung sekundäre Ergebnisse	Conflict and containment events both fell significantly between during the intervention period, the former by 20% and the latter by 18%.
Dauer Baseline/Intervention/Follow-up	3 month baseline, 1 year intervention
Funding	Square Smile Appeal and Henry Smith Charity
Qualitätsbemerkung	many scales, tests, nothing reported about adjustment for multiple testing, vague dscription

Nummer	12
Studie	Cibis, M. L.; Wackerhagen, C.; Muller, S.; Lang, U. E.; Schmidt, Y.; Heinz, A. (2016): Comparison of Aggressive Behavior, Compulsory Medication and Absconding Behavior Between Open and Closed door Policy in an Acute Psychiatric Ward. In: Psychiatrische Praxis. DOI: 10.1055/s-0042-105181.
Institution	Charité, UPK Basel
Studientyp	Pretest-posttest-design, retrospektiv
Kontrollgruppe ja/nein	nein

Komplex ja/nein	no
Interventionstyp	Türöffnung
n Patienten	980, davon 163 untergebracht
Effekt ja/nein auf S/R	no
Beschreibung Intervention	Türöffnung
Beschreibung Patienten	allgemeinpsychiatrische Patienten, u-a- mit Schizophrenie, affektiver Psychose, Sucht; > 50% unfreiwillig nach PsychKG oder BGB)
Beschreibung Outcomevariablen	Entweichung, Zwangsmedikation, aggressive Übergriffe, Fixierung, besondere Sicherheitsmaßnahmen nach §29a (Isolierung)
Beschreibung Ergebnisse	Keine signifikante Reduktion von S/R
Dauer	
Baseline/Intervention/Follow-up	baseline: 8 Jahre (1995, 2002), Intervention 2 Jahre (2012, 2013)
Funding	keine Interessenskonflikte
Qualitätsbemerkung	Daten durch zwischenzeitliche Änderung des Stationskonzepts kontaminiert (bspw. Trennung Männer Frauen aufgehoben, baseline enthält nur Männer, Intervention gemischt), andere Änderungen innerhalb von fast 20 Jahren wahrscheinlich

Nummer		13
Studie	CLARKE DE; BROWN A; GRIFFITH P (2010): The Brøset Violence Checklist: clinical utility in a secure psychiatric intensive care setting. In: J PSYCHIATR MENT HEALTH NURS 17 (7), S. 614–620. DOI: 10.1111/j.1365-2850.2010.01558.x.	
Institution	University of Manitoba, Health Science Center Winnipeg	
Studientyp	interrupted time-series	
Kontrollgruppe ja/nein	no	
Komplex ja/nein	no	
Interventionstyp	Early Interventions// Structured Risk Assessment, BVC	
N Patienten	48	
Effekt ja/nein auf S/R	yes	
Beschreibung Intervention	BVC completed for each patient, each shift for the first 72h	
Beschreibung Patienten	PICU (11 beds) of an acute psychiatric ward, PICU for most unstable and dangerous patients, 40/48 were involuntarily	
Beschreibung Outcomevariablen	seclusion incidents (absolute count per month)	
Beschreibung Ergebnisse	Using a modified case study approach, use of seclusion decreased dramatically for the duration of the 3-month trial. In the 2 months before the implementation of the BVC, there was an average of 30 episodes of seclusion per month. During the trial, the rate dropped to 12 per month, while after completion of the trial, the rate again increased, but only to 22 episodes per month.	
Dauer	baseline 2 months, intervention 3months, follow-up 2 months, for follow-ups after 1 and 5 years no data for S/R	
Baseline/Intervention/Follow-up		
Funding	Workers' Compensation Board of Manitoba	
Qualitätsbemerkung	missing follow-up for seclusion an restraint data	

Nummer		14
Studie	Cummings, Kathleen S.; Grandfield, Sylvia A.; Coldwell, Craig M. (2010): Caring with comfort rooms. Reducing seclusion and restraint use in psychiatric facilities. In: Journal of psychosocial nursing and mental health services 48 (6), S. 26–30. DOI: 10.3928/02793695-20100303-02.	
Institution	New Hampshire Hospital, Concord, New Hampshire/ Edith Nourse Rogers Memorial Veterans Hospital, Bedford, Massachusetts	
Studientyp	Clinical Controlled trial	
Kontrollgruppe ja/nein	yes	
Komplex ja/nein	no	
Interventionstyp	Sensory modulation// Comfort Rooms	
Effekt ja/nein auf S/R	No (just after exclusion of high users)	
Beschreibung Intervention	light blue painted room, photo wallpaper, light dimmer, multisensory reclining chair, television, DVD, CD, calming music, books, puzzles, weighted blankets, stress balls, magazines	
Beschreibung Patienten	one unit in a big psychiatric hospital, in the hospital: adults, children, primary direct receiving facility, > 2000 involuntarily admitted people annually	
Beschreibung Outcomevariablen	frequency, duration and variance of seclusion and restraint (measures not further specified)	
Beschreibung Ergebnisse	ANOVA showed no significant changes, after excluding 11 high utilizers (2% of admissions) accounting for 15% of episodes, 14% of seclusion hours and 56% of restraint hours, SPC (statistical process control) showed decrease in frequency, duration, variation in S/R	

Beschreibung sekundäre Ergebnisse	89% of patients reported a reduction in distress, nobody an increase in distress, 88% of comfort room interventions did not progress to S/R
Dauer	
Baseline/Intervention/Follow-up	baseline plus intervention 9 months??
Funding	None
Qualitätsbemerkung	Outcome measures not specified, length of baseline and intervention period not specified, nothing about absolute episodes/durations and their relative declines, no sufficient data

Nummer	16
Studie	Donat, D. C. (1998): Impact of a mandatory behavioral consultation on seclusion/restraint utilization in a psychiatric hospital. In: Journal of behavior therapy and experimental psychiatry 29 (1), S. 13–19.
Institution	Western State Hospital, University of Virginia/School of Medicine Charlottesville
Studientyp	interrupted time-series/pre-posttest design
Kontrollgruppe ja/nein	no
Komplex ja/nein	yes
Interventionstyp	Behavioral therapy// Behavioral treatment plans
n Patienten	(inpatient census went from 319 - 245)
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Patients who exceeded the monthly criteria (a.o. 6x 72h) receive a behavioral treatment plan from the Behavior Management Committee
Beschreibung Patienten	adult psychiatric inpatients with severe and persistent psychiatric impairment in a state hospital, unclear if it is a longterm care facility
Beschreibung Outcomevariablen	mean S/R use per person
Beschreibung Ergebnisse	The data were analyzed by ANOVA utilizing a withinsubjects design with repeated measures. This analysis revealed a significant effect for the before-after condition (seclusion/restraint utilization during the 6 months after approval of the treatment plan compared to seclusion/restraint use during the 6 months prior to approval of the plan), $F(52, 1)=11.03$, $p<0.01$. There was significantly less seclusion/restraint utilization during the 6 months after approval of the plan. The analysis also revealed a significant interaction between the serial effect across months during the before period and the serial effect of months during the after period, $F(260, 5)=4.77$, $p<0.01$. The serial trend across the 6 months prior to approval of the plan was for increasing use of seclusion/restraint. The serial trend across the 6 months after approval of the treatment plan was for decreasing seclusion/restraint use.
Dauer	
Baseline/Intervention/Follow-up	6 months baseline, 6 months after implementation of the intervention
Funding	Not reported
Qualitätsbemerkung	insufficient reporting about patient population, especially setting, LOS, setting

Nummer	17
Studie	D'Orio, Barbara M.; Purselle, David; Stevens, Debbie; Garlow, Steven J. (2004): Reduction of episodes of seclusion and restraint in a psychiatric emergency service. In: Psychiatric services (Washington, D.C.) 55 (5), S. 581–583. DOI: 10.1176/appi.ps.55.5.581.
Institution	Emory University, Grady Memorial Hospital Atlanta
Studientyp	Pretest-posttest-design, retrospective
Kontrollgruppe ja/nein	no
Komplex ja/nein	yes
Interventionstyp	complex, comprehensive plan for early identification and management of problem behaviors
n Patienten	(1327 patient contacts per month, 484 were admitted to the observation area)
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	response team for behavioral emergencies, two-way radios on the wards, verbal de-escalation training, identification of prodromal behaviors with a rating scale and management with verbal de-escalation, medication, time-outs, increasing existing video surveillance
Beschreibung Patienten	Approximately 38 percent of psychiatric emergency service patients are admitted to the observation area. At any given time, there are seven to 22 patients in the observation unit. The most common diagnoses seen in psychiatric emergency services are substance use disorders (35 percent), psychotic disorders (25 percent), unipolar mood disorders (13 percent), bipolar disorders (11 percent), adjustment disorders (6 percent), and anxiety disorders (2 percent). The remaining 8 percent of the diagnoses each have an occurrence of less than 2 percent.
Beschreibung Outcomevariablen	Number of S/R episodes per month, compliance rate with performance improvement measures

Beschreibung Ergebnisse	The mean±SD for the number of episodes of seclusion and restraint per month was 65.2±9.4 before implementation and 38.1±12 after implementation ($F=28.5$, $df=1$, 16, $p<.001$), which represents a 39 percent reduction in the number of episodes of seclusion and restraint. New joint commission regulations instituted in January 2001 did not significantly alter the postintervention levels of seclusion and restraint. Implementation was associated with greater compliance with performance improvement measures for seclusion and restraint. ($F=890.5$, $df=1$, 16, $p<.001$).
Beschreibung sekundäre Ergebnisse	Before implementation, the mean monthly compliance rate was 96±.22 percent, and after implementation, it was 100±.23 percent
Dauer	
Baseline/Intervention/Follow-up	9 months baseline, 9 months after implementation of the intervention
Funding	Not reported

Nummer	18
Studie	Espinosa, L.; Harris, B.; Frank, J.; Armstrong-Muth, J.; Brous, E.; Moran, J.; Giorgi-Cipriano, J. (2015): Milieu improvement in psychiatry using evidence-based practices: the long and winding road of culture change. In: Archives of psychiatric nursing 29 (4), S. 202–207. DOI: 10.1016/j.apnu.2014.08.004.
Institution	New York-Presbyterian Hospital
Studientyp	time series
Kontrollgruppe ja/nein	no
Komplex ja/nein	yes
Interventionstyp	Complex
n Patienten	(big hospital with 350 patients)
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Interventions were multiple, including intensive multi-modal staff education based on the literature review and starting in orientation, introduction of comfort rooms, changes in debriefing practices, careful review of all seclusion and restraint episodes, introduction of integrative modalities (activities, nursing presence, early identification and management, communication, shared tea time), and careful review of all 1:1 observation and review of unit structure (vital signs later in the morning), reminders/posters on the ward.
Beschreibung Patienten	facility is treating children, adolescents and adults with a wide variety of psychiatric diagnoses on 15 separate inpatient units
Beschreibung Outcomevariablen	S/R incidents per year, patient and staff satisfaction on a 0-100% Likert Scale
Beschreibung Ergebnisse	As the most restrictive intervention, restraints declined (from 282 in 2005 to 16 in 2014), and seclusion rates increased temporarily (from 28 in 2005 to 435 in 2006) and then began to decline (to 53 in 2014). Initially we found that only 50% of the incidents were judged to have been unpreventable. Now, 6 years into the project, there are fewer than 5% in which our reviewers felt that an alternative intervention might have been successful.
Beschreibung sekundäre Ergebnisse	Patient satisfaction and staff scores have improved.
Dauer	
Baseline/Intervention/Follow-up	10 years reported, time of intervention not clear
Funding	Not reported
Qualitätsbemerkung	not reported when which interventions were implemented

Nummer	19
Studie	Fisher, W. A. (2003): Elements of successful restraint and seclusion reduction programs and their application in a large, urban, state psychiatric hospital. In: Journal of psychiatric practice 9 (1), S. 7–15.
Institution	Creedmoor Psychiatric Center
Studientyp	time series ??
Kontrollgruppe ja/nein	no
Komplex ja/nein	yes
Interventionstyp	Complex, Especially shorter duration of physicians S&R order, new training programs, new dual debriefing process
n Patienten	(Creedmoor admits approximately 50 recipients per month. The hospital operates 19 wards with a typical census of 26 recipients per ward (fewer on its Secure Care ward).)
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	the performance improvement workgroup administered an identical survey to both staff and recipients, new staff training curriculum (this curriculum put greater emphasis on increasing staff sensitivity to situations which may lead to violence and training staff in noncoercive measures of de-escalating potentially violent situations), 8-hour curriculum entitled "Creating A Respectful Environment", use of two types of post-event discussions: 1. "post-event analysis" which takes place immediately after the application of restraint or seclusion and involves the staff members who participated in the intervention along with supervisory staff who review the concrete handling of the situation while it is still fresh in their minds, look at what might have been done differently to avoid restraint or seclusion,

	and make a short-term plan to avoid a repetition of the intervention. 2. "debriefing" that includes the recipient and his or her regular treatment team and involves a more detailed behavior analysis, from both the recipient's and the team's points of view, of the events leading up to the intervention and more long-range planning to avoid a repetition of the restraint or seclusion, data usage and Benchmarking, better treatment interventions (DBT, avoid psychopharmacologic complacency, aggressive use of clozapine), reduction of physician's of S/R order duration from 4 to 2 and then 1 hour.
Beschreibung Patienten	Creedmoor's inpatient division provides intermediate and extended psychiatric hospitalization to mentally ill individuals over 18 years of age who remain dangerous to others or actively or passively dangerous to self despite acute treatment (averaging 3–6 weeks in duration) in the psychiatric units of local general hospitals. Creedmoor also admits mentally ill individuals from the New York City jail system.
Beschreibung Outcomevariablen	S/R orders per 1000 recipient days, combined hours of S/R per 1000 recipient days
Beschreibung Ergebnisse	Creedmoor experienced a 67% decline in its rate between 1999 and 2001 and went from being 46% above the average state rate to 44% below it. Since virtually 100% of recipients were spending the full 4 hours in restraint or seclusion during 1999, the decrease in combined hours of restraint and seclusion per 1,000 recipient days between 1999 and 2001 was approximately 92%.
Beschreibung sekundäre Ergebnisse	QUAL: Among the actions that substantial numbers (> 35%) of both staff and recipients felt would have a positive impact were increased staff politeness, more explanations of staff actions, fewer rules, more individualized expectations for participation in treatment activities, and the availability of more concrete de-escalation strategies (e.g., taking a shower or a walk) as opposed to verbal interventions and medication. Both staff and recipients (> 90%) endorsed the value of post-restraint debriefings in preventing repeat occurrences. A large majority of both staff and recipients (> 85%) endorsed the value of having staff, as part of their training, hear presentations from recipients who had a history of being restrained. In addition, about half of staff and recipients endorsed the value of staff experiencing restraint or seclusion as part of their training.
Dauer	
Baseline/Intervention/Follow-up	3 years observation ??
Funding	Not reported
Qualitätsbemerkung	No clear baseline, different interventions implemented step by step, contamination from former intervention-steps, where do effects come from??

Nummer		20
Studie	Fluttert, F. A.; van Meijel, B.; Nijman, H.; Bjorkly, S.; Grypdonck, M. (2010): Preventing aggressive incidents and seclusions in forensic care by means of the 'Early Recognition Method'. In: Journal of clinical nursing 19 (11-12), S. 1529–1537. DOI: 10.1111/j.1365-2702.2009.02986.x.	
Institution	Utrecht University/Department of Nursing Science, InHolland University, Radboud University, Ulleval University Hospital, Oslo	
Studientyp	one-way case-crossover design	
Interventionstyp	Early Interventions// Early Recognition Method (incl. collaborative care)	
n Patienten		168
Effekt ja/nein auf S/R	yes	
Beschreibung Intervention	ERM was conducted in 4 phases: 1. information of the patient, 2. extended list of early signs of aggression set up by the patient and his nurse-staff mentor, 3. collaborative monitoring the patient's behaviour and detecting early signs of loss of emotional equilibrium, 4. preventive actions are discussed with the patient and described in the early detection plan. When warning signs emerged, if possible, these actions were carried out to help the patient regain his self-control. ERM sessions between a patient and his staff mentor generally took approximately 30 minutes/week. The intervention was implemented as part of already existing weekly evaluations between patients and their mentors. All staff members working with patients on ERM-wards were trained (1-d-training) in applying this intervention	
Beschreibung Kontrolle	TAU	
Beschreibung Patienten	Of a total of 189 patients who were eligible to be included, 168 (88,9%) actually were involved in the intervention and 21 (11,1%) persistently refused to get involved. All of these 189 patients were males, involuntarily admitted and convicted of serious offences. The mean admission duration, as assessed in the middle of the 30 months study period, was 51 months (SD 35; range 3–176 months). main diagnosis: schizophrenia, anti-social PD, ASD, sexual deviation.	
Beschreibung Outcomevariablen	the main outcome measures were the number of seclusions and the severity of incidents that led to these seclusions, as rated on the SOAS-R	
Beschreibung Ergebnisse	For the involved patients (n = 168), a significant decrease in seclusions from 219 in TAU to 104 in ERM, [Chi-squared (1) = 22,82 p < 0,001] was found. The ERM observation period showed substantially lower aggression in comparison to the TAU period. To be more specific, the seclusion rate per patient per month decreased from a mean of 0,13 (SD 0,33, median = 0,000)–0,05 (SD 0,13, median = 0,000) (z = -4,264, p < 0,001, r = -0,23). The severity of the incidents, calculated by the incident-severity-index, decreased from 1,38 (SD 4,18, median = 0,000)–0,50 (SD 1,75, median = 0,000) (z = -4,071, p < 0,001, r = -0,22).	

Beschreibung sekundäre Ergebnisse	Significant decreases in seclusions as well as severity of incidents were also found in the following patient subgroups: patients with schizophrenia patients with anti-social personality disorder and patients with substance abuse In patients (n = 58) who in TAU, at least had one incident with a SOAS-R-severity-score of 13 or higher a significant decrease in seclusions and a significant decrease of severity of incidents was also found. Patients convicted of sexual offences, on the other hand, did not show significant improvement after participation in the intervention. The intervention resulted in a small effect size for the total sample. A medium effect size was found for the subgroup of patients with substance abuse problems. This suggests that this last subgroup may have benefited most from the intervention. Finally, we found a negative correlation between the age of the patient and the decrease of the incident-severity-index.
Dauer	
Baseline/Intervention/Follow-up	baseline: 2396 patient-months in total, post-intervention: 1995 patient-months in total
Funding	Not reported

Nummer	21
Studie	Forster, P. L.; Cavness, C.; Phelps, M. A. (1999): Staff training decreases use of seclusion and restraint in an acute psychiatric hospital. In: Archives of psychiatric nursing 13 (5), S. 269–271.
Institution	San Francisco County Community Mental Health Services, John George Psychiatry Pavillon, Gateway Psychiatric Services
Studientyp	pretest-posttest-design
Kontrollgruppe ja/nein	no
Komplex ja/nein	no
Interventionstyp	Staff training
n Patienten	(2000 admissions for inpatient treatment per year)
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Management of Assaultive Behavior workgroup (multidisciplinary committee, recommend policy changes, leadership, developing a mandatory full-day-training), Training (3 goals: increase awareness of the factors leading to patient aggression, promote knowledge about less restrictive measures, increase safe staff reactions to violence; every staff member experienced 5-point restraint, administrative personal present during the training, explain goals especially staff members safety), weekly discussion items about S/R during team meetings, hospital-wide publicity charting the ongoing process
Beschreibung Patienten	acute-psychiatric hospital: 4 locked wards, 1 emergency service, LOS decreased during the study period from 16 to 9,14
Beschreibung Outcomevariablen	number and duration of seclusion and restraint episodes, number of staff injuries incurred during physical containment
Beschreibung Ergebnisse	The total annual rate of restraint decreased 13,8% overall, from 2379 episodes per 2560 admissions in 1995, to 2380 episodes per 3010 admissions in 1996. The average duration of seclusion or seclusion and restraint per episode was reduced 54,6%, from 13,9 hours/episode in 1995 to 6,3 hours/episode in 1996. Staff injuries were reduced 18,8% from 48 incidents in 1995 to 39 in 1996.
Dauer	
Baseline/Intervention/Follow-up	1 year baseline, 1 year post-intervention
Funding	Not reported
Qualitätsbemerkung	Contamination due to other changes (LOS decreases, admissions increase), all staff injuries should have been counted, not just those linked to containment

Nummer	22
Studie	Godfrey, Jenna L.; McGill, Amanda C.; Jones, Nicole Tuomi; Oxley, Stephen L.; Carr, Robyn M. (2014): Anatomy of a transformation: a systematic effort to reduce mechanical restraints at a state psychiatric hospital. In: PSYCHIATRY SERV 65 (10), S. 1277–1280. DOI: 10.1176/appi.ps.201300247.
Institution	Central Regional Hospital, Butner, South Carolina
Studientyp	pretest-posttest-design
Kontrollgruppe ja/nein	no
Komplex ja/nein	yes
Interventionstyp	staff training and response team / policy change requires upper-management approval for S/R
n Patienten	2244
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Nonviolent Crises Intervention (NVC) training program in deescalation techniques, forming a response team to assist in crises situations
Beschreibung Intervention II	S/R requires upper-management approval
Beschreibung Patienten	acute adult unit and community transition unit
Beschreibung Outcomevariablen	patients put in S/R per patients on the unit that day, manual holds, PRN, assaults on staff or consumers

Beschreibung Ergebnisse	After implementing training and crises response teams R was reduced in both units, after the additions policy change the number of R was again decreased on the admission ward, no decrease on the CTU because R were already eliminated, R decreased by 98% on the AAU and by 100% on the CTU, CTU had not used the intervention for 559 days. S and PNR decreased on AAU and increased in CTU, assaults and injuries were reduced in both units, manual holds stayed the same).
Dauer	
Baseline/Intervention/Follow-up	1 year baseline, 1 year after 1 intervention, 1 year after 2. intervention
Funding	No competing interests
Qualitätsbemerkung	Contamination of the 2. intervention by the first

Nummer	23
Studie	Gonzalez-Torres, Miguel Angel; Fernandez-Rivas, Aranzazu; Bustamante, Sonia; Rico-Vilademoros, Fernando; Vivanco, Esther; Martinez, Karmele et al. (2014): Impact of the creation and implementation of a clinical management guideline for personality disorders in reducing use of mechanical restraints in a psychiatric inpatient unit. In: The primary care companion for CNS disorders 16 (6). DOI: 10.4088/PCC.14m01675.
Institution	University of the Basque-Country/Department of Neuroscience, Basurto University Hospital/Psychiatry Service, Granada University/Neuroscience Institute
Studientyp	Pretest-posttest-design, retrospective
Kontrollgruppe ja/nein	no
Komplex ja/nein	no
Interventionstyp	Specialized therapy for personality disorders// implementation of a guideline for the management of personality disorders
n Patienten	199 (87 baseline, 112 intervention=
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	treatment guideline focussing on cluster B disorders and follows a psychodynamic perspective, guideline was developed and implemented collaboratively with key staff, guideline focusses on treatment plans, interpersonal interaction, reduction of conflicts NOT coercive measures
Beschreibung Patienten	young inpatients with a clinical diagnosis of personality disorder, mostly cluster b/Bordeline, only a minority had a stable partner or were employed
Beschreibung Outcomevariablen	patients with restraint use, relative and absolute risk reduction
Beschreibung Ergebnisse	Restraint use was reduced from 38 of 87 patients with personality disorders (43.7%) to 3 of 112 (2.7%), for a relative risk of 0.06 (95% CI, 0.02–0.19) and an absolute risk reduction of 41% (95% CI, 29.9%–51.6%). Restraint use in patients with other diagnoses was also reduced to a similar extent.
Beschreibung Nebenwirkungen	The risk of being discharged against medical advice increased after the intervention, with a relative risk of 1.84 (95% CI, 0.96–3.51).
Dauer	
Baseline/Intervention/Follow-up	1 year baseline, 1 year post-intervention
Funding	No fundings or conflicts of interest reported.
Qualitätsbemerkung	No. Of S/R per patient and duration of S/R not reported

Nummer	24
Studie	Guzman-Parra, J.; Aguilera, Serrano C.; Garcia-Sanchez, J. A.; Pino-Benitez, I.; Alba-Vallejo, M.; Moreno-Kustner, B.; Mayoral-Cleries, F. (2016): Effectiveness of a Multimodal Intervention Program for Restraint Prevention in an Acute Spanish Psychiatric Ward. In: Journal of the American Psychiatric Nurses Association 22 (3), S. 233–241. DOI: 10.1177/1078390316644767.
Institution	University regional hospital of malaga/department of mental health, biomedical research institute of malaga
Studientyp	Pretest-posttest-design, retrospective
Kontrollgruppe ja/nein	no
Komplex ja/nein	yes
Interventionstyp	Complex, Six Core Strategies
n Patienten	(1575 admissions, 158 required mechanical restraint, 249 restraining episodes in 2 years)
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	4/6 Cores strategies: 1. Leadership and organizational changes - developing discussion groups, analyze data, review and update of the coercive-measures-protocol, reduction of frequency and duration of seclusion becomes quality indicator; 2. registration and monitoring of risk patients, 3. Nursing staff Training: de-escalation techniques and prevention (10 hours course, and weekly 1-hour-sessions), involvement of patients in the treatment program
Beschreibung Patienten	acute psychiatric ward

Beschreibung Outcomevariablen	probability of being restrained, total number of restraint and mean number of monthly incidents per 1000 patient days, mean duration of each episode of restraint, reasons for restraint
Beschreibung Ergebnisse	The probability of mechanical restraint use in a hospital admission decreased (year 2013 vs. 2012; adjusted odds ratio = .578), the total percentage of restrained patients fell from 15.07% to 9.74%, the total number of restraint hours was reduced from 2514 in 2012 to 1559 in 2013. There was a significant difference between the mean number of monthly incidents per 1000 patient days in 2012 (18.54 +8.78) and in 2013 (8.53 +7.00; P= 0.005). However the mean duration of each episode increased from 15.33 to 18.35 (p= 0.03).
Dauer	
Baseline/Intervention/Follow-up	1 year baseline, 1 year post-intervention
Funding	None

Nummer	25
Studie	Guzman-Parra, Jose; Garcia-Sanchez, Juan A.; Pino-Benitez, Isabel; Alba-Vallejo, Mercedes; Mayoral-Cleries, Fermin (2015): Effects of a Regulatory Protocol for Mechanical Restraint and Coercion in a Spanish Psychiatric Ward. In: Perspectives in psychiatric care 51 (4), S. 260–267. DOI: 10.1111/ppc.12090.
Institution	University regional hospital of malaga/department of mental health, biomedical research institute of malaga
Studientyp	Pretest-posttest-design, retrospective
Kontrollgruppe ja/nein	no
Komplex ja/nein	no
Interventionstyp	institutional changes// Regulatory Protocol for Mechanical Restraint
Effekt ja/nein auf S/R	No??
Beschreibung Intervention	every episode is registered centrally, indications for use are restricted, maximal duration 4hr, extension must be ordered by psychiatrist, nurse assessment every 15 minutes plus video monitoring instead of 30 minutes, medical assessment after 1 hour instead of 2 hours after beginning, staff received no training but written information
Beschreibung Patienten	acute psychiatric ward
Beschreibung Outcomevariablen	date and time of immobilization, reasons for restraint, patient cooperation, medication, staff involvement, time of suspending the measure, diagnosis
Beschreibung Ergebnisse	In 2005, 100 patients were restrained (accounting for 148 restraint episodes), and in 2012, a total of 82 patients were restrained (accounting for 164 restraint episodes). The percentage of patients restrained in 2005 was 18.2%, compared to 15.1% in 2012 ($\chi^2 = 1.90$, $p = .17$), with an odds ratio (OR) (2012 vs. 2005) of 0.80 (CI = 0.58–1.01; 95%). The mean duration of each mechanical restraint episode decreased from 27.91 hr in 2005 to 15.33 hr in 2012 ($Z = -0.52$, $p < .01$), and the total number of restraint hours was also reduced from 4,131 to 2,514 in 2005 and 2012, respectively. The mean of restraint episodes per patient increased from 1.5 to 2 episodes in 2012 ($Z = -2.10$, $p < .05$).
Beschreibung sekundäre Ergebnisse	In 2012, there was an increase in using medication together with mechanical restraint measures ($\chi^2 = 9.99$, $p < .01$).
Dauer	
Baseline/Intervention/Follow-up	1 year baseline, 1 year post-intervention (7 years later)
Funding	None

Nummer	26
Studie	Hamilton, Bridget; Love, Anna (2010): Reducing reliance on seclusion in acute psychiatry. In: Australian nursing journal (July 1993) 18 (3), S. 43.
Institution	St. Vincent's Mental Health (SVMH)
Studientyp	time series?? Pre-post??
Kontrollgruppe ja/nein	no
Komplex ja/nein	yes
Interventionstyp	complex, local seclusion reduction plan
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	commission of a working group, one-day-training-program "Creating Safety", changing seclusion policies, piloting a Emergency Response Team made up of senior clinicians and managers
Beschreibung Patienten	acute unit
Beschreibung Outcomevariablen	seclusion events
Beschreibung Ergebnisse	the rate of seclusion declined markedly over the course of the project, from 474 events in 2006 to 186 in 2008 and 200 in 2009
Dauer	
Baseline/Intervention/Follow-up	4 years observation?
Funding	NHMRC NICS Fellowship

Qualitätsbemerkung	unsufficient reporting about patientst, admissions, development of S/R rates over time, e.g. in 2007
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Nummer	27
Studie	Hellerstein, D. J.; Staub, A. B.; Lequesne, E. (2007): Decreasing the use of restraint and seclusion among psychiatric inpatients. In: Journal of psychiatric practice 13 (5), S. 308–317. DOI: 10.1097/01.pra.0000290669.10107.ba.
Institution	New York State Psychiatric Institute, Columbia University College of Physicians and Surgeons
Studientyp	pretest-posttest-design
Kontrollgruppe ja/nein	no
Komplex ja/nein	yes
Interventionstyp	Complex
Untersuchungseinheit	
n Patienten	
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	duration of physicians S/R order declined from 4 to 2 hours, staff training, clinical director has to evaluate all patientst with 2 or mor consecutive S/R episodes, relaxing off-unit privileges, Coping Agreement Questionnaire is filled out from patient and nurse together
Beschreibung Patienten	patients suffering from schizophrenia, schizoaffective disorder, mood disorders, anxiety disorders, substantial abuse, eating disorders, two research and one general units
Beschreibung Outcomevariablen	number of individuals secluded, restrained per number of individuals admitted during reporting unit, number of hours al clients spent in S, R per number of inpatient hours in the reporting period, patient-related staff-injury, fights/assaults, elopements
Beschreibung Ergebnisse	The number of patients placed in restraints did not change (from 0.35 ± 0.6 to 0.32 ± 0.5 patients/month), although there was a numerical (but not statistically significant) decrease in the number of hours that patients were restrained (from 1.7 ± 1.2 to 1.0 ± 2.4 hours/month). However, all seclusion variables showed a dramatic and statistically significant decrease. After September 1, 2000, the number of patients secluded dropped from 3.1 ± 1.4 to 1.0 ± 1.1 patients/month and the number of hours in seclusion dropped from 41.6 ± 52 to 2.7 ± 4.5 hours/month.
Beschreibung Nebenwirkungen	Two of the three secondary outcomes—number of elopements per month and number of patient-related staff injuries per month—demonstrated significant decreases during the course of our follow-up. There was also a numerical (although not statistically significant) decrease in fights and assaults. Elopements averaged 1.05 ± 1.2 per month in the 20 months prior to the project, 1.0 ± 0.95 per month in the first year following the implementation of the project, and then decreased to 0.58 ± 0.67 , 0.43 ± 0.67 , 0.0 ± 0 , 0.0 ± 0 , and 0.17 ± 0.39 per month in the following years after improved off-unit escort staffing.
Dauer	
Baseline/Intervention/Follow-up	20 months baseline, 67 months after starting interventions
Funding	not reported
Qualitätsbemerkung	interventions were introduced over time, no reporting about this, no clear interventions point, not reported in 1000 patient hours

Nummer	28
Studie	Hoch, Jeffrey S.; O'Reilly, Richard L.; Carscadden, Judith (2006): Relationship management therapy for patients with borderline personality disorder. In: Psychiatric services (Washington, D.C.) 57 (2), S. 179–181. DOI: 10.1176/appi.ps.57.2.179.
Institution	Center for Research on Inner City Health at St. Michael's Hospital in Toronto, Ontario, department of health policy, management and evaluation at the University of Toronto, Regional Mental Health Care in London, Ontario, Department of Psychiatry at the University of WEstern Ontario in London, Ontario
Studientyp	pretest-posttest-design, retrospective
Kontrollgruppe ja/nein	no
Komplex ja/nein	no
Interventionstyp	Specialized therapy for personality disorders// Relationship Management Therapy
n Patienten	27
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	With relationship management therapy, patients choose their own treatment, limited only by the availability of resources and by professional standards of practice. A fundamental, and perhaps counterintuitive, aspect of this type of therapy is that a patient who requests hospitalization will be admitted if a bed is available. Patients are always admitted on a voluntary status, allowed to leave if they request discharge, and given full privileges throughout their hospital stay. The model requires that patients who engage in or threaten self-harm or

	aggressive behavior are discharged from the inpatient part of the program for 24 hours, S/R are not allowed.
Beschreibung Patienten	patients aged 18-64 years, meeting DSM-IV criteria for borderline personality disorder
Beschreibung Outcomevariablen	incidents of self-harm, hours of S, R, constant nursing observation
Beschreibung Ergebnisse	No differences were seen in the mean number of hours in seclusion (from 12±34 hours in the year before enrollment to 9±36 hours in the year during enrollment). Sizeable and statistically significant differences were seen in the mean annual number of hours in restraints (from 33±135 hours to 1±3 hours; $p<.01$ for Wilcoxon signed-rank test) and constant nursing observation (from 95±342 hours to 4±14 hours; $p<.001$ for Wilcoxon's signed-rank tests). Overall, self-harm incidents declined significantly, from 2±3 per year before enrollment in the relationship management therapy program to none during the time that patients were enrolled in this program ($p<.001$ for Wilcoxon's signed-rank tests).
Dauer	at least 12 months baseline per patient, and 12 months for the intervention
Baseline/Intervention/Follow-up	Financial support from career scientist award from the ontario ministry of health and long term care
Funding	
Qualitätsbemerkung	insufficient reporting over time??

Nummer	29
Studie	Jones, D. W. (1997): Pennsylvania hospital continues to reduce seclusion and restraints. In: Joint Commission perspectives. Joint Commission on Accreditation of Healthcare Organizations 17 (2), S. 17.
Institution	Haverford State Hospital in Harverford, Penn
Studientyp	pre-post-design
Kontrollgruppe ja/nein	no
Komplex ja/nein	no
Interventionstyp	Staff training
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	The staff development instructos (leadership?) on the treatment units are reinforcing our process by education direct care staff in methods of effectively managing critical situations/aggressive behaviors (cultural change?)
Beschreibung Patienten	seriously, persistently mentally ill inpatients, longterm care?
Beschreibung Outcomevariablen	S/R patients/incidents/Hours for 1000 inpatient days
Beschreibung Ergebnisse	secluded patients (per 1000 inpatient days, 1995 vs. 1996) 0.76 -> 0.2, seclusion incidents 1.24 -> 0.20, seclusion hours 1.92 -> 0.19, restrained patients 0,78-> 0.34, restraint incidents 1.64 -> 0.45, restraint hours 3.72 -> 1.44
Dauer	
Baseline/Intervention/Follow-up	2 consecutive years during changes that happened during many years
Funding	not reported
Qualitätsbemerkung	insufficient reporting about interventions and changes, anderes Versorgungssystem (eher wie Heim??)

Nummer	30
Studie	Jonikas, J. A.; Cook, J. A.; Rosen, C.; Laris, A.; Kim, J. B. (2004): A program to reduce use of physical restraint in psychiatric inpatient facilities. In: Psychiatric services (Washington, D.C.) 55 (7), S. 818-820. DOI: 10.1176/appi.ps.55.7.818.
Institution	Department of Psychiatry at the University of Illinois at Chicago, Center on Mental Health Services Research and Policy
Studientyp	pre-post-design
Komplex ja/nein	yes
Interventionstyp	Patient interviewing, staff training
n Patienten	1910 adult patients treated during this time
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	One component of the program involved interviewing patients (in the first 24 h after intake) to determine their stress triggers and personal crisis management strategies. So patients personal strategies can be used during hospitalization if these techniques are documented before agitation or anger occurs. The second consisted of training staff members in crisis deescalation and nonviolent intervention.
Beschreibung Patienten	youths (not relevant to the review), general psychiatric unit and research unit where people generally suffer from psychotic and mood disorders.
Beschreibung Outcomevariablen	The rate was defined as the total number of patient-hours in restraints that quarter, divided by the number of patient-days (the daily patient census summed for all days of the quarter). This number was then multiplied by 24 and then by 1,000.
Beschreibung Ergebnisse	The general psychiatry unit experienced an 85 percent decrease in restraint rate one quarter after the training and a 99 percent decrease two quarters after the training. Once again the rate remained low during the final two quarters

	of the evaluation period. The clinical research unit experienced a 51 percent decrease in the restraint rate in the quarter after crisis management training and a 49 percent decrease in the quarter after nonviolent crisis intervention training. In the two quarters after both trainings had occurred, the rate declined by 98 percent and remained low (at zero) for the final two quarters.
Dauer Baseline/Intervention/Follow-up	4-5 quarters baseline, 1-2 quarters implementation of intervention, 4 quarters postintervention/follow up
Funding	This study was funded by the National Institute on Disability and Rehabilitation Research, U.S. Department of Education, and the Center for Mental Health Services, and by cooperative agreement H-133B-000700 from the Substance Abuse and Mental Health Services Administration.

Nummer	31
Studie	Jungfer, Hermann-Alexander; Schneeberger, Andres R.; Borgwardt, Stefan; Walter, Marc; Vogel, Marc; Gairing, Stefanie K. et al. (2014): Reduction of seclusion on a hospital-wide level: successful implementation of a less restrictive policy. In: Journal of psychiatric research 54, S. 94–99. DOI: 10.1016/j.jpsychires.2014.03.020.
Institution	Universitäre psychiatrische Klinik, Universitätsklinikum Hamburg-Eppendorf, Psychiatrie Dienste Graubünden
Studientyp	pre-post-design, 2 y longitudinal hospital wide observational study
Kontrollgruppe ja/nein	no
Komplex ja/nein	no
Interventionstyp	Türöffnung
n Patienten	Phase 1: 573 cases (!) on closed wards, 674 cases on closed wards that were newly opened in phase 2, 99 on open wards. Phase 2: 926 for closed wards, 353 for newly opened wards, 193 for open wards.
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Opening 2 of 4 closed wards, This step was prepared through an extensive planning period and supported by strong, constant top-down leadership. In the two previously closed wards, which were permanently opened during the study period, no specific changes concerning the therapeutic setting and/or personnel were implemented. However, in the whole hospital (open and closed wards) one-to-one care was increased in crisis situations, personnel was trained in deescalation strategies, psychotherapeutic approaches were implemented, and crisis management for suicidality and aggression was standardized.
Beschreibung Patienten	Psychiatric University Hospital with 6 general admissions wards, patients whose inpatient treatment was completed in Phase 1 or 2
Beschreibung Outcomevariablen	Change in patients subjected to seclusion and change in patients subjected to forced medication on a hospital-wide level was defined as main outcome criterion. Chi-square tests were performed to compare the percentage of seclusions and forced medications during the two analysis periods.
Beschreibung Ergebnisse	On a hospital-wide level, the percentage of patients with at least one seclusion during AP2 was significantly lower than during AP1 ($c(2(1)=5.8; p=.016$), while there was no significant change in forced medication ($c(2(1)=.08; p=.775$).
Beschreibung sekundäre Ergebnisse	On a ward-type level, there were no significant changes regarding the percentage of patients with at least one seclusion on closed (AP1: 75 (13.1%); AP2: 151 (16.3%); $c(2(1)=2.9; p=.091$) and open (AP1: 0 (0%); AP2: 4 (2.1%); $c(2(1)=2.1; p=.149$) wards. For newly opened wards, the number of patients with at least one seclusion changed significantly from 110 (15.9%) in AP1 to 1 (3%) in AP2 ($c(2(1)=59.8; p<.001$). The number of forced medications increased significantly on closed wards (AP1: 17 (3.0%); AP2: 50 (5.4%); $c(2(1)=4.9; p=.027$) and decreased significantly on newly opened wards (AP1: 34 (4.9%); AP2: 0 (0%); $c(2(1)=17.9; p<.001$). There were no significant changes regarding open wards (AP1: 0 (0%); AP2: 2 (1.0%); $c(2(1)=1.0; p=.309$).
Dauer Baseline/Intervention/Follow-up	1 year baseline, 1 year postintervention
Funding	none
Qualitätsbemerkung	contamination through the other programs, nothing reported on changed admission policies (patients not randomized)

Nummer	32
Studie	Keski-Valkama, A.; Sailas, E.; Eronen, M.; Am Koivisto; Lonnqvist, J.; Kaltiala-Heino, R. (2007): A 15-year national follow-up: legislation is not enough to reduce the use of seclusion and restraint. In: Social psychiatry and psychiatric epidemiology 42 (9), S. 747–752. DOI: 10.1007/s00127-007-0219-7.
Institution	Vanha Vaasa Hospital, National Research Center for Welfare and Health, Helsinki, Finland, Kellokoski Hospital, Tampere University, University of Helsinki...
Studientyp	repeated survey
Kontrollgruppe ja/nein	no
Komplex ja/nein	no
Interventionstyp	Legislative changes

Effekt ja/nein auf S/R	no
Beschreibung Intervention	Finland joined the European Convention of Human Rights in 1990 and implemented the fundamental rights in 1995. The restriction of patients' freedom and the use of coercion in psychiatry are regulated by the Finnish Mental Health Act. In relation to using coercion, the Finnish Mental Health Act has been revised three times during three decades so that it has become more specific each time. However, the Mental Health Acts in 1978 and in 1991 did not include explicit regulations about the seclusion and restraint practices. In practice, local instructions regulated the use of seclusion and restraint at the hospital level until the partly revised Mental Health Act went into effect in 2002. Since then, the Act has focused on regulating the use of coercive measures during inpatient care. The intent of the reform was to specify the reasons for limiting the fundamental rights of the involuntarily treated patient as well as to clarify and standardise coercive practices.
Beschreibung Patienten	patients from psychiatric hospitals in Finland
Beschreibung Outcomevariablen	Number of secluded patients, secluded patients of all psychiatric in-patients, number of restrained patients, restrained patients of all psychiatric in-patients
Beschreibung Ergebnisse	The total number of seclusion and restraint incidents during the study week was 263 in 1990, 242 in 1991, 217 in 1994, 161 in 1998 and 129 in 2004. The total number of all hospitalised patients and the total number of the secluded and restrained patients decreased, but the risk for being secluded did not change during the study time when compared to the first study year. In the use of restraint, there was a slight decrease from index year 1990 to 1991, 1998 and 2004, but no linear trend was formed.
Beschreibung sekundäre Ergebnisse	The duration of the seclusion events increased over time, the duration of restraint events did not change.
Dauer	
Baseline/Intervention/Follow-up	15 years observation period
Funding	not reported
Qualitätsbemerkung	different legislative changes put together, some of them very inconcrete, not specific for Psychiatry (e.g. human rights)

Nummer	33
Studie	Khadiji, Ali None; Patel, Raman C.; Atkinson, Angela R.; Levine, Jeffery M. (2004): Association between seclusion and restraint and patient-related violence. In: Psychiatric services (Washington, D.C.) 55 (11), S. 1311–1312. DOI: 10.1176/appi.ps.55.11.1311.
Institution	department of psychiatry at Bronx-Lebanon Hospital Center and with Albert Einstein College of Medicine
Studientyp	pre-post-design, retrospective
Kontrollgruppe ja/nein	no
Komplex ja/nein	yes
Interventionstyp	complex
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	The intervention was compatible with the mandates of JCAHO and included staff education, the addition of the history of inpatient violence to admission forms, continuous nursing monitoring to minimize the duration of episodes of seclusion and restraint, postepisode debriefing of the staff and the patient, and a review of each episode by the senior nurse and a physician. The intervention centered on early recognition of signs of agitation among patients and early clinical intervention.
Beschreibung Patienten	Patients in this hospital tend to be poor; are insured primarily through Medicaid or Medicare; tend to have severe and persistent mental illness, most often in the context of dual diagnosis; and are frequently admitted involuntarily.
Beschreibung Outcomevariablen	total number of episodes of S/R in the 12 months before and after the intervention examining the 2000 and 2001 central nursing books, episodes of violence against patients and staff and episodes of self-destructive behavior were determined from incident report files, other-directed violence was defined as any event in which there was unwanted physical contact with intent to harm
Beschreibung Ergebnisse	A significant decrease (52 percent reduction) was seen in the total number of episodes of seclusion and restraint from the 12 months before to the 12 months after the intervention ($\chi^2=37.01$, $df=2$, $p<.001$).
Beschreibung Nebenwirkungen	The number of episodes of assaults on staff increased significantly, from 31 in the preintervention period to 83 in the postintervention period ($\chi^2=31.9$ $df=2$, $p<.001$). The number of episodes of assaults on patients also increased significantly, from 67 in the preintervention period to 85 in the postintervention period ($\chi^2=5.52$ $df=2$, $p<.05$).
Dauer	
Baseline/Intervention/Follow-up	1 year baseline, 1 year post-intervention
Funding	not reported
Qualitätsbemerkung	year 2000 seems to be baseline, 2001 post-intervention, unclear in which period this complex intervention was implemented

Nummer	34
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Studie	Khazaal, Y.; Chatton, A.; Pasandin, N.; Zullino, D.; Preisig, M. (2009): Advance directives based on cognitive therapy: a way to overcome coercion related problems. In: Patient education and counseling 74 (1), S. 35–38. DOI: 10.1016/j.pec.2008.08.006.
Institution	Geneva University Hospitals; Department of Psychiatry/University Hospital Center and University of Lausanne
Studientyp	pre-post design
Kontrollgruppe ja/nein	no
Komplex ja/nein	no
Interventionstyp	Advance directives based on cognitive therapy
n Patienten	18
Effekt ja/nein auf S/R	no (not for seclusion but for hospitalization, compulsory admissions, LOS)
Beschreibung Intervention	Specific therapeutic sessions (mean = 4 sessions; S.D. = 1.6; range of 2–8) were dedicated to help patients to prepare ADs. Cognitive therapy sessions based on a Socratic exploration of what is happening attempt to enhance the patients' skill to write their ADs and to improve coping with their disorder. The intervention is divided into seven phases: (1) legal information about ADs, (2) exploration of cognitive representation of illness, (3) concerns about previous treatments including compulsory admission procedures (patients' experiences with treatments, restraint and seclusion procedures. Explore the cases in which specific measures are considered acceptable or not by the patient), (4) elaboration of long-term prevention strategies, including the conception of how to cope with prodroms of mania or depression in the future, (5) establishment of the ADs, obligatory signed and approved by the patient, (6) application of the ADs during the next crisis and (7) re-evaluation of the suitability of the ADs.
Beschreibung Patienten	12 suffering from bipolar disorder, 6 from schizophrenia, average age 40 year, 61% women, time since first contact with psychiatric services 9 years (SD 5,2 years), 22.2% active substance abuse dependence, 13 hospitalizations (SD 7.5), duration of hospitalizations 21.9 months (SD 4.3) time since the first ADs 29.2 months (SD 4.2), subjects have a past history of compulsory admissions (4.9, SD 3.4). During the year preceding ADBCT, all patients revealed non-adherence or irregular compliance to treatment. The following mood stabilizing or antipsychotic agents were prescribed prior to ADBCT: lithium (8), valproate (12), carbamazepine (1), lamotrigine (2), clozapine (3), olanzapine (6), quetiapine (4).
Beschreibung Outcomevariablen	(Hospitalizations, Compulsory admissions), days spent in a locked room, (days spent in psychiatric hospital)
Beschreibung Ergebnisse	The number of hospitalizations and compulsory admissions, as well as the number of days spent in a psychiatric hospital decreased significantly after ADs, whereas the diminution of the number of days spent in a locked room was not statistically significant.
Dauer Baseline/Intervention/Follow-up	Number and duration of psychiatric hospitalizations for a mood or a psychotic episode as well as compulsory admissions and seclusion procedures were recorded for each patient 2 years before ADBCT and during a follow-up period of at least 24 months.
Funding	not reported

Nummer	35
Studie	Laker C; Gray R; Flach C (2010): Case study evaluating the impact of de-escalation and physical intervention training. In: J PSYCHIATR MENT HEALTH NURS 17 (3), S. 222–228. DOI: 10.1111/j.1365-2850.2009.01496.x.
Institution	Health Service & Population Research Department, Institute of Psychiatry, King's College/London; Faculty of Health, Nursing and Midwifery, University of East Anglia
Studientyp	pre-post design
Kontrollgruppe ja/nein	no
Komplex ja/nein	no
Interventionstyp	Staff training
n Patienten	195 patients (96 pre and 103 post training, 3 patients available in both periods) admitted to the PICU during this timeframe and 266 incidents by 86 different service users
Effekt ja/nein auf S/R	no
Beschreibung Intervention	physical intervention training about restraint but with emphasis on prevention and de-escalation
Beschreibung Patienten	PICU-patients, majority was male and from ethnical minorities, had schizophrenia, bipolar disorder or substance dependence, some were in hospital involuntarily
Beschreibung Outcomevariablen	incident rate ratio (IRR) pre and post training, severe IRR, IRR for RT and hands on
Beschreibung Ergebnisse	1. The pre- and post-training groups were similar by the characteristics analysed. 2. The incident rates after training were not significantly lower than before training (IRR = 0.986, 95% CI = 0.75–1.29, P = 0.920). 3. The odds of a severe incident were not significantly lower after training than before training (Odds Ratio = 0.58, 95% CI 0.32–1.03, P = 0.064). 4. Adjustment for demographics made no difference to the conclusions drawn and had little impact on the estimates.
Dauer Baseline/Intervention/Follow-up	6 months baseline, 6 months after training
Funding	not reported

Qualitätsbemerkung	seclusion events not mentioned
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Nummer	36
Studie	Lewis M; Taylor K; Parks J (2009): Crisis prevention management: a program to reduce the use of seclusion and restraint in an inpatient mental health setting. In: ISSUES MENT HEALTH NURS 30 (3), S. 159–164. DOI: 10.1080/01612840802694171.
Institution	Department of Psychiatric Nursing/John Hopkins Hospital Baltimore
Studientyp	time series?, retrospective for 2004-6, prospective for 2007
Kontrollgruppe ja/nein	no
Komplex ja/nein	yes
Interventionstyp	complex, Crisis Prevention Management
n Patienten	(88 beds for psychiatric inpatients in a 900 bed hospital)
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Structured risk assessment (Phipps Aggression Screening Tool), Personal Safety Plan (including early warning symptoms, specific actions to decrease stress), Daily Safety Focused Community Meeting, Family Style Meals Program, leisure activities, staff made a concerted effort to be in patient environment rather than in nurses' station, Milieu Rounds (staff meetings to discuss patients or safety issues), expansion of yearly staff education, use the least restrictive alternative, Patient Support Sheet (incl patient's target symptoms, effective interventions, instances when it will be imperative to report to the nurse) for one-to-one observers, Comfort Carts and Comfort Rooms, patient debriefing after S/R
Beschreibung Patienten	Patients may have voluntary or involuntary status. A large percentage of the population served by the department has a comorbid Axis I substance abuse diagnosis. A significant number of patients, over 20% in the clinic, self-report a history of recent aggression including making threats or hitting someone in the hospital. Twenty percent have been secluded, restrained, or required constant observation during past hospitalizations.
Beschreibung Outcomevariablen	total hours of seclusion and restraint, seclusion and restraint per 1000 patient hours a year, repeated restraints/seclusion
Beschreibung Ergebnisse	Each unit experienced a decrease in the use of restraint ranging from 20–97%. Three of the four units had a decrease in the use of seclusion ranging from 30–63%. Seclusion and restraint per 1000 patient hours a year also decreased (at least at a hospital wide level).
Beschreibung Nebenwirkungen	There was one moderate injury, defined as requiring suturing, steristrips, fracture, or splinting, of both a staff member and a patient during an aggressive event between 2004 and 2006. There was an increase in minor injuries, requiring application of a dressing, ice, cleaning of a wound, limb elevation, or topical medication for staff. Focus groups addressing this issue felt that was due to improved reporting.
Dauer	
Baseline/Intervention/Follow-up	about 2-3 years baseline and 1-2 years post intervention
Funding	not reported
Qualitätsbemerkung	insufficient reporting of outcome data, outcomes just shown in diagrams; program pilots implemented step by step, time lag of effects

Nummer	37
Studie	Lorenzo, R. D.; Miani, F.; Formicola, V.; Ferri, P. (2014): Clinical and organizational factors related to the reduction of mechanical restraint application in an acute ward: an 8-year retrospective analysis. In: Clinical practice and epidemiology in mental health : CP & EMH 10, S. 94–102. DOI: 10.2174/1745017901410010094.
Institution	Mental Health department SPDC-Modena Centro, NOCSAE
Studientyp	retrospective analysis, Fall-Kontroll-Studie?? time series??
Kontrollgruppe ja/nein	no
Komplex ja/nein	no
Interventionstyp	institutional changes
n Patienten	305 (all restrained inpatients admitted from 1-1-2005 to 31-12-2012 = 560 cases, = 1224 restraints)
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	change of medical staff (2008), increase of nurses per shift and ward relocation in 2009, implementation of more restricted guidelines in 2011
Beschreibung Patienten	This retrospective study was conducted in the 15-bed public psychiatric ward, Servizio Psichiatrico di Diagnosi e Cura (SPDC) of Modena Centro, located in General Hospital (NOCSAE of Az-USL-Modena), where patients (catchment area of about 250,000 people) affected by acute psychiatric disorders are hospitalized in voluntary or compulsory treatment, as required by Italian Law 180. Majority of patients had schizophrenia/psychosis, organic psychosis or bipolar disorder.
Beschreibung Outcomevariablen	number of (Mechanical?) restraints
Beschreibung Ergebnisse	The number of restraints per year progressively declined during the 8-year period (Fig. 2). The reduction of restraints was statistically significantly related to all the institutional changes that occurred in the observation period: the change of medical staff in 2008 (Pearson $\chi^2 = 157.0559$, $p < .001$), the increase in nurses per shift and the ward

	relocation in 2009 (Pearson chi2 = 112.0902, p<.001) and the implementation of more restricted guidelines for restraint application in 2011 (Pearson chi2 = 157.0559, p<.001).
Dauer	
Baseline/Intervention/Follow-up	8 years observation period
Funding	none declared
Qualitätsbemerkung	retrospective, institutional changes are not described in detail

Nummer	38
Studie	Lykke, J.; Austin, S. F.; Mørch, M. M. (2008): Cognitive milieu therapy and restraint within dual diagnosis populations. In: Ugeskrift for læger 170 (5), S. 339–343.
Institution	Sct. Hans Hospital, Center for Kognitiv Terapi
Studientyp	tim-series
Kontrollgruppe ja/nein	no
Komplex ja/nein	yes
Interventionstyp	Behavioral therapy// kognitive Milieuthérapie
n Patienten	70
Effekt ja/nein auf S/R	yes (just for restraint, not for seclusion, forced medication)
Beschreibung Intervention	Kognitives milieuthérapeutisches Programm mit Psychoedukation, sozialem Kompetenztraining, kognitiver Verhaltenstherapie, Debriefing mit Personal und in der Patientengruppe (Erkennen externer und interner Auslöser für Krisensituationen und erarbeiten von Alternativen)
Beschreibung Patienten	Patienten mit Doppeldiagnose (F20-F34) plus Substanzmissbrauch Sucht (F10-19), bei denen Erkrankung so schwer ausgeprägt ist, dass aktuell stationäre Behandlung indiziert ist
Beschreibung Outcomevariablen	Anzahl der von S/R, Zwangsmed betroffenen Patienten, Anzahl von S/R, Zangsmedikationsereignissen, Anteil von stationären Patienten, die von Zwangs betroffen sind
Beschreibung Ergebnisse	Der Anteil der fixierten Patienten nahm über die Jahre signifikant ab: 2002 9,33%, 2003 9,08%, 2004 5,31 %, 2005 1,18%. Jährliche Odds ratio 0,64, p > 0.0001. Keine signifikanten Änderungen ergaben sich beim Anteil der isolierten oder zwangsmedizierten Patienten.
Dauer	
Baseline/Intervention/Follow-up	4 Jahre Beobachtungszeitraum
Funding	Not reported
Qualitätsbemerkung	sprachliche Schwierigkeiten meinerseits, da dänisch

Nummer	39
Studie	MacDonald, A. (1989): Reducing seclusion in a psychiatric hospital. In: Nursing times 85 (23), S. 58–59.
Institution	Royal Shrewsbury Hospital/Shelton
Studientyp	pre-post design, retrospective
Kontrollgruppe ja/nein	no
Komplex ja/nein	yes
Interventionstyp	Complex
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	changing ward's concept (long stay, locked -> short stay, intensive care, open), improving of staff's skills mix, introduction of a stringent seclusion policy, staff education in incident prevention strategies; phase 2: redecorating and refurbishing the ward, shifting control from doctors to nurses, a primary nursing concept (Bezugspflege??) was installed
Beschreibung Patienten	psychiatric ward (changing from a long-stay secure = locked to a short-stay intensive care = open ward)
Beschreibung Outcomevariablen	seclusion events per week
Beschreibung Ergebnisse	Seclusion went down from 22.3 seclusion events per week to 2 seclusion events per week in phase one, and continued to decrease to 0.6 events per week in phase 2
Funding	Not reported
Qualitätsbemerkung	the to phases aren't specified, when did they occur? Contamination?, the concept of the ward changed, it's not clear if patient population stayed the same

Nummer	40
Studie	Maguire, T.; Young, R.; Martin, T. (2012): Seclusion reduction in a forensic mental health setting. In: J PSYCHIATR MENT HEALTH NURS 19 (2), S. 97–106. DOI: 10.1111/j.1365-2850.2011.01753.x.
Institution	Victorian Institute for Forensic Mental Health
Studientyp	interrupted time series
Kontrollgruppe ja/nein	no

Komplex ja/nein	yes
Interventionstyp	Complex, Six Core Strategies
n Patienten	(116 beds)
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	6CS: Reduction of seclusion identified as a priority in Corporate Plan. Establishment of a project management structure that included consumer consultants, managers, clinicians and academics of all disciplines. A project officer was employed. The Seclusion Policy and Procedure was rewritten to reflect changes to practice. Staff training sessions introduced the project and the new initiatives, and during induction new recruits to the hospital were introduced to the organizational commitment to reduce seclusion. Existing management of aggression training was revised to incorporate learnings from the project and to strengthen the focus on early intervention and prevention of aggression, trauma-informed care and sensory modulation. Regular updates were provided to unit staff through newsletters, emails and team meetings. A consumer consultant was a member of the Project Management Group. Consumer consultants liaised with the Consumer Advisory Group representatives on each unit to collate personal experiences of seclusion practices. The unit community meetings were used to promote and discuss the Beacon Project and new initiatives. Patients were invited to inspect the seclusion suites with unit managers to suggest refurbishment ideas. Consumer consultants and Consumer Advisory Group were involved in development of the Safety Plan. Consumers delivered content in the staff training. Staff and patients collaborated to review the unwritten and arbitrary 'unit rules' that often are sources of conflict. Revision of the admission procedures to reflect a more therapeutic introduction to the hospital. On admission patients were no longer taken to the seclusion area to be searched – the search occurred during the required physical examination conducted by the doctor and nurse. Implementation of Safety Plans, a collaborative document completed by the patient with the staff that recorded stressors and triggers, warning signs, calming strategies, and communication and de-escalation strategies. Safety Plans focus on early intervention. Sensory approaches were introduced (aroma therapeutic sprays, massage chairs, weighted blankets and rocking chairs. Occupational therapists provided sensory assessments. Establishment of Sensory Modulation Rooms that were designed to promote emotional control and to facilitate the learning and practice of stress management. Introduction of Seclusion Plans for patients secluded for longer than 4 h. In addition to documenting the care to be delivered, the plan identified the conditions and interventions that were required to end seclusion – this allowed transparency for the patient and consistency for the clinical team. Introduction of the Structured Day to provide a coherent approach to the programmes and activities undertaken by patients and reduce boredom – a frequent contributor to aggression. Risk assessment for imminent patient aggression was strengthened through revision of the use of the Dynamic Assessment of Situation Aggression: Inpatient Version. Improved documentation of incidents with staff more clearly describing early intervention and prevention strategies, a justification for seclusion and plans for ongoing treatment of aggression. Reduction in number of seclusion rooms at the hospital – previously there were 15 seclusion rooms, perhaps reinforcing a complacent use of the rooms. Collected and distributed widely the seclusion data. Data were regularly sent to units to inform practice. Case file entries were audited to examine practice. Other data (admission patterns, staff injuries, sick leave) were also reviewed. Introduction of a seclusion review process in which a senior nurse met with the treating team to reflect on the seclusion episode and make recommendations for practice. Strengthening of the existing post-seclusion debriefing to be more than an opportunity to discuss ongoing treatment. The debriefing was to assist the patient to process the experience of seclusion.
Beschreibung Patienten	The patient population consists of male and female patients found not guilty by reason of mental impairment, sentenced and remanded prisoners, as well as patients referred from area mental health services that are deemed to be a risk to others. The most commonly identified risk for patients at TEH is interpersonal violence.
Beschreibung Outcomevariablen	seclusion events per month, patients secluded per month, total hours of seclusion per month
Beschreibung Ergebnisse	At the conclusion of the project, there was a demonstrable reduction of seclusion events and the hours of seclusion but a lesser reduction in the number of patients that were secluded. Peaks in seclusion events or hours of seclusion generally indicate the admission of a persistently aggressive patient. Peaks in numbers of patients being secluded can often indicate the presence of patients whose aggressive behaviour influences others to also be aggressive for various motivations. The reduction in the use of seclusion is evident during the Beacon Project but appears to increase post the project, but not to the pre-Beacon levels. Seclusion reduction in a forensic setting.
Dauer	
Baseline/Intervention/Follow-up	2 years baseline, 2 years intervention, 1 year follow up
Funding	Commonwealth-funded National Mental Health Seclusion and Restraint Project
Nummer	41
Studie	McCue, R. E.; Urcuyo, L.; Lilo, Y.; Tobias, T.; Chambers, M. J. (2004): Reducing restraint use in a public psychiatric inpatient service. In: The journal of behavioral health services & research 31 (2), S. 217–224.
Institution	Woodhull Medical and Mental Health Center
Studientyp	pre-post-design, prospective

Kontrollgruppe ja/nein	no
Komplex ja/nein	yes
Interventionstyp	Complex
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	better identification of restraint-prone patients, a stress/anger management group for patients (4 sessions patient education!), staff training on crisis intervention, development of crises response team, daily review of all restraints, incentive system for staff
Beschreibung Patienten	psychiatric inpatients from a economically disadvantaged urban population
Beschreibung Outcomevariablen	number of restraints; patient-to-patient assaults; patient-to-staff-assaults; suicidal acts; self-inflicted injuries per 1000 patient-days
Beschreibung Ergebnisse	There was a significant decrease in the rate of restraint use after the restraint reduction initiatives were implemented.
Beschreibung Nebenwirkungen	No change in patient-to-patient-assaults or suicide attempts, decrease in self inflicted injuries, but significant increase in patient-to-staff-assaults (but due to one peak)
Dauer	
Baseline/Intervention/Follow-up	3 years pre-intervention, 2 years post intervention
Funding	Not reported
Qualitätsbemerkung	when did the complex interventions occur? No pause between pre and post

Nummer	42
Studie	Needham, I.; Abderhalden, C.; Meer, R.; Dassen, T.; Haug, H. J.; Halfens, R. J.; Fischer, J. E. (2004): The effectiveness of two interventions in the management of patient violence in acute mental inpatient settings: report on a pilot study. In: Journal of psychiatric and mental health nursing 11 (5), S. 595–601. DOI: 10.1111/j.1365-2850.2004.00767.x.
Institution	School of Nursing/Fribourg, University of Bern, Humboldt University Berlin
Studientyp	pre-post-design, prospective
Kontrollgruppe ja/nein	no
Komplex ja/nein	no
Interventionstyp	Early Interventions// Structured Risk assessment (BVC-R), training course
n Patienten	576 patients accounting for 721 admissions and 7732 patient days (two 12-bed acute mental health care inpatient settings (one urban, one rural))
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	The risk prediction was conducted using an extended version of the Brøset Violence Checklist (BVC). The extended version – the BVC-R – requires nurses to rate six patient behaviours (confused, irritable, boisterous, verbally threatening, physically threatening and attacking objects) and to perform an overall assessment of the risk for imminent violence using a slide-rule-VAS. These combined ratings produce a score between 0 (very low risk) and 12 (high risk). All patients are consecutively assessed at admission and twice daily for the three following days. A natural frequency interpretation of the scoring results is provided comprising the following risk categories for a physical patient attack against staff: < 1 in 100 (score 0–3), 1 in 100 (score 4–6), 1 in 10 (score 7–9) and 1 in 4 patients (score 10–12). For patients obtaining scores above 7, a discussion on preventive measures used in general practice (e.g. observation, relaxation) was recommended, and for patients with scores of 10 or more, we suggested considering immediate measures after multidisciplinary discussion.
Beschreibung Intervention II	The nurses were trained in the aggression management training course. The 5-day course (35 lessons) is a skill-oriented, action-centred, and problem-oriented educational programme incorporating experiential- and knowledge-based elements such as the nature and prevalence of aggression, violence and sexual harassment, the use of aggression scales, preventive measures and strategies, de-escalation techniques, post-incident care and support, ethical aspects of violence management, and safety management. Another main element of the course is the acquisition of practical 'hands-on' skills such as holding methods, breakaway techniques, and control and restraint. The approach includes the use of a team of three persons with clearly assigned roles (similar to the unambiguous role definition in cardiac arrest resuscitation) when dealing with aggressive patients.
Beschreibung Patienten	41,3% females, mean age 38, range 15-88 years, 61,5% involuntarily, diagnosis: Schizophrenia, schizo-type and delusional disorders, mood disorders, mental and behavioral disorders due to psychoactive substance use, neurosis, personality disorders; LOS: 1-367 days (median 5, mean 11.3)
Beschreibung Outcomevariablen	aggressive events (SOAS-R), attacks against persons, coercive measures (with or without prior aggression)
Beschreibung Ergebnisse	The crude analysis including all patients and using hospitalization days as the unit of analysis showed no significant reduction in the incidence rate of aggressive events and attacks against persons from baseline over the introduction of risk prediction to training the staff. However, the rates of coercive measures per 100 hospitalization days significantly declined from 4.0, to 2.9, and to 2.3 over the three study periods (χ^2 -test $P=0.0008$, Mantel-Haenszel trend-test $P=0.0002$).
Beschreibung sekundäre Ergebnisse	It should be noted, that the two participating wards showed considerable differences as to the effects of the interventions. In one ward, we observed a significant decline in the percentage of days with occurrence of attacks against persons from 17.8%, to 13.8%, to 5.7% (trend-test $P=0.005$), while the percentage of days with implementation of coercive

	measures remained similar (trend-test $P=0.24$). On the other ward, the days with occurrence of coercive measures declined (42.2% to 28.7%, trend-test $P=0.03$), while the percentage of days with attacks against persons remained unchanged (trend-test $P=0.72$). The severity of all aggressive incidents as assessed by the SOAS-R remained unchanged across the three study periods (mean score 9.8 vs. 10.1 vs. 10.5, $P = 0.59$). The SOAS-R score of those incidents identified as attacks against persons also remained unchanged (mean 12.9 vs. 13.2 vs. 11.8, $P = 0.35$). However, the subjective perception of severity as indicated on the visual analogue scale significantly declined after the training (mean 42.3 vs. 41.5 vs. 27.8, χ^2 -test $P = 0.005$).
Dauer Baseline/Intervention/Follow-up	3 months baseline, 3 months post risk-assessment, 3 months post training (Both interventions implemented)
Funding	This study was supported by research grant BK 361/01 of the Swiss Academy of Medical Science.
Qualitätsbemerkung	units are not the same, different moderators in action?

Nummer	43
Studie	Noorthoorn, E. O.; Voskes, Y.; Janssen, W. A.; Mulder, C. L.; van de Sande, R.; Nijman, H. L. et al. (2016): Seclusion Reduction in Dutch Mental Health Care: Did Hospitals Meet Goals? In: Psychiatric services (Washington, D.C.), appips201500414. DOI: 10.1176/appi.ps.201500414.
Institution	Forensische Psychiatrie de Boog, Dutch Information Center for Coercive Measures, department of Medical Humanities, EMGO Institute for Health and Care Research/VU University Medical Center Amsterdam...
Studientyp	interrupted time series, pre post design?
Kontrollgruppe ja/nein	no
Komplex ja/nein	no
Interventionstyp	political/legislative changes
n Patienten	316064
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	In 2006, GGZ Nederland (Dutch Association of Mental Health and Addiction Care) set a seclusion reduction target of 10% per year.
Beschreibung Patienten	psychiatric inpatients
Beschreibung Outcomevariablen	seclusion incidents, patients secluded, patients secluded as percentage of those admitted, seclusion duration in hours (Mean, Median)
Beschreibung Ergebnisse	Both the seclusion rate (2008: 11.3% -> 2013: 7%) and the duration (median 2008: 92 hours -> 2013: 16 hours) of seclusion incidents decreased during this period. At the level of the individual hospital, absolute changes varied between a decrease of 93% and an increase of 112%. A greater than tenfold difference was found between hospitals in the duration of seclusion incidents per admission duration. After 2011 93% of all admitted patients were included in the register, allowing a more sound comparison, which showed a mean and median reduction in seclusion rates of 9% and a reduction in mean and median duration of seclusion hours of 8 and 32%. -> a significant decrease in seclusion incidents per 1000 admission hours
Beschreibung Nebenwirkungen	forced medication increased by 81%, -> significant increase in forced medication incidents per 1000 admission hours, the total number of coercive measures increased significantly
Dauer Baseline/Intervention/Follow-up	6 years observation period
Funding	This study was supported by grants 5159 and 5162 from the Dutch Ministry of Health, Welfare and Sports during 2013 and 2014. Between 2007 and 2012, the study was supported by several grants to each separate hospital by the Dutch Health Authority.
Qualitätsbemerkung	no complete reporting in the first years, selection bias?

Nummer	44
Studie	Novak, T.; Scanlan, J.; McCaul, D.; MacDonald, N.; Clarke, T. (2012): Pilot study of a sensory room in an acute inpatient psychiatric unit. In: Australasian psychiatry : bulletin of Royal Australian and New Zealand College of Psychiatrists 20 (5), S. 401–406. DOI: 10.1177/1039856212459585.
Institution	Missenden Psychiatric Unit, Mental Health Services, Sydney and South Western Sydney Local Health Districts, University of Sydney
Studientyp	pre-post-design
Kontrollgruppe ja/nein	no
Komplex ja/nein	no
Interventionstyp	sensory room
n Patienten	75
Effekt ja/nein auf S/R	no
Beschreibung Intervention	An existing interview room was converted into a sensory room. The design followed best practice principles and included a homely environment with scenic pictures, comfortable furnishings and a range of sensory modulation items (weighted blanket, listen to music, read magazine/book, rocking chair, scents, fitball). Staff were educated about the room

	and encouraged to offer time in the room to consumers at the first sign of distress or agitation. Over 80% of nursing and allied health staff and 40% of medical staff attended these sessions. Consumers were also routinely educated about the room and encouraged to use it when they felt distressed or needed 'time-out.'
Beschreibung Patienten	40-bed acute-psychiatric unit in the inner city of Sydney. 82,7% female, 12% Under 20 years, 64,7 20-39 years, 13.3% 40-59 years. Diagnosis: Schizophrenia/other psychoses, Manic episode or bipolar affective disorder, Depresion. Borderline, 25.3% diagnosis missing!
Beschreibung Outcomevariablen	self rated dsitress, Behavior, Episodes of Seclusion, Aggression incidents
Beschreibung Ergebnisse	No changes were noted in the rates of seclusion or aggression
Beschreibung sekundäre Ergebnisse	Changes in self rated distress and some problem behaviours (pacing, loud, irritable, intrusive, elevated, anxious). No interaction effects for gender. There were between-subjects interaction effects for medication and diagnosis and within-subjects effects of self-rated distress.
Dauer	
Baseline/Intervention/Follow-up	12 months prior to and following intervention
Funding	no conflicts of interest, funding not reported??

Nummer	45
Studie	Ohlenschlaeger, Johan; Nordentoft, Merete; Thorup, Anne; Jeppesen, Pia; Petersen, Lone; Christensen, Torben O. et al. (2008): Effect of integrated treatment on the use of coercive measures in first-episode schizophrenia-spectrum disorder. A randomized clinical trial. In: International journal of law and psychiatry 31 (1), S. 72–76. DOI: 10.1016/j.ijlp.2007.11.003.
Institution	Sct. Hans Hospital, Bisbebjerg Hospital, Psychiatric Hospital Aarhus
Studientyp	RCT
Kontrollgruppe ja/nein	yes
Komplex ja/nein	yes
Interventionstyp	integrated treatment
n Patienten	167 patients integrated treatment, 161 standard treatment
Effekt ja/nein auf S/R	no
Beschreibung Intervention	Integrated treatment consisted of assertive community treatment, psycho-educational multi-family groups, social skills training
Beschreibung Patienten	inpatients and outpatients with first-episode schizophrenia-spectrum disorder
Beschreibung Outcomevariablen	[number and duration of involuntary admission, detainment, involuntary treatment,] restraint with leather belt, straps and gloves, and number of psychical restraints/use of force, isolation (locked door), [involuntary medication with sedatives] (all measuers restriceted to use only during hospitalization)
Beschreibung Ergebnisse	No significant difference in mechanical or physical restraint between integrative and standard treatment, no statistics on seclusion applied due to small numbers
Beschreibung sekundäre Ergebnisse	other coercive measures also not significant
Dauer	
Baseline/Intervention/Follow-up	1 year
Funding	The OPUS-trial was funded by grants from The Danish Ministry of Health and The Danish Medical Research Council. The Copenhagen Hospital Corporation funded the first authour during the study period.
Qualitätsbemerkung	Secondary analysis of OPUS study??

Nummer	46
Studie	Olver, James; Love, Mervyn; Daniel, Jeffrey; Norman, Trevor; Nicholls, Daniel (2009): The impact of a changed environment on arousal levels of patients in a secure extended rehabilitation facility. In: Australasian psychiatry : bulletin of Royal Australian and New Zealand College of Psychiatrists 17 (3), S. 207–211. DOI: 10.1080/10398560902839473.
Institution	University of Melbourne, Mental Health Clinical Service Unit/Austin Health/Heidelberg/Australia
Studientyp	pre-post-design
Kontrollgruppe ja/nein	no
Komplex ja/nein	no
Interventionstyp	changes of the physical ward environment
n Patienten	15
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	moving from a temporary, refurbished medical ward to a large, light-filled, purpose built facility
Beschreibung Patienten	the majority were male (80%), had a diagnosis of schizophrenia (53%) or schizoaffective disorder (13%)

Beschreibung Outcomevariablen	seclusion episodes, extended seclusion episodes, staff report of aggressive incidents and Brief Psychiatric Rating Scale
Beschreibung Ergebnisse	There were statistically significant reductions in the mean number of seclusion episodes, (24 -> 11,7; d= 3.6) mean number of extended episodes (> 4h; 11.3 -> 4; d= 4.4) and BPRS total score following the move. There were non statistically significant reduction in aggressive incidents reported by staff. There were statistically significant increases in ambient light conditions in the new unit.
Dauer	
Baseline/Intervention/Follow-up	3 months baseline, 3 months after the move
Funding	Not reported
Qualitätsbemerkung	very few staff members participated

Nummer	47
Studie	Petrakis, M.; Penno, S.; Oxley, J.; Bloom, H.; Castle, D. (2012): Early psychosis treatment in an integrated model within an adult mental health service. In: European psychiatry : the journal of the Association of European Psychiatrists 27 (7), S. 483–488. DOI: 10.1016/j.eurpsy.2011.03.004.
Institution	St. Vincent's Mental Health Service (SVMHS), Monash University, University of Melbourne
Studientyp	comparison between a recent and a historic cohort
Komplex ja/nein	no
Interventionstyp	integrated treatment, Early Psychosis Program
n Patienten	62 (historic cohort) and 0 (recent cohort)
Effekt ja/nein auf S/R	no (not for seclusion)
Beschreibung Intervention	Early Psychosis Program: A clinical programme, utilising an integrated model of management of early psychosis clients, commenced in 2006 with dedicated consultant psychiatrist time and a project officer to carry out program establishment tasks. Over time the project officer position was replaced by a senior clinician, employed in the service to both hold a clinical load and act as a resource for secondary consult, monitoring and training of other case managers regarding work with EPP clients. Program implementation was further enhanced after the introduction of a specific early psychosis nurse in the inpatient unit setting, to support acute service staff in identification of early psychosis cases and assist in timely referral to community and completion of care pathway documentation. The consultant psychiatrist had active involvement in the development of the service-based Early Psychosis Clinical Guidelines to facilitate a clinical programme, and ensured the guidelines were updated according to current best practice. The consultant developed the clinical pathway tool in association with other staff to maintain high clinical standards within the programme, and was also involved in all modifications to the pathway tool. All case managers who saw early psychosis patients clinically reported to the early psychosis consultant, and clinically worked with the early psychosis consultant and/or early psychosis registrar. The consultant reviewed cases within programme as clinically required, and closely supervised the early psychosis registrar to provide care according to current best practice guidelines. Early engagement with the patient and family was identified as an important priority. Providing continuity, familiarity and support at an early stage throughout all settings in the health service would facilitate trust, reduce distress and trauma. A comprehensive physical examination and investigations were encouraged. This ensured appropriate review of any biological contributors to the presentation and comorbid conditions. Physical illness assessment was a focus and reinforced by other processes and protocols within the service which included physical health and metabolic monitoring. A previous study indicated that there was solid fidelity to Guidelines 2 years after the implementation of the integrated model of service delivery for an EPP within a metropolitan area mental health service.
Beschreibung Patienten	psychotic spectrum disorders, 55%/57 % male, mean age 27/31 years, range 17 /18 - 62 Years, DUP 15/24 months
Beschreibung Outcomevariablen	[Duration of untreated psychosis,] admission to hospital (incl seclusion), [CTO, Family care involvement, discharge]
Beschreibung Ergebnisse	use of seclusion declined non significantly from 22% to 15%
Funding	no conflicts of interest, funding not reported??
Qualitätsbemerkung	willkürliche Auswahl Kohorten, Zeitraum 2006-2008 wird mit Zeitpunkt (2001) verglichen, starke Veränderungen der Diagnoseverteilung, der Versorgungslandschaft, unklar auf welche Grundgesamtheit sich die Isolierungszahlen beziehen.

Nummer	48
Studie	Phillips, D.; Rudestam, K. E. (1995): Effect of nonviolent self-defense training on male psychiatric staff members' aggression and fear. In: Psychiatric services (Washington, D.C.) 46 (2), S. 164–168. DOI: 10.1176/ps.46.2.164.
Institution	Fielding institute
Studientyp	CCT
Kontrollgruppe ja/nein	yes
Komplex ja/nein	no
Interventionstyp	staff training (nonviolent self-defense skills)

n Patienten	(24 self-selected male mental health staff)
Effekt ja/nein auf S/R	yes (for the group with both didactic and physical skills training)
Beschreibung Intervention	Training using didactic materials for 4h20 minutes over 2 sessions
Beschreibung Intervention II	didactic training and physical skills training for the same total time over 2 sessions
Beschreibung Kontrolle	no training
Beschreibung Patienten	psychiatric state hospital
Beschreibung Outcomevariablen	Buss-Durkee Hostility-Guilt Inventory (Judges rated physical skills pre- and posttraining during a role play; and self-rated); number of assaults and episodes of restraint
Beschreibung Ergebnisse	Subjects in the group who received only didactic training reported that during the two-week period they were involved in 18 assaultive encounters, resulting in ten episodes of restraint and three minor staff injuries. Subjects who received both didactic and physical training reported 13 assaults, resulting in five episodes of restraint and no injuries. The group who received no training reported 15 assaults, leading to eight episodes of restraint and one staff injury. Thus subjects trained in physical and didactic skills were involved in 23 percent fewer assaults than those who received only didactic training and 20 percent fewer assaults than the control group. They reported no injuries and 50 percent fewer episodes of restraint than the didactic group and 30 percent fewer than the control group.
Beschreibung sekundäre Ergebnisse	Judges rating showed significant differences between group 2 (didactic and physical skills training) and group 1 and 3
Beschreibung Nebenwirkungen	self-rating was not different between groups
Dauer Baseline/Intervention/Follow-up	2 weeks
Funding	not reported
Qualitätsbemerkung	insufficient reporting about patients, small sample, not test statistics about coercive measures

Nummer	49
Studie	Pollard, R.; Yanasak, E. V.; Rogers, S. A.; Tapp, A. (2007): Organizational and unit factors contributing to reduction in the use of seclusion and restraint procedures on an acute psychiatric inpatient unit. In: The Psychiatric quarterly 78 (1), S. 73–81. DOI: 10.1007/s11126-006-9028-5.
Institution	VA Puget Sound Health Care System/American Lake Division/Mental Health Service; department of Psychiatry and Behavioral Science/University of Washington
Studientyp	pre-post-design
Kontrollgruppe ja/nein	no
Komplex ja/nein	no
Interventionstyp	political/legislative changes
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	The introduction of JCAHO 2000 standards for utilization of S/R occurred at month 28. This involved a series of formal and informal interventions implemented by the senior unit leadership and facility leadership, including discussions regarding alternatives to the use of S/R, exploration of staff concerns about the new standards through both informal discussion and focus groups, and positive feedback to staff from both senior unit management and facility leadership for the use of alternatives. Videotapes were also prepared, the intent of which was to serve as stimuli for discussions regarding risks of restraint, alternatives to restraint, and the senior leadership commitment to a restraint free environment. In addition, facility policies and procedures for the use of S/R were updated to reflect the emphasis on expanded leadership involvement in restraint and seclusion usage. As part of this, mental health and nursing leadership were tasked with the responsibility of reviewing all episodes of behavioral restraints for appropriateness and for meeting specified documentation requirements on an ongoing basis. In addition, the committee was tasked with identifying opportunities for improvement of care and patient safety. Aggregated and trended data were presented and discussed monthly at the facility clinical executive committee meeting.
Beschreibung Patienten	VA facility with a secured acute mental health unit that accepts voluntarily and involuntarily committed patients
Beschreibung Outcomevariablen	S/R hours per month, S/R hours per patient
Beschreibung Ergebnisse	T-test analysis revealed significantly fewer hours of restraint or seclusion in the months after the implementation of JCAHO standards compared to the months prior to this implementation, $t(44) = 4.59$, $P < .001$. Similarly, there was a significant reduction in the hours of S/R use per patient following the implementation of the new JCAHO policy, $t(44) = 4.02$, $P < .001$. Moreover, the difference in restraint or seclusion hours between the months prior to and after policy implementation remained significant even when changes in environmental variables were controlled using ANCOVA procedures, all $F_s(1,43) > 4.55$, $P_s < .05$.
Dauer Baseline/Intervention/Follow-up	28 months baseline, 18 months post-intervention

Funding	Institutional support for this study was provided by the Mental Illness Research Education and Clinical Center (MIRECC) of the VA Puget Sound Health Care System, Tacoma and Seattle, WA.
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Nummer	50
Studie	Prescott, David L.; Madden, Lynn M.; Dennis, Marilyn; Tisher, Paul; Wingate, Carrie (2007): Reducing mechanical restraints in acute psychiatric care settings using rapid response teams. In: The journal of behavioral health services & research 34 (1), S. 96–105. DOI: 10.1007/s11414-006-9036-0.
Institution	Acadia Hospital, APT Foundation Inc.
Studientyp	pre-post-design
Kontrollgruppe ja/nein	no
Komplex ja/nein	no
Interventionstyp	debriefing// Rapid response teams (= debriefing with staff)
n Patienten	(3702 patient bed days baseline, 3479 patient bed days post-intervention)
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Following any instance of mechanical restraint, a restraint response team was activated, consisting of (1) the medical director or assistant medical director, (2) the clinical supervisor, and (3) the nurse manager from the service where the restraint occurred. Within 24 h of the restraint episode, the restraint response team met with the receiving team, consisting of the restrained patient's attending physician, the charge nurse from the patient's program area, and the master's level clinician working with the patient. These consultations were specifically designed to be brief (15–20 min) and to address the question, "What can be done to reduce the likelihood that an additional restraint will occur with this patient?" No limitations were placed on potential treatment options or strategies. The response team physician had the option of writing medication orders or modifications to the treatment plan if he/she desired. As the response team was required to meet within 24 h of the restraint episode, a 7-day-a-week coverage was arranged. Members of the change team rotated a call schedule for staffing the response team on weekends and holidays. Senior-level managers had historically been present in the hospital, or available for consultation, during weekend hours and thus were involved 7 days/week. Patients were not directly involved in the team meetings. Meeting format typically involved a brief review of the restraint incident (led by the receiving team), development of hypotheses about the cause of behaviors that led to restraint (all team members), and identification of specific treatment changes that were hypothesized to reduce the likelihood of further restraints. The nurse or master's level clinician from the receiving team documented recommended changes in treatment on a one-page form developed specifically for this purpose.
Beschreibung Patienten	Acadia Hospital is a nonprofit psychiatric and chemical dependency treatment facility providing inpatient treatment, partial hospital and intensive outpatient programs, an outpatient clinic, and extensive substance abuse services (methadone clinic, wet shelter). Hospital services include 22 adult inpatient beds, 21 young adult inpatient beds, 18 adolescent inpatient beds, 18 inpatient pediatric beds, and a 14-bed observation service.
Beschreibung Outcomevariablen	total no. Of restraint, no. Of physical/mechanical restraints (per 1000 patient days), total patients receiving restraint, patients receiving physical/mechanical restraint
Beschreibung Ergebnisse	The total number of mechanical restraints declined to 36.4%, from 77 during the baseline period to 49 during the first 6 weeks of using the restraint response team. The total number of patients who received a mechanical restraint declined to a lesser degree, by 12% (25 during baseline; 21 during change phase). The number of physical restraints also decreased during the change period by 44.3% (79 during baseline; 44 during the change period). The total number of patients who received a physical restraint declined to a lesser degree, by 21.4% (28 during baseline; 22 during change phase). The number of mechanical restraints per thousand patient bed days during baseline was 20.8, and during the change period was 14.1, which is a 32.2% reduction. The number of physical restraints during baseline was 21.3 per thousand patient bed days, declining to 12.6 during the change period—a 40.8% reduction. Thus, the reduction in both types of restraints was still evident when restraints were examined in relation to total patient bed days. Although the overall rate of mechanical and physical restraints decreased during the 6-week intervention period, the number of patients receiving either a mechanical or physical restraint did not appear to significantly change. These findings seem predictable, given that the focus of the response teams was on patients who had already received at least one restraint episode, as opposed to reducing the likelihood of restraint for "high-risk" patients.
Dauer	6 weeks baseline, (1 year extended baseline), 6 weeks post-intervention
Baseline/Intervention/Follow-up	6 weeks baseline, (1 year extended baseline), 6 weeks post-intervention
Funding	not reported
Qualitätsbemerkung	short intervention, no follow up

Nummer	51
Studie	Putkonen, A.; Kuivalainen, S.; Louheranta, O.; Repo-Tiihonen, E.; Rynnanen, O. P.; Kautiainen, H.; Tiihonen, J. (2013): Cluster-randomized controlled trial of reducing seclusion and restraint in secured care of men with schizophrenia. In: Psychiatric services (Washington, D.C.) 64 (9), S. 850–855. DOI: 10.1176/appi.ps.201200393.

Institution	Department of Forensic Psychiatry/University of Eastern Finland (UEF), Niuvanniemi Hospital/Kuopio, Department of Clinical Neuroscience/Karolinska Institutet Stockholm...
Studientyp	Cluster-RCT
Kontrollgruppe ja/nein	yes
Komplex ja/nein	yes
Interventionstyp	Complex, Six Core Strategies
n Patienten	(During the intervention year, the two intervention wards accounted for 1,306–1,400 patientdays per month, with 50 beds (24 and 26 beds). The two control wards accounted for 930–1,003 patientdays per month, with 38 beds (17 and 21 beds))
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Between January and June 2009 the researchers assisted staff of the intervention wards to initiate the new practices, and they assisted again between July and December to maintain the intervention. The leaders of the intervention wards were supported with individual and group counseling (one hour per week) and in daily postevent analyses with the senior nurse or counselor (30 minutes per day). Staff critically reviewed problems, rules, and practices and received information on the risks and traumas associated with seclusion-restraint, the prevention of crises, and the new tools (one hour per week). The cultural anthropologist–psychotherapist–counselor used participation-observation methods to help the counseling processes and helped the wards to develop individual preventive strategies and alternatives to seclusion (one hour per week). The service users educated the project workers in consumer specialist meetings (one hour per week) about their own experiences with violence and coercion, individual triggers of violence, and effective calming activities. They also suggested new ways and practices to decrease fear, violence, and coercion and brainstormed with staff and doctors about the ward rules and practices during weekly community meetings (45 minutes). According to the patients' request for activities, some patients and staff volunteered to work together one hour per week on building projects in the courtyard. Because many patients and staff found it difficult to discuss their experiences of coercion and violence, they wrote, photographed, and illustrated a book together, titled Behind Locked Doors. Statistics on coercion and violence were used to guide the practices in many ways. Intervention wards used a progress sheet to record and track daily the number of seclusion/restraint incidents observed, and staff discussed the monthly figures with the senior nurse (30 minutes per month). The statistics were also discussed in the monthly steering group and at two general information meetings. Individual graphics of violence and seclusion were used in counseling and crisis planning. Crisis prevention tools were tailored with input from staff and patients to aid in individual crisis prevention, deescalation of tense situations, and coping with crises. The tools included a questionnaire of traumatic experiences and violent behavior and a list of common triggers, warning signs, calming activities, and daily activities. The individual crisis plan, which was an agreement on the calming activities to be used if the warning signs of violence appeared, was revised and developed after each crisis. Each morning the project senior nurse and cultural anthropologist–psychotherapist–counselor discussed with staff the violent incidents that occurred and reported on the practices, restrictions, and alternative methods used, according to the postevent analysis sheet. These meetings identified and praised successful interventions and otherwise helped the staff to improve their practices.
Beschreibung Kontrolle	TAU
Beschreibung Patienten	About 86% of the inpatients were men, 97% of whom had schizophrenia spectrum disorder or a delusional disorder. The patients having the highest risk for violence and seclusion were admitted to the highsecurity wards that had the highest staff-to-patient ratios. Practically all patients used second-generation antipsychotics—primarily clozapine—and many received antiepileptics and mood stabilizers as adjuvants. In the four high-security units, with the exception of a small number of Asians, the clients were Finnish-speaking Caucasians. The mean±SD age of the patients was 40.26±10.6 in the intervention cluster and 38.46±10.6 years in the control cluster.
Beschreibung Outcomevariablen	The monthly incidence rate ratios (IRRs) between the intervention and control wards during the stabilized intervention (between July and December 2009) consisted of the following three parameters, all divided into 100 patient-days: seclusion, restraints, or room observation days (the number of patient-days when any seclusion/restraint or room observation was used); seclusion-restraint time (the patient-hours spent in seclusion or restraint); and violence (the number of incidents of physical violence against any person, including selfharm). In addition, the number of injuries to patients and staff during the intervention year was compared with data for the previous year.
Beschreibung Ergebnisse	Seclusion-restraint and observation days decreased during the supported intervention from 30% to 15% of the total patient time for intervention wards (IRR over time=.88, CI=.86–.90, p=.001) versus a decrease from 25% to 19% for control wards (IRR=.97, CI=.93–1.01, p=.056). The difference between the groups was significant (p=.001), despite the significantly lower rate in December than in July for both intervention wards (IRR=.51, CI=.43–.60, p=.001) and control wards (IRR=.77, CI=.63–.94, p=.009). Seclusion-restraint time decreased from 110 to 56 hours per 100 patientdays for intervention wards (IRR over time=.85, CI=.78–.92, p=.001), yet increased from 133 to 150 hours for control wards (IRR=1.09, CI=.94–1.25, p=.24). The difference between the groups was significant (p=.001). The difference between July and December was significant for intervention wards (IRR=1.14, CI=1.05–1.23, p=.001) and for control wards (IRR=.77, CI=.63–.94, p=.001). Violence decreased for both groups, from 1.1% to .4% of patient-days for intervention wards (IRR over time=.92, CI=.79–1.05, p=.23) versus from .1% to .01% for

	the control wards (IRR=.90, CI=.64–1.23, p=.51).The difference between intervention and control wards was not statistically significant (p=.91). The severity of violence diminished in the intervention wards. Patient-to patient violence or self-harm resulted in a broken bone for one patient during the intervention year (versus one suicide and one restraint death before the intervention in 2008). For the control wards patient injuries remained minor, consisting of superficial wounds. The consequences of patient-to-staff violence remained minor for both groups and consisted of superficial wounds and bruises.
Beschreibung sekundäre Ergebnisse	Monthly seclusion-restraint time had increased before the project (2006– 2007) but declined during both project years. The IRR for annual seclusion-restraint time, compared with 2007, was .75 (CI=.73–.78) in 2008 and .49 (CI=.47–.51) in 2009. More reports of patient-to-staff violence were recorded at the entire hospital: 18 reports during the information year (2008) and 22 reports during the intervention year (2009), compared with 13 reports before the project (2007). However, patient-associated injuries to staff resulted in 75% and 65% fewer sick days, respectively, during the information and intervention years, compared with the year before the project (29 days in 2008 and 40 days in 2009, versus 114 days in 2007). The mean duration of a sick leave resulting from patients was 80% shorter during the project (1.6 days per injury for 2008 and 1.8 days per injury for 2009, versus 8.8 days per injury in 2007). The only patient-to-staff injury at the hospital occurred on a nonproject ward and resulted in a mild contusion. Surprisingly, monthly staff physical violence management training with colleagues resulted in a three- to fourfold higher number of sick days compared with sick days resulting from patient violence (89 sick days from staff training versus 29 days from patient-related incidents for 2008, and 165 sick days from colleague-related incidents versus 40 days from patient-related incidents for 2009). Compared with patient-to-staff injuries, these staff-to-staff injuries also resulted in longer sick leaves: mean 6.4 days per injury from colleagues versus 1.6 days per injury from patients for 2008 and 12.7 days per injury from colleagues versus 1.8 days per injury from patients in 2009.
Dauer	6 months
Baseline/Intervention/Follow-up	
Funding	This project was funded by the Finnish Ministry of Health through the developmental fund for Niuvanniemi Hospital. Dr. Tiihonen is a member of the AstraZeneca and Janssen-Cilag advisory boards. He also reports serving as a consultant for or receiving fees for expert opinions or lectures from AstraZeneca, Bristol-Myers Squibb, Eli Lilly, F. Hoffman–La Roche, GlaxoSmithKline, Janssen-Cilag, Lundbeck, Novartis, Organon, and Pfizer. The other authors report no competing interests.

Nummer	52
Studie	Richmond I; Trujillo D; Schmelzer J; Phillips S; Davis D (1996): Least restrictive alternatives: do they really work? In: J NURS CARE QUAL 11 (1), S. 29–37.
Institution	Veterans Administration Medical Center Fort Lyon, VA Western New York Health Care System Buffalo/New York
Studientyp	pre-post-design
Kontrollgruppe ja/nein	no
Komplex ja/nein	no
Interventionstyp	staff training
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Staff training focussing on prevention and management of disturbed behavior, early assessment of disruptive behavior, interventions using least restrictive alternatives, and a team approach to using physical restraint if least restrictive alternatives are ineffective
Beschreibung Patienten	psychiatric inpatients and nursing home residents, including many veterans, having difficulty functioning in an unstructured environment and so requiring long term management
Beschreibung Outcomevariablen	seclusion and restraint hours in the psychiatric service per year
Beschreibung Ergebnisse	1991: 3388 restraint and 396 seclusion hours -> 1992: 1812 restraint and 788 seclusion hours. Total S/R hours declined by 31 percent, and restraint hours by 47 percent. But 2 of 3 wards showed an increase in seclusion only hours.
Beschreibung sekundäre Ergebnisse	during the 12 month study period 873 incidents of disruptive behavior occurred, 75 resulted in restraint, 25 in seclusion, 773 were managed using least restrictive alternatives
Dauer	
Baseline/Intervention/Follow-up	1 year baseline, 1 year post-intervention
Funding	not reported

Nummer	53
Studie	Rohe, T.; Dresler, T.; Stuhlinger, M.; Weber, M.; Strittmatter, T.; Fallgatter, A. J. (2016): Architectural modernization of psychiatric hospitals influences the use of coercive measures. In: Der Nervenarzt. DOI: 10.1007/s00115-015-0054-0.
Institution	Klinik für Psychiatrie und Psychotherapie/Uni Tübingen
Studientyp	pre-post-design // interrupted time series??
Kontrollgruppe ja/nein	no

Komplex ja/nein	no
Interventionstyp	changes of the physical ward environment
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Die früheren zehn Stationen im Altbau besaßen Zwei- bis Vierbettzimmer und umfassten für jeweils 16 bis 18 Patienten insgesamt eine Grundfläche von ca. 200m ² , mit nur zwei Duschen und Toiletten pro Station. Die neun Neubaustationen (je 17 Patienten, insgesamt ca. 400m ²) bieten Ein- und Zweibettzimmer mit jeweils einer barrierefreien Nasszelle. Die Zimmer haben einen eigenen Bereich für jeden Patienten (mit Bett, Schrank und Schreibplatz) und sind suizidpräventiv eingerichtet (z.B. Sicherheitsglasscheiben, Metallspiegel und verdeckte Kabel).
Beschreibung Patienten	verschieden psychiatrische Patienten
Beschreibung Outcomevariablen	Anzahl der Fixierungen, Anzahl der Tage mit Fixierungen, Anzahl der fixierten Patienten, durchschnittliche Dauer von Fixierungen
Beschreibung Ergebnisse	Vor dem Umzug im Jahre 2011 lag die Anzahl der Fixierungen mit durchschnittlich 7% aller belegten Betten pro Monat sogar tendenziell niedriger als in anderen psychiatrischen Kliniken in Südwestdeutschland, in denen bis 2007 im Durchschnitt 9,5% aller behandelten Patienten Zwangsmaßnahmen unterlagen. Nach dem Umzug reduzierte sich der monatliche, an der durchschnittlichen Bettenbelegung normierte Umfang der Zwangsmaßnahmen um 48–84%. Die Anzahl der fixierten Patienten reduzierte sich um 50% (0.069 -> 0.035; t37 = 5,968; p < 0,001; d = 1.96), die Anzahl der Tage mit Fixierung um 64% (0.222 -> 0.081; t37 = 5,509; p < 0,001; d = 1.81), die durchschnittliche Dauer der Fixierungen um 52% (2.015 -> 0.962; t37 = 3,195; p = 0,003; d = 1,05).
Beschreibung Nebenwirkungen	Der Einsatz von Zwangsmedikation reduzierte sich um 84% (t37 = 6,669; p < 0,001). Auch die Anzahl fürsorglicher Zurückhaltungen reduzierte sich um 48% (t37 = 3,491; p = 0,001). Der gleichzeitige Abfall der Zwangsmaßnahmen und -medikationen zeigt, dass die abnehmenden Fixierungen nicht durch zusätzliche Zwangsmedikationen kompensiert wurden.
Dauer	
Baseline/Intervention/Follow-up	baseline 24 Quartale, post-intervention 15 Quartale
Funding	T.Rohe, T. Dresler, M. Stuhlinger, M. Weber und A. J. Fallgatter geben an, dass kein Interessenkonflikt besteht. T. Strittmatter ist ausführender Architekt des Klinikneubaus. Funding not reported
Qualitätsbemerkung	aggregierte und geglättete Daten verwendet

Nummer	54
Studie	Schepeleern, E. S.; Aggermaes, K. H.; Stender, A. K.; Raben, H. (1993): Use of restraints in a psychiatric department, Frederiksberg Hospital, before and after introduction of the new psychiatric law. Restraining devices. In: Ugeskrift for laeger 155 (50), S. 4091–4095.
Institution	Sct. Hans Hospital, Psychiatric Department/Frederiksberg Hospital
Studientyp	pre-post-design, prospektiv
Kontrollgruppe ja/nein	no
Komplex ja/nein	no
Interventionstyp	political/legislative changes
n Patienten	145 restrained patients (167 admissions), 58 baseline, 87 nach Gesetzesänderung
Effekt ja/nein auf S/R	no
Beschreibung Intervention	New Danish law concerning commitment and compulsory procedures in psychiatry from 1.10.1989. Das Gesetz sichert die rechtliche Stellung psychisch kranker Patienten, regelt Fixierungen und versucht diese wo möglich zu reduzieren oder zu verhindern. Es regelt Indikation und Durchführung von Fixierungen, die Anwendung körperlicher Gewalt sowie die Einrichtung einer Sitzwache und eines Patientenfürsprechers.
Beschreibung Patienten	stationäre psychiatrische Patientne zwisch 15 und 90 Jahren, die Zwang erlitten habe, Männer und Frauen, Diagnosen: Schizophrenie, Manie, Depression, reaktive Psychose, organische Psychose
Beschreibung Outcomevariablen	number and duration of restraints
Beschreibung Ergebnisse	No changes were registered in the number of restraints in connection with the law reform, but the duration of the fixations increased by 42%.
Beschreibung sekundäre Ergebnisse	The number of medications given forcibly in connection with the restraints increased significantly.
Dauer	
Baseline/Intervention/Follow-up	23 Monate vor und 24 Monate nach Gesetzesänderung
Funding	not reported

Nummer	55
Studie	Smith, S.; Jones, J. (2014): Use of a sensory room on an intensive care unit. In: Journal of psychosocial nursing and mental health services 52 (5), S. 22–30. DOI: 10.3928/02793695-20131126-06.
Institution	East London NHS Foundation Trust; City University
Studientyp	pre-post-design

Kontrollgruppe ja/nein	no
Komplex ja/nein	no
Interventionstyp	sensory room
n Patienten	(15 bed PICU; 7 patients participated in the interviews; 19 were secluded the 3 months prior to intervention, and 18 the 3 months after)
Effekt ja/nein auf S/R	no
Beschreibung Intervention	Sensory room, 2.5x5m, light blue painted walls, laminate flooring, window with black out roller blind, equipment: floor-mounted bubble tube, optic mat, a light/image emitting projector, two lying bean bags, two sitting bean backs, cushions, iPod, iPod dock, magazines, stress release toys, chewing gum, educational materials promoting relaxation and healthy living
Beschreibung Patienten	males only, PICU, locked doors, average length of stay 3-4 weeks, compulsory detained, usually in secure conditions, acutely disturbed phase of a serious mental disorder with a correspondending increase in risk
Beschreibung Outcomevariablen	seclusions, secluded patients, seclusions per secluded patient
Beschreibung Ergebnisse	The number of seclusion incidents was higher after the sensory room was introduced with 27 incidents of seclusion in the three months prior to the sensory room introduction and 37 incidents in the following 3 months. 18 patients secluded prior nach 19 patients secluded after. But more repeater incidents post. (25 repeater events in 6 patients post vs. 12 repeater events in 4 patients prior)
Dauer	3 months baseline, 3 months post-intervention
Baseline/Intervention/Follow-up	Ms. Smith conducted this research as a Clinical Academic at City University London, a program funded by East London NHS Foundation Trust and part of the Joint Institute of Mental Health Nursing.
Funding	
Qualitätsbemerkung	small sample

Nummer	56
Studie	Stead, Karen; Kumar, Saravana; Schultz, Timothy J.; Tiver, Sue; Pirone, Christy J.; Adams, Robert J.; Wareham, Conrad A. (2009): Teams communicating through STEPPS. In: The Medical journal of Australia 190 (11 Suppl), S128-32.
Institution	South Australian Department for Health; Center for Allied Health Evidence/University of South Australia; Australian Patient Safety Foundation; Cramond Clinic/Queen Elizabeth Hospital; Health Observatory/University of Adelaide; Lyell McEwin Hospital
Studientyp	pre-post-design // interrupted time series??
Kontrollgruppe ja/nein	no
Komplex ja/nein	no
Interventionstyp	staff training? Communication through STEPPS
n Patienten	(five sites, including the mental health site)
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Communication through STEPPS, ad hoc gatherings, structured team approach
Beschreibung Patienten	mental health patients???
Beschreibung Outcomevariablen	number of unique seclusion events per admission per month
Beschreibung Ergebnisse	Seclusion rates before implementation were significantly higher than after implementation.
Dauer	26 months baseline, 12 months post intervention
Baseline/Intervention/Follow-up	US Department of Defense and the Agency for Healthcare Research and Quality permitted the use of Team STEPPS material and offered guidance during program implementation- insufficient reporting about patients (mental health, what's about the other sites, were also non-mental health patients secluded...), intervention (content of training)
Funding	
Qualitätsbemerkung	

Nummer	57
Studie	Steinert, Tilman; Zinkler, Martin; Elsasser-Gaissmaier, Hans-Peter; Starrach, Axel; Hoppstock, Sandra; Flammer, Erich (2015): Long-Term Tendencies in the Use of Seclusion and Restraint in Five Psychiatric Hospitals in Germany. In: Psychiatrische Praxis 42 (7), S. 377-383. DOI: 10.1055/s-0034-1370174.
Institution	ZfP Südwürttemberg/Weissenau und Schussenried, Klinik für Psychiatrie und Psychotherapie I/Uni Ulm; Psychiatrische Klinik der Kliniken Landkreis Heidenheim gGmbH, Klinik an der Lindenhöhe Offenburg, Bezirkskrankenhaus Kaufbeuren
Studientyp	Zeitreihe
Kontrollgruppe ja/nein	no
Komplex ja/nein	no
Interventionstyp	Benchmarking (und komplexe interventionen)
n Patienten	138 580 Behandlungsfälle

Effekt ja/nein auf S/R	Yes
Beschreibung Intervention	Benchmarking, Maßnahmen zur Reduktion von Zwangsmaßnahmen (klinikinterne LL, DGPPN-LL, Deseskalationstrainings, sonstige Schulungen, Hospitation in England/Festhaltetechniken/Physical restraint, strukturierte Risikovorhersage, 4-Stufen-Programm zur Deeskalation (Primat Festhalten vor Fixieren, Bezugspersonensystem, Stationsöffnung, Behandlungsvereinbarungen, klinikinterne Kriseninterventionsteams, Einführung einer verpflichtenden 1:1 Überwachung, erhöhte Anforderungen an die Dokumentation, Verkürzung der Überprüfungsintervalle, technische Alternativen in der Gerontoüropsychiatrie (geteilte Bettgitter, Klingelmatte, Niedrigbett, Hüftprotektoren), Bewegungstraining in der Gerontopsychiatrie, Vermittlung durch Patientenfürsprecher und Beschwerdestellen, spezialisierte Stationskonzepte, geeignete Architektur, Leadership
Beschreibung Patienten	psychiatrische Patienten F0-F4, F6
Beschreibung Outcomevariablen	Anteil von Zwangsmaßnahmen betroffener Fälle an allen Behandlungsfällen in %, durchschnittliche Dauer einer freiheitsbeschränkenden Maßnahme in Stunden, kumulative Dauer aller Zwangsmaßnahmen pro Fall in Stunden
Beschreibung Ergebnisse	Insgesamt reduzierte sich der Anteil der Betroffenen innerhalb von 8 Jahren von 8,2% 2004 auf 6,2% 2012. Bei einer Steigung der Regressionsgeraden von -0,2 ergab sich also ein Rückgang von durchschnittlich 0,2 Prozentpunkten pro Jahr. Die Reduktion betraf in erster Linie die Diagnosegruppe F0, während sich in den anderen Diagnosegruppen keine eindeutigen Tendenzen zeigten. Auch von 2011 nach 2012 zeigte sich keine auffällige Änderung außer einem Anstieg in der Diagnosegruppe F1 auf den höchsten bis dahin festgestellten Wert. Die Standardabweichung zwischen den Kliniken reduzierte sich stetig mit einem Koeffizienten von 0,34 /Jahr. Bei der durchschnittlichen Dauer einer Maßnahme ist kein eindeutiger Trend über die Jahre erkennbar. Zwischen 2011 und 2012 war eine Verkürzung der durchschnittlichen Dauer einer Maßnahme von 10,2 auf 7,8 Stunden feststellbar, d. h. um 23,5 %. Dies betraf weitgehend alle Diagnosegruppen gleichermaßen. Bei der durchschnittlichen kumulativen Dauer der Maßnahmen pro betroffenen Fall über alle Diagnosen hinweg sind dabei eine eindeutigen Tendenzen festzustellen. Der Koeffizient der Regressionsgeraden ergibt einen Rückgang von 0,6 Stunden/Jahr pro betroffenen Fall. Die Tendenzen in den einzelnen Diagnosegruppen sind unterschiedlich. Bei den organischen psychischen Störungen ist eine Tendenz zur Abnahme zu erkennen, bei den übrigen Diagnosegruppen fand sich kein einheitlicher Trend. Zwischen 2011 und 2012 zeigte sich bei der Diagnosegruppe F3, aber auch bei F0 und F1, ein deutlicher Anstieg, während es bei F2 zu einer leichten Abnahme kam. Zunahmen waren auch bei den Diagnosegruppen F4 und F6 zu beobachten, wo die Zahlen allerdings stark schwanken. Bezogen auf die Gesamtzahl aller Behandlungsfälle (kumulierte Dauer der Maßnahmen pro Fall x Anteil der Betroffenen) ergab sich die größte Abnahme von 2010 auf 2011 (von 3,06 Stunden pro Behandlungsfall auf 2,48 Stunden), gefolgt von einem nahezu vergleichbar großen Anstieg 2012 (auf 2,95 Stunden pro Behandlungsfall).
Dauer Baseline/Intervention/Follow-up	Beobachtungszeitraum 9 Jahre
Funding	keine Interessenskonflikte
Qualitätsbemerkung	unklar, welche Kliniken welche Interventionen durchführen, welche Interventionen was bringen, was allein auf Benchmarking (Hawthorneffekt) zurückzuführen ist.

Nummer	58
Studie	Sullivan, Ann M.; Bezmen, Janet; Barron, Charles T.; Rivera, James; Curley-Casey, Linda; Marino, Dominic (2005): Reducing restraints: alternatives to restraints on an inpatient psychiatric service--utilizing safe and effective methods to evaluate and treat the violent patient. In: The Psychiatric quarterly 76 (1), S. 51-65.
Institution	Gold Coast Hospital/Spouthport/Queensland, Reserach Center for Clinical Practice Innovation/Griffith University, Department of Occupational Therapy/University of Queensland
Studientyp	pre-post-design, retrospective
Kontrollgruppe ja/nein	no
Komplex ja/nein	yes
Interventionstyp	patient-focused care (= staff rotation and risk assessment and staff training)
n Patienten	330 pre, 310 post intervention (48 secluded pre, 31 post intervention)
Effekt ja/nein auf S/R	yes (just duration decreased)
Beschreibung Intervention	In June of 2001 nursing began using a violence assessment tool created to look at three specific areas. Part one of the tool detailed pertinent history and precipitants to violence such as past violence history, access to weapons, history of abuse, cognitive and physical deficits ranging from head trauma to limited intellectual functioning, and violence precipitating situations (Figure 1). In part two, the clinician defined with the patient those behaviors, which were the patient's way of manifesting agitation, aggression or violence either verbal and physical. Staff discussed specific details as to how the patient expressed his or her anger and aggression and noted for example postural movements: large movements through the torso may pose a greater threat to the staff and other patients, while those that are gestural or contained within one small body part and do not move through the torso, may pose less of a threat. In part three, the patient was then given options for interventions that he or she might find helpful when faced with a potential loss of control. Choices were made from a realistic menu that included many options such as:

	physical (exercise, walking, deep breathing); cognitive (reading, painting, watch TV); social (talking with friend or staff, being alone); environmental (decreasing stimulation, listening to music); spiritual (prayers, meditation, yoga). The tool did rate potential for violence as low, medium or high, but was primarily utilized as a guide for how to approach each patient in a unique way to meet his or her needs. A primary goal of the tool was to help nurses establish conversations with patients around this genuinely difficult topic for both patients and staff. When nursing staff supported patients in discussing their expressed feelings of violence and worked with them to choose realistic options of dealing with those feelings, they began to develop an effective partnership necessary to learning new behaviors. This information was then shared with the treatment team, and the plan of care reflected patient choices. In addition staff were trained in new methods of working with patients who became agitated or threatened violence. This training included several formal courses: 8-hour Crisis Intervention Course, an Alternatives to Restraint and Seclusion Course, and training in Cultural Diversity. Units regularly monitored their incidents and rates of seclusion and restraints, and on some units it became a measure of treatment success and staff pride that restraint and seclusion use was minimal. Whenever seclusion or restraint were utilized, these events were carefully reviewed by staff and patients to determine what might have been done differently.
Beschreibung Patienten	acute psychiatric unit, 8 bed locked unit within a large regional hospital, 78% male, age in average 32 years, diagnosis: schizophrenia, substance related disorders, bipolar disorder (manic phase), depressive disorder, personality disorder, delirium/dementia/cognitive disorder, anxiety and dissociative disorder, LOS in average 13.5 days, 8 days in acute care area
Beschreibung Outcomevariablen	number of times in seclusion (median), length of time secluded (median hours)
Beschreibung Ergebnisse	no difference in number of seclusion (median pre and post 1.0), but length of time secluded decreased from 5.5 hours (median) to 3.5 hours (median)
Beschreibung sekundäre Ergebnisse	pre intervention more haloperidol was given
Dauer	
Baseline/Intervention/Follow-up	6 months baseline, 6 months post-intervention
Funding	conflict of interest: none

Nummer	59
Studie	Sullivan D; Wallis M; Lloyd C (2004): Effects of patient-focused care on seclusion in a psychiatric intensive care unit...including commentary by Holmes D and Perron A. In: International Journal of Therapy & Rehabilitation 11 (11), S. 503–508.
Institution	Elmhurst Hospital Center in Queens/mt. Sinai School of Medicine
Studientyp	pre-post-design // interrupted time series??
Kontrollgruppe ja/nein	no
Komplex ja/nein	yes
Interventionstyp	complex (violence safety program: structured risk assessment + individual crisis plan for early intervention + staff training (least restrictive alternatives, intercultural competencies))
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	staff were rostered to different appts of the ward, which resulted in them working with people who were not as acutely unwell; daily nursing assessment (brief mental state component, risk of violence or harm to self or others, individual service plan for the following 24h), workshops covering topics such as verbal de-escalation
Beschreibung Patienten	psychiatric in-patients, US-American with special wards for Asians and Latinos
Beschreibung Outcomevariablen	patients confined, confinement episodes, confinement hours
Beschreibung Ergebnisse	Patients confined in all adult units per thousand patient days significantly declined from 5.8 in 1998 to 1.6 in 2003. The lowest rate of individuals confined per thousand patient days occurred in 2002 at 1.3 patients. Confinement events per 1000 patient days in all adult units decreased from 10.9 in 1998 to 3.2 in 2003. The lowest rate of confinement events was in 2002 at 1.7. Total Confinement hours per thousand patient days decreased from 36.6 hours in 1998 to 6.6 in 2003, with the lowest rate occurring in 2002 at 3.0 hours per thousand patient days.
Beschreibung sekundäre Ergebnisse	Use of alternative methods for violence control and safety on unit AB-11 in 2003 showed that the most commonly used methods were: 32% favored talking to staff; 17% walking with staff; 12% use of time out or a quiet room/space; 8% decrease stimulation and 20% others including special requests for calling specific person on the phone, movie or TV of their choice, talking to another patient with staff assistance. The average length of stay on the adult service did not vary to any large extent during the years measured: 1998 LOS 21.7 days; 1999 LOS 27.5 days; 2000 LOS 30.9 days; 2001 LOS 25.5 days; 2002 LOS 29.3 days; 2003 LOS 29.1. The length of stay on the Adult Units is high largely due to patients needing housing placement.
Beschreibung Nebenwirkungen	The number of injurious behaviors (self-inflicted gestures, and attempts) and altercations (between staff and patients) per thousand patient days on the adult units from 1998 to 2003 were as follows: a general decrease in altercations from 1998 through 2003 from 4.1 to 2.8, the lowest in 2002 at 1.9; a decrease in Adult self-injurious behaviors from 0.9 to 0.4 in 2003. There was some variation in the self-injurious behaviors, with an increase in 2000

	to 1.4 and 2002 at 1.1. However, there was a significant decrease in 2003 at 0.4. The trend of decrease in altercation follow the same trend as the decrease in confinement on the Adult Services with the lowest in adult altercations in 2002, the same as the lowest confinement rates. It should be noted that the number of these events per thousand patient days was low throughout this period. The use of IM medication on Unit A between 2001 and 2003 decreased slightly in medications given per thousand patient days from 8.0 to 6.5 and increased slightly in number of patients who received IM medication from 2.3 to 4.3. There was no significant increased trend in use of IM medication for stat emergency purposes in this unit during the reduction in use of restraints and seclusion. The rate of use of special observation hours per thousand patient days decreased on the Adult Service from June 2002 to December 2003 . There was no trend upward in special observation hours with the reduction in restraint and seclusion use during this period.
Dauer Baseline/Intervention/Follow-up	3,5 years baseline? 2,5 years post-intervention?
Funding	Not reported

Nummer	60
Studie	Taxis, J. Carole (2002): Ethics and praxis: alternative strategies to physical restraint and seclusion in a psychiatric setting. In: Issues in mental health nursing 23 (2), S. 157–170.
Institution	University of Texas in Austin/School of Nursing
Studientyp	observational study??
Kontrollgruppe ja/nein	no
Komplex ja/nein	yes
Interventionstyp	Complex
n Patienten	(86-bed unit)
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	A group of nurses discussed S/R, collected data on S/R incidents and developed a program to reduce S/R: The program included (1) development of an assault program, (2) expanded use of individual treatment planning -> development of nonviolent coping skills, (3) implementation of mandatory staff education (sometimes in brief sessions on the unit to make the best use of existing teams) to focus on developing alternatives to restraint and seclusion, (4) patient education to focus on empowering patients to make adaptive choices that enhance self-efficacy incl. structured individual debriefing sessions after S/R, (5) environmental alterations -> Oasis room, (6) creation of a communication feedback loop to disseminate information and progress in reducing restraints and seclusions, and (7) administrative and programmatic changes -> audit tool for nurses to check the S/R practice after every event, -> special treatment program for people with personality disorders with group therapy and staff education. There were many concerns about safety, especially from unlicensed personal, leadership and an interdisciplinary group with all clinical disciplines to implement these changes were required.
Beschreibung Patienten	adult unit in a state psychiatric facility, people with psychosis, personality disorders? (long term??)
Beschreibung Outcomevariablen	seclusion and restraint events
Beschreibung Ergebnisse	94% reduction in the incidence of restraint and seclusion
Beschreibung sekundäre Ergebnisse	comprehensive programmatic changes ¹
Dauer Baseline/Intervention/Follow-up	42 months
Funding	not reported
Qualitätsbemerkung	insufficient reporting about patient characteristics, data for several quaters are missing, insufficient reporting about when the changes were implemented and in which order, contaminations?

Nummer	61
Studie	Teitelbaum, A.; Volpo, S.; Paran, R.; Zislin, J.; Drumer, D.; Raskin, S. et al. (2007): Multisensory environmental intervention (snoezelen) as a preventive alternative to seclusion and restraint in closed psychiatric wards. In: Harefuah 146 (1), 11-4, 79-80.
Institution	Jerusalem Mental Health Center/Kfar Shaul Psychiatric Hospital affiliated with the Hadassah Faculty of Medicine/Hebrew University
Studientyp	CCT, pre-post-design
Kontrollgruppe ja/nein	yes
Komplex ja/nein	no
Interventionstyp	sensory room
n Patienten	626 Männner (davon 234 gsnoezelt, 393 fixiert), 258 Frauen fixiert
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Männer sind Interventionsgruppe: Snoezelen gegen psychomotorische Unruhe, Anspannung, verbale Aggressionen (bei tätlichen Aggressionen, wenn Deeskalation und

	Medikation nicht hilfreich, Fixierung wegen akuter Eigen/Fremdgefährdung, muss in Israel alle 4 h durch Arzt angeordnet werden). Bei Snoezelen wählt Pat. Stimulus selbst aus, muss selbst aktiv werden, wird dabei über Mikro von einem "enableing therapist" supervidiert: Musik, Lavendelduft... Pat. ist im Raum alleine, Intervention dauert etwa 30-40 Minuten.
Beschreibung Kontrolle	Frauen sind Kontrollgruppe, kein Snoezelen, TAU.
Beschreibung Patienten	Psychiatrische Patienten mit F20, anderen Psychosen, affektiven Störungen, Persönlichkeitsstörungen, illegaler Drogenkonsum als Komorbidität. Geschlossene Abteilung. Frauen- und Männergruppe unterscheiden sich nicht wesentlich.
Beschreibung Outcomevariablen	Fixierungen pro Bett
Beschreibung Ergebnisse	Frauen haben vor der Intervention signifikant weniger Fixierungen als Männer (1,027 vs. 1,7), Männer haben nach der Intervention signifikant weniger Fixierungen als vor der Intervention (1,17 vs. 1,7). Die Fixierungen sind bei den Frauen über die Zeit extremw angestiegen (1,027 vs. 2,42), allerdings nicht signifikant wegen hoher SD (Ausreißer?).
Beschreibung sekundäre Ergebnisse	Im Schnitt haben 1,3 Pat pro Tag gesnoezelt, Pat. gaben in Umfrage positives Feedback für die Intervention, aggressives Verhalten ging auf Station zurück (nur in der Diskussion erwähnt)
Dauer Baseline/Intervention/Follow-up	6 Monate Baseline, 6 Monate post-intervention
Funding	not reported
Qualitätsbemerkung	Männer-Frauen Vergleich gerechtfertigt, Männer waren zu Beginn signifikant häufiger fixiert (aggressiver??)? Woher kommt große SD und Zunahme bei Frauen?, kein Reporting zu klinischen Daten wie Pathopsychologischen Phänomenen, medikamentöser Behandlung

Nummer	62
Studie	Templeton L; Gray S; Topping J (1998): Seclusion: changes in policy and practice on an acute psychiatric unit. In: J MENT HEALTH 7 (2), S. 199–202.
Institution	Wexham Park Hospital
Studientyp	pre-post-desgn, baseline retrospective, post-intervention prospective
Kontrollgruppe ja/nein	no
Komplex ja/nein	no
Interventionstyp	Complex, data use for an audit with consecutive changes in policies and staff education
n Patienten	annual admission rate of around 900
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	All episodes of seclusion between July 1993 and June 1994 were studied retrospectively. Information regarding each patient's admission and seclusion dates, reason for seclusion and previous attempts to defuse the situation were sought from seclusion forms and the casenotes. The timing of reviews and the identity of staff attending these were recorded as well as the length of the episode. The results were compared to the standards in the Code of Practice and a new policy was written emphasising these standards. The results were presented at the multi-disciplinary audit meeting and staff were educated about the standards. The new policy was accepted and all nursing staff were instructed in its use by senior nurses who were present at the meeting. The audit was repeated retrospectively after a year of its use.
Beschreibung Patienten	open acute psychiatric unit with a lockable room for seclusion
Beschreibung Outcomevariablen	Number of seclusion episodes, Mean length of seclusion (hours), Mean days from admission, Percentage out of working hours
Beschreibung Ergebnisse	In the year 1993±94, 19 patients were involved in 29 seclusion episodes, seven patients being secluded twice and one four times. In the year 1995±96, this fell to 10 patients in 11 episodes despite a slightly increased admission rate (882 admissions in 1993±94 compared to 975 for 1995±96). This represented a 66% reduction in seclusion use, which was statistically significant (p<0.01). In the 1993±94 study, was secluded four times and seven were secluded twice, whereas in the re-audit period, only one patient was secluded twice. There was also a reduction in the proportion of seclusion episodes occurring outside working hours, i.e. weekends and between 5 p.m. and 9 a.m. weekdays (45% at re-audit compared to 82% initially). Patients were also secluded later in their admission, mean time being 54 days, median 28 days (range zero to 323 days) compared to a mean of 20 days and a median of 2 days in the earlier audit (range zero to 276 days). The mean length of seclusion fell from 12 hours (range 1 hour 20 minutes ± 50 hours 50 minutes) to 6.5 hours (range 1 hour ± 24 hours 35 minutes). These changes were not, however, statistically significant
Beschreibung sekundäre Ergebnisse	Improvements in documentation were also seen as a result of the audit, with statistically significant improvement in the legibility of staff names on seclusion record. At re-audit, all indications for seclusion were appropriate whereas previously inappropriate reasons such as damage to property or absconding had been noted. In addition, significantly more interventions and plans for seclusion were documented. During the re-audit period, more reviews occurred within the recommended time but this difference was not statistically significant. The longest period between reviews was 6 hours, whereas in the first period of study, eight patients waited nine hours or more between reviews. During the first study period, none of the 13 patients secluded for 8 hours or more received an independent review whereas at re-audit, three of five did receive this.

Dauer Baseline/Intervention/Follow-up	1 year baseline, 1 year post-intervention
Funding	not reported
Nummer	63
Studie	van de Sande, R.; Nijman, H. L. I.; Noorhoorn, E. O.; Wierdsma, A. I.; Hellendoorn, E.; van der Staak, C.; Mulder, C. L. (2011): Aggression and seclusion on acute psychiatric wards: effect of short-term risk assessment. In: The British journal of psychiatry : the journal of mental science 199 (6), S. 473–478. DOI: 10.1192/bjp.bp.111.095141.
Institution	Mental Health Centre Bavo-Europoort/University of Applied Science Utrecht; Behavioural Science Institute/Radboud University Nijmegen; Erasmus Medical Centre/Department of Psychiatry/Research Center O3
Studientyp	cluster randomised controlled trial
Kontrollgruppe ja/nein	yes
Komplex ja/nein	no
Interventionstyp	Early Interventions// Structured Risk Assessment, BVC
n Patienten	597 (In the 40-week study period, 617 admissions of 597 individual patients occurred on the four wards. During the 10-week preintervention period 170 patients were resident on the wards. During the intervention period 458 patients were resident on the wards, of whom 207 were admitted to an experimental ward and 251 to a control ward.)
Effekt ja/nein auf S/R	yes (for aggressiveness, duration of seclusion, not for number of seclusion incidents or secluded patients)
Beschreibung Intervention	Structured risk assessment: Patients were monitored daily by psychiatric nurses on the experimental wards by means of risk assessment scales, from the first day of admission until discharge or transfer to another ward. The item scores on the Crisis Monitor were discussed during inter- and multidisciplinary meetings. On a daily basis the Brøset Violence Checklist and the Kennedy–Axis V (short version) scale were used to identify risks of loss of control that might result in imminent (but preventable) escalations on the ward. Once a week the Kennedy–Axis V (full version), the Brief Psychiatric Rating Scale (BPRS), the Dangerousness Scale and the Social Dysfunction and Aggression Scale were used. All psychiatric nurses and doctors on the two experimental wards were trained to use the instruments on site directly after the random allocation of the wards to either the experimental or the control cluster.
Beschreibung Kontrolle	TAU (assessment was based purely on clinical judgement)
Beschreibung Patienten	psychiatric inpatients on a acute psychiatric wards, male and female, mean age 38–40, diagnosis: psychosis, personality disorders, drug misuse, on interventions wards more people were involuntary admitted, more people had psychotic or personality disorders, at baseline the experimental wards had more seclusion hours (1382 vs 985, $p < 0.001$)
Beschreibung Outcomevariablen	Aggression incidents (SOAS-R), Aggressive patients, seclusion incidents (Seclusion episodes were recorded using the Argus scale, which enables detailed collection and analysis of seclusion rates, in terms of both incidence and duration of the seclusion. On the Argus scale a seclusion incident is defined as a sequence of periods of seclusion separated by no more than 24 h; for example, two single hours in seclusion separated by 36 h would be counted as two seclusion incidents, whereas two single hours in seclusion separated by less than 24 h would be counted as one seclusion incident.), Secluded patients, Seclusion duration. The procedures were continuously monitored by a clinical nurse specialist to avoid underreporting of aggression incidents and seclusion use in both experimental and control arms.
Beschreibung Ergebnisse	The number of incidents of aggression decreased on the experimental wards from baseline to intervention period compared with the control wards. Relative risk ratios between the baseline and intervention period changed substantially, revealing a lower risk of aggression incidents on the experimental wards (RRR = -68%; risk ratio at baseline 1.12, 95% CI 0.72–1.76, at intervention 0.36, 95% CI 0.26–0.50). When converted into number of aggression incidents per week, the rate on the experimental wards decreased from 4.9 incidents per week (i.e. 49 incidents over 10 weeks) during the baseline period to 1.7 incidents per week (52 incidents over 30 weeks) during the intervention period. On the control wards, the number of aggression incidents hardly changed, going from 3.5 incidents per week (35 incidents over 10 weeks) during baseline to 3.9 incidents per week (117 incidents over 30 weeks) during the intervention period. Otherwise, the number of patients engaged in aggression showed a (non-significant) trend towards reduction on the experimental wards during the intervention period compared with the control wards. The relative risk ratios of the number of aggressive patients between the experimental and the control wards, corrected for the number of patient days, however, did show a clear decrease (-50%) between the baseline (risk ratio RR = 1.13, 95% CI 0.57–3.10) and intervention period (RR = 0.62, 95% CI 0.40–0.99), albeit with a 13% overlapping confidence interval ($P < 0.10$). The number of hours spent in seclusion decreased significantly on the experimental wards after the introduction of the Crisis Monitor, in comparison with the control wards. A significant decrease of -45% in the risk ratio was observed in seclusion hours per admission hours, showing no overlapping confidence intervals: baseline period RR = 1.12 (95% CI 1.01–1.19), intervention period RR = 0.62 (95% CI 0.58–0.66). The number of seclusion incidents showed a small but not significant decrease (-15%) from baseline (RR = 1.19, 95% CI 0.76–1.88) to intervention (RR = 1.01, 95% CI 0.74–1.88). The number of individual patients exposed to seclusion also did not increase significantly (+8%; 100% overlapping confidence intervals) on the experimental

	wards during the intervention period, despite a relatively significant increase in the number of patients secluded in the control ward (RR at baseline 1.42, 95% CI 0.83–2.48; RR at intervention 1.71, 95% CI 1.12–2.67), but again with 100% overlapping confidence intervals.
Beschreibung sekundäre Ergebnisse	Regression analyses controlling for patient characteristics on time spent in seclusion per number of admission days revealed significant intervention effects but in opposite directions for baseline ($b = -0.71$, $P = 0.005$) and intervention periods ($b = 1.34$, $P < 0.0001$; goodness-of-fit statistics: deviance 479.419, d.f. = 131 and deviance 1596.856, d.f. = 419, respectively). In this model both short-term ($b = -0.78$, $P < 0.0001$) and long-term ($b = -2.25$, $P < 0.0001$) involuntary admission and psychotic disorder ($b = -1.71$, $P < 0.0001$) showed a negative association with time spent in seclusion. Being aged less than 35 years also showed a positive association with time spent in seclusion ($b = 0.35$, $P = 0.005$). Various other regression analyses performed on seclusion incidents and number of secluded patients showed no effect of the intervention, but again involuntary admission as well as a psychotic disorder predicted these outcome variables. Therefore, it seems fair to conclude from these regression analyses that observed differences in patient characteristics did not explain the reduction of time spent in seclusion found on the experimental wards after implementation of the Crisis Monitor.
Dauer Baseline/Intervention/Follow-up	baseline 10 weeks, intervention/control 30 weeks
Funding	The study was funded by the Dutch Ministry of Health to investigate interventions that might contribute to the reduction of use of seclusion in The Netherlands.
Qualitätsbemerkung	Experimental wards had higher baseline measurements, RRR containing differences over time and between wards are discussed, randomisation was not successful (-> regression analysis was done)

Nummer	64
Studie	Vruwink, F. J.; Mulder, C. L.; Noorthoorn, E. O.; Uitenbroek, D.; Nijman, H. L. (2012): The effects of a nationwide program to reduce seclusion in the Netherlands. In: BMC psychiatry 12, S. 231. DOI: 10.1186/1471-244X-12-231.
Institution	GGNet (Forensische Psychiatrie?); Mental Health Centre Bavo-Europoort Rotterdam/University of Applied Science Utrecht; Forensic Psychology/Behavioural Science Institute/Radboud University Nijmegen; Erasmus Medical Centre/Public Mental Health/Research Center O3; Quantitative Skills/Consultancy for Research and Statistics
Studententyp	interrupted time series?
Kontrollgruppe ja/nein	no
Komplex ja/nein	no
Interventionstyp	Legislative changes/governmental program
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	From 2006 to 2009, the Dutch government provided €5 m annually for a nationwide program to reduce seclusion in psychiatric hospitals by 10% a year. In 2006, grants were awarded to 34 Dutch psychiatric hospitals (approximately 70% of all psychiatric hospitals), a number that had increased to 42 by 2009 (approximately 90%). The grants were allocated only to psychiatric hospitals that had a specific plan how to reduce the number of seclusions and would also match the sum they received. The total national investment was therefore €40 m, i.e. €20 m from the government and €20 m from the hospitals. Criteria for receiving the grant included the plan having a specific target for reducing seclusion, developing psychiatric intensive care, gathering reliable data on coercive measures, and enhancing expertise of staff (e.g. using specific strategies for preventing seclusion and dealing with problematic behaviours). The projects were very varied in scope. Some sought reductions at institutional level (e.g. closing seclusion rooms), others at ward level (e.g. through new engagement strategies or aggression de-escalation training), others at patient level (e.g. through crisis plans or aggression-risk assessment), and others by combining various levels and strategies.
Beschreibung Patienten	psychiatric inpatients
Beschreibung Outcomevariablen	annual change in seclusion/involuntary medication (per involuntary hospitalization)
Beschreibung Ergebnisse	Whereas the number of seclusions had increased 3.2% annually from 1998 to 2005 (logit slope = 1.032), they fell significantly between 2006 and 2009 to an annual decrease of 2.0% (logit slope = 0.980, difference -5.2%: $z = -8.58$, $p < 0.001$). The use of involuntary medication had increased by 8.5% annually from 1998 to 2005 (logit slope = 1.085). Between 2006 and 2009, this increase was 8.0% (logit slope = 1.080, difference -0.5%: $z = -0.54$, not significant). A 3.3% annual decrease in the number of seclusions per involuntary hospitalization from 1998 to 2005 (logit slope = 0.967) was followed between 2006 and 2009 by a significantly greater annual decrease of 4.7% (logit slope = 0.953, difference -1.4%: $z = -2.37$, $p = 0.018$). A 1.8% annual increase in the number of involuntary medications per involuntary hospitalization from 1998 to 2005 (logit slope = 1.018) became a significantly greater annual increase of 5.1% between 2006 and 2009 (logit slope = 1.051, difference 3.3%: $z = 3.16$, $p = 0.002$).
Dauer Baseline/Intervention/Follow-up	baseline 8 years, observation during intervention 4 years

Funding	no conflicts of interest, data provided by Dutch Health Care Inspectorate, funding not reported
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Nummer	65
Studie	Wale, Joyce B.; Belkin, Gary S.; Moon, Robert (2011): Reducing the use of seclusion and restraint in psychiatric emergency and adult inpatient services- improving patient-centered care. In: The Permanente journal 15 (2), S. 57–62.
Institution	Office of Behavioural Health for the New York City Health and Hospitals Cooperation
Studientyp	pre-post-design
Kontrollgruppe ja/nein	no
Komplex ja/nein	yes
Interventionstyp	complex, 6CS, Seclusion and Restraint Reduction Initiative, patient--centered, trauma-informed
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Seclusion and Restraint Reduction Initiative: interdisciplinary change teams are in charge of the initiative at each facility; education about rehabilitation and recovery in a discussion and dialogue format, corporate culture change training ("Creating Violence Free and Coercion Free Mental Health Treatment Environments for the Reduction of Seclusion and Restraint" a training from the National Association of State Mental Health Program Directors' Office of Technical Assistance (OTA)), crises de-escalation training; OTA-Consultation; Peer Counselor Program; data transparency: monthly data submission to the corporate office was required and a competition was announced with a prize for the facility with the greatest improvement per year; sensorymodulaiton tools and approaches; Managing agitated patients Work group, implementing emergency response teams and a new job called Behavioral Health Associate (receives extensive crises prevention and de-escalation training) perform some duties that had been assumed by hospital police, trining modules for hospital police; corporate guidelines on S/R e.g. two-hour-maximum limit on an S/R order for adults; Trauma assessment including effective calming measures, triggers for agitation and preferences regarding S/R
Beschreibung Patienten	Psychiatric Emergency and Adult Inpatient Services (unclear if long term facilities are included)
Beschreibung Outcomevariablen	frequency of S/R per 1000 patient hours, mean duration (minutes) of S/R, patient injuries in pyschiatric emergency services
Beschreibung Ergebnisse	Data captures mechanical as well as manual restraints. The frequency of S/R use per 1000 patients dropped markedly during the project. The total duration of restraint episodes rate per 1000 patient hours dropped by 28%, and the total duration of seclusion episodes decreased 27%. In addition, there was a decrease in patient injuries in our PES settings by 56%. Also, the duration per episode of restraint went from a mean of 246.81 minutes to 57.62 minutes between 2007 to June 30, 2009, a 77% reduction and the mean duration per episode of seclusion decreased from 88.78 minutes to 50.50 minutes, a 43% reduction. A one-way analysis of variance (ANOVA) of the mean differences between 2007, 2008, and 2009 was conducted. The overall change in inpatient restraint rate did not achieve statistical significance. However, the patterns of use of these methods did change significantly reflecting more targeted and safer use, and significant reduction in the most acute treatment areas. For the adult inpatient service, reductions in frequency of seclusion, mean duration per restraint and mean duration per seclusion were significant at 0.04. Patient injury (restraint) reduction was significant at 0.05. In the PES settings, frequency of restraints was significant at 0.02 and patient injury was significant at 0.03. Given that at the outset of the Seclusion and Restraint Reduction Initiative some facility leadership and staff were concerned that further reductions in S/R use would be difficult especially with the advent of including counts of manual restraints in the S/R data, these declines strongly speak to the success of the initiative. Unfortunately, staff injuries have remained generally level, which could reflect that despite fewer restraints, those patients that are restrained represent a core of significantly violent or agitated patients that contribute to injury.
Dauer	
Baseline/Intervention/Follow-up	3 years of observation (2007-2009), mentioned baseline year 2006 not reported
Funding	No conflicts of interest, funding not reported
Qualitätsbemerkung	baseline missing, insufficient reporting about patient characteristics

Nummer	66
Studie	Whitecross, Fiona; Seeary, Amy; Lee, Stuart (2013): Measuring the impacts of seclusion on psychiatry inpatients and the effectiveness of a pilot single-session post-seclusion counselling intervention. In: INT J MENT HEALTH NURS 22 (6), S. 512–521. DOI: 10.1111/inm.12023.
Institution	Alfred Psychiatry, Monash Alfred Psychiatry Research Centre
Studientyp	CCT, retrospective?
Kontrollgruppe ja/nein	yes
Komplex ja/nein	no
Interventionstyp	debriefing// post-seclusion debriefing
n Patienten	31 patients

Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Structured debriefing: In developing the content of the intervention, a review of the debriefing published work was conducted with a study by Needham and Sands (2010) particularly influential. They identified five areas that they argued were appropriate for inclusion in postseclusion counselling: (i) counselling; (ii) ventilation; (iii) support and reassurance; (iv) screening for physical adverse effects; and (v) psychoeducation. An emphasis was also on exploring in a discussion between clinician and patient, the patient, staff, and environmental factors that contributed to the occurrence of the seclusion episode, as well as how similar situations in future could be avoided.
Beschreibung Kontrolle	informal debriefing only on patient's request or when a need was identified by clinician
Beschreibung Patienten	patients admitted to the acute inpatient service (58 beds on 2 wards), wards divided in a high-dependency unit (behavioural problems, harming self or others) or low-dependency unit, 14,6% of 508 patients were secluded on ground floor and 14,8% of 567 patients on the first floor (baseline?); Participants were mostly male and had a primary diagnosis of a psychotic illness or schizoaffective disorder with the remaining patients having a primary diagnosis of a unipolar or bipolar affective disorder or borderline personality disorder. Highlighting the potential complexity of treating this population, the admission lengths of stay were more than double those of the overall inpatient psychiatry unit during the study period.
Beschreibung Outcomevariablen	Seclusion Register: the number of seclusion episodes across the admission, the number of hours in seclusion across the admission; 22-item Impact of Event Scale-Revised
Beschreibung Ergebnisse	The difference in number of episodes of seclusion for the two groups was not significant ($t(15.6) = 0.95, P = 0.36$), whereas participants on the first floor ward (intervention ward) had significantly fewer hours of seclusion ($t(29) = 2.70, P = 0.01$) (Fig. 3). Of additional interest, for patients who experienced more than one episode of seclusion (ground floor ward, five; first floor ward, eight), the mean number of seclusion episodes was far higher for patients on the ground floor (mean = 5.20; standard deviation (SD) = 3.83) than the first floor (mean = 2.50; SD = 1.07).
Beschreibung sekundäre Ergebnisse	No differences were found between the groups on ISE-R scale.
Dauer	
Baseline/Intervention/Follow-up	10 months of recruiting?
Funding	Alfred research trust

Nummer	67
Studie	Wieman, Dow A.; Camacho-Gonsalves, Teresita; Huckshorn, Kevin Ann; Leff, Stephen (2014): Multisite study of an evidence-based practice to reduce seclusion and restraint in psychiatric inpatient facilities. In: PSYCHIATR SERV 65 (3), S. 345–351. DOI: 10.1176/appi.ps.201300210.
Institution	Human Services Research Institute; Department of Psychiatry/Harvard Medical School/at the Cambridge Health Alliance; Division of Substance Abuse and Mental Health/Delaware Health and Social Services
Studientyp	CCT ?? Case-control-study?
Kontrollgruppe ja/nein	yes
Komplex ja/nein	yes
Interventionstyp	Complex, Six Core Strategies
Untersuchungseinheit	individual psychiatric facility
n Patienten	43 psychiatric facilities
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	6CS implementation stabilized, passing the 20% threshold then reaching a steady state of an ISRRI score that did not increase or decrease by more than 10 points over a four-month period (N=28)
Beschreibung Intervention II	6CS implementation continuing, passing the threshold then continuing to increase fidelity by adding components throughout the time frame (N=7), Intervention 3: 6 CS implementation decreasing, passing the threshold to reach a plateau and then subsequently declining by more than 10% (N=5)
Beschreibung Kontrolle	6CS implementation discontinuing, passing the threshold but then subsequently falling below it (N=1); OR 6 CS never implemented, never reaching the threshold score (N=2)
Beschreibung Patienten	psychiatric inpatients including residential programs and psychiatric units in hospitals
Beschreibung Outcomevariablen	Patient-level seclusion and restraint events: S/R rates are specified as the percentage of clients secluded or restrained at least once during the report period, duration of S/R events are specified as hours of S/R per total inpatient hours. Implementation and fidelity was measured with the "Inventory of Seclusion and Restraint Reduction Interventions" (ISRRI) twice (2004 and 07). The ISRRI, which was completed by facility staff knowledgeable about their reduction program, required respondents to indicate retrospectively whether and when a particular activity had been implemented. In the second administration, they were also required to identify any activities that had been discontinued and when this occurred.
Beschreibung Ergebnisse	Nine of the 28 facilities that reached stable implementation achieved reductions in the percentage of the overall population secluded, with an average reduction of 17% ($p=.002$). Fifteen reduced the amount of seclusion hours per 1,000 treatment hours, with an average reduction of 19% ($p=.001$). Nine facilities achieved reductions in the percentage of patients

	who were restrained, with an average reduction of 30% ($p=.027$). Twelve facilities achieved reductions in the hours of restraint, with an average of 55%, although the change was not significant.
Beschreibung sekundäre Ergebnisse	The dose-effect analysis tested the hypothesis that facilities in the stabilized implementation category ($N=28$) would have sharper declines in seclusion and restraint rates than facilities in the other implementation categories. The results shown in Figure 3 indicate that the hypothesis was supported with respect to two of the four outcome measures—those related to average duration of seclusion and restraint events—but not to the proportion of the population secluded or restrained. Facilities in the stable implementation group had the greatest mean change in seclusion hours per 1,000 treatment hours ($r=.88$, $p=.02$) and in restraint hours per 1,000 treatment hours ($r=.46$, $p=.05$). The greatest reduction in percentage secluded, however, was achieved by facilities in the implementation continuing group. Group differences in the change in the percentage of patients restrained were nonsignificant. It is also noteworthy that the order of the implementation categories in relative degree of change varied with respect to the four outcomes.
Dauer Baseline/Intervention/Follow-up	4 years observation?
Funding	Data collection for this study was funded under task order 280-04-0103 from the Center for Mental Health Services (CMHS) of the Substance Abuse and Mental Health Services Administration (SAMHSA) to the National Association of State Mental Health Program Directors (NASMHPD). Measures from the Behavioral Health Performance Measurement System were licensed for this study by the NASMHPD Research Institute.
Qualitätsbemerkung	not reported which strategies were adopted?

Nummer	68
Studie	Yang, Chin-Po Paul; Hargreaves, William A.; Bostrom, Alan (2014): Association of empathy of nursing staff with reduction of seclusion and restraint in psychiatric inpatient care. In: PSYCHIATR SERV 65 (2), S. 251–254. DOI: 10.1176/appi.ps.201200531.
Institution	Department of Psychiatry and Department of Epidemiology and Biostatistics, University of California, San Francisco
Studientyp	pre-post-design
Kontrollgruppe ja/nein	no
Komplex ja/nein	no
Interventionstyp	staff training, empathy training
n Patienten	1098 nursing shifts
Effekt ja/nein auf S/R	no
Beschreibung Intervention	mindfulness-based empathy training
Beschreibung Patienten	inpatient psychiatric unit in a general hospital
Beschreibung Outcomevariablen	binary: any vs. no entry of a patients into S/R in each day or evening shift
Beschreibung Ergebnisse	With controls for shift, patient, and other staffing variables, analyses showed that the presence of more nursing staff with above-average empathy ratings was strongly associated with reduced use of seclusion and restraint but empathy training showed no further benefit.
Dauer Baseline/Intervention/Follow-up	6 months baseline, 6 months post-intervention one year apart
Funding	This project was supported by a University of California, San Francisco, REAC grant.

Nummer	69
Studie	Ashcraft, Lori; Anthony, William (2008): Eliminating seclusion and restraint in recovery-oriented crisis services. In: Psychiatric services (Washington, D.C.) 59 (10), S. 1198–1202. DOI: 10.1176/appi.ps.59.10.1198.
Institution	Recovery Opportunity Center/Recovery Innovations/Phoenix, Arizona, Center for Psychiatric Rehabilitation/Boston University
Studientyp	Time series?
Kontrollgruppe ja/nein	no
Komplex ja/nein	yes
Interventionstyp	Complex, recovery-oriented
n Patienten	14.500 people per year (12000 in the small, 2500 in the large center)
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Seclusion and restraint elimination strategies included strong leadership direction (CEO informing staff that S/R is not used anymore), policy and procedural change, 4x3-hours recovery-based staff training (esp. about trauma, substance abuse strength-based communication, building resilience, giving responsibility back to consumers, avoiding crises rather than managing them, telling stories of recovery and inviting peers to training), consumer debriefing (what should (have been) done to avoid crisis, staff should be more service oriented) and regular feedback on progress.

Beschreibung Patienten	Involuntarily admitted clients (32% of the total admissions) were brought by police and others who believed them to be a danger to themselves or others. People admitted voluntarily came because they were frightened by their own thoughts and feelings and needed reassurance, support, or medication. Some of the voluntary clients came because they didn't know what else to do. Some were homeless, were hungry, and had no other alternatives. Many were self-medicating with street drugs and alcohol. Primary Diagnosis: Schizophrenia 27%, Major depression or mood disorder 31.8%, Bipolar disorder 15.7%, Substance abuse 15.1%, ANxiety disorder 2.3%. When both primary and secondary axis I data were considered, 44.5% of the individuals seen had a diagnosis of substance abuse. Fifty-five percent were male. LOS was up to 24h in larger unit and up to 5 days in the smaller one.
Beschreibung Outcomevariablen	restraint and seclusions events per month
Beschreibung Ergebnisse	The larger crisis center took ten months until a month registered zero seclusions and 31 months until a month recorded zero restraints. The smaller crisis center achieved these same goals in two months and 15 months, respectively.
Beschreibung Nebenwirkungen	Over the course of the evaluation, the smaller center decreased its yearly staff injuries from 15 to five, whereas the larger center essentially stayed the same (nine to eight).
Dauer	58 months observation after intervention
Baseline/Intervention/Follow-up	The development of this article was supported in part by the National Institute on Disability and Rehabilitation Research (NIDRR) within the Department of Education and the Center for Mental Health Services (CMHS), a division of the Substance Abuse and Mental Health Services Administration.
Funding	
Qualitätsbemerkung	baseline is missing

Nummer	70
Studie	Corrigan P, Holmes PE, Luchins D, Basit A, Buican B. (1995): The effects of interactive staff training on staff programing and patient aggression in a psychiatric inpatient ward. In: Behavioral Interventions 10 (1), 17-32.
Institution	Center of Psychiatric Rehabilitation/University of Chicago, Tinely Park Mental Health Center
Studientyp	interrupted time series
Kontrollgruppe ja/nein	no
Komplex ja/nein	no
Interventionstyp	staff training -> social learning program
n Patienten	Two physically seperated housing facilities with 30-32 patients each (one for males, one for females)
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	"Interactive Staff Training (IST)" uses principles of organizational psychology to help line-level staff members design and implement social learning programs for severely mentally ill inpatients. IST is a training package that includes assessment of staff perceptions regarding programatic needs, selection of appropriate social learning strategies to meet these needs (here: token economy, social skills trianing), appointment of a program committee from within the ward to champion development of the social learning strategy, and participative decision making about aspects of the social learning strategy. Weekly meetings for one hour.
Beschreibung Patienten	extended care wards at a state hospital, Patients had diagnoses of severe mental illness (e.g., schizophrenia and manic depression) but, for the most part, not developmental disability; they had typically been hospitalized at least 60 days on acute wards prior to transfer to the extended care ward.
Beschreibung Outcomevariablen	The average number of aggressive incidents (operationalized as patient injury, staff injury, fire, theft, damage to property, and unauthorized absences) and physical restraints per quarter.
Beschreibung Ergebnisse	Number of restraints per quarter prior to implementing the token economy averaged 19.0 (SD = 1.7). This average decreased to 11.3 (SD = 0.6) during the period in which the token economy was implemented, a 41 .OYO reduction. The change in aggression-related incidents as a result of the token economy program was not as dramatic; 69.0 incidents were reported per quarter during baseline (SD = 9.3) while only 60.3 incidents (SD = 9.3) were reported during the token economy condition, only a 12.6% decrement. Data showed that number or physical restraints remained low after introducing the skills training program; 10.0 (SD = 1 .O) restraints were reported per quarter when the skills training modules were operative. Aggression-related incidents per quarter for the tokens plus skills training condition diminished markedly from the token economy alone to 5 1.2 (SD = 1.9), a 26.8% reduction from baseline.
Dauer	3 quaters baseline, 3 quaters post intervention token economy, 2 quateres post-intervention token + skills
Baseline/Intervention/Follow-up	
Funding	grant from the Illinois Department of Mental Health and Developmental Disabilities to the University of Chicago to establish the Illinois State Staff Training Institute
Qualitätsbemerkung	unclear reporting: which quarter belongs to which months on the time axis

Nummer	71
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Studie	Craig, C.; Ray, F.; Hix, C. (1989): Seclusion and restraint: decreasing the discomfort. In: Journal of psychosocial nursing and mental health services 27 (7), S. 17–19.
Studientyp	interrupted time series?
Kontrollgruppe ja/nein	no
Komplex ja/nein	yes
Interventionstyp	Complex
Effekt ja/nein auf S/R	Yes
Beschreibung Intervention	unit space for seclusion and restraint was renovated, an anteroom was added for continuous observation during S/R, minimum one RN per shift, at least one person for the patients in S/R - this staff is free from all other unit duties, staff education (crises theory, early recognition, prior interventions), interdisciplinary team for decision making, automatic notification of Medical Director/Hospital Administrator when S/R > 12 h
Beschreibung Patienten	acute care, state-operated hospital
Beschreibung Outcomevariablen	total restraint hours per month
Beschreibung Ergebnisse	Restraint hours per month declined from 1030 in the year prior to the intervention to 408 in the year after
Beschreibung Nebenwirkungen	average monthly seclusion hours initially increased from 231 to 260 hours, but fell to the lowest totals since record-keeping began after about 10 months
Dauer	
Baseline/Intervention/Follow-up	12 months baseline, 12 months post-intervention
Funding	not reported
Qualitätsbemerkung	insufficient reporting about patient characteristics, no statistical measures (SD, p etc.)

Nummer	72
Studie	Currier, Glenn W.; Farley-Toombs, Carole (2002): Datapoints: use of restraint before and after implementation of the new HCFA rules. In: Psychiatric services (Washington, D.C.) 53 (2), S. 138. DOI: 10.1176/appi.ps.53.2.138.
Institution	department of psychiatry at the University of Rochester School of Medicine in Rochester, New York
Studientyp	pre-post-design
Kontrollgruppe ja/nein	no
Komplex ja/nein	no
Interventionstyp	Legislative change
n Patienten	4 psychiatric units with a total of 80 beds
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	The rules require that a physician or a licensed independent practitioner make a face-to-face assessment of a patient within one hour of the initiation of restraint or seclusion. The rules also shorten the interval between mandatory renewal orders, codify requirements for staff training, and create more stringent requirements for documentation.
Beschreibung Patienten	The medical center has four specialty units—a child and adolescent unit (not relevant for this review), a general adult unit, a unit for medically ill chemical-abusing patients, and a unit for neurogeriatric patients (not relevant for this review).
Beschreibung Outcomevariablen	number and mean duration of episodes of restraint
Beschreibung Ergebnisse	The overall number of episodes decreased by more than 50 percent after the new rules went into effect (adult unit 20 -> 3 episodes, medically ill chemical abusing unit 15 -> 22). Reductions in the use of restraint were seen on all units except the unit for chemical-abusing patients, where a 46.7 percent increase occurred. The mean duration of an episode declined by 40.8 percent overall and 72.1 percent on the general adult unit (adult unit 8.6h -> 2.4h, medically ill chemical-abusing unit 11h -> 8.3h). The higher rate of restraint on the unit for chemical-abusing patients may reflect the large number of delirious patients in drug and alcohol withdrawal who were served on the unit.
Beschreibung sekundäre Ergebnisse	The use and duration of seclusion decreased at similar rates.
Dauer	
Baseline/Intervention/Follow-up	3 months before the new rules, 3 months after
Funding	not reported
Qualitätsbemerkung	insufficient reporting on seclusion, no statistical measures (SD, p etc.)

Nummer	75
Studie	Goodness, Kelly R.; Renfro, Nancy S. (2002): Changing a culture: a brief program analysis of a social learning program on a maximum-security forensic unit. In: Behavioral sciences & the law 20 (5), S. 495–506. DOI: 10.1002/bsl.489.
Institution	North Texas State Hospital
Studientyp	time-series??/pre-posttest design
Kontrollgruppe ja/nein	no

Komplex ja/nein	no
Interventionstyp	Behavioral therapy// social learning program
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	The essence of the Behavior Management Treatment Program's (BMTTP's) Social Learning Diagnostic Program that social learning principles are applied during staff-patient interactions and that all patient activities are utilized as diagnostic evaluations aimed at identifying both the patient's engagement problems and effective dangerousness management strategies. In addition, there are five key behavioral concepts that have been incorporated into the core of the BMTTP Social Learning Diagnostic Program: modeling, reinforcement, shaping, overlearning, and generalization. A major thrust of the program is the use of positive reinforcement through contingent points (e.g., tokens), differentiated privilege levels, and social reinforcement to shape and maintain adaptive pro-social behaviors. Moreover, the common denominator for all BMTTP programming efforts is the focus on developing a Dangerousness Management Plan that is individual specific and capable of assisting all concerned parties in managing the factors that contribute to a particular patient's dangerousness.
Beschreibung Patienten	extremely challenging, treatment resistive patient population on a maximum-security forensic setting (also civilly committed patients)
Beschreibung Outcomevariablen	incidents and hours of emergency interventions (S/R), average no. Of hours and incidents per patient served
Beschreibung Ergebnisse	In fact, in less than two years since changing the program, the average number of incidents of restraint and seclusion dropped by more than 50%, with FY 1999 (pre-SLDP) having an average of 4.78 incidents per patient served and FY 2001 (post-SLDP) having an average of 2.32. Likewise, the average number of hours that patients spent in restraint and seclusion for each incident absolutely decreased between FY 1999 (pre-SLDP) which saw an 11.20 hour average restraint and seclusion time per patient served and 2000 (post-SLDP) which saw a 10.35 hour average restraint and seclusion time. Even more impressive is that the average number of hours per incident plummeted to 5.75 in FY 2001 (post-SLDP).
Dauer	
Baseline/Intervention/Follow-up	1 year baseline, 1 year implementation, 1 year post-intervention
Funding	not reported

Nummer	76
Studie	Kostecka, M.; Zardecka, M. (1999): The use of physical restraints in Polish psychiatric hospitals in 1989 and 1996. In: Psychiatric services (Washington, D.C.) 50 (12), S. 1637–1638. DOI: 10.1176/ps.50.12.1637.
Institution	department of psychiatry at the Medical University of Warsaw
Studientyp	pre post
Kontrollgruppe ja/nein	no
Komplex ja/nein	no
Interventionstyp	Legislative changes and political transformations
Untersuchungseinheit	
n Patienten	In 1989 a total of 452 patients were hospitalized on the 11 wards, 207 men and 245 women. In 1996 a total of 414 patients were hospitalized, 163 women and 251 men.
Effekt ja/nein auf S/R	no ??
Beschreibung Intervention	Political transformation from a totalitarian to a democratic system, implementation of the Mental Health Act in 1995
Beschreibung Patienten	11 locked wards (7 in two large psychiatric hospitals, 4 were run by a scientific institute one of the latter in a general hospital), average age of patients 43, all Caucasian, restrained patients mostly suffered from endogenous psychosis/schizophrenia, alcohol dependence
Beschreibung Outcomevariablen	no of patients restrained, no of restraint episodes, no. Of episodes divided by total no. Of patients, no of episodes due to aggression, no. Of episodes due to aggression divided by total number of episodes, mean and SD duration of episodes
Beschreibung Ergebnisse	Significantly more episodes of restraint occurred in 1996 than in 1989; the number of episodes increased in each of the wards studied. However, the number of episodes per patient fell, as did the average duration of each episode. In addition the proportion of episodes that were due to patient aggression increased.
Beschreibung sekundäre Ergebnisse	Wards with high global pathology levels as measured by the Kellam's index had higher rates on three measures— the frequency of restraint episodes, the percentage of patients restrained, and the percentage of episodes due to aggression. The Pearson's correlation coefficients were .66 (p=.05), .69 (p=.02), and .54 (p=.1), respectively. The duration of restraint was correlated with the patient-staff ratio. On wards with more patients per staff member, episodes of restraint were longer (r=.7, p=.02).
Dauer	
Baseline/Intervention/Follow-up	1 year baseline (1989), 1 year post intervention (1995)
Funding	Helsinki Human Rights Foundation
Qualitätsbemerkung	Effects of political transformation and new law cannot be distinguished

Nummer	77
Studie	Lloyd C, King R, Machingura T. (2014): An investigation into the effectiveness of sensory modulation in reducing seclusion within a acute mental health unit. In: Advances in Mental Health 12, S. 93–100.
Institution	Behavioural Basis of Health, Gold Coast Campus, Griffith University; Queensland University of Technology; Gold Coast Health Service District.
Studientyp	CCT and pre-post-design
Kontrollgruppe ja/nein	yes
Komplex ja/nein	no
Interventionstyp	Sensory modulation
n Patienten	all patient admitted to intervention or control ward in 1 year (2011)
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Implementing a sensory modulation room
Beschreibung Patienten	acute mental health inpatient unit, 237 of the seclusion episodes male, 99 female, nothin reported on age, diagnosis of the patients
Beschreibung Outcomevariablen	seclusion episodes per year
Beschreibung Ergebnisse	intervention ward 157 -> 53, effect size 0.24, but duration of seclusion did not change, control ward 46 -> 81
Dauer	
Baseline/Intervention/Follow-up	1 year baseline, 1 year intervention
Funding	not reported
Qualitätsbemerkung	no randomization and highly increasing number on controll wards, wenig Daten, da von Anfang an auf Jahr aggregiert

Nummer	78
Studie	Moore D. (2010): The least restrictive continuum. In: Inst Nurs Newsl 6, 2-6.
Institution	Mental Health Services South Jersey Healthcare
Studientyp	interrupted time series
Kontrollgruppe ja/nein	yes
Komplex ja/nein	no
Interventionstyp	staff training -> NVCIP (non-violent crisis intervention program)
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Six employees became CPI (Crisis Prevention Institute) certified instructor, three of them attended advanced team training, all inpatient nursing employees were certified in NVCIP, code teams respond to silent codes.
Beschreibung Patienten	short term inpatient units (14 beds for children/adols, 28 for adults)
Beschreibung Outcomevariablen	The Moore Safety Code Team Performance/Analyses Tool (the lower the TOOL scores the less restrictive was the intervention de-escalation -> S ->R), injuries, Minutes of restraint Utilization over Patient Care Days
Beschreibung Ergebnisse	The TOOL Score on the adult unit fell from 271 in 2008 (2005: 300, 2006: 392, 2007:431) to 122 in 2009. Minutes of Restraint Utilization over Patient Care Days on the adult unit fell from 0.98 in 2008 (2005: 0.65, 2006: 0.94, 2007: 0.67) to 0.45 in 2009. Just one Injury occured on the adult unit in 2007.
Dauer	3 (?) years baseline 1 year in which intervention was implemented (all retrospective?)
Baseline/Intervention/Follow-up	1 year follow up, another year wasa not competed
Funding	not reported
Qualitätsbemerkung	retrospective, uncomplete data, willkürlicher Vergleich von Jahren (bspw. 2006 - weil da hoher restraint? Mit Ergebnisejahr 2009), hohe Variabilität in der Baseline

Nummer	79
Studie	Morales, E.; Duphorne, P. L. (1995): Least restrictive measures: alternatives to four-point restraints and seclusion. In: Journal of psychosocial nursing and mental health services 33 (10), S. 13–16.
Institution	Veterans Administrative Center/Albuquerque, Ft. Lyon Veterans Administrative Center/Ft Lyon, College of Nursing/University of New Mexico
Studientyp	pre-post-design, retrospective
Kontrollgruppe ja/nein	no
Komplex ja/nein	yes
Interventionstyp	complex
n Patienten	25
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Team meetings for discussing patients, alternative meassures, early signs and symptomes; information for staff (6 articles about Alzheimer, violence and assaultiveness, managing the difficult patient, the use of restraint and seclusion, and staff responsibilities);

	idea of offering patients two alternative choices was supported (choices: one-to-one verbal interaction with staff member, quiet time, beating on a pillow, warm milk or cold drink, provision of limited exercise, listening to soft music or relaxation tapes)
Beschreibung Patienten	acute psychiatric unit, 30 beds, majority of patients were chronically mentally ill with diagnoses of schizophrenia, organic brain syndrome, bipolar affective disorder, and depression, Primarily men, age 27-69. Average length of stay 2 weeks.
Beschreibung Outcomevariablen	??
Beschreibung Ergebnisse	By the end of the project, the total time spent by patients in restraints and seclusion was ESTIMATED(?) to have been reduced by approximately 50 %.
Dauer	3 months during the project, compared with the same 3-month period in the previous 2 years
Baseline/Intervention/Follow-up	
Funding	not reported
Qualitätsbemerkung	baseline retrospective (Hawthorne effect?), measuring instruments not mentioned, documentation of coercive measures not described

Nummer	80
Studie	O'Malley J, Frampton C, Wijnveld AM et al. (2007): Factors influencing seclusion rates in an adult psychiatric intensive care unit. In: Journal of Psychiatric Intensive Care 3 (2), S. 93–100.
Institution	Department of Psychological Medicine/Christchurch School of Medicine and Health Science
Studientyp	pre-post-design, retrospective, multivariate analysis
Kontrollgruppe ja/nein	no
Komplex ja/nein	yes
Interventionstyp	split (=downsize) unit
n Patienten	(21 shifts baseline, 21 shifts post-intervention, 126 shifts follow up; 1x20 bed unit at baseline, 2x10 bed unit post-intervention/follow up)
Effekt ja/nein auf S/R	Yes
Beschreibung Intervention	Splitting the PICU from a 20 bed unit to two 10 bed units
Beschreibung Patienten	PICU, locked all times, high levels of observation, patients: 18-64 years, require 24 h acute psychiatric care, average LOS 17-20 days, at significant risk of harm to self or others
Beschreibung Outcomevariablen	Seclusion room entry and exit times, unit admission and discharge times were used to calculate hours in seclusion and patient hours in the unit. From this, total patient hours in seclusion as a percentage of the total patient hours in the unit (from which the secluded patients came) was calculated per shift.
Beschreibung Ergebnisse	Univariate analysis of variance revealed a significant reduction in the rates from 8,2% in the first period to 4,4% in the second and 3,6% in the third. Multivariate analysis: Period, shift and nurse hours all showed independent statistically significant association with seclusion rates and explained 23% of seclusion while period alone explained 15%.
Dauer	12 weeks baseline (retrospective), 12 weeks post intervention (retrospective), after a year
Baseline/Intervention/Follow-up	6 months follow-up (prospective)
Funding	A Canterbury (New Zealand) District Health Board Research grant of \$11,000 supported data collection.
Qualitätsbemerkung	retrospective.

Nummer	81
Studie	Smith, Gregory M.; Davis, Robert H.; Bixler, Edward O.; Lin, Hung-Mo; Altenor, Aidan; Altenor, Roberta J. et al. (2005): Pennsylvania State Hospital system's seclusion and restraint reduction program. In: Psychiatric services (Washington, D.C.) 56 (9), S. 1115–1122. DOI: 10.1176/appi.ps.56.9.1115.
Institution	Office of Mental Health and Substance Abuse Services of the Commonwealth of Pennsylvania in Harrisburg, Pennsylvania State University School of Medicine in Hershey
Studientyp	time-series, multivariate analysis
Kontrollgruppe ja/nein	no
Komplex ja/nein	yes
Interventionstyp	Complex
n Patienten	(The annual census for the hospital system during this 11-year period decreased 56 percent, from about 6,300 to about 2,800)
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	advocacy efforts (By 1995 the state government had independent advocates assigned to each hospital, who provided a needed layer of protection for patients on a day-to-day basis), leadership (e.g. defining seclusion as a treatment failure), state policy change (defining S/R, limit use of S/R to emergency situations, defining and prohibiting chemical restraint), improved patient-staff ratios and reduction of unit-size, psychiatric emergency response teams (PERT), incident management system (tracking S/R, PRN and STAT medications, making 35 performance indicators available on unit level) and second-generation antipsychotics, increase in the quantity and quality of treatment especially

	training programs to prepare people for discharge, recovery-based approaches and group therapy
Beschreibung Patienten	records of patients older than 18 years who were civilly committed to one of the nine state hospitals in Pennsylvania were included, patients had severe and persistent mental illness, 53% were men
Beschreibung Outcomevariablen	Two databases were used in each of the nine hospitals: one identified date, time, duration, and justification for each episode of seclusion or restraint and the other identified when a patient was hospitalized and the demographic characteristics and the diagnosis of the patient. Rate and duration of seclusion and restraint were calculated. Reports from compensation claims were used to determine staff injuries from patient assaults.
Beschreibung Ergebnisse	The rate and duration of seclusion and mechanical restraint decreased dramatically during this period. From 1990 to 2000, the rate of seclusion decreased from 4.2 to .3 episodes per 1,000 patient-days. The average duration of seclusion decreased from 10.8 to 1.3 hours. The rate of restraint decreased from 3.5 to 1.2 episodes per 1,000 patient-days. The average duration of restraint decreased from 11.9 to 1.9 hours.
Beschreibung sekundäre Ergebnisse	No significant changes were seen in rates of staff injuries from 1998 to 2000.
Dauer	11 years observation
Baseline/Intervention/Follow-up	
Funding	This research project was funded, in part, by an award from the Ford Foundation in conjunction with Harvard University's John F. Kennedy School of Government and the Council for Excellence in Government through an Innovations in American Government Award.
Qualitätsbemerkung	Patient population changing to a less acute one (During most of its history the hospital system provided direct admission service. However, during the study period, the admission of civilly committed patients was limited to referrals from local psychiatric acute care settings for individuals who were unable to be stabilized within a 30-day acute care stay)?; No clear intervention, many changes over time, unclear what helped.

Nummer	82
Studie	Steinert T, Eisele F, Göser U, Tschöke S, Solmaz S, Falk S. (2009): Quality of Process and Results in Psychiatry: Decreasing Coercive Interventions and Violence among Patients with Personality Disorder by Implementation of a Crisis Intervention Ward. In: Gesundheitsökonomik und Qualitätsmanagement 14, S. 44–48.
Institution	Abteilung Psychiatrie I der Universität Ulm, Zentrum für Psychiatrie Die Weissenau
Kontrollgruppe ja/nein	no
Komplex ja/nein	no
Interventionstyp	Specialized therapy for personality disorders// Diagnosespezifische Spezialstation
Effekt ja/nein auf S/R	yes
Beschreibung Intervention	Während bis dahin alle in Krisensituationen aufgenommenen Patienten mit Persönlichkeitsstörungen (ICD-10: F6) auf eine der vier alltagspsychiatrischen, überwiegend geschlossen geführten Aufnahmestationen der Klinik aufgenommen worden waren und die Verteilung nach dem Wohnort erfolgte (Sektorprinzip), wurde eine dieser Stationen ab 1.11.2005 zur Kriseninterventionsstation umfunktioniert, auf die seitdem alle Patienten mit einer Hauptdiagnose F6 oder F4 (Anpassungs- und Belastungsstörungen) aufgenommen werden.
Beschreibung Patienten	Es handelt sich weiterhin um eine Akutstation, d. h. Patienten werden zu jeder Zeit aufgenommen, kommen überwiegend als Notfall, sind bei der Aufnahme häufig suizidal oder auch fremdaggressiv, nicht selten auch intoxikiert bei begleitendem Substanzmissbrauch. Zwangsmaßnahmen können auf dieser Station durchgeführt werden, die Patienten werden zu diesem Zweck nicht verlegt. Bei Patienten mit der Hauptdiagnose F4 handelt es sich überwiegend um Patienten mit suizidalen Krisen oder Zustand nach Suizidversuch, die Zuweisung erfolgt von vorbehandelnden Allgemeinkrankenhäusern oder direkt von außen. Diese Patientengruppe ist strukturell ähnlich wie die hier im Fokus des Interesses stehende Gruppe mit Persönlichkeitsstörungen (F6), selbstverletzende und fremdaggressive Verhaltensweisen sind aber seltener und Zwangsmaßnahmen kommen deshalb auch vergleichsweise selten zur Anwendung. Patienten mit primärer Substanzabhängigkeit (ICD-10: F1), psychotischen oder affektiven Störungen (ICD-10: F2, F3) werden nicht auf der Kriseninterventionsstation aufgenommen.
Beschreibung Outcomevariablen	Behandlungsepisoden, Anteil von Fixierung/Isolierung betroffen, mittlere Dauer einer Fixierung/Isolierung, durchschnittliche Anzahl Maßnahmen pro betroffenem Pat, Gesamtzahl freiheitsbeschränkende Maßnahmen, Suizidversuch, gewalttätige Drohung, Gewalt gegen Gegenstände/Personen, gerichtliche Unterbringung (BGB, UBG)
Beschreibung Ergebnisse	Die Gesamtzahl der Zwangsmaßnahmen konnte von 120 bei allen in der Gesamtklinik behandelten Fällen mit der Diagnose einer Persönlichkeitsstörung auf 17 reduziert werden, auch der Anteil der von solchen Maßnahmen betroffenen Patienten reduzierte sich um über die Hälfte. In allen untersuchten Maßnahmen ergab sich eine fast einheitlich gleichgerichtete günstige Tendenz, wenn auch statistische Signifikanz aufgrund der zum Teil kleinen Fallzahlen entsprechender Vorkommnisse nicht immer erreicht (signifikant: Anteil von Isolierung betroffenen 15% -> 2,7% $p < 0,001$). Einzig die durchschnittliche Dauer einer Fixierung war deutlich angestiegen, was aber in Anbetracht der sehr geringen Fallzahl von Fixierungen nicht als systematischer Effekt interpretiert werden sollte. Auch aggressive Tätlichkeiten konnten um nahezu die Hälfte reduziert werden. Der Anteil

	unfreiwillig untergebrachter Patienten reduzierte sich von 11,0 auf 3,8% und damit um zwei Drittel ($p < 0,05$).
Dauer	
Baseline/Intervention/Follow-up	1 Jahr vor und 1 Jahr nach Eröffnung der Station
Funding	not reported
Qualitätsbemerkung	kleine Stichprobe, Signifikanz häufig nicht erreicht

Deeskalation und Mitarbeitertrainings

Literatursuche zwischen September 2016 und November 2024

Artike I-Nr.	Studie n-Nr.	Sub- numm er	
1	1		Baldaçara L, Ismael F, Leite V, Pereira LA, Dos Santos RM, Gomes Júnior VP, Calfat ELB, Diaz AP, Périco CAM, Porto DM, Zacharias CE, Cordeiro Q, da Silva AG, Tung TC. Brazilian guidelines for the management of psychomotor agitation. Part 1. Non-pharmacological approach. Braz J Psychiatry. 2019 Mar-Apr;41(2):153-167. doi: 10.1590/1516-4446-2018-0163. Epub 2018 Dec 6. PMID: 30540028; PMCID: PMC6781680.
2	2		Barbui C, Purgato M, Abdulmalik J, Caldas-de-Almeida JM, Eaton J, Gureje O, Hanlon C, Nosè M, Ostuzzi G, Saraceno B, Saxena S, Tedeschi F, Thornicroft G. Efficacy of interventions to reduce coercive treatment in mental health services: umbrella review of randomised evidence. Br J Psychiatry. 2021 Apr;218(4):185-195. doi: 10.1192/bjp.2020.144 . PMID: 32847633 .
3	3		Celofiga A, Kores Plesnicar B, Koprivsek J, Moskon M, Benkovic D, Gregoric Kumperscak H. Effectiveness of De-Escalation in Reducing Aggression and Coercion in Acute Psychiatric Units. A Cluster Randomized Study. Front Psychiatry. 2022 Apr 7;13:856153. doi: 10.3389/fpsy.2022.856153. PMID: 35463507; PMCID: PMC9021532.
4	4		Dike CC, Lamb-Pagone J, Howe D, Beavers P, Bugella BA, Hillbrand M. Implementing a program to reduce restraint and seclusion utilization in a public-sector hospital: Clinical innovations, preliminary findings, and lessons learned. Psychol Serv. 2021 Nov;18(4):663-670. doi: 10.1037/ser0000502. Epub 2020 Sep 17. PMID: 32940500.
5	5		Dixon M, Long EM. An Educational Intervention to Decrease the Number of Emergency Incidents of Restraint and Seclusion on a Behavioral Health Unit. J Contin Educ Nurs. 2022 Feb;53(2):70-76. doi: 10.3928/00220124-20220104-07 . Epub 2022 Feb 1. PMID: 35103503 .
6	6		Guzman-Parra J, Aguilera-Serrano C, Huizing E, Bono Del Trigo A, Villagrán JM, García-Sánchez JA, Mayoral-Cleries F. A regional multicomponent intervention for mechanical restraint reduction in acute psychiatric wards. J Psychiatr Ment Health Nurs. 2021 Apr;28(2):197-207. doi: 10.1111/jpm.12669 . Epub 2020 Jul 15. PMID: 32667113 .
7	7		Haefner J, Dunn I, McFarland M. A Quality Improvement Project Using Verbal De-Escalation to Reduce Seclusion and Patient Aggression in an Inpatient Psychiatric Unit. Issues Ment Health Nurs. 2021 Feb;42(2):138-144. doi: 10.1080/01612840.2020.1789784 . Epub 2020 Aug 4. PMID: 32749904.
8	8		Hirsch S, Steinert T. Measures to Avoid Coercion in Psychiatry and Their Efficacy. Dtsch Arztebl Int. 2019 May 10;116(19):336-343. doi: 10.3238/arztebl.2019.0336 . PMID: 31288909 ; PMCID: PMC6630163.
9	9		McDonnell AA, O'Shea MC, Bews-Pugh SJ, McAuliffe H, Deveau R. Staff training in physical interventions: a literature review. Front Psychiatry. 2023 Jul 26;14:1129039. doi: 10.3389/fpsy.2023.1129039 . PMID: 37564241 ; PMCID: PMC10411725.
10	10		Newman J, Paun O, Fogg L. Effects of a Staff Training Intervention on Seclusion Rates on an Adult Inpatient Psychiatric Unit. J Psychosoc Nurs Ment Health Serv. 2018 Jun 1;56(6):23-30. doi: 10.3928/02793695-20180212-02. Epub 2018 Feb 16. PMID: 29447413 .
11	11		Välimäki M, Lantta T, Anttila M, Vahlberg T, Normand SL, Yang M. An Evidence-Based Educational Intervention for Reducing Coercive Measures in Psychiatric Hospitals: A Randomized Clinical Trial. JAMA Netw Open. 2022 Aug 1;5(8):e2229076. doi: 10.1001/jamanetworkopen.2022.29076 . PMID: 36040740; PMCID: PMC9428738.
12	12		Ye J, Xia Z, Wang C, Liao Y, Xu Y, Zhang Y, Yu L, Li S, Lin J, Xiao A. Effectiveness of CRSCE-Based De-escalation Training on Reducing Physical Restraint in Psychiatric Hospitals: A Cluster Randomized Controlled Trial. Front Psychiatry. 2021 Feb 16;12:576662. doi: 10.3389/fpsy.2021.576662. PMID: 33679467; PMCID: PMC7928340
13	13		Ye J, Xiao A, Yu L, Guo J, Lei H, Wei H, Luo W. Staff Training Reduces the Use of Physical Restraint in Mental Health Service, Evidence-based Reflection for China. Arch Psychiatr Nurs. 2018 Jun;32(3):488-494. doi: 10.1016/j.apnu.2017.11.028. Epub 2017 Nov 22. PMID: 29784235 .

Nummer	1
Studie	Baldaçara L, Ismael F, Leite V, Pereira LA, Dos Santos RM, Gomes Júnior VP, Calfat ELB, Diaz AP, Périco CAM, Porto DM, Zacharias CE, Cordeiro Q, da Silva AG, Tung TC. Brazilian guidelines for the management of psychomotor agitation. Part 1. Non-pharmacological approach. Braz J Psychiatry. 2019 Mar-Apr;41(2):153-167. doi: 10.1590/1516-4446-2018-0163. Epub 2018 Dec 6. PMID: 30540028; PMCID: PMC6781680.
Institution	-Comissao de Emergencias Psiquiatricas, Associacao Brasileira de Psiquiatria (ABP), Rio de Janeiro, RJ, Brazil. -Universidade Federal do Tocantins (UFT), Palmas, TO, Brazil. -Secretaria de Estado de Saude do Tocantins, Palmas, TO, Brazil.

	-Coordenadoria de Saude Mental, Sao Caetano do Sul, SP, Brazil. -Faculdade de Medicina do ABC, Santo Andre', SP, Brazil. -Universidade de Sao Caetano do Sul, Sao Caetano do Sul, SP, Brazil. -Secretaria de Saude do Municı'pio de Palmas, Palmas, TO, Brazil. -Faculdade de Tecnologia e Ciencias (FTC), Salvador, BA. -Universidade Salvador (UNIFACS), Salvador, BA, Brazil. -Escola Bahiana de Medicina e Sau'de Pu'blica (EBMSP), Salvador, BA, Brazil. -Hospital Universita'rio Lauro Wanderley, Universidade Federal da Paraiba (UFPB), Joao Pessoa, PB, Brazil. -Pronto Atendimento de Saude Mental, Joao Pessoa, PB, Brazil. -Associacao Psiquia'trica do Piaui' (APPI), Teresina, PI, Brazil. -Faculdade de Medicina da Santa Casa de Sao Paulo (FCMSCSP), Sa'õ Paulo, SP, Brazil. -Centro de Atenc,a'õ Integrada a Saude Mental, Franco da Rocha, SP, Brazil. - Universidade do Sul de Santa Catarina (UNISUL), Tubarao, SC, Brazil. -Coordenadoria de Sau'de Mental, Sa'õ Bernardo do Campo, SP, Brazil. -Instituto de Psiquiatria de Santa Catarina, Sao Jose', SC, Brazil. -Coordenac,a'õ Estadual de Sau'de Mental, Florianopolis, SC, Brazil. -Secretaria de Estado da Saude de Sao Paulo, Sao Paulo, SP, Brazil. -Secretaria de Sau'de do Municı'pio de Sorocaba, Sorocaba, SP, Brazil. -Coordenacao-Geral de Saude Mental, Alcool e Outras Drogas, Ministerio da Saude, Brazil. -Asociacio'n Psiquiatrica de America Latina (APAL). -ABP, Rio de Janeiro,RJ, Brazil. -Faculdade de Medicina, Universidade do Porto/Conselho Federal de Medicina (CFM), Porto, Portugal. -Instituto de Psiquiatria,Hospital das Cli'nicas, Faculdade de Medicina, Universidade de Sao Paulo (USP), Sao Paulo, SP, Brazil.
Studientyp	Systematic review
Kontrollgruppe ja/nein	No
Komplex ja/nein	No
Interventionstyp	Non-pharmacological intervention
n Patienten	
Effekt ja/nein auf S/R	No
Beschreibung Intervention	Verbal de-escalation techniques to manage psychomotor agitation in patients
Beschreibung Kontrolle	
Beschreibung Patienten	Patients with psychomotor agitation
Beschreibung Outcomevariablen	Scales to assess agitation and aggressiveness/violent state (e.g. Agitation severity scale, overt aggression scale)
Beschreibung Ergebnisse	- Verbal de-escalation techniques have been shown to decrease agitation and reduce the potential for associated violence in the emergency setting. - The possibility of underlying medical etiologies must be considered first and foremost. Particular attention should be paid to the patient's appearance and behavior, physical signs, and mental state. - If agitation is severe, rapid tranquilization with medications is recommended. - If verbal measures fail to contain the patient, physical restraint should be performed as the ultimate measure for patient protection, and always be accompanied by rapid tranquilization. Healthcare teams must be thoroughly trained to use these techniques and overcome difficulties if the verbal approach fails. - It is important that healthcare professionals be trained in non-pharmacological management of patients with psychomotor agitation as part of the requirements for a degree and graduate degree.
Dauer	
Baseline/Intervention/Follow-up	
Funding	No external funding reported
Qualitätsbemerkung	Evidence quality challenge by indirectness (transferability)
Nummer	2
Studie	Barbui C, Purgato M, Abdulmalik J, Caldas-de-Almeida JM, Eaton J, Gureje O, Hanlon C, Nosè M, Ostuzzi G, Saraceno B, Saxena S, Tedeschi F, Thornicroft G. Efficacy of interventions to reduce coercive treatment in mental health services: umbrella review of randomised evidence. Br J Psychiatry. 2021 Apr;218(4):185-195. doi: 10.1192/bjp.2020.144 . PMID: 32847633 .
Institution	-World Health Organization Collaborating Centre for Research and Training in Mental Health and Service Evaluation, Department of Neuroscience, Biomedicine and Movement Sciences, Section of Psychiatry, University of Verona, Italy -World Health Organization Collaborating Centre for Research and Training in Mental Health, Neurosciences and Substance Abuse, Department of Psychiatry, College of Medicine, University of Ibadan, Nigeria -Lisbon Institute of Global Mental Health, Comprehensive Health Research Centre, Nova Medical School, Nova University of Lisbon, Portugal

	-Centre for Global Mental Health, London School of Hygiene and Tropical Medicine, UK; -CBM Global, Laudenbach, Germany -King's College London, Institute of Psychiatry, Psychology and Neuroscience, Health Service and Population Research Department, Centre for Global Mental Health, UK -WHO Collaborating Centre for Mental Health Research and Capacity Building, Department of Psychiatry, School of Medicine, College of Health Sciences, Addis Ababa University; and Centre for Innovative Drug Development and Therapeutic Trials for Africa (CDT-Africa), College of Health Sciences, Addis Ababa University, Ethiopia -Harvard TH Chan School of Public Health, Boston, USA -Centre for Global Mental Health and Centre for Implementation Science, Institute of Psychiatry, Psychology and Neuroscience, King's College London
Studientyp	Umbrella review
Kontrollgruppe ja/nein	No
Komplex ja/nein	Yes
Interventionstyp	Non-pharmacological intervention
n Patienten	8554 participants
Effekt ja/nein auf S/R	Yes
Beschreibung Intervention	interventions to reduce coercive treatment in mental health services, such as staff training to foster verbal de-escalation techniques
Beschreibung Kontrolle	
Beschreibung Patienten	people with mental health conditions in any treatment setting
Beschreibung Outcomevariablen	Involuntary admissions, restraint use
Beschreibung Ergebnisse	-The evidence on the efficacy of staff training to reduce use of restraint was supported by the most robust evidence (relative risk RR = 0.74, 95% CI 0.62–0.87; suggestive association, GRADE: moderate), - Effects have been identified for the evidence on integrated care interventions (RR = 0.66, 95% CI 0.46–0.95; weak association, GRADE: low)
Dauer	
Baseline/Intervention/Follow-up	
Funding	-support from the European Commission, grant agreement number 779255 'RE-DEFINE: Refugee Emergency: DEFinIng and Implementing Novel Evidence-based psychosocial interventions -support from the National Institute of Mental Health of the National Institutes of Health under award number R01MH100470 (Cobalt study) -support by the UK Medical Research Council in relation the Emilia (MR/S001255/1) and Indigo Partnership (MR/R023697/1) awards
Qualitätsbemerkung	Low to moderate levels of evidence quality
Nummer	3
Studie	Celofiga A, Kores Plesnicar B, Koprivsek J, Moskon M, Benkovic D, Gregoric Kumperscak H. Effectiveness of De-Escalation in Reducing Aggression and Coercion in Acute Psychiatric Units. A Cluster Randomized Study. Front Psychiatry. 2022 Apr 7;13:856153. doi: 10.3389/fpsyt.2022.856153. PMID: 35463507; PMCID: PMC9021532.
Institution	-Department of Psychiatry, University Medical Centre Maribor, Maribor, Slovenia, - Faculty of Medicine, University of Maribor, Maribor, Slovenia, - University Psychiatric Clinic Ljubljana, Ljubljana, Slovenia, -Faculty of Medicine, University of Ljubljana, Ljubljana, Slovenia, -Faculty of Computer and Information Science, University of Ljubljana, Ljubljana, Slovenia, -Faculty of Natural Sciences and Mathematics, University of Maribor, Maribor, Slovenia, -Child and Adolescent Psychiatry Unit, University Medical Centre Maribor, Maribor, Slovenia
Studientyp	multi-center cluster randomized study
Kontrollgruppe ja/nein	Yes
Komplex ja/nein	No
Interventionstyp	Non-pharmacological intervention
n Patienten	1251 patients in 3 IV-hospitals , 1939 participants in 3 CG-hospitals
Effekt ja/nein auf S/R	Yes
Beschreibung Intervention	training in verbal and non-verbal de-escalation techniques for the staff teams on experimental wards.
Beschreibung Kontrolle	Treatment as usual, waitinglist control
Beschreibung Patienten	psychiatric hospital staff dealing with patients in an acute psychiatric ward that showed aggressive behavior
Beschreibung Outcomevariablen	-The primary outcome was the number of aggressive incidents and the restraint episodes for the baseline and intervention periods, while the severity of aggressive incidents and the duration of restraints were a secondary outcome. -The number of patients with aggressive behavior and restrained patients was also obtained.

	-Data on aggressive incidents and severity were recorded by the revised Staff Observation Aggression Scale (SOAS-R)
Beschreibung Ergebnisse	-Compared to the control group, the incidence rate of aggressive events was 73% lower in the experimental group (IRR = 0.268, 95% CI [0.221; 0.342]), while the rate of severe events was 86% lower (IRR = 0.142, 95% CI [0.107; 0.189]). - During the intervention period, the incidence rate of physical restraints due to aggression in the experimental group decreased to 30% of the rate in the control group (IRR = 0.304, 95% CI [0.238; 0.386]). - No reduction in the incidence of restraint used for reasons unrelated to aggression was observed. - After the intervention, a statistically significant decrease in the severity of aggressive incidents ($p < 0.001$) was observed, while the average duration of restraint episodes did not decrease.
Dauer Baseline/Intervention/Follow-up	The de-escalation training was 16 h duration in total
Funding	The research was conducted as part of a research project of the University Medical Centre Maribor (IRP 2018/1-09)
Qualitätsbemerkung	Risk of bias due to impossibility of blinding increased
Nummer	4
Studie	Dike CC, Lamb-Pagone J, Howe D, Beavers P, Bugella BA, Hillbrand M. Implementing a program to reduce restraint and seclusion utilization in a public-sector hospital: Clinical innovations, preliminary findings, and lessons learned. Psychol Serv. 2021 Nov;18(4):663-670. doi: 10.1037/ser0000502. Epub 2020 Sep 17. PMID: 32940500.
Institution	- Yale University School of Medicine - Connecticut Department of Mental Health and Addiction Services
Studientyp	Observational study
Kontrollgruppe ja/nein	No
Komplex ja/nein	Yes
Interventionstyp	Complex intervention
n Patienten	
Effekt ja/nein auf S/R	No
Beschreibung Intervention	Eleven clinical innovations were derived from the Alternatives to Restraint and Seclusion State Incentive Grant (ARS-SIG) approach based on the 6 principles entailed in the ARS-SIG Core Strategies (Leadership Toward Organizational Change, Workforce Development, Use of Restraint and Seclusion Prevention Tools, Use of Data to Inform Practice, Debriefing Techniques).
Beschreibung Kontrolle	
Beschreibung Patienten	Patients in psychiatric hospital
Beschreibung Outcomevariablen	total patient-restraint hours per 100 patient days, health economic outcome
Beschreibung Ergebnisse	-Mean annual restraint hours decreased between the baseline period (2005–2008) and study period (2009–2012) from 5,300 hr to 570 hr, a 89% decrease ($t = 10.54$, $p < .01$, $d = 5.27$). The mean annual staff injuries decreased from 225 injuries to 184, an 18% decrease ($t = 6.61$, $p < .01$, $d = 3.31$). -The mean annual workmen's compensation medical costs decreased from \$780,937 to \$527,715, a 24% decrease ($t = 4.11$, $p < .01$, $d = 1.45$). All effect sizes are large. A cursory examination of total seclusion hours by year reveals no concomitant increase of seclusion accompanying the observed decreases in restraints hours. -During the baseline phase, mean annual seclusion hours were 327 hr. During the study period, it was 232 hr, a 29% decrease.
Dauer Baseline/Intervention/Follow-up	4-year baseline phase, 4-year intervention phase
Funding	
Qualitätsbemerkung	
Nummer	5
Studie	Dixon M, Long EM. An Educational Intervention to Decrease the Number of Emergency Incidents of Restraint and Seclusion on a Behavioral Health Unit. J Contin Educ Nurs. 2022 Feb;53(2):70-76. doi: 10.3928/00220124-20220104-07. Epub 2022 Feb 1. PMID: 35103503.
Institution	Lamar University, Dishman School of Nursing, Beaumont, Texas, USA
Studientyp	Quasi-experimental pre-post study
Kontrollgruppe ja/nein	Yes
Komplex ja/nein	No
Interventionstyp	Educational intervention

n Patienten	9 mental health technicians, 12 licensed nurses
Effekt ja/nein auf S/R	Yes
Beschreibung Intervention	Staff training in De-Escalate Anyone, Anywhere, Anytime (DAAA) that consists of three principles, 1. Principle: meet needs of patient, 2. Principle: reflect respect and dignity back to patient, 3. Principle: maintain safety of everyone; additional communication in leadership skill enforcement training for licensed nurses
Beschreibung Kontrolle	Facilities in this condition received no intervention.
Beschreibung Patienten	Direct care staff that included mental health technicians and nurse staff
Beschreibung Outcomevariablen	Mean incidences of restraints, Mean incidences of seclusions
Beschreibung Ergebnisse	- Incidence of restrained decreased from 6 pre-intervention to 2 post-intervention for the facilities in the intervention condition (increased from 7 to 8.33 in the control group) - Incidence of seclusion decreased from 4.33 pre-intervention to 1.67 post-intervention for the intervention condition (from 5 to 3 in the control group)
Dauer	
Baseline/Intervention/Follow-up	2-month intervention period
Funding	No external funding reported
Qualitätsbemerkung	Evidence quality restricted by small numbers of units (imprecision)
Nummer	6
Studie	Guzman-Parra J, Aguilera-Serrano C, Huizing E, Bono Del Trigo A, Villagrán JM, García-Sánchez JA, Mayoral-Cleries F. A regional multicomponent intervention for mechanical restraint reduction in acute psychiatric wards. J Psychiatr Ment Health Nurs. 2021 Apr;28(2):197-207. doi: 10.1111/jpm.12669 . Epub 2020 Jul 15. PMID: 32667113 .
Institution	-Department of Mental Health, University General Hospital of Málaga, Biomedical Research Institute of Malaga (IBIMA), Malaga, Spain -Community Mental Health Unit of Motril, South Health Management Area of Granada, Motril, Spain -Mental Health Coordination Unit, Sevilla, Spain -Andalusian School of Public Health (EASP), Granada, Spain -Mental Health Hospitalization Unit, Jerez de la Frontera Hospital, Jerez de la Frontera, Spain
Studientyp	retrospective observational study
Kontrollgruppe ja/nein	No
Komplex ja/nein	Yes
Interventionstyp	Non-pharmacological complex multicomponent intervention
n Patienten	30 psychiatric wards
Effekt ja/nein auf S/R	Yes
Beschreibung Intervention	The intervention consisted of five strategies: (a) leadership, (b) analysis of the situation, (c) awareness training for the heads of the wards, (d) unified record of MR and (e) staff training.
Beschreibung Kontrolle	
Beschreibung Patienten	Patients in acute psychiatric wards
Beschreibung Outcomevariablen	Mechanical restraint duration and frequency: (a) the monthly restraint hours per 1,000 bed days (the numerator included the total number of monthly restraint hours of all wards and the denominator the number of beds multiplied by the number of days in the month; this quotient was multiplied by 1,000) (b) the number of monthly restraint episodes per 1,000 bed days (the same as the previous index, but the numerator included the total number of episodes).
Beschreibung Ergebnisse	-There were 206.32 restraint hours and 12.96 restraint episodes/1,000 bed days during the study period. -A significant decreasing trend was observed in restraint hours (-1.79%, $p < .001$), but not in the number of restraint episodes (-0.45%; $p = .149$). -During the study period, there were 206.32 restraint hours/1,000 bed days and 12.96 restraint episodes/1,000 bed days. -Comparing the first semester with the last semester of the study period, there were reductions in the restraint hours/1,000 bed days of 33.19% (266.40 versus 177.99) and in the restraint episodes/1,000 bed days of 6.35% (14.01 versus 13.12). -There was also a reduction in admissions with restraint of 8.39% (14.07% versus 12.89%). -There was a reduction of 8.14% in the percentage of patients restrained (in the first semester, 15.44% of the total patients admitted were restrained versus 14.20% in the last semester). -Regarding the average duration of the restraint episodes in the five semesters of the study, there was a significant reduction in the duration of the restraint episodes in the different semesters ($H = 25.49$, $p < .001$) (median first semester = 10.40 [IQR = 5.25–

	19.00]; median second semester = 9.50 [IQR = 5.17–17.50]; median third semester = 9.50 [IQR = 5.00–17.29]; median fourth semester = 9.50 [IQR = 5.00–16.50]; median fifth semester = 9.00 [IQR = 4.75–15.50]; post hoc Dunn test: significant differences between first semester versus fourth semester [$p = .019$] and versus fifth semester [$p < .001$], and second semester versus fifth semester [$p = .009$]).
Dauer Baseline/Intervention/Follow-up	Observation period over 30 months
Funding	No external funding reported
Qualitätsbemerkung	Reductions in quality of evidence due to study design
Nummer	7
Studie	Haefner J, Dunn I, McFarland M. A Quality Improvement Project Using Verbal De-Escalation to Reduce Seclusion and Patient Aggression in an Inpatient Psychiatric Unit. <i>Issues Ment Health Nurs</i> . 2021 Feb;42(2):138-144. doi: 10.1080/01612840.2020.1789784 . Epub 2020 Aug 4. PMID: 32749904.
Institution	-School of Nursing, University of Michigan Flint, Flint, Michigan USA -Tuerk House, Baltimore, Maryland, USA
Studientyp	Quasi-experimental pre-post study
Kontrollgruppe ja/nein	No
Komplex ja/nein	No
Interventionstyp	Educational program
n Patienten	31 participants (providers), 342 patients until endpoint assessment
Effekt ja/nein auf S/R	Yes
Beschreibung Intervention	TeamSTEPPS educational program to inform nurses about verbal de-escalation to reduce patient aggressive behavior; presented in three self-learning computer moduls and one in-class demonstration of escalation techniques
Beschreibung Kontrolle	
Beschreibung Patienten	Healthcare providers of nursing staff
Beschreibung Outcomevariablen	- Rate of aggressive behavior - Rate of seclusion events
Beschreibung Ergebnisse	- Decrease in rate of aggressive behavior from 17.3% pre-intervention to 11.4% post-intervention - Decrease in rate of seclusion events from 5.9% pre-intervention to 4.4% post-intervention -
Dauer Baseline/Intervention/Follow-up	2 months prior to initiation of program to 2 months after completion of program
Funding	No external funding reported
Qualitätsbemerkung	Restrictions in quality of evidence due to study design and small sample
Nummer	8
Studie	Hirsch S, Steinert T. Measures to Avoid Coercion in Psychiatry and Their Efficacy. <i>Dtsch Arztebl Int</i> . 2019 May 10;116(19):336-343. doi: 10.3238/arztebl.2019.0336 . PMID: 31288909 ; PMCID: PMC6630163.
Institution	ZfP Südwürttemberg, Klinik für Psychiatrie und Psychotherapie I der Universität Ulm, Weissenau, Germany
Studientyp	Systematic review
Kontrollgruppe ja/nein	Yes
Komplex ja/nein	Yes
Interventionstyp	Non-pharmacological intervention
n Patienten	
Effekt ja/nein auf S/R	Yes
Beschreibung Intervention	interventions to reduce coercive measures (seclusion and restraint [SR]) in adult patients with severe psychiatric disorders. Seven intervention categories were identified: • Staff training • Organization • Risk assessment • Environment • Debriefings • Psychotherapy • Advance directives Complex intervention programs combine interventions from different categories (eg, psychotherapy, staff training, use of data)
Beschreibung Kontrolle	Any comparators reported in the included studies
Beschreibung Patienten	Adult patients with severe psychiatric disorders

Beschreibung Outcomevariablen	- Measures of aggression - Measures of seclusion - Measures of restraint
Beschreibung Ergebnisse	-Most interventions in each category were found to be effective in the respective studies. 38 studies investigated complex treatment programs; 37 of these (including one RCT) revealed effective reduction of the frequency of coercion. -Two RCTs on the use of rating instruments to assess the risk of aggressive behavior revealed a relative reduction of the number of seclusion measures by 27% and a reduction of the cumulative duration of seclusion by 45%. -The Brøset Violence Checklist as a standardized instrument to predict risk was effective in reducing seclusion rates in two RCTs. In one study, the relative risk for coercion in the intervention group was reduced by 27% (146 instances of seclusion/6074 treatment days before the intervention versus 135 instances of seclusion/7727 treatment days after the intervention), whereas in the control group, it increased by 10% (92 instances of seclusion/8449 treatment days before the intervention versus 126 instances of seclusion/10 485 treatment days after the intervention; $p < 0.001$). - In the other study the cumulative duration of the seclusion incidents was reduced by 45% (the risk of being secluded at a particular point in time on the intervention wards before the intervention was 1.12 times the risk in the control wards (95% confidence interval 1.01 to 1.19); after the intervention it was 0.62 times the risk (0.58 to 0.66, $p < 0.05$). -In one forensic unit, instances of seclusion per patient were reduced from 4.8 to 2.3 and the average duration of such incidents fell from 11.2 hours to 5.8 hours after a program of social learning had been introduced.
Dauer Baseline/Intervention/Follow-up	
Funding	No external funding
Qualitätsbemerkung	
Nummer	9
Studie	McDonnell AA, O'Shea MC, Bews-Pugh SJ, McAulliffe H, Deveau R. Staff training in physical interventions: a literature review. Front Psychiatry. 2023 Jul 26;14:1129039. doi: 10.3389/fpsy.2023.1129039. PMID: 37564241 ; PMCID: PMC10411725.
Institution	-Birmingham City University, Birmingham, United Kingdom -Studio 3 Clinical Services Limited, Alcester, United Kingdom -Tizard Centre, University of Kent, Canterbury, United Kingdom
Studientyp	Systematic review
Kontrollgruppe ja/nein	Ja, in RCTs
Komplex ja/nein	No
Interventionstyp	Non-pharmacological intervention
n Patienten	
Effekt ja/nein auf S/R	No
Beschreibung Intervention	Staff training in physical interventions
Beschreibung Kontrolle	Any comparators reported in the included study
Beschreibung Patienten	Mental health patients
Beschreibung Outcomevariablen	-Any measure assessing the use of physical restraint (frequency, duration) -Any measure assessing levels of aggressive behavior
Beschreibung Ergebnisse	- 17 included studies take place in a range of care settings and comprise a wide range of outcomes and designs. -The training programmes examined vary widely in their duration, course content, teaching methods, and extent to which physical skills are taught. -Studies were of relatively poor quality. -Many descriptions of training programmes did not clearly operationalise the knowledge and skills taught to staff. -The review demonstrates that, although staff training is a 'first response' to managing health and safety in care settings, there is very little evidence to suggest that staff training in physical intervention skills leads to meaningful outcomes.
Dauer Baseline/Intervention/Follow-up	Variable assessment periods and intervention duration
Funding	study received funding from Studio 3 Training Systems Ltd
Qualitätsbemerkung	Included studies tend to be of poor quality due to study design, quality of evidence restricted due to risk of bias and indirectness of evidence (transferability across several settings)
Nummer	10
Studie	Newman J, Paun O, Fogg L. Effects of a Staff Training Intervention on Seclusion Rates on an Adult Inpatient Psychiatric Unit. J Psychosoc Nurs Ment Health Serv. 2018 Jun 1;56(6):23-30. doi: 10.3928/02793695-20180212-02. Epub 2018 Feb 16. PMID: 29447413.
Institution	Rush University College of Nursing, Chicago, Illinois, USA

Studientyp	Quasi-experimental pre-post design
Kontrollgruppe ja/nein	No
Komplex ja/nein	No
Interventionstyp	Educational program
n Patienten	88 staff members
Effekt ja/nein auf S/R	No
Beschreibung Intervention	90-minute staff training fostering staff commitment to seclusion alternatives and improving de-escalation skills consisting of a 30-minute psychoeducational program of traumatic effects on seclusion, handing over a seclusion alternative /de-escalation skills sheet, and a 60-minute discussion and active training of de-escalation skills.
Beschreibung Kontrolle	
Beschreibung Patienten	Staff members of psychiatric hospitals, such as nurses, psychiatrists, physicians, assistants, social workers, mental health and occupational therapists
Beschreibung Outcomevariablen	-Primary outcome: Seclusion rates -Secondary outcome: Staff knowledge about and attitudes towards seclusion, staff de-escalation skills confidence, use of new resource sheet by only 17% of participants
Beschreibung Ergebnisse	-Seclusion rates were reduced from a 6-month pre-intervention mean rate of 2.95 seclusion hours per 1000 patient hours to a 6-month post-intervention mean rate of 0.29 seclusion hours per 1000 patient hours, marking a reduction of 90.2% , - Significant staff knowledge gains - Non-significant changes in attitudes towards seclusion - Non-significant change in de-escalation skills confidence - Use of new seclusion alternative/ de-escalation resource sheet
Dauer Baseline/Intervention/Follow-up	6 months pre-intervention, 6 months post intervention, 3 months post-training survey
Funding	No external funding reported
Qualitätsbemerkung	Due to study design and conducting the quality of evidence is relatively low
Nummer	11
Studie	Välimäki M, Lantta T, Anttila M, Vahlberg T, Normand SL, Yang M. An Evidence-Based Educational Intervention for Reducing Coercive Measures in Psychiatric Hospitals: A Randomized Clinical Trial. JAMA Netw Open. 2022 Aug 1;5(8):e2229076. doi: 10.1001/jamanetworkopen.2022.29076 . PMID: 36040740; PMCID: PMC9428738.
Institution	-Department of Nursing Science, University of Turku, Turku, Finland -Xiangya Nursing School, Xiangya Research Center of Evidence-based Healthcare, Central South University, Hunan, China -Faculty of Health and Education, Department of Nursing, Manchester Metropolitan University, Manchester, UK -Department of Biostatistics, University of Turku, Turku, Finland -Department of Health Care Policy, Harvard Medical School, Boston, Massachusetts, USA -Department of Biostatistics, Harvard T.H. Chan School of Public Health, Boston, Massachusetts, USA -West China School of Public Health, Sichuan University, Chengdu, China -Faculty of Design, Health, and Art, Swinburne University of Technology, Hawthorn, Victoria, Australia
Studientyp	Cluster randomized clinical trial
Kontrollgruppe ja/nein	Yes
Komplex ja/nein	No
Interventionstyp	Educational program
n Patienten	8349 patients in 27 psychiatric hospital wards (n = 4163 intervention, n = 4186 control)
Effekt ja/nein auf S/R	Yes
Beschreibung Intervention	VIOLIN (violence intervention) is a multicomponent, 18-month educational intervention that aims to reduce coercive practices in psychiatric wards The 8 months of education for staff (May 1 to December 31, 2016), included lectures, seminars, workshops, and side visits, was followed by a 10-month (January 1 to October 31, 2017) maintenance period to encourage and monitor ward activities.
Beschreibung Kontrolle	TAU
Beschreibung Patienten	Psychiatric patients 18 years or older. Hospital wards that specialized solely in forensic psychiatry, psychogeriatric care, or child and adolescent psychiatric care were excluded
Beschreibung Outcomevariablen	Occurrence of patient seclusion (events per total number of patients)
Beschreibung Ergebnisse	Of 28 psychiatric hospital wards screened (437 beds and 648 nurses), 27 wards completed the study. A total of 8349 patients were receiving care in the study wards, with 53% male patients and a mean (SD) age of 40.6 (5.7) years. The overall number of seclusions was 1209 (14.5%) in 2015 and 1349 (16.5%) in 2017. In the intervention group, the occurrence rate of seclusion at the ward level decreased by 5.3% from 629 seclusions among 4163 patients (15.1%) to 585 seclusions among 4089 patients (14.3%) compared with a 34.7% increase from 580 seclusions among 4186 patients (13.9%) to 764 seclusions among 4092 patients (18.7%) in the usual practice group. The adjusted rate

	ratio was 0.86 (95% CI, 0.40-1.82) in 2015 and 0.66 (95% CI, 0.31-1.41) in 2017 (P = .003). However, the number of forced injections increased in the intervention group from 317 events among 4163 patients (7.6%) in 2015 to 486 events among 4089 patients (11.9%) in 2017 compared with an increase in the usual practice group from 414 events among 4186 patients (9.9%) in 2015 to 481 events among 4092 patients (11.8%) in 2017. Seven adverse events were reported.
Dauer Baseline/Intervention/Follow-up	May 1 to December 31, 2016: Education of staff and January 1 to October 31, 2017 maintenance period
Funding	This study was funded by grants 294298 and 307367 from the Academy of Finland, the Turku University Hospital, grant 13893 from State Research Funding, and grant 26003424 from University of Turku
Qualitätsbemerkung	Some concerns in terms of Risk of Bias
Nummer	12
Studie	Ye J, Xia Z, Wang C, Liao Y, Xu Y, Zhang Y, Yu L, Li S, Lin J, Xiao A. Effectiveness of CRSCE-Based De-escalation Training on Reducing Physical Restraint in Psychiatric Hospitals: A Cluster Randomized Controlled Trial. Front Psychiatry. 2021 Feb 16;12:576662. doi: 10.3389/fpsyt.2021.576662. PMID: 33679467; PMCID: PMC7928340
Institution	-Department of Nursing Administration, Affiliated Brain Hospital of Guangzhou Medical University (Guangzhou Huiai Hospital), Guangzhou, China. -Department of Traditional Chinese Medicine, Affiliated Brain Hospital of Guangzhou -- Medical University (Guangzhou Huiai Hospital), Guangzhou, China. -Department of Adult Psychiatry, Affiliated Brain Hospital of Guangzhou Medical University (Guangzhou Huiai Hospital), Guangzhou, China. -Department of Early Intervention, Affiliated Brain Hospital of Guangzhou Medical University (Guangzhou Huiai Hospital), Guangzhou, China. -Department of Cardiothoracic Surgery, Jingzhou Central Hospital, Jingzhou, China. -Department of Intensive Care Unit, West China Hospital of Sichuan University, Chengdu, China.
Studientyp	RCT
Kontrollgruppe ja/nein	Yes
Komplex ja/nein	No
Interventionstyp	Training and education program
n Patienten	
Effekt ja/nein auf S/R	Yes
Beschreibung Intervention	CRSCE-based de-escalation training program, aimed to reduce the use of PR, was designed with 5 modules (Communication, Response, Solution-Focused Technique, Care, and Environment)
Beschreibung Kontrolle	Routine training regarding restraint
Beschreibung Patienten	Secluded wards for mentally ill patients
Beschreibung Outcomevariablen	Frequency of and the duration of restraint
Beschreibung Ergebnisse	After CRSCE-based de-escalation training, the frequency (inpatients and patients admitted within 24 h) of and the duration of PR of experimental group, showed a descending trend and were significantly lower than those of control group (P < 0.01); compared to control group, the numbers of unexpected events (level II and level III) and injury caused by PR of experimental group had been markedly reduced (P < 0.05).
Dauer Baseline/Intervention/Follow-up	Ye, J., Xia, Z., Wang, C., Liao, Y., Xu, Y., Zhang, Y., Yu, L., Li, S., Lin, J., & Xiao, A. (2021). Effectiveness of CRSCE-Based De-escalation Training on Reducing Physical Restraint in Psychiatric Hospitals: A Cluster Randomized Controlled Trial. Frontiers in psychiatry, 12, 576662. https://doi.org/10.3389/fpsyt.2021.576662
Funding	Department of Nursing Administration, Affiliated Brain Hospital of Guangzhou Medical University (Guangzhou Huiai Hospital), Guangzhou, China. Department of Traditional Chinese Medicine, Affiliated Brain Hospital of Guangzhou Medical University (Guangzhou Huiai Hospital), Guangzhou, China. Department of Adult Psychiatry, Affiliated Brain Hospital of Guangzhou Medical University (Guangzhou Huiai Hospital), Guangzhou, China. Department of Early Intervention, Affiliated Brain Hospital of Guangzhou Medical University (Guangzhou Huiai Hospital), Guangzhou, China. Department of Cardiothoracic Surgery, Jingzhou Central Hospital, Jingzhou, China. Department of Intensive Care Unit, West China Hospital of Sichuan University, Chengdu, China.
Qualitätsbemerkung	RCT
Nummer	13
Studie	Ye J, Xiao A, Yu L, Guo J, Lei H, Wei H, Luo W. Staff Training Reduces the Use of Physical Restraint in Mental Health Service, Evidence-based Reflection for China. Arch Psychiatr Nurs. 2018 Jun;32(3):488-494. doi: 10.1016/j.apnu.2017.11.028. Epub 2017 Nov 22. PMID: 29784235 .
Institution	-Traditional Chinese Medicine Department, Affiliated Brain Hospital of Guangzhou Medical University, China

	-Nursing Administration Department, Affiliated Brain Hospital of Guangzhou Medical University, China -Medical Administration Department, Affiliated Brain Hospital of Guangzhou Medical University, China
Studientyp	Systematic review
Kontrollgruppe ja/nein	Yes
Komplex ja/nein	No
Interventionstyp	Training and education program
n Patienten	
Effekt ja/nein auf S/R	Yes
Beschreibung Intervention	Staff trainings
Beschreibung Kontrolle	
Beschreibung Patienten	Patients admitted to a psychiatric unit, a psychiatric hospital, an acute admission ward, or a mental health center
Beschreibung Outcomevariablen	Frequency of physical restraint
Beschreibung Ergebnisse	Eight studies (four randomized controlled trials and four quasi-experimental studies) published between June 2013 and May 2017 were selected. Risk ratios (RRs) with 95% confidence intervals (CIs) were used as the effect index for dichotomous variables. The standardized mean differences (SMDs) with 95% CIs were calculated as the pooled continuous effect. The outcome of meta-analysis suggested staff training reduced the duration (IV = -0.88; 95% CIs = -1.65 to -0.10; Z = 2.22; p = 0.03) and adverse effect (RR, 0.16; 95% CIs = 0.09 to 0.30; Z = 5.96; p < 0.00001) of physical restraint, but there were no statistical change in the frequency of physical restraint (RR, 0.74; 95% CIs = 0.43 to 1.28; Z = 1.07; p = 0.28). Noticeably, the result of pooled estimates from 3 RCTs suggested staff training had no effects on the incidence of physical restraint. (RR, 1.01; 95% CIs = 0.45 to 2.24; Z = 0.02; p = 0.99)
Dauer Baseline/Intervention/Follow-up	
Funding	This study was funded by the grant of Scientific Research Project of Twelfth Five-year Plan Internal Medicine of the Affiliated Brain Hospital of Guangzhou Medical University (No.GBH2014-HL07)
Qualitätsbemerkung	High risk of bias

Suche bis September 2016

Nummer	1
Autoren	Allen, D.; McDonald, L.; Dunn, C.; Doyle, T.
Jahr	1997
Studie	Changing care staff approaches to the prevention and management of aggressive behaviour in a residential treatment unit for persons with mental retardation and challenging behaviour. In: Research in developmental disabilities 18 (2), S. 101–112.
Studientyp	Prä/Post-Intervention
Dauer Intervention	Bei Stellenantritt, dann Refresher Training alle 6 Monate
Dauer Follow up	5 Jahre
Kontrollgruppe ja/nein	nein
Ort der Datenerhebung	Residential Treatment Unit for Persons With Mental Retardation and Challenging Behaviour. The unit contained six beds and was located on the campus of a large institution for people with mental retardation
Land	UK
Charakterisierung der Zielgruppe der Trainingsmassnahme	New staff, All staff
Anzahl Patienten	7 Patienten
Beschreibung Patienten	people with mental retardation and challenging behaviour 7 residents accounting for 90.8% of possible inpatient days. average age 28years; 4 were male. 6 had been formally detained in institutional care at least once under the powers of the Mental Health Act (1983) as a consequence of the behavioural challenges they posed; 5 had offended against the criminal or civil law, 1 had been in prison on remand; 4 had at some time been placed in private out-of-county facilities because local services felt unable to cope with them.
Beschreibung Intervention	Training: Understanding aggressive incidents, Primary prevention, Secondary prevention, Reactive strategies, Post-incident support for clients and caregivers
Detaillierte Beschreibung der Intervention	# Understanding aggressive incidents: a brief introduction to the nature of aggressive incidents which was based on the time-intensity model developed by Smith and cited in Rowett and Breakwell (1992).S4 # Primary prevention: instruction in modifying or removing known environmental or individual setting conditions or triggers associated with the production of challenging behaviour.N1 # Secondary prevention: instruction in responding safely to early indicators that behaviour is moving away from baseline via verbal and non-verbal defusion/distraction strategies. # Reactive strategies: instruction in safe, efficient, effective responses to critical incidents (including self-defensive strategies and minimal physical restraint procedures). # Post-incident support for clients and caregivers: training to sensitise caregivers to the emotional consequences of aggressive incidents. -> Teaching methods included classroom instruction, role play (for developing interpersonal defusion and distraction skills), and repeated practice of physical interventions.
Beschreibung Outcomevariablen	behavioral incidents, overall rate of major reactive strategy use, reduced injuries to both residents and caregivers
Beschreibung Ergebnisse	# overall decreasing trend in total behavioural incidents, there were major outlying peaks in 3 middle years. More serious behavioural incidents were essentially stable, but showed a slightly increasing trend towards the end of the phase. The outlying data points on the graph were largely explained by the fact that one person accounted for 37% of total recorded incidents in 1992 and 50% in 1993. The person concerned had Prader-Willi syndrome and a dual diagnosis; Excluding this person's data from the analysis indicated a clearer decreasing trend in overall behavioural incidents for the group over time ($r = -.74$, significant at .05 level for a one-tailed test) # The use of the three major reactive strategies of physical restraint, emergency medication, and seclusion was consistently low in relation to total behavioural incidents and showed little variation over time. # Rates of staff client injuries over time, expressed as a percentage of severe behavioural incidents. Once again, clear trends are evident toward decreasing rates of both staff and client injury over time (r values being $-.93$ and $-.75$); the relationship between staff injury and time was significant beyond the .05 level for a one-tailed test.
Qualitätsbemerkung	Sehr geringe Patientenzahl

Nummer	2
Autoren	Baker PA; Bissmire D.

Jahr	2000
Studie	A Pilot Study of the Use of Physical Intervention in the Crisis Management of People with Intellectual Disabilities who present Challenging Behaviour. In: Journal of applied research in intellectual disabilities : JARID (13), S. 38–45.
Studientyp	Prä/Post-Intervention
Dauer Baseline	5 Monate
Dauer Intervention	2 Tage
Dauer Follow up	2 Monate
Kontrollgruppe ja/nein	nein
Ort der Datenerhebung	Wohnanlage für Menschen mit Verhaltensauffälligkeit und Lernbehinderung
Land	UK
Charakterisierung der Zielgruppe der Trainingsmassnahme	Staff without formally qualification
Anzahl Teilnehmer Interventionsgruppe	17
Anzahl Patienten	10 Patienten
Beschreibung Patienten	people with learning disabilities and challenging behaviour
Beschreibung Intervention	SCIP-Training course (Strategies for Crisis Intervention and Prevention)
Detaillierte Beschreibung der Intervention	Topics: Service Values, Understanding Challenging Behaviour, Prevention, Early Intervention, Health & Safety and the Legal Framework; 25% of the time was devoted to demonstration and training of physical intervention
Beschreibung Outcomevariablen	1. Fragebogen vor und 3 Monate nach der Intervention bezüglich: Crisis management, Prevention of challenging behavior, supported by organization 2. Messung der Anzahl der Ereignisse und die Reaktion des Personals darauf (verbal, physikal, ignorierend)
Beschreibung Ergebnisse	the number of responses to incidents pre- and post-training indicated that there was a highly significantly increased tendency to respond physically

Nummer	3
Autoren	Barton SA, Johnson MR, Price LV
Jahr	2009
Studie	Achieving Restraint-Free on an inpatient behavioral Health Unit
Studientyp	Prä/Post-Intervention
Dauer Baseline	1 Jahr
Dauer Intervention	regelmässig über ca. 18 Monate,
Dauer Follow up	1 Jahr
Kontrollgruppe ja/nein	nein
Ort der Datenerhebung	Geschlossene Psychiatrische Sation
Land	US
Charakterisierung der Zielgruppe der Trainingsmassnahme	Front Line Staff
Anzahl Patienten	26 Betten
Beschreibung Patienten	14 Jahre und älter, freiwillige und unfreiwillige Aufnahme, Hauptdiagnosen: Schwere rezidivierende Depression, Bipolare Störung und Schizoaffektive Störung; Mittlere Verweildauer 5-7 Tage
Beschreibung Intervention	Training basierend auf dem "National Executive Training Institute programm 2005 (NETI)
Detaillierte Beschreibung der Intervention	Zusammenfassung: 1. Sensibilisierung des Personals durch Edukation in Traumatherapie, 2. Präventive Massnahmen "olfaktorisch und situativ" "Comfort room", 3. Culture Change: Patienten werden mit Namen angesprochen, ausführliche Besprechung von Restraints, Restraints waren als letzte Möglichkeit stets verfügbar Medien: Handbuch, Film, 3 Tage Präsentationen z.T. interaktiv, Inhalte: 1. Trauma Theorie ("Learning about trauma theory was a major eyeopener.", Many staff react with fear, voicing concern for their safety, as well as patient safety. These concerns must be addressed. Und wie steht nirgends.; The restraint elimination vision had to be kept constantly in the forefront. As a key component in achieving culture change, restraint elimination was constantly addressed, alluded to, promoted, and "talked up" in staff meetings and impromptu gatherings. Staff safety concerns were discussed repeatedly.

Beschreibung Outcomevariablen	1. Messung von Restraints 2004 und 2007 2. Messung Verabreichung Sedativer Medikamente
Detaillierte Beschreibung Outcomevariablen	2. Lorazepam, Haldol, Fluphenazin, Chlorpromazine, Olanzapin
Beschreibung Ergebnisse	1. Ab 2007 keine Restraints mehr 2. kein Anstieg an Verabreichung sedativer Medikamente, diese gingen um 22% zurück.
Nummer	5
Autoren	Bowers, Len; Nijman, Henk; Allan, Teresa; Simpson, Alan; Warren, Jonathan; Turner, Lynny
Jahr	2006
Studie	Prevention and management of aggression training and violent incidents on U.K. Acute psychiatric wards. In: Psychiatric services (Washington, D.C.) 57 (7), S. 1022–1026. DOI: 10.1176/ps.2006.57.7.1022.
Studientyp	Prä/Post-Intervention
Dauer Intervention	five-day foundation course or a one day annual update course
Dauer Follow up	two-and-a-half years (April 2002 to November 2004)
Kontrollgruppe ja/nein	nein
Ort der Datenerhebung	Acute Psychiatric Wards (14 acute admission psychiatric wards at three hospital sites) (One was a female-only ward, a second served as an assessment ward, the remainder were mixed-gender wards serving specific localities.)
Land	UK
Charakterisierung der Zielgruppe der Trainingsmassnahme	Nursing Staff
Anzahl Teilnehmer Interventionsgruppe	312 course attendances (144 ward staff attended five-day PMVA courses, and 168 attended updates)
Anzahl Patienten	5,384 admissions
Beschreibung Patienten	14 acute admission psychiatric wards at three hospital sites: One was a female-only ward, a second served as an assessment ward, the remainder were mixed-gender wards serving specific localities.
Beschreibung Intervention	PMVA- Training courses in the Prevention and Management of Violence and Aggression Courses consisted of either a five-day foundation course or a one day annual update course.
Detaillierte Beschreibung der Intervention	courses content: theoretical material on factors influencing aggression and signs of imminent violence; discussions pertaining to when restraint can be legally used; teaching breakaway techniques; and teaching manual restraint techniques performed by a three-person team, utilizing pain-free holds based on leverage # 5- day course: prediction, anticipation, and prevention of violence; reporting requirements; the role of personal, environmental, and organizational factors in violence reduction; responses to aggression, involving deescalation, communication skills, problem solving, and negotiation; and the principles and practice of breakaway and manual-restraint skills. # Update course: manual-restraint skills only
Beschreibung Outcomevariablen	violent incident rates
Beschreibung Ergebnisse	# 684 incidents (226 incidents of verbal aggression, 88 incidents of property damage, and 370 incidents of physical aggression) # positive association was found between training and rates of violent incidents # weak evidence that increased rates of aggressive incidents prompted course attendance # no evidence that course attendance reduced violence # some evidence that attendance of briefer update courses triggered small short-term rises in rates of physical aggression # Course attendance was associated with a rise in physical and verbal aggression while staff were away from the ward.
Beschreibung sekundäre Ergebnisse	Associations within four-week periods: The relationship between training and aggression was explored by examining the association of aggression to training in the months after the incident and the relationship between training and aggression in the months after the training course. For every one incident of property damage in the month before the course, there was a 38 percent increase in course attendances; for every one incident of physical violence during the month of the course, the rate of course attendance increased by 16 percent, and for every incident of physical violence three months before the course, the attendance rate decreased by 22 percent.

Nummer	6
Autoren	Bybel, Barbara-Ann
Jahr	2011
Studie	Does education of alternative measures decrease the use of physical restraints and seclusion? In: Does Education of Alternative Measures Decrease the Use of Physical Restraints & Seclusion? (D.H.A), 109 p-109 p.
Ort der Datenerhebung	Psychiatrisches Krankenhaus (akut9
Land	US
Charakterisierung der Zielgruppe der Trainingsmassnahme	Front Line Staff
Anzahl Teilnehmer Interventionsgruppe	450
Beschreibung Outcomevariablen	the dependent variable is the use of seclusion and physical restraints and the independent variable is the number of staff educated on restraint reduction strategies.
Nummer	7
Autoren	Calabro, Karen; Mackey, Thomas A.; Williams, Steven
Jahr	2002
Studie	Evaluation of training designed to prevent and manage patient violence. In: Issues in mental health nursing 23 (1), S. 3–15.
Studientyp	Prä/Post-Intervention
Dauer Intervention	12-hour training
Kontrollgruppe ja/nein	nein
Ort der Datenerhebung	Akut - psychiatrisches Krankenhaus
Land	US
Charakterisierung der Zielgruppe der Trainingsmassnahme	Nursing staff/Mental health care workers (registered nurses (one third), hospital aides (about one half), and activity therapists, social workers and individuals who admit patients (less than ten percent for each of these respective categories).)
Anzahl Teilnehmer Interventionsgruppe	118
Beschreibung Patienten	12 inpatient units. The units housed both male and female patients in either adult, geriatric, child, adolescent, or substance abuse units.
Beschreibung Intervention	The Nonviolent Crisis Intervention® R (CPI), (National Crisis Prevention Institute, Inc, Brookfield, WI) and Handle with Care (Handle with Care Behavioral Management System, Old Bridge, NJ)
Detaillierte Beschreibung der Intervention	# The Nonviolent Crisis Intervention: to increase staff knowledge and self-efficacy about defusing potentially violent incidents and preventing assaults, methods to identify nonverbal and verbal behaviors and the use of techniques for managing people whose behaviors could escalate to physical aggression, help staff manage their fear and anxiety in a crisis situation. Practicing the techniques demonstrated during the training helps to provide staff safety and quality care for clients. The basic program consisted of participative lecture, role-plays, a posttest, and self-study as participants work through a study manual supplied by the developers. The hospital training staff customized the intervention for use in the psychiatric setting. Patients with mental illness can be psychotic, agitated, or confused, and their ability to process information may be impaired. As a result, staff were instructed to set clear and simple limits with the patients when communicating both verbally and nonverbally. Staff were taught about hospital policies and procedures and about rights for patients mandated by the state. The training focused on preventing acting-out behaviors through the use of techniques such as reducing environmental stressors, setting consistent limits across shifts, and teaching clients to recognize and cope with anxiety. # Handle with Care® was a lecture about team dynamics for managing aggressive patients and included specific hospital policies and procedures for physical interventions. To pass this section of the training, staff demonstrated the required self-defense and restraint skills.
Beschreibung Outcomevariablen	Four variables (knowledge, attitude, self-efficacy, and behavioral intention to use the training techniques)
Beschreibung Ergebnisse	# the staff's knowledge increased from 6.1 pretest to 7.3 posttest, ($t[109] = 7.29$, $p < 0.001$). # For attitude about using the techniques presented in the program, the results showed a significant change at posttest ($t[109] = -5.68$, $p < 0.001$). The attitude score showed a positive indication of change as measured by the mean score improvement from 18.6 pretest to 16.8 posttest. # For self-efficacy, there was significant positive improvement, ($t[114] = -2.82$, $p < 0.01$). Respondents indicated that their confidence levels and perception about

	the ease or difficulty about using the training techniques changed with a pretest mean of 15.0 to 14.3 posttest. This change indicated that respondents chose responses that displayed enhanced self-efficacy. # For behavioral intention, there was positive improvement with a mean 10.8 pretest to 10.3 posttest ($t[114] = -1.99, p < 0.05$). Respondents chose responses that were stronger for intention to use the techniques learned in the program.
Nummer	8
Autoren	Carmel, Herold; Hunter, Mel
Jahr	1990
Studie	Compliance with training in managing assaultive behavior and injuries from inpatient violence. In: Hospital & community psychiatry 41 (5), S. 558–560.
Studientyp	Fall- Kontroll-Studie
Dauer Intervention	16 Stunden einmal + 6h alle 2 Jahre
Dauer Follow up	Erhebungszeitraum 1 Jahr (1986)
Kontrollgruppe ja/nein	ja
Charakterisierung der Kontrollgruppe	The 27 wards were divided into two groups: 18 wards with low compliance with the requirement for training in management of assaultive behavior (less than 60 percent of the staff in compliance) and nine wards with high compliance (more than 60 percent of the staff in compliance).
Ort der Datenerhebung	Forensisches Krankenhaus
Land	US
Charakterisierung der Zielgruppe der Trainingsmassnahme	Nursing staff
Anzahl Teilnehmer Interventionsgruppe	244 (High Compliance)
Anzahl Teilnehmer Kontrollgruppe	500 (Low Compliance)
Anzahl Patienten	Low compliance n=643 beds, High compliance n=330 beds
Beschreibung Patienten	Forensic hospital
Beschreibung Intervention	Training program in the management of assaultive behaviour for state hospital of the California Department of mental health
Detaillierte Beschreibung der Intervention	training, which includes attention to interpersonal skills as well as didactic and practical instruction in the management of violent patients.
Beschreibung Outcomevariablen	compliance with the training requirements for management of assaultive behavior and for cardiopulmonary resuscitation (CPR), the rate of employee injury from patient violence, and the number of aggressive incidents per bed.
Beschreibung Ergebnisse	1. There was no evidence of a relationship between staff compliance with training in management of assaultive behavior by ward and incidents of patient aggression in the ward. 2. The rate of staff injury from patient violence in the wards with low compliance with training in managing assaultive behavior was almost three times the rate in the wards with high compliance
Nummer	9
Autoren	Colenda, C. C.; Hamer, R. M.
Jahr	1991
Studie	Antecedents and interventions for aggressive behavior of patients at a geropsychiatric state hospital. In: Hospital & community psychiatry 42 (3), S. 287–292.
Studientyp	Prä/Post Intervention
Dauer Baseline	16 consecutive days in August 1987
Dauer Follow up	15 consecutive days in January 1988
Kontrollgruppe ja/nein	nein
Ort der Datenerhebung	Gerontopsychiatrische Klinik, a 210-bed state facility providing long term care. The hospital has a 24-bed admission unit and five long-term care units
Land	US
Charakterisierung der Zielgruppe der Trainingsmassnahme	Staff
Anzahl Patienten	118 voluntary and in voluntary admissions a year

Beschreibung Patienten	Patients must be 65 years of age or older, have a primary diagnosis of mental illness or dementia, and reside within the designated 8,833-square mile catchment area in central Virginia. Hospital census data for 1988 showed: 42.1 per cent of the patient population had dementia (all types), schizophrenia (all types), 22.2 percent; major affective disorder (mania and depression), 1.8 percent; organic psychosis, 10.8 percent; and alcohol-related disorders (excluding alcohol-related dementia), 4.4 percent.
Beschreibung Intervention	two kinds of inservice training: 1. training in agenda behavior modification 2. training: series of three clinical case conferences on psychotropic drug use in the elderly.
Detaillierte Beschreibung der Intervention	1. training in agenda behavior modification, which is based on the premise that for patients with dementia, wandering and aggression often stem from loneliness and separation. The assumption is that staff can modify or prevent such behaviors by helping patients feel safe and "connected" in their present environment, using such techniques as reality orientation and reassurance. The agenda behavior modification training was presented to the direct care staff by the clinical nurse specialists in small group sessions. The training was on going. 2. training: series of three clinical case conferences on psychotropic drug use in the elderly, conducted by the senior author for the prescribing physicians. The physicians were encouraged to use low-dose neuroleptics for dementia patients who were psychotic; to minimize polypharmacy; and to intervene with p.r.n. medications when potentially violent patients begin to telegraph aggressive behavior.
Beschreibung Outcomevariablen	# All aggressive events committed by patients # the kind of event that triggered them # the kind of staff interventions, based on an instrument designed by the senior author.
Detaillierte Beschreibung Outcomevariablen	# The instrument listed five kinds of aggressive events: patient-patient exchange, patient-staff exchange, yelling or threatening behavior, physical and vocal behavior, and property damage. Patient-patient exchange and patient-staff exchange were defined as physically aggressive behavior "such as hitting, pushing, or biting" between patients or between patient and staff, respectively. Yelling or threatening behavior referred to patients' cursing, yelling, or making verbal threats at staff or patients. Physical and vocal behavior was defined as both physical and vocal aggression toward staff or patients. # Four categories of triggering events were documented: unknown or not observed, patient-patient exchange, patient-staff exchange, and group activity (such as congregate dining or a group outing). # Interventions were documented in six categories: no intervention, removal of patient from the stimulus (but without intensive supervision), one-to-one supervision, seclusion or restraint, p.r.n. medication, and p.r.n. medication plus seclusion or restraint.
Beschreibung Ergebnisse	1st survey: n=48 agitated or aggressive patients with and without dementia, between 66 to 93 years who committed 199 aggressive events. 2nd survey: n=40 agitated or aggressive patients with and without dementia, between 65 to 87 years who committed 119 aggressive events. # Patient behaviors: total rate of aggression was stable across both study periods, at 1.49 and 1.36. Both surveys found dementia patients to have a higher rate of aggression than nondementia patients (.99 compared with .50 in the first survey period, and .85 compared with .51 in the second). Dementia patients also had a higher rate of aggressive events in both survey periods. Based on the formula for calculating change between surveys, the total aggressive event rate for all patients dropped by 23.6 percent across surveys. # Triggering events: In both surveys, the triggering event most often listed was "unknown or not observed", especially for yelling or threatening behavior. Patient staff exchange was listed as the second most frequent triggering event, especially for dementia patients, and was most frequently associated with physical aggression between staff and patients. It was also the category in which the largest reduction of triggering events for both dementia and nondementia patients was recorded between surveys. # Staff interventions: During the first survey, for both dementia and nondementia patients the most frequent staff intervention for aggression was one-to-one supervision, followed by removal of the patient from the situation. P.r.n. medication, seclusion or restraint, and a combination of the two were used much less frequently.
Beschreibung sekundäre Ergebnisse	# Both surveys found dementia patients to have a higher rate of aggression than nondementia patients. # Both surveys found that most aggressive events occurred during the day shift. # Based on the formula for calculating change between surveys, the total aggressive event rate for all patients dropped by 23.6 percent across surveys.
Nummer	10
Autoren	Cowin, Leanne; Davies, Rhian; Estall, Graham; Berlin, Theresa; Fitzgerald, Maria; Hoot, Sandra
Jahr	2003

Studie	De-escalating aggression and violence in the mental health setting. In: International journal of mental health nursing 12 (1), S. 64–73.
Studientyp	Prä/Post Intervention
Dauer Follow up	3 Monate
Kontrollgruppe ja/nein	nein
Ort der Datenerhebung	Acute mental health-care unit (MHU) and the emergency department (ED) at Liverpool Hospital, Sydney
Land	AUS
Charakterisierung der Zielgruppe der Trainingsmassnahme	Nursing Staff MHU und Nursing Staff ED
Beschreibung Intervention	de-escalation kit: educative and informative package (kit) on de-escalation. The kit include the de-escalation poster, a nursing staff survey to test pre- and post-knowledge and awareness of de-escalation, an in-service education session that explored the important processes involved in successful de-escalation using case studies for group discussions and a literature discussion paper.
Detaillierte Beschreibung der Intervention	The goals of the de-escalation project were to develop an informative poster for use in an ED and MHU that could serve as a useful reminder to nurses of the processes and skills involved in de-escalation. The in-service education lecture supported the introduction of the poster by offering nurses an opportunity to discuss and examine their current knowledge while improving their understanding within a group of their peers. The use of a pre- and post-test survey provided the de-escalation development group with an excellent opportunity to test nurses' knowledge and awareness and examine any changes over time.
Beschreibung Outcomevariablen	increase in de-escalation knowledge and awareness
Beschreibung Ergebnisse	# Mental health-care unit within-group differences over time: Overall, the results revealed an increase in de-escalation knowledge and awareness for the nursing staff of the MHU although there were no significant changes noted in an analysis of variance. While the total mean scores from T1 to T2 were non-significant for the small sample size, the total scale mean score increased from 48.07 to 49.73 thereby demonstrating a positive effect from the intervention (de-escalation poster and in-service education). # Emergency department within-group differences over time: An overall non-significant increase in de-escalation knowledge and awareness was also apparent for the nursing staff of the ED. There was a rise in total mean scores from T1 to T2 (41.18–42.43). a number of non-significant rises in individual item scores as well as a number of falls from pre-intervention to post-intervention. The differences between scores from T1 to T2 were less than those of the MHU, indicating less change (Table 1). The fall in mean score for item 3 from 3.39 at T1 to 3.27 at T2 may have been the result of staff changes in the ED. For example, shortly after the administration of the survey at T1 a fulltime security guard was employed to work within the ED thereby making it easier for the nursing staff to gain security help at any time throughout their shift.
Nummer	11
Autoren	Dickens, G.; Rogers, G.; Rooney, C.; Mc Guinness, A.; Doyle, D.
Jahr	2009
Studie	An audit of the use of breakaway techniques in a large psychiatric hospital. A replication study. In: Journal of psychiatric and mental health nursing 16 (9), S. 777–783. DOI: 10.1111/j.1365-2850.2009.01449.x.
Studientyp	Prä/Post Intervention
Dauer Intervention	initial induction and refresher updates are provided annually
Kontrollgruppe ja/nein	nein
Ort der Datenerhebung	St Andrew's Hospital, Northampton
Land	UK
Charakterisierung der Zielgruppe der Trainingsmassnahme	all Staff (any members of clinical or nonclinical staff, ward-based or otherwise). Sampling was opportunistic.
Anzahl Teilnehmer Interventionsgruppe	147
Anzahl Patienten	0
Beschreibung Patienten	inpatient services for approximately 500 adults and adolescents with mental disorder, learning disability or acquired brain injury. Many patients have challenging behaviours

Beschreibung Intervention	break away from simulations of potentially life-threatening scenarios in a timely manner, and using the techniques taught in annual breakaway or refresher training. Breakaway techniques comprise a set of physical skills to help separate or break away from an aggressor in a safe manner, but do not involve the use of restraint.
Detaillierte Beschreibung der Intervention	The audit team = three conflict management advisors; One of the three, the lead auditor, was assigned to play the role of violent assailant while the other two independently assessed the participant's use of breakaway techniques to escape from the hold. Participants were requested to randomly select one of five unmarked envelopes. Each envelope contained one of the following scenarios: • a straight arm strangle hold from the front; • a hair pull from the front; • neck lock; • bar neck lock; and • a bear hug with arms trapped. The lead auditor read aloud the scenario and gave the participant 5 s to think about the situation before the simulation commenced. If the participant had not escaped within 10 s the simulation was halted. The two independent raters completed the audit measures during the scenario. Participants were given a chance to discuss the experience afterwards.
Beschreibung Outcomevariablen	"used taught technique"
Detaillierte Beschreibung Outcomevariablen	"successful breakaway" within an appropriate time frame (10 s) # correctly recalled and implemented the techniques taught to them to 'break away' from a simulated life-threatening situation # and did so within an appropriate time frame (10 s)
Beschreibung Ergebnisse	# Only 21/147 (14.3%) of participants correctly used the taught techniques to break away within 10 s. However, 117 (79.6%) of people were able to break away from the scenarios within 10 s but did not use the techniques taught to them.

Nummer	12
Autoren	Fitzwater, Evelyn L.; Gates, Donna M.
Jahr	2002
Studie	Testing an intervention to reduce assaults on nursing assistants in nursing homes. A pilot study. In: Geriatric nursing (New York, N.Y.) 23 (1), S. 18–23.
Studientyp	Randomisierte-kontrollierte Studie (Prä/Post Intervention)
Dauer Baseline	2 Wochen
Dauer Intervention	4 Stunden
Dauer Follow up	2 Wochen
Kontrollgruppe ja/nein	ja
Charakterisierung der Kontrollgruppe	Jeweils 10 certified nurse assistants (CNAs) in 2 nursing homes:
Ort der Datenerhebung	Interventionsgruppe (120 Betten), Kontrollgruppe (100 Betten) Pflegeheim
Land	US
Charakterisierung der Zielgruppe der Trainingsmassnahme	Certified nursing assistants (CNA)
Anzahl Teilnehmer Interventionsgruppe	10
Anzahl Teilnehmer Kontrollgruppe	10
Anzahl Patienten	Intervention (120 Betten), Kontrollgruppe (100 Betten)
Beschreibung Intervention	Multifaceted, multisite intervention program
Detaillierte Beschreibung der Intervention	The workshops involved roleplaying, simulation, discussion, lecture, videotapes, and return demonstration of self-protection techniques. Zudem gab es eine Checkliste zur Prävention von Vorfällen
Beschreibung Outcomevariablen	Assault Incidents, Daily Log-Selfreport
Detaillierte Beschreibung Outcomevariablen	Assault included any sudden physical attack, such as biting, kicking, hitting with the body or other object, pinching, spitting, scratching, or pushing. The log is a daily self-report tool that includes five data categories: caregiver demographics, gender of resident who assaulted caregiver, type of physical assault, injury, and type of caregiving activity at the time of assault
Beschreibung Ergebnisse	an educational intervention can effectively decrease assaults against caregivers and increase the confidence level of staff

Nummer	13
Autoren	Ford, Paul
Jahr	2012
Studie	Patient Care Provider Safety. Examining a Training Intervention to Reduce Hospital Violence. In: Patient Care Provider Safety: Examining a Training Intervention to Reduce Hospital Violence (Ph.D), 107 p-107 p.
Dauer Baseline	12 Monate
Dauer Intervention	1 Stunde
Dauer Follow up	12 Monate
Kontrollgruppe ja/nein	ja
Ort der Datenerhebung	Akutkrankenhaus (incl. Psychiatrie)
Land	US
Charakterisierung der Zielgruppe der Trainingsmassnahme	Caring staff
Beschreibung Patienten	Geriatrische und Kardiologische Stationen vs. Kontrollen
Beschreibung Intervention	One-hour de-escalation and selfdefense training
Detaillierte Beschreibung der Intervention	De-escalation taught both nonverbal and verbal methods to calm, display respect, and encourage continual dialog. The self-defence portion provided basic techniques of escaping the most common forms of physical contact by patients and visitors, beginning with methods to seek assistance and understanding the importance of identified escape routes. Next was demonstration of and practicing escapes from arm grams, clothing grabs, hair pulls, and blocking punches.
Beschreibung Outcomevariablen	1. Number of calls to security for assistance from patient care staff
Beschreibung Ergebnisse	1. Signifikant weniger "Code grey", d.h. Arlamierungen des Sicherheitsdienstes 2. Weniger physische Gewalt dafür mehr verbale Gewalt

Nummer	14
Autoren	Forster, P. L.; Cavness, C.; Phelps, M. A.
Jahr	1999
Studie	Staff training decreases use of seclusion and restraint in an acute psychiatric hospital. In: Archives of psychiatric nursing 13 (5), S. 269–271.
Studientyp	Prä/Post Intervention
Dauer Baseline	12 Monate
Dauer Intervention	annual 2-hour review course and weekly discussions
Dauer Follow up	12 Monate
Kontrollgruppe ja/nein	nein
Ort der Datenerhebung	San Francisco Country Community Mental Health Services, John George Psychiatry Pavillon, Gateway Psychiatric Services
Land	US
Charakterisierung der Zielgruppe der Trainingsmassnahme	all staff members with any patient contact
Anzahl Patienten	?? (Approximately 6,500 patients are evaluated in the Psychiatric Emergency Service annually, and nearly 2,000 are admitted for inpatient treatment.
Beschreibung Patienten	acute-psychiatric hospital: 4 locked wards, 1 emergency service
Beschreibung Intervention	Interventions included a mandatory staff training session on the management of assaultive behavior, weekly discussion items during team meetings for each local ward, and hospital-wide publicity charting the ongoing progress of the effort
Detaillierte Beschreibung der Intervention	The multidisciplinary committee met biweekly during paid work time and only nursing and occupational therapy staff to attend an annual 2-hour review course: 1.to increase awareness of the factors leading to patient agitation and violence; 2. to promote the knowledge and use of less restrictive measures, such as seclusion without restraint; 3. to increase safe staff reactions to violence # The program emphasized a hands-on approach. Each staff member experienced 5-point restraints first-hand, and many cited that experience as pivotal in their decision whether or not to restrain a patient in a state of agitation when queried 1 year after the course. # Hands-on self-defense training was taught and optimal "containment" techniques were practiced to minimize the risk of patient or staff injury. Inappropriate uses of restraint (for staff convenience or because of irritation) were discussed, and participants role-played verbal interventions that may be used as

	less restrictive alternatives to physical containment. The intervention also included weekly discussion items about S&R during team meetings for each local ward and hospital-wide publicity charting the ongoing progress of the effort.
Beschreibung Outcomevariablen	Rates of the use and duration of seclusion and restraint episodes, and number of staff injuries incurred during physical containment
Beschreibung Ergebnisse	The total annual rate of restraint decreased 13.8% overall, from 2,379 episodes per 2,560 admissions in 1995, to 2,380 episodes per 3,010 admissions in 1996. The average duration of seclusion or seclusion and restraint per episode was reduced 54.6%, from 13.9 hours/episode in 1995 to 6.3 hours/episode in 1996. Staff injuries were reduced 18.8% from 48 incidents in 1995 to 39 in 1996
Funding	Not reported
Qualitätsbemerkung	Contamination due to other changes (LOS decreases, admissions increase), all staff injuries should have been counted, not just those linked to containment

Nummer	15
Autoren	Geoffrion, Steve; Goncalves, Jane; Giguere, Charles-Edouard; Guay, Stephane
Jahr	2017
Studie	Impact of a Program for the Management of Aggressive Behaviors on Seclusion and Restraint Use in Two High-Risk Units of a Mental Health Institute. In: The Psychiatric quarterly. DOI: 10.1007/s11126-017-9519-6.
Studientyp	Prä/Post Intervention
Dauer Baseline	Pre-training data (April 2010–December 2011)
Dauer Intervention	4 Days training
Dauer Follow up	data during training (January 2012–October 2012) posttraining data (November 2012–July 2014)
Kontrollgruppe ja/nein	nein
Ort der Datenerhebung	emergency unit and the intensive care unit, which each have a 12-bed capacity
Land	CAN
Anzahl Patienten	The yearly average number of admissions for this period is 210 patients in the intensive care unit and 1041 patients in the emergency unit
Beschreibung Intervention	Omega training
Detaillierte Beschreibung der Intervention	The training is delivered by peer trainers (security agents) on a four-day period and seeks to teach participants the skills and intervention methods necessary to ensure their safety and that of their patients in situations of aggression. Participants are taught the fundamental values (i.e., respect, professionalism, accountability, and security) and principles (i.e., to protect oneself, to assess the situation, to predict behavior, to take the time needed, and to focus on the person) of Omega. Participants are also taught a pacification approach and the use of a grid for classifying behaviors and levels of dangerousness of potentially aggressive individuals. Levels of dangerousness include emotional tension, conditional cooperation, refractory behavior, destructive behavior, psychological intimidation, active resistance, physical aggression, serious assaults, and exceptional threats. Seven levels of interventions are classified in an intervention pyramid ranging from mitigation (i.e., resolving the aggressive crisis situation or the acute crisis with an approach focused on the safety of the patient) to physical intervention (i.e., last resort intervention, used when the patient or client has imposed an act of protection or control). The training also provides the necessary tools to complete a post-incident report.
Beschreibung Outcomevariablen	number and duration of S/R
Detaillierte Beschreibung Outcomevariablen	number and duration of S/R --> reducing potential emotional and physical harm patients may cause to themselves and staff, as well as in maintaining a positive and trustful atmosphere between the patients and the staff in the unit
Beschreibung Ergebnisse	A total of 6933 S/R were registered in the Intensive care unit between April 1st 2010 and July 31st 2014. For the same period, a total of 880 S/R were registered in the Emergency unit. # Intensive care unit: increase of both mean daily number and duration of S/R pre-training followed by a decrease during the training and post-training. # Emergency unit, no statistically significant differences were observed. A decrease had already started prior to the Omega training program
Funding	This study was funded by the Canadian Institutes of Health Research

Nummer	16
Autoren	Gertz, B.
Jahr	1980

Studie	Training for prevention of assaultive behavior in a psychiatric setting. In: Hospital & community psychiatry 31 (9), S. 628–630.
Studientyp	Prä/Post-Intervention
Dauer Baseline	1 Jahr
Dauer Intervention	2-tägiger Workshop
Dauer Follow up	1 Jahr
Kontrollgruppe ja/nein	nein
Ort der Datenerhebung	Psychiatrisches Krankenhaus in Denver
Land	US
Charakterisierung der Zielgruppe der Trainingsmassnahme	Alle Berufsgruppen
Anzahl Teilnehmer Interventionsgruppe	317
Beschreibung Intervention	Two-day workshop: goals: to increase their skills in defusing or de-escalating potentially violent behavior, to learn to apply both defensive and restraining techniques, and to develop plans for improving the prevention of assaultive incidents
Beschreibung Outcomevariablen	Anzahl der Vorfälle
Beschreibung Ergebnisse	center's staff and administration: increased confidence by giving all a valuable set of guidelines for managing assaultive behavior. A study to assess any reduction in patient-related accidents as a result of the workshop showed that in calendar year 1979 there were 117 such incidents compared with 174 in 1978. A one-day workshop has been designed to teach nonclinical staff members similar methods for the management of disturbed patient behavior.

Nummer	17
Autoren	Huizing, Anna R.; Hamers, Jan P. H.; Gulpers, Math J. M.; Berger, Martijn P. F.
Jahr	2006
Studie	Short-term effects of an educational intervention on physical restraint use. A cluster randomized trial. In: BMC geriatrics 6, S. 17. DOI: 10.1186/1471-2318-6-17.
Studientyp	Cluster-randomisierte kontrollierte Studie
Dauer Intervention	5x 2-stündige Meetings in insgesamt 2 Monaten für 23 ausgewählte Nurses 1x 1,5 Stunden Plenarsitzung für alle Nurses der Interventionsstationen
Dauer Follow up	1 Monat
Kontrollgruppe ja/nein	ja
Charakterisierung der Kontrollgruppe	3 Wards mit Intervention, 2 Wards ohne Intervention als Kontrollgruppe
Ort der Datenerhebung	Psycho-geriatrisches Wohnheim (5 Stationen)
Land	NL
Charakterisierung der Zielgruppe der Trainingsmassnahme	Nursing staff
Anzahl Teilnehmer Interventionsgruppe	23 Nursing staff from Interventions wards
Anzahl Teilnehmer Kontrollgruppe	0
Anzahl Patienten	145 (Insgesamt 5 Stationen: intervention (3 wards) or control status (2 wards)) Ursprünglich 167, aber einige verstorben
Beschreibung Patienten	Patienten mit Demenz
Beschreibung Intervention	educational programme combined with consultation with a nurse specialist
Detaillierte Beschreibung der Intervention	# educational programme: decision-making process towards restraint use, the effects and consequences of restraint use, strategies to analyse risk behaviour of residents and alternatives for restraints. discussion of real-life cases during the educational meetings. small-scale meetings with an active learning environment for the nurses. # The consultation with the nurse specialist focused on supporting nurses in achieving restraint-free care and complying with the decision-making process concerning restraint use
Beschreibung Outcomevariablen	1. restraint prevalence and intensity of use 2. Effect on multiple restraint use 3. Effect on different restraint types

Detaillierte Beschreibung Outcomevariablen	Datensammlung mittels Fragebögen (Baseline und 1 Monat nach Intervention) und "Beobachten" zu 1. Restraint prevalence was defined as the percentage of residents observed restrained at any time during the 24-hour period. Restraint intensity indicated the number of times in four observations that a particular resident was restrained. zu 2. Multiple restraints indicated the number of different restraint types used per resident recorded during the four observations. zu 3. Restraint types were also recorded in order to gain insight into the types of restraint used with residents. Any device with limitation on an individual's freedom of movement was regarded as a restraint. Examples of restraint types are chairs with tables, belts tied to a chair or bed, bilateral bed rails, sleep suits, special sheets (a fitted sheet including a coat that encloses a mattress), chairs with a board (a chair with chair legs fixed to a board), infrared systems, safe seats, and deep or overturned chairs.
Beschreibung Ergebnisse	Interventionsgruppe: Restraint use did not change significantly over time in the experimental group (55%–56%) Kontrollgruppe: significant increased use ($P < 0.05$) in the control group (56%–70%). The mean restraint intensity and mean multiple restraint use in residents increased in the control group but no changes were shown in the experimental group. Logistic regression analysis showed that residents in the control group were more likely to experience increased restraint use than residents in the experimental group
Beschreibung sekundäre Ergebnisse	# Restraint prevalence: Restraint prevalence in the experimental group did not change significantly. Restraint prevalence during the morning, afternoon, evening and at night did also not change over time. However, restraint prevalence in the control group increased significantly from 56% to 70% ($P = 0.021$), and there was a statistically significant increase in restraint use in the morning and at night. # Restraint intensity: Comparison of restraint intensity and the average score of restraint intensity at both measurements showed no statistically significant differences between the experimental and control groups. There was a significant increase in the mean score of restraint intensity over time in the control group from 1.41 to 1.89. The mean restraint intensity did not change over time in the experimental group. Although the mean score in the control group increased more (gain score = 0.48) compared to the experimental group (gain score = 0.13), the gain score difference was not statistically significant ($P = 0.133$). # Multiple restraints: The control group had a significantly higher mean score of multiple restraint use at post-intervention compared to the experimental group ($P = 0.033$). # Restraint types: 12 different restraint types were found to be used with nursing home residents. The most frequently used restraints at baseline were bilateral bed rails (57%), sleep suits (14%), belts in bed (11%), belts in chairs (8%), and chairs with a table (8%). Comparison in the use of different restraint types at baseline between the control and experimental groups showed that more sleep suits were used with the control group (23%) compared to the experimental group (7%) ($P = 0.008$). At post-intervention, even more sleep suits were used with the control group (36%) compared to the experimental group (12%) ($P \leq 0.001$). The use of sleep suits in the control group increased significantly over time from 22% to 38.9% ($P = 0.012$). The increased use of belts in bed with the control group, from 9% to 19%, nearly reached the level of statistical significance ($P = 0.063$). No significant changes occurred over time in the experimental group (Table 4).

Nummer	18
Autoren	Hurlebaus, A. E.; Link, S.
Jahr	1997
Studie	The effects of an aggressive behavior management program on nurses' levels of knowledge, confidence, and safety. In: Journal of nursing staff development : JNSD 13 (5), S. 260–265.
Studientyp	Randomisierte-kontrollierte Studie (Prä/Post Intervention)
Dauer Intervention	4 Stunden
Kontrollgruppe ja/nein	ja
Charakterisierung der Kontrollgruppe	Entsprechend der Interventionsgruppe wurde eine Kontrollgruppe mit ähnlichen Qualifikationen und Berufserfahrung zusammengestellt
Ort der Datenerhebung	Krankenhaus
Land	US
Charakterisierung der Zielgruppe der Trainingsmassnahme	Nursing staff

Anzahl Teilnehmer Interventionsgruppe	13
Anzahl Teilnehmer Kontrollgruppe	10
Beschreibung Intervention	Workshop: "Managing Aggressive Behavior"
Detaillierte Beschreibung der Intervention	Introduction, Discussion about general crime and crime specific of the institution, Verbal and nonverbal signs of increasing agitation, Communication skills, Body Language, Tone of voice, Eye contact, nonphysical interventions as preferred method, use of physical defense techniques discussed and demonstrated, supervised practice of self-defence and break away techniques
Beschreibung Outcomevariablen	1. Objektiver Wissenszuwachs 2. Messung der Sicherheit des Personals im Umgang mit der Situation und bezüglich des subjektiven Bewältigungsvermögens
Detaillierte Beschreibung Outcomevariablen	1. Schriftlicher Test prä/post Intervention zur objektiven Wissenkontrolle mittels 15 Fragen (Ja/Nein und Multiple Choice) 2. Messung der Sicherheit und des subjektiven Bewältigungsvermögens mittels einer visuellen Analogskala
Beschreibung Ergebnisse	1. Significant differences in knowledge, no significant changes in safety or confidence

Nummer	19
Autoren	Ilkiw-Lavalle, Olga; Grenyer, Brin F. S.; Graham, Linda
Jahr	2002
Studie	Does prior training and staff occupation influence knowledge acquisition from an aggression management training program? In: International journal of mental health nursing 11 (4), S. 233–239.
Studientyp	Prä/Post-Intervention
Dauer Intervention	2 Tage
Kontrollgruppe ja/nein	nein
Ort der Datenerhebung	Multizentrische Psychiatrische Stationen (Geschlossen, Offen, Akut, Subakut)
Land	AUS
Charakterisierung der Zielgruppe der Trainingsmassnahme	Nursing staff, Medical health staff (Psychologen, Sozialarbeiter, Ärzte), sonstige Beschäftigte (Administrativ, Hauswirtschaft usw)
Anzahl Teilnehmer Interventionsgruppe	103 (42 Nursing, 18 Medical health, 37 Ancillary Staff)
Beschreibung Patienten	Psychiatrische Stationen (Geschlossen, Offen, Akut, Subakut)
Beschreibung Intervention	INTACT Aggression Management Program (Graham 1999)
Detaillierte Beschreibung der Intervention	Gruppengrösse 13 Teilnehmern, Aushandigung Kursbuch, Gruppenarbeit, Rollenspiele, Übung von Selbstverteidigungstechniken, Unterricht in Legalen Aspekten, Charakteristika von Aggression, Vorhersehbarkeit von Aggression, Management von Aggression und Selbstschutz
Beschreibung Outcomevariablen	1. INTACT knowledge evaluation (Schriftlicher Wissenstest) 2. Program evaluations Fragebogen bezüglich, Zielsetzung, Verständlichkeit des Kursbuches und des Kursleiters, Unterrichtsmaterials, Praktischen Kursanteile und Kursdauer
Detaillierte Beschreibung Outcomevariablen	1. Schriftlicher Test (14 Punkte) prä/post intervention bezüglich Charakteristika, Erkennungsmerkmale, Management und Legale Aspekte im Bezug zu aggressivem Verhalten 2. Evaluationsfragebogen
Beschreibung Ergebnisse	1. Alle Gruppen profitierten signifikant im Wissenszuwachs, am meisten die mit der schlechtesten Vorbildung 2. Insgesamt war die Belegschaft mit dem INTACT Programm zufrieden.

Nummer	20
Autoren	Infantino, J. A., JR; Musingo, S. Y.
Jahr	1985
Studie	Assaults and injuries among staff with and without training in aggression control techniques. In: Hospital & community psychiatry 36 (12), S. 1312–1314.
Studientyp	Fall- Kontroll-Studie
Dauer Intervention	3 Tage zu 8h
Dauer Follow up	Erhebungszeitraum 9 Monate
Kontrollgruppe ja/nein	ja
Charakterisierung der Kontrollgruppe	Angestellte ohne ACT Training

Ort der Datenerhebung	State Hospital
Land	US
Charakterisierung der Zielgruppe der Trainingsmassnahme	Angestellte mit direktem Patientenkontakt
Anzahl Teilnehmer Interventionsgruppe	31
Anzahl Teilnehmer Kontrollgruppe	65
Beschreibung Intervention	Training in Aggression Control Techniques (ACT) Florida
Detaillierte Beschreibung der Intervention	3 Trainingsphasen zu Verbale Deeskalation, Selbstverteidigungsmassnahmen bei Tötlichkeiten. Phase 1: Vorgehensmassnahmen entsprechend der Patientenrechte und Verbale Deeskalation mit Rollenspielen, verschiedenen Interventionsmodelle mit Schwerpunkt auf dem helping relationship stressed by Egan, 2. Phase: Selbstverteidigungsmassnahmen, Befreiungstechniken, 3. Phase: Instruktionen zu Zwangsmassnahmen
Beschreibung Outcomevariablen	1. Auftreten von Vorfällen; 2. Anzahl an Verletzungen von Mitarbeitern,
Beschreibung Ergebnisse	1.+2. Signifikant weniger tätliche Angriffe mit signifikant weniger Verletzungen für das Personal

Nummer	21
Autoren	Khadivi AN, Patel RC, Atkinson AR, Levine JM
Jahr	2004
Studie	Association between Seclusion and Restraint and Patient-Related Violence
Studientyp	Prä/Post-Intervention
Dauer Baseline	12 Monate
Dauer Follow up	12 Monate
Kontrollgruppe ja/nein	nein
Ort der Datenerhebung	Psychiatrisches Krankenhaus Akutstation, fürsorgliche Unterbringung
Land	US
Charakterisierung der Zielgruppe der Trainingsmassnahme	Staff, wahrscheinlich nur Pflege
Anzahl Patienten	1,766 preintervention and 1,602 postintervention
Beschreibung Patienten	Stationär Psychiatrisch, unfreiwillige Einweisung
Beschreibung Intervention	Trainingsprogramm
Detaillierte Beschreibung der Intervention	The intervention centered on early recognition of signs of agitation among patients and early clinical intervention. All staff members had previously been trained on assault prevention measures; however, this training varied and specific training on violence prevention was not given during the study period.
Beschreibung Outcomevariablen	1. total number of episodes of seclusion and restraint 2. episodes of assault on patients and staff 3. Anzahl der behandelten Patienten und Patiententagen
Detaillierte Beschreibung Outcomevariablen	central nursing log books of the department of psychiatry. Episodes of violence against patients and staff and episodes of self-destructive behavior were determined from incident report files.
Beschreibung Ergebnisse	1. Signifikant weniger Zwangsmassnahmen (310 zu 148) 2. Signifikant mehr Vorfälle von Aggressivem Verhalten gegenüber dem Personal (31 zu 83) und gegenüber von Patienten (67 zu 85) 3. Die Gruppen sind vergleichbar

Nummer	22
Autoren	Lee S, Wright S, Sayer J, Parr AM, Gray R, Gournay K
Jahr	2001
Studie	Physical restraint training for nurses in English and Welsh psychiatric intensive care and regional secure units
Studientyp	Deskriptiv Retrospektiv
Kontrollgruppe ja/nein	nein
Ort der Datenerhebung	Psychiatrische Intensivstation und Forensische Stationen (Secure Units)
Land	UK

Charakterisierung der Zielgruppe der Trainingsmassnahme	Pflegepersonal
Anzahl Teilnehmer Interventionsgruppe	338
Beschreibung Patienten	Psychiatrisch Intensiv und Forensisch (PICU/RSU)
Beschreibung Intervention	Überregionale Untersuchung, in wie weit das Pflegepersonal ausgebildet ist und welche Ausbildung es bekommen hat und wo
Detaillierte Beschreibung der Intervention	Fragebogen an 63 Stationen (von Insgesamt 112 Stationen in England und Wales)
Beschreibung Outcomevariablen	1. Untersuchung welches Training stattgefunden hat 2. Dauer des Trainings 3. Inhalte des Trainings 4. Bewertung des Trainings
Beschreibung Ergebnisse	1. Die meisten Teilnehmer konnten nicht angeben welches Training sie bekommen haben. Am Häufigsten waren "Control & Restraint" (Broadmoor and Rampton hospital and C&R Services) und "Care and Responsibility" (Ashworth Hospital) 2. Das Training dauerte durchschnittlich 5 Tage 3. Die Inhalte siehe Tabelle Paper welche Techniken gelehrt wurden, verbale Deeskalation 50%, restraining hold 49%, use of three person team 47%) 4.

Nummer	23
Autoren	Lehmann, L. S.; Padilla, M.; Clark, S.; Loucks, S.
Jahr	1983
Studie	Training personnel in the prevention and management of violent behavior. In: Hospital & community psychiatry 34 (1), S. 40–43.
Studientyp	Prä/Post-Intervention
Dauer Intervention	5 Stunden
Kontrollgruppe ja/nein	nein
Ort der Datenerhebung	Veteranenkrankenhaus
Land	US
Charakterisierung der Zielgruppe der Trainingsmassnahme	Sämtliche Angestellte mit Patientenkontakt in einem Krankenhauses
Anzahl Teilnehmer Interventionsgruppe	144
Beschreibung Intervention	Training program for the personnel of the Audie L. Murphy Memorial Veterans Hospital
Detaillierte Beschreibung der Intervention	Kurze Einführung, Vorstellung der Gründe für Aggressives Verhalten: Gewalttätige Patienten werden als ängstlich vor ihrer eigenen Feindseeligkeit betrachtet sowie als ängstlich vor einem Kontrollverlust trotz der Tatsache dass sie Gewalt als Bewältigungsstrategie für Hilflosigkeitsgefühle und für Kontrolle über andere verwenden.; Präventionsmassnahmen zur Abwendung von gewalttätigem Verhalten; Management von gewalttätigem Verhalten; Verbale Intervention, Legale Aspekte von Gewaltanwendung, Demonstration und Übung von Selbstverteidigungstechniken sowie Haltegriffe, Rollenspiele zu verbalen und Selbstverteidigungstechniken
Beschreibung Outcomevariablen	1. Wissen zur Thematik 2. subjektives Bewältigungsvermögen
Detaillierte Beschreibung Outcomevariablen	1. prä/post MC-Test zu 10 Punkten 2. Strukturiertes Interview Formular bei tatsächlichen Vorfällen
Beschreibung Ergebnisse	1. Der MC Test zeigte einen objektiven Wissenszuwachs nach Absolvieren des Kurses 2. Trainingsteilnehmer hatten ein signifikant höheres Selbstvertrauen und subjektives Bewältigungsvermögen, Teilnehmer waren zudem signifikant besser in der Lage die auslösenden Umstände zu erfassen.

Nummer	24
Autoren	Long CG, West R, Afford M, Collins L, Dollex O
Jahr	2015
Studie	Reducing the use of seclusion in a secure service for women
Studientyp	Prä/Post-Intervention
Dauer Baseline	1 Jahr
Dauer Intervention	1h / Woche über 4 Monate
Dauer Follow up	1 Jahr

Kontrollgruppe ja/nein	nein
Ort der Datenerhebung	Secure service for women
Land	UK
Charakterisierung der Zielgruppe der Trainingsmassnahme	Staff
Anzahl Patienten	38 (19 prä / 19 post-Intervention)
Beschreibung Patienten	Frauen, alle Forensisch oder fürsorglich untergebracht, Hauptdiagnosen: Emotionale instabile Persönlichkeitsstörung oder Schizophrenie, Die ersten 19 Patienten mit einer Liegedauer von 1 Jahr wurden mit 19 Patienten vor der Intervention verglichen. (Zuteilung auf der Basis von Alter, Diagnose, Herkunft (Krankenhaus oder Gefängnis))
Beschreibung Intervention	1. RAID (Reinforce Appropriate Implode Disruptive; Davies, 2004) milieu therapeutic approach to the management of extreme behaviour 2. Training in Relational Security (Allen, 2010) 3. Einbeziehung der Patientensicht in die Prävention und Management von aggressin und Gewalt 4. Training auf Station 5. Präventionsmassnahmen
Detaillierte Beschreibung der Intervention	1. RAID: staff training; . the use of a recovery approach to patient care; post-incident use of Behaviour Chain Analysis (Linehan, 1993); .the use of structured risk assessment tools and scenario-planning to inform risk management and intervention (Douglas et al. 2013) and the use of a risk stage system (Long et al. 2014) 2. 1-Stündiges Einführungsprogramm für Personal und wöchentliche Besprechungen zur Kontrolle der Compliance 4.. 1-Stündiges wöchentliches Training in Deeskalations-Techniken anhand von Fallbeispielen (nicht physikalisch) 5. Präventionsmassnahmen wie Gewichte um Arousal zu senken, Sport am Wochenende
Beschreibung Outcomevariablen	1. Ereignisse für Isolationsmassnahmen 2. Vorfälle von riskantem Verhalten 3. Behavior rating scale 4. Anwesenheit bei Therapiesitzungen 5. Seclusion questionnaire
Detaillierte Beschreibung Outcomevariablen	3. Bewertungssystem (0-3 Punkte) für folgende Punkte: self-harm; suicide ideation; appropriate behaviour; verbal aggression; physical aggression; property care, participation in ward/hospital programmes; compliance with drug treatment; responsibility for own behaviour; insight into disorder; insight into risk; relationship with primary nurse; and relationship with staff 5. Fragebogen an Belegschaft und Patienten über die beste mglichkeit Isolationsmassnahmen zu umgehen (training in de-escalation; timetabled BCA sessions; patient consultation about risk management plans; sensory integration treatment; increased activity sessions at weekends; and Relational Security items: increased levels of engagement with patients by staff (team) and initiatives to reduce bullying, harassment and discrimination (other patients).)
Beschreibung Ergebnisse	1. Signifikant weniger Seclusion (Isolationsmassnahmen) und signifikant weniger Zeit der Patienten in der Isolationsmassnahme 2. Am Häufigsten war Selbstgefährdung der Grund für die Isolationsmassnahmen 3. Signifikant weniger Risikoverhalten 4. Höhere Rate an Teilnahmen an Therapiesitzungen 5. Staff findet deeskalationstechnik am effektivsten, patienten finden Relational Security team initiative item am besten

Nummer	25
Autoren	Martin, K. H.
Jahr	1995
Studie	Improving staff safety through an aggression management program. In: Archives of psychiatric nursing 9 (4), S. 211–215.
Studientyp	Prä/Post-Intervention
Dauer Baseline	1 Jahr
Dauer Intervention	1 Tag Workshop, danach wöchentliches Hands-on Training für 2 Monate
Dauer Follow up	2 Jahre
Kontrollgruppe ja/nein	nein
Ort der Datenerhebung	Psychiatrie einer Universitätsklinik
Land	US

Charakterisierung der Zielgruppe der Trainingsmassnahme	Begleitschaft zweier psychiatrischer Stationen (Pflege, Ärzte, Beschäftigungstherapeuten, Sozialarbeiter, Sekretariat)
Beschreibung Patienten	Inpatient Psychiatric
Beschreibung Intervention	Aggression Management Program: Workshop
Detaillierte Beschreibung der Intervention	1) A mandatory Aggression Management Workshop, was attended by all inpatient staff, which provided both theory and practice: The morning session, primarily theory, focused on overall review of the psychiatric emergency protocol with emphasis on assessment and interventions for level I and II. Staffs' behaviors, attitudes and perceptions in dealing with aggressive and/or potentially aggressive patients were also discussed. The afternoon session offered hands-on training with emphasis on personal safety techniques, individual and team takedowns, as well as the use of seclusion and restraints, all part of level III interventions in the psychiatric emergency protocol., 2) a video on verbal deescalation techniques, was viewed by all staff, 3) a competence assessment, through return demonstration of learned skills, was required by all staff within 2 months of the workshop, and 4) annual certification in each of the three areas was required for all staff.
Beschreibung Outcomevariablen	1) number of aggressive incidents, 2) level of aggression, 3) type of injury, 4) Number of missed work days, and 5) cost to the Department of Psychiatric Nursing as a result of injury.
Beschreibung Ergebnisse	1+2) The level of actual aggression began to drop after the implementation of the program, despite an increase in total number of aggressive incidents 3) The occurrence of staff injuries improved only the second year after the program development. 4) The number of injuries resulting in missed work time stayed the same over all 3 years.
Beschreibung sekundäre Ergebnisse	Schriftliche Evaluation nach 1 Jahr zeigte eine gesteigerte Zufriedenheit und Selbstvertrauen im Management mit Aggressiven Patienten

Nummer	26
Autoren	McDonnell, Andrew
Jahr	1997
Studie	Training Care Staff to manage challenging behaviour: an evaluation of a three day training course. In: The British Journal of Development Disabilities 43 (85), S. 156–162. DOI: 10.1179/bjdd.1997.015.
Studientyp	Prä/Post-Intervention
Dauer Intervention	3 Tage
Kontrollgruppe ja/nein	nein
Land	UK
Charakterisierung der Zielgruppe der Trainingsmassnahme	Pflegepersonal
Anzahl Teilnehmer Interventionsgruppe	21
Beschreibung Intervention	3-tägiger Trainingskurs
Detaillierte Beschreibung der Intervention	Tag 1: Understanding the law, Ursachen für auffälliges Verhalten, Unterschiede in Gewalt und Aggression, Tag 2: Nicht-gewalttätige Methoden zum Management von auffälligem Verhalten, incl Selbstverteidigung ohne das Verdrehen von Gelenken Tag 3: Nichtgewalttätige freiheitsentziehende Massnahmen
Beschreibung Outcomevariablen	1. MC-Test mit 20 Fragen prä/post, 2. Managign Challenging Behavior Confidence Scale mit 15 Punkten prä/post 3. Restraint Role Play Test
Detaillierte Beschreibung Outcomevariablen	1. MC Fragen zum Abfragen von Wissen 2. Selbsteinschätzung zum Umgang mit aggressiven Patienten und zur Anwendung von freiheitsentziehenden Massnahmen 3. Videoanalyse der Rollenspiele durh 2 unabhängige Bewerter, Analyse anhand eines 9-Stufen Bewertungssystems
Beschreibung Ergebnisse	1. Wissenszuwachs durch die Massnahme (nicht signifikant) 2. Signifikant gesteigertes Selbstvertrauen im Umgang mit aggressivem Verhalten und mit freiheitsentziehendenMassnahmen 3. Alle Teilnehmer bestanden den Role-Play test mit mindestens 8 von 9 Stufen
Beschreibung sekundäre Ergebnisse	Die älteren Teilnehmer haben schlechter im Rollenspiel abgeschlossen

Nummer	27
Autoren	McGowan, S.; Wynaden, D.; Harding, N.; Yassine, A.; Parker, J.
Jahr	1999

Studie	Staff confidence in dealing with aggressive patients. A benchmarking exercise. In: The Australian and New Zealand journal of mental health nursing 8 (3), S. 104–108.
Studientyp	(nicht randomisierte) Fall-Kontroll-Studie mit Prä/Post-Intervention
Dauer Intervention	Kontroll-Gruppe: 1-Tages-Trainingsprogramm bei Stellenantritt, alle 6 Monate 1,5 - stündiger Refresher-Kurs Interventionsgruppe: 6 Module mit insgesamt 22,5 Stunden
Dauer Follow up	6 Monate (Interventionsgruppe)
Kontrollgruppe ja/nein	ja
Charakterisierung der Kontrollgruppe	Kontroll-Krankenhaus mit bereits vorher bestehendem Aggressionsmanagement-Programm
Ort der Datenerhebung	Multizentrisch (2 Psychiatrische Intensivstationen in 2 verschiedenen Krankenhäusern)
Land	AUS
Charakterisierung der Zielgruppe der Trainingsmassnahme	Nursing Staff
Anzahl Teilnehmer Interventionsgruppe	ursprünglich 28, aber nur 15 haben den 2. Fragebogen ausgefüllt
Anzahl Teilnehmer Kontrollgruppe	42
Beschreibung Intervention	Kontrollgruppe: "Restraint and Manual Handling." Interventionsgruppe: Safe physical restraint module + 5 weitere Module
Detaillierte Beschreibung der Intervention	1. Kontrollgruppe: 'Restraint and Manual Handling' . *New staff undertake a one day training program that includes legal and ethical issues, managing challenging incidents, communicating effectively with aggressive patients, recognition and management of antecedent behaviour and physical restraint techniques including breakaway strategies. All staff undertake a one and a half-hour annual refresher training workshop. --> This explains the significantly higher confidence levels reported by staff at Graylands Hospital (Kontrollgruppe) for every item on the questionnaire when compared with Fremantle Hospital staff (Interventionsgruppe) prior to implementation of the safe physical restraint module. The safe physical restraint module was introduced at Fremantle Hospital (Interventionsgruppe) in May 1997. In addition, five other modules that cover legal and ethical issues, multicultural issues, management of aggressive behaviour, self-defence techniques, and management of aggression in the community form the basis for a comprehensive management of aggression program. The total hours for all six modules in the program is 22 and a half. The safe physical restraint-module is seven and half-hours in length. It is designed for health professionals working in the mental health area and includes training in defusing and debriefing of both patients and staff following a critical incident. The module teaches a structured sequential process of dealing with physical aggression and the importance of team work and role assignment during the restraint process. The module follows a strict set of guidelines that ensure standards of safety for both staff and patients are met. Trainings focuses on early recognition and management of antecedent behaviours and the empowerment of the patients to take control of their behaviour. Six monthly updates and clinical drills are conducted
Beschreibung Outcomevariablen	Messung des Selbstvertrauens (Confidence) im Umgang mit aggressivem Verhalten von Patienten
Detaillierte Beschreibung Outcomevariablen	1. Selbstbewertungsfragebogen (mit 10 Punkten) zu Selbstvertrauen vor Intervention 2. Wiederholung des Fragebogens 6 Monate nach Trainingsprogramm
Beschreibung Ergebnisse	(1) Confidence level. (how comfortable they felt working with an aggressive patient). --> Signifikant erhöht. (2) Training for handling psychological aggression. (how good their present level of training was for handling psychological aggression). --> Signifikant erhöht. (3) Ability to physically intervene. (views on their ability to intervene physically with an aggressive patient). --> Signifikant erhöht. (4) Self assurance. (how self-assured they felt in the presence of an aggressive patient). --> Signifikant erhöht. (5) Ability to intervene psychologically. (how able they are to intervene psychologically with an aggressive patient). --> Signifikant erhöht. (6) Training for handling physical aggression. (indicate their present level of training for handling physical aggression). --> Signifikant erhöht. (7) Safety. (how safe they felt around an aggressive patient). --> Signifikant erhöht. (8) Techniques for dealing with aggression. (indicate the effectiveness of techniques they knew for dealing with aggression). --> Signifikant erhöht. (9) Meeting needs. (how able they were to meet the needs of an aggressive patient). --> Signifikant erhöht. (10) Protection. (how able they were to protect themselves from aggressive patients). --> Signifikant erhöht.
Nummer	28

Autoren	Needham I.; Abderhalden C.; Meer R.; Dassen T.; Haug H. J.; Halfens R.J.G.; Fischer J.E.
Jahr	2004
Studie	The effectiveness of two Interventions in the management of patient violence in acute mental inpatient settings: report on a pilot study. In: Journal of Psychiatric and Mental Health Nursing 11, S. 595-601.
Studientyp	Prä/Post-Intervention (Prospektive nicht- randomisierte Studie)
Dauer Baseline	3 Monate
Dauer Intervention	Gesamtdauer der Studie: 10 Monate Nach 3 Monaten (= Baseline) nur Kurs "Risikovorhersage" Im 7. Monat 5- tägiger Trainingskurs zu Aggressionsmanagement Die letzten 3 Monate Risikovorhersage und Trainingsprogramm parallel
Kontrollgruppe ja/nein	nein
Ort der Datenerhebung	Multizentrisch (1 Städtische psychiatrische Station, 1 ländliche psychiatrische Station mit jeweils 12 Betten)
Land	CH
Charakterisierung der Zielgruppe der Trainingsmassnahme	Nursing Staff
Anzahl Patienten	576 Patienten
Beschreibung Patienten	576 patients (41.3% females, mean age 38 years, range 15–88 years) accounted for 721 admissions to the two acute psychiatric wards. hospitalizations comprised 38.5% voluntary and 61.5% involuntary admissions, giving rise to a total of 7 732 hospitalization days. Diagnosen: schizophrenia, schizo-type and delusional disorders (38.3%), mood (affective) disorders (15.6%), mental and behavioural disorders due to psychoactive substance use (23.9%), neurosis and personality disorders (14.9%), and other psychiatric ICD-10 categories (7.3%).
Beschreibung Intervention	1. Systematische Risikovorhersage mit BVC-R 2. Standardisiertes Trainingsprogramm zu Management von Aggressionen
Detaillierte Beschreibung der Intervention	1. Risikovorhersage mittels extended version of the Brøset Violence Checklist (BVC-R) . Einschätzung von "six patient behaviours (confused, irritable, boisterous, verbally threatening, physically threatening and attacking objects)" --> anschliessend Bewertung "of the risk for imminent violence using a slide-rule-VAS. These combined ratings produce a score between 0 (very low risk) and 12 (high risk). --> Alle Patienten wurden so bei Aufnahme und die nächsten 3 Tage (2x tgl) bewertet 2. Trainingsprogramm zu Management von Aggressionen (devised by (N.E. Oud unpublished) in the Netherlands). 5-tägiger Kurs mit 35 Einheiten " is a skilloriented, action-centred, and problem-centred educational programme incorporating experiential- and knowledgebased elements such as the nature and prevalence of aggression, violence and sexual harassment, the use of aggression scales, preventive measures and strategies, de-escalation techniques, post-incident care and support, ethical aspects of violence management, and safety management." Weiterer Bestandteil des Kurses: "practical 'hands-on' skills such as holding methods, breakaway techniques, and control and restraint"
Beschreibung Outcomevariablen	1. Anzahl der aggressiven Ereignisse 2. Schwere der aggressiven Ereignisse 3. Anzahl der Zwangsmassnahmen
Detaillierte Beschreibung Outcomevariablen	1. Aggressive Ereignisse = verbal aggression, physical attacks against persons, or coercive measures. Dokumentiert mittels Staff Observation Aggression Scale (SOAS-R). The SOAS-R allows the registration of the provoking factor, the means used by the patient, the target of aggression, the consequence for the victims, and the measures to terminate aggression. 2. Zwangsmassnahmen: recorded on a form developed on the basis of existing formats in general use in the area. Coercive measures were further categorized as: (1) coercive measures without prior aggression, and (2) coercive measures following an aggressive incident. Incidence rates were expressed as events per 100 hospitalization days (unit of analysis = occupied beds) and as days with event per ward (unit of analysis = ward). Secondary outcomes were the severity of aggressive events as measured by the SOAS-R and by a visual analogue scale.
Beschreibung Ergebnisse	1. Anzahl der aggressiven Ereignisse unverändert 2. Schwere der aggressiven Ereignisse etwa unverändert 3. Signifikante Abnahme der Zwangsmassnahmen
Beschreibung sekundäre Ergebnisse	A 'ward effect' was detected with one ward showing a decline in attacks with unchanged incidence rates of coercion and the other ward showing the opposite. The severity of the incidents remained unchanged whilst the subjective severity declined after the training course.
Funding	This study was supported by research grant BK 361/01 of the Swiss Academy of Medical Science.
Qualitätsbemerkung	"ward effect"

Nummer	29
Autoren	Needham, I.; Abderhalden, C.; Halfens, R. J. G.; Dassen, T.; Haug, H. J.; Fischer, J. E.
Jahr	2005
Studie	The effect of a training course in aggression management on mental health nurses' perceptions of aggression. A cluster randomised controlled trial. In: International journal of nursing studies 42 (6), S. 649–655. DOI: 10.1016/j.ijnurstu.2004.10.003.
Studientyp	Randomisierte-kontrollierte Studie (Prä/Post Intervention)
Dauer Intervention	5 Tage
Dauer Follow up	90 Tage
Kontrollgruppe ja/nein	ja
Charakterisierung der Kontrollgruppe	ohne Trainingsmassnahme
Ort der Datenerhebung	Multizentrisch
Land	CH
Charakterisierung der Zielgruppe der Trainingsmassnahme	Pflegepersonal auf Psychiatrische Station
Anzahl Teilnehmer Interventionsgruppe	30
Anzahl Teilnehmer Kontrollgruppe	28
Beschreibung Patienten	Stationär Psychiatrisch
Beschreibung Intervention	Trainingsprogramm im Management von Aggressionen nach Nico Oud
Beschreibung Outcomevariablen	1. Fragebogen zur sozio-biographischen Datenerhebung und Fragen zu persönlichen Erfahrungen mit aggressivem Verhalten 2. Perception of Aggression Scale (POAS-S) 3. Tolerance Scale 4. Impact of Patient Aggression on Carers Scale (IMPACTS)
Detaillierte Beschreibung Outcomevariablen	#####
Beschreibung Ergebnisse	1. Beide Versuchsgruppen sind gleichwertig. 2. +3)+4) Alle Vergleiche zwischen der Kontrollgruppe und der Interventionsgruppe sind nicht signifikant unterschiedlich. Evtl war die Nachuntersuchungszeit zu kurz.

Nummer	30
Autoren	Nijman, H. L.; Merckelbach, H. L.; Allertz, W. F.; a Campo, J. M.
Jahr	1997
Studie	Prevention of aggressive incidents on a closed psychiatric ward. In: Psychiatric services (Washington, D.C.) 48 (5), S. 694–698. DOI: 10.1176/ps.48.5.694.
Studientyp	Prä/Post-Intervention
Dauer Baseline	3 Monate
Dauer Follow up	3 Monate
Kontrollgruppe ja/nein	ja
Charakterisierung der Kontrollgruppe	Stationen ohne Intervention
Ort der Datenerhebung	Psychiatrisches Krankenhaus
Land	NL
Charakterisierung der Zielgruppe der Trainingsmassnahme	Staff
Anzahl Patienten	3 Stationen a 20 Betten
Beschreibung Patienten	Akute geschlossene Psychiatrische Station
Beschreibung Intervention	Managment von Patienten
Detaillierte Beschreibung der Intervention	Interventions included a protocol for talking to patients who exhibited aggressive behavior, discussing treatment goals with the patient shortly after admission, explaining why the ward's door was locked and the exit rules, providing a schedule of staff meetings to explain staff members' absence from the ward, and clarifying the procedure for making an appointment with the psychiatrists. R

Beschreibung Outcomevariablen	1. Messung der aggressiven Vorfälle mittels Staff Observation Aggression Scale (SOAS)
Beschreibung Ergebnisse	Kein Unterschied Signifikant weniger "Incidents of physical aggression" im Post-Interventionszeitraum auch auf den Control Wards. Wahrscheinlich wurde im Laufe der Zeit exakter durch das Personal differenziert (systematischer Fehler)

Nummer	31
Autoren	Parkes, Jon
Jahr	1996
Studie	Control and restraint training. A study of its effectiveness in a medium secure psychiatric unit. In: The Journal of Forensic Psychiatry 7 (3), S. 525–534. DOI: 10.1080/09585189608415035.
Studientyp	Prä/Post-Intervention
Dauer Baseline	18 Monate
Dauer Intervention	4 Tage
Dauer Follow up	12 Monate
Kontrollgruppe ja/nein	nein
Ort der Datenerhebung	Forensische Pyachiatrie
Land	UK
Charakterisierung der Zielgruppe der Trainingsmassnahme	Nursing staff
Beschreibung Patienten	Psychiatrische Stataion mittlerer Sicherheit
Beschreibung Intervention	Control and Restraint (C&R) Training
Detaillierte Beschreibung der Intervention	It involved non-touch training, break-away, techniques and the use of a team of three staff to restrain a person
Beschreibung Outcomevariablen	Data consisted of information on the nature of the incident, the number of staff involved, the number of injuries occurring and the staff's feelings.
Beschreibung Ergebnisse	Es gab einen leichten nicht-signifikanten Anstieg von Verletzungen beim Personal (post training), Das Personal stufte die Vorfälle als gleich Schwierig wie vor dem Programm ein. Break away techniken wurden nicht benutzt.
Beschreibung sekundäre Ergebnisse	Am häufigsten waren Schläge gegen den Kopf des Personals 149 incidents involving restraint

Nummer	32
Autoren	Paterson, B.; Turnbull, J.; Aitken, I.
Jahr	1992
Studie	An evaluation of a training course in the short-term management of violence. In: Nurse education today 12 (5), S. 368–375.
Studientyp	Prä/Post-Intervention
Dauer Intervention	10 Tage
Kontrollgruppe ja/nein	nein
Ort der Datenerhebung	Psychiatrisches Krankenhaus
Land	UK
Charakterisierung der Zielgruppe der Trainingsmassnahme	Nursing staff
Anzahl Teilnehmer Interventionsgruppe	25
Beschreibung Intervention	De-escalation Methode nach (Turnbull et al 1990)
Detaillierte Beschreibung der Intervention	Inhalte: Participants are first introduced to the theoretical issues surrounding violence and are encouraged to examine their current practice, particularly in relation to its legal basis and the safety of the client and themselves. Secondly, instruction is given in verbal and non-verbal techniques which might prevent assault and participants are afforded opportunities to practice their new skills in video role-play situations. Thirdly, participants are shown a comprehensive set of physical skills which would enable them to 'escape' from situations where a client has initiated an assault by grabbing clothing, pulling hair and so on. Fourthly, participants are instructed in techniques of control and restraint. Übungen wurden durchgeführt in De-escalation role plays, Instrucion in almost 100 separate break away techniques, davon 10 Haupt-Techniken wurden gelehrt.

Beschreibung Outcomevariablen	1. Fragebogen 2. Situationsmanagement 3. Befreiung aus Haltegriffen
Detaillierte Beschreibung Outcomevariablen	1. Zu (Wissen, General health questionnaire (GHQ), Job satisfaction questionnaire ,Role conflict/ambiguity scale) 2. Video Bewertung von Rollenspielen durch unabhängige, nicht in die Weiterbildungsmaßnahme involvierte Experten. Bewertung Hinsichtlich: Personalises self, Mood matching, Negotiating options, Distraction, Non-verbal communication, Use of non-provocative phrases 3. Bewertung durch Instruktoren bezüglich Effektivität, Geschwindigkeit, Technik, Sicherheit des Aggressors und des Personals
Beschreibung Ergebnisse	1. Signifikanter Wissenszuwachs, 2. Signifikant weniger Stress, 3. Höhere Job-Zufriedenheit (nicht signifikant), 4. Signifikant weniger Rollenkonflikt, 5. Signifikant bessere Fähigkeiten in Deeskalation, 5. Signifikant grössere Kompetenz bezüglich Praktischer Verteidigungstechniken
Beschreibung sekundäre Ergebnisse	Nach dem Kurs waren die Teilnehmer strukturierter und effektiver im Umgang mit schwierigen Situationen.
Nummer	33
Autoren	Phillips, Douglas; Rudestam, Kjell Erik
Jahr	1995
Studie	Effect of Nonviolent Self-Defense Training on Male Psychiatric staff Members' Aggression and Fear. In: In: PSYCHIATR SERV 46 (2), S. 164-168.
Studientyp	Randomisierte Fall-Kontroll-Studie
Dauer Intervention	1. Gruppe: Didaktisches Training in 2 Einheiten: Gesamtdauer 4 Stunden und 20 Min 2. Gruppe: Didaktisches und Physical skills Training in 2 Einheiten: Gesamtdauer 4h und 20 min
Dauer Follow up	2 Wochen
Kontrollgruppe ja/nein	ja
Charakterisierung der Kontrollgruppe	Three groups of male staff: 1. didactic training 2. didactic and physical skills training 3. no training in the nonviolent self-defense skills (= Kontrollgruppe)
Ort der Datenerhebung	Multizentrisch (2 Psychiatrische Krankenhäuser)
Land	US
Charakterisierung der Zielgruppe der Trainingsmassnahme	Male psychiatric staff members Three groups of male staff: 1. didactic training 2. didactic and physical skills training 3. no training in the nonviolent self-defense skills
Anzahl Teilnehmer Interventionsgruppe	Gruppe 1: 8 (Didaktisches Training)
Anzahl Teilnehmer Kontrollgruppe	Gruppe 2: 8 (Didaktisches Training und Physikal skills Training)
Beschreibung Intervention	8
Detaillierte Beschreibung der Intervention	Three groups of male staff received didactic training, didactic and physical skills training, or no training in the nonviolent self-defense skills of protective profile, repel, and push-off, as well as in evasive movement. Am Anfang der ersten Einheit simulierter Angriff als Rollenspiel für alle Teilnehmer, wurde per Video aufgezeichnet, anschliessend self-report questionnaire. The role-plays were videotaped and later reviewed by two judges who had received two hours of training in use of the assessment instruments and who were teaching violence management in other settings using the skills employed in this study. The judges were trained to rate levels of physical competence and levels of behaviorally expressed aggression and fear. Group 1 met with the first author for presentation and discussion of the following didactic material: nature and dynamics of violence, including psychoanalytic and social learning theories; the effects of nonverbal communications; warning signs of violence; intervention strategies; and legal and institutional issues. Group 2 followed an identical course, with the addition of training in the core physical skills of protective profile, repel, and push-off to evasion. The concepts of nonviolent self-defense and stress inoculation training were explained. The crucial factors of interpersonal distance and threat perception were discussed and illustrated with the protective profile. The protective profile is an upright posture with the knees very slightly bent and with the body at an oblique angle to the attacker. The hands are held crossed in front of the chest, held at the sides, or held up in front of the body. After training, subjects engaged in the same role-play as before training. The role-play was videotaped. The judges reevaluated the subjects for achieved physical competence using the evaluation of physical skill instrument. The Buss-Durkee Inventory was readministered. The subjects then participated in another videotaped role-play and were evaluated for physical competence and behaviorally expressed aggression and fear. After the role-play, subjects completed the self-report questionnaire.

Beschreibung Outcomevariablen	1. Level der Aggression und Angst des Personals gegenüber aggressiven Patienten (1. Bewertung durch Jury, 2. Eigenbewertung) 2. Anzahl der Angriffe 3. Episoden der Zwangsmassnahmen 4. Verletzungen Mitarbeiter
Detaillierte Beschreibung Outcomevariablen	Messung der Effektivität mithilfe von: 1. Buss-Durkee Hostility-Guilt inventory (Messung von Feindseligkeit und Schuldgefühlen) # a demographic questionnaire # an instrument used for evaluation of level of physical skill (clinical experience and sports training) # a scale evaluating aggression and fear # a self-report questionnaire # a follow-up questionnaire about posttraining assaults.
Beschreibung Ergebnisse	1. Buss-Durkee measures: Keine signifikanten Unterschiede zwischen den Gruppen 2 Judges' ratings: Two judges rated three measures from the videotapes. The three measures were physical competency, fear, and aggression. # competency: From pre- to posttraining, group 2 improved in competency by 32 percent, while group 1 improved by 2 percent and group 3 decreased by 2 percent. # fear: group 2 reduced their fear by 38 percent, while group 1 subjects reduced their fear by 5 percent and group 3 by 3 percent. # aggression: Subjects in group 2 reduced their aggression by 50 percent, while group 1 subjects reduced their aggression by 1 percent and group 3 by 5 percent. 3. Self-ratings. The subjects rated themselves pre- and posttraining on the variables of the value of nonaggressive responses and outcomes and on fear and aggression. # The three groups differed significantly from each other in posttraining self-ratings of the value of nonaggressive response. group 2 was significantly different from those for group 1 and group 3 at the .05 level but that the mean ratings for group 1 and group 3 were not different from one another. # No significant differences were found between the groups in the degree of change in self-ratings of fear or aggression; that is, the three groups experienced similar levels of change from pretraining to posttraining. 4. Follow-up measures. Follow-up questionnaires were solicited from the subjects two weeks after the final training exposure. Group 1: 18 assaultive encounters, resulting in ten episodes of restraint and three minor staff injuries. Group 2: 13 assaults, resulting in five episodes of restraint and no injuries. Group 3: 15 assaults, leading to eight episodes of restraint and one staff injury. -> Gruppe 2 involved in 23 percent fewer assaults than those who received only didactic training and 20 percent fewer assaults than the control group. They reported no injuries and 50 percent fewer episodes of restraint than the didactic group and 30 percent fewer than the control group.
Beschreibung sekundäre Ergebnisse	Relationships between physical competency and other variables. The judges' ratings of change in physical competency were significantly correlated with judged change in fear ($r=.77$, $p<.001$) and in aggression ($r=.83$, $p<.001$). Subjects with increased physical competency were judged to have had reductions in fear and aggression. Judged change in physical competency was also significantly correlated with self-reports of value of a nonaggressive response ($r=.46$, $p<.01$), indicating that increased physical competency was accompanied by increased belief in the value of a nonaggressive response. Finally, judged change in physical competency was not significantly related to self-reports of fear or aggression.

Nummer	34
Autoren	Shah, A.; De, Tamal
Jahr	1998
Studie	The effect of an educational intervention package about aggressive behaviour directed at the nursing staff on a continuing care psychogeriatric ward. In: International journal of geriatric psychiatry 13 (1), S. 35-40.
Studientyp	Prä/Post-Intervention
Dauer Baseline	6 Wochen
Dauer Intervention	2x45 Min/Woche über 6 Wochen
Dauer Follow up	6 Wochen
Kontrollgruppe ja/nein	nein
Ort der Datenerhebung	Gerontopsychiatrie
Land	UK
Charakterisierung der Zielgruppe der Trainingsmassnahme	Nursing staff
Anzahl Teilnehmer Interventionsgruppe	15

Anzahl Patienten	26
Beschreibung Patienten	26 Patienten mit Hohem RAGE und SOAS Score Patientengut: Geriatrische Psychiatrische Station, Only patients with persistently severe behavioural disturbance, despite assessment and treatment on the acute admission ward, were admitted to the continuing care ward
Beschreibung Intervention	Educational package by consultant psychiatrist
Detaillierte Beschreibung der Intervention	Inhalte: support, opportunity for the nursing staff to ventilate their feelings, sharing of knowledge about aggressive behaviour in the elderly based on an up-to-date literature review. Themen: The literature review included discussion on the definitions, prevalences, precipitants, outcomes, clinical correlates, social correlates, demographic correlates, biological correlates, timing, site and management of aggressive behaviour. The influence of staffing factors, including staff training, and the sensitive pharmacokinetics and pharmacodynamics in the elderly were also discussed.
Beschreibung Outcomevariablen	Messung aggressiven Verhaltens mittels RAGE and SOAS scales.
Detaillierte Beschreibung Outcomevariablen	The RAGE scale (Patel and Hope, 1992a) measures the quantity and severity of aggressive behaviour, and gives a score on a three-point scale (0±3) for each of the 21 items and a total score. The RAGE scale was completed once a week for each patient by the nursing manager of the ward for the entire study duration of 18 weeks. The original RAGE scale was designed to measure aggressive behaviour for the preceding 3 days. The Staff Observation Aggression Scale (SOAS) (Palmstierna and Wistedt, 1987) measures individual episodes of aggressive behaviour and gives a total score (0±12) and subscores for the means (the method of aggression used), aims (the actual target of the aggression) and results (the outcome of aggression) of an individual episode of aggressive behaviour on a four-point scale (0±4). Individual nurses, across all shifts, completed the SOAS scale every time they observed an individual episode of aggressive behaviour.
Beschreibung Ergebnisse	RAGE UND SOAS -Score waren signifikant abnehmend durch die Bildungsmaßnahme
Beschreibung sekundäre Ergebnisse	RAGE und SOAS korrelieren gut

Nummer	35
Autoren	Singh NN, Lancioni GE, Winton ASW, Singh AN, Adkins AD, Singh J
Jahr	2008
Studie	Mindful Staff Can Reduce the Use of Physical Restraints when Providing Care to Individuals with Intellectual Disabilities
Studientyp	Prä/Post-Intervention
Dauer Baseline	3-5 Wochen
Dauer Intervention	2h/Woche über 12 Wochen (=24h)
Dauer Follow up	22-24 Wochen
Kontrollgruppe ja/nein	nein
Ort der Datenerhebung	Wohnheim für Geistig Behinderte
Land	US
Charakterisierung der Zielgruppe der Trainingsmaßnahme	Staff
Anzahl Teilnehmer Interventionsgruppe	23
Anzahl Patienten	20
Beschreibung Patienten	Geistige Retardierung
Beschreibung Intervention	Mindfulness training, Anweisungen bezüglich Umgang mit Patientengewalt blieb unverändert
Detaillierte Beschreibung der Intervention	All received basic training in behaviour management based on the Miller (1997) text. This was provided 2 years before the mindfulness training and was similar to that reported by Singh et al. (2006a) The staff was taught meditation methods and given exercises to enhance mindfulness.
Beschreibung Outcomevariablen	1. Anzahl Ereignisse 2. Beobachtungen von Verbalen Ereignissen 3. Physical Restraints 4. Verschreibung Medikamente gegen aggressives Verhalten 5. Verletzungen des Personals 6. Verletzungen der Patienten

Detaillierte Beschreibung Outcomevariablen	1. Eine Episode von physikalischer (gegen Sachen oder Personen) oder verbaler Aggression ist ein Ereignis 2. Beobachtungen von verbalem Austausch der zu physikalischer Gewalt führen konnte mit und ohne Einschreiten des Personals 3. kurze Physikalische Restraints ohne mechanische restraints
Beschreibung Ergebnisse	systematic decreases in incidents, verbal redirections and injuries to staff and peers and an increase in observations. The use of restraints and Stat medications decreased during mindfulness training and more substantially (to almost zero levels) during mindfulness practice.

Nummer	36
Autoren	Sjöström, N.; Eder, D. N.; Malm, U.; Beskow, J.
Jahr	2001
Studie	Violence and its prediction at a psychiatric hospital. In: European psychiatry : the journal of the Association of European Psychiatrists 16 (8), S. 459–465.
Studientyp	Prä/Post-Intervention
Dauer Baseline	6 Wochen
Dauer Intervention	35h während 2 Monaten
Dauer Follow up	6 Wochen
Kontrollgruppe ja/nein	nein
Ort der Datenerhebung	Psychiatrische Universitätsklinik Göteborg
Land	S
Charakterisierung der Zielgruppe der Trainingsmassnahme	Nursing staff
Anzahl Teilnehmer Interventionsgruppe	185/144 (prä/post)
Anzahl Patienten	211/175 (prä/post)
Beschreibung Patienten	Stationäre psychiatrische Patienten
Beschreibung Intervention	35-Stündiger Trainingskurs auf verschiedenen Ebenen
Detaillierte Beschreibung der Intervention	Improve staff competence, understand the aggressive process and how aggression arises, be able to predict aggressive events and dangerous situations, be able to defend oneself with psychological and physical techniques and routinely, follow up assaults to gain experience.
Beschreibung Outcomevariablen	1. SDAS - Scale 2. SOAS-Scale 3. Erfassung der Krankheitstage des Personals
Detaillierte Beschreibung Outcomevariablen	Social Dysfunction Aggression Scale (SDAS) was used to report and assess aggressive behaviour over time, and the Staff Observation Aggression Scale (SOAS) to report and assess single aggressive incidents
Beschreibung Ergebnisse	1+2 Es gab keine signifikante Reduktion in aggressiven Vorfällen 3. Die Krankheitstage waren unverändert

Nummer	37
Autoren	Smoot, S. L.; Gonzales, J. L.
Jahr	1995
Studie	Cost-effective communication skills training for state hospital employees. In: Psychiatric services (Washington, D.C.) 46 (8), S. 819–822. DOI: 10.1176/ps.46.8.819.
Studientyp	Prä/Post-Intervention
Dauer Baseline	6 Monate
Dauer Intervention	8h/Woche für 4 Wochen (Insgesamt 32h)
Dauer Follow up	6 Monate
Kontrollgruppe ja/nein	ja
Charakterisierung der Kontrollgruppe	Zusammenstellung einer Gruppe ohne Training, Annähernd gleiche Bettenzahl (45 statt 43)
Ort der Datenerhebung	Psychiatrische Klinik eines Regionalkrankenhauses in Atlanta
Land	US
Charakterisierung der Zielgruppe der Trainingsmassnahme	Direct care staff

Anzahl Teilnehmer Interventionsgruppe	35
Anzahl Teilnehmer Kontrollgruppe	37
Beschreibung Patienten	Akut psychiatrisch Stationär, Rückfall innerhalb eines Jahres
Beschreibung Intervention	32-stündiges :specific empathy-based human resources program.
Detaillierte Beschreibung der Intervention	Hauptlernziel: Akkurate Empathie erlernen in dem man die Bedeutung der Botschaft zurück auf den Sprecher gibt. emotional components of interpersonal communication, Körpersprache, Ablauf: Theoretischer Überblick, Videos, Rollenspiele, Deeskalationskommunikation
Beschreibung Outcomevariablen	1. Erfassung von Daten der Teilnehmer, 2. Maslach Burnout Inventory (13) 3. Ward Atmosphere Scale 4. Kostenanalyse
Detaillierte Beschreibung Outcomevariablen	Kostenanalyse: 1 Stunde Arbeitsausfall: \$13; Untersuchung einer Patientenbeschwerden: \$615; Kosten eine Registered Nurse zu ersetzen: \$3255 (Einstellungs- und Einarbeitungskosten);
Beschreibung Ergebnisse	-30% Restraints and Seclusion, bessere Kosteneffizienz (-52%) Ersparnis von 62000\$!, weniger Staff-Turnover (-63,6%), weniger Fehlzeiten (-73%), Weniger Patientenbeschwerden (-66%),

Nummer	38
Autoren	St. Thomas Psychiatric Hospital Ontario, Canada
Jahr	1976
Studie	A program for the prevention and management of disturbed behavior. In: Hospital & community psychiatry 27 (10), S. 724–727.
Studientyp	Prä/Post-Intervention
Dauer Baseline	1 Jahr
Dauer Intervention	5x2h Training
Dauer Follow up	1 Jahr
Kontrollgruppe ja/nein	nein
Ort der Datenerhebung	Psychiatrisches Krankenhaus
Land	CAN
Charakterisierung der Zielgruppe der Trainingsmassnahme	Gesamte Belegschaft (klinisch und nicht-klinisch)
Beschreibung Patienten	Akutes Psychiatrisches Krankenhaus
Beschreibung Intervention	Theoretischer Vortrag mit Handbuch und Video und praktische Übung von Befreiungsgriffen
Detaillierte Beschreibung der Intervention	Video: A 45-minute, color, audiovisual tape mit Schritt zu Schritt Anleitungen I)are(I a workbook to be used in the teaching prograiii. 'I'lic First part of the workbook identifies various behaviors that will predictahl lead to aggressive behavior an(I UletlB)(IS of intervention that might prevent inappropriate behavior from occurring. The second Part of the workbook describes and illustrates methods of physical intervention if disturbed behavior occurs.2. teaching appropriate physical intervention for those situations that were not predictable and preventable and hat occurred spontaneously, Emphasis was placed on intervening physically only when no other methods were effective and on using methods that would not injure either the staff or the patient. he movements are part of the Korean style of karate,
Beschreibung Outcomevariablen	number of incidents of disturbed behavior, number of patient injuries, and number of staff injuries and manhours lost from work.
Beschreibung Ergebnisse	1. Anzahl der Ereignisse ging zurück (-9% 222 zu 201), 2. Weniger Verletzte Patienten (-12%, 415zu365), 3. Die Anzahl verletzter Mitarbeiter ging zurück (-10.4%, 87zu78), Die Abwesenheitszeit ging zurück (-31%, 15128h zu 10444h)

Nummer	39
Autoren	Testad I, Aasland AM, Aarsland D
Jahr	2005
Studie	The effect of staff training n the use of restraint in a single-blind randomised controlled trial
Studientyp	Randomisierte-kontrollierte single Blind Studie
Dauer Baseline	(min. 1 Woche)
Dauer Intervention	1 Tag + 1h/Monat über 6 Monate

Dauer Follow up	(min. 1 Woche)
Kontrollgruppe ja/nein	ja
Charakterisierung der Kontrollgruppe	gleiches Patientengut, gleiche grösse
Ort der Datenerhebung	4 Pflegeheime
Land	N
Charakterisierung der Zielgruppe der Trainingsmassnahme	Pflegepersonal
Anzahl Teilnehmer Interventionsgruppe	14
Anzahl Teilnehmer Kontrollgruppe	22
Anzahl Patienten	151 (55 Intervention 96 Kontrolle)
Beschreibung Patienten	Geriatrische Patienten mit Demenz
Beschreibung Intervention	The content of the educational program focused on the decision making process in the use of restraint and alternatives to restraint consistent with professional practice and quality care.
Detaillierte Beschreibung der Intervention	A six-hour seminar focusing on dementia, aggression, problem behaviour, decision making process and alternatives towards use of restraint was presented to the entire staff.
Beschreibung Outcomevariablen	The primary outcome measures were number of restraints per patient in the nursing homes in one week and agitation as measured with the Brief Agitation Rating Scale (BARS). Demographic and clinical information über a standardised interview of the nurse,
Beschreibung Ergebnisse	1. Die beiden Vergleichgruppen sind gleichwertig. 2. Die Anzahl der Einsätze von Fixierungsmassnahmen ging signifikant zurück (-54% in Interventionsgruppe; -18% in der Kontrollgruppe) 3. Das Level der Aggressivität war gleichbleibend bzw leicht Ansteigend

Nummer	40
Autoren	Ward A, Keeley S, Warr J
Jahr	2012
Studie	Physical interventions training and organisational management in mental health: an integrated approach to promote patient safety
Studientyp	Prä/Post-Intervention
Dauer Baseline	3 Monate/ 1 Jahr
Dauer Intervention	5 Tage
Dauer Follow up	3 Monate/1Jahr
Kontrollgruppe ja/nein	nein
Ort der Datenerhebung	Mental health care trust
Land	UK
Charakterisierung der Zielgruppe der Trainingsmassnahme	Staff
Beschreibung Patienten	Akut Psychiatrisch Stationär und Ambulant
Beschreibung Intervention	Physical Intervention Training Programme
Detaillierte Beschreibung der Intervention	Seven step model for promoting patient safety (National Patient Safety Agency, 2008) Inhalte: Kontrolle über einzelner Körperteile, Häusliche Gewalt, Bericht von Vorfällen, Legale Aspekte, Restraints im Stuhl und Sitzsack, Seclusion, Deeskalationstechniken, Rollenspiele
Beschreibung Outcomevariablen	1. Anzahl der Schwerwiegenden Vorfälle 2. Anzahl an Vorfällen 3. Verletzungen der Mitarbeiter
Detaillierte Beschreibung Outcomevariablen	1. Trust routinely collects 'serious incident' data
Beschreibung Ergebnisse	1. Reduction in the number of reported situations where physical restraint was required 2. dramatic reduction across the in-patient wards in the number of recorded incidents where aggressive behaviour had required the team to consider the possible use of restraint to contain a situation; for example there were 134 incidents in the three months following the programme compared with 261 in the corresponding period of the previous year. 3. Angriffe aufs Personal halbiert (41 post vs 75 prä)

Nummer	41
Autoren	Whittington, R.; Wykes, T.
Jahr	1996
Studie	An evaluation of staff training in psychological techniques for the management of patient aggression. In: Journal of clinical nursing 5 (4), S. 257–261.
Studientyp	Prä/Post-Intervention
Dauer Baseline	28 Tage
Dauer Intervention	1 Tag (7h)
Dauer Follow up	28 Tage
Kontrollgruppe ja/nein	ja
Charakterisierung der Kontrollgruppe	Interventionsgruppe und Kontrollgruppe wurden je nach Dienstplan von der Stationsleitung bestimmt
Ort der Datenerhebung	Psychiatrisches Krankenhaus
Land	UK
Charakterisierung der Zielgruppe der Trainingsmassnahme	Nurse
Anzahl Teilnehmer Interventionsgruppe	47
Anzahl Teilnehmer Kontrollgruppe	108
Beschreibung Patienten	Akutes Psychiatrisches Krankenhaus
Beschreibung Intervention	Trainingspaket (Whittington & Wykes, 1994), leading cognitive stress theory Lazarus & Folkman 1984
Detaillierte Beschreibung der Intervention	1. Teil: Prävention von aufkeimender Gewalt 2. Verarbeitung der psychologischen Folgen von Angriffen Rollenspiele über Gewalttätige Situationen und Deeskalationstechniken, keine Physikalischen Techniken.
Beschreibung Outcomevariablen	1. Gewalttätige Angriffe auf das Personal
Detaillierte Beschreibung Outcomevariablen	Als Gewalttätiger Angriff war jeder physikalisch-aggressive Kontakt eines Patienten zu einer Pflegekraft unabhängig von der Schwere
Beschreibung Ergebnisse	1. Anzahl der Vorfälle war -31% signifikant weniger (58 zu 40 Vorfällen)
Beschreibung sekundäre Ergebnisse	vor der Trainingsmaßnahme wurden 22% der Interventionsgruppe und nur 13% der Kontrollgruppe Opfer von gewalttätigen Vorfällen. - d.h. Gruppen sind nur bedingt vergleichbar

Gewalt gegen Angehörige (Suche bis September 2016)

Studien, die Prädiktoren beschreiben:

Year NAME COUNTRY population (N=) method	p r e d i c t o r s o f v i o l e n c e [2 6 5] a g a i n s t f a m i l y c a r e g i v e r s		
	perpetrator	victim	interaction
S 2017 LABRUM USA persons who report having an adult relative with PD (N=243) <i>Sekundäranalyse!</i> ☐ Mit anderen Studien und v.a der Hauptstudie ergänzen!	<u>Financial abuse:</u> ... have used illegal drugs in the past 6 months	<u>Physical abuse:</u> ... greater levels of limit-setting practices towards relatives with PD <u>Financial abuse:</u> ... representative payees for relatives with PD; greater levels of limit-setting practices towards relatives with PD <u>Psychological</u> <u>abuse:</u> ... more frequent financial assistance; greater levels of limit- setting practices towards relatives with PD	<u>Physical</u> <u>abuse:</u> ... co- resided with relatives with PD <u>Psychologic</u> <u>al abuse:</u> .. co-resided with relatives with PD
S 2016 VARGHESE INDIA caregivers of patients with severe mental illness (N= 100/63) <i>cross sectional study</i>	- mere sight of medicines (30) - perceived hostility (20) - lack of sleep (10) -hearing loud noise (10) - not able to meet sexual needs (5)	<u>Not fulfilling</u> <u>patients demands:</u> - not giving money for consumption alcohol (10) - not allowing to smoke (10) - not allowing to go out at midnight (2) <u>Other responses</u> <u>obtained:</u> - talking to others regarding patient's illness (30) - listening or talking to the patient (15)	<u>Non-</u> <u>adherence</u> <u>to caregiver</u> <u>instructions:</u> - refusal to take medicines (40) - refusal to do household chores (20) - refusal to get up in morning (5)
S			

2016 KAGEYAMA JAPAN parents of patients with schizophrenia (N=400) <i>questionnaire</i>	... patients who were female, were not competitively employed, were hospitalized three or more times since the onset of the illness, did not use rehabilitation services, and had fewer days of talking to others per month.	... 2/3 were mothers, primary caregivers, and most lived with the patient; have a lower household income.	... parents who experienced violence were more likely to have higher hostility and criticism scores on the EE measures and to manage the patient's money.
S 2016 KIVISTO USA patients (SMI) and a nominated informant who best knew what was going on in his or her life: 47% family and 24% friends (N=1136) <i>Interview with both and records</i>	perpetrator: ... female gender (family violence in general, as well as intimate partner violence (IPV) specifically; ... highest during the first 10 weeks following discharge		
S 2015 KONTIO FINLAND focus groups including relatives (N=8) <i>qualitative design: focus groups interviews</i>	perpetrator: <i>"The relative described examples of how psychiatric symptoms, such as serious psychotic hallucinations, restlessness, suspiciousness, and fear, affected patients' violent behavior or were signals before a violent episode. "</i> <i>"Differences in patients' daily routines, [...] might also indicate imminent violence."</i> <i>"Decline of the patients' mental health"</i> <i>"Although the patients trusted the relative, sometimes the relatives felt that the patient was not him- or herself and was capable of doing anything against them."</i> Patienten erhalten eine nicht-gewalttätige Fassade nach außen hin aufrecht. Zuhause spielt sich dann das Gegenteil ab: <i>"My husband would not have behaved that way in hospital, threatening and aggressive as he did at home at his worst. "</i> <i>"He was able to behave very nicely at the doctors' so the doctor only prescribed sleeping pills..."</i> <i>"Idle days caused patients frustration and could contribute to violent behavior (on the wards)"</i>		
S			

2015 KAGEYAMA JAPAN caregivers of patients with schizophrenia (N=302) <i>mail survey questionnaires</i>		<u>Physical violence:</u> ... main targets were mothers, fathers, and younger sisters.	<u>Physical violence:</u> ... fathers and older brothers in lifetime were targeted more by male patients.
S 2014 ONWUMERE UK caregivers of patients with psychosis (N= 72) <i>RCT</i>	... younger, male, single being an inpatient at the time of recruitment into the study	... hostility towards the patient; ... low self-esteem; ... being on its own caring for a patient	
S 2014 HSU TAIWAN patients with schizophrenia and their parent (N=14 dyads) <i>qualitative study design: phenomenology, individual in-depth interviews</i>	... psychotic symptoms and impulse control appeared to be important factors of the violent behavior: “Some parents felt that in some cases, violence was the weapon of choice for the purpose of retaking supremacy when making decisions.” “The parents felt that the patient often tried to compensate for their unmet needs and perceived lack of power by using violence.” ... emotional stress and fluctuation (precursors and causes of catalysts of violence) ... result of an irritable mood, frequent emotional or behavioral	“Some patients complained that parents distrusted or rejected them, lacked flexibility and were stubborn.”	“Repetitive violent episodes and tension made parents and patients feel uncontrollable, with a loss of self- control, and even feeling powerless to stop after a violence episode or a threat of violence.” ... ineffective communication; monologue was reported, they did not dialogue. “Most patients and parents agree that a combination

	overreactions or intense mood changes.		<i>of psychodynamic and situational factors plays a role in precipitation violence and aggression."</i>
S RAVEENDRANATHAN 2012 INDIA 100 family members of inpatients (focus on caregiver) (N= 100) <i>interview</i>	... in 70%, a family member was the target of the violence; ... 78% history of violence in the previous month; ... about 70% of incidents were preceded by a clear threat made by the patient, which comprised verbal threats (72%) and physical threats (28%) <u>Behavior 1 - day prior to violent incident:</u> - irritable 50 (67%) - irritable to family member 4 (5%) - irritable and suspicious 6 (8%) - quiet 15 (20%) <u>Behavior 2 - hours prior to violent incident:</u> - irritable 57 (76%) - irritable to family member 2 (3%) - irritable and suspicious 4 (5%) - quiet 12 (16%) <u>Behavior just before the violent incident:</u> - irritable 57 (76%) - irritable to family member 2 (3%) - irritable and suspicious 4 (5%) - quiet 12 (16%)		<u>Perceived cause of violence:</u> - prevented from leaving the ward 43 (57%) - patient's resistance to treatment 4 (5%) - arguments with family member 10 (13%) - attempts during family member's assistance with activities of daily living 2 (3%) - family member's report to ward staff regarding patient's violent behavior 6 (8%) - suspicious thoughts 5 (7%) (perpetrator) - do not know 5 (7%)
D 2012 MORGAN USA	aggression: defined as any physical or verbal behavior	aggression or rather time to	aggression :

patients with dementia and caregivers (N=171) <i>longitudinal study design</i> □ part of a longitudinal study, ok?!	that has the effect of harming or repelling others and includes behaviors such as hitting, kicking, and verbal threats. ... worst pain over 4 weeks ... the Relationship between depression and the time to aggression onset appeared to be mediated by pain...; ... both baseline physical agitation and change in physical agitation significantly predicted the time to aggression onset; ... to lesser extent change in nonaggressive physical agitation ($p < 0,1$)	onset of aggression: Risk factors: ... higher levels of baseline caregiver burden ... and caregiver burden, whereas the relationship between baseline dementia severity and the time to aggression onset appeared partially mediated by caregiver burden, (although the direct relationship between dementia severity and time to aggression onset remained marginally significant; ... the relationship between baseline nonaggressive physical agitation and time to aggression onset appeared mediated by caregiver burden ($p < 0,001$) and...	Risk factors: ... decline in mutuality over time ... <i>Schaubild direkte und indirekte Beziehungen zwischen psychosozialen Faktoren und Aggression und caregiver burden</i>
D 2010 BALL USA Patients with dementia and their caregivers (N= 171) <i>part of a larger study</i>	changes in mutuality over time: ... increases (ie, improvement) in total mutuality over 4-month periods were significantly associated with increased number and frequency of pleasant events and decreased caregiver burden ($p < 0,0001$) and patient aggression ($p < 0,04$) over the same 4-month periods.		
D 2010 COOPER UK family dementia carers (N= 220) <i>part of a larger cross-sectional study</i> EINSCHLUSS?	abusive behavior: perpetrator: ... male gender, non-white ethnicity, more ADL impairments victim: ... using dysfunctional coping strategies, finding their current and past relationship with CR less rewarding. interaction:		

	“Those who experienced more abuse were also more likely to report acting abusively towards the CR.”		
S 2009 LOUGHLAND AUSTRALIA carer relatives of people with psychosis (N= 106) <i>questionnaire</i>	aggression: ... the moderate/severe aggression group were rated as having greater affective ($p<0,045$), antisocial ($p<0,001$), negative ($p<0,001$) and psychotic ($p<0,007$) symptoms, compared with the none/mild aggression subgroup.	abusive behavior: ... using more dysfunctional coping strategies; ... experiencing the relationship less rewarding	abusive behavior: ... those who experienced more abuse were also more likely to report acting abusively towards the care recipient; ... carers reported finding their current and past relationship with the CR less rewarding; cares abusive behavior was associated with the carer reporting fewer current rewards from their dyadic relation ship/ a greater deterioration in their relationship
S 2008 CHAN CANADA	intensity of threat/control-override symptoms: ... significant factor that contributed to the incidence of <u>physical assault</u> against caregivers and to the incidence of <u>psychological aggression</u> against caregivers		

caregivers (N= 61) and their relatives with schizophrenia (N= 51) <i>survey kontrollieren!</i>	caregivers' critical comments: ... significant factor that contributed to the incidence of <u>psychological aggression</u> against caregivers <i>PLUS: GUTE SCHAUBILDER; EVTL HILFREICH: FIGURE 1+2</i>
S 2005 ELLBOGEN USA persons with severe mental illness (SMI) (N= 245) <i>Interviews for a randomized study (The effectiveness of outpatient commitment for persons with SMI)</i>	family violence perpetrator: ... substance abuse (bivariate association $p < 0,04$, multivariate analysis $p < 0,009$), ... history of violence (multi.a. $p < 0,05$) interaction: ... family representative Payee ship (FRP) (bivariate association $p < 0,05$, multi. a $p < 0,04$), high family contact (multi.a. $p < 0,05$) ... individuals in the "FRP + High Family Contact" Group were over four times more likely to indicate family violence relative to the comparison group ($p < 0,003$).
S 2004 JOYAL CANADA men with schizophrenia (N= 58) and schizoaffective psychosis (N= 4) <i>interviews</i>	homicide: ... 60 % followed delusions and/or hallucinations directly related to them. interaction: ... poor access to, or insufficient time in, psychiatric hospitals ... simple social conditions: because patients often live with their parents, parents are likely to be "victim of convenience" or to be in a "zone of danger" when something goes awry. ... mothers may press their sons or daughters to take their medications, frustrate their impulses to do something, or simply be in the wrong place at the wrong time. ... demanded money for cigarettes, his mother refused

S 2003 WEIZMANN- HENELIUS FINLAND violent female offenders (N= 61) semi-structured interview	perpetrator: Motive/ Circumstance Close (%) Acquaintance (%)Stranger (%) Quarrel while drinking alcohol18,9% 26,9%33,3% Deep conflicts in relation8,1% 0,0%0,0% Defense in violent situation10,8% 3,8%0,0% Long-term psychological abuse10,8% 0,0%0,0% Solving some other problem13,5% 11,5%22,2% Mental health problems13,5% 3,8%16,7% Women in the close-group were/had... usually married,-children, a higher degree of education, more often employed a personality disorder (N= 24) paranoid 12,5 %, histrionic 12,5 %, narcissistic 12,5 %, borderline 20,8 % antisocial 25,0 % Homicide: Significantly more offenders with a dual diagnosis (34%) than offenders without an antisocial personality disorder (APD) had an argument or a fight not related to psychotic symptoms prior to the homicidal act. ... in each case of altercation, the offender had used alcohol, often with the victim
S 2003 ROBBINS USA patients in acute psychiatric wards (men N= 667, women N= 469) part of the "MacArthur Violence Risk AssessmentStudy"(Stead man et al, 1998), interviews after discharge	perpetrator: Gender ... violent acts by women were less likely to have been preceded by alcohol or drug consumption and more likely to occur while psychiatric medications were being taken; ... men were more likely to have a co-occurring substance abuse diagnosis (52,2%) than were women (34,0%). Co-occurring substance abuse diagnosis ... patients were usually more likely to be violent. These findings suggest that the effect of gender on violence is in part explained by the increased likelihood of males to possess co-occurring abuse substance disorders, compared to females.
S 2001 DORE NEW ZEALAND caregivers of patients with bipolar disorder (N= 41) face-to-face interviews	violence: ... the patient was experienced as more irritable when unwell (80%) and this frequently led to arguments that did not occur other times; ... episodes of mania and hypomania; ... patient was unwell

S 1997 VADDADI AUSTRALIA patients and their relatives (N= 101) <i>semi-structured</i> <i>interview</i>	perpetrator: ... patients with schizophrenia or schizoaffective disorder were more likely to lose their temper or hit or strike their carer, and were significantly more likely to cause a serious injury to their carer <u>Overall level of abuse:</u> ... schizophrenic and bipolar psychosis patient sample > depressed and other non-psychotic sample ... heavy consumption of alcohol increases the probability of the carer reporting having been struck or hit by the patient ... use of cannabis associated with the most aspects of abuse ... younger age ... pre-illness-episode relationship		
S 1997 TARDIFF USA psychiatric patients after hospital discharge (N= 430) <i>prospective study,</i> <i>interview about violence</i> <i>before admission, via</i> <i>telephone: asking about</i> <i>violence after discharge</i>	history of violence before admission: ... 9x more likely to be violent in the two weeks after discharge; ... for 69,2 % of those patients, the target of past violence was the same person. axis II disorder; personality disorder: ... 4x more likely to be violent borderline or antisocial personality disorders: ... 4x more likely to be violent other types: ... 2,3x more likely to be violent		
? 1994 ASNIS USA outpatients (N= 517) <i>survey</i> <i>Einschluss ?</i>	SCL-90-R subscales/ symptom checklist-90 no homicidal behavior: (403) - obsessive-compulsive - depression - anxiety homicidal ideation: (92) - depression - interpersonal sensitivity - psychoticism homicide attempts: (22) - interpersonal sensitivity - hostility - paranoid ideation		
D 1990 HAMEL CANADA caregivers and care receivers with dementia (N= 213) <i>interviews</i>	aggressive behavior: ... premorbid aggressive behaviors were reported for only 9,6% of the patients;	aggressive behavior: ... the situation most often found to elicit patient aggression was when he or she	aggressive behavior: ... whereas the typical caregiver reaction to aggression

	<u>Patient variables:</u> Age, sex, aggression before onset of dementia, level of cognitive impairment, behavior and memory problems	was told to do something; <u>Caregiver variables:</u> Sex, income, relation to patient, NEO neuroticism score, reaction to patient problem behavior, length of caregiving, past social interaction	was to retreat, ignore, or accept such behavior. Feeling angry, but not responding aggressively, was reported by 10,1% of the caregivers, whereas aggressive reactions to patient aggression were reported by 10,6% of the caregivers. ... a more troubled premorbid relationship between the caregiver and receiver, higher levels of premorbid patient aggression, and greater number of patient problems were significant predictors of current patient aggression.
	objective burden: ... past social interactions with their patients as being of poorer quality, patients having greater	subjective burden: ... being less healthy (caregiver), being more distressed by these problems, spending less time in pleasurable activities	

	number of behavior and memory problems ... living together at the time of the assault	
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Studien, die negative Folgen von Gewalt beschreiben

Year NAME
COUNTRY
population (N=)
method

**o u t c o m e o f a g g r e s s i v e
b e h a v i o r a g a i n s t
f a m i l y c a r e g i v e r s
[2 7 5]**

S LABRUM 2017 USA persons who report having an adult relative with PD (N=243) <i>Survey</i> ? Ergänzen mit Haupt und Nebenstudien! PD= psychiatric disorders	violence: In the past 6 months... <u>36 (15%) of respondents reported physical abuse:</u> 16 (6,6%) reported "one type of physically abusive act", 20 (8,2%) "multiple types of physically abusive acts" or that "specific act was committed multiple times" ->Co-occurrence of abuse:17 (47%) also experienced financial abuse, 29 (81%) psychological abuse. <u>47 (19%) reported financial abuse:</u> 10 (4,1%) were financially abuse "once", 23 (9,5%) were abused "between 2 and 4 times", and 14 (5,8%) were abused "5 ore more times". ->Co-occurrence of abuse:17 (36%) also experienced physical abuse, 39 (83%) psychological abuse. <u>99 (41%) psychological abuse against them,</u> Median summed score for psychological abuse is eight (M= 8,77, SD= 3,44) ->Co-occurrence of abuse: 29 (29%) experienced physical abuse, 39 (39%) financial abuse. burden: <u>Violence at home:</u> Feeling: concern, guilt, fear, grief
D 2017 LANGE USA caregivers of US military service members with TBI (N= 214) <i>study</i> EINSCHUSS??	burden: ... high caregiver burden was associated with a service members symptom of [...] and verbal and physical expressions of irritability, anger, and aggression.
S 2016 VARGHESE	violence:

INDIA caregivers of patients with severe mental illness (N= 100) <i>cross sectional study</i>	<u>Verbal aggression:</u> 95% - makes loud noises, shouts angrily: 85% - makes personal insults (e.g. "You're stupid!"): 76% - curses viciously, uses foul language, makes moderate threats to others or self: 62% - makes clear threats of violence toward others or self (I'm going to kill you.):38% - requests to help to control self: 13% <u>Severity of aggressive behavior:</u> - slight/ mild: 14% - moderate/moderately severe: 53% - severe/extreme: 33% burden: <u>Impact of patient aggression on the caregiver:</u> - impairment of relationship between patient and carer: 42% - adverse moral emotions: 91% - adverse feelings to external sources: 30%
2016 KAGEYAMA JAPAN parents of patients with schizophrenia (N=400) <i>questionnaire</i>	violence: ... of 400 parents, 263 (65,8%) „no physical violence“and 137 (34,4%) „physical violence“. 35 (8,8%) erlebten „acts of violence“, 136 (34,0%) berichteten „other aggressive acts“ im letzten Jahr. Letztere teilten sich noch auf in 34 Eltern, die zusätzlich auch „acts of violence“ erfuhren und 102 Teilnehmer mit „other aggressive acts only“. <i>Tabelle einfügen!</i> ... acts of violence: visited physician for injury, injured with knife, threatening with knife, beating with a physical object, choking ... other aggressive acts: destroyed property, pushing, punching and kicking, throwing an object
S 2016 KIVISTO USA patients and a nominated informant who best knew what was going on in his or her life: 47% family and 24% friends (N=1136) <i>Interview with both and records</i>	violence: ... the rates of violence toward any family member by patients with schizophrenia were 60,9% (lifetime) and 27,2% (past year).
D 2015 RATTINGER USA	burden: - NPI: Neuropsychiatric Inventory

patients with dementia and their unpaid caregivers (N= 306) <i>progression study</i>	- CGNPM: Number of caregiver non-psychotropic medications - CGPM: Number of caregiver psychotropic medications - CGHC: Number of caregiver health conditions ... greater CGHC and CGNPM were associated with NPI-agitation/aggression, although over time, higher NPI-agitation/aggression predicted lower CGNPM. ... NPI-agitation/aggression were associated with higher caregiver depression scores over time. ... significantly associations of agitation/aggression with CGNPM. ... CGNPM remained after controlling for dementia severity. ... neuropsychiatric symptoms are associated with negative caregiver psychiatric and health outcomes over time, particularly affective, psychotic and agitation/aggression are associated with more severe depressive symptoms in caregivers.
S 2015 KONTIO FINLAND focus groups including relatives (N=8) <i>Qualitative design: focus groups interviews</i>	violence: 12-Month Prevalence of Family Violence Perpetration: ... 4 in 10 discharged patients committed at least one violent act following discharge, similar rated across male and female patients. ... prevalence rates for IPV (Intime Partner Violence) perpetration is more than twice as high among discharged female patients (13,9% vs 29,4%)
D 2015 FINLAYSON UK adults with mild to profound ID (Intellectual Disabilities) and their carers: 218/446 patients /carers (N=511) <i>face-to face interviews</i>	violence: ... 44 (9,8%) of the 446 carers experienced at least one injury that required medical or nursing attention and treatment in the previous 12 months (four of the 44 experienced two incidents of injury). ... the family carers (17, 7,8%) were significantly more likely to have experienced falls, trips, or slips than the paid carers (7, 3,1%). ... the family carers (7, 3,2%) were significantly more likely to experience bone fractures than the care/support workers (1, 0,4%). ... 57 (12,8%) carers reported that they were exposed to challenging behaviors of adults with ID through their caring/support role (16, 7,3% unpaid carers). The term challenging behavior included but was not exclusive to physical aggression. 17 (3,3%) carers were specifically exposed to physical aggression through their caring/support role, but only one (0,2%) experienced an injury in the 12-month period.
S	

2014 ONWUMERE UK caregivers of patients with psychosis (N= 72) <i>interview</i>	violence: ... 52, 9% of the caregivers reported at least 1 incident of patient-initiated violence during their CFI interview. ... 62, 2% reported personal violence, 5, 4% of the violence was toward other family members. <u>Examples of caregiver reports of patient violence from the Camberwell Family Interview: (Violence toward caregiver)</u> - "He used to give you the odd punch and kick as he was walking by, but his mind was so confused and muddled." - "She did hit me a few times when we used to live together." - "He started to slap me, threaten me, and push me. This went on for a couple of days and I couldn't get anyone out to assess him." - "I have passed him money in the past he squeezed it in my hand that made it bleed. He twisted my hands as if I have done something wrong and that does really get to me." - "He only ever lashed out at me at once." - "She hit me yesterday because she wanted me to come up here every day like I used to." - "He punched me in the face and threatened to kill me. I had a fractured rib." - "There was a period when he was violent every day." - "The day she hit me I was going to ring child line. This wasn't my mum. This is because she had escaped from hospital." - "Only been aggressive to me once, years ago. I said if you do that again I will hit you in the balls when you are fast asleep----he has never touched me since. He has got physical with my eldest daughter-he transferred it over to her."
S 2014 HSU TAIWAN patients with schizophrenia and their parent (N=14) <i>qualitative study design: phenomenology, individual in-depth interviews</i>	violence: ... most violent episodes were verbal (e.g. abusive language, yelling to parent, blaming, ridicule and criticism), ... followed by damage to property, violent threats of harm and physical violence towards objects and families (e.g. hitting, shoving, throwing objects, punching walls or doors)
D 2013 UEI TAIWAN people with dementia and their primary caregivers (N= 162) <i>Cross-sectional study</i>	violence: <u>DBD (dementia behavior disturbance)</u> ... the most frequent behavior types were [...] agitation (2,38 in a range of 0-4), [...] aggressiveness (1,77); and inappropriate sexual behavior (1,1).

	burden: ... the results of multiple regression analyses showed that the frequency of DBD of people with dementia, [...] were significantly positively associated with increased care burden.
S 2013 HANZAWA JAPAN caregivers of individuals with schizophrenia (N= 116) <i>questionnaire</i>	violence: ... 56 (48,3%) family members experienced patients' abusive language and violent behavior toward family members or others. burden: ... with violence behavior (N= 56) vs without violence behavior (N= 56) IES-R (psychological impact) total score: 31,21 vs 21, 83 (mean) - Intrusion: 11,21 vs 7,58 (mean) - Avoidance: 11,96 vs 8,56 (mean) - Hyperarousal: 8,04 vs 5,69 (mean) ... Zarit Caregiver Burden Interview total score: 17, 21 vs 11,67 (mean) ... there was a significant difference in mean IES-R total scores between caregiver families who had experienced a patient's violent behavior and those who had not ($P < 0,01$). ... however, the IES-R total score was not significantly associated with patients' abusive language and violent behavior using multiple regression analysis.
D 2012 HUANG TAIWAN patients with dementia (N= 88) and caregivers (N= 88) <i>cross-sectional study</i>	burden: ... for individual BPSD ... NPI-D score (caregiver burden): ... agitation/aggression (mean 3,0), irritability/lability (mean 2,6) ... agitation/aggression showed a statistically significant positive correlation between symptom frequency and NPI-D score. ... agitation/aggression and irritability/lability showed a statistically significant correlation between symptom severity and NPI-D scores and showed a significant correlation between the product of frequency and severity and NPI-D score.
D 2012 MORGAN USA PwD and caregivers (N=171)	burden: ... both depression and dementia severity were also indirectly related to caregiver burden through their

<i>Longitudinal study design</i>	relationships with our baseline measures of agitation ($p < 0,03$ with depression and $p < 0,001$ with dementia severity). ... the relationship between baseline nonaggressive physical agitation and time to aggression onset appeared mediated by caregiver burden ($p < 0,001$) and to a lesser extent change in nonaggressive physical agitation ($p < 0,10$). SCHAUBILD DIREKTE UND INDIREKTE BEZIEHUNGEN ZWISCHEN PSYCHOSOZIALEN FAKTOREN UND AGGRESSION UND CAREGIVER BURDEN
D 2011 UNWIN UK family caregiver of people with intellectual disabilities (ID) (N= 44) <i>part of a longitudinal explorative study</i> EINSCHLUSS?	violence: <u>Types of aggressive behavior:</u> (N= 44) - verbal aggression: 34 (79, 1%) - physical aggression to others: 16 (37, 2%) - SIB (against the self): 18 (41, 9%) - physical aggression toward objects: 25 (58, 1%) - all four types of aggressive behavior: 4 (9, 3%) burden: ... in terms of the ABC-I measure for severity of aggression, caregiver burden was strongly positively associated. Conversely, caregiver uplift was negatively correlated. ... caregiver burden was significantly higher in those caring for people who showed physical aggression in the week preceding assessment compared with those who did not show physical aggression.
D 2010 COOPER UK family dementia carers (N= 220) <i>part of a larger cross-sectional study</i>	... proportion of family carers who reported that each abusive behavior was happening "at least sometimes" in 3 months (from large to small percentage): - used harsh tone of voice, insulted or swore at carer - screamed or yelled at carer - accused carer of neglecting or abandoning them - threatened to use physical force on carer - threatened to leave, live elsewhere or evict you - carer afraid CR might hit or hurt them - hit or slapped carer - otherwise behaved roughly towards carer - shaken carer - not allowing carer to eat BALKENDIAGRAMM
S 2009 LOUGHLAND AUSTRALIA carer-relatives of people with psychosis (N= 106) <i>questionnaire</i>	violence: ... overall, verbal aggression was reported to occur with the greatest frequency, followed by physical, then self-directed and sexual aggression. burden:

	... IES-R score (was used to measure PTSD symptoms after exposure to levels of aggression): 34 (51,5%) reported an IES-R score of 33 or more and were assigned to the "high likelihood of PTSD" subgroup. ... exposure to verbal aggression, but not physical, self-directed or sexual aggression, was significantly higher in the high likelihood of PTSD subgroup.
2009 JACKSON UK family carers of adults with Acquired brain injury (ABI) (N= 222) <i>questionnaire, comparison with patients with dementia</i> ->from two studies: ABI study and Dementia study-secondary analysis	Violence/ Burden: ... aggressive problems significantly predicted greater burden, poor quality-of-life and poor mental health in ABI carers, (whereas passivity/low mood significantly predicted greater burden and worse quality-of-life in dementia carers.) ... aggressive behaviours were more likely to occur in people with head injuries than other groups with ABI ($p<0,05$). ... overall frequency of behavioural problems was similar across groups, negative carer reactions to problems were greater overall in the ABI group. Associations were found between the extent of behavioural problems, both overall and in subscales, and carer burden, quality-of-life and mental health.
S 2008 CHAN CANADA caregivers (N= 61) and their relatives with schizophrenia (N= 51) <i>survey</i>	violence: ... prevalence of Violence and Injury Against Caregivers in Families Providing Care to Relatives with Schizophrenia (N= 61) in the last 12 months <u>Physical assault</u> Severe 26,2% Minor 31,1% <u>Psychological aggression</u> Severe 44,3% Minor 63,9% <u>Any incident of violence</u> 63,9% <u>Injury</u> Severe 9,8% Minor 18,0%
D 2008 ORENGO USA patients with dementia (N= 385) <i>telephone screening</i>	violence: ... 75/385 participants (19, 5%) were aggressive at the initial telephone screening. - 23 (31%) verbally aggressive - 9 (12%) physically aggressive - 24 (32%) both, verbally and physically aggressive - 19 (25%) unspecified aggressive behavior
S 2007 THOMPSON USA	burden:

caregiver of patients with severe mental illness (SMI) (N= 189) <i>part of the Duke Mental Health Study (RCT):</i> <i>"The effectiveness of involuntary outpatient commitment and..."</i> <i>(Swartz et al. 1995)</i>	... caring for persons with SMI who engage in violence is associated with a greater number of financial contributions and more perceived financial strain. <table border="1"> <thead> <tr> <th>Caregiver Burden</th> <th>Financial Contributions</th> </tr> <tr> <th>Perceived Financial Strain</th> <th></th> </tr> <tr> <th>Stressor</th> <th>Violence Effects</th> </tr> <tr> <th>Violence Effects</th> <th></th> </tr> </thead> <tbody> <tr> <td>Moderator variable</td> <td></td> </tr> <tr> <td>Perceived disruptive behavior*</td> <td></td> </tr> <tr> <td>-low</td> <td>2,225</td> </tr> <tr> <td>2,138</td> <td></td> </tr> <tr> <td>-moderate</td> <td>3,379</td> </tr> <tr> <td>2,984</td> <td></td> </tr> <tr> <td>-high</td> <td>4,533</td> </tr> <tr> <td>3,785</td> <td></td> </tr> </tbody> </table> *= included problems sleeping, verbal abuse, stealing, inappropriate sexual behaviors, hallucinations, suspicions, delusions, temper tantrums, carelessness with safety, pacing aimlessly, running away, social withdrawal, eating too little or overeating	Caregiver Burden	Financial Contributions	Perceived Financial Strain		Stressor	Violence Effects	Violence Effects		Moderator variable		Perceived disruptive behavior*		-low	2,225	2,138		-moderate	3,379	2,984		-high	4,533	3,785	
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D 2007 MATSUMOTO JAPAN participants with dementia and their caregivers (each N= 67) <i>second analyses of a study, analysis of three studys</i>	violence: ... the most common symptom [...], followed by agitation/aggression (39%) and irritability/lability (34%). burden: ... agitation/aggression had the highest mean NPI-D score (caregiver distress) (mean 2,3) followed by irritability/lability (mean 2,1). ... across all subjects, the symptoms most frequently reported to be severely distressing to caregivers were agitation/aggression, delusions and irritability/lability.																								
D 2005 MEILAND NETHERLAND partners of patients with dementia (N= 58) <i>Interview, cross sectional design -> part of a larger multicenter study (IMO-project)</i>	burden: - NPI-D score (emotional impact) - Agitation/Aggression (N= 41) -> 3,3 mean - Disinhibition (N= 34) -> 3,1 mean - Irritability (N= 38) -> 3,3 mean																								
S 2005 ELBOGEN USA persons with severe mental	... 1/5 of the sample (N= 47, 19,2%) reported either engaging in physical fights or making verbal threats using a deadly weapon with a family member during the year of the study.																								

illness (SMI) (N= 245) <i>Interviews for a randomized study</i>	
S 2004 JOYAL CANADA men with Schizophrenia (N= 58) and schizoaffective psychosis (N= 4) <i>interviews</i>	... nearly half (47%) of the offenders assaulted someone from their own household, including parents and roommates. ... violence and aggression displayed by individuals with schizophrenia, family members, acquaintances, friends, or health care providers are more likely to be targeted than strangers, even when homicide and antisocial personality disorder (APD) are considered.
S 2003 ROBBINS USA patients in acute psychiatric wards (men N= 667, women N= 469) <i>part of the "MacArthur Violence Risk Assessment Study"</i>	violence: <u>Prevalence during 1-year follow-up:</u> <u>"Act of violence"</u>: 29,7% for men, 24,6% for women (differences between men and women only at the first follow-up period) <u>"At least one other aggressive act only"</u>: 30,1% for men, 37,0 % for women <u>"Violence or other aggressive acts"</u>: 59,8% for men, 61,6 % for women <u>Types, targets, and locations of violence:</u> <u>"Act of violence"</u>: kick/bite/hit-beat up, weapon threat/weapon use -> especially men <u>"Other aggressive acts"</u>: throwing objects/ push/ grab/ shove/slap -> especially women <u>Target:</u> family members with women (69,5% violence/74,6% other aggressive acts) > men (39,9%/ 48,8%) <u>Locations:</u> Subject's home with women (55,8%/ 68,2%) > men (35,8%/ 53,1%) <u>Time:</u> on the first 20 weeks with men (21,4% violence) > women (15,2% violence) but with women (35,2% other aggressive acts- and no violent act) > men (27,1%)
S 2003 LAUBER SWITZERLAND relative of schizophrenic patients (N= 64) <i>semi-structured Interview</i>	violence: ... more than half of the relatives had to deal with irritability, anger, and serious conflicts. More than one third of the affected were physically aggressive. ... disturbing behavior of the affected (N= 64): a selection of items and respective percentages: <u>Aggression (frequency)</u> - irritability and anger 78% - serious conflicts 55% - impoliteness, rudeness, disrespect 48%

	- destruction of objects 45% - physical aggression 38% - threatening behavior 31 % Nuisances and threats (frequency) - towards the informant 58% - towards those living in the same house 44% burden: <u>Burden in the relationship:</u> ... disturbing or restricting behavior of the affected 95% ... both total burden scores are related to the aggressive behavior of individuals with schizophrenia.
2002 VADDADI AUSTRALIA Clients* of a community mental health service and their family carers (N= 101) interviews <i>*: majority: schizophrenia or schizoaffective disorder</i>	violence: <u>Prevalence of abuse experienced by carers (at any point during patient's illness/ in the last year)</u> <u>Verbal aggression:</u> - regular loss of temper: 66%/47% - regular shouting and swearing: 64%/42% - threats of violence (ever): 40%/22% <u>Physical aggression:</u> - hit or struck (ever): 40%/24% - physical injury (ever): 17%/4% - destroyed property (ever): 41%/22% <u>Correlates of severity of reported abuse:</u> <u>Variable:</u> Patient's self-report on pre-episode relationship, Carer's self-report on pre-episode relationship, Number of reported offences with $p < 0,05/0,01$ burden: ... in both cases there was a highly significant correlation (GHQ and abuse, total burden and abuse). <u>Comparison between the admission sample vs. the current community sample:</u> (both N= 101) Carers' burden score: 12,2 vs. 9,9 Carers' GHQ total score (level of emotional distress): 11,1 vs. 9,3 ... levels of abuse were generally higher in the acute sample, whose level of clinical symptomatology was greater.
D 2002 FOGEL USA family caregivers of care recipients with dementia (N= 18, 17% from the larger study)	burden: ... correlational analyses showed significant <u>relationships between</u> certain behavioral symptoms (<u>aggression</u>, delusions, hallucinations, sleep disturbance, and depressed mood) <u>and higher levels of caregiver burden and depression.</u>

<i>post-hoc study Einschluss?</i>	Also, longitudinal analysis revealed that <u>higher levels of caregiver depression</u> were significantly <u>associated with</u> the onset of depressed mood and <u>verbal aggression by....????</u>
S 2002 MACINNES UK caregivers of clients suffering from schizophrenia with a forensic history (N= 79) and caregivers of non-offenders (N= 28) <i>In-depth interviews, Survey design (cross sectional)</i>	violence: ... a great number of participants expressed concerns about violence with 177 events detailed. Approximately two third of those related to violent threats or actions directed towards the caregiver with the forensic group describing significantly more events of this type than the non-forensic group. ... nearly half of the violent burdens recounted (42,5%) were rated as severe; they included attacks with weapons and injuries that required hospitalization. In addition, threats of violence often accompanied requests for money. burden: ... the three most described burdens were those related to (annoyance), symptomatology and violence. Forensic caregivers were most likely to note burdens relating to (annoyance), symptomatology and violence [...]. ... there were slightly more severe burdens in the forensic group which may be related to the greater reported number of violent incidents.
D 2002 CALHOUN USA partners of vietnam war combat veterans, with PTSD vs without PTSD (N= 51 vs N= 20) <i>interviews</i>	burden: ... association between caregiver burden and symptom variables including (PTSD severity), level of interpersonal violence, [...], among those veterans diagnosed with PTSD. ... PTSD symptom severity and both veteran-reported and partner-reported acts of interpersonal violence committed by the veterans were significantly associated with caregiver burden among partner of patients with PTSD. - Partners caring for veterans with more severe levels of PTSD symptoms and higher levels of interpersonal violence tended to experience higher levels of caregiver burden. ... both PTSD symptoms severity and level of interpersonal violence independently contributed to the variance in caregiver burden. ... interpersonal violence was also significantly associated with partner psychological adjustment. - greater levels of interpersonal violence were associated with poorer psychological adjustment.
#s 2001 Dore NEW ZEALAND	violence: <i>"Once he threw me on the floor and tried to butt my head. "</i>

caregivers of patients with bipolar disorder (N= 41) face-to-face interview	<i>“He threatened me with a chain saw once.”</i> <i>“She was about to stab me with a kitchen knife so I knocked her out.”</i> <i>“His hostility and threatening attitude to me personally is upsetting and at times frightening (during mania).”</i> burden: <u>Caregiver relationship with the patient:</u> ... most caregivers (81%) were distressed by the way the patient related to them when unwell; 64% described the level of personal distress as “severe” . <u>Caregiver experience of stress:</u> ... for 44% this was primarily when the patient was ill, while another 27% felt this stress even when the patient was well. ... stress as major (partners 85 % vs parents 87%) <u>Problem behaviours:</u> ... most commonly, caregivers found aggressive and violent behaviours to be most disturbing (17%).																											
D 1998 MARSH NEW ZEALAND caregivers of adults with a severe traumatic brain injury (TBI) (N= 69) questionnaires, 6 months and 1-year post-injury part of the Waikato Traumatic Brain Injury Study	violence/burden: <u>6 months following severe traumatic brain injury:</u> <table><tr><th>Problem area</th><th>Frequency</th><th>Mean distress:</th></tr><tr><td>Behavioural scale</td><td></td><td>4-point</td></tr><tr><td>-impulsive</td><td>35/ 52 %</td><td>2, 23</td></tr><tr><td>-mood changes</td><td>34/ 50 %</td><td>2, 74</td></tr><tr><td>-anger</td><td>34/ 50 %</td><td>2, 68</td></tr><tr><td>-Irritable</td><td>34/ 50 %</td><td>2, 68</td></tr><tr><td>-aggression</td><td>19/ 28 %</td><td>2, 79</td></tr></table> ...Aggression: low frequency, but causing the greatest degree of distress for caregivers!! ... caregiver reports of the number of behavioural problems displayed by the TBI patient were related to all aspects of caregiver functioning: <u>Objective burden:</u> - depression - anxiety - social adjustment - subjective burden ... summary of simultaneous regression analysis for TBI patient variables <u>(behavioural) predicting caregiver functioning:</u> - -objective burden - -anxiety - -social adjustment - -subjective burden <u>1 year following severe traumatic brain injury:</u> <table><tr><th>Problem area</th><th>Frequency</th><th>Mean distress:</th></tr><tr><td>behavioural scale</td><td></td><td>4-point</td></tr></table>	Problem area	Frequency	Mean distress:	Behavioural scale		4-point	-impulsive	35/ 52 %	2, 23	-mood changes	34/ 50 %	2, 74	-anger	34/ 50 %	2, 68	-Irritable	34/ 50 %	2, 68	-aggression	19/ 28 %	2, 79	Problem area	Frequency	Mean distress:	behavioural scale		4-point
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	-impatient 51/ 74 % 2, 61 -overly sensitive 42/ 61 % 2, 31 -impulsive 42/ 61 % 2, 17 -<u>anger</u> 38/ 55 % <u>2, 76</u> -irritable 33/ 48 % 2, 49 -mood changes 31/ 45 % 2, 65 -aggression 22/ 32 % 2, 50 ... the number of behavioural problems reported for the person with TBI was significantly related to caregiver levels of... - objective burden - anxiety - social adjustment - subjective burden ... summary of simultaneous regression analysis for patient with TBI variables (behavioural) predicting caregiver functioning: objective burden, subjective burden
D 1998 VICTOROFF USA Patient with dementia-caregiver pairs (N= 35) interviews	burden: ... there were highly significant correlations between patient agitation and both caregiver burden and depression. ... agitation, particularly physical aggression, may impact caregivers even more than does the cognitive status of the demented patient. ... the presence of violence was significantly correlated with caregiver burden.
D 1998 NAGARATMAN AUSTRALIA patients with dementia and their caregivers (N= 90) <i>Study, interview with the caregiver + tests with the patient</i>	violence: ... the most common behavioral change was aggression (59%), [...]. ... most disturbing was the uncontrollable bouts of aggression seen in 59% of the dementia patients that were mostly directed to the caregiver. ... the behavioral problems perceived by the caregivers of those with moderate-severe dementia included a higher incidence of wandering and incontinence and a lower incidence of verbal aggression than among those with mild dementia. mild Dementia: verbal aggression 30/43 (N= 43) physical violence 7/43 moderate-severe dementia: verbal aggression 23/47 (N= 47) physical violence 3/47 burden: ... aggression caused the most distress to the caregiver
? 1997 VADDADI	violence:

AUSTRALIA patients and their relatives (N= 101) <i>semi-structured interview</i>	<u>Prevalence of abuse of carers by patients</u> <table border="1"> <thead> <tr> <th><u>Type of abuse</u></th><th><u>Percentage frequency (N= 101)</u></th></tr> </thead> <tbody> <tr> <td><u>Shouting and swearing</u></td><td> - never: 40% - often: 43% - most of the time: 18% </td></tr> <tr> <td><u>Temper outbursts</u></td><td> - never: 29% - often: 48% - most of the time: 24% </td></tr> <tr> <td><u>Physical threats</u></td><td> - never: 55% - on one or two occasions: 13% - several/many times: 33% </td></tr> <tr> <td><u>Hitting and striking</u></td><td> - never: 68% - on one or two occasions: 15% - several/many times: 17% </td></tr> <tr> <td><u>Causing physical injury</u></td><td> - NO: 80% - YES: 20% </td></tr> </tbody> </table> burden: ... 15% of the carers reported living in fear of their relative, all of these carers having experienced threats of or actual physical harm. ... 79% of the carers had scores of >4 (GHQ), indicating a significant level of emotional/psychiatric disorder. ... the total amount of abuse experienced correlated positively with relatives' GHQ score, as did the number of types of abuse. ... the correlation between the total burden score and the total amount of personal abuse was highly significant.	<u>Type of abuse</u>	<u>Percentage frequency (N= 101)</u>	<u>Shouting and swearing</u>	- never: 40% - often: 43% - most of the time: 18%	<u>Temper outbursts</u>	- never: 29% - often: 48% - most of the time: 24%	<u>Physical threats</u>	- never: 55% - on one or two occasions: 13% - several/many times: 33%	<u>Hitting and striking</u>	- never: 68% - on one or two occasions: 15% - several/many times: 17%	<u>Causing physical injury</u>	- NO: 80% - YES: 20%
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S 1997 TARDIFF USA psychiatric patients after hospital discharge (N= 430) <i>prospective study</i>	violence: <u>One or more violent acts toward persons within two weeks after discharge:</u> 16 of 430 (3, 7%) <u>Types:</u> most of the attacks involved punching or scratching and left bruises or scratches <u>Target:</u> most were directed toward spouses, other intimates, or other family members												
S 1994 ASNIS USA outpatients (N= 517) <i>survey</i>	violence: ... <u>patients with a diagnosis of alcohol and substance abuse</u> had the greatest frequency of <u>past homicidal ideation and</u> <u>patients with schizophrenia</u> had the <u>greatest frequency of</u> <u>past homicide attempts.</u>												

	<u>The targets of the homicide attempts were:</u> - father (18 %) - brother (9 %) - spouse or girlfriend or boyfriend (27 %) - strangers (18 %). <u>Type:</u> ... knife was the most common weapon, used in 45 percent of the attempts
? 1994 REIS CANADA caregiver-care receiver participant pairs (N= 213) <i>interview</i>	burden: ... female caregivers [...] who were caring for more aggressive and more impaired dependents found caregiving more burdensome.
D 1990 HAMEL CANADA caregivers and care receivers with dementia (N= 213) <i>interviews</i>	... caregivers reported some form of aggression for 119 (57,2%) of the dementia patients. <u>Verbal aggression</u> in 106 (52%) of cases <u>Physical aggression</u> in 71 (34,1%) of cases: the most common form, 21% threatening gestures <u>Sexual aggression</u> only in 17 (7,2%) of the care receivers: persistent hugging and kissing, each less than 7% ... the actual frequency was low ... hostile and accusatory language, the most frequently occurring form of aggressive act, was observed in 44,7% of the patients. ... daily occurrence for only 10,6%

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GRADE – Ratingtabellen

Rapid Tranquilization

Studie	Outcome	Medikation	Effektschätzer	Ergebnis	Risk of Bias gesamt	GRADE - Inconsis- tency	GRADE - Indi- rectness	GRADE - Impreci- sion	GRADE - Publication Bias	GRADE - Evi- denzqualität
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	change in AB after 20 min	Haloperidol	relative risk	0.63 (0.46-0.85)	high	serious	not serious	not serious	not serious	moderate
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	change in AB after 2h	Haloperidol	relative risk	0.55 [0.33; 0.90]	some concerns	serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation).	change in AB after 2h	Haloperidol	relative risk	0.86 [0.76; 0.98]	some concerns	serious	not serious	not serious	not serious	

Cochrane Database Syst Rev 2017;7: CD009377.										
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	change in AB after 2h	Haloperidol	relative risk	1.14 [1.05; 1.22]	some concerns	serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	change in AB after 2h	Haloperidol	relative risk	1.93 [1.14; 3.27]	some concerns	serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	change in AB after 2h	Haloperidol	Repeat medication < 2h	2.38 [1.27; 4.47]	some concerns	serious	not serious	not serious	not serious	

Ostinelli EG, Ja-jawi S, Spyridi S, Sayal K, Jayaram MB. Aripiprazole (intramuscular) for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Jan 8;1(1):CD008074. doi: 10.1002/14651858.CD008074.	change in ABS	Aripiprazol	difference score	-3.77[-5.39,-2.16]	high	not serious	very serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	change in ABS at 2h	Haloperidol	risk ratio (RR)	2.4[0.01,4.79]	high	serious	not serious	not serious	not serious	
Zaman H, Sampson SJ, Beck AL, Sharma T, Clay FJ, Spyridi S, Zhao S, Gillies	change in ABS-short-term	Lorazepam	risk ratio (RR)	2.91 [0.80, 5.02]	high	not serious	not serious	not serious	not serious	

D. Benzodiaze- pines for psycho- sis-induced ag- gression or agi- tation. Cochrane Database Syst Rev. 2017 Dec 8;12(12):CD0030 79. doi: 10.1002/1465185 8.CD003079.pub 4. PMID: 29219171; PMCID: PMC6486117.										
Ostinelli EG, Brooke- Powney MJ, Li X, Adams CE. Haloperi- dol for psychosis in- duced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	change score ABS up to 24h	Haloperidol	difference score	-2.4[-4.13,- 0.67]	high	not seri- ous	not seri- ous	not seri- ous	not serious	
Ostinelli EG, Brooke- Powney MJ, Li X, Adams CE. Haloperi- dol for psychosis in- duced aggression or agitation (rapid tranquillisation).	change score ABS up to 2h	Haloperidol	risk ratio (RR)	2.7[0.38,5. 02]	high	not seri- ous	not seri- ous	not seri- ous	not serious	

Cochrane Database Syst Rev 2017;7: CD009377.										
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	change score ABS up to 2h	Haloperidol	difference score	-4.48[-5.78,-3.18]	critical	serious	not serious	not serious	not serious	
Bak M, Weltens I, Bervoets C, De Fruyt J, Samochowiec J, Fiorillo A, Sampogna G, Bienkowski P, Preuss WU, Misiak B, Frydecka D, Samochowiec A, Bak E, Drukker M, Dom G. The pharmacological management of agitated and aggressive behaviour: A systematic review and	change in ACES	ari-piprazole	change score	1.9 (1.46 – 2.33)	high	serious	serious	not serious	not serious	low

meta-analysis. Eur Psychiatry. 2019 Apr;57:78- 100. doi: 10.1016/j.eurpsy. 2019.01.014. Epub 2019 Feb 2. PMID: 30721802.										
Bak M, Weltens I, Bervoets C, De Fruyt J, Samo- chowiec J, Fiorillo A, Sampogna G, Bienkowski P, Preuss WU, Misiak B, Fry- decka D, Samo- chowiec A, Bak E, Drukker M, Dom G. The pharma- cological man- agement of agi- tated and ag- gressive behav- iour: A system- atic review and meta-analysis. Eur Psychiatry. 2019 Apr;57:78-	change in ACES	Haloperidol	change score	1.4 (0.65 – 2.14)	some con- cerns	very seri- ous	serious	not seri- ous	not serious	

100. doi: 10.1016/j.eurpsy. 2019.01.014. Epub 2019 Feb 2. PMID: 30721802.										
Bak M, Weltens I, Bervoets C, De Fruyt J, Samochowiec J, Fiorillo A, Sampogna G, Bienkowski P, Preuss WU, Misiak B, Frydecka D, Samochowiec A, Bak E, Drukker M, Dom G. The pharmacological management of agitated and aggressive behaviour: A systematic review and meta-analysis. Eur Psychiatry. 2019 Apr;57:78-100. doi: 10.1016/j.eurpsy.2019.01.014.	change in ACES	haloperidol + lorazepam	change score	2.2 (1.59 – 2.81)	some concerns	serious	serious	not serious	not serious	

Epub 2019 Feb 2. PMID: 30721802.										
Bak M, Weltens I, Bervoets C, De Fruyt J, Samochowiec J, Fiorillo A, Sampogna G, Bienkowski P, Preuss WU, Misiak B, Frydecka D, Samochowiec A, Bak E, Drukker M, Dom G. The pharmacological management of agitated and aggressive behaviour: A systematic review and meta-analysis. Eur Psychiatry. 2019 Apr;57:78-100. doi: 10.1016/j.eurpsy.2019.01.014. Epub 2019 Feb 2. PMID: 30721802.	change in ACES	levopromazine	change score	1.35 (1.05 – 1.64)	some concerns	serious	serious	not serious	not serious	

Bak M, Weltens I, Bervoets C, De Fruyt J, Samochowiec J, Fiorillo A, Sampogna G, Bienkowski P, Preuss WU, Misiak B, Frydecka D, Samochowiec A, Bak E, Drukker M, Dom G. The pharmacological management of agitated and aggressive behaviour: A systematic review and meta-analysis. Eur Psychiatry. 2019 Apr;57:78-100. doi: 10.1016/j.eurpsy.2019.01.014. Epub 2019 Feb 2. PMID: 30721802.	change in ACES	Lorazepam	change score	2.05 (1.72 – 2.38)	some concerns	not serious	serious	not serious	not serious	
	change in ACES	olanzapine	change score	1.98 (1.69 – 2.27)	some concerns	very serious	serious	not serious	not serious	

Samochowiec J, Fiorillo A, Sampogna G, Bienkowski P, Preuss WU, Misiak B, Frydecka D, Samochowiec A, Bak E, Drukker M, Dom G. The pharmacological management of agitated and aggressive behaviour: A systematic review and meta-analysis. Eur Psychiatry. 2019 Apr;57:78-100. doi: 10.1016/j.eurpsy.2019.01.014. Epub 2019 Feb 2. PMID: 30721802.										
Bak M, Weltens I, Bervoets C, De Fruyt J, Samochowiec J, Fiorillo A, Sampogna G, Bienkowski P,	change in ACES	placebo	change score	0.7 (0.52 – 0.88)	some concerns	not serious	serious	not serious	not serious	

Preuss WU, Misiak B, Frydecka D, Samochowiec A, Bak E, Drukker M, Dom G. The pharmacological management of agitated and aggressive behaviour: A systematic review and meta-analysis. Eur Psychiatry. 2019 Apr;57:78-100. doi: 10.1016/j.eurpsy.2019.01.014. Epub 2019 Feb 2. PMID: 30721802.										
Brankston G, Picheca L. Antipsychotic Drugs or Benzodiazepines for Rapid Tranquilization in Mental Health Facilities or Emergency Department Settings [Internet]. Ottawa (ON): Canadian Agency for	change in ACES	aripiprazole	change score	ACES change scores at 2 hours: MD = 0.58; 95% CI, 0.10 to 1.06 (1 RCT	high	not serious	not serious	serious	not serious	

Drugs and Technologies in Health; 2021 Aug. PMID: 36264874.										
Ostinelli EG, Jajawi S, Spyridi S, Sayal K, Jayaram MB. Aripiprazole (intramuscular) for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Jan 8;1(1):CD008074. doi: 10.1002/14651858.CD008074.	change in ACES	Aripiprazol	difference score	-2.49[-4.28,-0.7]	high	not serious	very serious	not serious	not serious	
Ostinelli EG, Jajawi S, Spyridi S, Sayal K, Jayaram MB. Aripiprazole (intramuscular) for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane	change in ACES up to 2h	Aripiprazol	difference score	0.58[0.1,1.06]	low	serious	not serious	serious	not serious	

Database Syst Rev. 2018 Jan 8;1(1):CD008074. doi: 10.1002/14651858.CD008074.										
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	change score ACES up to 2h	Haloperidol	difference score	0.83[0.39, 1.26]	high	not serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	change score ACES up to 2h	Haloperidol	risk ratio (RR)	1.2[0.06, 2.34]	high	serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database	one or more adverse effects up to 24 hours	Haloperidol	risk ratio (RR)	2.01[1.07, 3.8]	high	serious	not serious	not serious	not serious	low

Syst Rev 2017;7: CD009377.										
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	one or more drug related adverse effects - by 14 days	Haloperidol	risk ratio (RR)	3.06[1.62, 5.79]	high	not serious	not serious	very serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	one or more drug related adverse effects - by 72 hours	Haloperidol	risk ratio (RR)	1.74[1.47, 2.06]	high	serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	one or more drug related adverse events	Haloperidol	risk ratio (RR)	1.38[1.09, 1.76]	high	serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE.	one or more drug related adverse	Haloperidol	risk ratio (RR)	1.81[1.19, 2.77]	high	not serious	not serious	very serious	not serious	

Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	events by 28 days									
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	one or more drug related adverse events during 24 hours	Haloperidol	risk ratio (RR)	1.64[1.22, 2.2]	high	not serious	not serious	serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	overall adverse events during 120 hours	Haloperidol	risk ratio (RR)	1.72[1.29, 2.29]	high	serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database	overall adverse events during 72 hours	Haloperidol	risk ratio (RR)	1.33[1.04, 1.7]	high	serious	not serious	not serious	not serious	

Syst Rev 2017;7: CD009377.										
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	overall adverse events during 72 hours	Haloperidol	risk ratio (RR)	1.78[1.23, 2.59]	high	not serious	not serious	serious	not serious	
Muir-Cochrane E, Grimmer K, Gerace A, Bastiampillai T, Oster C. Safety and effectiveness of olanzapine and droperidol for chemical restraint for non-consenting adults: a systematic review and meta-analysis. Australas Emerg Care. 2021 Jun;24(2):96-111. doi: 10.1016/j.auec.20	risk of adverse events	Olanzapin	odds ratio	0.4 (0.2,0.8)	some concerns	not serious	not serious	not serious	not serious	

20.08.004. Epub 2020 Oct 10. PMID: 33046432.										
Ostinelli EG, Jajawi S, Spyridi S, Sayal K, Jayaram MB. Aripiprazole (intramuscular) for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Jan 8;1(1):CD008074. doi: 10.1002/14651858.CD008074.	worsening of AE after second injection	Aripipratol	risk ratio (RR)	2,4 {1.36, 4.23}	some concerns	serious	not serious	serious	not serious	
Brankston G, Picheca L. Antipsychotic Drugs or Benzodiazepines for Rapid Tranquilization in Mental Health Facilities or Emergency Department Settings [Internet]. Ottawa (ON): Canadian Agency for Drugs and	adverse events	midazolam		Respiratory distress was experienced by significantly more midazolam patients than the patients	high	not serious	serious	not serious	not serious	

Technologies in Health; 2021 Aug. PMID: 36264874.				given droperidol or ziprasidone						
Ostinelli EG, Jajawi S, Spyridi S, Sayal K, Jayaram MB. Aripiprazole (intramuscular) for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Jan 8;1(1):CD008074. doi: 10.1002/14651858.CD008074.	adverse effects	Aripiprazol	RR	1.51[0.93, 2.46]	high	not serious	serious	not serious	not serious	
Ostinelli EG, Jajawi S, Spyridi S, Sayal K, Jayaram MB. Aripiprazole (intramuscular)	Adverse effects: movement disorders during 24h	Aripiprazol	risk ratio (RR)	0.29 (0.12; 0.70)	high	not serious	very serious	not serious	not serious	low

for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Jan 8;1(1):CD008074. doi: 10.1002/14651858.CD008074.										
Brankston G, Picheca L. Antipsychotic Drugs or Benzodiazepines for Rapid Tranquilization in Mental Health Facilities or Emergency Department Settings [Internet]. Ottawa (ON): Canadian Agency for Drugs and Technologies in Health; 2021 Aug. PMID: 36264874.	improvement of agitation	Aripiprazole	Risk Ratio	Improvement in agitation at 2 hours: RR = 0.77; 95% CI, 0.60 to 0.99 (1 RCT) ◦ Statistically significant at P < 0.05	high	not serious	serious	not serious	not serious	low
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation).	akathisia - by 7 d	Haloperidol	risk ratio (RR)	4.29[1.13, 16.31]	high	serious	not serious	not serious	not serious	very low

Cochrane Database Syst Rev 2017;7: CD009377.										
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	akathisia - by 72 hours	Haloperidol	risk ratio (RR)	2.32[1.34, 4.01]	critical	serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	akathisia during 5 days	Haloperidol	risk ratio (RR)	1.63[1.12, 2.38]	critical	not serious	not serious	serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	not asleep at 1 h	haloperidol + lorazepam	risk ratio (RR)	0.74[0.59, 0.92]	high	not serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X,	not asleep at 2 h	haloperidol + lorazepam	risk ratio (RR)	0.71[0.51, 0.99]	high	not serious	not serious	not serious	not serious	low

Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.										
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	not asleep at 30 min	haloperidol + lorazepam	risk ratio (RR)	0.84[0.74, 0.95]	high	not serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	not asleep up to 2 hours	Haloperidol	risk ratio (RR)	0.88[0.82, 0.95]	high	not serious	serious	not serious	strongly suspected	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation).	not asleep up to 2 hours	Haloperidol	risk ratio (RR)	1.16[1.02, 1.32]	critical	not serious	serious	not serious	not serious	

Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	asleep not asleep by 3 hours									
Zaman H, Sampson SJ, Beck AL, Sharma T, Clay FJ, Spyridi S, Zhao S, Gillies D. Benzodiazepines for psychosis-induced aggression or agitation. Cochrane Database Syst Rev. 2017 Dec 8;12(12):CD003079. doi: 10.1002/14651858.CD003079.pub 4. PMID: 29219171; PMCID: PMC6486117.	Tranquillisation or asleep - short-term	Midazolam	risk ratio (RR)	2.71 [1.55, 4.73]	high	not serious	not serious	serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE.	change in BAS at 7 d	Haloperidol	difference score	0.9[0.51,1.29]	high	serious	not serious	not serious	not serious	low

Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.										
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	change score at 24 hours (BAS akathisia, high=worse)	haloperidol + lorazepam	risk ratio (RR)	0.3[0.24,0.36]	high	not serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	BAS change score at 24 hours	Haloperidol	difference score	0.28[0.09, 0.47]	critical	not serious	not serious	not serious	not serious	
Ostinelli EG, Jajawi S, Spyridi S, Sayal K, Jayaram MB. Aripiprazole (intramuscular) for psychosis-	need for benzodiazepine up to 24 hours	Aripiprazol	risk ratio (RR)	0.48[0.28, 0.8]	high	not serious	very serious	not serious	not serious	very low

induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Jan 8;1(1):CD008074. doi: 10.1002/14651858.CD008074.										
Ostinelli EG, Hussein M, Ahmed U, Rehman FU, Miramontes K, Adams CE. Risperidone for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Apr 10;4(4):CD009412. doi: 10.1002/14651858	BPRS clinical response at 4 weeks	Risperidone	risk ratio (RR)	0.69 [0.5,0.97]	high	not serious	not serious	very serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database	change in BPRS up to 24h	Haloperidol	difference score	-4.81[-6.82,-2.81]	high	not serious	not serious	not serious	not serious	very low

Syst Rev 2017;7: CD009377.										
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7:CD009377.	change in BPRS up to 2h	Haloperidol	difference score	-5.69[-7.38,-4]	high	not serious	not serious	not serious	not serious	
Ostinelli EG, Hussein M, Ahmed U, Rehman FU, Miramontes K, Adams CE. Risperidone for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Apr 10;4(4):CD009412. doi: 10.1002/14651858	difference in BPRS end-point scores at 1 week	Risperidon	difference score	5.2[1.04,9.36]	high	not serious	not serious	very serious	not serious	
Ostinelli EG, Hussein M, Ahmed U, Rehman FU, Miramontes K, Adams CE. Risperidone for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane	difference in BPRS end-point scores at 2 weeks	Risperidon	difference score	6.2[2.48,9.92]	high	not serious	not serious	very serious	not serious	

Database Syst Rev. 2018 Apr 10;4(4):CD009412. doi: 10.1002/14651858										
Ostinelli EG, Hussein M, Ahmed U, Rehman FU, Miramontes K, Adams CE. Risperidone for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Apr 10;4(4):CD009412. doi: 10.1002/14651858	difference in BPRS endpoint scores at 4 weeks	Risperidon	difference score	5.4[1.84,8.96]	high	not serious	not serious	very serious	not serious	
Ostinelli EG, Hussein M, Ahmed U, Rehman FU, Miramontes K, Adams CE. Risperidone for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Apr 10;4(4):CD009412. doi: 10.1002/14651858	number of BPRS respondents at 4 weeks	Risperidon	risk ratio (RR)	10.61 [1.44,78.36]	high	not serious	not serious	very serious	not serious	

Zaman H, Sampson SJ, Beck AL, Sharma T, Clay FJ, Spyridi S, Zhao S, Gillies D. Benzodiazepines for psychosis-induced aggression or agitation. Cochrane Database Syst Rev. 2017 Dec 8;12(12):CD003079. doi: 10.1002/14651858.CD003079.pub 4. PMID: 29219171; PMCID: PMC6486117.	change in CGI- immediate term	Lorazepam	risk ratio (RR)	1.79 [1.36 , 2.37]	high	not serious	not serious	not serious	not serious	moderate
Zaman H, Sampson SJ, Beck AL, Sharma T, Clay FJ, Spyridi S, Zhao S, Gillies D. Benzodiazepines for psychosis-induced aggression or	change in CGI- short term	Lorazepam	difference score	0.49 [0.23 , 0.75]	high	not serious	not serious	not serious	not serious	

agitation. Cochrane Data- base Syst Rev. 2017 Dec 8;12(12):CD0030 79. doi: 10.1002/1465185 8.CD003079.pub 4. PMID: 29219171; PMCID: PMC6486117.										
Zaman H, Sampson SJ, Beck AL, Sharma T, Clay FJ, Spyridi S, Zhao S, Gillies D. Benzodiaze- pines for psycho- sis-induced ag- gression or agi- tation. Cochrane Database Syst Rev. 2017 Dec 8;12(12):CD0030 79. doi: 10.1002/1465185 8.CD003079.pub 4. PMID:	change in CGI- short term	Lorazepam	risk ratio (RR)	2.47 [1.51 , 4.03]	high	not seri- ous	not seri- ous	not seri- ous	not serious	

29219171; PMCID: PMC6486117.										
Ostinelli EG, Ja- jawi S, Spyridi S, Sayal K, Jayaram MB. Aripiprazole (intramuscular) for psychosis-in- duced aggres- sion or agitation (rapid tranquilli- sation). Cochrane Database Syst Rev. 2018 Jan 8;1(1):CD008074. doi: 10.1002/1465185 8.CD008074.	change in CGI-I	Aripiprazol	difference score	-0.71[- 1.17,-0.25]	high	serious	not seri- ous	serious	not serious	
Ostinelli EG, Ja- jawi S, Spyridi S, Sayal K, Jayaram MB. Aripiprazole (intramuscular) for psychosis-in- duced aggres- sion or agitation (rapid tranquilli- sation). Cochrane	change in CGI-I	Aripiprazol	difference score	-0.73[- 0.97,-0.49]	high	not seri- ous	not seri- ous	serious	not serious	

Database Syst Rev. 2018 Jan 8;1(1):CD008074. doi: 10.1002/14651858.CD008074.										
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	change in CGI-I up to 24h	Haloperidol	difference score	-0.4[-0.62,-0.18]	critical	not serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	change in CGI-I up to 2h	Haloperidol	difference score	-0.64[-0.98,-0.3]	critical	not serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database	change in CGI-I up to 2h	Haloperidol	difference score	-0.73[-0.96,-0.51]	high	not serious	not serious	not serious	not serious	

Syst Rev 2017;7: CD009377.										
Zaman H, Sampson SJ, Beck AL, Sharma T, Clay FJ, Spyridi S, Zhao S, Gillies D. Benzodiaze- pines for psycho- sis-induced ag- gression or agi- tation. Cochrane Database Syst Rev. 2017 Dec 8;12(12):CD0030 79. doi: 10.1002/1465185 8.CD003079.pub 4. PMID: 29219171; PMCID: PMC6486117.	change in CGI-medium term	Lorazepam	difference score	0.60 [0.34 , 0.86]	high	not seri- ous	not seri- ous	not seri- ous	not serious	
Zaman H, Sampson SJ, Beck AL, Sharma T, Clay FJ, Spyridi S, Zhao S, Gillies D. Benzodiaze- pines for	change in CGI-medium term	Lorazepam	risk ratio (RR)	2.17 [1.16 , 4.05]	high	not seri- ous	not seri- ous	serious	not serious	

psychosis-in- duced aggres- sion or agitation. Cochrane Data- base Syst Rev. 2017 Dec 8;12(12):CD0030 79. doi: 10.1002/1465185 8.CD003079.pub 4. PMID: 29219171; PMCID: PMC6486117.										
Ostinelli EG, Ja- jawi S, Spyridi S, Sayal K, Jayaram MB. Aripiprazole (intramuscular) for psychosis-in- duced aggres- sion or agitation (rapid tranquill- isation). Cochrane Database Syst Rev. 2018 Jan 8;1(1):CD008074. doi:	change in CGI-S	Aripiprazol	difference score	-0.56[- 0.86,-0.26]	high	not seri- ous	very seri- ous	not seri- ous	not serious	

10.1002/14651858.CD008074.										
Ostinelli EG, Jawi S, Spyridi S, Sayal K, Jayaram MB. Aripiprazole (intramuscular) for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Jan 8;1(1):CD008074. doi: 10.1002/14651858.CD008074.	change in CGI-S	Aripiprazol	difference score	0.58[0.01, 1.15]	high	not serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	change in CGI-S up at 7 d	Haloperidol	difference score	0.51[0.07, 0.95]	high	not serious	serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE.	change in CGI-S up at 72h	Haloperidol	difference score	0.34[0.13, 0.55]	high	serious	not serious	not serious	not serious	

Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.										
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	change in CGI-S up to 24h	Haloperidol	difference score	-0.2[-0.46,0.06]	high	not serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	change in CGI-S up to 2h	Haloperidol	difference score	-0.48[-0.78,-0.18]	high	not serious	serious	not serious	not serious	
Brankston G, Picheca L. Antipsychotic Drugs or Benzodiazepines for Rapid Tranquilization in Mental Health Facilities or Emergency Department	Clinical Global Impressions Severity	aripiprazole	change score	Clinical Global Impressions Severity change scores: MD = 0.58; 95% CI,	high	not serious	not serious	serious	not serious	

Settings [Internet]. Ottawa (ON): Canadian Agency for Drugs and Technologies in Health; 2021 Aug. PMID: 36264874.				0.01 to 1.15 (1 RCT)						
Ostinelli EG, Hussein M, Ahmed U, Rehman FU, Miramontes K, Adams CE. Risperidone for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Apr 10;4(4):CD009412. doi: 10.1002/14651858	difference in CGI-I at 2 weeks	Risperidon	difference score	0.5[0.07,0.93]	high	not serious	not serious	very serious	not serious	
Ostinelli EG, Hussein M, Ahmed U, Rehman FU, Miramontes K, Adams CE. Risperidone for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Apr 10;4(4):CD009412. doi: 10.1002/14651858	difference in CGI-I at 4 weeks	Risperidon	difference score	0.5[0.14,0.86]	high	not serious	not serious	very serious	not serious	

Ostinelli EG, Hussein M, Ahmed U, Rehman FU, Miramontes K, Adams CE. Risperidone for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Apr 10;4(4):CD009412. doi: 10.1002/14651858	difference in CGI-S at 2 weeks	Risperidon	difference score	0.5[0.07,0.93]	high	not serious	not serious	very serious	not serious	
Ostinelli EG, Hussein M, Ahmed U, Rehman FU, Miramontes K, Adams CE. Risperidone for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Apr 10;4(4):CD009412. doi: 10.1002/14651858	difference in CGI-S at 4 weeks	Risperidon	difference score	0.5[0.14,0.86]	high	not serious	not serious	very serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation).	time to discontinuation	Haloperidol	difference score	-3.48[-6.28,-0.68]	critical	not serious	not serious	not serious	not serious	low

Cochrane Database Syst Rev 2017;7: CD009377.										
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	dry mouth by 72 hours	Haloperidol	risk ratio (RR)	2.97[1.22, 7.22]	some concerns	serious	not serious	serious	not serious	low
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	dyspepsia - between 3 - 7 days (oral phase) (only reported if occurred in ≥ 2%)	Haloperidol	risk ratio (RR)	10.41[1.36, 79.76]	high	not serious	not serious	serious	not serious	low
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	acute dystonia	Haloperidol	risk ratio (RR)	19.48[1.14, 331.92]	high	not serious	not serious	serious	not serious	very low
Ostinelli EG, Brooke-Powney MJ, Li X,	dystonia - by 72 hours	Haloperidol	risk ratio (RR)	10.26[1.67, 63.17]	critical	not serious	not serious	serious	not serious	

Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.										
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	dystonia - between 0 - 1 day (IM phase) (only reported if occurred in ≥5%)	Haloperidol	risk ratio (RR)	6.63[1.52, 28.86]	high	not serious	not serious	very serious	strongly suspected	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	dystonia during 24 hours	Haloperidol	risk ratio (RR)	12.92[1.67, 99.78]	high	not serious	not serious	very serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation).	ECG - abnormal - by 72 hours	Haloperidol	risk ratio (RR)	0.38[0.17, 0.84]	high	serious	not serious	not serious	not serious	low

Cochrane Database Syst Rev 2017;7: CD009377.										
Brankston G, Pich-eca L. Antipsychotic Drugs or Benzodiaz-epines for Rapid Tranquilization in Mental Health Facil-ities or Emergency Department Set-tings [Internet]. Ot-tawa (ON): Cana-dian Agency for Drugs and Technol-ogies in Health; 2021 Aug. PMID: 36264874.	efficacy	drugs in terms of time to se-dation and found no difference between droperidol and	diverse	midazolam 5 mg supe-rior to haloperi-dol 5 mg	high	not seri-ous	serious	not seri-ous	not serious	
Muir-Cochrane E, Grimmer K, Gerace A, Bas-tiampillai T, Os-ter C. Safety and effectiveness of olanzapine and droperidol for chemical re-straint for non-consenting adults: a system-atic review and meta-analysis.	efficacy	Droperidol	diverse	Droperidol were more effective than ziprasi-done	some con-cerns	not seri-ous	not seri-ous	not seri-ous	not serious	moderate

Australas Emerg Care. 2021 Jun;24(2):96-111. doi: 10.1016/j.auec.2020.08.004. Epub 2020 Oct 10. PMID: 33046432.										
Muir-Cochrane E, Grimmer K, Gerace A, Bastiampillai T, Oster C. Safety and effectiveness of olanzapine and droperidol for chemical restraint for non-consenting adults: a systematic review and meta-analysis. Australas Emerg Care. 2021 Jun;24(2):96-111. doi: 10.1016/j.auec.2020.08.004. Epub	efficacy	Lorazepam + Haloperidol	diverse	Lorazepam + haloperidol was significantly better than lorazepam alone in acutely agitated patients	some concerns	not serious	not serious	not serious	not serious	

2020 Oct 10. PMID: 33046432.										
Muir-Cochrane E, Grimmer K, Gerace A, Bastiampillai T, Oster C. Safety and effectiveness of olanzapine and droperidol for chemical restraint for non-consenting adults: a systematic review and meta-analysis. Australas Emerg Care. 2021 Jun;24(2):96-111. doi: 10.1016/j.auec.2020.08.004. Epub 2020 Oct 10. PMID: 33046432.	efficacy	Midazolam	diverse	Midazolam were more effective than ziprasidone	some concerns	not serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid	EPS - between 0 -1 day (IM phase) (only reported if	Haloperidol	risk ratio (RR)	9.46[1.22, 73.13]	high	not serious	not serious	serious	not serious	low

tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	occurred in ≥5%)									
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	EPS - between 3 - 7 days (oral phase) (only reported if occurred in ≥ 2%)	Haloperidol	risk ratio (RR)	7.09[1.65, 30.58]	high	not serious	not serious	serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	EPS - by 7 days	Haloperidol	risk ratio (RR)	34.29[4.7, 250.02]	some concerns	not serious	not serious	very serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	EPS - by 72 hours	Haloperidol	risk ratio (RR)	19.13[7.59, 48.21]	some concerns	serious	not serious	not serious	not serious	

Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	EPS during 24 hours	Haloperidol	risk ratio (RR)	8.35[2.27, 30.63]	some concerns	serious	not serious	not serious	not serious	
Ostinelli EG, Jajawi S, Spyridi S, Sayal K, Jayaram MB. Aripiprazole (intramuscular) for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Jan 8;1(1):CD008074. doi: 10.1002/14651858.CD008074.	EPS during 24 hours	Aripiprazol	risk ratio (RR)	0.29[0.12, 0.7]	high	not serious	very serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid	EPS during 5 days	Haloperidol	risk ratio (RR)	2.22[1.52, 3.23]	high	serious	not serious	not serious	not serious	

tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.										
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	excessive sedation by 12 hours	Haloperidol	risk ratio (RR)	0.25[0.08, 0.8]	high	not serious	not serious	not serious	not serious	
Ostinelli EG, Hussein M, Ahmed U, Rehman FU, Miramontes K, Adams CE. Risperidone for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Apr 10;4(4):CD009412. doi: 10.1002/14651858	Excessive sedation over 24 hours	Risperidon	risk ratio (RR)	0.06[0,0.92]	high	not serious	not serious	very serious	not serious	low
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation).	extrapyramidal effects - use of antiparkinson drugs - by 7 days	Haloperidol	risk ratio (RR)	3.3[1.82,5.97]	high	not serious	not serious	serious	not serious	low

Cochrane Database Syst Rev 2017;7: CD009377.										
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	extrapyramidal effects - use of antiparkinson drugs during 24 hours	Haloperidol	risk ratio (RR)	4.51[1.92, 10.58]	critical	not serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	extrapyramidal effects - use of antiparkinson drugs during 24 hours	Haloperidol	risk ratio (RR)	5.57[1.37, 22.65]	critical	not serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	Global outcome - not any improvement	Haloperidol	risk ratio (RR)	0.15 (0.05, 0.49)	high	serious	not serious	serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X,	Global outcome: no	Haloperidol	risk ratio (RR)	2.67 (1.25, 5.68)	critical	not serious	not serious	serious	not serious	very low

Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	overall improvement - at 30 minutes									
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	heartbeat change at 8 hours	haloperidol + lorazepam	difference score	-8.8[-9.75,-7.85]	high	not serious	serious	serious	not serious	very low
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	hypersalivation by 72 hours	Haloperidol	risk ratio (RR)	2.55[1.11, 5.87]	high	serious	not serious	serious	not serious	very low
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation).	increased severity of adverse effects after 2nd injection	Haloperidol	risk ratio (RR)	1.34[1.03, 1.74]	high	not serious	not serious	serious	not serious	low

Cochrane Database Syst Rev 2017;7: CD009377.										
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	increased severity of adverse effects after 2nd injection	Haloperidol	risk ratio (RR)	3.25[1.88, 5.63]	high	not serious	not serious	serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	more than 1 injection	Haloperidol	risk ratio (RR)	2.5[1,6.28]	high	serious	not serious	serious	not serious	
Ostinelli EG, Jajawi S, Spyridi S, Sayal K, Jayaram MB. Aripiprazole (intramuscular) for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane	needing 2 additional injections during 24 hours	Aripiprazol	risk ratio (RR)	0.36[0.19, 0.7]	high	not serious	very serious	not serious	not serious	low

Database Syst Rev. 2018 Jan 8;1(1):CD008074. doi: 10.1002/14651858.CD008074.										
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	needing additional injection during 24 hours (agitation only)	Haloperidol	risk ratio (RR)	0.51[0.42, 0.62]	high	not serious	not serious	not serious	strongly suspected	
Ostinelli EG, Jajawi S, Spyridi S, Sayal K, Jayaram MB. Aripiprazole (intramuscular) for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Jan 8;1(1):CD008074. doi:	needing additional injections during 24 hours	Aripiprazol	risk ratio (RR)	1.28[1,1.63]	high	not serious	serious	not serious	not serious	

10.1002/14651858.CD008074.										
Ostinelli EG, Jajawi S, Spyridi S, Sayal K, Jayaram MB. Aripiprazole (intramuscular) for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Jan 8;1(1):CD008074. doi: 10.1002/14651858.CD008074.	non-responders to the first injection	Aripiprazol	risk ratio (RR)	0.49 (0.34; 0.71)	high	not serious	serious	not serious	not serious	
Ostinelli EG, Jajawi S, Spyridi S, Sayal K, Jayaram MB. Aripiprazole (intramuscular) for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst	non-responders to the first injection	Aripiprazol	risk ratio (RR)	0.49[0.34, 0.71]	high	not serious	serious	not serious	not serious	

Rev. 2018 Jan 8;1(1):CD008074. doi: 10.1002/14651858.CD008074.										
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	Repeated need for rapid tranquillisation - more than 1 injection	Haloperidol	risk ratio (RR)	2.38 (1.27, 4.47)	high	not serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	Repeated need for rapid tranquillisation: needing additional injection	Haloperidol	risk ratio (RR)	0.78[0.62, 0.99]	high	not serious	not serious	not serious	strongly suspected	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database	Repeated need for tranquillisation - needing additional injection by 12h	Haloperidol	risk ratio (RR)	3.29[1.67, 6.47]	critical	not serious	not serious	not serious	not serious	

Syst Rev 2017;7: CD009377.										
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	Repeated need for tranquillisation: more than 3 injections	Haloperidol	risk ratio (RR)	2.54[1.19, 5.46]	high	not serious	serious	serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	insomnia - between 0-1 days (IM phase) (only reported if occurred in ≥5%)	Haloperidol	risk ratio (RR)	2.08[1.01, 4.27]	high	not serious	not serious	serious	not serious	
Ostinelli EG, Jajawi S, Spyridi S, Sayal K, Jayaram MB. Aripiprazole (intramuscular) for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst	insomnia during 24 hours	Aripiprazole	risk ratio (RR)	0.48[0.23, 0.97]	high	not serious	very serious	not serious	not serious	very low

Rev. 2018 Jan 8;1(1):CD008074. doi: 10.1002/14651858.CD008074.										
Ostinelli EG, Hussein M, Ahmed U, Rehman FU, Miramontes K, Adams CE. Risperidone for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Apr 10;4(4):CD009412. doi: 10.1002/14651858	difference in MOAS end-point score at 1 week	Risperidon	difference score	1.13[0.23, 2.02]	high	not serious	not serious	very serious	not serious	
Ostinelli EG, Hussein M, Ahmed U, Rehman FU, Miramontes K, Adams CE. Risperidone for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Apr 10;4(4):CD009412. doi: 10.1002/14651858	difference in MOAS end-point score at 4 weeks	Risperidon	difference score	1.57[0.75, 2.39]	high	not serious	not serious	very serious	not serious	very low

Ostinelli EG, Hussein M, Ahmed U, Rehman FU, Miramontes K, Adams CE. Risperidone for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Apr 10;4(4):CD009412. doi: 10.1002/14651858	difference in MOAS endpoint score at 6 weeks	Risperidon	difference score	1.47[0.83, 2.11]	high	not serious	not serious	very serious	not serious	
Ostinelli EG, Hussein M, Ahmed U, Rehman FU, Miramontes K, Adams CE. Risperidone for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Apr 10;4(4):CD009412. doi: 10.1002/14651858	difference in MOAS endpoint score at 2 weeks	Risperidon	difference score	1.8 (0.2; 3.40)	high	not serious	serious	very serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation).	myotonia - by 72 hours	Haloperidol	risk ratio (RR)	3.84[1.85, 8]	some concerns	serious	not serious	very serious	not serious	very low

Cochrane Database Syst Rev 2017;7: CD009377.										
Ostinelli EG, Jajawi S, Spyridi S, Sayal K, Jayaram MB. Aripiprazole (intramuscular) for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Jan 8;1(1):CD008074. doi: 10.1002/14651858.CD008074.	nausea during 24 hours	Aripiprazol	risk ratio (RR)	5.52[1.63, 18.7]	high	not serious	very serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	nausea - between 0-1 days (IM phase) (only reported if occurred in ≥5%)	Haloperidol	risk ratio (RR)	0.18[0.05, 0.6]	high	serious	not serious	not serious	not serious	very low
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE.	need for additional drugs for	Haloperidol	risk ratio (RR)	0.27[0.1, 0.71]	critical	not serious	not serious	not serious	not serious	low

Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	tranquillisation up to 2 hours									
Zaman H, Sampson SJ, Beck AL, Sharma T, Clay FJ, Spyridi S, Zhao S, Gillies D. Benzodiazepines for psychosis-induced aggression or agitation. Cochrane Database Syst Rev. 2017 Dec 8;12(12):CD003079. doi: 10.1002/14651858.CD003079.pub4. PMID: 29219171; PMCID: PMC6486117.	need for additional medication (mean dose, high = worse)	Midazolam + Haloperidol+N247G G247:M247	difference score	0.63 [0.15, 1.11]	high	not serious	not serious	serious	not serious	
Brankston G, Picheca L. Antipsychotic Drugs or Benzodiazepines for Rapid	need for additional rescue medication	olanzapine			high	not serious	serious	not serious	not serious	low

Tranquilization in Mental Health Facilities or Emergency Department Settings [Internet]. Ottawa (ON): Canadian Agency for Drugs and Technologies in Health; 2021 Aug. PMID: 36264874.										
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	need for benzodiazepine up to 24 hours	Haloperidol	risk ratio (RR)	0.44[0.31, 0.62]	high	not serious	not serious	not serious	not serious	low
Brankston G, Picheca L. Antipsychotic Drugs or Benzodiazepines for Rapid Tranquilization in Mental Health Facilities or Emergency Department Settings [Internet]. Ottawa (ON): Canadian Agency for Drugs and Technologies in Health;	repeated need for tranquilization	aripiprazole		RR = 1.28; 95% CI, 1.00 to 1.63 (2 RCTs) ◦ Statistically significant at P < 0.05	high	not serious	serious	not serious	not serious	low

2021 Aug. PMID: 36264874.										
Ostinelli EG, Jajawi S, Spyridi S, Sayal K, Jayaram MB. Aripiprazole (intramuscular) for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Jan 8;1(1):CD008074. doi: 10.1002/14651858.CD008074.	Repeated need for tranquillisation during 24h	Aripiprazol	risk ratio (RR)	0.69 (0.56; 0.85)	high	not serious	very serious	not serious	not serious	
Ostinelli EG, Jajawi S, Spyridi S, Sayal K, Jayaram MB. Aripiprazole (intramuscular) for psychosis-induced aggression or agitation	Repeated need for tranquillisation during 24h	Aripiprazol	risk ratio (RR)	1.28 (1.00; 1.63)	high	not serious	very serious	not serious	not serious	

(rapid tranquillisation). Cochrane Database Syst Rev. 2018 Jan 8;1(1):CD008074. doi: 10.1002/14651858.CD008074.										
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	Repeated need for tranquillisation up to 24 h - need for additional drugs for tranquillisation	Haloperidol	risk ratio (RR)	1.64[1.07, 2.53]	critical	not serious	not serious	very serious	not serious	
Zaman H, Sampson SJ, Beck AL, Sharma T, Clay FJ, Spyridi S, Zhao S, Gillies D. Benzodiazepines for psychosis-induced aggression or agitation. Cochrane Database Syst Rev. 2017 Dec 8;12(12):CD0030	no improvement (number of participants with < 10 points on the OAS and OASS aTer 12 hours)	Midazolam + Haloperidol+N247G G247:M247	risk ratio (RR)	25.00 [1.55 , 403.99]	high	not serious	not serious	very serious	not serious	moderate

79. doi: 10.1002/1465185 8.CD003079.pub 4. PMID: 29219171; PMCID: PMC6486117.										
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	OAS end-point score at 1 h	Haloperidol	difference score	0.9[0.13,1.67]	critical	not serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	OAS end-point score at 1 h	Haloperidol	difference score	-4.5[-6.28,-2.72]	critical	not serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid	OAS end-point score at 12 h	Haloperidol	difference score	0.2[0.07,0.33]	high	not serious	not serious	not serious	not serious	

tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.										
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	OAS end-point score at 12 h	Haloperidol	difference score	-0.2[-0.39,-0.01]	high	not serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	OAS end-point score at 12 h	Haloperidol	difference score	1.8[1.67,1.93]	high	not serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	OAS end-point score at 12 h	Haloperidol	difference score	-1.9[-2.58,-1.22]	high	not serious	not serious	not serious	not serious	

Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	OAS end-point score at 2 h	Haloperidol	difference score	-2.4[-4.21,-0.59]	critical	not serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	OAS end-point score at 4 h	Haloperidol	difference score	0.6[0.49,0.71]	critical	not serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	OAS end-point score at 6 h	Haloperidol	difference score	0.4[0.3,0.5]	critical	not serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or	OAS end-point score at 6 h	Haloperidol	difference score	0.7[0.6,0.8]	critical	not serious	not serious	not serious	not serious	

agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.										
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	OAS end-point score at 6 h	Haloperidol	difference score	1.1[0.91,1.29]	critical	not serious	not serious	not serious	not serious	
Zaman H, Sampson SJ, Beck AL, Sharma T, Clay FJ, Spyridi S, Zhao S, Gillies D. Benzodiazepines for psychosis-induced aggression or agitation. Cochrane Database Syst Rev. 2017 Dec 8;12(12):CD003079. doi: 10.1002/14651858.CD003079.pub 4. PMID:	OAS end-point score - short term	Midazolam + Haloperidol+N247G G247:M247	difference score	-3.30 [-5.25, -1.35]	high	not serious	not serious	serious	not serious	

29219171; PMCID: PMC6486117.										
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	OAS total aggression change score at 30 min	haloperidol + lorazepam	risk ratio (RR)	-0.5[-0.58,-0.42]	high	not serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	change in OASS at 1h	Haloperidol	risk ratio (RR)	2[1.18,2.82]	critical	not serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	change in OASS at 2h	Haloperidol	risk ratio (RR)	4.2[3.54,4.86]	critical	not serious	not serious	not serious	not serious	low

Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	OASS end-point score at 12 h	Haloperidol	difference score	0.9[0.82,0.98]	critical	not serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	OASS end-point score at 1 h	Haloperidol	difference score	-24.5[-27.32,-21.68]	critical	not serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	OASS end-point score at 1 h	Haloperidol	difference score	-8.5[-9.93,-7.07]	critical	not serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or	OASS end-point score at 12 h	Haloperidol	difference score	0.8[0.55,1.05]	critical	not serious	not serious	not serious	not serious	

agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.										
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	OASS end-point score at 12 h	Haloperidol	difference score	0.9[0.82,0.98]	critical	not serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	OASS end-point score at 12 h	Haloperidol	difference score	-11.2[-12.24,-10.16]	critical	not serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	OASS end-point score at 2 h	Haloperidol	difference score	-24.5[-27.32,-21.68]	critical	not serious	not serious	not serious	not serious	

Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	OASS end-point score at 2 h	Haloperidol	difference score	-6.7[-7.46,-5.94]	critical	not serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	OASS end-point score at 4 h	Haloperidol	difference score	3.8[3.27,4.33]	critical	not serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	OASS end-point score at 4 h	Haloperidol	difference score	-5.5[-6.48,-4.52]	critical	not serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or	OASS end-point score at 6 h	Haloperidol	difference score	0.2[0.05,0.35]	critical	not serious	not serious	not serious	not serious	

agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.										
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	OASS end-point score at 6 h	Haloperidol	risk ratio (RR)	0.2[0.05,0.35]	critical	not serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	OASS end-point score at 6 h	Haloperidol	difference score	2.6[2.13,3.07]	critical	not serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	OASS end-point score at 6 h	Haloperidol	difference score	-3.7[-4.56,-2.84]	critical	not serious	not serious	not serious	not serious	

Zaman H, Sampson SJ, Beck AL, Sharma T, Clay FJ, Spyridi S, Zhao S, Gillies D. Benzodiazepines for psychosis-induced aggression or agitation. Cochrane Database Syst Rev. 2017 Dec 8;12(12):CD003079. doi: 10.1002/14651858.CD003079.pub 4. PMID: 29219171; PMCID: PMC6486117.	OASS end-point score - medium term	Midazolam + Haloperidol+N247G G247:M247	difference score	-2.70 [-3.73 , -1.67]	high	not serious	not serious	not serious	not serious	
Zaman H, Sampson SJ, Beck AL, Sharma T, Clay FJ, Spyridi S, Zhao S, Gillies D. Benzodiazepines for psychosis-induced aggression or	OASS end-point score - short term	Midazolam + Haloperidol+N247G G247:M247	difference score	-16.00 [-18.98 , -13.02]	high	not serious	not serious	not serious	not serious	

agitation. Cochrane Data- base Syst Rev. 2017 Dec 8;12(12):CD0030 79. doi: 10.1002/1465185 8.CD003079.pub 4. PMID: 29219171; PMCID: PMC6486117.										
Ostinelli EG, Brooke- Powney MJ, Li X, Adams CE. Haloperi- dol for psychosis in- duced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	pain (2nd in- jection)	Haloperidol	risk ratio (RR)	1.34[1.03, 1.74]	high	serious	not seri- ous	not seri- ous	not serious	
Ostinelli EG, Brooke- Powney MJ, Li X, Adams CE. Haloperi- dol for psychosis in- duced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	pain (2nd in- jection)	Haloperidol	risk ratio (RR)	3.25[1.88, 5.63]	high	not seri- ous	not seri- ous	serious	not serious	low

Zaman H, Sampson SJ, Beck AL, Sharma T, Clay FJ, Spyridi S, Zhao S, Gillies D. Benzodiazepines for psychosis-induced aggression or agitation. Cochrane Database Syst Rev. 2017 Dec 8;12(12):CD003079. doi: 10.1002/14651858.CD003079.pub4. PMID: 29219171; PMCID: PMC6486117.	change in PANSS - medium term	Lorazepam	risk ratio (RR)	5.64 [2.20, 9.08]	high	not serious	not serious	not serious	not serious	low
Bak M, Weltens I, Bervoets C, De Fruyt J, Samochowiec J, Fiorillo A, Sampogna G, Bienkowski P, Preuss WU, Misiak B, Frydecka D,	change in PANSS-EC	ari-piprazole	change score	-9.63 (-14.28 -- 4.97)	some concerns	serious	serious	not serious	not serious	

Samochowiec A, Bak E, Drukker M, Dom G. The pharmacological management of agitated and aggressive behaviour: A systematic review and meta-analysis. Eur Psychiatry. 2019 Apr;57:78-100. doi: 10.1016/j.eurpsy.2019.01.014. Epub 2019 Feb 2. PMID: 30721802.										
Bak M, Weltens I, Bervoets C, De Fruyt J, Samochowiec J, Fiorillo A, Sampogna G, Bienkowski P, Preuss WU, Misiak B, Frydecka D, Samochowiec A, Bak E, Drukker M, Dom G. The	change in PANSS-EC	Haloperidol	change score	-6.79 (-9.42 -- 4.16)	some concerns	very serious	serious	not serious	not serious	

pharmacological management of agitated and aggressive behaviour: A systematic review and meta-analysis. Eur Psychiatry. 2019 Apr;57:78-100. doi: 10.1016/j.eurpsy.2019.01.014. Epub 2019 Feb 2. PMID: 30721802.										
Bak M, Weltens I, Bervoets C, De Fruyt J, Samochowiec J, Fiorillo A, Sampogna G, Bienkowski P, Preuss WU, Misiak B, Frydecka D, Samochowiec A, Bak E, Drukker M, Dom G. The pharmacological management of agitated and	change in PANSS-EC	haloperidol + lorazepam	change score	-8.75 (-10.3 -- 7.19)	some concerns	not serious	serious	not serious	not serious	

aggressive behaviour: A systematic review and meta-analysis. Eur Psychiatry. 2019 Apr;57:78-100. doi: 10.1016/j.eurpsy.2019.01.014. Epub 2019 Feb 2. PMID: 30721802.										
Bak M, Weltens I, Bervoets C, De Fruyt J, Samochowiec J, Fiorillo A, Sampogna G, Bienkowski P, Preuss WU, Misiak B, Frydecka D, Samochowiec A, Bak E, Drukker M, Dom G. The pharmacological management of agitated and aggressive behaviour: A	change in PANSS-EC	haloperidol + promethazine	change score	-15 (-17.52 – -12.48)	some concerns	not serious	serious	not serious	not serious	

systematic review and meta-analysis. Eur Psychiatry. 2019 Apr;57:78-100. doi: 10.1016/j.eurpsy.2019.01.014. Epub 2019 Feb 2. PMID: 30721802.										
Bak M, Weltens I, Bervoets C, De Fruyt J, Samochowiec J, Fiorillo A, Sampogna G, Bienkowski P, Preuss WU, Misiak B, Frydecka D, Samochowiec A, Bak E, Drukker M, Dom G. The pharmacological management of agitated and aggressive behaviour: A systematic review and meta-analysis.	change in PANSS-EC	levopromazine	change score	-5.75 (-7.02 -- 4.47)	some concerns	serious	serious	not serious	not serious	

Eur Psychiatry. 2019 Apr;57:78-100. doi: 10.1016/j.eurpsy. 2019.01.014. Epub 2019 Feb 2. PMID: 30721802.										
Bak M, Weltens I, Bervoets C, De Fruyt J, Samochowiec J, Fiorillo A, Sampogna G, Bienkowski P, Preuss WU, Misiak B, Frydecka D, Samochowiec A, Bak E, Drukker M, Dom G. The pharmacological management of agitated and aggressive behaviour: A systematic review and meta-analysis. Eur Psychiatry. 2019 Apr;57:78-100. doi:	change in PANSS-EC	Lorazepam	change score	-7.59 (-9.29 -- 5.88)	some concerns	not serious	serious	not serious	not serious	

10.1016/j.eurpsy. 2019.01.014. Epub 2019 Feb 2. PMID: 30721802.										
Bak M, Weltens I, Bervoets C, De Fruyt J, Samochowiec J, Fiorillo A, Sampogna G, Bienkowski P, Preuss WU, Misiak B, Frydecka D, Samochowiec A, Bak E, Drukker M, Dom G. The pharmacological management of agitated and aggressive behaviour: A systematic review and meta-analysis. Eur Psychiatry. 2019 Apr;57:78-100. doi: 10.1016/j.eurpsy. 2019.01.014.	change in PANSS-EC	olanzapine	change score	-10.49 (-14.15 -- 6.82)	some concerns	very serious	serious	not serious	not serious	

Epub 2019 Feb 2. PMID: 30721802.										
Bak M, Weltens I, Bervoets C, De Fruyt J, Samochowiec J, Fiorillo A, Sampogna G, Bienkowski P, Preuss WU, Misiak B, Frydecka D, Samochowiec A, Bak E, Drukker M, Dom G. The pharmacological management of agitated and aggressive behaviour: A systematic review and meta-analysis. Eur Psychiatry. 2019 Apr;57:78-100. doi: 10.1016/j.eurpsy.2019.01.014. Epub 2019 Feb 2. PMID: 30721802.	change in PANSS-EC	Placebo	change score	-3.89 (-6.86 -- 2.93)	some concerns	not serious	serious	not serious	not serious	

Bak M, Weltens I, Bervoets C, De Fruyt J, Samochowiec J, Fiorillo A, Sampogna G, Bienkowski P, Preuss WU, Misiak B, Frydecka D, Samochowiec A, Bak E, Drukker M, Dom G. The pharmacological management of agitated and aggressive behaviour: A systematic review and meta-analysis. Eur Psychiatry. 2019 Apr;57:78-100. doi: 10.1016/j.eurpsy.2019.01.014. Epub 2019 Feb 2. PMID: 30721802.	change in PANSS-EC	risperidone	change score	-14.8 (-17.43 -- 12.17)	some concerns	not serious	serious	not serious	not serious	
Bak M, Weltens I, Bervoets C, De Fruyt J,	change in PANSS-EC	risperidone + clonazepam	change score	-7.5 (-9.13 -- -5.87)	some concerns	not serious	serious	not serious	not serious	

Samochowiec J, Fiorillo A, Sampogna G, Bienkowski P, Preuss WU, Misiak B, Frydecka D, Samochowiec A, Bak E, Drukker M, Dom G. The pharmacological management of agitated and aggressive behaviour: A systematic review and meta-analysis. Eur Psychiatry. 2019 Apr;57:78-100. doi: 10.1016/j.eurpsy.2019.01.014. Epub 2019 Feb 2. PMID: 30721802.										
Bak M, Weltens I, Bervoets C, De Fruyt J, Samochowiec J, Fiorillo A, Sampogna G, Bienkowski P,	change in PANSS-EC	risperidone + lorazepam	change score	-7.8 (-7.95 – -7.65)	some concerns	not serious	serious	not serious	not serious	

Preuss WU, Misiak B, Frydecka D, Samochowiec A, Bak E, Drukker M, Dom G. The pharmacological management of agitated and aggressive behaviour: A systematic review and meta-analysis. Eur Psychiatry. 2019 Apr;57:78-100. doi: 10.1016/j.eurpsy.2019.01.014. Epub 2019 Feb 2. PMID: 30721802.										
Bak M, Weltens I, Bervoets C, De Fruyt J, Samochowiec J, Fiorillo A, Sampogna G, Bienkowski P, Preuss WU, Misiak B, Frydecka D,	change in PANSS-EC	Ziprasidone	change score	-5.29 (-7.84 – -2.74)	some concerns	serious	serious	not serious	not serious	

Samochowiec A, Bak E, Drukker M, Dom G. The pharmacological management of agitated and aggressive behaviour: A systematic review and meta-analysis. Eur Psychiatry. 2019 Apr;57:78-100. doi: 10.1016/j.eurpsy.2019.01.014. Epub 2019 Feb 2. PMID: 30721802.										
Brankston G, Picheca L. Antipsychotic Drugs or Benzodiazepines for Rapid Tranquilization in Mental Health Facilities or Emergency Department Settings [Internet]. Ottawa (ON): Canadian Agency for Drugs and Technologies in Health; 2021 Aug. PMID: 36264874.	change in PANSS-EC	ari-piprazole	change score	PANSS-EC change scores at 2 hours: MD = 3.30; 95% CI, 1.25 to 5.35 (1 RCT)	high	not serious	not serious	serious	not serious	

Ostinelli EG, Ja-jawi S, Spyridi S, Sayal K, Jayaram MB. Aripiprazole (intramuscular) for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Jan 8;1(1):CD008074. doi: 10.1002/14651858.CD008074.	change in PANSS-EC	Aripiprazol	difference score	-2.49[-4.28,-0.7]	high	not serious	very serious	not serious	not serious	
Ostinelli EG, Ja-jawi S, Spyridi S, Sayal K, Jayaram MB. Aripiprazole (intramuscular) for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Jan 8;1(1):CD008074.	change in PANSS-EC	Aripiprazol	difference score	-2.55[-3.78,-1.32]	high	not serious	very serious	not serious	not serious	

doi: 10.1002/1465185 8.CD008074.										
Ostinelli EG, Ja- jawi S, Spyridi S, Sayal K, Jayaram MB. Aripiprazole (intramuscular) for psychosis-in- duced aggres- sion or agitation (rapid tranquilli- sation). Cochrane Database Syst Rev. 2018 Jan 8;1(1):CD008074. doi: 10.1002/1465185 8.CD008074.	change in PANSS-EC	Aripiprazol	difference score	-2.68[- 3.75,-1.62]	high	not seri- ous	very seri- ous	not seri- ous	not serious	
Ostinelli EG, Ja- jawi S, Spyridi S, Sayal K, Jayaram MB. Aripiprazole (intramuscular) for psychosis-in- duced aggres- sion or agitation (rapid tranquilli- sation). Cochrane	change in PANSS-EC	Aripiprazol	difference score	-2.83[- 3.92,-1.75]	high	not seri- ous	very seri- ous	not seri- ous	not serious	

Database Syst Rev. 2018 Jan 8;1(1):CD008074. doi: 10.1002/1465185 8.CD008074.										
Citrome, L., Pres- korn, S. H., Lauri- ello, J., Krystal, J. H., Kakar, R., Fin- man, J., ... & Raja- chandran, L. (2022). Sublingual dexme- detomidine for the treatment of acute agitation in adults with schizophrenia or schizoaffective disorder: a random- ized placebo-con- trolled trial. <i>The Journal of clinical psychiatry</i> , 83(6), 43180.	change in PANSS-EC at 2h	sublingual dexmede- tomidine	difference score	-3.7 (-4.9, - 2.5)	some con- cerns	not seri- ous	not seri- ous	not seri- ous	not serious	
Citrome, L., Pres- korn, S. H., Lauri- ello, J., Krystal, J. H., Kakar, R., Fin- man, J., ... & Raja- chandran, L. (2022). Sublingual dexme- detomidine for the treatment of acute agitation in adults with schizophrenia or schizoaffective disorder: a random- ized placebo-	change in PANSS-EC at 2h	sublingual dexmede- tomidine	difference score	-5.5 (-6.7, - 4.3)	some con- cerns	not seri- ous	not seri- ous	not seri- ous	not serious	

controlled trial. <i>The Journal of clinical psychiatry</i> , 83(6), 43180.										
Zaman H, Sampson SJ, Beck AL, Sharma T, Clay FJ, Spyridi S, Zhao S, Gillies D. Benzodiazepines for psychosis-induced aggression or agitation. Cochrane Database Syst Rev. 2017 Dec 8;12(12):CD003079. doi: 10.1002/14651858.CD003079.pub 4. PMID: 29219171; PMCID: PMC6486117.	change in PANSS-EC - medium term	Lorazepam	risk ratio (RR)	1.84 [1.06, 3.18]	high	not serious	not serious	very serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database	change in PANSS-EC up to 24h	Haloperidol	difference score	-1.4[-2.97,0.17]	high	serious	not serious	not serious	not serious	

Syst Rev 2017;7: CD009377.										
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	change in PANSS-EC up to 2h	Haloperidol	difference score	-2.57[-4.05,-1.09]	high	serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	change in PANSS-EC up to 2h	Haloperidol	difference score	-2.64[-3.95,-1.33]	high	serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	change in PANSS-EC up to 2h	Haloperidol	difference score	-3.67[-4.75,-2.59]	high	serious	not serious	not serious	not serious	
Ostinelli EG, Jajawi S, Spyridi S,	change in PANSS-EC	Aripiprazol	risk ratio (RR)	0.77 (0.60; 0.99)	low	not serious	serious	serious	not serious	

Sayal K, Jayaram MB. Aripiprazole (intramuscular) for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Jan 8;1(1):CD008074. doi: 10.1002/14651858.CD008074.	(40% reduction)									
Ostinelli EG, Jajawi S, Spyridi S, Sayal K, Jayaram MB. Aripiprazole (intramuscular) for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Jan 8;1(1):CD008074. doi:	change in PANSS-EC (40% reduction)	Aripiprazol	risk ratio (RR)	1.50 (1.17; 1.92)	high	not serious	very serious	not serious	not serious	

10.1002/14651858.CD008074.										
Ostinelli EG, Jajawi S, Spyridi S, Sayal K, Jayaram MB. Aripiprazole (intramuscular) for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Jan 8;1(1):CD008074. doi: 10.1002/14651858.CD008074.	change in PANSS-EC (40% reduction) up to 2h	Aripiprazol	risk ratio (RR)	0.77[0.6,0.99]	low	serious	not serious	serious	not serious	
Ostinelli EG, Jajawi S, Spyridi S, Sayal K, Jayaram MB. Aripiprazole (intramuscular) for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst	change in PANSS-EC (40% reduction) up to 2h	Aripiprazol	difference score	3.3[1.25,5.35]	low	serious	not serious	serious	not serious	

Rev. 2018 Jan 8;1(1):CD008074. doi: 10.1002/14651858.CD008074.										
Brankston G, Picheca L. Antipsychotic Drugs or Benzodiazepines for Rapid Tranquilization in Mental Health Facilities or Emergency Department Settings [Internet]. Ottawa (ON): Canadian Agency for Drugs and Technologies in Health; 2021 Aug. PMID: 36264874.	change in PANSS-EC reduction (of $\geq 40\%$ from baseline)	aripiprazole	risk ratio (RR)	RR = 0.94; 95% CI, 0.80 to 1.11 (2 RCTs)	high	not serious	not serious	serious	not serious	
Ostinelli EG, Hussein M, Ahmed U, Rehman FU, Miramontes K, Adams CE. Risperidone for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Apr 10;4(4):CD009412. doi: 10.1002/14651858	difference in PANSS at 4 weeks	Risperidon	difference score	1.7 (0.01; 3.39)	high	not serious	serious	very serious	not serious	

Ostinelli EG, Hussein M, Ahmed U, Rehman FU, Miramontes K, Adams CE. Risperidone for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Apr 10;4(4):CD009412. doi: 10.1002/14651858	difference in PANSS endpoint score at 2 weeks	Risperidon	difference score	3.48[1.88, 5.08]	critical	not serious	not serious	serious	not serious	
Ostinelli EG, Hussein M, Ahmed U, Rehman FU, Miramontes K, Adams CE. Risperidone for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Apr 10;4(4):CD009412. doi: 10.1002/14651858	difference in PANSS endpoint score at 4 weeks	Risperidon	difference score	5.45[3.81, 7.08]	critical	not serious	not serious	serious	not serious	
Ostinelli EG, Hussein M, Ahmed U, Rehman FU, Miramontes K, Adams CE. Risperidone for psychosis-induced aggression or agitation	difference in PANSS endpoint score at 6 weeks	Risperidon	difference score	9.9 [7.42,12.37]	high	very serious	not serious	very serious	not serious	

(rapid tranquillisation). Cochrane Database Syst Rev. 2018 Apr 10;4(4):CD009412. doi: 10.1002/14651858										
Ostinelli EG, Hussein M, Ahmed U, Rehman FU, Miramontes K, Adams CE. Risperidone for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Apr 10;4(4):CD009412. doi: 10.1002/14651858	difference in PANSS endpoint score at 8 weeks	Risperidon	difference score	5.83[4.12, 7.54]	high	not serious	not serious	very serious	not serious	
Ostinelli EG, Hussein M, Ahmed U, Rehman FU, Miramontes K, Adams CE. Risperidone for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Apr 10;4(4):CD009412. doi: 10.1002/14651858	difference in PANSS general psychopathology subscale endpoint score at 4 weeks	Risperidon	difference score	1.14[0.04, 2.23]	high	serious	not serious	serious	not serious	

Ostinelli EG, Hussein M, Ahmed U, Rehman FU, Miramontes K, Adams CE. Risperidone for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Apr 10;4(4):CD009412. doi: 10.1002/14651858	difference in PANSS general psychopathology subscale endpoint score at 6 weeks	Risperidon	difference score	6.5[4.06,8.94]	high	serious	not serious	serious	not serious	
Ostinelli EG, Hussein M, Ahmed U, Rehman FU, Miramontes K, Adams CE. Risperidone for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Apr 10;4(4):CD009412. doi: 10.1002/14651858	difference in PANSS general psychopathology subscale endpoint score at 8 weeks	Risperidon	difference score	1.6[0.43,2.77]	high	serious	not serious	serious	not serious	
Ostinelli EG, Hussein M, Ahmed U, Rehman FU, Miramontes K, Adams CE. Risperidone for psychosis-induced aggression or agitation	difference in PANSS negative symptom subscale endpoint score at 6 weeks	Risperidon	difference score	3.8[1.07,6.53]	high	serious	not serious	serious	not serious	

(rapid tranquillisation). Cochrane Database Syst Rev. 2018 Apr 10;4(4):CD009412. doi: 10.1002/14651858										
Ostinelli EG, Hussein M, Ahmed U, Rehman FU, Miramontes K, Adams CE. Risperidone for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Apr 10;4(4):CD009412. doi: 10.1002/14651858	difference in PANSS positive symptom subscale endpoint score at 4 weeks	Risperidon	difference score	2.75[1.86, 3.64]	high	not serious	not serious	very serious	not serious	
Ostinelli EG, Hussein M, Ahmed U, Rehman FU, Miramontes K, Adams CE. Risperidone for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Apr 10;4(4):CD009412. doi: 10.1002/14651858	difference in PANSS positive symptom subscale endpoint score at 6 weeks	Risperidon	difference score	4.4[1.4, 7.4]	high	not serious	not serious	very serious	not serious	

Ostinelli EG, Hussein M, Ahmed U, Rehman FU, Miramontes K, Adams CE. Risperidone for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Apr 10;4(4):CD009412. doi: 10.1002/14651858	difference in PANSS positive symptom subscale endpoint score at 8 weeks	Risperidon	difference score	1.7[0.71,2.69]	high	not serious	not serious	very serious	not serious	
Ostinelli EG, Hussein M, Ahmed U, Rehman FU, Miramontes K, Adams CE. Risperidone for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Apr 10;4(4):CD009412. doi: 10.1002/14651858	difference in PANSS-EC endpoint score at 1 week	Risperidon	difference score	2.7 (0.42; 4.98)	high	not serious	not serious	very serious	not serious	
Ostinelli EG, Hussein M, Ahmed U, Rehman FU, Miramontes K, Adams CE. Risperidone for psychosis-induced aggression or agitation	difference in PANSS-EC endpoint score at 1 week	Risperidon	difference score	5.11[2.51, 7.71]	high	not serious	not serious	very serious	not serious	

(rapid tranquillisation). Cochrane Database Syst Rev. 2018 Apr 10;4(4):CD009412. doi: 10.1002/14651858										
Ostinelli EG, Hussein M, Ahmed U, Rehman FU, Miramontes K, Adams CE. Risperidone for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Apr 10;4(4):CD009412. doi: 10.1002/14651858	difference in PANSS-EC endpoint score at 2 weeks	Risperidon	difference score	2.4[0.32,4.48]	high	not serious	not serious	very serious	not serious	
Ostinelli EG, Hussein M, Ahmed U, Rehman FU, Miramontes K, Adams CE. Risperidone for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Apr 10;4(4):CD009412. doi: 10.1002/14651858	difference in PANSS-EC endpoint score at 4 weeks	Risperidon	difference score	2.4[0.53,4.27]	high	not serious	not serious	very serious	not serious	

Ostinelli EG, Hussein M, Ahmed U, Rehman FU, Miramontes K, Adams CE. Risperidone for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Apr 10;4(4):CD009412. doi: 10.1002/14651858	difference in PANSS-EC endpoint score at 5 days	Risperidon	difference score	5.47[2.64, 8.3]	high	not serious	not serious	very serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	endpoint score at 1 week (PANSS-EC, high=worse)	Haloperidol	difference score	-2.56[-4.57,-0.55]	high	not serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	endpoint score at 14d hours (PANSS-EC, high=worse)	Haloperidol	difference score	1.82[0.61, 3.03]	high	not serious	not serious	not serious	not serious	

Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	endpoint score at 24 hours (PANSS-EC, high=worse)	Haloperidol	difference score	3.82[1.35, 6.29]	high	not serious	not serious	serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	endpoint score at 72 hours (PANSS negative subscale, high=worse)	Haloperidol	difference score	-4.19[-5.71,-2.67]	critical	not serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	endpoint score at 7d (PANSS-EC, high=worse)	Haloperidol	difference score	1.61[0.15, 3.07]	critical	not serious	not serious	not serious	not serious	
Zaman H, Sampson SJ, Beck AL, Sharma T, Clay FJ, Spyridi	improvement in PANSS-EC (40%)	Lorazepam	risk ratio (RR)	0.62 [0.40, 0.97]	critical	not serious	not serious	not serious	not serious	

S, Zhao S, Gillies D. Benzodiazepines for psychosis-induced aggression or agitation. Cochrane Database Syst Rev. 2017 Dec 8;12(12):CD003079. doi: 10.1002/14651858.CD003079.pub4. PMID: 29219171; PMCID: PMC6486117.	reduction) - short-term									
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	PANSS-EC response at 2 hours	Haloperidol	risk ratio (RR)	1.62[1.28, 2.07]	high	not serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid	physical examination significant changes - by 72 hours	Haloperidol	risk ratio (RR)	27.29[1.63 ,455.72]	high	not serious	not serious	not serious	not serious	low

tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.										
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	pyramidal tract syndrome - by 72 hours	Haloperidol	risk ratio (RR)	17.18[1,29 5.55]	high	serious	not serious	serious	not serious	very low
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	reduced movement - by 72 hours	Haloperidol	risk ratio (RR)	2.14[1.17, 3.91]	some concerns	serious	not serious	serious	not serious	low
Paris, G., Bighelli, I., Deste, G., Siafis, S., Schneider-Thoma, J., Zhu, Y., ... & Leucht, S. (2021). Short-acting intramuscular second-generation antipsychotic drugs for acutely agitated patients with schizophrenia spectrum disorders. A	number of responders to treatment at 2 h	Aripiprazol	risk ratio (RR)	1.51 [1.18; 1.93]	high	not serious	not serious	not serious	not serious	moderate

systematic review and network meta-analysis. <i>Schizophrenia Research</i> , 229, 3-11.										
Paris, G., Bighelli, I., Deste, G., Siafis, S., Schneider-Thoma, J., Zhu, Y., ... & Leucht, S. (2021). Short-acting intramuscular second-generation antipsychotic drugs for acutely agitated patients with schizophrenia spectrum disorders. A systematic review and network meta-analysis. <i>Schizophrenia Research</i> , 229, 3-11.	number of responders to treatment at 2 h	Haloperidol	risk ratio (RR)	1.54 [1.02; 2.33]	high	not serious	not serious	serious	not serious	
Paris, G., Bighelli, I., Deste, G., Siafis, S., Schneider-Thoma, J., Zhu, Y., ... & Leucht, S. (2021). Short-acting intramuscular second-generation antipsychotic drugs for acutely agitated patients with schizophrenia spectrum disorders. A systematic review and network meta-analysis. <i>Schizophrenia Research</i> , 229, 3-11.	number of responders to treatment at 2 h	Haloperidol	risk ratio (RR)	1.81 [1.48; 2.21]	high	not serious	not serious	not serious	not serious	

Paris, G., Bighelli, I., Deste, G., Siafis, S., Schneider-Thoma, J., Zhu, Y., ... & Leucht, S. (2021). Short-acting intramuscular second-generation antipsychotic drugs for acutely agitated patients with schizophrenia spectrum disorders. A systematic review and network meta-analysis. <i>Schizophrenia Research</i> , 229, 3-11.	number of responders to treatment at 2 h	Olanzapin	risk ratio (RR)	1.24 [1.05; 1.45]	high	not serious	not serious	not serious	not serious	
Paris, G., Bighelli, I., Deste, G., Siafis, S., Schneider-Thoma, J., Zhu, Y., ... & Leucht, S. (2021). Short-acting intramuscular second-generation antipsychotic drugs for acutely agitated patients with schizophrenia spectrum disorders. A systematic review and network meta-analysis. <i>Schizophrenia Research</i> , 229, 3-11.	number of responders to treatment at 2 h	Olanzapin	risk ratio (RR)	1.80 [1.22; 2.66]	high	not serious	not serious	not serious	not serious	
Paris, G., Bighelli, I., Deste, G., Siafis, S., Schneider-Thoma, J., Zhu, Y., ... & Leucht, S. (2021).	number of responders to treatment at 2 h	Olanzapin	risk ratio (RR)	2.22 [1.69; 2.92]	high	not serious	not serious	not serious	not serious	

Short-acting intramuscular second-generation antipsychotic drugs for acutely agitated patients with schizophrenia spectrum disorders. A systematic review and network meta-analysis. <i>Schizophrenia Research</i> , 229, 3-11.										
Paris, G., Bighelli, I., Deste, G., Siafis, S., Schneider-Thoma, J., Zhu, Y., ... & Leucht, S. (2021). Short-acting intramuscular second-generation antipsychotic drugs for acutely agitated patients with schizophrenia spectrum disorders. A systematic review and network meta-analysis. <i>Schizophrenia Research</i> , 229, 3-11.	number of responders to treatment at 2 h	Ziprasidone	risk ratio (RR)	1.24 [1.05; 1.45]	high	not serious	serious	not serious	not serious	
Paris, G., Bighelli, I., Deste, G., Siafis, S., Schneider-Thoma, J., Zhu, Y., ... & Leucht, S. (2021). Short-acting intramuscular second-generation antipsychotic drugs for acutely agitated	number of responders to treatment at 2 h	Ziprasidone	risk ratio (RR)	2.26 [1.63; 3.14]	high	not serious	serious	not serious	not serious	

patients with schizophrenia spectrum disorders. A systematic review and network meta-analysis. <i>Schizophrenia Research</i> , 229, 3-11.										
Paris, G., Bighelli, I., Deste, G., Siafis, S., Schneider-Thoma, J., Zhu, Y., ... & Leucht, S. (2021). Short-acting intramuscular second-generation antipsychotic drugs for acutely agitated patients with schizophrenia spectrum disorders. A systematic review and network meta-analysis. <i>Schizophrenia Research</i> , 229, 3-11.	number of responders to treatment at 2 h	Ziprasidone	risk ratio (RR)	2.51 [1.50; 4.22]	high	not serious	serious	not serious	not serious	
Paris, G., Bighelli, I., Deste, G., Siafis, S., Schneider-Thoma, J., Zhu, Y., ... & Leucht, S. (2021). Short-acting intramuscular second-generation antipsychotic drugs for acutely agitated patients with schizophrenia spectrum disorders. A systematic review and network meta-	number of responders to treatment at 24 h	Aripiprazol	risk ratio (RR)	1.73 [1.25; 2.41]	high	not serious	not serious	not serious	not serious	

analysis. <i>Schizophrenia Research</i> , 229, 3-11.										
Paris, G., Bighelli, I., Deste, G., Siafis, S., Schneider-Thoma, J., Zhu, Y., ... & Leucht, S. (2021). Short-acting intramuscular second-generation antipsychotic drugs for acutely agitated patients with schizophrenia spectrum disorders. A systematic review and network meta-analysis. <i>Schizophrenia Research</i> , 229, 3-11.	number of responders to treatment at 24 h	Haloperidol	risk ratio (RR)	1.83 [1.30; 2.58]	high	not serious	not serious	not serious	not serious	
Paris, G., Bighelli, I., Deste, G., Siafis, S., Schneider-Thoma, J., Zhu, Y., ... & Leucht, S. (2021). Short-acting intramuscular second-generation antipsychotic drugs for acutely agitated patients with schizophrenia spectrum disorders. A systematic review and network meta-analysis. <i>Schizophrenia Research</i> , 229, 3-11.	number of responders to treatment at 24 h	Olanzapin	risk ratio (RR)	1.82 [1.36; 2.44]	high	not serious	not serious	not serious	not serious	

Zaman H, Sampson SJ, Beck AL, Sharma T, Clay FJ, Spyridi S, Zhao S, Gillies D. Benzodiazepines for psychosis-induced aggression or agitation. Cochrane Database Syst Rev. 2017 Dec 8;12(12):CD003079. doi: 10.1002/14651858.CD003079.pub4. PMID: 29219171; PMCID: PMC6486117.	change score (Ramsay Sedation Scale, high = worse)	Midazolam + Haloperidol+N247G G247:M247	difference score	0.60 [0.07, 1.13]	high	not serious	not serious	serious	not serious	low
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	change in SAS at 24 hours	Haloperidol	risk ratio (RR)	1.89[0.77, 3.01]	critical	not serious	not serious	not serious	not serious	low

Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	change in SAS at 7 d	Haloperidol	difference score	6.1[3.91,8.29]	high	not serious	not serious	serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	change in SAS at 72 hours	Haloperidol	difference score	3.59[2.15, 5.03]	high	not serious	not serious	serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	change score at 24 hours (SAS movement disorders, high=worse)	haloperidol + lorazepam	difference score	0.4[0.34,0.46]	high	not serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or	SAS change score at 24 hours	Haloperidol	difference score	1.31[0.56, 2.06]	high	not serious	not serious	not serious	not serious	

agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.										
Brankston G, Pich- eca L. Antipsychotic Drugs or Benzodiaz- epines for Rapid Tranquilization in Mental Health Facil- ities or Emergency Department Set- tings [Internet]. Ot- tawa (ON): Cana- dian Agency for Drugs and Technol- ogies in Health; 2021 Aug. PMID: 36264874.	proportion sedated in set time pe- riod	Midazolam	Relative risk	Significant differ- ences were de- tected in the Kaplan- Meier curves for midazolam compared with olanzapine (P = 0.03) and haloperi- dol (P = 0.002)	high	not seri- ous	serious	not seri- ous	not serious	low
Brankston G, Pich- eca L. Antipsychotic Drugs or Benzodiaz- epines for Rapid Tranquilization in Mental Health Facil- ities or Emergency Department Set- tings [Internet]. Ot- tawa (ON): Cana- dian Agency for Drugs and	time to adequate sedation	first and second generation antipsy- chotic drug	Difference score	No differ- ence: '- Droperi- dol: 16 minutes (10 to 30) - Olanzap- ine: 17.5 minutes (10 to 31)	high	not seri- ous	serious	not seri- ous	not serious	low

Technologies in Health; 2021 Aug. PMID: 36264874.										
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	sedated at 30 minutes	haloperidol + lorazepam	risk ratio (RR)	1.9[1.39,2.59]	high	not serious	not serious	not serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	sedated at 60 minutes	haloperidol + lorazepam	risk ratio (RR)	1.41[1.15, 1.72]	high	not serious	not serious	not serious	not serious	
Zaman H, Sampson SJ, Beck AL, Sharma T, Clay FJ, Spyridi S, Zhao S, Gillies D. Benzodiazepines for psychosis-induced	sedation - immediate term	Lorazepam	risk ratio (RR)	0.88 [0.77 , 0.99]	high	not serious	not serious	not serious	not serious	low

aggression or agitation. Cochrane Database Syst Rev. 2017 Dec 8;12(12):CD003079. doi: 10.1002/14651858.CD003079.pub 4. PMID: 29219171; PMCID: PMC6486117.										
Zaman H, Sampson SJ, Beck AL, Sharma T, Clay FJ, Spyridi S, Zhao S, Gillies D. Benzodiazepines for psychosis-induced aggression or agitation. Cochrane Database Syst Rev. 2017 Dec 8;12(12):CD003079. doi: 10.1002/14651858.CD003079.pub	sedation - medium term	Lorazepam	risk ratio (RR)	0.91 [0.84, 0.98]	high	not serious	not serious	serious	not serious	

4. PMID: 29219171; PMCID: PMC6486117.										
Zaman H, Sampson SJ, Beck AL, Sharma T, Clay FJ, Spyridi S, Zhao S, Gillies D. Benzodiaze- pines for psycho- sis-induced ag- gression or agi- tation. Cochrane Database Syst Rev. 2017 Dec 8;12(12):CD0030 79. doi: 10.1002/1465185 8.CD003079.pub 4. PMID: 29219171; PMCID: PMC6486117.	sedation - medium term	Midazolam	risk ratio (RR)	1.13 [1.04 , 1.23]	high	not seri- ous	not seri- ous	serious	not serious	
Zaman H, Sampson SJ, Beck AL, Sharma T, Clay FJ, Spyridi S, Zhao S, Gillies	sedation - short term	Lorazepam	risk ratio (RR)	0.85 [0.77 , 0.95]	high	not seri- ous	not seri- ous	serious	not serious	

D. Benzodiazepines for psychosis-induced aggression or agitation. Cochrane Database Syst Rev. 2017 Dec 8;12(12):CD003079. doi: 10.1002/14651858.CD003079.pub 4. PMID: 29219171; PMCID: PMC6486117.										
Zaman H, Sampson SJ, Beck AL, Sharma T, Clay FJ, Spyridi S, Zhao S, Gillies D. Benzodiazepines for psychosis-induced aggression or agitation. Cochrane Database Syst Rev. 2017 Dec 8;12(12):CD003079. doi:	sedation - short term	Midazolam	risk ratio (RR)	1.32 [1.16, 1.49]	high	not serious	not serious	serious	not serious	

10.1002/1465185 8.CD003079.pub 4. PMID: 29219171; PMCID: PMC6486117.										
Zaman H, Sampson SJ, Beck AL, Sharma T, Clay FJ, Spyridi S, Zhao S, Gillies D. Benzodiaze- pines for psycho- sis-induced ag- gression or agi- tation. Cochrane Database Syst Rev. 2017 Dec 8;12(12):CD0030 79. doi: 10.1002/1465185 8.CD003079.pub 4. PMID: 29219171; PMCID: PMC6486117.	sedation medium- term	Midazolam + Haloperi- dol	risk ratio (RR)	12.00 [1.66 , 86.59]	high	not seri- ous	not seri- ous	very seri- ous	not serious	
Brankston G, Pich- eca L. Antipsychotic Drugs or Benzodiaz- epines for Rapid	time to se- dation	Midazolam		Midazo- lam has a signifi- cantly	high	not seri- ous	serious	not seri- ous	not serious	

Tranquilization in Mental Health Facilities or Emergency Department Settings [Internet]. Ottawa (ON): Canadian Agency for Drugs and Technologies in Health; 2021 Aug. PMID: 36264874.				shorter time to onset of sedation and a more rapid time to arousal than lorazepam or haloperidol						
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	blurred vision by 72 hours	Haloperidol	risk ratio (RR)	3.97[1.15, 13.68]	high	serious	not serious	not serious	not serious	low
Ostinelli EG, Jajawi S, Spyridi S, Sayal K, Jayaram MB. Aripiprazole (intramuscular) for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane	somnolence during 2h	Aripiprazol	risk ratio (RR)	0.77[0.6,0.99]	low	serious	not serious	serious	not serious	low

Database Syst Rev. 2018 Jan 8;1(1):CD008074. doi: 10.1002/14651858.CD008074.										
Ostinelli EG, Jajawi S, Spyridi S, Sayal K, Jayaram MB. Aripiprazole (intramuscular) for psychosis-induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev. 2018 Jan 8;1(1):CD008074. doi: 10.1002/14651858.CD008074.	Adverse effects: somnolence during 24 hours	Aripiprazol	risk ratio (RR)	0.25 (0.08 to 0.82)	low	not serious	serious	serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database	tremor - by 72 hours	Haloperidol	risk ratio (RR)	2.64[1.37, 5.11]	some concerns	not serious	serious	serious	not serious	low

Syst Rev 2017;7: CD009377.										
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	tremor during 14 days	Haloperidol	risk ratio (RR)	3.2[1.27,8.07]	some concerns	not serious	serious	serious	not serious	
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	Use of antiparkinson drugs - between 3 - 7 days (oral phase)	Haloperidol	risk ratio (RR)	4.94[2.5,9.78]	high	not serious	not serious	serious	not serious	low
Ostinelli EG, Brooke-Powney MJ, Li X, Adams CE. Haloperidol for psychosis induced aggression or agitation (rapid tranquillisation). Cochrane Database Syst Rev 2017;7: CD009377.	additional restraint, seclusion or special observation during 12 hours	Haloperidol	risk ratio (RR)	0.29[0.13,0.61]	critical	not serious	not serious	very serious	not serious	very low

Behandlung rezidivierender Aggression

Studie	Diagnose/ Zielgruppe	Outcome	Medikation	Effekt- schätzer	Ergebnis	Risk of Bias Gesamt	GRADE - Inconsis- tency	GRADE- Indi- rectness	GRADE_Im- precision	GRADE- ins- gesamt
Stoffers-Winterling JM, Storebø OJ, Pereira Ri- beiro J, Kongerslev MT, Völlm BA, Mattivi JT, Faltinsen E, Todorovac A, Jørgensen MS, Callesen HE, Sales CP, Schaug JP, Simonsen E, Lieb K. Pharmacological interventions for people with borderline personality disorder. Cochrane Database Syst Rev. 2022 Nov 14;11(11):CD012956. doi: 10.1002/14651858.	borderline personality disorder	Affective instabil- ity at end of treat- ment	Valproic acid	mean dif- ference	1.72 [0.68 , 2.76]	critical	not serious	not seri- ous	very serious	
Stoffers-Winterling JM, Storebø OJ, Pereira Ri- beiro J, Kongerslev MT, Völlm BA, Mattivi JT, Faltinsen E, Todorovac A, Jørgensen MS, Callesen HE, Sales CP, Schaug JP, Simonsen E,	borderline personality disorder	Affective instabil- ity at end of treat- ment	Olanzapin	mean dif- ference	2.28 [1.51 , 3.05]	critical	not serious	not seri- ous	very serious	very low

Lieb K. Pharmacological interventions for people with borderline personality disorder. Cochrane Database Syst Rev. 2022 Nov 14;11(11):CD012956. doi: 10.1002/14651858.										
Stoffers-Winterling JM, Storebø OJ, Pereira Ribeiro J, Kongerslev MT, Völlm BA, Mattivi JT, Faltinsen E, Todorovac A, Jørgensen MS, Callesen HE, Sales CP, Schaug JP, Simonsen E, Lieb K. Pharmacological interventions for people with borderline personality disorder. Cochrane Database Syst Rev. 2022 Nov 14;11(11):CD012956. doi: 10.1002/14651858.	borderline personality disorder	Affective instability at end of treatment	Antidepressants	mean difference	-1.66 [-3.26, -0.06]	some concerns	not serious	not serious	very serious	
Stoffers-Winterling JM, Storebø OJ, Pereira Ribeiro J, Kongerslev MT, Völlm BA, Mattivi JT, Faltinsen E, Todorovac	borderline personality disorder	Affective instability at end of treatment	Antipsychotics	mean difference	-0.16 [-0.31, -0.01]	high	serious	not serious	very serious	

A, Jørgensen MS, Callesen HE, Sales CP, Schaug JP, Simonsen E, Lieb K. Pharmacological interventions for people with borderline personality disorder. Cochrane Database Syst Rev. 2022 Nov 14;11(11):CD012956. doi: 10.1002/14651858.										
Stoffers-Winterling JM, Storebø OJ, Pereira Ribeiro J, Kongerslev MT, Völlm BA, Mattivi JT, Faltinsen E, Todorovac A, Jørgensen MS, Callesen HE, Sales CP, Schaug JP, Simonsen E, Lieb K. Pharmacological interventions for people with borderline personality disorder. Cochrane Database Syst Rev. 2022 Nov 14;11(11):CD012956. doi: 10.1002/14651858.	borderline personality disorder	Anger at the end of treatment	Olanzapin	mean difference	1.14 [0.31, 1.97]	critical	not serious	not serious	very serious	
Stoffers-Winterling JM, Storebø OJ, Pereira	borderline personality disorder	Anger at the end	Alprazolam	mean difference	1.65 [0.80, 2.50]	high	not serious	not serious	very serious	very low

Ribeiro J, Kongerslev MT, Völlm BA, Mattivi JT, Faltinsen E, Todorovac A, Jørgensen MS, Callesen HE, Sales CP, Schaug JP, Simonsen E, Lieb K. Pharmacological interventions for people with borderline personality disorder. Cochrane Database Syst Rev. 2022 Nov 14;11(11):CD012956. doi: 10.1002/14651858.		of treatment								
Stoffers-Winterling JM, Storebø OJ, Pereira Ribeiro J, Kongerslev MT, Völlm BA, Mattivi JT, Faltinsen E, Todorovac A, Jørgensen MS, Callesen HE, Sales CP, Schaug JP, Simonsen E, Lieb K. Pharmacological interventions for people with borderline personality disorder. Cochrane Database Syst Rev. 2022 Nov	borderline personality disorder	Anger at the end of treatment	Alprazolam	mean difference	1.41 [0.24, 2.58]	high	not serious	not serious	very serious	

14;11(11):CD012956. doi: 10.1002/14651858.										
Stoffers-Winterling JM, Storebø OJ, Pereira Ribeiro J, Kongerslev MT, Völlm BA, Mattivi JT, Faltinsen E, Todorovac A, Jørgensen MS, Callesen HE, Sales CP, Schaug JP, Simonsen E, Lieb K. Pharmacological interventions for people with borderline personality disorder. Cochrane Database Syst Rev. 2022 Nov 14;11(11):CD012956. doi: 10.1002/14651858.	borderline personality disorder	Anger at the end of treatment	Olanzapin	mean difference	-0.33 [-0.48 , -0.18]	high	serious	not serious	not serious	
Stoffers-Winterling JM, Storebø OJ, Pereira Ribeiro J, Kongerslev MT, Völlm BA, Mattivi JT, Faltinsen E, Todorovac A, Jørgensen MS, Callesen HE, Sales CP, Schaug JP, Simonsen E, Lieb K. Pharmacological interventions for people with borderline	borderline personality disorder	Anger at the end of treatment	Antipsychotics	mean difference	-0.37 [-0.55 , -0.18]	high	not serious	not serious	serious	

personality disorder. Cochrane Database Syst Rev. 2022 Nov 14;11(11):CD012956. doi: 10.1002/14651858.										
Stoffers-Winterling JM, Storebø OJ, Pereira Ri- beiro J, Kongerslev MT, Völlm BA, Mattivi JT, Faltinsen E, Todorovac A, Jørgensen MS, Callesen HE, Sales CP, Schaug JP, Simonsen E, Lieb K. Pharmacological interventions for peo- ple with borderline per- sonality disorder. Cochrane Database Syst Rev. 2022 Nov 14;11(11):CD012956. doi: 10.1002/14651858.	borderline personality disorder	Anger at the end of treat- ment	Antidepres- sants	mean dif- ference	-0.37 [- 0.64 , - 0.11]	high	not serious	not seri- ous	very serious	
Stoffers-Winterling JM, Storebø OJ, Pereira Ri- beiro J, Kongerslev MT, Völlm BA, Mattivi JT, Faltinsen E, Todorovac A, Jørgensen MS, Callesen HE, Sales CP, Schaug JP, Simonsen E,	borderline personality disorder	Anger at the end of treat- ment	Mood stabi- lisers	mean dif- ference	-0.67 [- 1.10 , - 0.24]	high	not serious	not seri- ous	very serious	

Lieb K. Pharmacological interventions for people with borderline personality disorder. Cochrane Database Syst Rev. 2022 Nov 14;11(11):CD012956. doi: 10.1002/14651858.										
Stoffers-Winterling JM, Storebø OJ, Pereira Ribeiro J, Kongerslev MT, Völm BA, Mattivi JT, Faltinsen E, Todorovac A, Jørgensen MS, Callesen HE, Sales CP, Schaug JP, Simonsen E, Lieb K. Pharmacological interventions for people with borderline personality disorder. Cochrane Database Syst Rev. 2022 Nov 14;11(11):CD012956. doi: 10.1002/14651858.	borderline personality disorder	Anger at the end of treatment	Omega-3 fatty acids	mean difference	-0.48 [-0.95, -0.01]	high	not serious	not serious	very serious	
Mühlbauer V, Möhler R, Dichter MN, Zuidema SU, Köpke S, Luijendijk HJ. Antipsychotics for agitation and psychosis	AD / vascular dementia	Any adverse event	Atypical antipsychotics	risk ratio	1.05 [1.02, 1.09]	high	serious	not serious	not serious	low

in people with Alzheimer's disease and vascular dementia. Cochrane Database Syst Rev. 2021 Dec 17;12(12):CD013304. doi: 10.1002/14651858.										
Mühlbauer V, Möhler R, Dichter MN, Zuidema SU, Köpke S, Luijendijk HJ. Antipsychotics for agitation and psychosis in people with Alzheimer's disease and vascular dementia. Cochrane Database Syst Rev. 2021 Dec 17;12(12):CD013304. doi: 10.1002/14651858.	AD / vascular dementia	Any adverse event	Atypical antipsychotics	risk ratio	1.19 [1.07, 1.32]	high	serious	not serious	not serious	
Mühlbauer V, Möhler R, Dichter MN, Zuidema SU, Köpke S, Luijendijk HJ. Antipsychotics for agitation and psychosis in people with Alzheimer's disease and vascular dementia. Cochrane Database Syst Rev. 2021 Dec	AD / vascular dementia	Any serious adverse event	Atypical antipsychotics	risk ratio	1.32 [1.09, 1.61]	high	serious	not serious	not serious	

17;12(12):CD013304. doi: 10.1002/14651858.										
Marinheiro G, Dantas JM, Mutarelli A, Menezes de Almeida A, Monteiro GA, Zerlotto DS, Telles JPM. Efficacy and safety of brexpiprazole for the treatment of agitation in Alzheimer's disease: a meta-analysis of randomized controlled trials. Neurol Sci. 2024 Oct;45(10):4679-4686. doi: 10.1007/s10072-024-07576-8.	Alzheimer's disease (AD)	CGI-S score at week 12	brexpiprazole	mean difference	-0.20 (-0.36; -0.05)	low	serious	not serious	not serious	
Mühlbauer V, Möhler R, Dichter MN, Zuidema SU, Köpke S, Luijendijk HJ. Antipsychotics for agitation and psychosis in people with Alzheimer's disease and vascular dementia. Cochrane Database Syst Rev. 2021 Dec 17;12(12):CD013304. doi: 10.1002/14651858.	AD / vascular dementia	change in agitation	Haloperidol	standardized mean difference	-0.29 [-0.51, -0.07]	high	not serious	not serious	serious	low

Mühlbauer V, Möhler R, Dichter MN, Zuidema SU, Köpke S, Luijendijk HJ. Antipsychotics for agitation and psychosis in people with Alzheimer's disease and vascular dementia. Cochrane Database Syst Rev. 2021 Dec 17;12(12):CD013304. doi: 10.1002/14651858.	AD / vascular dementia	change in agitation	Atypical antipsychotics	standardized mean difference	-0.21 [-0.30, -0.12]	high	not serious	not serious	not serious	
Mühlbauer V, Möhler R, Dichter MN, Zuidema SU, Köpke S, Luijendijk HJ. Antipsychotics for agitation and psychosis in people with Alzheimer's disease and vascular dementia. Cochrane Database Syst Rev. 2021 Dec 17;12(12):CD013304. doi: 10.1002/14651858.	AD / vascular dementia	change in agitation	Risperidone	standardized mean difference	-0.26 [-0.44, -0.09]	critical	not serious	not serious	not serious	
Mühlbauer V, Möhler R, Dichter MN, Zuidema SU, Köpke S, Luijendijk HJ. Antipsychotics for agitation and psychosis	AD / vascular dementia	change in agitation (CGI-S) at endpoint	Atypical antipsychotics	risk ratio	1.31 (1.16 to 1.48)	high	not serious	not serious	not serious	

in people with Alzheimer's disease and vascular dementia. Cochrane Database Syst Rev. 2021 Dec 17;12(12):CD013304. doi: 10.1002/14651858.		(3 to 16 weeks)								
Mühlbauer V, Möhler R, Dichter MN, Zuidema SU, Köpke S, Luijendijk HJ. Antipsychotics for agitation and psychosis in people with Alzheimer's disease and vascular dementia. Cochrane Database Syst Rev. 2021 Dec 17;12(12):CD013304. doi: 10.1002/14651858.	AD / vascular dementia	change in agitation (CGI-S) at end-point/ responders for agitation	Typical antipsychotics	risk ratio	1.18 (1.01 to 1.38)	critical	not serious	not serious	not serious	
Mühlbauer V, Möhler R, Dichter MN, Zuidema SU, Köpke S, Luijendijk HJ. Antipsychotics for agitation and psychosis in people with Alzheimer's disease and vascular dementia. Cochrane Database Syst Rev. 2021 Dec	AD / vascular dementia	CMAI total score at end-point (3 to 16 weeks)	Typical antipsychotics	mean difference	-5.2 (-8.2 to -2.2), SMD: -0.36 (-0.15 to -0.57)	critical	serious	not serious	serious	low

17;12(12):CD013304. doi: 10.1002/14651858.										
Marinheiro G, Dantas JM, Mutarelli A, Menezes de Almeida A, Monteiro GA, Zerlotto DS, Telles JPM. Efficacy and safety of brexpiprazole for the treatment of agitation in Alzheimer's disease: a meta-analysis of randomized controlled trials. Neurol Sci. 2024 Oct;45(10):4679-4686. doi: 10.1007/s10072-024-07576-8.	Alzheimer's disease (AD)	CMAI total score at week 12	brexpiprazole	mean difference	-3.05 (- 5.12, - 0.98)	low	serious	not serious	not serious	
Marinheiro G, Dantas JM, Mutarelli A, Menezes de Almeida A, Monteiro GA, Zerlotto DS, Telles JPM. Efficacy and safety of brexpiprazole for the treatment of agitation in Alzheimer's disease: a meta-analysis of randomized controlled trials. Neurol Sci. 2024	Alzheimer's disease (AD)	CMAI total score at week 12	brexpiprazole	mean difference	-4.36 (- 7.02, - 1.70)	low	serious	not serious	not serious	

Oct;45(10):4679-4686. doi: 10.1007/s10072-024-07576-8.										
Mühlbauer V, Möhler R, Dichter MN, Zuidema SU, Köpke S, Luijendijk HJ. Antipsychotics for agitation and psychosis in people with Alzheimer's disease and vascular dementia. Cochrane Database Syst Rev. 2021 Dec 17;12(12):CD013304. doi: 10.1002/14651858.	AD / vascular dementia	Extrapyramidal symptoms	Typical antipsychotics	risk ratio	2.26 (1.58 to 3.23)	low	not serious	not serious	not serious	
Mühlbauer V, Möhler R, Dichter MN, Zuidema SU, Köpke S, Luijendijk HJ. Antipsychotics for agitation and psychosis in people with Alzheimer's disease and vascular dementia. Cochrane Database Syst Rev. 2021 Dec 17;12(12):CD013304. doi: 10.1002/14651858.	AD / vascular dementia	Extrapyramidal symptoms	Atypical antipsychotics	risk ratio	1.39 (1.14 to 1.68)	high	not serious	not serious	not serious	
Mühlbauer V, Möhler R, Dichter MN, Zuidema	AD / vascular dementia	Extrapyramidal	Risperidone	risk ratio	1.75 [1.32 , 2.33]	high	serious	not serious	not serious	low

SU, Köpke S, Luijendijk HJ. Antipsychotics for agitation and psychosis in people with Alzheimer's disease and vascular dementia. Cochrane Database Syst Rev. 2021 Dec 17;12(12):CD013304. doi: 10.1002/14651858.		symptoms								
Khalifa NR, Gibbon S, Völlm BA, Cheung NH-Y, McCarthy L. Pharmacological interventions for antisocial personality disorder. Cochrane Database of Systematic Reviews 2020, Issue 9. Art. No.: CD007667. DOI: 10.1002/14651858.CD007667.pub3.	antisocial personality disorder	frequency of aggressive acts per week	Phenytoin	mean difference	-0.18	critical	not serious	not serious	serious	low
Faay MDM, Czobor P, Sommer IEC. Efficacy of typical and atypical antipsychotic medication on hostility in patients with psychosis-spectrum disorders: a review and meta-analysis. Neuropsychopharmacology. 2018 Nov;43(12):2340-2349.	psychotic disorders	hostility	Typical antipsychotics	Hedge's g	0.260 (sensitivity analysis: 0.212)	some concerns	not serious	not serious	very serious	low

doi: 10.1038/s41386-018-0161-2.										
Faay MDM, Czobor P, Sommer IEC. Efficacy of typical and atypical antipsychotic medication on hostility in patients with psychosis-spectrum disorders: a review and meta-analysis. Neuropsychopharmacology. 2018 Nov;43(12):2340-2349. doi: 10.1038/s41386-018-0161-2.	psychotic disorders	hostility	Clozapine	Hedge's g	0.415	some concerns	not serious	not serious	very serious	
Faay MDM, Czobor P, Sommer IEC. Efficacy of typical and atypical antipsychotic medication on hostility in patients with psychosis-spectrum disorders: a review and meta-analysis. Neuropsychopharmacology. 2018 Nov;43(12):2340-2349. doi: 10.1038/s41386-018-0161-2.	psychotic disorders, high-dosage group	hostility	Typical antipsychotics	Hedge's g	0.567	some concerns	not serious	not serious	serious	

Buoli M, Rovera C, Esposito CM, Grassi S, Cahn W, Altamura AC. THE USE OF LONG-ACTING ANTIPSYCHOTICS FOR THE MANAGEMENT OF AGGRESSIVENESS IN SCHIZOPHRENIA: A CLINICAL OVERVIEW. Clin Schizophr Relat Psychoses. 2018 Jun 26. doi: 10.3371/CSRP.BURO.061518.	schizophrenia	hostility (PANSS hostility item scores)	aripiprazole lauroxil	mean change from baseline	-0.24	high	not serious	not serious	not serious	
Faden J, Citrome L. A systematic review of clozapine for aggression and violence in patients with schizophrenia or schizoaffective disorder. Schizophr Res. 2024 Jun;268:265-281. doi: 10.1016/j.schres.2023.11.008.	Treatment-resistant inpatients with schizophrenia or schizoaffective disorder	hostility (reduction in score at 14 weeks)	Clozapine		significantly greater anti-aggressive effects than risperidone (p = 0.012). 9),	some concerns	not serious	not serious	serious	
Faden J, Citrome L. A systematic review of clozapine for aggression and violence in patients with schizophrenia or schizoaffective disorder. Schizophr Res. 2024 Jun;268:265-	Treatment-resistant inpatients with schizophrenia or schizoaffective disorder	hostility (reduction in score at 14 weeks)	Clozapine		significantly greater anti-aggressive effects than haloperidol (p = 0.021)	some concerns	not serious	not serious	serious	

281. doi: 10.1016/j.schres.2023.11.008.										
Faden J, Citrome L. A systematic review of clozapine for aggression and violence in patients with schizophrenia or schizoaffective disorder. Schizophr Res. 2024 Jun;268:265-281. doi: 10.1016/j.schres.2023.11.008.	Treatment-resistant inpatients with schizophrenia or schizoaffective disorder	hostility score at 14 weeks	Clozapine		Reduction in hostility scores over time was significant only for clozapine (p = 0.019),	some concerns	not serious	not serious	serious	
Stoffers-Winterling JM, Storebø OJ, Pereira Ribeiro J, Kongerslev MT, Völlm BA, Mattivi JT, Faltinsen E, Todorovac A, Jørgensen MS, Callesen HE, Sales CP, Schaug JP, Simonsen E, Lieb K. Pharmacological interventions for people with borderline personality disorder. Cochrane Database	borderline personality disorder	Impulsivity at the end of treatment	Valproic acid	mean difference	12.59 [6.11, 19.07]	critical	not serious	not serious	very serious	very low

Syst Rev. 2022 Nov 14;11(11):CD012956. doi: 10.1002/14651858.										
Stoffers-Winterling JM, Storebø OJ, Pereira Ribeiro J, Kongerslev MT, Völlm BA, Mattivi JT, Faltinsen E, Todorovac A, Jørgensen MS, Callesen HE, Sales CP, Schaug JP, Simonsen E, Lieb K. Pharmacological interventions for people with borderline personality disorder. Cochrane Database Syst Rev. 2022 Nov 14;11(11):CD012956. doi: 10.1002/14651858.	borderline personality disorder	Impulsivity at the end of treatment	Alprazolam	mean difference	2.18 [1.20, 3.16]	high	not serious	not serious	very serious	
Stoffers-Winterling JM, Storebø OJ, Pereira Ribeiro J, Kongerslev MT, Völlm BA, Mattivi JT, Faltinsen E, Todorovac A, Jørgensen MS, Callesen HE, Sales CP, Schaug JP, Simonsen E, Lieb K. Pharmacological interventions for	borderline personality disorder	Impulsivity at the end of treatment	Alprazolam	mean difference	1.83 [0.66, 3.00]	high	not serious	not serious	very serious	

people with borderline personality disorder. Cochrane Database Syst Rev. 2022 Nov 14;11(11):CD012956. doi: 10.1002/14651858.										
Stoffers-Winterling JM, Storebø OJ, Pereira Ribeiro J, Kongerslev MT, Völlm BA, Mattivi JT, Faltinsen E, Todorovac A, Jørgensen MS, Callesen HE, Sales CP, Schaug JP, Simonsen E, Lieb K. Pharmacological interventions for people with borderline personality disorder. Cochrane Database Syst Rev. 2022 Nov 14;11(11):CD012956. doi: 10.1002/14651858.	borderline personality disorder	Impulsivity at the end of treatment	Carbamazepine	mean difference	-1.73 [-2.87, -0.59]	high	not serious	not serious	very serious	
Stoffers-Winterling JM, Storebø OJ, Pereira Ribeiro J, Kongerslev MT, Völlm BA, Mattivi JT, Faltinsen E, Todorovac A, Jørgensen MS, Callesen HE, Sales CP,	borderline personality disorder	Impulsivity at the end of treatment	Trifluoperazine hydrochloride	mean difference	1.38 [0.08, 2.68]	high	not serious	not serious	very serious	

Schaug JP, Simonsen E, Lieb K. Pharmacological interventions for people with borderline personality disorder. Cochrane Database Syst Rev. 2022 Nov 14;11(11):CD012956. doi: 10.1002/14651858.										
Stoffers-Winterling JM, Storebø OJ, Pereira Ribeiro J, Kongerslev MT, Völlm BA, Mattivi JT, Faltinsen E, Todorovac A, Jørgensen MS, Callesen HE, Sales CP, Schaug JP, Simonsen E, Lieb K. Pharmacological interventions for people with borderline personality disorder. Cochrane Database Syst Rev. 2022 Nov 14;11(11):CD012956. doi: 10.1002/14651858.	borderline personality disorder	Interpersonal problems at end of treatment	Antipsychotics	standardized mean difference	-0.21 [-0.34, -0.08]	high	serious	not serious	not serious	
Stoffers-Winterling JM, Storebø OJ, Pereira Ribeiro J, Kongerslev MT, Völlm BA, Mattivi JT,	borderline personality disorder	Interpersonal problems at end of	Mood stabilisers	standardized mean difference	-0.58 [-1.14, -0.02]	high	serious	not serious	not serious	low

Faltinsen E, Todorovac A, Jørgensen MS, Callesen HE, Sales CP, Schaug JP, Simonsen E, Lieb K. Pharmacological interventions for people with borderline personality disorder. Cochrane Database Syst Rev. 2022 Nov 14;11(11):CD012956. doi: 10.1002/14651858.		treatment								
Iffland M, Livingstone N, Jorgensen M, Hazell P, Gillies D. Pharmacological intervention for irritability, aggression, and self-injury in autism spectrum disorder (ASD). Cochrane Database Syst Rev. 2023 Oct 9;10(10):CD011769. doi: 10.1002/14651858.CD011769.	autism spectrum disorder (ASD)	Irritability	Atypical antipsychotic	mean difference	-0.94 [-1.70, -0.18]	low	not serious	not serious	not serious	very low
Wang G, Huang H, Wang Y, Yang Y, Li C, Luo S, Li Y. A randomized, prospective, active-controlled study	schizophrenia	MOAS aggression against property	Paliperidone palmitate	t-test	-3.444	low	not serious	not serious	serious	low

comparing intramuscular long-acting paliperidone palmitate versus oral antipsychotics in patients with schizophrenia at risk of violent behavior. Prog Neuropsychopharmacol Biol Psychiatry. 2024 Feb 8;129:110897.		at 13 weeks								
Wang G, Huang H, Wang Y, Yang Y, Li C, Luo S, Li Y. A randomized, prospective, active-controlled study comparing intramuscular long-acting paliperidone palmitate versus oral antipsychotics in patients with schizophrenia at risk of violent behavior. Prog Neuropsychopharmacol Biol Psychiatry. 2024 Feb 8;129:110897.	schizophrenia	MOAS aggression against property at 25 weeks	Paliperidone palmitate	t-test	-4.683	low	not serious	not serious	serious	
Wang G, Huang H, Wang Y, Yang Y, Li C, Luo S, Li Y. A randomized, prospective,	schizophrenia	MOAS aggression against property	Paliperidone palmitate	t-test	-6.558	low	not serious	not serious	serious	

active-controlled study comparing intramuscular long-acting paliperidone palmitate versus oral antipsychotics in patients with schizophrenia at risk of violent behavior. Prog Neuropsychopharmacol Biol Psychiatry. 2024 Feb 8;129:110897.		at 25 weeks								
Wang G, Huang H, Wang Y, Yang Y, Li C, Luo S, Li Y. A randomized, prospective, active-controlled study comparing intramuscular long-acting paliperidone palmitate versus oral antipsychotics in patients with schizophrenia at risk of violent behavior. Prog Neuropsychopharmacol Biol Psychiatry. 2024 Feb 8;129:110897.	schizophrenia	MOAS physical aggression at 49 weeks	Paliperidone palmitate	t-test	-4.437	low	not serious	not serious	serious	
Wang G, Huang H, Wang Y, Yang Y, Li C, Luo S, Li Y. A	schizophrenia	MOAS physical	Paliperidone palmitate	t-test	-2.104	low	not serious	not serious	serious	low

randomized, prospective, active-controlled study comparing intramuscular long-acting paliperidone palmitate versus oral antipsychotics in patients with schizophrenia at risk of violent behavior. Prog Neuropsychopharmacol Biol Psychiatry. 2024 Feb 8;129:110897.		aggression at 13 weeks								
Wang G, Huang H, Wang Y, Yang Y, Li C, Luo S, Li Y. A randomized, prospective, active-controlled study comparing intramuscular long-acting paliperidone palmitate versus oral antipsychotics in patients with schizophrenia at risk of violent behavior. Prog Neuropsychopharmacol Biol Psychiatry. 2024 Feb 8;129:110897.	schizophrenia	MOAS physical aggression at 25 weeks	Paliperidone palmitate	t-test	-4.390	low	not serious	not serious	serious	

Faden J, Citrome L. A systematic review of clozapine for aggression and violence in patients with schizophrenia or schizoaffective disorder. Schizophr Res. 2024 Jun;268:265-281. doi: 10.1016/j.schres.2023.11.008.	schizophrenia/schizoaffective disorder	MOAS physical aggression subscale scores at 12 weeks	Clozapine		MOAS physical aggression subscale scores were consistent, with clozapine being statistically superior to both olanzapine and haloperidol ($p < 0.001$ for each), and olanzapine being superior to haloperidol ($p < 0.001$).	some concerns	not serious	not serious	serious	
Faden J, Citrome L. A systematic review of clozapine for aggression and violence in patients with schizophrenia or schizoaffective disorder. Schizophr Res. 2024 Jun;268:265-	schizophrenia/schizoaffective disorder	MOAS physical aggression subscale scores at 12 weeks	Clozapine		MOAS physical aggression subscale scores were consistent, with clozapine being	some concerns	not serious	not serious	serious	

281. doi: 10.1016/j.schres.2023.11.008.					statistically superior to both olanzapine and haloperidol ($p < 0.001$ for each),					
Faden J, Citrome L. A systematic review of clozapine for aggression and violence in patients with schizophrenia or schizoaffective disorder. Schizophr Res. 2024 Jun;268:265-281. doi: 10.1016/j.schres.2023.11.008.	schizophrenia/schizoaffective disorder	MOAS physical aggression subscale scores at 12 weeks	Olanzapine		and olanzapine being superior to haloperidol ($p < 0.001$).	some concerns	not serious	not serious	serious	
Krakowski M, Tural U, Czobor P. The Importance of Conduct Disorder in the Treatment of Violence in Schizophrenia: Efficacy of Clozapine Compared With Olanzapine and Haloperidol. Am J Psychiatry. 2021 Mar	schizophrenia with conduct disorder	MOAS Physical assault score at 12 weeks	Clozapine	odds ratio	4.12 (3.45–4.76)	high	not serious	not serious	very serious	very low

1;178(3):266-274. doi: 10.1176/appi.ajp.2020.20010052										
Krakowski M, Tural U, Czobor P. The Importance of Conduct Disorder in the Treatment of Violence in Schizophrenia: Efficacy of Clozapine Compared With Olanzapine and Haloperidol. Am J Psychiatry. 2021 Mar 1;178(3):266-274. doi: 10.1176/appi.ajp.2020.20010052	schizophrenia with conduct disorder	MOAS Physical assault score at 12 weeks	Clozapine	odds ratio	1.66 (1.43–2.00)	high	not serious	not serious	very serious	
Krakowski M, Tural U, Czobor P. The Importance of Conduct Disorder in the Treatment of Violence in Schizophrenia: Efficacy of Clozapine Compared With Olanzapine and Haloperidol. Am J Psychiatry. 2021 Mar 1;178(3):266-274. doi: 10.1176/appi.ajp.2020.20010052	schizophrenia with conduct disorder	MOAS Physical assault score at 12 weeks	Olanzapine	odds ratio	2.44 (2.12–2.82)	high	not serious	not serious	very serious	

Krakowski M, Tural U, Czobor P. The Importance of Conduct Disorder in the Treatment of Violence in Schizophrenia: Efficacy of Clozapine Compared With Olanzapine and Haloperidol. Am J Psychiatry. 2021 Mar 1;178(3):266-274. doi: 10.1176/appi.ajp.2020.20010052	schizophrenia with conduct disorder	MOAS Physical assault score at 12 weeks	Clozapine	odds ratio	3.09 (2.27–3.13)	high	not serious	not serious	very serious	
Krakowski M, Tural U, Czobor P. The Importance of Conduct Disorder in the Treatment of Violence in Schizophrenia: Efficacy of Clozapine Compared With Olanzapine and Haloperidol. Am J Psychiatry. 2021 Mar 1;178(3):266-274. doi: 10.1176/appi.ajp.2020.20010052	schizophrenia with conduct disorder	MOAS Physical assault score at 12 weeks	Clozapine	odds ratio	2.56 (1.89–3.57)	high	not serious	not serious	very serious	
Faden J, Citrome L. A systematic review of clozapine for	schizophrenia/schizoaffective disorder	MOAS total score at 12 weeks	Clozapine		The mean MOAS total score was 25.1,	some concerns	not serious	not serious	serious	very low

aggression and violence in patients with schizophrenia or schizoaffective disorder. Schizophr Res. 2024 Jun;268:265-281. doi: 10.1016/j.schres.2023.11.008.					32.7, and 40.9 for clozapine, olanzapine, and haloperidol, respectively. Clozapine was superior to both haloperidol and olanzapine ($p < 0.001$ for each)					
Faden J, Citrome L. A systematic review of clozapine for aggression and violence in patients with schizophrenia or schizoaffective disorder. Schizophr Res. 2024 Jun;268:265-281. doi: 10.1016/j.schres.2023.11.008.	schizophrenia/schizoaffective disorder	MOAS total score at 12 weeks	Clozapine		The mean MOAS total score was 25.1, 32.7, and 40.9 for clozapine, olanzapine, and haloperidol, respectively. Clozapine was superior to both haloperidol and	some concerns	not serious	not serious	serious	

					olanzapine ($p < 0.001$ for each)					
Faden J, Citrome L. A systematic review of clozapine for aggression and violence in patients with schizophrenia or schizoaffective disorder. Schizophr Res. 2024 Jun;268:265-281. doi: 10.1016/j.schres.2023.11.008.	schizophrenia/schizoaffective disorder	MOAS total score at 12 weeks	Olanzapine		olanzapine was superior to haloperidol ($p < 0.001$).	some concerns	not serious	not serious	serious	
Krakowski M, Tural U, Czobor P. The Importance of Conduct Disorder in the Treatment of Violence in Schizophrenia: Efficacy of Clozapine Compared With Olanzapine and Haloperidol. Am J Psychiatry. 2021 Mar 1;178(3):266-274. doi: 10.1176/appi.ajp.2020.20010052	schizophrenia with conduct disorder	MOAS total score at 12 weeks	Clozapine	odds ratio	2.70 (2.38–3.03)	high	not serious	not serious	very serious	
Krakowski M, Tural U, Czobor P. The Importance of Conduct	schizophrenia with	MOAS total	Clozapine	odds ratio	1.54 (1.34–1.69)	high	not serious	not serious	very serious	

Disorder in the Treatment of Violence in Schizophrenia: Efficacy of Clozapine Compared With Olanzapine and Haloperidol. Am J Psychiatry. 2021 Mar 1;178(3):266-274. doi: 10.1176/appi.ajp.2020.20010052	conduct disorder	score at 12 weeks								
Krakowski M, Tural U, Czobor P. The Importance of Conduct Disorder in the Treatment of Violence in Schizophrenia: Efficacy of Clozapine Compared With Olanzapine and Haloperidol. Am J Psychiatry. 2021 Mar 1;178(3):266-274. doi: 10.1176/appi.ajp.2020.20010052	schizophrenia with conduct disorder	MOAS total score at 12 weeks	Olanzapine	odds ratio	1.76 (1.59–1.95)	high	not serious	not serious	very serious	
Krakowski M, Tural U, Czobor P. The Importance of Conduct Disorder in the Treatment of Violence in Schizophrenia: Efficacy	schizophrenia with conduct disorder	MOAS total score at 12 weeks	Clozapine	odds ratio	1.92 (1.61–2.27)	high	not serious	not serious	very serious	

of Clozapine Compared With Olanzapine and Haloperidol. Am J Psychiatry. 2021 Mar 1;178(3):266-274. doi: 10.1176/appi.ajp.2020.20010052										
Krakowski M, Tural U, Czobor P. The Importance of Conduct Disorder in the Treatment of Violence in Schizophrenia: Efficacy of Clozapine Compared With Olanzapine and Haloperidol. Am J Psychiatry. 2021 Mar 1;178(3):266-274. doi: 10.1176/appi.ajp.2020.20010052	schizophrenia with conduct disorder	MOAS total score at 12 weeks	Clozapine	odds ratio	1.66 (1.41–1.96)	high	not serious	not serious	very serious	
Krakowski M, Tural U, Czobor P. The Importance of Conduct Disorder in the Treatment of Violence in Schizophrenia: Efficacy of Clozapine Compared With Olanzapine and Haloperidol. Am J	schizophrenia with conduct disorder	MOAS total score at 12 weeks	Olanzapine	odds ratio	1.15 (1.02–1.30)	high	not serious	not serious	very serious	

Psychiatry. 2021 Mar 1;178(3):266-274. doi: 10.1176/appi.ajp.2020.20010052										
Wang G, Huang H, Wang Y, Yang Y, Li C, Luo S, Li Y. A randomized, prospective, active-controlled study comparing intramuscular long-acting paliperidone palmitate versus oral antipsychotics in patients with schizophrenia at risk of violent behavior. Prog Neuropsychopharmacol Biol Psychiatry. 2024 Feb 8;129:110897.	schizophrenia	MOAS verbal aggression at 13 weeks	Paliperidone palmitate	t-test	-2.759	low	not serious	not serious	serious	
Wang G, Huang H, Wang Y, Yang Y, Li C, Luo S, Li Y. A randomized, prospective, active-controlled study comparing intramuscular long-acting paliperidone palmitate versus oral antipsychotics in patients with	schizophrenia	MOAS verbal aggression at 25 weeks	Paliperidone palmitate	t-test	-3.595	low	not serious	not serious	serious	moderate

schizophrenia at risk of violent behavior. Prog Neuropsychopharmacol Biol Psychiatry. 2024 Feb 8;129:110897.										
Wang G, Huang H, Wang Y, Yang Y, Li C, Luo S, Li Y. A randomized, prospective, active-controlled study comparing intramuscular long-acting paliperidone palmitate versus oral antipsychotics in patients with schizophrenia at risk of violent behavior. Prog Neuropsychopharmacol Biol Psychiatry. 2024 Feb 8;129:110897.	schizophrenia	MOAS verbal aggression at 49 weeks	Paliperidone palmitate	t-test	-4.402	low	not serious	not serious	serious	
Wang G, Huang H, Wang Y, Yang Y, Li C, Luo S, Li Y. A randomized, prospective, active-controlled study comparing intramuscular long-acting paliperidone palmitate versus oral antipsychotics in	schizophrenia	proportion of patients with no/low risk compared to moderate/high riskViolence	Paliperidone palmitate	chi2-test	7.853	low	not serious	not serious	serious	low

patients with schizophrenia at risk of violent behavior. Prog Neuropsychopharmacol Biol Psychiatry. 2024 Feb 8;129:110897.		Risk Assessment for Psychiatric Patients (VRAPP) at 25 weeks								
Wang G, Huang H, Wang Y, Yang Y, Li C, Luo S, Li Y. A randomized, prospective, active-controlled study comparing intramuscular long-acting paliperidone palmitate versus oral antipsychotics in patients with schizophrenia at risk of violent behavior. Prog Neuropsychopharmacol Biol Psychiatry. 2024 Feb 8;129:110897.	schizophrenia	proportion of patients with no/low risk compared to moderate/high risk Violence Risk Assessment for Psychiatric Patients (VRAPP) at 49 weeks	Paliperidone palmitate	chi2-test	18.808	low	not serious	not serious	serious	
Faden J, Citrome L. A systematic review of clozapine for aggression and violence in patients with schizophrenia or	Outpatients with schizophrenia	proportion risk of violence	Clozapine	odds ratio	0.69	some concerns	not serious	not serious	serious	

schizoaffective disorder. Schizophr Res. 2024 Jun;268:265-281. doi: 10.1016/j.schres.2023.11.008.										
Mühlbauer V, Möhler R, Dichter MN, Zuidema SU, Köpke S, Luijendijk HJ. Antipsychotics for agitation and psychosis in people with Alzheimer's disease and vascular dementia. Cochrane Database Syst Rev. 2021 Dec 17;12(12):CD013304. doi: 10.1002/14651858.	AD / vascular dementia	responders for agitation	Atypical antipsychotics	risk ratio	1.31 [1.16, 1.48]	high	serious	not serious	not serious	
Mühlbauer V, Möhler R, Dichter MN, Zuidema SU, Köpke S, Luijendijk HJ. Antipsychotics for agitation and psychosis in people with Alzheimer's disease and vascular dementia. Cochrane Database Syst Rev. 2021 Dec	AD / vascular dementia	responders for agitation	Risperidone	risk ratio	1.61 [1.29, 2.01]	critical	not serious	not serious	not serious	low

17;12(12):CD013304. doi: 10.1002/14651858.										
Mühlbauer V, Möhler R, Dichter MN, Zuidema SU, Köpke S, Luijendijk HJ. Antipsychotics for agitation and psychosis in people with Alzheimer's disease and vascular dementia. Cochrane Database Syst Rev. 2021 Dec 17;12(12):CD013304. doi: 10.1002/14651858.	AD / vascular dementia	responders for agitation	Quetiapine	risk ratio	1.35 [1.02, 1.78]	high	not serious	not serious	not serious	
Kongpakwattana K, Sawangjit R, Tawankanjanachot I, Bell JS, Hilmer SN, Chaiyakunapruk N. Pharmacological treatments for alleviating agitation in dementia: a systematic review and network meta-analysis. Br J Clin Pharmacol. 2018 Jul;84(7):1445-1456. doi: 10.1111/bcp.13604.	Dementia	response for agitation at 8 weeks (CMAI, NPI-A, BEHAVE-AD-A or NBRSA)	Dextromethorphan/Quinidin	odds ratio	3.04 (1.69–5.46)	high	not serious	not serious	not serious	

Kongpakwattana K, Sawangjit R, Tawankanjanachot I, Bell JS, Hilmer SN, Chaikyapunapruk N. Pharmacological treatments for alleviating agitation in dementia: a systematic review and network meta-analysis. Br J Clin Pharmacol. 2018 Jul;84(7):1445-1456. doi: 10.1111/bcp.13604.	Dementia	response for agitation at 8 weeks (CMAI, NPI-A, BEHAVE-AD-A or NBRSA)	Risperidone	odds ratio	1.88 (1.46–2.43)	high	not serious	not serious	not serious	
Marinheiro G, Dantas JM, Mutarelli A, Menezes de Almeida A, Monteiro GA, Zerlotto DS, Telles JPM. Efficacy and safety of brexpiprazole for the treatment of agitation in Alzheimer's disease: a meta-analysis of randomized controlled trials. Neurol Sci. 2024 Oct;45(10):4679-4686. doi: 10.1007/s10072-024-07576-8.	Alzheimer's disease (AD)	SAS total score	brexpiprazole	mean difference	0.47 (0.28, 0.66)	low	serious	not serious	not serious	low

Mühlbauer V, Möhler R, Dichter MN, Zuidema SU, Köpke S, Luijendijk HJ. Antipsychotics for agitation and psychosis in people with Alzheimer's disease and vascular dementia. Cochrane Database Syst Rev. 2021 Dec 17;12(12):CD013304. doi: 10.1002/14651858.	AD / vascular dementia	Somnolence	Haloperidol	risk ratio	2.62 (1.51 to 4.56)	high	serious	not serious	not serious	
Mühlbauer V, Möhler R, Dichter MN, Zuidema SU, Köpke S, Luijendijk HJ. Antipsychotics for agitation and psychosis in people with Alzheimer's disease and vascular dementia. Cochrane Database Syst Rev. 2021 Dec 17;12(12):CD013304. doi: 10.1002/14651858.	AD / vascular dementia	Somnolence	Atypical antipsychotics	risk ratio	1.93 (1.57 to 2.39)	high	not serious	not serious	not serious	
Mühlbauer V, Möhler R, Dichter MN, Zuidema SU, Köpke S, Luijendijk HJ. Antipsychotics for agitation and psychosis	AD / vascular dementia	Somnolence	Risperidone	risk ratio	3.35 [1.99, 5.65]	high	serious	not serious	not serious	

in people with Alzheimer's disease and vascular dementia. Cochrane Database Syst Rev. 2021 Dec 17;12(12):CD013304. doi: 10.1002/14651858.										
Mühlbauer V, Möhler R, Dichter MN, Zuidema SU, Köpke S, Luijendijk HJ. Antipsychotics for agitation and psychosis in people with Alzheimer's disease and vascular dementia. Cochrane Database Syst Rev. 2021 Dec 17;12(12):CD013304. doi: 10.1002/14651858.	AD / vascular dementia	Somno- lence	Quetiapine	risk ratio	4.83 [2.73 , 8.57]	high	serious	not seri- ous	not serious	

Reduktion von freiheitsbeschränkenden Zwangsmaßnahmen - Aggression

Literatur	Studientyp	Intervention	Outcome einzeln	Schätzer	Ergebnisse einzeln	Interpretation	Risk of Bias gesamt	GRADE - Inconsistency	GRADE - Indirectness	GRADE - Imprecision	Evidenzqualität
Bowllan, N. M., O'brien, H. P., Blackwood, C., Cross, W. F., & Walsh, P. (2025). Implementation and Evaluation of a High-Fidelity, Interprofessional Simulation Project Using Standardized Patients to Address Aggression in a Psychiatric Emergency Department. Journal of the American Psychiatric Nurses Association, 31(2), 121–127. https://doi.org/10.1177/10783903241308529	Beobachtungsstudie	Fort- und Weiterbildungsprogramme	injuries	RR	0.48	nur deskriptiv und eher secondary outcome (< 1 favors intervention)	Very high risk of bias	not serious	not serious	not serious	mäßig
Celofiga, A., Kores Plesnicar, B., Koprivsek, J., Moskon, M., Benkovic, D., & Gregoric Kumpercak, H. (2022). Effectiveness of De-Escalation in Reducing Aggression and Coercion in Acute Psychiatric Units. A Cluster Randomized Study. Frontiers in psychiatry, 13, 856153. https://doi.org/10.3389/fpsy.2022.856153	RCT	Fort- und Weiterbildungsprogramme	Aggressive Behavior, Incidents; Primary!	IRR, Incidence rate ratio (post)	0.268 (0.221; 0.324)	< 1 favors intervention	Some concerns	not serious	not serious	not serious	
Celofiga, A., Kores Plesnicar, B., Koprivsek, J., Moskon, M., Benkovic, D., & Gregoric Kumpercak, H. (2022). Effectiveness of De-Escalation in Reducing Aggression and Coercion in Acute Psychiatric Units. A Cluster Randomized Study. Frontiers in psychiatry, 13, 856153. https://doi.org/10.3389/fpsy.2022.856153	RCT	Fort- und Weiterbildungsprogramme	Aggressive Behavior, Severe Incidents	IRR, Incidence rate ratio (post)	0.142 (0.107; 0.189)	< 1 favors intervention	Some concerns	not serious	not serious	not serious	

Haefner, J., Dunn, I., & McFarland, M. (2021). A Quality Improvement Project Using Verbal De-Escalation to Reduce Seclusion and Patient Aggression in an Inpatient Psychiatric Unit. <i>Issues in mental health nursing</i> , 42(2), 138–144. https://doi.org/10.1080/01612840.2020.1789784	Beobachtungsstudie	Fort- und Weiterbildungsprogramme	rate of aggressive behavior (pre-post)	% reduction	17.3% pre vs. 11.4% post p = .024 34.1% reduction	reduction > 0 favors intervention	high risk of bias	not serious	serious	not serious	
Dike, C. C., Lamb-Pagone, J., Howe, D., Beavers, P., Bugella, B. A., & Hillbrand, M. (2021). Implementing a program to reduce restraint and seclusion utilization in a public-sector hospital: Clinical innovations, preliminary findings, and lessons learned. <i>Psychological services</i> , 18(4), 663–670. https://doi.org/10.1037/ser0000502	Beobachtungsstudie	Komplexe Behandlungsprogramme – Sonstige	staff injuries/year	Vergleich von Durchschnitt Intervention mit Durchschnitt Baseline; Effektstärke d	0.82 (t=-6.61, p<0.01), d=3.31	< 1 favors intervention	high risk of bias	serious	not serious	not serious	
Dike, C. C., Lamb-Pagone, J., Howe, D., Beavers, P., Bugella, B. A., & Hillbrand, M. (2021). Implementing a program to reduce restraint and seclusion utilization in a public-sector hospital: Clinical innovations, preliminary findings, and lessons learned. <i>Psychological services</i> , 18(4), 663–670. https://doi.org/10.1037/ser0000502	Beobachtungsstudie	Komplexe Behandlungsprogramme – Sonstige	workmen's compensation costs/year	Vergleich von Durchschnitt Intervention mit Durchschnitt Baseline;	0.76 (t=-5.11, p<0.01), d 1.45	< 1 favors intervention	high risk of bias	serious	serious	not serious	niedrig

				Effekt- stärke d							
Haines-Delmont A, Goodall K, Duxbury J, Tsang A. (2022) An Evaluation of the Implementation of a "No Force First" Informed Organisational Guide to Reduce Physical Restraint in Mental Health and Learning Disability Inpatient Settings in the UK. URL: https://pub-med.ncbi.nlm.nih.gov/35185645/ DOI: 10.3389/fpsyt.2022.749615	Beobach- tungsstudie	Kom- plexe Be- hand- lungs- pro- gramme – Sons- tige	Incidence rate of ag- gres- sion/vio- lence per 1000 pa- tient-days [95% CI] (pre-post)	inci- dence rate ra- tio IRR [95% CI] %reduc- tion	IRR = 0.94, 95% CI 0.91– 0.97 p < 0.01	IRR < 0 favors inter- vention	some con- cerns	serious	not seri- ous	not se- rious	
Hirsch, S., Baumgardt, J., Bechdorf, A., Bühling-Schindowski, F., Cole, C., Flammer, E., Jaeger, S., Junghanss, J., Kampmann, M., Sauter, D., Muche, R., Vandamme, A., Steinert, T., & Mahler, L. (2025). Umsetzung der DGPPN-S3-Leitlinie zur Prävention von Gewalt und Zwang: Prä-post-Analyse der randomisierten kontrollierten PreVCo-Studie [Implementation of the guidelines on the prevention of violence and coercion: pre-post analysis of the randomized controlled PreVCo study]. Psychiatrische Praxis, 52(3), 141–149. https://doi.org/10.1055/a-2440-8795	Beobach- tungsstudie	Kom- plexe Be- hand- lungs- pro- gramme – Sons- tige	Anzahl Übergriffe pro Mo- nat und belegtem Bett	Median (IQR) der Paardif- feren- zen	-0.041 (0.45) p = .060	not sig- nificant	Low risk	serious	not seri- ous	serious	
Steinert, T., Baumgardt, J., Bechdorf, A., Bühling-Schindowski, F., Cole, C., Flammer, E., Jaeger, S., Junghanss, J., Kampmann, M., Mahler, L., Muche, R., Sauter, D., Vandamme, A., & Hirsch, S. (2023). Implementation of guidelines on prevention of coercion and violence (PreVCo) in psychiatry: a multicentre randomised controlled trial. The Lancet regional health. Europe, 35, 100770. https://doi.org/10.1016/j.lanepe.2023.100770	RCT	Kom- plexe Be- hand- lungs- pro- gramme – Sons- tige	number of as- saults per month and occu- pied bed	median differ- ence be- tween matched pairs (in- terquar- tile range)	-0.12 (0.52), p_0.14	not sig- nificant	Low risk	serious	not seri- ous	serious	

Beaglehole, B., Beveridge, J., Campbell-Trotter, W., & Frampton, C. (2017). Unlocking an acute psychiatric ward: the impact on unauthorised absences, assaults and seclusions. BJPsych bulletin, 41(2), 92–96. https://doi.org/10.1192/pb.bp.115.052944	Beobachtungsstudie	Organisatorische und institutionelle Interventionen	aggressive incidents	RR	1.08	not significant	Some concerns	serious	not serious	not serious	niedrig
Beaglehole, B., Beveridge, J., Campbell-Trotter, W., & Frampton, C. (2017). Unlocking an acute psychiatric ward: the impact on unauthorised absences, assaults and seclusions. BJPsych bulletin, 41(2), 92–96. https://doi.org/10.1192/pb.bp.115.052944	Beobachtungsstudie	Organisatorische und institutionelle Interventionen	physical assaults	RR	1.24	not significant	Some concerns	serious	not serious	not serious	
Cibis, M. L., Wackerhagen, C., Müller, S., Lang, U. E., Schmidt, Y., & Heinz, A. (2017). Vergleichende Betrachtung von Aggressivität, Zwangsmedikation und Entweichungsraten zwischen offener und geschlossener Türpolitik auf einer Akutstation [Comparison of Aggressive Behavior, Compulsory Medication and Absconding Behavior Between Open and Closed door Policy in an Acute Psychiatric Ward]. Psychiatrische Praxis, 44(3), 141–147. https://doi.org/10.1055/s-0042-105181	Beobachtungsstudie	Organisatorische und institutionelle Interventionen	Aggressive Übergriffe	Chi ² (p-Wert)	12,2 (<0,001)	offen besser	High Risk of Bias	serious	not serious	not serious	
Indregard, A. R., Nussle, H. M., Hagen, M., Vandvik, P. O., Tesli, M., Gather, J., & Kunøe, N. (2024). Open-door policy versus treatment-as-usual in urban psychiatric inpatient wards: a pragmatic, randomised controlled, non-inferiority trial in Norway. The lancet. Psychiatry, 11(5), 330–338. https://doi.org/10.1016/S2215-0366(24)00039-7	RCT	Organisatorische und institutionelle Interventionen	incidents of violence against staff per patient stay (95% CI)	% reduction	0.15 per patient stay; 95% CI 0.11–0.20 intervention vs.	> 0 favors intervention	Some concerns	serious	not serious	not serious	

					0.18 per patient stay; 0.14–0.23 n.s. 16.7% reduction					
Schneeberger AR, Kowalinski E, Fröhlich D et al. Aggression and violence in psychiatric hospitals with and without open door policies: A 15-year naturalistic observation study. Journal of psychiatric research 2017;95:189-95.	Vergleichsstudie	Organisatorische und institutionelle Interventionen	Any aggressive behaviour (open vs. locked hospital)	Odd's ratios (OR)	1.087 [0.868; 1.370]	no significant difference	Serious risk of bias	serious	not serious	not serious
Schneeberger AR, Kowalinski E, Fröhlich D et al. Aggression and violence in psychiatric hospitals with and without open door policies: A 15-year naturalistic observation study. Journal of psychiatric research 2017;95:189-95.	Vergleichsstudie	Organisatorische und institutionelle Interventionen	Aggressive behaviour only (open vs. locked hospital)	Odd's ratios (OR)	1.073 [0.841; 1.370]	no significant difference	Serious risk of bias	serious	very serious	not serious
Schneeberger AR, Kowalinski E, Fröhlich D et al. Aggression and violence in psychiatric hospitals with and without open door policies: A 15-year naturalistic observation study. Journal of psychiatric research 2017;95:189-95.	Vergleichsstudie	Organisatorische und institutionelle Interventionen	Damage to property (open vs. locked hospital)	Odd's ratios (OR)	0.838 [0.639; 1.105]	no significant difference	Serious risk of bias	serious	very serious	not serious

Schneeberger AR, Kowalinski E, Fröhlich D et al. Aggression and violence in psychiatric hospitals with and without open door policies: A 15-year naturalistic observation study. Journal of psychiatric research 2017;95:189-95.	Vergleichs-studie	Organi-satori-sche und in-stitutio-nelle In-terven-tionen	Bodily harm (open vs. locked hospital)	Odd's ratios (OR)	1.294 [0.873; 1.876]	no sig-nificant diffe-rence	Seri-ous risk of bias	serious	very se-rious	serious	
Schneeberger AR, Kowalinski E, Fröhlich D et al. Aggression and violence in psychiatric hospitals with and without open door policies: A 15-year naturalistic observation study. Journal of psychiatric research 2017;95:189-95.	Vergleichs-studie	Organi-satori-sche und in-stitutio-nelle In-terven-tionen	Any ag-gressive behaviour (partially locked vs. locked ward)	Odd's ratios (OR)	0.929 [0.770, 1.123]	no sig-nificant diffe-rence	Mo-de-rate risk of bias	serious	very se-rious	not se-rious	
Schneeberger AR, Kowalinski E, Fröhlich D et al. Aggression and violence in psychiatric hospitals with and without open door policies: A 15-year naturalistic observation study. Journal of psychiatric research 2017;95:189-95.	Vergleichs-studie	Organi-satori-sche und in-stitutio-nelle In-terven-tionen	Any ag-gressive behaviour (open vs. locked ward)	Odd's ratios (OR)	0.870 [0.776; 0.972]	< 1, fa-vors o-pen ward	Mo-de-rate risk of bias	serious	very se-rious	not se-rious	
Schneeberger AR, Kowalinski E, Fröhlich D et al. Aggression and violence in psychiatric hospitals with and without open door policies: A 15-year naturalistic observation study. Journal of psychiatric research 2017;95:189-95.	Vergleichs-studie	Organi-satori-sche und in-stitutio-nelle In-terven-tionen	Aggres-sive be-haviour only (par-tially locked vs. locked ward)	Odd's ratios (OR)	0.830 [0.680; 0.999]	< 1, fa-vors parti-ally lo-cked ward	Mo-de-rate risk of bias	very serious	serious	not se-rious	

Schneeberger AR, Kowalinski E, Fröhlich D et al. Aggression and violence in psychiatric hospitals with and without open door policies: A 15-year naturalistic observation study. Journal of psychiatric research 2017;95:189-95.	Vergleichs-studie	Organi-satori-sche und in-stitutio-nelle In-terven-tionen	Aggres-sive be-haviour only (open vs. locked ward)	Odd's ratios (OR)	0.805 [0.718; 0.902]	< 1, fa-vors o-pen ward	Mo-de-rate risiko of bias	very serious	serious	not se-rious	
Schneeberger AR, Kowalinski E, Fröhlich D et al. Aggression and violence in psychiatric hospitals with and without open door policies: A 15-year naturalistic observation study. Journal of psychiatric research 2017;95:189-95.	Vergleichs-studie	Organi-satori-sche und in-stitutio-nelle In-terven-tionen	Damage to prop-erty (par-tially locked vs. locked ward)	Odd's ratios (OR)	1.720 [1.091; 2.667]	> 1, fa-vors lo-cked ward	Mo-de-rate risiko of bias	very serious	serious	serious	
Schneeberger AR, Kowalinski E, Fröhlich D et al. Aggression and violence in psychiatric hospitals with and without open door policies: A 15-year naturalistic observation study. Journal of psychiatric research 2017;95:189-95.	Vergleichs-studie	Organi-satori-sche und in-stitutio-nelle In-terven-tionen	Damage to prop-erty (open vs. locked ward)	Odd's ratios (OR)	1.108 [0.839; 1.476]	no sig-nificant diffe-rence	Mo-de-rate risiko of bias	very serious	serious	not se-rious	
Schneeberger AR, Kowalinski E, Fröhlich D et al. Aggression and violence in psychiatric hospitals with and without open door policies: A 15-year naturalistic observation study. Journal of psychiatric research 2017;95:189-95.	Vergleichs-studie	Organi-satori-sche und in-stitutio-nelle In-terven-tionen	Bodily harm (partially locked vs. locked ward)	Odd's ratios (OR)	1.879 [1.284; 2.773]	> 1, fa-vors lo-cked ward	Mo-de-rate risiko of bias	serious	not seri-ous	serious	

Schneeberger AR, Kowalinski E, Fröhlich D et al. Aggression and violence in psychiatric hospitals with and without open door policies: A 15-year naturalistic observation study. Journal of psychiatric research 2017;95:189-95.	Vergleichsstudie	Organisatorische und institutionelle Interventionen	Bodily harm (open vs. locked ward)	Odd's ratios (OR)	1.451 [1.112; 1.895]	> 1, favors locked ward	Moderate risk of bias	serious	not serious	not serious	
Floris, E. J. R., & Delespaul, P. A. E. G. (2020). Monitoring risk assessment on an acute psychiatric ward: Effects on aggression, seclusion and nurse behaviour. PloS one, 15(10), e0240163. https://doi.org/10.1371/journal.pone.0240163	Beobachtungsstudie	Risikovorhersage und frühe Interventionen	SDAS number of verbal aggressions, M (sd)	SMD (Standardized Mean Difference) % reduction	0.85 (1.41) pre vs. 0.90 (1.14) post p = .722 SMD = 0.039 5.9% increase	not significant	high risk of bias	serious	serious	not serious	
Floris, E. J. R., & Delespaul, P. A. E. G. (2020). Monitoring risk assessment on an acute psychiatric ward: Effects on aggression, seclusion and nurse behaviour. PloS one, 15(10), e0240163. https://doi.org/10.1371/journal.pone.0240163	Beobachtungsstudie	Risikovorhersage und frühe Interventionen	SDAS number of physical aggressions, M (sd)	SMD (Standardized Mean Difference) % reduction	0.22 (0.58) pre vs. 0.28 (0.58) post p = .069 SMD = 0.103 27.3% increase	not significant	high risk of bias	serious	not serious	not serious	
Floris, E. J. R., & Delespaul, P. A. E. G. (2020). Monitoring risk assessment on an acute psychiatric ward: Effects on aggression, seclusion and nurse behaviour. PloS one, 15(10), e0240163. https://doi.org/10.1371/journal.pone.0240163	Beobachtungsstudie	Risikovorhersage und frühe	SDAS total severity score, M (sd)	SMD (Standardized Mean	0.65 (0.85) pre vs. 0.73 (0.73)	not significant	high risk of bias	serious	serious	not serious	niedrig

		Inter-ventio-nen		Differ-ence) % reduc-tion	post p = .199 SMD = 0.101 12.3% increase						
Griffith, J. J., Meyer, D., Maguire, T., Ogloff, J. R. P., & Daffern, M. (2021). A Clinical Decision Support System to Prevent Aggression and Reduce Restrictive Practices in a Forensic Mental Health Service. <i>Psychiatric Services</i> , 72(8), 885–890. https://doi.org/10.1176/appi.ps.202000315	RCT	Risiko-vorher-sage und frühe Inter-ventio-nen	odds of an aggres-sive inci-dent	OR [95% CI]	OR = 0.56 [0.45–0.70] p < .001	OR < 0 favors inter-vention	some con-cern	not se-rious	serious	not se-rious	
Harrington A, Darke H, Ennis G, Sundram. (2019) Evaluation of an alternative model for the management of clinical risk in an adult acute psychiatric inpatient unit.	Beobach-tungsstudie	Risiko-vorher-sage und frühe Inter-ventio-nen	rate of ag-gression per 1000 occupied bed days [95% CI] (pre-post)	% reduc-tion risk Ra-tio RR [95% CI]	2.54 [1.85, 3.41] pre vs. 1.99 [1.29, 2.94] post p = .33 21.7% reduc-tion RR = 0.78 [0.47, 1.27]	not sig-nificant	high risk of bias	serious	not seri-ous	serious	
Harrington A, Darke H, Ennis G, Sundram. (2019) Evaluation of an alternative model for the management of clinical risk in an adult acute psychiatric inpatient unit.	Beobach-tungsstudie	Risiko-vorher-sage und frühe	rate of sexually inappropriate be-haviour	% reduc-tion risk Ra-tio RR [95% CI]	0.69 [0.36, -1.21] pre vs. 0.40	not sig-nificant	high risk of bias	not se-rious	serious	serious	

		Inter-ventio-nen	per 1000 occupied bed days [95% CI] (pre-post)		[0.13, ,0.93] post p = .29 42.0% reduc-tion RR = 0.57 [0.18, 1.60]						
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Reduktion von freiheitsbeschränkenden Zwangsmaßnahmen - Entweichungen

Literatur	Studien- typ	Interven- tion	Outcome einzel	Effekt- schät- zer	Ergeb- nisse einzel	Interpre- tation	Risk of Bias ge- samt	GRADE - Inconsis- tency	GRADE - In- directness	GRADE - Im- precision	Evidentqualität
Beaglehole, B., Beveridge, J., Campbell-Trotter, W., & Frampton, C. (2017). Unlocking an acute psychiatric ward: the impact on unauthorised absences, assaults and seclusions. BJPsych bulletin, 41(2), 92–96. https://doi.org/10.1192/pb.bp.115.052944	Beobach- tungsstu- die	Organisato- rische und institutio- nelle Inter- ventionen	unautho- rised ab- sences per month	RR	1.58	> 1 favors locked doors	Some concerns	serious	not serious	serious	niedrig
Cibis, M. L., Wackerhagen, C., Müller, S., Lang, U. E., Schmidt, Y., & Heinz, A. (2017). Vergleichende Betrachtung von Aggressivität, Zwangsmedikation und Entweichungsraten zwischen offener und geschlossener Türpolitik auf einer Akutstation	Beobach- tungsstu- die	Organisato- rische und institutio- nelle Inter- ventionen	entwei- chung (alle)	Chi ² (p- Wert)		nicht signi- fikant	very high risk of bias	serious	not serious	serious	

[Comparison of Aggressive Behavior, Compulsory Medication and Absconding Behavior Between Open and Closed door Policy in an Acute Psychiatric Ward]. Psychiatrische Praxis, 44(3), 141–147. https://doi.org/10.1055/s-0042-105181											
Cibis, M. L., Wackerhagen, C., Müller, S., Lang, U. E., Schmidt, Y., & Heinz, A. (2017). Vergleichende Betrachtung von Aggressivität, Zwangsmedikation und Entweichungsraten zwischen offener und geschlossener Türpolitik auf einer Akutstation [Comparison of Aggressive Behavior, Compulsory Medication and Absconding Behavior Between Open and Closed door Policy in an Acute Psychiatric	Beobachtungsstudie	Organisatorische und institutionelle Interventionen	entweichung (nur untergebracht)	Chi² (p-Wert)	nicht signifikant	very high risk of bias	serious	not serious	serious		

Ward]. Psychiatrische Praxis, 44(3), 141–147. https://doi.org/10.1055/s-0042-105181											
Harrington A, Darke H, Ennis G, Sundram. (2019) Evaluation of an alternative model for the management of clinical risk in an adult acute psychiatric inpatient unit.	Beobachtungsstudie	Risikovorhersage und frühe Interventionen	rate of absconds per 1000 occupied bed days [95% CI] (pre-post)	% reduction risk Ratio RR [95% CI]	10.46 [8.99, 12.1] pre vs. 6.53 [5.19, 8.10] post p = .0004 37.6% reduction RR = 0.62 [0.48, 0.81]	reduction > 0 favors intervention RR < 0 favors intervention	high risk of bias	not serious	not serious	not serious	niedrig

Reduktion von freiheitsbeschränkenden Zwangsmaßnahmen – Komplikationen

Literatur	Studientyp	Intervention	Outcome einzeln	Effektschätzer	Ergebnisse einzeln	Interpretation	Risk of Bias gesamt	GRADE - Inconsistency	GRADE - Indirectness	GRADE - Imprecision	Evidenzqualität - Gesamt
Ye, J., Xia, Z., Wang, C., Liao, Y., Xu, Y., Zhang, Y., Yu, L., Li, S., Lin, J., & Xiao, A. (2021). Effectiveness of CRSCE-Based De-escalation Training on Reducing Physical	RCT	Fort- und Weiterbildungsprogramme	no. of and severe level of	Chi ²	1.067 (p = 0.301)	nicht signifikant	Some concerns	serious	serious	not serious	mäßig

Restraint in Psychiatric Hospitals: A Cluster Randomized Controlled Trial. Frontiers in psychiatry, 12, 576662. https://doi.org/10.3389/fpsy.2021.576662			accidents caused by physical restraint, total							
Ye, J., Xia, Z., Wang, C., Liao, Y., Xu, Y., Zhang, Y., Yu, L., Li, S., Lin, J., & Xiao, A. (2021). Effectiveness of CRSCE-Based De-escalation Training on Reducing Physical Restraint in Psychiatric Hospitals: A Cluster Randomized Controlled Trial. Frontiers in psychiatry, 12, 576662. https://doi.org/10.3389/fpsy.2021.576662	RCT	Fort- und Weiterbildungsprogramme	no. of injury of nurses caused by conducting restraint	Chi ²	4.184 (p = 0.041)	Chi ² > 3.841 (df1=1, df2=1) zeigt signifikanten Unterschied	Some concerns	not serious	not serious	not serious
Ye, J., Xiao, A., Yu, L., Guo, J., Lei, H., Wei, H., & Luo, W. (2018). Staff Training Reduces the Use of Physical Restraint in Mental Health Service, Evidence-based Reflection for China. Archives of psychiatric nursing, 32(3), 488–494. https://doi.org/10.1016/j.apnu.2017.11.028	Text Review	Fort- und Weiterbildungsprogramme	adverse effect of physical restraint	Risk Ratio RR [95% CI]	RR = 0.16 [0.09, 0.30] p < .0001	RR < 1 favors intervention	high risk of bias	serious	not serious	serious

Reduktion von freiheitsbeschränkenden Zwangsmaßnahmen – Betroffene psychiatrische Zwangsmedikation

Literatur	Studientyp	Intervention	Outcome einzeln	Effektschätzer	Ergebnisse einzeln	Risk of Bias gesamt	GRADE - Inconsistency	GRADE - Indirectness	GRADE - Imprecision	Evidenzqualität - Gesamt
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Korezelidou, A., Welte, A., Oster, A., & Mahler, L. (2025). Overcoming the lack of alternatives - Changes in the use of coercive measures after implementation of the recovery-oriented "Weddinger Modell" in acute psychiatric care. Journal of psychiatric research, 181, 405–410. https://doi.org/10.1016/j.jpsychires.2024.11.032	Beobachtungsstudie	recovery-, resilience-, and patient-centered "Weddinger Modell" (WM) f	cases affected by forced medication (pre-post, n, %)	% reduction	11 (1.2%) pre vs. 17 (2.2%) post 54.5% increase	high risk of bias	not serious	not serious	not serious	
Hochstrasser, L., Fröhlich, D., Schneeberger, A. R., Borgwardt, S., Lang, U. E., Stieglitz, R. D., & Huber, C. G. (2018). Long-term reduction of seclusion and forced medication on a hospital-wide level: Implementation of an open-door policy over 6 years.	Beobachtungsstudie	open-door policy + systematic change towards a more patient-centered and recovery-oriented care	Cases with at least one forced medication (pre-post)	Odds ratio % reduction	OR = 0.90 p < .021 50.0% reduction	some concerns	serious	not serious	Serious	low

European psychiatry : the journal of the Association of European Psychiatrists, 48, 51–57. https://doi.org/10.1016/j.eurpsy.2017.09.008										
Hochstrasser, L., Voulgaris, A., Möller, J., Zimmermann, T., Steinauer, R., Borgwardt, S., Lang, U. E., & Huber, C. G. (2018). Reduced Frequency of Cases with Seclusion Is Associated with "Opening the Doors" of a Psychiatric Intensive Care Unit. <i>Frontiers in psychiatry</i> , 9, 57. https://doi.org/10.3389/fpsy.2018.00057	Beobachtungsstudie	Implementing an open door policy is a complex intervention comprising changes in therapeutic stance, team processes, and a change from locked to open doors.	Patients with at least one forced medication (pre-post, n, %)	% reduction	9 (11.5%) pre vs. 4 (5.1%) post p = .160 55.6% reduction	some concerns	serious	not serious	Serious	
Thomsen, C. T., Benros, M. E., Maltesen, T., Hastrup, L. H., Andersen, P. K., Giacco, D., & Nordentoft, M.	Vergleichsstudie	implementing patient-controlled admission (PCA)	forced treatment (between n groups)	risk difference (95% CI)	RD = -0.014 (-0.032; 0.004), p = .119	some concerns	not serious	not serious	not serious	Moderate

(2018). Patient-controlled hospital admission for patients with severe mental disorders: a nationwide prospective multicentre study. <i>Acta psychiatrica Scandinavica</i> , 137(4), 355–363. https://doi.org/10.1111/acps.12868										
Griffith, J. J., Meyer, D., Maguire, T., Ogloff, J. R. P., & Daffern, M. (2021). A Clinical Decision Support System to Prevent Aggression and Reduce Restrictive Practices in a Forensic Mental Health Service. <i>Psychiatric Services</i> , 72(8), 885–890. https://doi.org/10.1176/appi.ps.202000315	RCT	use of an electronic clinical decision support system that combines two elements, the Dynamic Appraisal of Situational Aggression instrument and an aggression prevention protocol (eDASA1APP), in acute forensic mental	odds of administration of as-needed medication	OR [95% CI]	OR = 0.64 [0.50–0.83] p < .001	some concern	not serious	not serious	not serious	

		health units for men								
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Reduktion von freiheitsbeschränkenden Zwangsmaßnahmen – Betroffene von Isolierungen und Fixierungen

Literatur	Studientyp	Intervention	Intervention-Kategorie	Outcome einzel	Effektschätzer	Ergebnisse einzel	Risk of Bias gesamt	GRADE - Inconsistency	GRADE - Indirectness	GRADE - Imprecision	Evidenzqualität- gesamt
Badouin, J., Bechdorf, A., Bempohl, F., Baumgardt, J., & Weinmann, S. (2023). Preventing, reducing, and attenuating restraint: A prospective controlled trial of the implementation of peer support in acute psychiatry. <i>Frontiers in psychiatry</i> , 14, 1089484. https://doi.org/10.3389/fpsy.2023.1089484	BeobachtungB2:B41s studie	two peer support worker with EX-IN training program	Fort- und Weiterbildungsprogramme	proportions of patients subjected to restraint (of all cases treated)	effect size according to phi (post, interventiongroup, Cave! Prä-Post-Vergleich, kein Vergleich zur Kontrollgruppe)	-0.045 (p=0.327)	high	serious	not serious	not serious	low
Stoll, J., Westermair, A. L., Kübler, U., Reisch, T., Cattapan, K., Bridler, R., Maier, R., & Trachsel, M. (2022). A two-center pilot	Beobachtungsstudie	Monthly moral case deliberation (MCD)	Fort- und Weiterbildungsprogramme	proportion of patients subjected to	% reduction	44.2% reduction (17.2% to	Critical	serious	not serious	not serious	

study on the effects of clinical ethics support on coercive measures in psychiatry. BMC psychiatry, 22(1), 370. https://doi.org/10.1186/s12888-022-04024-9				any formal coercion (pre-post)		9.6%) p = .024					
Stoll, J., Westermair, A. L., Kübler, U., Reisch, T., Cattapan, K., Bridler, R., Maier, R., & Trachsel, M. (2022). A two-center pilot study on the effects of clinical ethics support on coercive measures in psychiatry. BMC psychiatry, 22(1), 370. https://doi.org/10.1186/s12888-022-04024-9	Beobachtungsstudie	Monthly moral case deliberation (MCD)	Fort- und Weiterbildungsprogramme	proportion of patients subjected to seclusion (pre-post)	% reduction	42.5% reduction (16.7% to 9.6%) p = .034	critical	serious	not serious	not serious	
Stoll, J., Westermair, A. L., Kübler, U., Reisch, T., Cattapan, K., Bridler, R., Maier, R., & Trachsel, M. (2022). A two-center pilot study on the effects of clinical ethics support on coercive measures in psychiatry. BMC psychiatry, 22(1), 370. https://doi.org/10.1186/s12888-022-04024-9	Beobachtungsstudie	Monthly moral case deliberation (MCD)	Fort- und Weiterbildungsprogramme	proportion of patients subjected to mechanical restraint (pre-post)	% reduction	43.8% reduction (3.2% to 1.8%) p = .366	critical	serious	not serious	not serious	
Stoll, J., Westermair, A. L., Kübler, U., Reisch, T., Cattapan, K., Bridler, R., Maier, R., & Trachsel, M. (2022). A two-center pilot study on the effects of clinical ethics support on	Beobachtungsstudie	Monthly moral case deliberation (MCD)	Fort- und Weiterbildungsprogramme	proportion of patients subjected to coerced	% reduction	14.6% reduction (4.8% to 4.1%) p = .723	critical	serious	not serious	not serious	

coercive measures in psychiatry. BMC psychiatry, 22(1), 370. https://doi.org/10.1186/s12888-022-04024-9				medication (pre-post)							
Välimäki, M., Lantta, T., Anttila, M., Vahlberg, T., Normand, S. L., & Yang, M. (2022). An Evidence-Based Educational Intervention for Reducing Coercive Measures in Psychiatric Hospitals: A Randomized Clinical Trial. JAMA network open, 5(8), e2229076. https://doi.org/10.1001/jamanetworkopen.2022.29076	RCT		Fort- und Weiterbildungsprogramme	No. of secluded patients at ward level/total no. of patients (%)	adjusted rate ration (post)	0.75 (0.39-1.42)	Some concerns	serious	not serious	serious	
Välimäki, M., Lantta, T., Anttila, M., Vahlberg, T., Normand, S. L., & Yang, M. (2022). An Evidence-Based Educational Intervention for Reducing Coercive Measures in Psychiatric Hospitals: A Randomized Clinical Trial. JAMA network open, 5(8), e2229076. https://doi.org/10.1001/jamanetworkopen.2022.29076	RCT		Fort- und Weiterbildungsprogramme	No. of patients on whom limb [mechanical] restraints were used at ward level/total no. of patients (%)	adjusted rate ration (post)	1.23 (0.4-3.8)	Some concerns	serious	not serious	serious	

Välimäki, M., Lantta, T., Anttila, M., Vahlberg, T., Normand, S. L., & Yang, M. (2022). An Evidence-Based Educational Intervention for Reducing Coercive Measures in Psychiatric Hospitals: A Randomized Clinical Trial. JAMA network open, 5(8), e2229076. https://doi.org/10.1001/jamanetworkopen.2022.29076	RCT		Fort- und Weiterbildungsprogramme	No. of patients injected at ward level/total no. of patients (%)	adjusted rate ration (post)	1.09 (0.53-2.24)	Some concerns	serious	not serious	serious	
Välimäki, M., Lantta, T., Anttila, M., Vahlberg, T., Normand, S. L., & Yang, M. (2022). An Evidence-Based Educational Intervention for Reducing Coercive Measures in Psychiatric Hospitals: A Randomized Clinical Trial. JAMA network open, 5(8), e2229076. https://doi.org/10.1001/jamanetworkopen.2022.29076	RCT		Fort- und Weiterbildungsprogramme	No. of patients physically restrained were used at ward level/total no. of patients (%)	adjusted rate ration (post)	3.69 (0.89-15.25)	Some concerns	serious	not serious	very serious	
Whitecross, F., Lee, S., Bushell, H., Kang, M., Berry, C., Hollander, Y., Sonmez, G., & Rauchberger, I. (2020). Implementing a psychiatric behaviours of concern team can reduce restrictive intervention use and improve safety in inpatient	Beobachtungsstudie	implemented a psychiatric behaviour of concern (Psy-BOC) team Psy-BOC call. Psy-BOC	Fort- und Weiterbildungsprogramme	mean monthly percent of admitted patients secluded (6 mo. pre Psy-BOC	% reduction	55.7% reduction (14.7 to 6.5) no significance testing	high	serious	not serious	not serious	

psychiatry. Australasian psychiatry : bulletin of Royal Australian and New Zealand College of Psychiatrists, 28(4), 401–406. https://doi.org/10.1177/1039856220917072		team, Behaviours of Concern (Psy-BOC) Call Psychiatry guideline to educate staff		commencement vs. 6 mo. post Psy-BOC commencement)							
Ye, J., Xia, Z., Wang, C., Liao, Y., Xu, Y., Zhang, Y., Yu, L., Li, S., Lin, J., & Xiao, A. (2021). Effectiveness of CRSCE-Based De-escalation Training on Reducing Physical Restraint in Psychiatric Hospitals: A Cluster Randomized Controlled Trial. <i>Frontiers in psychiatry</i> , 12, 576662. https://doi.org/10.3389/fpsy.2021.576662	RCT	Routine training while additionally received CRSCE-based de-escalation training (based on restrain yourself (uk) and 6cs (usa)	Fort- und Weiterbildungsprogramme	frequency of physical restraint in patients admitted within 24h (monthly use of physical restraint of patients admitted within 24h (%) = monthly number of patient being physically restrained within	Fgroup	12.065 (p = 0,006)	Some concerns	serious	serious	not serious	

				24h after admission/ monthly no. of admitted patients x 100%)							
Baumgardt, J., Jäckel, D., Helber-Böhlen, H., Stiehm, N., Morgenstern, K., Voigt, A., Schöppe, E., Mc Cutcheon, A. K., Lecca, E. E. V., Löhr, M., Schulz, M., Bechdorf, A., & Weinmann, S. (2019). Preventing and Reducing Coercive Measures-An Evaluation of the Implementation of the Safewards Model in Two Locked Wards in Germany. <i>Frontiers in psychiatry</i> , 10, 340. https://doi.org/10.3389/fpsyt.2019.00340	Beobachtungsstudie	Safewards Model	Komplexe Behandlungsprogramme – Safewards	percentage of patients exposed to coercive interventions, ward a	RR	0.87	High	serious	not serious	not serious	
Baumgardt, J., Jäckel, D., Helber-Böhlen, H., Stiehm, N., Morgenstern, K., Voigt, A., Schöppe, E., Mc Cutcheon, A. K., Lecca, E. E. V., Löhr, M., Schulz, M., Bechdorf, A., & Weinmann, S. (2019). Preventing and Reducing Coercive Measures-An Evaluation of	Beobachtungsstudie	Safewards Model	Komplexe Behandlungsprogramme – Safewards	percentage of patients exposed to coercive interventions, ward b	RR	0.38	High	serious	not serious	not serious	low

the Implementation of the Safewards Model in Two Locked Wards in Germany. <i>Frontiers in psychiatry</i> , 10, 340. https://doi.org/10.3389/fpsy.2019.00340										
Lickiewicz, J., Adamczyk, N., Hughes, P. P., Jagielski, P., Stawarz, B., & Makara-Studzńska, M. (2021). Reducing aggression in psychiatric wards using Safewards-A Polish study. <i>Perspectives in psychiatric care</i> , 57(1), 50–55. https://doi.org/10.1111/ppc.12523	Beobachtungsstudie	Three aspects of Safewards	Komplexe Behandlungsprogramme – Safewards	number of patients restrained (pre-post)	% reduction	173 pre vs. 119 post 31.2% reduction p < .001	high	serious	not serious	not serious
Lickiewicz, J., Adamczyk, N., Hughes, P. P., Jagielski, P., Stawarz, B., & Makara-Studzńska, M. (2021). Reducing aggression in psychiatric wards using Safewards-A Polish study. <i>Perspectives in psychiatric care</i> , 57(1), 50–55. https://doi.org/10.1111/ppc.12523	Beobachtungsstudie	Three aspects of Safewards	Komplexe Behandlungsprogramme – Safewards	number of patients restrained per 1000 patient days	% reduction	0.65 pre vs. 0.45 post 30.8% reduction	high	serious	not serious	not serious
Lickiewicz, J., Adamczyk, N., Hughes, P. P., Jagielski, P., Stawarz, B., & Makara-Studzńska, M. (2021). Reducing aggression in psychiatric wards using Safewards-A	Beobachtungsstudie	Three aspects of Safewards	Komplexe Behandlungsprogramme	number of patients restrained per month	SMD (Standardized Mean Difference)	21.6 pre vs. 14.9 post p < .0001	high	serious	not serious	not serious

Polish study. Perspectives in psychiatric care, 57(1), 50–55. https://doi.org/10.1111/ppc.12523			– Safe-wards			delta = 1.24					
Czernin, K., Bermpohl, F., Heinz, A., Wullschleger, A., & Mahler, L. (2020). Auswirkungen der Etablierung des psychiatrischen Behandlungskonzepts „Weddinger Modell“ auf mechanische Zwangsmaßnahmen [Effects of the Psychiatric Care Concept "Weddinger Modell" on Mechanical Coercive Measures]. Psychiatrische Praxis, 47(5), 242–248. https://doi.org/10.1055/a-1116-0720	Vergleichs-studie	Recovery-orientated psychiatric care concept "Weddinger Modell"	Kom-plexe Be-hand-lungspro-gramme – Wed-dinger Modell	be-troffene Fälle Fi-xierung oder Iso-lierung n (%)	U (Mann-Whithney-U-Test, Wil-coxon-Rang-summen-Test) oder Chi²-Test	n. s. U bzw. Chi² nicht be-reicht	critical	serious	not seri-ous	not seri-ous	
Czernin, K., Bermpohl, F., Heinz, A., Wullschleger, A., & Mahler, L. (2020). Auswirkungen der Etablierung des psychiatrischen Behandlungskonzepts „Weddinger Modell“ auf mechanische Zwangsmaßnahmen [Effects of the Psychiatric Care Concept "Weddinger Modell" on Mechanical Coercive Measures]. Psychiatrische Praxis, 47(5), 242–248. https://doi.org/10.1055/a-1116-0720	Vergleichs-studie	Recovery-orientated psychiatric care concept "Weddinger Modell"	Kom-plexe Be-hand-lungspro-gramme – Wed-dinger Modell	be-troffene Fälle Fi-xierung und Iso-lierung in Kombi-nation n (%)	U (Mann-Whithney-U-Test, Wil-coxon-Rang-summen-Test) oder Chi²-Test	n. s. U bzw. Chi² nicht be-reicht	critical	serious	not seri-ous	not seri-ous	low

Czernin, K., BERPpohl, F., Heinz, A., Wullschleger, A., & Mahler, L. (2020). Auswirkungen der Etablierung des psychiatrischen Behandlungskonzepts „Weddinger Modell“ auf mechanische Zwangsmaßnahmen [Effects of the Psychiatric Care Concept "Weddinger Modell" on Mechanical Coercive Measures]. Psychiatrische Praxis, 47(5), 242–248. https://doi.org/10.1055/a-1116-0720	Vergleichsstudie	Recovery-orientated psychiatric care concept "Weddinger Modell"	Komplexe Behandlungsprogramme – Weddinger Modell	Fixierungen, betroffene Fälle n (%)	U (Mann-Whithney-U-Test, Wilcoxon-Rangsummen-Test) oder Chi²-Test	n. s. U bzw. Chi² nicht berichtet	critical	serious	not serious	not serious	
Czernin, K., BERPpohl, F., Heinz, A., Wullschleger, A., & Mahler, L. (2020). Auswirkungen der Etablierung des psychiatrischen Behandlungskonzepts „Weddinger Modell“ auf mechanische Zwangsmaßnahmen [Effects of the Psychiatric Care Concept "Weddinger Modell" on Mechanical Coercive Measures]. Psychiatrische Praxis, 47(5), 242–248. https://doi.org/10.1055/a-1116-0720	Vergleichsstudie	Recovery-orientated psychiatric care concept "Weddinger Modell"	Komplexe Behandlungsprogramme – Weddinger Modell	Isolierungen, betroffene Fälle n (%)	U (Mann-Whithney-U-Test, Wilcoxon-Rangsummen-Test) oder Chi²-Test	n. s. U bzw. Chi² nicht berichtet	critical	serious	not serious	not serious	
Korezelidou, A., Welte, A., Oster, A., & Mahler, L. (2025). Overcoming the lack of alternatives - Changes in the use of coercive	Beobachtungsstudie	recovery-, resilience-, and patient-centered "Weddinger	Komplexe Behandlungsprogramme	cases affected by coercive measures (pre-	% reduction	126 (14.3%) pre vs. 80 (10.3%)	high	serious	not serious	not serious	

measures after implementation of the recovery-oriented "Weddinger Modell" in acute psychiatric care. Journal of psychiatric research, 181, 405–410. https://doi.org/10.1016/j.jpsychires.2024.11.032		Modell" (WM) f	– Weddinger Modell	post, n, %)		post 36.5% reduction					
Korezelidou, A., Welte, A., Oster, A., & Mahler, L. (2025). Overcoming the lack of alternatives - Changes in the use of coercive measures after implementation of the recovery-oriented "Weddinger Modell" in acute psychiatric care. Journal of psychiatric research, 181, 405–410. https://doi.org/10.1016/j.jpsychires.2024.11.032	Beobachtungsstudie	recovery-, resilience-, and patient-centered "Weddinger Modell" (WM) f	Komplexe Behandlungsprogramme – Weddinger Modell	cases affected by seclusion(pre-post, n, %)	% reduction	123 (14.0%) pre vs. 72 (9.3%) post 41.5% reduction	high	serious	not serious	not serious	
Korezelidou, A., Welte, A., Oster, A., & Mahler, L. (2025). Overcoming the lack of alternatives - Changes in the use of coercive measures after implementation of the recovery-oriented "Weddinger Modell" in acute psychiatric care. Journal of psychiatric research, 181, 405–410. https://doi.org/10.1016/j.jpsychires.2024.11.032	Beobachtungsstudie	recovery-, resilience-, and patient-centered "Weddinger Modell" (WM) f	Komplexe Behandlungsprogramme – Weddinger Modell	cases affected by restraint (pre-post, n, %)	% reduction	57 (6.5%) pre vs. 27 (3.5%) post 52.6% reduction	high	serious	not serious	not serious	

Korezelidou, A., Welte, A., Oster, A., & Mahler, L. (2025). Overcoming the lack of alternatives - Changes in the use of coercive measures after implementation of the recovery-oriented "Weddinger Modell" in acute psychiatric care. Journal of psychiatric research, 181, 405–410. https://doi.org/10.1016/j.jpsychires.2024.11.032	Beobachtungsstudie	recovery-, resilience-, and patient-centered "Weddinger Modell" (WM) f	Komplexe Behandlungsprogramme – Weddinger Modell	odds of being affected by CM after WM-MIP	OR	OR = 0.398, 95%-CI = 0.156–1.017, p = 0.054	high	serious	not serious	serious	
Korezelidou, A., Welte, A., Oster, A., & Mahler, L. (2025). Overcoming the lack of alternatives - Changes in the use of coercive measures after implementation of the recovery-oriented "Weddinger Modell" in acute psychiatric care. Journal of psychiatric research, 181, 405–410. https://doi.org/10.1016/j.jpsychires.2024.11.032	Beobachtungsstudie	recovery-, resilience-, and patient-centered "Weddinger Modell" (WM) f	Komplexe Behandlungsprogramme – Weddinger Modell	odds of being affected by seclusion after WM-MIP	OR	OR = 0.296, 95% CI = 0.110–0.800, p = 0.016	high	serious	not serious	serious	
Korezelidou, A., Welte, A., Oster, A., & Mahler, L. (2025). Overcoming the lack of alternatives - Changes in the use of coercive measures after implementation of the recovery-oriented "Weddinger Modell" in acute psychiatric care.	Beobachtungsstudie	recovery-, resilience-, and patient-centered "Weddinger Modell" (WM) f	Komplexe Behandlungsprogramme – Weddinger Modell	odds of being affected by restraint after WM-MIP	OR	OR = 0.362, 95%-CI = 0.083–1.569, p = 0.174	high	serious	not serious	serious	

Journal of psychiatric research, 181, 405–410. https://doi.org/10.1016/j.jpsychires.2024.11.032											
Hochstrasser, L., Fröhlich, D., Schneeberger, A. R., Borgwardt, S., Lang, U. E., Stieglitz, R. D., & Huber, C. G. (2018). Long-term reduction of seclusion and forced medication on a hospital-wide level: Implementation of an open-door policy over 6 years. European psychiatry : the journal of the Association of European Psychiatrists, 48, 51–57. https://doi.org/10.1016/j.eurpsy.2017.09.008	Beobachtungsstudie	open-door policy + systematic change towards a more patient-centered and recovery-oriented care	Organisatorische und institutionelle Interventionen	Cases with at least one seclusion (pre-post)	Odds ratio % reduction	OR = 0.82 p < .001 57.3% reduction	some concerns	serious	not serious	not serious	
Hochstrasser, L., Voulgaris, A., Möller, J., Zimmermann, T., Steinauer, R., Borgwardt, S., Lang, U. E., & Huber, C. G. (2018). Reduced Frequency of Cases with Seclusion Is Associated with "Opening the Doors" of a Psychiatric Intensive Care Unit. Frontiers in psychiatry, 9, 57. https://doi.org/10.3389/fpsy.2018.00057	Beobachtungsstudie	Implementing an open door policy is a complex intervention comprising changes in therapeutic stance, team processes, and a change from locked to open doors.	Organisatorische und institutionelle Interventionen	Patients with at least one seclusion (pre-post, n, %)	% reduction	22 (28.2%) pre vs. 11 (13.9%) post p = .036 50.0% reduction	some concerns	serious	not serious	not serious	moderate

Indregard, A. R., Nussle, H. M., Hagen, M., Vandvik, P. O., Tesli, M., Gather, J., & Kunøe, N. (2024). Open-door policy versus treatment-as-usual in urban psychiatric inpatient wards: a pragmatic, randomised controlled, non-inferiority trial in Norway. <i>The lancet. Psychiatry</i> , 11(5), 330–338. https://doi.org/10.1016/S2215-0366(24)00039-7	RCT	Open-door policy versus treatment-as-usual	Organisatorische und institutionelle Interventionen	proportion of patient stays with one or more coercive measures defined as involuntary medication, isolation or seclusion, and physical and mechanical (ie, the use of belts on the patient's body limbs) restraints (primary)	RR (95% CI)	1.3 (0.97 to 1.6)	Some concerns	serious	not serious	not serious	
Indregard, A. R., Nussle, H. M., Hagen, M., Vandvik, P. O., Tesli, M., Gather, J., & Kunøe, N. (2024). Open-door policy versus treatment-as-usual in urban psychiatric inpatient wards: a	RCT	Open-door policy versus treatment-as-usual	Organisatorische und institutionelle Interventionen	proportion of patient stays with one or more coercive	adjusted RR (95% CI)	1.4 (0.95 to 2.1)	Some concerns	serious	not serious	not serious	

pragmatic, randomised controlled, non-inferiority trial in Norway. The lancet. Psychiatry, 11(5), 330–338. https://doi.org/10.1016/S2215-0366(24)00039-7				measures defined as involuntary medication, isolation or seclusion, and physical and mechanical (ie, the use of belts on the patient's body limbs) restraints (primary)							
Indregard, A. R., Nussle, H. M., Hagen, M., Vandvik, P. O., Tesli, M., Gather, J., & Kunøe, N. (2024). Open-door policy versus treatment-as-usual in urban psychiatric inpatient wards: a pragmatic, randomised controlled, non-inferiority trial in Norway. The lancet. Psychiatry, 11(5), 330–338. https://doi.org/10.1016/S2215-0366(24)00039-7	RCT	Open-door policy versus treatment-as-usual	Organisatorische und institutionelle Interventionen	one or more coercive measures during the admission: mechanical restraints (secondary)	RR (95% CI)	1.5 (0.6 to 3.4)	Some concerns	serious	not serious	serious	

Indregard, A. R., Nussle, H. M., Hagen, M., Vandvik, P. O., Tesli, M., Gather, J., & Kunøe, N. (2024). Open-door policy versus treatment-as-usual in urban psychiatric inpatient wards: a pragmatic, randomised controlled, non-inferiority trial in Norway. The lancet. Psychiatry, 11(5), 330–338. https://doi.org/10.1016/S2215-0366(24)00039-7	RCT	Open-door policy versus treatment-as-usual	Organisatorische und institutionelle Interventionen	one or more coercive measures during the admission: mechanical restraints (secondary	adjusted RR (95% CI)	0.9 (0.3 to 3.4)	Some concerns	serious	not serious	serious	
Indregard, A. R., Nussle, H. M., Hagen, M., Vandvik, P. O., Tesli, M., Gather, J., & Kunøe, N. (2024). Open-door policy versus treatment-as-usual in urban psychiatric inpatient wards: a pragmatic, randomised controlled, non-inferiority trial in Norway. The lancet. Psychiatry, 11(5), 330–338. https://doi.org/10.1016/S2215-0366(24)00039-7	RCT	Open-door policy versus treatment-as-usual	Organisatorische und institutionelle Interventionen	one or more coercive measures during the admission: isolation/seclusion	RR (95% CI)	1.0 (0.5 to 2.1)	Some concerns	serious	not serious	serious	
Indregard, A. R., Nussle, H. M., Hagen, M., Vandvik, P. O., Tesli, M., Gather, J., & Kunøe, N. (2024). Open-door policy versus treatment-as-usual in urban psychiatric inpatient wards: a pragmatic, randomised controlled, non-inferiority trial	RCT	Open-door policy versus treatment-as-usual	Organisatorische und institutionelle Interventionen	one or more coercive measures during the admission:	adjusted RR (95% CI)	1.0 (0.3 to 3.1)	Some concerns	serious	not serious	serious	

in Norway. The lancet. Psychiatry, 11(5), 330–338. https://doi.org/10.1016/S2215-0366(24)00039-7				isolation/seclusion							
Indregard, A. R., Nussle, H. M., Hagen, M., Vandvik, P. O., Tesli, M., Gather, J., & Kunøe, N. (2024). Open-door policy versus treatment-as-usual in urban psychiatric inpatient wards: a pragmatic, randomised controlled, non-inferiority trial in Norway. The lancet. Psychiatry, 11(5), 330–338. https://doi.org/10.1016/S2215-0366(24)00039-7	RCT	Open-door policy versus treatment-as-usual	Organisatorische und institutionelle Interventionen	one or more coercive measures during the admission: involuntary medication (short-term (single dose administration of short-acting drug solely for sedative purposes))	RR (95% CI)	1.5 (0.8 to 2.8)	Some concerns	serious	not serious	serious	
Indregard, A. R., Nussle, H. M., Hagen, M., Vandvik, P. O., Tesli, M., Gather, J., & Kunøe, N. (2024). Open-door policy versus treatment-as-usual in urban psychiatric inpatient wards: a	RCT	Open-door policy versus treatment-as-usual	Organisatorische und institutionelle Interventionen	one or more coercive measures during the admission:	adjusted RR (95% CI)	1.0 (0.4 to 2.6)	Some concerns	serious	not serious	serious	

pragmatic, randomised controlled, non-inferiority trial in Norway. The lancet. Psychiatry, 11(5), 330–338. https://doi.org/10.1016/S2215-0366(24)00039-7				involuntary medication (short-term (single dose administration of short-acting drug solely for sedative purposes))							
Indregard, A. R., Nussle, H. M., Hagen, M., Vandvik, P. O., Tesli, M., Gather, J., & Kunøe, N. (2024). Open-door policy versus treatment-as-usual in urban psychiatric inpatient wards: a pragmatic, randomised controlled, non-inferiority trial in Norway. The lancet. Psychiatry, 11(5), 330–338. https://doi.org/10.1016/S2215-0366(24)00039-7	RCT	Open-door policy versus treatment-as-usual	Organisatorische und institutionelle Interventionen	one or more coercive measures during the admission: physical restraints	RR (95% CI)	1.3 (0.8 to 2.0)	Some concerns	serious	not serious	not serious	
Indregard, A. R., Nussle, H. M., Hagen, M., Vandvik, P. O., Tesli, M., Gather, J., & Kunøe, N. (2024). Open-door policy versus	RCT	Open-door policy versus treatment-as-usual	Organisatorische und institutionelle	one or more coercive measures during	adjusted RR (95% CI)	1.4 (0.7 to 3.0)	Some concerns	serious	not serious	serious	

treatment-as-usual in urban psychiatric inpatient wards: a pragmatic, randomised controlled, non-inferiority trial in Norway. The lancet. Psychiatry, 11(5), 330–338. https://doi.org/10.1016/S2215-0366(24)00039-7			Interventionen	the admission: physical restraints							
Indregard, A. R., Nussle, H. M., Hagen, M., Vandvik, P. O., Tesli, M., Gather, J., & Kunøe, N. (2024). Open-door policy versus treatment-as-usual in urban psychiatric inpatient wards: a pragmatic, randomised controlled, non-inferiority trial in Norway. The lancet. Psychiatry, 11(5), 330–338. https://doi.org/10.1016/S2215-0366(24)00039-7	RCT	Open-door policy versus treatment-as-usual	Organisatorische und institutionelle Interventionen	one or more coercive measures during the admission: involuntary medication (long-term)	RR (95% CI)	1.3 (0.9 to 1.7)	Some concerns	serious	not serious	serious	
Indregard, A. R., Nussle, H. M., Hagen, M., Vandvik, P. O., Tesli, M., Gather, J., & Kunøe, N. (2024). Open-door policy versus treatment-as-usual in urban psychiatric inpatient wards: a pragmatic, randomised controlled, non-inferiority trial in Norway. The lancet. Psychiatry, 11(5), 330–338. https://doi.org/10.1016/S2215-0366(24)00039-7	RCT	Open-door policy versus treatment-as-usual	Organisatorische und institutionelle Interventionen	one or more coercive measures during the admission: involuntary medication (long-term)	adjusted RR (95% CI)	1.4 (0.9 to 2.1)	Some concerns	serious	not serious	serious	

Wullschleger, A., Berg, J., Bempohl, F., & Montag, C. (2018). Can "Model Projects of Need-Adapted Care" Reduce Involuntary Hospital Treatment and the Use of Coercive Measures?. <i>Frontiers in psychiatry</i> , 9, 168. https://doi.org/10.3389/fpsy.2018.00168	Beobachtungsstudie	model project of need-adapted care - FIGURE 1	Organisatorische und institutionelle Interventionen	Patients subject to restraint (Acute wards patients)	% reduction	60.0% reduction (7.7% to 3.1%) p < .05	high	serious	not serious	not serious	
Wullschleger, A., Berg, J., Bempohl, F., & Montag, C. (2018). Can "Model Projects of Need-Adapted Care" Reduce Involuntary Hospital Treatment and the Use of Coercive Measures?. <i>Frontiers in psychiatry</i> , 9, 168. https://doi.org/10.3389/fpsy.2018.00168	Beobachtungsstudie	model project of need-adapted care - FIGURE 1	Organisatorische und institutionelle Interventionen	Patients subject to restraint (F1x.5, F2x, F30, F31.x)	% reduction	58.3% reduction (10.9% to 4.5%) n.s.	high	serious	not serious	not serious	
Wullschleger, A., Berg, J., Bempohl, F., & Montag, C. (2018). Can "Model Projects of Need-Adapted Care" Reduce Involuntary Hospital Treatment and the Use of Coercive Measures?. <i>Frontiers in psychiatry</i> , 9, 168. https://doi.org/10.3389/fpsy.2018.00168	Beobachtungsstudie	model project of need-adapted care - FIGURE 1	Organisatorische und institutionelle Interventionen	Patients subject to seclusion (Acute wards patients)	% reduction	37.5% reduction (8.3% to 5.2%) n.s.	high	serious	not serious	not serious	
Wullschleger, A., Berg, J., Bempohl, F., & Montag, C. (2018). Can "Model Projects of Need-Adapted Care" Reduce Involuntary Hospital	Beobachtungsstudie	model project of need-adapted care - FIGURE 1	Organisatorische und institutionelle	Patients subject to seclusion (F1x.5,	% reduction	46.7% reduction (13.8% to	high	serious	not serious	not serious	

Treatment and the Use of Coercive Measures?. Frontiers in psychiatry, 9, 168. https://doi.org/10.3389/fpsy.2018.00168			Interventionen	F2x, F30, F31.x)		7.3%) n.s.					
Sigrunarson, V., Moljord, I. E., Steinsbekk, A., Eriksen, L., & Morken, G. (2017). A randomized controlled trial comparing self-referral to inpatient treatment and treatment as usual in patients with severe mental disorders. Nordic journal of psychiatry, 71(2), 120–125. https://doi.org/10.1080/08039488.2016.1240231	RCT	implemented services called 'self-referral to inpatient treatment' (SRIT) for patients with severe mental disorders	Psychotherapeutische Angebote	patients under coercion	RR (95% CI) (calculated from published number of affected cases)	1.2981 (0.6084 - 23.7697)	Some concerns	not serious	not serious	serious	
Thomsen, C. T., Benros, M. E., Maltesen, T., Hastrup, L. H., Andersen, P. K., Giacco, D., & Nordentoft, M. (2018). Patient-controlled hospital admission for patients with severe mental disorders: a nationwide prospective multicentre study. Acta psychiatrica Scandinavica, 137(4), 355–363. https://doi.org/10.1111/acps.12868	Vergleichsstudie	implementing patient-controlled admission (PCA)	Psychotherapeutische Angebote	restraint (between groups)	risk difference (95% CI)	RD = 0.000 (-0.033; 0.032), p = .983	Some concerns	not serious	not serious	not serious	moderate
Goulet, M. H., Larue, C., & Lemieux, A. J. (2018). A pilot study of "post-seclusion and/or restraint review" intervention with patients	Beobachtungsstudie	To develop and evaluate a "post-seclusion and/or	Verhaltenstherapeutische und	cases affected by seclusion (pre-	% reduction	19 (21.3%) pre vs. 11 (10.4%)	very high	serious	not serious	not serious	low

and staff in a mental health setting. Perspectives in psychiatric care, 54(2), 212–220. https://doi.org/10.1111/ppc.12225		restraint review" (PSRR) intervention implemented in an acute psychiatric care unit.	trauma-therapeutische Nachbesprechungen	post, n (%)		post p = .046 51.2% reduction					
Goulet, M. H., Larue, C., & Lemieux, A. J. (2018). A pilot study of "post-seclusion and/or restraint review" intervention with patients and staff in a mental health setting. Perspectives in psychiatric care, 54(2), 212–220. https://doi.org/10.1111/ppc.12225	Beobachtungsstudie	To develop and evaluate a "post-seclusion and/or restraint review" (PSRR) intervention implemented in an acute psychiatric care unit.	Verhaltenstherapeutische und traumatherapeutische Nachbesprechungen	cases affected by restraint (pre-post, %)	% reduction	12.4% pre vs. 7.5% post n.s. 39.5% reduction	very high	serious	not serious	not serious	

Reduktion von Freiheitsbeschränkenden Zwangsmaßnahmen – Dauer von Isolation und Freiheitbeschränkungen

Literatur	Studientyp	Intervention	Intervention-Kategorie	Outcome einzeln	Schätzer	Ergebnisse einzeln	Risk of Bias - gesamt	GRADE E - Inconsistency	GRADE - Indirectness	GRADE E - Imprecision	Evidenzqualität - gesamt
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Badouin, J., Bechdorf, A., Bempohl, F., Baumgardt, J., & Weinmann, S. (2023). Preventing, reducing, and attenuating restraint: A prospective controlled trial of the implementation of peer support in acute psychiatry. <i>Frontiers in psychiatry</i> , 14, 1089484. https://doi.org/10.3389/fpsyt.2023.1089484	Beobachtungsstudie	two peer support worker with EX-IN training program	Fort- und Weiterbildungsprogramm	mean duration of restraint (all kinds)	effect size according to phi (post, interventiongroup , Cave! Prä-Post-Vergleich, kein Vergleich zur Kontrollgruppe)	-0.040 (p=0.502)	serious risk of bias	serious	not serious	not serious	
Badouin, J., Bechdorf, A., Bempohl, F., Baumgardt, J., & Weinmann, S. (2023). Preventing, reducing, and attenuating restraint: A prospective controlled trial of the implementation of peer support in acute psychiatry. <i>Frontiers in psychiatry</i> , 14, 1089484. https://doi.org/10.3389/fpsyt.2023.1089484	Beobachtungsstudie	two peer support worker with EX-IN training program	Fort- und Weiterbildungsprogramm	mean duration of restraint (mechanical)	effect size according to phi (post, interventiongroup , Cave! Prä-Post-Vergleich, kein Vergleich zur Kontrollgruppe)	-0.02 (p=0.746)	serious risk of bias	serious	not serious	not serious	
Badouin, J., Bechdorf, A., Bempohl, F., Baumgardt, J., & Weinmann, S. (2023). Preventing, reducing, and attenuating restraint: A prospective controlled trial of the implementation of peer support in acute psychiatry. <i>Frontiers in psychiatry</i> , 14, 1089484. https://doi.org/10.3389/fpsyt.2023.1089484	Beobachtungsstudie	two peer support worker with EX-IN training program	Fort- und Weiterbildungsprogramm	mean duration of restraint (mechanical and forced)	effect size according to phi (post, interventiongroup , Cave! Prä-Post-Vergleich,	-0.130 (p=0.498)	serious risk of bias	serious	not serious	not serious	mäßig

					kein Vergleich zur Kontrollgruppe)						
Badouin, J., Bechdorf, A., Bermpohl, F., Baumgardt, J., & Weinmann, S. (2023). Preventing, reducing, and attenuating restraint: A prospective controlled trial of the implementation of peer support in acute psychiatry. <i>Frontiers in psychiatry</i> , 14, 1089484. https://doi.org/10.3389/fpsy.2023.1089484	Beobachtungsstudie	two peer support worker with EX-IN training program	Fort- und Weiterbildungsprogramme	duration of restraint per case (all kinds)	effect size according to phi (post, interventiongroup, Cave! Prä-Post-Vergleich, kein Vergleich zur Kontrollgruppe)	-0.099 (p=0.265)	serious risk of bias	serious	not serious	not serious	
Badouin, J., Bechdorf, A., Bermpohl, F., Baumgardt, J., & Weinmann, S. (2023). Preventing, reducing, and attenuating restraint: A prospective controlled trial of the implementation of peer support in acute psychiatry. <i>Frontiers in psychiatry</i> , 14, 1089484. https://doi.org/10.3389/fpsy.2023.1089484	Beobachtungsstudie	two peer support worker with EX-IN training program	Fort- und Weiterbildungsprogramme	duration of restraint per case (mechanical)	effect size according to phi (post, interventiongroup, Cave! Prä-Post-Vergleich, kein Vergleich zur Kontrollgruppe)	-0.139 (p=0.159)	serious risk of bias	serious	not serious	not serious	
Badouin, J., Bechdorf, A., Bermpohl, F., Baumgardt, J., & Weinmann, S. (2023). Preventing, reducing, and attenuating restraint: A prospective controlled trial of the implementation of peer	Beobachtungsstudie	two peer support worker with	Fort- und	duration of restraint per case	effect size according to phi (post,	-0.071 (p=0.757)	serious risk	serious	not serious	not serious	

support in acute psychiatry. Frontiers in psychiatry, 14, 1089484. https://doi.org/10.3389/fpsy.2023.1089484		EX-IN training program	Weiterbildungsprogramm e	(mechanical and forced medication)	interventiongroup , Cave! Prä-Post-Vergleich, kein Vergleich zur Kontrollgruppe)		of bias				
Celofiga, A., Kores Plesnicar, B., Koprivsek, J., Moskon, M., Benkovic, D., & Gregoric Kumpercak, H. (2022). Effectiveness of De-Escalation in Reducing Aggression and Coercion in Acute Psychiatric Units. A Cluster Randomized Study. Frontiers in psychiatry, 13, 856153. https://doi.org/10.3389/fpsy.2022.856153	RCT	A multi-center cluster randomized study was conducted in the acute wards of all psychiatric hospitals in Slovenia. The research was carried out in two phases, a baseline period of five consecutive months and an intervention period of the same five consecutive months in the following year. The intervention was	Fort- und Weiterbildungsprogramm e	Physical [Mechanical] Restraints [with belts], Duration	IRR, Incidence rate ratio (post), hours	0.309 (0.293; 0.325)	Some concerns	serious	not serious	not serious	

		implemented after the baseline period and included training in verbal and non-verbal de-escalation techniques for the staff teams on experimental wards.									
Kontio R, Pitkänen A, Joffe G, Katajisto J, Välimäki M. eLearning course may shorten the duration of mechanical restraint among psychiatric inpatients: a cluster-randomized trial. Nord J Psychiatry. 2014 Oct;68(7):443-9. doi: 10.3109/08039488.2013.855254. Epub 2013 Nov 25. PMID: 24274836.	RCT	In a cluster-randomized intervention trial, the nursing personnel on 10 wards were randomly assigned to eLearning (intervention) or training-as-usual (control) groups. The eLearning course comprised six modules with specific topics (legal and ethical issues, behaviour-	Fort- und Weiterbildungsprogramm e	duration of seclusion incidents (hours)	change in time patient spent in seclusion (pre-post, intervention wards)	MED (IQR) baseline = 19.3 (25.7) MED (IQR) follow-up = 18.0 (29.7) p = .622	Low risk	serious	not serious	serious	

		related factors, therapeutic relationship and self-awareness, teamwork and integrating knowledge with practice) and specific learning methods.									
Kontio R, Pitkänen A, Joffe G, Katajisto J, Välimäki M. eLearning course may shorten the duration of mechanical restraint among psychiatric inpatients: a cluster-randomized trial. Nord J Psychiatry. 2014 Oct;68(7):443-9. doi: 10.3109/08039488.2013.855254. Epub 2013 Nov 25. PMID: 24274836.	RCT	In a cluster-randomized intervention trial, the nursing personnel on 10 wards were randomly assigned to eLearning (intervention) or training-as-usual (control) groups. The eLearning course comprised six modules with specific topics (legal and ethical issues, behaviour-	Fort- und Weiterbildungsprogramm e	duration of mechanical restraint incidents (hours)	change in time patient spent in mechanical restraint (pre-post, intervention wards)	MED (IQR) baseline = 36.0 (71.0) MED (IQR) follow-up = 4.0 (9.3) p < .001	Low risk	serious	not serious	serious	

		related factors, therapeutic relationship and self-awareness, teamwork and integrating knowledge with practice) and specific learning methods.									
Kontio R, Pitkänen A, Joffe G, Katajisto J, Välimäki M. eLearning course may shorten the duration of mechanical restraint among psychiatric inpatients: a cluster-randomized trial. Nord J Psychiatry. 2014 Oct;68(7):443-9. doi: 10.3109/08039488.2013.855254. Epub 2013 Nov 25. PMID: 24274836.	RCT	In a cluster-randomized intervention trial, the nursing personnel on 10 wards were randomly assigned to eLearning (intervention) or training-as-usual (control) groups. The eLearning course comprised six modules with specific topics (legal and ethical issues, behaviour-	Fort- und Weiterbildungsprogramm e	duration of seclusion incidents (hours)	difference in change in time patient spent in seclusion (intervention wards vs. control wards)	no difference in change in time patient spent in seclusion (intervention wards vs. control wards) p = .436	Low risk	serious	not serious	not serious	

		related factors, therapeutic relationship and self-awareness, teamwork and integrating knowledge with practice) and specific learning methods.									
Kontio R, Pitkänen A, Joffe G, Katajisto J, Välimäki M. eLearning course may shorten the duration of mechanical restraint among psychiatric inpatients: a cluster-randomized trial. Nord J Psychiatry. 2014 Oct;68(7):443-9. doi: 10.3109/08039488.2013.855254. Epub 2013 Nov 25. PMID: 24274836.	RCT	In a cluster-randomized intervention trial, the nursing personnel on 10 wards were randomly assigned to eLearning (intervention) or training-as-usual (control) groups. The eLearning course comprised six modules with specific topics (legal and ethical issues, behaviour-	Fort- und Weiterbildungsprogramm e	duration of mechanical restraint incidents (hours)	difference in change in time patient spent in seclusion (intervention wards vs. control wards)	no difference in change in time patient spent in seclusion (intervention wards vs. control wards) p = .057	Low risk	serious	not serious	not serious	

		related factors, therapeutic relationship and self-awareness, teamwork and integrating knowledge with practice) and specific learning methods.									
Stoll, J., Westermair, A. L., Kübler, U., Reisch, T., Cattapan, K., Bridler, R., Maier, R., & Trachsel, M. (2022). A two-center pilot study on the effects of clinical ethics support on coercive measures in psychiatry. BMC psychiatry, 22(1), 370. https://doi.org/10.1186/s12888-022-04024-9	Beobachtungsstudie	Monthly moral case deliberation (MCD)	Fort- und Weiterbildungsprogramm	intensity of mechanical restraint (duration of all episodes in the measurement period) (pre-post)	r (SMD)	r = -0.74 (SMD = -2.181) (86.8 ± 45.3 vs. 14.5 ± 12.1 h) p = .019	very high risk of bias	serious	not serious	not serious	
Stoll, J., Westermair, A. L., Kübler, U., Reisch, T., Cattapan, K., Bridler, R., Maier, R., & Trachsel, M. (2022). A two-center pilot study on the effects of clinical ethics support on coercive measures in psychiatry. BMC psychiatry, 22(1), 370. https://doi.org/10.1186/s12888-022-04024-9	Beobachtungsstudie	Monthly moral case deliberation (MCD)	Fort- und Weiterbildungsprogramm	mean duration of restraint episodes (pre-post)	r (SMD)	r = -0.81 (SMD = -2.397) (55.2 ± 24.7 vs. 10.1 ± 9.9 h) p = .010	very high risk of bias	serious	not serious	not serious	

Stoll, J., Westermair, A. L., Kübler, U., Reisch, T., Cattapan, K., Bridler, R., Maier, R., & Trachsel, M. (2022). A two-center pilot study on the effects of clinical ethics support on coercive measures in psychiatry. BMC psychiatry, 22(1), 370. https://doi.org/10.1186/s12888-022-04024-9	Beobachtungsstudie	Monthly moral case deliberation (MCD)	Fort- und Weiterbildungsprogramm	intensity of seclusion (duration of all episodes in the measurement period) (pre-post)	r (SMD)	r = -0.22 (SMD = -0.577) (156.2 ± 268.8 vs. 39.8 ± 95.2 h) p = .115	very high risk of bias	serious	not serious	serious	
Stoll, J., Westermair, A. L., Kübler, U., Reisch, T., Cattapan, K., Bridler, R., Maier, R., & Trachsel, M. (2022). A two-center pilot study on the effects of clinical ethics support on coercive measures in psychiatry. BMC psychiatry, 22(1), 370. https://doi.org/10.1186/s12888-022-04024-9	Beobachtungsstudie	Monthly moral case deliberation (MCD)	Fort- und Weiterbildungsprogramm	mean duration of seclusion episodes (pre-post)	r (SMD)	r = -0.27 (SMD = (73.9 ± 102.3 vs. 10.0 ± 12.6 h) p = .049	very high risk of bias	serious	not serious	not serious	
Välimäki, M., Lantta, T., Anttila, M., Vahlberg, T., Normand, S. L., & Yang, M. (2022). An Evidence-Based Educational Intervention for Reducing Coercive Measures in Psychiatric Hospitals: A Randomized Clinical Trial. JAMA network open, 5(8), e2229076. https://doi.org/10.1001/jamanetworkopen.2022.29076	RCT		Fort- und Weiterbildungsprogramm	Length per limb [mechanical] restraint event on ward level, geometric mean, min	adjusted rate ratio (post)	0.18 (-0.86-1.21)	Some concerns	serious	not serious	serious	

Välimäki, M., Lantta, T., Anttila, M., Vahlberg, T., Normand, S. L., & Yang, M. (2022). An Evidence-Based Educational Intervention for Reducing Coercive Measures in Psychiatric Hospitals: A Randomized Clinical Trial. JAMA network open, 5(8), e2229076. https://doi.org/10.1001/jamanetworkopen.2022.29076	RCT		Fort- und Weiterbildungsprogramme	Length per physical restraint event on ward level, geometric mean, min	adjusted rate ratio (post)	-0.69 (-2.82-1.45)	Some concerns	serious	not serious	serious	
Ye, J., Xia, Z., Wang, C., Liao, Y., Xu, Y., Zhang, Y., Yu, L., Li, S., Lin, J., & Xiao, A. (2021). Effectiveness of CRSCE-Based De-escalation Training on Reducing Physical Restraint in Psychiatric Hospitals: A Cluster Randomized Controlled Trial. Frontiers in psychiatry, 12, 576662. https://doi.org/10.3389/fpsyt.2021.576662	RCT	Routine training while additionally received CRSCE-based de-escalation training (based on restrain yourself (uk) and 6cs (usa)	Fort- und Weiterbildungsprogramme	duration of physical restraint	Fgroup	5.054 (p=0.048)	Some concerns	serious	not serious	not serious	
Ye, J., Xiao, A., Yu, L., Guo, J., Lei, H., Wei, H., & Luo, W. (2018). Staff Training Reduces the Use of Physical Restraint in Mental Health Service, Evidence-based Reflection for China. Archives of psychiatric nursing, 32(3), 488–494. https://doi.org/10.1016/j.apnu.2017.11.028	Text Review	siehe Tabelle 1	Fort- und Weiterbildungsprogramme	duration of physical restraint	SMD [95% CI]	SMD = -0.88 [-1.65, -1.10] p = .03	high risk of bias	serious	not serious	not serious	
Baumgardt, J., Jäckel, D., Helber-Böhlen, H., Stiehm, N., Morgenstern, K., Voigt, A., Schöppe, E., Mc Cutcheon, A. K., Lecca, E. E. V., Löhr, M., Schulz, M., Bechdorf, A., & Weinmann, S. (2019). Preventing and Reducing Coercive Measures-An Evaluation of the Implementation of the Safewards Model in Two Locked Wards in	Beobachtungsstudie	Safewards Model	Komplexe Behandlungsprogramme	mean duration of coercive interventions, ward a	U value	-0.537 (p=0.591)	High Risk of Bias	serious	not serious	not serious	niedrig

Germany. Frontiers in psychiatry, 10, 340. https://doi.org/10.3389/fpsy.2019.00340			e – Sa- fewards							
Baumgardt, J., Jäckel, D., Helber-Böhlen, H., Stiehm, N., Morgenstern, K., Voigt, A., Schöppe, E., Mc Cutcheon, A. K., Lecca, E. E. V., Löhr, M., Schulz, M., Bechdolf, A., & Weinmann, S. (2019). Preventing and Reducing Coercive Measures-An Evaluation of the Implementation of the Safewards Model in Two Locked Wards in Germany. Frontiers in psychiatry, 10, 340. https://doi.org/10.3389/fpsy.2019.00340	Be- obach- tungs- studie	Safewards Model	Kom- plexe Be- hand- lungs- pro- gramm e – Sa- fewards	mean du- ration of coercive interven- tions, ward b	U value	-2.142 (p=0.032)	High Risk of Bias	seri- ous	not se- rious	not se- rious
Lickiewicz, J., Adamczyk, N., Hughes, P. P., Jagielski, P., Stawarz, B., & Makara-Studzińska, M. (2021). Reducing aggression in psychiatric wards using Safewards-A Polish study. Perspectives in psychiatric care, 57(1), 50–55. https://doi.org/10.1111/ppc.12523	Be- obach- tungs- studie	Three aspects of Safewards	Kom- plexe Be- hand- lungs- pro- gramm e – Sa- fewards	mean days per episode	% reduc- tion	2.80 pre vs. 2.80 post 0.0% re- duction p = .71	high risk of bias	seri- ous	not se- rious	not se- rious
Stensgaard, L., Andersen, M. K., Nordentoft, M., & Hjorthøj, C. (2018). Implementation of the safewards model to reduce the use of coercive measures in adult psychiatric inpatient units: An interrupted time-series analysis. Journal of psychiatric research, 105, 147–152. https://doi.org/10.1016/j.jpsychires.2018.08.026	Be- obach- tungs- studie	Safewards model ten interventions	Kom- plexe Be- hand- lungs- pro- gramm e – Sa- fewards	Duration of me- chanical restraint (hours) (pre- post; Median; IQR)		24 (12; 58) to 18 (8; 39) p < .001	high risk of bias	seri- ous	not se- rious	seri- ous

Alexandra Hernandez, Sanaz Riahi, Melanie I. Stuckey, Barbara A. Mildon and Philip E. Klassen.(2017).Multidimensional approach to restraint minimization: The journey of a specialized mental health organization. URL: https://pubmed.ncbi.nlm.nih.gov/28960744/	Interr Time Series	Method to avoid re-strictions "Recovery Rounds" --> recommendation of the 6 CS (Methode zu Vermeidung von Einschränkungen)	Kom-plexe Be-hand-lungs-pro-gramm e – Six Core Strate-gies	Sec red hrs/inc/ m step beta2	beta	-28,3 (p<0,001)	High Risk of Bias	seri-ous	serious	seri-ous	
Alexandra Hernandez, Sanaz Riahi, Melanie I. Stuckey, Barbara A. Mildon and Philip E. Klassen.(2017).Multidimensional approach to restraint minimization: The journey of a specialized mental health organization. URL: https://pubmed.ncbi.nlm.nih.gov/28960744/	Interr Time Series	Method to avoid re-strictions "Recovery Rounds" --> recommendation of the 6 CS (Methode zu Vermeidung von Einschränkungen)	Kom-plexe Be-hand-lungs-pro-gramm e – Six Core Strate-gies	Sec red hrs/inc/ m step beta3	beta	-1,9 (p<0,001)	High Risk of Bias	seri-ous	serious	seri-ous	
Alexandra Hernandez, Sanaz Riahi, Melanie I. Stuckey, Barbara A. Mildon and Philip E. Klassen.(2017).Multidimensional approach to restraint minimization: The journey of a specialized mental health organization. URL: https://pubmed.ncbi.nlm.nih.gov/28960744/	Interr Time Series	Method to avoid re-strictions "Recovery Rounds" --> recommendation of the 6 CS (Methode zu Vermeidung von	Kom-plexe Be-hand-lungs-pro-gramm e – Six Core Strate-gies	Res red hrs/inc/ m step beta2	beta	-4.2 (p=0.23)	High Risk of Bias	seri-ous	serious	seri-ous	niedrig

		Ein- schränkungen)									
Alexandra Hernandez, Sanaz Riahi, Melanie I. Stuckey, Barbara A. Mildon and Philip E. Klassen.(2017).Multidimensional approach to restraint minimization: The journey of a specialized mental health organization. URL: https://pubmed.ncbi.nlm.nih.gov/28960744/	Interr Time Series	Method to avoid re- strictions "Re- covery Rounds" --> recommenda- tion of the 6 CS (Methode zu Vermei- dung von Ein- schränkungen)	Kom- plexe Be- hand- lungs- pro- gramm e – Six Core Strate- gies	Res red hrs/inc/ m step beta3	beta	-0,9 (p=0.03)	High Risk of Bias	seri- ous	serious	seri- ous	
Blair, E. W., Woolley, S., Szarek, B. L., Mucha, T. F., Dutka, O., Schwartz, H. I., Wisniowski, J., & Goethe, J. W. (2017). Reduction of Seclusion and Restraint in an Inpatient Psychiatric Setting: A Pilot Study. The Psychiatric quarterly, 88(1), 1–7. https://doi.org/10.1007/s11126-016-9428-0	Be- obach- tungs- studie	The study in- tervention, which used evidence- based thera- peutic prac- tices for re- ducing vio- lence/aggres- sion, included routine use of the Brøset Vi- olence Check- list, man- dated staff education in crisis inter- vention and trauma	Kom- plexe Be- hand- lungs- pro- gramm e – Sons- tige	mean du- ration of seclusion events	% reduc- tion (post interven- tion vs. baseline)	27% re- duction p < .001	Very high risk of bias	seri- ous	not se- rious	not se- rious	niedrig

		informed care, increased frequency of physician re-assessment of need for S/R, formal administrative review of S/R events and environmental enhancements (e.g., comfort rooms to support sensory modulation).									
Blair, E. W., Woolley, S., Szarek, B. L., Mucha, T. F., Dutka, O., Schwartz, H. I., Wisniowski, J., & Goethe, J. W. (2017). Reduction of Seclusion and Restraint in an Inpatient Psychiatric Setting: A Pilot Study. <i>The Psychiatric quarterly</i> , 88(1), 1–7. https://doi.org/10.1007/s11126-016-9428-0	Beobachtungsstudie	The study intervention, which used evidence-based therapeutic practices for reducing violence/aggression, included routine use of the Brøset Violence Checklist, mandated staff education in crisis	Komplexe Behandlungsprogramme – Sonstige	mean duration of restraint events	% reduction (post intervention vs. baseline)	52% increase (n.s.?) p >.05? (unclear; p-value not reported; no statement about significance)	Very high risk of bias	serious	not serious	not serious	

		intervention and trauma informed care, increased frequency of physician re-assessment of need for S/R, formal administrative review of S/R events and environmental enhancements (e.g., comfort rooms to support sensory modulation).									
Rowsell, K. A., Akinbola, A., Hancock, M., Nyambayo, T., Jackson, Z., & Hunt, D. F. (2024). Reducing use of seclusion on a male medium secure forensic ward. <i>BMJ open quality</i> , 13(1), e002576. https://doi.org/10.1136/bmjoq-2023-002576	Beobachtungsstudie	designed and implemented three tests of change which reviewed seclusion processes, enhanced de-escalation skills and improved decision making	Komplexe Behandlungsprogramme – Sonstige	hours in seclusion (pre-post)	% reduction	67 % reduction	very high risk of bias	serious	not serious	not serious	

Czernin, K., Bermpohl, F., Heinz, A., Wullschle- ger, A., & Mahler, L. (2020). Auswirkungen der Etablierung des psychiatrischen Behandlun- gskonzepts „Weddinger Modell“ auf mechanische Zwangsmaßnahmen [Effects of the Psychiatric Care Concept "Weddinger Modell" on Mechan- ical Coercive Measures]. Psychiatrische Praxis, 47(5), 242–248. https://doi.org/10.1055/a-1116-0720	Ver- gleichs studie	Recovery-ori- entated psy- chiatric care concept "Weddinger Modell"	Kom- plexe Be- hand- lungs- pro- gramm e – Wed- dinger Modell	Fixierun- gen, durch- schnittli- che Dauer in h, Me- dian (IQR)	U (Mann- Whith- ney-U- Test, Wil- coxon- Rangsum- men- Test) oder Chi ² -Test	n. s. U bzw. Chi ² nicht be- reicht	criti- cal risk of bias	seri- ous	not se- rious	not se- rious	
Czernin, K., Bermpohl, F., Heinz, A., Wullschle- ger, A., & Mahler, L. (2020). Auswirkungen der Etablierung des psychiatrischen Behandlun- gskonzepts „Weddinger Modell“ auf mechanische Zwangsmaßnahmen [Effects of the Psychiatric Care Concept "Weddinger Modell" on Mechan- ical Coercive Measures]. Psychiatrische Praxis, 47(5), 242–248. https://doi.org/10.1055/a-1116-0720	Ver- gleichs studie	Recovery-ori- entated psy- chiatric care concept "Weddinger Modell"	Kom- plexe Be- hand- lungs- pro- gramm e – Wed- dinger Modell	Fixierun- gen, ku- mulative Dauer in h, Me- dian (IQR)	U (Mann- Whith- ney-U- Test, Wil- coxon- Rangsum- men- Test) oder Chi ² -Test	n. s. U bzw. Chi ² nicht be- reicht	criti- cal risk of bias	seri- ous	not se- rious	not se- rious	
Czernin, K., Bermpohl, F., Heinz, A., Wullschle- ger, A., & Mahler, L. (2020). Auswirkungen der Etablierung des psychiatrischen Behandlun- gskonzepts „Weddinger Modell“ auf mechanische Zwangsmaßnahmen [Effects of the Psychiatric Care Concept "Weddinger Modell" on Mechan- ical Coercive Measures]. Psychiatrische Praxis, 47(5), 242–248. https://doi.org/10.1055/a-1116-0720	Ver- gleichs studie	Recovery-ori- entated psy- chiatric care concept "Weddinger Modell"	Kom- plexe Be- hand- lungs- pro- gramm e – Wed- dinger Modell	Isolierun- gen, durch- schnittli- che Dauer in h, Me- dian (IQR)	U (Mann- Whith- ney-U- Test, Wil- coxon- Rangsum- men- Test)	63; p=0.002	criti- cal risk of bias	seri- ous	not se- rious	not se- rious	

Czernin, K., Bermpohl, F., Heinz, A., Wullschleger, A., & Mahler, L. (2020). Auswirkungen der Etablierung des psychiatrischen Behandlungskonzepts „Weddinger Modell“ auf mechanische Zwangsmaßnahmen [Effects of the Psychiatric Care Concept "Weddinger Modell" on Mechanical Coercive Measures]. Psychiatrische Praxis, 47(5), 242–248. https://doi.org/10.1055/a-1116-0720	Vergleichsstudie	Recovery-orientated psychiatric care concept "Weddinger Modell"	Komplexe Behandlungsprogramme – Weddinger Modell	Isolierungen, kumulative Dauer in h, Median (IQR)	U (Mann-Whitney-U-Test, Wilcoxon-Rangsummentest)	65,5; p=0.003	critical risk of bias	serious	not serious	not serious	
Korezelidou, A., Welte, A., Oster, A., & Mahler, L. (2025). Overcoming the lack of alternatives - Changes in the use of coercive measures after implementation of the recovery-oriented "Weddinger Modell" in acute psychiatric care. Journal of psychiatric research, 181, 405–410. https://doi.org/10.1016/j.jpsychires.2024.11.032	Beobachtungsstudie	recovery-, resilience-, and patient-centered "Weddinger Modell" (WM) f	Komplexe Behandlungsprogramme – Weddinger Modell	Single duration of CM per case in hours, M MD RA	% reduction	9.08 5.04 0.25–207.25 pre vs. 9.35 5.13 0.08–111.42 post 3.0% increase	high risk of bias	serious	not serious	serious	
Korezelidou, A., Welte, A., Oster, A., & Mahler, L. (2025). Overcoming the lack of alternatives - Changes in the use of coercive measures after implementation of the recovery-oriented "Weddinger Modell" in acute psychiatric care. Journal of psychiatric research, 181, 405–410. https://doi.org/10.1016/j.jpsychires.2024.11.032	Beobachtungsstudie	recovery-, resilience-, and patient-centered "Weddinger Modell" (WM) f	Komplexe Behandlungsprogramme – Weddinger Modell	average single CM duration per case after WM-MIP	exp. B	exp. B = 0.887, 95%-CI = 0.642–1.225, p = 0.466	high risk of bias	serious	not serious	not serious	

Florisse, E. J. R., & Delespaul, P. A. E. G. (2020). Monitoring risk assessment on an acute psychiatric ward: Effects on aggression, seclusion and nurse behaviour. PloS one, 15(10), e0240163. https://doi.org/10.1371/journal.pone.0240163	Beobachtungsstudie	implemented the Crisis Monitor, risk assessment tools	Risikovorhersage und frühe Interventionen	average duration of seclusion in hours (pre-post, mean (sd))	SMD (Standardized Mean Difference) % reduction	20.5 (48.5) pre vs. 30.9 (63.6) post p = .03 SMD = 0.184 50.7% increase	high risk of bias	serious	not serious	not serious	niedrig
Manning, T., Bell, S. B., Dawson, D., Kezbers, K., Crockett, M., & Gleason, O. (2022). The Utilization of a Rapid Agitation Scale and Treatment Protocol for Patient and Staff Safety in an Inpatient Psychiatric Setting. The Psychiatric quarterly, 93(3), 915–933. https://doi.org/10.1007/s11126-022-10001-y	Beobachtungsstudie	Rapid Agitation Scale and Treatment Protocol for Patient and Staff Safety in an Inpatient Psychiatric Setting	Risikovorhersage und frühe Interventionen	average restraint minutes per incident (pre-post)	SMD (Standardized mean Difference)	SMD = 0.41 44.4% reduction (18 to 10 minutes) p = .047	high risk of bias	serious	not serious	not serious	
Manning, T., Bell, S. B., Dawson, D., Kezbers, K., Crockett, M., & Gleason, O. (2022). The Utilization of a Rapid Agitation Scale and Treatment Protocol for Patient and Staff Safety in an Inpatient Psychiatric Setting. The Psychiatric quarterly, 93(3), 915–933. https://doi.org/10.1007/s11126-022-10001-y	Beobachtungsstudie	Rapid Agitation Scale and Treatment Protocol for Patient and Staff Safety in an Inpatient Psychiatric Setting	Risikovorhersage und frühe Interventionen	average seclusion minutes per incident (pre-post)	SMD (Standardized mean Difference)	SMD = -0.041 3.2% increase (132 to 137 minutes) n.s.	high risk of bias	serious	not serious	serious	
Odgaard, A. S., Kragh, M., & Roj Larsen, E. (2018). The impact of modified mania assessment scale (MAS-M) implementation on the use of mechanical restraint in psychiatric units. Nordic journal of psychiatry, 72(8), 549–555.	Vergleichsstudie	Danish assessment tool for psychiatric inpatients diagnosed with	Risikovorhersage und frühe Interventionen	duration of mechanical restraints	Median (IQR)	IG: MED = 30.7 h 12.0, 91.3) CG: MED	serious risk of bias	serious	not serious	serious	

https://doi.org/10.1080/08039488.2018.1490816		mania (MAS-M)	Interventionen			= 54. h (24.55, 93.7) no statistical test reported					
Emma Griffin.(2022) Seclusion Reduction on an Adult Inpatient Psychiatric Unit: A Quality Improvement Project. URL: https://pubmed.ncbi.nlm.nih.gov/34846230/	Beobachtungsstudie	Implementation of a standard debriefing process based on 6CS	Verhaltenstherapeutische und traumatherapeutische Nachbesprechungen	mean duration of seclusion episodes (pre-post)	% reduction	158 pre vs. 142 post 10.1% reduction	very high risk of bias	not serious	not serious	not serious	sehr niedrig

Reduktion von freiheitsbeschränkenden Maßnahmen – Anzahl Episoden psychiatrischer Zwangsmedikation

Literatur	Studientyp	Intervention	Intervention-Kategorie	Outcome einzeln	Outcome-Kategorie	Effektschätzer	Ergebnisse einzeln	Risk of Bias - gesamt	GRADE - Inconsistency	GRADE - Indirectness	GRADE - Imprecision	GRADE - Other considerations
Andersen C, Kolmos A, Andersen K, Sippel V, Stenager E. Applying sensory modulation to mental health inpatient care to reduce seclusion and restraint: a case control study	Vergleichsstudie	Sensory-based interventions	Gestaltung psychiatrischer Stationen	no. of forced medications	Reduktion Episoden psychiatrische	rate ratios	(0.54) 0.29-1.02	Serious risk of bias	not serious	not serious	serious	sehr niedrig

					Zwangs- be- hand- lung							
Harpøth A, Kennedy H, Terkildsen MD, Nørremark B, Carlsen AH, Sørensen LU. (2022) Do improved structural surroundings reduce restrictive practices in psychiatry? URL: https://pub-med.ncbi.nlm.nih.gov/36404331/ . DOI: 10.1186/s13033-022-00562-7	Be- obach- tungs- studie	We ex- amine if the use of RPs was re- duced by the struc- tural change of relo- cating a 170- year-old psychi- atric univer- sity hos- pital (UH) in Central Den- mark Region (CDR) to a new modern pur- pose- built	Gestaltung psychiatri- scher Stati- onen	Involun- tary acute medica- tion (pre- post, n (%))	Reduk- tion Episo- den psychi- atrische Zwangs- be- hand- lung	% re- duc- tion	1202 (30%) pre vs. 628 (24%) post p < .0001 20,0% re- duction	high risk of bias	not se- rious	not seri- ous	not se- rious	

		university hospital.										
Harpøth A, Kennedy H, Terkildsen MD, Nørremark B, Carlsen AH, Sørensen LU. (2022) Do improved structural surroundings reduce restrictive practices in psychiatry? URL: https://pubmed.ncbi.nlm.nih.gov/36404331/ . DOI: 10.1186/s13033-022-00562-7	Beobachtungsstudie	We examine if the use of RPs was reduced by the structural change of relocating a 170-year-old psychiatric university hospital (UH) in Central Denmark Region (CDR) to a new modern purpose-built	Gestaltung psychiatrischer Stationen	Involuntary treatment (pre-post, n (%))	Reduktion Episoden psychiatrische Zwangsbehandlung	% reduction	82 (2%) pre vs. 54 (2%) post p = .831 0,0% reduction	high risk of bias	not serious	not serious	not serious	

		university hospital.										
Harpøth A, Kennedy H, Terkildsen MD, Nørremark B, Carlsen AH, Sørensen LU. (2022) Do improved structural surroundings reduce restrictive practices in psychiatry? URL: https://pubmed.ncbi.nlm.nih.gov/36404331/ . DOI: 10.1186/s13033-022-00562-7	Beobachtungsstudie	We examine if the use of RPs was reduced by the structural change of relocating a 170-year-old psychiatric university hospital (UH) in Central Denmark Region (CDR) to a new modern purpose-built	Gestaltung psychiatrischer Stationen	Involuntary electroconvulsive therapy (pre-post, n (%))	Reduktion Episoden psychiatrische Zwangshandlung	% reduction	15 (0%) pre vs. 8 (0%) post p = .690 0.0% reduction	high risk of bias	not serious	not serious	not serious	

		university hospital.										
Stensgaard, L., Andersen, M. K., Nordentoft, M., & Hjorthøj, C. (2018). Implementation of the safeguards model to reduce the use of coercive measures in adult psychiatric inpatient units: An interrupted time-series analysis. <i>Journal of psychiatric research</i> , 105, 147–152. https://doi.org/10.1016/j.jpsychires.2018.08.026	Beobachtungsstudie	Safeguards model ten interventions	Komplexe Behandlungsprogramme – Safeguards	Electroconvulsive therapy (ECT) (pre-post; N/year (%))	Reduktion Episoden psychiatrische Zwangsbehandlung	% reduction	2.6 (0.5%) to 6.7 (1.1%) 120.0% increase p < .001	high risk of bias	not serious	not serious	not serious	
Stensgaard, L., Andersen, M. K., Nordentoft, M., & Hjorthøj, C. (2018). Implementation of the safeguards model to reduce the use of coercive measures in adult psychiatric inpatient units: An interrupted time-series analysis. <i>Journal of psychiatric research</i> , 105, 147–152. https://doi.org/10.1016/j.jpsychires.2018.08.026	Beobachtungsstudie	Safeguards model ten interventions	Komplexe Behandlungsprogramme – Safeguards	Forced sedation (pre-post; N/year (%))	Reduktion Episoden S/R	% reduction	198.8 (32.6%) to 231.8 (39.7%) 21.8% increase p < .001	high risk of bias	not serious	not serious	not serious	niedrig
Haines-Delmont A, Goodall K, Duxbury J, Tsang A. (2022) An Evaluation of the Implementation of a "No Force First" Informed Organisational Guide to Reduce Physical Restraint in Mental Health and Learning Disability Inpatient Settings in the UK. URL: https://pubmed.ncbi.nlm.nih.gov/35185645/ DOI: 10.3389/fpsy.2022.749615	Beobachtungsstudie	No Force First Guide - implementation of a bespoke, person-centred and	Komplexe Behandlungsprogramme – Sonstige	Incidence rate of medication used during restraint per 1000 patient-	Reduktion Episoden S/R	incidence rate ratio IRR [95% CI] %reduction	1.49 [1.38–1.61] pre vs. 1.33 [1.22–1.44] post p = .06 IRR = 0.89, 95% CI 0.79–1.00 10.7% reduction	some concerns	not serious	not serious	serious	sehr niedrig

		recovery focused "No Force First" intervention to reduce the use of restraint in both mental health and learning disabilities settings		days [95% CI] (pre-post)								
Cibis, M. L., Wackerhagen, C., Müller, S., Lang, U. E., Schmidt, Y., & Heinz, A. (2017). Vergleichende Betrachtung von Aggressivität, Zwangsmedikation und Entweichungsraten zwischen offener und geschlossener Türpolitik auf einer Akutstation [Comparison of Aggressive Behavior, Compulsory Medication and Absconding Behavior Between Open and Closed door Policy in an Acute Psychiatric Ward]. Psychiatrie Praxis, 44(3), 141–147. https://doi.org/10.1055/s-0042-105181	Beobachtungsstudie	überprüfung der These, dass offene Stationstüren Aggressivität und	Organisatorische und institutionelle Interventionen	Zwangsmedikation	Reduktion Episoden psychiatrische Zwangsbehandlung	Chi ² (p-Wert)	7,6 (0,006)	Very high risk of bias	serious	not serious	not serious	niedrig

		Zwangs- behand- lung re- duzie- ren ohne Entwei- chungs- raten zu erhöhen										
Hochstrasser, L., Voulgaris, A., Möller, J., Zimmermann, T., Steinauer, R., Borgwardt, S., Lang, U. E., & Huber, C. G. (2018). Reduced Frequency of Cases with Seclusion Is Associated with "Opening the Doors" of a Psychiatric Intensive Care Unit. <i>Frontiers in psychiatry</i> , 9, 57. https://doi.org/10.3389/fpsy.2018.00057	Be- obach- tungs- studie	Imple- menting an open door policy is a com- plex in- terven- tion com- prising changes in ther- apeutic stance, team pro- cesses, and a change from locked to open doors.	Organisa- torische und institu- tionelle In- terventio- nen	Mean number of forced medica- tions (pre- post, mean (sd))	Reduk- tion Episo- den psychi- atrische Zwangs- be- hand- lung	SMD (Stan- dar- dize Mean Diffe- rence)	1.1 ± 0.3 pre vs. 1.0 ± 0.0 post p = .529 SMD = 0.472	some con- cerns	serious	not seri- ous	not se- rious	

Van Melle, A. L., Noorthoorn, E. O., Widdershoven, G. A. M., Mulder, C. L., & Voskes, Y. (2020). Does high and intensive care reduce coercion? Association of HIC model fidelity to seclusion use in the Netherlands. BMC psychiatry, 20(1), 469. https://doi.org/10.1186/s12888-020-02855-y	Beobachtungsstudie	audits with high and Intensive Care (HIC) monitor The association between HIC monitor scores and the use of seclusion and forced medication was analyzed, corrected for patient characteristics	Organisatorische und institutionelle Interventionen	medication events per admission days	Reduktion Episoden psychiatrische Zwangsbehandlung	students t test	0.0162 events/dys vs. 0.0207 events/days (p< 0.05)	serious risk of bias	serious	not serious	not serious	niedrig
Thomsen, C. T., Benros, M. E., Maltesen, T., Hastrup, L. H., Andersen, P. K., Giacco, D., & Nordentoft, M. (2018). Patient-controlled hospital admission for patients with severe mental disorders: a	Vergleichsstudie	implementing patient-controlled	Psychotherapeutische Angebote	forced treatment (IG group)	Reduktion Episoden	mean difference (95% CI)	MD = -0.01, p = .4632	moderate risk	serious	not serious	not serious	

nationwide prospective multicentre study. Acta psychiatrica Scandinavica, 137(4), 355–363. https://doi.org/10.1111/acps.12868		admission (PCA)		pre-post)	psychiatrische Zwangsbehandlung			of bias				
Florisse, E. J. R., & Delespaul, P. A. E. G. (2020). Monitoring risk assessment on an acute psychiatric ward: Effects on aggression, seclusion and nurse behaviour. PLoS one, 15(10), e0240163. https://doi.org/10.1371/journal.pone.0240163	Beobachtungsstudie	implemented the Crisis Monitor, risk assessment tools	Risikovorhersage und frühe Interventionen	number of involuntary medications (pre-post, n, n per 1000 patient days per bed)	Reduktion Episoden psychiatrische Zwangsbehandlung	% reduction	75 (0.69) pre vs. 86 (0.87) post p < .01 26.1% increase	high risk of bias	not serious	not serious	not serious	niedrig
Välimäki, M., Lantta, T., Anttila, M., Vahlberg, T., Normand, S. L., & Yang, M. (2022). An Evidence-Based Educational Intervention for Reducing Coercive Measures in Psychiatric Hospitals: A Randomized Clinical Trial. JAMA network open, 5(8), e2229076. https://doi.org/10.1001/jamanetworkopen.2022.29076	RCT		Fort- und Weiterbildungsprogramme	No. of forced medication events at ward level/total no. of patients (%)	Reduktion Episoden psychiatrische Zwangsbehandlung	adjusted rate ratio (post)	0.81 (0.39-1.68)	some concerns	not serious	not serious	serious	
Stoll, J., Westermair, A. L., Kübler, U., Reisch, T., Cattapan, K., Bridler, R., Maier, R., & Trachsel, M. (2022). A two-center pilot study on the effects of clinical ethics support on coercive measures in psychiatry. BMC psychiatry, 22(1), 370.	Beobachtungsstudie	Monthly moral case deliberation (MCD)	Fort- und Weiterbildungsprogramme	intensity of coerced medication (absolute	Reduktion Episoden psychiatrische	SMD (Standardized Mean	SMD = -0.175 (1.3 ± 0.7 vs. 1.2 ± 0.4) p = .931	very high risk of bias	not serious	not serious	serious	niedrig

https://doi.org/10.1186/s12888-022-04024-9				frequen- cy of coer- ced medica- tions in patients sub- jected to it during the meas- ure- ment period) (pre- post)	Zwangs- be- hand- lung	Diffe- rence)						
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Reduktion von freiheitsbeschränkenden Maßnahmen – Anzahl der Episoden von Isolierungen und Fixierungen

Literatur	Studientyp	Interven- tion	Intervention- Kategorie	Outcome einzel	Outcome- Kategorie	Effekt- chätzer	Ergeb- nisse einzel	Risk of Bias ge- samt	GRADE - In- consis- tency	GRADE - Indi- rectnes s	GRAD E - Im- preci- sion	Evi- denzqu alität
Badouin, J., Bechdorf, A., Bermpohl, F., Baumgardt, J., & Weinmann, S. (2023). Preventing, reducing, and attenuating restraint: A prospective controlled trial of the implementation of peer support in	Beobach- tungsstudie	two peer support worker with EX-IN train- ing program	Fort- und Weiterbil- dungspro- gramme	number of events of re- straint per case	Reduktion Episoden S/R	effect size ac- cording to phi (post, inter- ven- tiongro up,	-0.126 (p=0.153)	serious risk of bias	serious	not se- rious	seri- ous	niedrig

acute psychiatry. Frontiers in psychiatry, 14, 1089484. https://doi.org/10.3389/fpsyt.2023.1089484						Cave! Prä-Post-Vergleich, kein Vergleich zur Kontrollgruppe)						
Badouin, J., Bechdorf, A., Bermpohl, F., Baumgardt, J., & Weinmann, S. (2023). Preventing, reducing, and attenuating restraint: A prospective controlled trial of the implementation of peer support in acute psychiatry. Frontiers in psychiatry, 14, 1089484. https://doi.org/10.3389/fpsyt.2023.1089484	Beobachtungsstudie	two peer support worker with EX-IN training program	Fort- und Weiterbildungsprogramme	number of events of restraint per case	Reduktion Episoden S/R	beta (post IG vs. CG)	0.08 [-0.40; 0.56] (p=0.737)	serious risk of bias	serious	not serious	serious	
Bowllan, N. M., O'brien, H. P., Blackwood, C., Cross, W. F., & Walsh, P. (2025). Implementation and Evaluation of a High-Fidelity, Interprofessional Simulation Project Using Standardized	Beobachtungsstudie	2.5-hr educational initiative that included Crisis Prevention Intervention (CPI) and Team	Fort- und Weiterbildungsprogramme	restraints	Reduktion Episoden S/R	RR	0.65	Very high risk of bias	serious	not serious	serious	

[illegible]

		post data on restraints, injuries, and an educational survey.										
Celofiga, A., Kores Plesnicar, B., Koprivsek, J., Moskon, M., Benkovic, D., & Gregoric Kumperscak, H. (2022). Effectiveness of De-Escalation in Reducing Aggression and Coercion in Acute Psychiatric Units. A Cluster Randomized Study. <i>Frontiers in psychiatry</i>, 13, 856153. https://doi.org/10.3389/fpsyt.2022.856153	RCT	A multi-center cluster randomized study was conducted in the acute wards of all psychiatric hospitals in Slovenia. The research was carried out in two phases, a baseline period of five consecutive months and an intervention period of the same five consecutive months in the following year. The intervention was	Fort- und Weiterbildungsprogramme	Physical [Mechanical] Restraints [with belts], Incidents; Primary!	Reduktion Episoden S/R	IRR, Incidence rate ratio (post)	0.537 (0.450; 0.640)	some concerns	serious	not serious	not serious	

		implemented after the baseline period and included training in verbal and non-verbal de-escalation techniques for the staff teams on experimental wards.										
Dixon, M., & Long, E. M. (2022). An Educational Intervention to Decrease the Number of Emergency Incidents of Restraint and Seclusion on a Behavioral Health Unit. Journal of continuing education in nursing, 53(2), 70–76. https://doi.org/10.3928/00220124-20220104-07	Beobachtungsstudie	implement a educational intervention "De-escalate Anyone, Anywhere, Anytime"-training	Fort- und Weiterbildungsprogramme	average no. of restraint per month (pre post)	Reduktion Episoden S/R	einfache Differenz	-4	high risk of bias	serious	not serious	serious	
Dixon, M., & Long, E. M. (2022). An Educational Intervention to Decrease the Number of Emergency Incidents	Beobachtungsstudie	implement a educational intervention "De-escalate Anyone,	Fort- und Weiterbildungsprogramme	average no. of seclusion per month	Reduktion Episoden S/R	einfache Differenz	-2.67	high risk of bias	serious	not serious	serious	

of Restraint and Seclusion on a Behavioral Health Unit. Journal of continuing education in nursing, 53(2), 70–76. https://doi.org/10.3928/00220124-20220104-07		Anywhere, Anytime"-training		(pre post)								
Dixon, M., & Long, E. M. (2022). An Educational Intervention to Decrease the Number of Emergency Incidents of Restraint and Seclusion on a Behavioral Health Unit. Journal of continuing education in nursing, 53(2), 70–76. https://doi.org/10.3928/00220124-20220104-07	Beobachtungsstudie	implement a educational intervention "De-escalate Anyone, Anywhere, Anytime"-training	Fort- und Weiterbildungsprogramme	average no. of restraint per month (Int vs. controll post)	Reduktion Episoden S/R	Diff-in-diff	-5.3	high risk of bias	serious	not serious	serious	
Dixon, M., & Long, E. M. (2022). An Educational Intervention to Decrease the Number of Emergency Incidents of Restraint and Seclusion on a Behavioral Health Unit. Journal of continuing education in nursing, 53(2), 70–76. https://doi.org/10.3928/00220124-20220104-07	Beobachtungsstudie	implement a educational intervention "De-escalate Anyone, Anywhere, Anytime"-training	Fort- und Weiterbildungsprogramme	average no. of seclusion per month (Int vs. controll post)	Reduktion Episoden S/R	Diff-in-diff	-0.67	high risk of bias	serious	not serious	serious	

Geoffrion, S., Gonçalves, J., Giguère, C. É., & Guay, S. (2018). Impact of a Program for the Management of Aggressive Behaviors on Seclusion and Restraint Use in Two High-Risk Units of a Mental Health Institute. <i>The Psychiatric quarterly</i> , 89(1), 95–102. https://doi.org/10.1007/s11126-017-9519-6	Beobachtungsstudie	Omega Programm	Fort- und Weiterbildungsprogramme	Number of seclusion for 1000 patient-days intensive care (pre-post)	Reduktion Episoden S/R	% reduction	320.3 pre vs. 161.6 post p = .0023 49.7% reduction	very high risk of bias	serious	not serious	serious	
Geoffrion, S., Gonçalves, J., Giguère, C. É., & Guay, S. (2018). Impact of a Program for the Management of Aggressive Behaviors on Seclusion and Restraint Use in Two High-Risk Units of a Mental Health Institute. <i>The Psychiatric quarterly</i> , 89(1), 95–102. https://doi.org/10.1007/s11126-017-9519-6	Beobachtungsstudie	Omega Programm	Fort- und Weiterbildungsprogramme	Number of seclusion for 1000 patient-days emergency (pre-post)	Reduktion Episoden S/R	% reduction	5.4 pre vs. 2.9 post p = .3970 46.3% reduction	very high risk of bias	serious	not serious	serious	
Geoffrion, S., Gonçalves, J., Giguère, C. É., & Guay, S. (2018). Impact of a Program for the Management of	Beobachtungsstudie	Omega Programm	Fort- und Weiterbildungsprogramme	Number of restraints for 1000 patient-	Reduktion Episoden S/R	% reduction	71.9 pre vs. 26.3 post p = .0354	very high risk of bias	serious	not serious	serious	

Aggressive Behaviors on Seclusion and Restraint Use in Two High-Risk Units of a Mental Health Institute. The Psychiatric quarterly, 89(1), 95–102. https://doi.org/10.1007/s11126-017-9519-6				days intensive care (pre-post)			63.4% reduction					
Geoffrion, S., Gonçalves, J., Giguère, C. É., & Guay, S. (2018). Impact of a Program for the Management of Aggressive Behaviors on Seclusion and Restraint Use in Two High-Risk Units of a Mental Health Institute. The Psychiatric quarterly, 89(1), 95–102. https://doi.org/10.1007/s11126-017-9519-6	Beobachtungsstudie	Omega Programm	Fort- und Weiterbildungsprogramme	Number of restraints for 1000 patient-days emergency (pre-post)	Reduktion Episoden S/R	% reduction	3.7 pre vs. 1.6 post p = .1960 56.8% reduction	very high risk of bias	serious	not serious	serious	
Haefner, J., Dunn, I., & McFarland, M. (2021). A Quality Improvement Project Using Verbal De-Escalation to Reduce Seclusion and Patient Aggression in an Inpatient Psychiatric Unit. Issues in mental health nursing, 42(2),	Beobachtungsstudie	TeamStEEPS education programm	Fort- und Weiterbildungsprogramme	rate of seclusion events (pre-post)	Reduktion Episoden S/R	% reduction	5.9% pre vs. 4.4% post p = .39 25.4% reduction	high risk of bias	serious	not serious	serious	

138–144. https://doi.org/10.1080/01612840.2020.1789784												
Kontio R, Pitkänen A, Joffe G, Katajisto J, Välimäki M. eLearning course may shorten the duration of mechanical restraint among psychiatric inpatients: a cluster-randomized trial. Nord J Psychiatry. 2014 Oct;68(7):443-9. doi: 10.3109/08039488.2013.855254. Epub 2013 Nov 25. PMID: 24274836.	RCT	In a cluster-randomized intervention trial, the nursing personnel on 10 wards were randomly assigned to eLearning (intervention) or training-as-usual (control) groups. The eLearning course comprised six modules with specific topics (legal and ethical issues, behaviour-related factors, therapeutic relationship and self-awareness,	Fort- und Weiterbildungsprogramme	seclusions per 1000 occupied bed days	Reduktion Episoden S/R	change in rates (pre-post, intervention wards)	MED (IQR) baseline = 12.2 (12.0) MED (IQR) follow-up = 16.3 (16.0) p = .354	some concerns	serious	not serious	serious	

		teamwork and integrating knowledge with practice) and specific learning methods.										
Kontio R, Pitkänen A, Joffe G, Katajisto J, Välimäki M. eLearning course may shorten the duration of mechanical restraint among psychiatric inpatients: a cluster-randomized trial. Nord J Psychiatry. 2014 Oct;68(7):443-9. doi: 10.3109/08039488.2013.855254. Epub 2013 Nov 25. PMID: 24274836.	RCT	In a cluster-randomized intervention trial, the nursing personnel on 10 wards were randomly assigned to eLearning (intervention) or training-as-usual (control) groups. The eLearning course comprised six modules with specific topics (legal and ethical issues, behaviour-related	Fort- und Weiterbildungsprogramme	mechanical restraints per 1000 occupied bed days	Reduktion Episoden S/R	change in rates (pre-post, intervention wards)	MED (IQR) baseline = 1.5 (1.6) MED (IQR) follow-up = 1.0 (6.1) p = .226	some concerns	serious	not serious	serious	

		factors, therapeutic relationship and self-awareness, teamwork and integrating knowledge with practice) and specific learning methods.										
Kontio R, Pitkänen A, Joffe G, Katajisto J, Välimäki M. eLearning course may shorten the duration of mechanical restraint among psychiatric inpatients: a cluster-randomized trial. Nord J Psychiatry. 2014 Oct;68(7):443-9. doi: 10.3109/08039488.2013.855254. Epub 2013 Nov 25. PMID: 24274836.	RCT	In a cluster-randomized intervention trial, the nursing personnel on 10 wards were randomly assigned to eLearning (intervention) or training-as-usual (control) groups. The eLearning course comprised six modules with specific	Fort- und Weiterbildungsprogramme	seclusions per 1000 occupied bed days	Reduktion Episoden S/R	difference in change in rates (intervention wards vs. control wards)	no difference in change rates (intervention wards vs. control wards) p = .629	some concerns	serious	not serious	serious	

		topics (legal and ethical issues, behaviour-related factors, therapeutic relationship and self-awareness, teamwork and integrating knowledge with practice) and specific learning methods.										
Kontio R, Pitkänen A, Joffe G, Katajisto J, Välimäki M. eLearning course may shorten the duration of mechanical restraint among psychiatric inpatients: a cluster-randomized trial. Nord J Psychiatry. 2014 Oct;68(7):443-9. doi: 10.3109/08039488.2013.855254. Epub 2013 Nov 25. PMID: 24274836.	RCT	In a cluster-randomized intervention trial, the nursing personnel on 10 wards were randomly assigned to eLearning (intervention) or training-as-usual (control) groups. The	Fort- und Weiterbildungsprogramme	mechanical restraints per 1000 occupied bed days	Reduktion Episoden S/R	difference in change in rates (intervention wards vs. control wards)	no difference in change rates (intervention wards vs. control wards) p = .369	some concerns	serious	not serious	serious	

		eLearning course comprised six modules with specific topics (legal and ethical issues, behaviour-related factors, therapeutic relationship and self-awareness, teamwork and integrating knowledge with practice) and specific learning methods.										
Nikopaschos, F., Burrell, G., Clark, J., & Salgueiro, A. (2023). Trauma-Informed Care on mental health wards: the impact of Power Threat Meaning Framework Team Formulation and Psychological Stabilisation on self-harm and restrictive interventions.	Beobachtungsstudie	Trauma-Informed Care (TIC), comprising weekly Power Threat Meaning Framework (PTMF) Team Formulation	Fort- und Weiterbildungsprogramme	mean number of monthly incidents of seclusion (sd)	Reduktion Episoden S/R	% reduction, r, SMD	mean (pre intervention) = 10.25 (sd = 3.72) mean post intervention) = 7.31 (sd = 3.28)	very high risk of bias	serious	not serious	not serious	

Frontiers in psychology, 14, 1145100. https://doi.org/10.3389/fpsyg.2023.1145100		and weekly Psychological Stabilisation staff training, to a National Health Service (NHS) adult acute inpatient mental health unit over a four-year period					$p < .05$ 28.66% reduction $r = .30$ SMD = -0.838					
Nikopaschos, F., Burrell, G., Clark, J., & Salgueiro, A. (2023). Trauma-Informed Care on mental health wards: the impact of Power Threat Meaning Framework Team Formulation and Psychological Stabilisation on self-harm and restrictive interventions. Frontiers in psychology, 14, 1145100. https://doi.org/10.3389/fpsyg.2023.1145100	Beobachtungsstudie	Trauma-Informed Care (TIC), comprising weekly Power Threat Meaning Framework (PTMF) Team Formulation and weekly Psychological Stabilisation staff training, to a National Health Service (NHS) adult acute	Fort- und Weiterbildungsprogramme	mean number of monthly restraints (sd)	Reduktion Episoden S/R	% reduction, r, SMD	mean (pre intervention) = 16.08 (sd = 5.66) mean post intervention = 12.90 (sd = 5.85) $p < .05$ 19.82% reduction $d = .55$	very high risk of bias	serious	not serious	not serious	

		inpatient mental health unit over a four-year period										
Stoll, J., Westermair, A. L., Kübler, U., Reisch, T., Cattapan, K., Bridler, R., Maier, R., & Trachsel, M. (2022). A two-center pilot study on the effects of clinical ethics support on coercive measures in psychiatry. BMC psychiatry, 22(1), 370. https://doi.org/10.1186/s12888-022-04024-9	Beobachtungsstudie	Monthly moral case deliberation (MCD)	Fort- und Weiterbildungsprogramme	absolute frequency of restraint episodes in patients subjected to it (pre-post)	Reduktion Episoden S/R	SMD (Standardized Mean Difference)	SMD = -0.283 (1.7 ± 0.8 vs. 1.5 ± 0.6 h) p = .914	very high risk of bias	serious	not serious	serious	
Stoll, J., Westermair, A. L., Kübler, U., Reisch, T., Cattapan, K., Bridler, R., Maier, R., & Trachsel, M. (2022). A two-center pilot study on the effects of clinical ethics support on coercive measures in psychiatry. BMC psychiatry, 22(1), 370. https://doi.org/10.1186/s12888-022-04024-9	Beobachtungsstudie	Monthly moral case deliberation (MCD)	Fort- und Weiterbildungsprogramme	absolute frequency of restraint seclusion episodes in patients subjected to it (pre-post)	Reduktion Episoden S/R	SMD (Standardized Mean Difference)	SMD = 0.24 (2.2 ± 2.5 vs. 3.4 ± 6.6 h) p = .418	very high risk of bias	serious	not serious	serious	
Välimäki, M., Lantta, T., Anttila, M., Vahlberg, T., Normand, S. L., & Yang, M. (2022). An	RCT	8 months Training with lectures,	Fort- und Weiterbildungsprogramme	No. of seclusion events at ward	Reduktion Episoden S/R	adjusted rate	0.66 (0.31-1.14)	some concerns	serious	not serious	serious	

Evidence-Based Educational Intervention for Reducing Coercive Measures in Psychiatric Hospitals: A Randomized Clinical Trial. JAMA network open, 5(8), e2229076. https://doi.org/10.1001/jamanetworkopen.2022.29076		seminars, workshops, and side visits		level/total no. of patients (%), primary!		ration (post)						
Välimäki, M., Lantta, T., Anttila, M., Vahlberg, T., Normand, S. L., & Yang, M. (2022). An Evidence-Based Educational Intervention for Reducing Coercive Measures in Psychiatric Hospitals: A Randomized Clinical Trial. JAMA network open, 5(8), e2229076. https://doi.org/10.1001/jamanetworkopen.2022.29076	RCT		Fort- und Weiterbildungsprogramme	No. of limb [mechanical] restraint events at ward level/total no. of patients (%)	Reduktion Episoden S/R	adjusted rate ratio (post)	0.92 (0.27-3.11)	some concerns	serious	not serious	serious	
Välimäki, M., Lantta, T., Anttila, M., Vahlberg, T., Normand, S. L., & Yang, M. (2022). An Evidence-Based Educational Intervention for Reducing Coercive Measures in Psychiatric Hospitals: A	RCT		Fort- und Weiterbildungsprogramme	No. of physical restraint events at ward level/total no. of patients (%)	Reduktion Episoden S/R	adjusted rate ratio (post)	6.25 (0.99-39.64)	some concerns	serious	not serious	serious	

Randomized Clinical Trial. JAMA network open, 5(8), e2229076. https://doi.org/10.1001/jamanetworkopen.2022.29076												
Whitecross, F., Lee, S., Bushell, H., Kang, M., Berry, C., Hollander, Y., Sonmez, G., & Rauchberger, I. (2020). Implementing a psychiatric behaviours of concern team can reduce restrictive intervention use and improve safety in inpatient psychiatry. Australasian psychiatry : bulletin of Royal Australian and New Zealand College of Psychiatrists, 28(4), 401–406. https://doi.org/10.1177/1039856220917072	Beobachtungsstudie	implemented a psychiatric behaviour of concern (Psy-BOC) team Psy-BOC call. Psy-BOC team, Behaviours of Concern (Psy-BOC) Call Psychiatry guideline to educate staff	Fort- und Weiterbildungsprogramme	mean monthly seclusion episodes per 1000 occupied bed days (6 mo. pre Psy-BOC commencement vs. 6 mo. post Psy-BOC commencement)	Reduktion Episoden S/R	% reduction	65.3% reduction (19.2 to 6.6) no significance testing	high risk of bias	serious	not serious	serious	
Whitecross, F., Lee, S., Bushell, H., Kang, M., Berry, C., Hollander, Y., Sonmez, G., & Rauchberger, I. (2020). Implementing a psychiatric behaviours of concern team can reduce restrictive intervention use and improve safety	Beobachtungsstudie	implemented a psychiatric behaviour of concern (Psy-BOC) team Psy-BOC call. Psy-BOC team,	Fort- und Weiterbildungsprogramme	management of physical aggression episodes with or without a Psy-BOC	Reduktion Episoden S/R	% reduction	40.3% reduction (41 (56.9%) to 17 (34.0%)) p = .013	high risk of bias	serious	not serious	not serious	

in inpatient psychiatry. Australasian psychiatry : bulletin of Royal Australian and New Zealand College of Psychiatrists, 28(4), 401–406. https://doi.org/10.1177/1039856220917072		Behaviours of Concern (Psy-BOC) Call Psychiatry guideline to educate staff		re- sponse: use of seclusion								
Whitecross, F., Lee, S., Bushell, H., Kang, M., Berry, C., Hollander, Y., Sonmez, G., & Rauchberger, I. (2020). Implementing a psychiatric behaviours of concern team can reduce restrictive intervention use and improve safety in inpatient psychiatry. Australasian psychiatry : bulletin of Royal Australian and New Zealand College of Psychiatrists, 28(4), 401–406. https://doi.org/10.1177/1039856220917072	Beobachtungsstudie	implemented a psychiatric behaviour of concern (Psy-BOC) team Psy-BOC call. Psy-BOC team, Behaviours of Concern (Psy-BOC) Call Psychiatry guideline to educate staff	Fort- und Weiterbildungsprogramme	management of physical aggression episodes with or without a Psy-BOC response: use of mechanical restraint	Reduktion Episoden S/R	% reduction	27.7% reduction (6 (8.3%) to 3 (6.0%)) n.s.	high risk of bias	serious	not serious	serious	
Whitecross, F., Lee, S., Bushell, H., Kang, M., Berry, C., Hollander, Y., Sonmez, G., & Rauchberger, I. (2020). Implementing a psychiatric behaviours of concern team can reduce restrictive intervention	Beobachtungsstudie	implemented a psychiatric behaviour of concern (Psy-BOC) team Psy-BOC call. Psy-BOC	Fort- und Weiterbildungsprogramme	management of physical aggression episodes with or without a Psy-	Reduktion Episoden S/R	% reduction	57.4% reduction (40 (56.3%) to 12 (244.0%)) p < .001	high risk of bias	serious	not serious	not serious	

use and improve safety in inpatient psychiatry. Australasian psychiatry : bulletin of Royal Australian and New Zealand College of Psychiatrists, 28(4), 401–406. https://doi.org/10.1177/1039856220917072		team, Behaviours of Concern (Psy-BOC) Call Psychiatry guideline to educate staff		BOC response: use of physical restraint								
Ye, J., Xiao, A., Yu, L., Guo, J., Lei, H., Wei, H., & Luo, W. (2018). Staff Training Reduces the Use of Physical Restraint in Mental Health Service, Evidence-based Reflection for China. Archives of psychiatric nursing, 32(3), 488–494. https://doi.org/10.1016/j.apnu.2017.11.028	Text Review	siehe Tabelle 1	Fort- und Weiterbildungsprogramme	frequency of physical restraint	Reduktion Episoden S/R	Risk Ratio RR [95% CI]	RR = 0.74 [0.43, 1.28] p = .28	high risk of bias	serious	not serious	serious	
Andersen C, Kolmos A, Andersen K, Sippel V, Stenager E. Applying sensory modulation to mental health inpatient care to reduce seclusion and restraint: a case control study	Vergleichsstudie	Sensory-based interventions	Gestaltung psychiatrischer Stationen	total no. of coercive measures	Reduktion Episoden S/R	rate ratios (IRR)	0.58 (0.38-0.9)	Serious risk of bias	not serious	not serious	serious	
Andersen C, Kolmos A, Andersen K, Sippel V, Stenager E. Applying sensory modulation to	Vergleichsstudie	Sensory-based interventions	Gestaltung psychiatrischer Stationen	no. of belt restraints	Reduktion Episoden S/R	rate ratios (IRR)	0.62 (0.34-1.13)	Serious risk of bias	not serious	not serious	not serious	sehr niedrig

mental health inpatient care to reduce seclusion and restraint: a case control study												
Harpøth A, Kennedy H, Terkildsen MD, Nørre-mark B, Carlsen AH, Sørensen LU. (2022) Do improved structural surroundings reduce restrictive practices in psychiatry? URL: https://pub-med.ncbi.nlm.nih.gov/36404331/ . DOI: 10.1186/s13033-022-00562-7	Beobach-tungsstudie	We examine if the use of RPs was reduced by the structural change of relocating a 170-year-old psychiatric university hospital (UH) in Central Denmark Region (CDR) to a new modern purpose-built university hospital.	Gestaltung psychiatrischer Stationen	Mechanical restraint (pre-post, n (%))	Reduktion Episoden S/R	% reduction	788 (19%) pre vs. 373 (14%) post p < .0001 26.3% reduction	high risk of bias	not serious	not serious	not serious	
Harpøth A, Kennedy H, Terkildsen MD, Nørre-mark B, Carlsen AH, Sørensen LU. (2022) Do improved structural surroundings reduce restrictive practices in psychiatry? URL: https://pub-med.ncbi.nlm.nih.gov/36404331/	Beobach-tungsstudie	We examine if the use of RPs was reduced by the structural change of relocating a 170-year-old	Gestaltung psychiatrischer Stationen	Manual restraint (pre-post, n (%))	Reduktion Episoden S/R	% reduction	373 (9%) pre vs. 367 (14%) post p < .0001 55.6% reduction	high risk of bias	not serious	not serious	not serious	

36404331/. DOI: 10.1186/s13033-022-00562-7		psychiatric university hospital (UH) in Central Denmark Region (CDR) to a new modern purpose-built university hospital.										
Harpøth A, Kennedy H, Terkildsen MD, Nørre-mark B, Carlsen AH, Sørensen LU. (2022) Do improved structural surroundings reduce restrictive practices in psychiatry? URL: https://pub-med.ncbi.nlm.nih.gov/36404331/ . DOI: 10.1186/s13033-022-00562-7	Beobachtungsstudie	We examine if the use of RPs was reduced by the structural change of relocating a 170-year-old psychiatric university hospital (UH) in Central Denmark Region (CDR) to a new modern purpose-built university hospital.	Gestaltung psychiatrischer Stationen	Locking of doors for an individual patient (pre-post, n (%))	Reduktion Episoden S/R	% reduction	176 (4%) pre vs. 99 (4%) post p = .326 0.0% reduction	high risk of bias	not serious	not serious	not serious	

Harpøth A, Kennedy H, Terkildsen MD, Nørre-mark B, Carlsen AH, Sørensen LU. (2022) Do improved structural surroundings reduce restrictive practices in psychiatry? URL: https://pub-med.ncbi.nlm.nih.gov/36404331/ . DOI: 10.1186/s13033-022-00562-7	Beobach-tungsstudie	We examine if the use of RPs was re-duced by the struc-tural change of relocating a 170-year-old psychi-atric univer-sity hospital (UH) in Cen-tral Den-mark Region (CDR) to a new modern pur-pose-built university hospital.	Gestaltung psychiatri-scher Statio-nen	Straps (wrists and an-kles) (pre-post, n (%))	Reduktion Episoden S/R	% re-duction	555 (14%) pre vs. 295 (11%) post p = .008 21.4% re-duction	high risk of bias	not se-rious	not se-rious	not seri-ous	
Harpøth A, Kennedy H, Terkildsen MD, Nørre-mark B, Carlsen AH, Sørensen LU. (2022) Do improved structural surroundings reduce restrictive practices in psychiatry? URL: https://pub-med.ncbi.nlm.nih.gov/36404331/ . DOI: 10.1186/s13033-022-00562-7	Beobach-tungsstudie	We examine if the use of RPs was re-duced by the struc-tural change of relocating a 170-year-old psychi-atric univer-sity hospital (UH) in Cen-tral	Gestaltung psychiatri-scher Statio-nen	Involun-tary per-sonal shielding for more than 24 h (pre-post, n (%))	Reduktion Episoden S/R	% re-duction	8 (0%) pre vs. 7 (0%) post p = .533 0.0% re-duction	high risk of bias	not se-rious	not se-rious	not seri-ous	

		Denmark Region (CDR) to a new modern purpose-built university hospital.										
Harpøth A, Kennedy H, Terkildsen MD, Nørre-mark B, Carlsen AH, Sørensen LU. (2022) Do improved structural surroundings reduce restrictive practices in psychiatry? URL: https://pub-med.ncbi.nlm.nih.gov/36404331/ . DOI: 10.1186/s13033-022-00562-7	Beobach-tungsstudie	We examine if the use of RPs was re-duced by the struc-tural change of relocating a 170-year-old psychi-atric univer-sity hospital (UH) in Cen-tral Den-mark Region (CDR) to a new modern pur-pose-built university hospital.	Gestaltung psychiatrischer Stationen	Restric-tive prac-tices other (pre-post, n (%))	Reduktion Episoden S/R	% re-duction	22 (1%) pre vs. 16 (1%) post p = .677 0.0% re-duction	high risk of bias	not se-rious	not se-rious	not seri-ous	
Baumgardt, J., Jäckel, D., Helber-Böhlen, H., Stiehm, N., Morgenstern, K., Voigt, A., Schöppe, E., Mc Cutcheon, A. K., Lecca,	Beobach-tungsstudie	Safewards Model	Komplexe Be-handlungs-programme – Safewards	average amount of coer-cive in-terven-tions per	Reduktion Episoden S/R	RR	0.97	High Risk of Bias	serious	not se-rious	seri-ous	sehr niedrig

E. E. V., Löhr, M., Schulz, M., Bechdorf, A., & Weinmann, S. (2019). Preventing and Reducing Coercive Measures-An Evaluation of the Implementation of the Safewards Model in Two Locked Wards in Germany. <i>Frontiers in psychiatry</i> , 10, 340. https://doi.org/10.3389/fpsyt.2019.00340				patient, ward a								
Baumgardt, J., Jäckel, D., Helber-Böhlen, H., Stiehm, N., Morgenstern, K., Voigt, A., Schöppe, E., McCutcheon, A. K., Lecca, E. E. V., Löhr, M., Schulz, M., Bechdorf, A., & Weinmann, S. (2019). Preventing and Reducing Coercive Measures-An Evaluation of the Implementation of the Safewards Model in Two Locked Wards in Germany. <i>Frontiers in psychiatry</i> , 10, 340. https://doi.org/10.3389/fpsyt.2019.00340	Beobachtungsstudie	Safewards Model	Komplexe Behandlungsprogramme – Safewards	average amount of coercive interventions per patient, ward b	Reduktion Episoden S/R	RR	0.92	High Risk of Bias	serious	not serious	serious	

Fletcher, J., Spittal, M., Brophy, L., Tibble, H., Kinner, S., Elsom, S., & Hamilton, B. (2017). Outcomes of the Victorian Safewards trial in 13 wards: Impact on seclusion rates and fidelity measurement. International journal of mental health nursing, 26(5), 461–471. https://doi.org/10.1111/inm.12380	Beobachtungsstudie	Safewards is a model and a set of 10 interventions	Komplexe Behandlungsprogramme – Safewards	No. of seclusion events per 1000 occupied bed days per ward per month	Reduktion Episoden S/R	IRR (No. of seclusion events per 1000 occupied bed days per ward per month) , pre vs. post (p=0.931)	1.03 [0.66;1,58]	critical risk of bias?	serious	not serious	serious	
Fletcher, J., Spittal, M., Brophy, L., Tibble, H., Kinner, S., Elsom, S., & Hamilton, B. (2017). Outcomes of the Victorian Safewards trial in 13 wards: Impact on seclusion rates and fidelity measurement. International journal of mental health nursing, 26(5), 461–471. https://doi.org/10.1111/inm.12380	Beobachtungsstudie	Safewards is a model and a set of 10 interventions	Komplexe Behandlungsprogramme – Safewards	No. of seclusion events per 1000 occupied bed days per ward per month	Reduktion Episoden S/R	IRR (No. of seclusion events per 1000 occupied bed days per ward per month) , pre vs. follow-up (p=0.04)	0.64 [0.4;1]	critical risk of bias?	serious	not serious	serious	

Lickiewicz, J., Adamczyk, N., Hughes, P. P., Jagielski, P., Starwarz, B., & Makara-Studzńska, M. (2021). Reducing aggression in psychiatric wards using Safewards-A Polish study. Perspectives in psychiatric care, 57(1), 50–55. https://doi.org/10.1111/ppc.12523	Beobachtungsstudie	Three aspects of Safewards	Komplexe Behandlungsprogramme – Safewards	day shift number of mechanical restraints per day (mean (sd) pre-post)	Reduktion Episoden S/R	SMD (Standardized Mean Difference)	Mean (pre) = 1.6 (sd = 1.2), Mean (post) = 1.3 (sd = 1.1) p = .0020 d = 0.15	high risk of bias	serious	not serious	serious	
Lickiewicz, J., Adamczyk, N., Hughes, P. P., Jagielski, P., Starwarz, B., & Makara-Studzńska, M. (2021). Reducing aggression in psychiatric wards using Safewards-A Polish study. Perspectives in psychiatric care, 57(1), 50–55. https://doi.org/10.1111/ppc.12523	Beobachtungsstudie	Three aspects of Safewards	Komplexe Behandlungsprogramme – Safewards	night shift number of mechanical restraints per day (mean (sd) pre-post)	Reduktion Episoden S/R	SMD (Standardized Mean Difference)	Mean (pre) = 2.0 (sd = 1.3), Mean (post) = 1.6 (sd = 1.3) p < .0001 d = 0.0	high risk of bias	serious	not serious	serious	
Lickiewicz, J., Adamczyk, N., Hughes, P. P., Jagielski, P., Starwarz, B., & Makara-Studzńska, M. (2021). Reducing aggression in psychiatric wards using Safewards-A Polish study. Perspectives in	Beobachtungsstudie	Three aspects of Safewards	Komplexe Behandlungsprogramme – Safewards	mean number of mechanical restraints per day (mean	Reduktion Episoden S/R	SMD (Standardized Mean Difference)	Mean (pre) = 1.8 (sd = 1.2), Mean (post) = 1.5 (sd = 1.2)	high risk of bias	serious	not serious	serious	

psychiatric care, 57(1), 50–55. https://doi.org/10.1111/ppc.12523				(sd) pre-post)			p = .0000 d = 0.19					
Lickiewicz, J., Adamczyk, N., Hughes, P. P., Jagielski, P., Stawarz, B., & Makara-Studzinska, M. (2021). Reducing aggression in psychiatric wards using Safewards-A Polish study. Perspectives in psychiatric care, 57(1), 50–55. https://doi.org/10.1111/ppc.12523	Beobachtungsstudie	Three aspects of Safewards	Komplexe Behandlungsprogramme – Safewards	number of episodes	Reduktion Episoden S/R	% reduction	879 pre vs. 706 post 19.7% reduction	high risk of bias	serious	not serious	serious	
Lickiewicz, J., Adamczyk, N., Hughes, P. P., Jagielski, P., Stawarz, B., & Makara-Studzinska, M. (2021). Reducing aggression in psychiatric wards using Safewards-A Polish study. Perspectives in psychiatric care, 57(1), 50–55. https://doi.org/10.1111/ppc.12523	Beobachtungsstudie	Three aspects of Safewards	Komplexe Behandlungsprogramme – Safewards	number of episodes per 1000 patient days	Reduktion Episoden S/R	% reduction	3.33 pre vs. 2.69 post 19.2% reduction	high risk of bias	serious	not serious	serious	
Stensgaard, L., Andersen, M. K., Nordentoft, M., & Hjorthøj, C. (2018). Implementation of the safewards	Beobachtungsstudie	Safewards model ten interventions	Komplexe Behandlungsprogramme – Safewards	Mechanical restraint (pre-post;	Reduktion Episoden S/R	% reduction	153.9 (25.2%) to 108.2 (18.2%) 27.8%	high risk of bias	serious	not serious	not serious	

model to reduce the use of coercive measures in adult psychiatric inpatient units: An interrupted time-series analysis. Journal of psychiatric research, 105, 147–152. https://doi.org/10.1016/j.jpsychires.2018.08.026				N/year (%)			reduction p < .001					
Stensgaard, L., Andersen, M. K., Nordentoft, M., & Hjorthøj, C. (2018). Implementation of the safeguards model to reduce the use of coercive measures in adult psychiatric inpatient units: An interrupted time-series analysis. Journal of psychiatric research, 105, 147–152. https://doi.org/10.1016/j.jpsychires.2018.08.026	Beobachtungsstudie	Safeguards model ten interventions	Komplexe Behandlungsprogramme – Safeguards	Straps (arms and legs) (pre-post; N/year (%))	Reduktion Episoden S/R	% reduction	123.3 (20.2%) to 94.2 (16.1%) 20,3% reduction p < .001	high risk of bias	serious	not serious	not serious	
Stensgaard, L., Andersen, M. K., Nordentoft, M., & Hjorthøj, C. (2018). Implementation of the safeguards model to reduce the use of coercive measures in adult	Beobachtungsstudie	Safeguards model ten interventions	Komplexe Behandlungsprogramme – Safeguards	Locking of doors (pre-post; N/year (%))	Reduktion Episoden S/R	% reduction	7.2 (1.2%) to 9.0 (1.5%) 25.0% increase p < .001	high risk of bias	serious	not serious	not serious	

psychiatric inpatient units: An interrupted time-series analysis. Journal of psychiatric research, 105, 147–152. https://doi.org/10.1016/j.jpsychires.2018.08.026												
Stensgaard, L., Andersen, M. K., Nordentoft, M., & Hjorthøj, C. (2018). Implementation of the safeguards model to reduce the use of coercive measures in adult psychiatric inpatient units: An interrupted time-series analysis. Journal of psychiatric research, 105, 147–152. https://doi.org/10.1016/j.jpsychires.2018.08.026	Beobachtungsstudie	Safeguards model ten interventions	Komplexe Behandlungsprogramme – Safeguards	Personal shielding of the patient (pre-post; N/year (%))	Reduktion Episoden S/R	% reduction	1.3 (0.2%) to 0.5 (0.1%) 50% reduction p < .001	high risk of bias	serious	not serious	not serious	
Stensgaard, L., Andersen, M. K., Nordentoft, M., & Hjorthøj, C. (2018). Implementation of the safeguards model to reduce the use of coercive measures in adult psychiatric inpatient units: An interrupted time-	Beobachtungsstudie	Safeguards model ten interventions	Komplexe Behandlungsprogramme – Safeguards	Rates of quarterly increase of commenced coercive measures (negative values)	Reduktion Episoden S/R	difference (post-pre) in IRR (95% CI)	Pre-intervention period: –1% (–2% to –1%), p < .001 Post-intervention	high risk of bias	serious	serious	not serious	

series analysis. Journal of psychiatric research, 105, 147–152. https://doi.org/10.1016/j.jpsychires.2018.08.026				indicate decreases) (IRR (95% CI)): Any coercive measure			period: –3% (–5% to –2%), $p < .001$ The effect of the Safewards: –2% (–4% to –1%), $p = .03$					
Stensgaard, L., Andersen, M. K., Nordentoft, M., & Hjorthøj, C. (2018). Implementation of the safewards model to reduce the use of coercive measures in adult psychiatric inpatient units: An interrupted time-series analysis. Journal of psychiatric research, 105, 147–152. https://doi.org/10.1016/j.jpsychires.2018.08.026	Beobachtungsstudie	Safewards model ten interventions	Komplexe Behandlungsprogramme – Safewards	Rates of quarterly increase of commenced coercive measures (negative values indicate decreases) (IRR (95% CI)): Mechanical restraint	Reduktion Episoden S/R	difference (post-pre) in IRR (95% CI)	Pre-intervention period: –4% (–5% to –3%), $p < .001$ Post-intervention period: –2% (–7% to +2%), $p = .33$ The effect of the Safewards: +2% (–3% to +7%), $p = .40$	high risk of bias	serious	serious	not serious	

Stensgaard, L., Andersen, M. K., Nordentoft, M., & Hjorthøj, C. (2018). Implementation of the safeguards model to reduce the use of coercive measures in adult psychiatric inpatient units: An interrupted time-series analysis. <i>Journal of psychiatric research</i> , 105, 147–152. https://doi.org/10.1016/j.jpsychires.2018.08.026	Beobachtungsstudie	Safeguards model ten interventions	Komplexe Behandlungsprogramme – Safeguards	Rates of quarterly increase of commenced coercive measures (negative values indicate decreases) (IRR (95% CI)): Forced sedation	Reduktion Episoden S/R	difference (post-pre) in IRR (95% CI)	Pre-intervention period: +3% (+2% to +4%), $p < .001$ Post-intervention period: -8% (-11% to -5%), $p < .001$ The effect of the Safeguards: -11% (-13% to -8%), $p < .001$	high risk of bias	serious	serious	not serious	
Alexandra Hernandez, Sanaz Riahi, Melanie I. Stuckey, Barbara A. Mildon and Philip E. Klasen. (2017). Multidimensional approach to restraint minimization: The journey of a specialized mental health organization. URL:	Beobachtungsstudie	Method to avoid restrictions "Recovery Rounds" --> recommendation of the 6 CS (Methode zu Vermeidung von	Komplexe Behandlungsprogramme – Six Core Strategies	Sec red inc/m step beta2	Reduktion Episoden S/R	beta	18,1 ($p=0,14$)	High Risk of Bias	serious	not serious	serious	niedrig

https://pub-med.ncbi.nlm.nih.gov/28960744/		Ein-schränkung en)										
Alexandra Hernandez, Sanaz Riahi, Melanie I. Stuckey, Barbara A. Mildon and Philip E. Klas-sen.(2017).Multidimen-sional approach to re-straint minimization: The journey of a spe-cialized mental health organization. URL: https://pub-med.ncbi.nlm.nih.gov/28960744/	Beobach-tungsstudie	Method to avoid re-strictions "Recovery Rounds" --> recommen-dation of the 6 CS (Methode zu Vermei-dung von Ein-schränkung en)	Komplexe Be-handlungs-programme – Six Core Stra-tegies	Sec red inc/m post beta3	Reduktion Episoden S/R	beta	6,4 (p<0,001)	High Risk of Bias	serious	not se-rious	seri-ous	
Alexandra Hernandez, Sanaz Riahi, Melanie I. Stuckey, Barbara A. Mildon and Philip E. Klas-sen.(2017).Multidimen-sional approach to re-straint minimization: The journey of a spe-cialized mental health organization. URL: https://pub-med.ncbi.nlm.nih.gov/28960744/	Beobach-tungsstudie	Method to avoid re-strictions "Recovery Rounds" --> recommen-dation of the 6 CS (Methode zu Vermei-dung von Ein-schränkung en)	Komplexe Be-handlungs-programme – Six Core Stra-tegies	Res red inc/m step beta2	Reduktion Episoden S/R	beta	3,3 (p=0.399)	High Risk of Bias	serious	not se-rious	seri-ous	
Alexandra Hernandez, Sanaz Riahi, Melanie I. Stuckey, Barbara A.	Beobach-tungsstudie	Method to avoid re-strictions	Komplexe Be-handlungs-programme –	Res red inc/m	Reduktion Episoden S/R	beta	2.6 (p=0.007)	High Risk of Bias	serious	not se-rious	seri-ous	

Mildon and Philip E. Klassen. (2017). Multidimensional approach to restraint minimization: The journey of a specialized mental health organization. URL: https://pubmed.ncbi.nlm.nih.gov/28960744/		"Recovery Rounds" --> recommendation of the 6 CS (Methode zu Vermeidung von Einschränkungen)	Six Core Strategies	step beta3								
Atdjian, S., & Huckshorn, K. A. (2024). Toward the Cessation of Seclusion and Mechanical Restraint Use in Psychiatric Hospitals: A Call for Regulatory Action. Psychiatric services (Washington, D.C.), 75(1), 64–71. https://doi.org/10.1176/appi.ps.202100538	Beobachtungsstudie	The authors describe Pennsylvania State hospitals' nearly 10-year cessation of S-R use via their continuous adherence to 6CS	Komplexe Behandlungsprogramme – Six Core Strategies	MR Red year 2	Reduktion Episoden S/R	RR	0.23	Some concerns	serious	not serious	serious	
Atdjian, S., & Huckshorn, K. A. (2024). Toward the Cessation of Seclusion and Mechanical Restraint Use in Psychiatric Hospitals: A Call for Regulatory Action. Psychiatric services (Washington, D.C.), 75(1), 64–71. https://doi.org/10.1176/appi.ps.202100538	Beobachtungsstudie	The authors describe Pennsylvania State hospitals' nearly 10-year cessation of S-R use via their continuous adherence to 6CS	Komplexe Behandlungsprogramme – Six Core Strategies	MR Red year 3	Reduktion Episoden S/R	RR	0.12	Some concerns	serious	not serious	serious	

Atdjian, S., & Huckshorn, K. A. (2024). Toward the Cessation of Seclusion and Mechanical Restraint Use in Psychiatric Hospitals: A Call for Regulatory Action. Psychiatric services (Washington, D.C.), 75(1), 64–71. https://doi.org/10.1176/appi.ps.202100538	Beobachtungsstudie	The authors describe Pennsylvania State hospitals' nearly 10-year cessation of S-R use via their continuous adherence to 6CS	Komplexe Behandlungsprogramme – Six Core Strategies	MR Red year 4	Reduktion Episoden S/R	RR	0.03	Some concerns	serious	not serious	serious	
Atdjian, S., & Huckshorn, K. A. (2024). Toward the Cessation of Seclusion and Mechanical Restraint Use in Psychiatric Hospitals: A Call for Regulatory Action. Psychiatric services (Washington, D.C.), 75(1), 64–71. https://doi.org/10.1176/appi.ps.202100538	Beobachtungsstudie	The authors describe Pennsylvania State hospitals' nearly 10-year cessation of S-R use via their continuous adherence to 6CS	Komplexe Behandlungsprogramme – Six Core Strategies	MR Red year 5	Reduktion Episoden S/R	RR	0.02	Some concerns	serious	not serious	serious	
Atdjian, S., & Huckshorn, K. A. (2024). Toward the Cessation of Seclusion and Mechanical Restraint Use in Psychiatric Hospitals: A Call for Regulatory Action. Psychiatric services (Washington, D.C.), 75(1), 64–71.	Beobachtungsstudie	The authors describe Pennsylvania State hospitals' nearly 10-year cessation of S-R use via their continuous	Komplexe Behandlungsprogramme – Six Core Strategies	MR Red year 6	Reduktion Episoden S/R	RR	0.02	Some concerns	serious	not serious	serious	

https://doi.org/10.1176/appi.ps.202100538		adherence to 6CS										
Atdjian, S., & Huckshorn, K. A. (2024). Toward the Cessation of Seclusion and Mechanical Restraint Use in Psychiatric Hospitals: A Call for Regulatory Action. <i>Psychiatric services</i> (Washington, D.C.), 75(1), 64–71. https://doi.org/10.1176/appi.ps.202100538	Beobachtungsstudie	The authors describe Pennsylvania State hospitals' nearly 10-year cessation of S-R use via their continuous adherence to 6CS	Komplexe Behandlungsprogramme – Six Core Strategies	Sec Red year 7	Reduktion Episoden S/R	RR	0.16	Some concerns	serious	not serious	serious	
Atdjian, S., & Huckshorn, K. A. (2024). Toward the Cessation of Seclusion and Mechanical Restraint Use in Psychiatric Hospitals: A Call for Regulatory Action. <i>Psychiatric services</i> (Washington, D.C.), 75(1), 64–71. https://doi.org/10.1176/appi.ps.202100538	Beobachtungsstudie	The authors describe Pennsylvania State hospitals' nearly 10-year cessation of S-R use via their continuous adherence to 6CS	Komplexe Behandlungsprogramme – Six Core Strategies	MR Red year 8	Reduktion Episoden S/R	RR	0.28	Some concerns	serious	not serious	serious	
Atdjian, S., & Huckshorn, K. A. (2024). Toward the Cessation of Seclusion and Mechanical Restraint Use in Psychiatric Hospitals: A Call for Regulatory	Beobachtungsstudie	The authors describe Pennsylvania State hospitals' nearly 10-year	Komplexe Behandlungsprogramme – Six Core Strategies	MR Red year 9	Reduktion Episoden S/R	RR	0.63	Some concerns	serious	not serious	serious	

Action. Psychiatric services (Washington, D.C.), 75(1), 64–71. https://doi.org/10.1176/appi.ps.202100538		cessation of S-R use via their continuous adherence to 6CS										
Atdjian, S., & Huckshorn, K. A. (2024). Toward the Cessation of Seclusion and Mechanical Restraint Use in Psychiatric Hospitals: A Call for Regulatory Action. Psychiatric services (Washington, D.C.), 75(1), 64–71. https://doi.org/10.1176/appi.ps.202100538	Beobachtungsstudie	The authors describe Pennsylvania State hospitals' nearly 10-year cessation of S-R use via their continuous adherence to 6CS	Komplexe Behandlungsprogramme – Six Core Strategies	MR Red year 10	Reduktion Episoden S/R	RR	0.96	Some concerns	serious	not serious	serious	
Atdjian, S., & Huckshorn, K. A. (2024). Toward the Cessation of Seclusion and Mechanical Restraint Use in Psychiatric Hospitals: A Call for Regulatory Action. Psychiatric services (Washington, D.C.), 75(1), 64–71. https://doi.org/10.1176/appi.ps.202100538	Beobachtungsstudie	The authors describe Pennsylvania State hospitals' nearly 10-year cessation of S-R use via their continuous adherence to 6CS	Komplexe Behandlungsprogramme – Six Core Strategies	Sec Red year 2	Reduktion Episoden S/R	RR	0.94	Some concerns	serious	not serious	serious	
Atdjian, S., & Huckshorn, K. A. (2024). Toward the Cessation of Seclusion and Mechanical Restraint Use in Psychiatric Hospitals: A	Beobachtungsstudie	The authors describe Pennsylvania State hospitals' nearly 10-	Komplexe Behandlungsprogramme – Six Core Strategies	Sec Red year 3	Reduktion Episoden S/R	RR	0.38	Some concerns	serious	not serious	serious	

Call for Regulatory Action. Psychiatric services (Washington, D.C.), 75(1), 64–71. https://doi.org/10.1176/appi.ps.202100538		year cessation of S-R use via their continuous adherence to 6CS										
Atdjian, S., & Huckshorn, K. A. (2024). Toward the Cessation of Seclusion and Mechanical Restraint Use in Psychiatric Hospitals: A Call for Regulatory Action. Psychiatric services (Washington, D.C.), 75(1), 64–71. https://doi.org/10.1176/appi.ps.202100538	Beobachtungsstudie	The authors describe Pennsylvania State hospitals' nearly 10-year cessation of S-R use via their continuous adherence to 6CS	Komplexe Behandlungsprogramme – Six Core Strategies	Sec Red year 4	Reduktion Episoden S/R	RR	0.47	Some concerns	serious	not serious	serious	
Atdjian, S., & Huckshorn, K. A. (2024). Toward the Cessation of Seclusion and Mechanical Restraint Use in Psychiatric Hospitals: A Call for Regulatory Action. Psychiatric services (Washington, D.C.), 75(1), 64–71. https://doi.org/10.1176/appi.ps.202100538	Beobachtungsstudie	The authors describe Pennsylvania State hospitals' nearly 10-year cessation of S-R use via their continuous adherence to 6CS	Komplexe Behandlungsprogramme – Six Core Strategies	Sec Red year 5	Reduktion Episoden S/R	RR	0.38	Some concerns	serious	not serious	serious	
Atdjian, S., & Huckshorn, K. A. (2024). Toward the Cessation of Seclusion and Mechanical Restraint Use in	Beobachtungsstudie	The authors describe Pennsylvania State hospitals'	Komplexe Behandlungsprogramme – Six Core Strategies	Sec Red year 6	Reduktion Episoden S/R	RR	0.94	Some concerns	serious	not serious	serious	

Psychiatric Hospitals: A Call for Regulatory Action. Psychiatric services (Washington, D.C.), 75(1), 64–71. https://doi.org/10.1176/appi.ps.202100538		nearly 10-year cessation of S-R use via their continuous adherence to 6CS										
Atdjian, S., & Huckshorn, K. A. (2024). Toward the Cessation of Seclusion and Mechanical Restraint Use in Psychiatric Hospitals: A Call for Regulatory Action. Psychiatric services (Washington, D.C.), 75(1), 64–71. https://doi.org/10.1176/appi.ps.202100538	Beobachtungsstudie	The authors describe Pennsylvania State hospitals' nearly 10-year cessation of S-R use via their continuous adherence to 6CS	Komplexe Behandlungsprogramme – Six Core Strategies	Sec Red year 7	Reduktion Episoden S/R	RR	2.17	Some concerns	serious	not serious	serious	
Atdjian, S., & Huckshorn, K. A. (2024). Toward the Cessation of Seclusion and Mechanical Restraint Use in Psychiatric Hospitals: A Call for Regulatory Action. Psychiatric services (Washington, D.C.), 75(1), 64–71. https://doi.org/10.1176/appi.ps.202100538	Beobachtungsstudie	The authors describe Pennsylvania State hospitals' nearly 10-year cessation of S-R use via their continuous adherence to 6CS	Komplexe Behandlungsprogramme – Six Core Strategies	Sec Red year 8	Reduktion Episoden S/R	RR	2.77	Some concerns	serious	not serious	serious	
Atdjian, S., & Huckshorn, K. A. (2024). Toward the Cessation of Seclusion and	Beobachtungsstudie	The authors describe Pennsylvania State	Komplexe Behandlungsprogramme –	Sec Red year 9	Reduktion Episoden S/R	RR	3.13	Some concerns	serious	not serious	serious	

Mechanical Restraint Use in Psychiatric Hospitals: A Call for Regulatory Action. Psychiatric services (Washington, D.C.), 75(1), 64–71. https://doi.org/10.1176/appi.ps.202100538		hospitals' nearly 10-year cessation of S-R use via their continuous adherence to 6CS	Six Core Strategies									
Atdjian, S., & Huckshorn, K. A. (2024). Toward the Cessation of Seclusion and Mechanical Restraint Use in Psychiatric Hospitals: A Call for Regulatory Action. Psychiatric services (Washington, D.C.), 75(1), 64–71. https://doi.org/10.1176/appi.ps.202100538	Beobachtungsstudie	The authors describe Pennsylvania State hospitals' nearly 10-year cessation of S-R use via their continuous adherence to 6CS	Komplexe Behandlungsprogramme – Six Core Strategies	Sec Red year 10	Reduktion Episoden S/R	RR	3.92	Some concerns	serious	not serious	serious	
Duxbury, J., Baker, J., Downe, S., Jones, F., Greenwood, P., Thygesen, H., McKeown, M., Price, O., Scholes, A., Thomson, G., & Whittington, R. (2019). Minimising the use of physical restraint in acute mental health services: The outcome of a restraint reduction programme ('REsTRAIN YOURSELF'). International journal of	Beobachtungsstudie	REsTRAIN YOURSELF: adapted version of the Six Core Strategies	Komplexe Behandlungsprogramme – Six Core Strategies	restraint event rates (IG pre-post)	Reduktion Episoden S/R	restraint event rates per 1000 bed-days (95% CI)	6.62 events/1 000 bed-days, (95% CI 5.53–7.72) in adoption phase 9.38 events/1 000 bed-days, (95% CI 8.19–	serious risk of bias	serious	not serious	not serious	

nursing studies, 95, 40–48. https://doi.org/10.1016/j.ijnurstu.2019.03.016							10.55) in baseline phase					
Duxbury, J., Baker, J., Downe, S., Jones, F., Greenwood, P., Thygesen, H., McKeown, M., Price, O., Scholes, A., Thomson, G., & Whittington, R. (2019). Minimising the use of physical restraint in acute mental health services: The outcome of a restraint reduction programme ('REsTRAIN YOURSELF'). International journal of nursing studies, 95, 40–48. https://doi.org/10.1016/j.ijnurstu.2019.03.016	Beobachtungsstudie	REsTRAIN YOURSELF: adapted version of the Six Core Strategies	Komplexe Behandlungsprogramme – Six Core Strategies	restraint event rates (CG pre-post)	Reduktion Episoden S/R	restraint event rates per 1000 bed-days (95% CI)	5.33 events/1000 bed-days, (95% CI 4.45–6.20) in adoption phase 7.22 events/1000 bed-days, (95% CI 6.01–8.42) in baseline phase no significant change ($p > .05$?)	serious risk of bias	serious	not serious	not serious	
Duxbury, J., Baker, J., Downe, S., Jones, F., Greenwood, P., Thygesen, H., McKeown, M., Price, O., Scholes, A., Thomson, G., & Whittington, R. (2019). Minimising the use of	Beobachtungsstudie	REsTRAIN YOURSELF: adapted version of the Six Core Strategies	Komplexe Behandlungsprogramme – Six Core Strategies	restraint event rates (reduction relative to comparator wards)	Reduktion Episoden S/R	% reduction relative to comparator wards	62% reduction relative to comparator wards $p < .002$	serious risk of bias	serious	not serious	not serious	

physical restraint in acute mental health services: The outcome of a restraint reduction programme ('REsTRAIN YOURSELF'). International journal of nursing studies, 95, 40–48. https://doi.org/10.1016/j.ijnurstu.2019.03.016												
Putkonen, A., Kuivalainen, S., Louheranta, O., Repo-Tiihonen, E., Ryyänänen, O.-P., Kautiainen, H., & Jari Tiihonen, B. (2013). Cluster-randomized controlled trial of reducing seclusion and restraint in secured care of men with schizophrenia. Psychiatric Services, 64(9), 850–855. http://dx.doi.org/10.1176/appi.ps.201200393 .	RCT	staff, patients, and doctors were trained for six months in applying six core strategies to prevent seclusion-restraint; six months of supervised intervention followed	Komplexe Behandlungsprogramme – Six Core Strategies	seclusion-restraint and observation days	Reduktion Episoden S/R	IRR (95%-CI)	intervention wards: IRR over time=.88, CI=.86–.90, p<.001 control wards: IRR over time=.97, CI=.93–1.01, p=.056 difference between the groups: p = .001	Low risk	serious	not serious	not serious	

Sizwile Havilla, Faisal Khalaf Alanazi , Brad Boon,Declan Patton, Yen-Chung Ho,Luke Molloy. (2023) Exploring the impact of a multilevel intervention focused on reducing the practices of seclusion and restraint in acute mental health units in an Australian mental health service	Beobachtungsstudie	Huckshorn's six core strategy areas. Multi-level interventions (six strategie areas: six core streategies, safewards model, no firce first, engagement model)	Komplexe Behandlungsprogramme – Six Core Strategies	number of re-straint events per month per unit (mean (sd))	Reduktion Episoden S/R	SMD (Standardized Mean Difference) Cohen's d	(I) Pre-implementation (6 months total) mean = 5.50 (3.77) (II) Post-implementation (6 months total) mean = 2.22 (2.36) (III) Post-implementation (12-month total) mean = 3.38 (3.21) (I) vs. (II) p = .004, (I) vs. (III) p = .037 SMD (II) vs. (I) = 1.043 Cohen's	high risk of bias	serious	not serious	serious	
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							d (III) vs. (I) = 0.62					
Sizwile Havilla, Faisal Khalaf Alanazi , Brad Boon,Declan Patton, Yen-Chung Ho,Luke Molloy. (2023) Exploring the impact of a multilevel intervention focused on reducing the practices of seclusion and restraint in acute mental health units in an Australian mental health service	Beobachtungsstudie	Huckshorn's six core strategy areas. Multi-level interventions (six strategie areas: six core streategies, safewards model, no firce first, engagement model)	Komplexe Behandlungsprogramme – Six Core Strategies	number of seclusion events per month per unit (mean (sd))	Reduktion Episoden S/R	SMD (Standardized Mean Difference) Cohen's d	(I) Pre-implementation (6 months total) mean = 6.22 (5.81) (II) Post-implementation (6 months total) mean = 1.55 (1.62) (III) Post-implementation (12-month total) mean = 2.55 (2.44) (I) vs. (II) p = .004, (I) vs. (III) p = .018	high risk of bias	serious	not serious	serious	

							SMD (II) vs. (I) = 1.095 Cohen's d (III) vs. (I) = 0.94					
Blair, E. W., Woolley, S., Szarek, B. L., Mucha, T. F., Dutka, O., Schwartz, H. I., Wisniewski, J., & Goethe, J. W. (2017). Reduction of Seclusion and Restraint in an Inpatient Psychiatric Setting: A Pilot Study. <i>The Psychiatric quarterly</i> , 88(1), 1–7. https://doi.org/10.1007/s11126-016-9428-0	Beobachtungsstudie	The study intervention, which used evidence-based therapeutic practices for reducing violence/aggression, included routine use of the Brøset Violence Checklist, mandated staff education in crisis intervention and trauma informed care, increased frequency of physician re-assessment of need for S/R, formal	Komplexe Behandlungsprogramme – Sonstige	rate of seclusion events	Reduktion Episoden S/R	% reduction (post intervention vs. baseline)	52% reduction p < .01	Very high risk of bias	not serious	not serious	not serious	niedrig

		administrative review of S/R events and environmental enhancements (e.g., comfort rooms to support sensory modulation).										
Blair, E. W., Woolley, S., Szarek, B. L., Mucha, T. F., Dutka, O., Schwartz, H. I., Wisniewski, J., & Goethe, J. W. (2017). Reduction of Seclusion and Restraint in an Inpatient Psychiatric Setting: A Pilot Study. <i>The Psychiatric quarterly</i> , 88(1), 1–7. https://doi.org/10.1007/s11126-016-9428-0	Beobachtungsstudie	The study intervention, which used evidence-based therapeutic practices for reducing violence/aggression, included routine use of the Brøset Violence Checklist, mandated staff education in crisis intervention and trauma informed	Komplexe Behandlungsprogramme – Sonstige	rate of restraint events	Reduktion Episoden S/R	% reduction (post intervention vs. baseline)	6% reduction (n.s.) p = .44	Very high risk of bias	not serious	not serious	not serious	

		care, increased frequency of physician re-assessment of need for S/R, formal administrative review of S/R events and environmental enhancements (e.g., comfort rooms to support sensory modulation).										
Haines-Delmont A, Goodall K, Duxbury J, Tsang A. (2022) An Evaluation of the Implementation of a "No Force First" Informed Organisational Guide to Reduce Physical Restraint in Mental Health and Learning Disability Inpatient Settings in the UK. URL: https://pub-med.ncbi.nlm.nih.gov/35185645/ DOI:	Beobachtungsstudie	No Force First Guide - implementation of a bespoke, person-centred and recovery focused "No Force First" intervention to reduce the use of restraint in	Komplexe Behandlungsprogramme – Sonstige	Incidence rate of physical restraint per 1000 patient-days [95% CI] (pre-post)	Reduktion Episoden S/R	incidence rate ratio IRR [95% CI] %reduction	4.14 [3.96–4.33] pre vs. 3.42 [3.25–3.59] post p < .0001 IRR = 0.83, 95% CI 0.77–0.88 17.4% reduction	some concerns	not serious	not serious	not serious	

10.3389/fpsyt.2022.749615		both mental health and learning disabilities settings										
Hirsch, S., Baumgardt, J., Bechdolf, A., Bühling-Schindowski, F., Cole, C., Flammer, E., Jaeger, S., Junghanss, J., Kampmann, M., Sauter, D., Muche, R., Vandamme, A., Steinert, T., & Mahler, L. (2025). Umsetzung der DGPPN-S3-Leitlinie zur Prävention von Gewalt und Zwang: Prä-post-Analyse der randomisierten kontrollierten PreVCo-Studie [Implementation of the guidelines on the prevention of violence and coercion: pre-post analysis of the randomized controlled PreVCo study]. Psychiatrische Praxis, 52(3), 141–149. https://doi.org/10.1055/a-2440-8795	Beobachtungsstudie	Strukturierte Implementierung der Leitlinie zur Vermeidung von Zwang zu einer Verbesserung leitlinienkonformen Arbeitens und der Reduktion von Zwang in der klinischen Arbeit	Komplexe Behandlungsprogramme – Sonstige	Anzahl der Zwangsmaßnahmen (Isolierung, Fixierung und medikamentöse Zwangsbehandlung) pro Bett und Monat	Reduktion Episoden S/R	Median (IQR) der Paardifferenzen	-0.22 (0.83) p = .002	Low risk	not serious	not serious	serious	
Lombardo, C., Van Bortel, T., Wagner, A. P., Kaminskiy, E., Wilson, C.,	Beobachtungsstudie	PROactive Management of Integrated	Komplexe Behandlungsprogramme – Sonstige	total prone restraint incidents	Reduktion Episoden S/R	% reduction	61 % reduction (from 82	very high risk of bias	not serious	not serious	serious	

Krishnamoorthy, T., Rae, S., Rouse, L., Jones, P. B., & Kar Ray, M. (2018). PROGRESS: the PROMISE governance framework to decrease coercion in mental healthcare. <i>BMJ open quality</i>, 7(3), e000332. https://doi.org/10.1136/bmjopen-2018-000332		Services and Environments (PROMISE) providing a caring response to all distress; courage to challenge the status quo; and coproduction of novel solutions PROactive Governance of Recovery Settings and Services, a five-step governance framework (Report, Reflect, Review, Rethink and Refresh), was developed in an iterative and organic fashion to oversee the		(pre-post)			to 32 incidents)					
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		improvement journey and effectively translate information into knowledge, learning and actions											
Lombardo, C., Van Bortel, T., Wagner, A. P., Kaminskiy, E., Wilson, C., Krishnamoorthy, T., Rae, S., Rouse, L., Jones, P. B., & Kar Ray, M. (2018). PROGRESS: the PROMISE governance framework to decrease coercion in mental healthcare. BMJ open quality, 7(3), e000332. https://doi.org/10.1136/bmjopen-2018-000332	Beobachtungsstudie	PROactive Management of Integrated Services and Environments (PROMISE) providing a caring response to all distress; courage to challenge the status quo; and coproduction of novel solutions PROactive Governance of Recovery Settings and Services, a five-step	Komplexe Behandlungsprogramme – Sonstige	polynomial cubic trend within Poisson regression models for prone restraints	Reduktion Episoden S/R	polynomial cubic trend within Poisson regression models for prone restraints	negative trend over time $\chi^2(3) = 49.13$ $p < .0001$	very high risk of bias	not serious	serious	serious		

		governance framework (Report, Reflect, Review, Rethink and Refresh), was developed in an iterative and organic fashion to oversee the improvement journey and effectively translate information into knowledge, learning and actions										
Lombardo, C., Van Bortel, T., Wagner, A. P., Kaminskiy, E., Wilson, C., Krishnamoorthy, T., Rae, S., Rouse, L., Jones, P. B., & Kar Ray, M. (2018). PROGRESS: the PROMISE governance framework to decrease coercion in mental healthcare. BMJ open quality, 7(3),	Beobachtungsstudie	PROactive Management of Integrated Services and Environments (PROMISE) providing a caring response to all distress;	Komplexe Behandlungsprogramme – Sonstige	total full physical interventions incidents (pre-post)	Reduktion Episoden S/R	% reduction	36 % reduction (from 328 to 210 incidents)	very high risk of bias	not serious	not serious	serious	

[illegible]

		learning and actions										
Lombardo, C., Van Bortel, T., Wagner, A. P., Kaminskiy, E., Wilson, C., Krishnamoorthy, T., Rae, S., Rouse, L., Jones, P. B., & Kar Ray, M. (2018). PROGRESS: the PROMISE governance framework to decrease coercion in mental healthcare. <i>BMJ open quality</i> , 7(3), e000332. https://doi.org/10.1136/bmjoq-2018-000332	Beobachtungsstudie	PROactive Management of Integrated Services and Environments (PROMISE) providing a caring response to all distress; courage to challenge the status quo; and coproduction of novel solutions PROactive Governance of Recovery Settings and Services, a five-step governance framework (Report, Reflect, Review, Rethink and	Komplexe Behandlungsprogramme – Sonstige	polynomial cubic trend within Poisson regression models for full physical interventions	Reduktion Episoden S/R	polynomial cubic trend within Poisson regression models for full physical interventions	negative trend over time $\chi^2(3) = 78.86$ $p < .0001$	very high risk of bias	not serious	serious	serious	

		Refresh), was developed in an iterative and organic fashion to oversee the improvement journey and effectively translate information into knowledge, learning and actions											
Rowsell, K. A., Akinbola, A., Hancock, M., Nyambayo, T., Jackson, Z., & Hunt, D. F. (2024). Reducing use of seclusion on a male medium secure forensic ward. BMJ open quality, 13(1), e002576. https://doi.org/10.1136/bmjopen-2023-002576	Beobachtungsstudie	designed and implemented three tests of change which reviewed seclusion processes, enhanced de-escalation skills and improved decision making	Komplexe Behandlungsprogramme – Sonstige	number of seclusion incidents (pre-post)	Reduktion Episoden S/R	% reduction	33 % reduction	very high risk of bias	not serious	not serious	serious		

Steinert, T., Baumgardt, J., Bechdorf, A., Bühling-Schindowski, F., Cole, C., Flammer, E., Jaeger, S., Jung-hanss, J., Kampmann, M., Mahler, L., Muche, R., Sauter, D., Vandamme, A., & Hirsch, S. (2023). Implementation of guidelines on prevention of coercion and violence (PreVCo) in psychiatry: a multicentre randomised controlled trial. The Lancet regional health. Europe, 35, 100770. https://doi.org/10.1016/j.lanepe.2023.100770	RCT	Implementation of guidelines on prevention of coercion and violence (PreVCo) Rating Tool	Komplexe Behandlungsprogramme – Sonstige	number of coercive measures (seclusion, restraint, forced medication) used per occupied bed and month	Reduktion Episoden S/R	median difference between matched pairs (interquartile range)	-0.043 (0.85)	Low risk	not serious	not serious	serious	
Czernin, K., Bermpohl, F., Heinz, A., Wullschleger, A., & Mahler, L. (2020). Auswirkungen der Etablierung des psychiatrischen Behandlungskonzepts „Weddinger Modell“ auf mechanische Zwangsmaßnahmen [Effects of the Psychiatric Care Concept "Weddinger Modell" on	Vergleichsstudie	Recovery-orientated psychiatric care concept "Weddinger Modell"	Komplexe Behandlungsprogramme – Weddinger Modell	Fixierungen, Anzahl, Median (IQR)	Reduktion Episoden S/R	U (Mann-Whitney-U-Test, Wilcoxon-Rangsummen-Test) oder	n. s. U bzw. Chi ² nicht berichtet	critical risk of bias	not serious	not serious	serious	

Mechanical Coercive Measures]. Psychiatrische Praxis, 47(5), 242–248. https://doi.org/10.1055/a-1116-0720						Chi ² -Test						
Czernin, K., Bermpohl, F., Heinz, A., Wullschleger, A., & Mahler, L. (2020). Auswirkungen der Etablierung des psychiatrischen Behandlungskonzepts „Weddinger Modell“ auf mechanische Zwangsmaßnahmen [Effects of the Psychiatric Care Concept "Weddinger Modell" on Mechanical Coercive Measures]. Psychiatrische Praxis, 47(5), 242–248. https://doi.org/10.1055/a-1116-0720	Vergleichsstudie	Recovery-orientated psychiatric care concept "Weddinger Modell"	Komplexe Behandlungsprogramme – Weddinger Modell	Isolierungen, Anzahl, Median (IQR)	Reduktion Episoden S/R	U (Mann-Whitney-U-Test, Wilcoxon-Rangsummen-Test) oder Chi ² -Test	n. s. U bzw. Chi ² nicht berichtet	critical risk of bias	not serious	not serious	serious	
Korezelidou, A., Welte, A., Oster, A., & Mahler, L. (2025). Overcoming the lack of alternatives - Changes in the use of coercive measures after implementation of the recovery-oriented "Weddinger Modell" in acute psychiatric care. Journal of psychiatric	Beobachtungsstudie	recovery-, resilience-, and patient-centered "Weddinger Modell" (WM) f	Komplexe Behandlungsprogramme – Weddinger Modell	CM per case, mean (M), median (MD) and range (RA)	Reduktion Episoden S/R	% reduction	0.46 0 0-30 pre vs. 0.21 0 0-15 post 54.3% reduction	high risk of bias	not serious	not serious	serious	

research, 181, 405–410. https://doi.org/10.1016/j.jpsychires.2024.11.032												
Korezelidou, A., Welte, A., Oster, A., & Mahler, L. (2025). Overcoming the lack of alternatives - Changes in the use of coercive measures after implementation of the recovery-oriented "Weddinger Modell" in acute psychiatric care. Journal of psychiatric research, 181, 405–410. https://doi.org/10.1016/j.jpsychires.2024.11.032	Beobachtungsstudie	recovery-, resilience-, and patient-centered "Weddinger Modell" (WM) f	Komplexe Behandlungsprogramme – Weddinger Modell	CM per affected case, mean (M), median (MD) and range (RA)	Reduktion Episoden S/R	% reduction	3.20 2 1-30 pre vs. 2.04 1 1-15 post 36.3% reduction	high risk of bias	not serious	not serious	serious	
Korezelidou, A., Welte, A., Oster, A., & Mahler, L. (2025). Overcoming the lack of alternatives - Changes in the use of coercive measures after implementation of the recovery-oriented "Weddinger Modell" in acute psychiatric care. Journal of psychiatric research, 181, 405–410. https://doi.org/10.1016/j.jpsychires.2024.11.032	Beobachtungsstudie	recovery-, resilience-, and patient-centered "Weddinger Modell" (WM) f	Komplexe Behandlungsprogramme – Weddinger Modell	CM per case in cases after WM-MIP	Reduktion Episoden S/R	IRR	RR = 0.570, 95% CI = 0.397–0.816, p = 0.002	high risk of bias	not serious	not serious	serious	

6/j.jpsychi- res.2024.11.032												
Cibis, M. L., Wackerha- gen, C., Müller, S., Lang, U. E., Schmidt, Y., & Heinz, A. (2017). Ver- gleichende Betrach- tung von Aggressivität, Zwangsmedikation und Entweichungsraten zwischen offener und geschlossener Türpoli- tik auf einer Akutsta- tion [Comparison of Aggressive Behavior, Compulsory Medica- tion and Absconding Behavior Between O- pen and Closed door Policy in an Acute Psy- chiatric Ward]. Psychi- atrische Praxis, 44(3), 141–147. https://doi.org/10.1055/s-0042-105181	Beobach- tungsstudie	überprüfung der These, dass offene Stationstü- ren Aggres- sivität und Zwangsb- ehandlung reduzieren ohne Ent- weichungs- raten zu er- höhen	Organisatori- sche und in- stitutionelle Interventio- nen	Fixierung	Reduktion Episoden S/R	Chi² (p- Wert)		High Risk of Bias	serious	not se- rious	seri- ous	niedrig
Cibis, M. L., Wackerha- gen, C., Müller, S., Lang, U. E., Schmidt, Y., & Heinz, A. (2017). Ver- gleichende Betrach- tung von Aggressivität, Zwangsmedikation und Entweichungsraten	Beobach- tungsstudie	überprüfung der These, dass offene Stationstü- ren Aggres- sivität und Zwangsb- ehandlung	Organisatori- sche und in- stitutionelle Interventio- nen	beson- dere Si- che- rungs- maß- nahme nach §29a	Reduktion Episoden S/R	Chi² (p- Wert)		High Risk of Bias	serious	not se- rious	seri- ous	

zwischen offener und geschlossener Türpolitik auf einer Akutstation [Comparison of Aggressive Behavior, Compulsory Medication and Absconding Behavior Between Open and Closed door Policy in an Acute Psychiatric Ward]. Psychiatrische Praxis, 44(3), 141–147. https://doi.org/10.1055/s-0042-105181		reduzieren ohne Entweichungsraten zu erhöhen		PsychKG (Isolierung, Sitzwache...)								
Dinsenhacher, L. L., Imfeld, L., Helfenstein, F., Moeller, J., Lang, U. E., & Huber, C. G. (2024). Specialized short term crisis intervention for patients with personality disorder: Effects on coercion and length of stay. The International journal of social psychiatry, 70(8), 1516–1524. https://doi.org/10.1177/00207640241277161	Beobachtungsstudie	In this 8-year, hospital-wide, longitudinal, observational study, we investigated the frequency of coercive measures and the median length of in-hospital stay in 1,752 inpatient-cases with PD admitted to the Adult	Organisatorische und institutionelle Interventionen	incidence rate of coercion	Reduktion Episoden S/R	Odds Ratio [95% CI] Interaction Introduction new crisis intervention track × Time period	1.037 [0.776, 1.369] p = .798	very high risk of bias	serious	not serious	serious	

		Psychiatry, UPK, Basel, Switzerland, between 01.01.2012 and 31.12.2019. By means of an interrupted-time-series analysis, we compared the period before and after the implementation of a specialized crisis intervention track for PD patients										
Hochstrasser, L., Voulgaris, A., Möller, J., Zimmermann, T., Steinauer, R., Borgwardt, S., Lang, U. E., & Huber, C. G. (2018). Reduced Frequency of Cases with Seclusion Is Associated with "Opening the Doors" of a Psychiatric Intensive Care Unit. <i>Frontiers in psychiatry</i> ,	Beobachtungsstudie	Implementing an open door policy is a complex intervention comprising changes in therapeutic stance, team processes, and a change	Organisatorische und institutionelle Interventionen	Mean number of seclusions (pre-post, mean (sd))	Reduktion Episoden S/R	SMD (Standardize Mean Difference)	2.7 ± 2.4 pre vs. 2.3 ± 2.4 post p = 1.000 SMD = -0.167	some concerns	serious	not serious	serious	

9, 57. https://doi.org/10.3389/fpsyt.2018.00057		from locked to open doors.										
Schneeberger AR, Kowalinski E, Fröhlich D et al. Aggression and violence in psychiatric hospitals with and without open door policies: A 15-year naturalistic observation study. Journal of psychiatric research 2017;95:189-95.	Vergleichsstudie	open-door policies	Organisatorische und institutionelle Interventionen	Seclusion or restraint (open vs. locked hospital)	Reduktion Episoden S/R	Odd's ratios (OR)	0.369 [0.198; 0.691]	Serious risk of bias	serious	not serious	not serious	
Schneeberger AR, Kowalinski E, Fröhlich D et al. Aggression and violence in psychiatric hospitals with and without open door policies: A 15-year naturalistic observation study. Journal of psychiatric research 2017;95:189-95.	Vergleichsstudie	open-door policies	Organisatorische und institutionelle Interventionen	Seclusion or restraint (partially locked vs. locked ward)	Reduktion Episoden S/R	Odd's ratios (OR)	0.845 [0.665; 1.081]	Moderate risk of bias	serious	not serious	serious	
Schneeberger AR, Kowalinski E, Fröhlich D et al. Aggression and violence in psychiatric hospitals with and without open door policies: A 15-year naturalistic observation study. Journal of psychiatric	Vergleichsstudie	open-door policies	Organisatorische und institutionelle Interventionen	Seclusion or restraint (open vs. locked ward)	Reduktion Episoden S/R	Odd's ratios (OR)	0.647 [0.582; 0.723]	Moderate risk of bias	serious	not serious	not serious	

research 2017;95:189-95.												
Wullschleger, A., Berg, J., Bempohl, F., & Montag, C. (2018). Can "Model Projects of Need-Adapted Care" Reduce Involuntary Hospital Treatment and the Use of Coercive Measures?. Frontiers in psychiatry, 9, 168. https://doi.org/10.3389/fpsyt.2018.00168	Beobachtungsstudie	model project of need-adapted care - FIGURE 1	Organisatorische und institutionelle Interventionen	Restraints/ 100 patient-days (Acute wards patients)	Reduktion Episoden S/R	SMD (Standardized Mean Difference)	SMD = - 0.14	high risk of bias	serious	not serious	serious	
Wullschleger, A., Berg, J., Bempohl, F., & Montag, C. (2018). Can "Model Projects of Need-Adapted Care" Reduce Involuntary Hospital Treatment and the Use of Coercive Measures?. Frontiers in psychiatry, 9, 168. https://doi.org/10.3389/fpsyt.2018.00168	Beobachtungsstudie	model project of need-adapted care - FIGURE 1	Organisatorische und institutionelle Interventionen	Restraints/ 100 patient-days (F1x.5, F2x, F30, F31.x)	Reduktion Episoden S/R	SMD (Standardized Mean Difference)	SMD = - 0.12	high risk of bias	serious	not serious	serious	
Wullschleger, A., Berg, J., Bempohl, F., & Montag, C. (2018). Can "Model Projects of Need-Adapted Care" Reduce Involuntary Hospital Treatment and	Beobachtungsstudie	model project of need-adapted care - FIGURE 1	Organisatorische und institutionelle Interventionen	Seclusions/100 patient-days (Acute	Reduktion Episoden S/R	SMD (Standardized Mean Difference)	SMD = 0.05	high risk of bias	serious	not serious	serious	

the Use of Coercive Measures?. Frontiers in psychiatry, 9, 168. https://doi.org/10.3389/fpsyt.2018.00168				wards patients)								
Wullschleger, A., Berg, J., BERPohl, F., & Montag, C. (2018). Can "Model Projects of Need-Adapted Care" Reduce Involuntary Hospital Treatment and the Use of Coercive Measures?. Frontiers in psychiatry, 9, 168. https://doi.org/10.3389/fpsyt.2018.00168	Beobachtungsstudie	model project of need-adapted care - FIGURE 1	Organisatorische und institutionelle Interventionen	Seclusions/100 patient-days (F1x.5, F2x, F30, F31.x)	Reduktion Episoden S/R	SMD (Standardized Mean Difference)	SMD = 0.07	high risk of bias	serious	not serious	serious	
Thomsen, C. T., Benros, M. E., Maltesen, T., Hastrup, L. H., Andersen, P. K., Giacco, D., & Nordentoft, M. (2018). Patient-controlled hospital admission for patients with severe mental disorders: a nationwide prospective multi-centre study. Acta psychiatrica Scandinavica, 137(4), 355–363. https://doi.org/10.1111/acps.12868	Vergleichsstudie	implementing patient-controlled admission (PCA)	Psychotherapeutische Angebote	use of any coercive measure (IG group pre-post)	Reduktion Episoden S/R	mean difference (95% CI)	MD = -0.20, p = .0001	moderate risk of bias	serious	not serious	not serious	

Thomsen, C. T., Benros, M. E., Maltesen, T., Hastrup, L. H., Andersen, P. K., Giacco, D., & Nordentoft, M. (2018). Patient-controlled hospital admission for patients with severe mental disorders: a nationwide prospective multicentre study. <i>Acta psychiatrica Scandinavica</i> , 137(4), 355–363. https://doi.org/10.1111/acps.12868	Vergleichsstudie	implementing patient-controlled admission (PCA)	Psychotherapeutische Angebote	restraint (IG group pre-post)	Reduktion Episoden S/R	mean difference (95% CI)	MD = -0.13, p = .0004	moderate risk of bias	serious	not serious	not serious	
Nurenberg JR, Schleifer SJ, Shaffer TM et al. Animal-Assisted Therapy With Chronic Psychiatric Inpatients: Equine-Assisted Psychotherapy and Aggressive Behavior. <i>Psychiatric Services</i> 2015; 66:80–86; doi: 10.1176/appi.ps.201300524	Beobachtungsstudie	Animal-Assisted Interventions	Psychotherapeutische Angebote	monthly seclusion or restraints (Einheit unklar)	Reduktion Episoden S/R	Fgroup	1.97 (p > 0.1)	some concerns	not serious	serious	serious	sehr niedrig
Brathovde A. (2021). Improving the Standard of Care in the Management of Agitation in the Acute Psychiatric Setting. <i>Journal of the American Psychiatric Nurses Association</i> , 27(3), 251–258.	Beobachtungsstudie	Patients were assessed using the BVC twice daily for first 72 hours of admission. BVC	Risikovorhersage und frühe Interventionen	restraint rate	Reduktion Episoden S/R	% reduction in restraint rate	6.5% reduction in restraint rate	Very high risk of bias	serious	not serious	serious	niedrig

https://doi.org/10.1177/1078390320915988		checklists and electronic health record documentation were audited for BVC scores above 2. The author and nurses involved in each restraint reviewed documentation improvement opportunities. Pre- and post-BVC intervention surveys assessed nurse attitudes regarding violence risk tools										
Florisse, E. J. R., & Delespaul, P. A. E. G. (2020). Monitoring risk assessment on an acute psychiatric ward:	Beobachtungsstudie	implemented the Crisis Monitor, risk	Risikovorhersage und frühe Interventionen	number of seclusions (pre-post, n,	Reduktion Episoden S/R	% reduction	73 (0.57) pre vs. 75 (0.76) post p = .83	high risk of bias	serious	not serious	serious	

Effects on aggression, seclusion and nurse behaviour. PloS one, 15(10), e0240163. https://doi.org/10.1371/journal.pone.0240163		assessment tools		n per 1000 patient days per bed)			33.3% increase					
Harrington A, Darke H, Ennis G, Sundram. (2019) Evaluation of an alternative model for the management of clinical risk in an adult acute psychiatric inpatient unit.	Beobachtungsstudie	development and implementation of the clinical risk management initiative	Risikovorhersage und frühe Interventionen	rate of seclusion events per 1000 occupied bed days [95% CI] (pre-post)	Reduktion Episoden S/R	% reduction risk Ratio RR [95% CI]	43.7 [40.6, 46.9] pre vs. 30.9 [27.9, 34.1] post p < .0001 29.3% reduction RR = 0.71 [0.63, 0.80]	high risk of bias	serious	not serious	not serious	
Hvidhjelm, J., Brandt-Christensen, M., Delcomyn, C., Møllerhøj, J., Siersma, V., & Bak, J. (2022). Effects of Implementing the Short-Term Assessment of Risk and Treatability for Mechanical Restraint in a Forensic Male Population: A Stepped-Wedge, Cluster-Randomized Design. Frontiers in psychiatry, 13, 822295.	RCT	Short-Term Assessment of Risk and Treatability (START)	Risikovorhersage und frühe Interventionen	occurrence of mechanical restraint use (primary)	Reduktion Episoden S/R	adjusted RR	0.18	Low risk	serious	serious	serious	

https://doi.org/10.3389/fpsyt.2022.822295												
Hvidhjelm, J., Brandt-Christensen, M., Delcomyn, C., Møllerhøj, J., Siersma, V., & Bak, J. (2022). Effects of Implementing the Short-Term Assessment of Risk and Treatability for Mechanical Restraint in a Forensic Male Population: A Stepped-Wedge, Cluster-Randomized Design. <i>Frontiers in psychiatry</i> , 13, 822295. https://doi.org/10.3389/fpsyt.2022.822295	RCT	Short-Term Assessment of Risk and Treatability (START)	Risikovorhersage und frühe Interventionen	occurrence of mechanical restraint use (primary)	Reduktion Episoden S/R	further adjusted RR	0.17	Low risk	serious	serious	serious	
Hvidhjelm, J., Brandt-Christensen, M., Delcomyn, C., Møllerhøj, J., Siersma, V., & Bak, J. (2022). Effects of Implementing the Short-Term Assessment of Risk and Treatability for Mechanical Restraint in a Forensic Male Population: A Stepped-Wedge, Cluster-Randomized Design. <i>Frontiers in psychiatry</i> , 13,	RCT	Short-Term Assessment of Risk and Treatability (START)	Risikovorhersage und frühe Interventionen	total coercive episodes (number of physical restraint episodes, episodes of acute forced medication, episodes of	Reduktion Episoden S/R	adjusted RR	0.37	Low risk	serious	serious	serious	

822295. https://doi.org/10.3389/fpsyt.2022.822295				one to one observation (without patient consent) and mechanical restraint episodes) (secondary)								
Hvidhjelm, J., Brandt-Christensen, M., Delcomyn, C., Møllerhøj, J., Siersma, V., & Bak, J. (2022). Effects of Implementing the Short-Term Assessment of Risk and Treatability for Mechanical Restraint in a Forensic Male Population: A Stepped-Wedge, Cluster-Randomized Design. <i>Frontiers in psychiatry</i> , 13, 822295. https://doi.org/10.3389/fpsyt.2022.822295	RCT	Short-Term Assessment of Risk and Treatability (START)	Risikovorhersage und frühe Interventionen	total coercive episodes (number of physical restraint episodes, episodes of acute forced medication, episodes of one to one observation (without patient consent) and mechanical	Reduktion Episoden S/R	further adjusted RR	0.33	Low risk	serious	serious	serious	

				restraint episodes) (secondary)								
Manning, T., Bell, S. B., Dawson, D., Kezbers, K., Crockett, M., & Gleason, O. (2022). The Utilization of a Rapid Agitation Scale and Treatment Protocol for Patient and Staff Safety in an Inpatient Psychiatric Setting. The Psychiatric quarterly, 93(3), 915–933. https://doi.org/10.1007/s11126-022-10001-y	Beobachtungsstudie	Rapid Agitation Scale and Treatment Protocol for Patient and Staff Safety in an Inpatient Psychiatric Setting	Risikovorhersage und frühe Interventionen	total restraint incidents (pre-post)	Reduktion Episoden S/R	% reduction	44.1% reduction (68 to 38 incidents) n.s	high risk of bias	serious	not serious	not serious	
Manning, T., Bell, S. B., Dawson, D., Kezbers, K., Crockett, M., & Gleason, O. (2022). The Utilization of a Rapid Agitation Scale and Treatment Protocol for Patient and Staff Safety in an Inpatient Psychiatric Setting. The Psychiatric quarterly, 93(3), 915–933. https://doi.org/10.1007/s11126-022-10001-y	Beobachtungsstudie	Rapid Agitation Scale and Treatment Protocol for Patient and Staff Safety in an Inpatient Psychiatric Setting	Risikovorhersage und frühe Interventionen	total seclusion incidents (pre-post)	Reduktion Episoden S/R	% reduction	27.3% increase (22 to 28 incidents) n.s.	high risk of bias	serious	not serious	not serious	

Odgaard, A. S., Kragh, M., & Roj Larsen, E. (2018). The impact of modified mania assessment scale (MAS-M) implementation on the use of mechanical restraint in psychiatric units. <i>Nordic journal of psychiatry</i> , 72(8), 549–555. https://doi.org/10.1080/08039488.2018.1490816	Vergleichsstudie	Danish assessment tool for psychiatric inpatients diagnosed with mania (MAS-M)	Risikovorhersage und frühe Interventionen	episodes of mechanical restraint	Reduktion Episoden S/R	OR (95% CI)	OR = 1.58 (0.75-3.30)	serious risk of bias	serious	not serious	serious	
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Reduktion von freiheitsbeschränkenden Maßnahmen – kumulierte Dauer von Isolierungen und Fixierungen

Literatur	Studientyp	Intervention	Intervention-Kategorie	Outcome einzeln	Outcome-Kategorie	Schätzer	Ergebnisse einzeln	Interpretation	Risk of Bias gesamt	GRADE - Inconsistency	GRADE - Indirectness	GRADE - Imprecision	Evidenzqualität
Geoffrion, S., Gonçalves, J., Giguère, C. É., & Guay, S. (2018). Impact of a Program for the Management of Aggressive Behaviors on Seclusion and Restraint Use in Two High-Risk Units of a Mental Health	Beobachtungsstudie	Omega Program	Fort- und Weiterbildungsprogramme	Duration of seclusion (hours) for 1000 patient-days intensive care (pre-post)	Reduktion kumulative Dauer S/R	% reduction	1775.3 pre vs. 892.0 post p = .0069 49.8% reduction	reduction > 0 favors intervention	very high risk of bias	not serious	not serious	not serious	niedrig

Institute. The Psychiatric quarterly, 89(1), 95–102. https://doi.org/10.1007/s11126-017-9519-6													
Geoffrion, S., Gonçalves, J., Giguère, C. É., & Guay, S. (2018). Impact of a Program for the Management of Aggressive Behaviors on Seclusion and Restraint Use in Two High-Risk Units of a Mental Health Institute. The Psychiatric quarterly, 89(1), 95–102. https://doi.org/10.1007/s11126-017-9519-6	Beobachtungsstudie	Omega Program	Fort- und Weiterbildungsprogramme	Duration of seclusion (hours) for 1000 patient-days emergency (pre-post)	Reduction cumulative Dauer S/R	% reduction	23.8 pre vs. 11.8 post p = .1453 50.4% reduction	not significant	very high risk of bias	not serious	not serious	serious	
Geoffrion, S., Gonçalves, J., Giguère, C. É., & Guay, S. (2018). Impact of a Program for the Management of Aggressive Behaviors on Seclusion and Restraint Use in Two High-Risk Units of a Mental Health Institute. The Psychiatric quarterly, 89(1), 95–102. https://doi.org/10.1007/s11126-017-9519-6	Beobachtungsstudie	Omega Program	Fort- und Weiterbildungsprogramme	Duration of restraint (hours) for 1000 patient-days intensive care (pre-post)	Reduction cumulative Dauer S/R	% reduction	248.9 pre vs. 82.9 post p = .0731 66.7% reduction	not significant	very high risk of bias	not serious	not serious	serious	

Geoffrion, S., Gonçalves, J., Giguère, C. É., & Guay, S. (2018). Impact of a Program for the Management of Aggressive Behaviors on Seclusion and Restraint Use in Two High-Risk Units of a Mental Health Institute. <i>The Psychiatric quarterly</i> , 89(1), 95–102. https://doi.org/10.1007/s11126-017-9519-6	Beobachtungsstudie	Omega Program	Fort- und Weiterbildungsprogramme	Duration of restraint (hours) for 1000 patient-days emergency (pre-post)	Reduktion kumulative Dauer S/R	% reduction	11.4 pre vs. 4.7 post p = .2924 58.8% reduction	not significant	very high risk of bias	not serious	not serious	serious	
Välimäki, M., Lantta, T., Anttila, M., Vahlberg, T., Normand, S. L., & Yang, M. (2022). An Evidence-Based Educational Intervention for Reducing Coercive Measures in Psychiatric Hospitals: A Randomized Clinical Trial. <i>JAMA network open</i> , 5(8), e2229076. https://doi.org/10.1001/jamanetworkopen.2022.29076	RCT		Fort- und Weiterbildungsprogramme	Length of seclusion event on ward level, geometric mean, min	Reduktion kumulative Dauer S/R	adjusted rate ratio (post)	0.02 (-0.56-0.6)	not significant	Some concerns	not serious	serious	serious	
Whitecross, F., Lee, S., Bushell, H., Kang, M., Berry, C., Hollander, Y., Sonmez, G., & Rauchberger, I. (2020).	Beobachtungsstudie	implemented a psychiatric behaviour	Fort- und Weiterbildungsprogramme	mean monthly seclusion hours per 1000	Reduktion	% reduction	71.9% reduction (270.4 to 76.0) no	reduction > 0% favors	high risk of bias	not serious	not serious	serious	

Implementing a psychiatric behaviours of concern team can reduce restrictive intervention use and improve safety in inpatient psychiatry. Australasian psychiatry : bulletin of Royal Australian and New Zealand College of Psychiatrists, 28(4), 401–406. https://doi.org/10.1177/1039856220917072		of concern (Psy-BOC) team Psy-BOC call. Psy-BOC team, Behaviours of Concern (Psy-BOC) Call Psychiatry guideline to educate staff		occupied bed days (6 mo. pre Psy-BOC commencement vs. 6 mo. post Psy-BOC commencement)	ku-mulative Dauer S/R		significance testing	intervention					
Ye, J., Xia, Z., Wang, C., Liao, Y., Xu, Y., Zhang, Y., Yu, L., Li, S., Lin, J., & Xiao, A. (2021). Effectiveness of CRSCE-Based De-escalation Training on Reducing Physical Restraint in Psychiatric Hospitals: A Cluster Randomized Controlled Trial. Frontiers in psychiatry, 12, 576662. https://doi.org/10.3389/fpsyt.2021.576662	RCT	Routine training while additionally received CRSCE-based de-escalation training (based on restrain yourself (uk) and 6cs (usa)	Fort- und Weiterbildungsprogramme	frequency of physical restraint of inpatients (monthly use of physical restraint of inpatients (%) = monthly number of patient days of physical	Reduktion ku-mulative Dauer S/R	Fgroup	5.375 (p = 0.043)	F > 4.965 (df1=1, df2=10) zeigt signifikanten Unterschied	Some concerns	not serious	not serious	serious	

				re- straint/to- tal monthly patient days x 100%)									
Shields, M. C., & Busch, A. B. (2020). The Effect of Centers for Medicare and Medicaid's Inpatient Psychiatric Facility Quality Reporting Program on the Use of Restraint and Seclusion. Medical care, 58(10), 889–894. https://doi.org/10.1097/MLR.0000000000001393	Vergleichs- studie	Inpa- tient Psy- chiatric Facility Quality Report- ing Pro- gram=IPF QR pro- gram	Gesetzes- oder Regeländerun- gen	No of total patient hours in re- straint/to- tal 1000 patient days	Re- duk- tion ku- mula- tive Dauer S/R	Diffe- rence -in- Diffe- rence	0,5104 (0,3127; 0,8331)	<1 fa- vors inter- ven- tion	mode- rate risk of bias	seri- ous	not se- rious	serious	
Shields, M. C., & Busch, A. B. (2020). The Effect of Centers for Medicare and Medicaid's Inpatient Psychiatric Facility Quality Reporting Program on the Use of Restraint and Seclusion. Medical care, 58(10), 889–894. https://doi.org/10.1097/MLR.0000000000001393	Vergleichs- studie	Inpa- tient Psy- chiatric Facility Quality Report- ing Pro- gram=IPF QR pro- gram	Gesetzes- oder Regeländerun- gen	No of total patient hours in seclu- sion/total 1000 pa- tient days	Re- duk- tion ku- mula- tive Dauer S/R	Diffe- rence -in- Diffe- rence	0,4646 (0,2668; 0,8029)	<1 fa- vors inter- ven- tion	mode- rate risk of bias	seri- ous	not se- rious	serious	niedrig

Shields, M. C., & Busch, A. B. (2020). The Effect of Centers for Medicare and Medicaid's Inpatient Psychiatric Facility Quality Reporting Program on the Use of Restraint and Seclusion. Medical care, 58(10), 889–894. https://doi.org/10.1097/MLR.0000000000001393	Vergleichs-studie	Inpa-tient Psy-chiatric Facility Quality Reporting Pro-gram=IPF QR pro-gram	Gesetzes- oder Regeländerun-gen	probability of achieviev-ing zero hours in restraint	Re-duk-tion ku-mula-tive Dauer S/R	Diffe-rence -in-Diffe-rence	n. s.	not signi-ficant	serious risk of bias	seri-ous	not se-rious	serious	
Shields, M. C., & Busch, A. B. (2020). The Effect of Centers for Medicare and Medicaid's Inpatient Psychiatric Facility Quality Reporting Program on the Use of Restraint and Seclusion. Medical care, 58(10), 889–894. https://doi.org/10.1097/MLR.0000000000001393	Vergleichs-studie	Inpa-tient Psy-chiatric Facility Quality Reporting Pro-gram=IPF QR pro-gram	Gesetzes- oder Regeländerun-gen	probability of achieviev-ing zero hours in seclusion	Re-duk-tion ku-mula-tive Dauer S/R	Diffe-rence -in-Diffe-rence	n. s.	not signi-ficant	serious risk of bias	seri-ous	not se-rious	serious	
Yakov, S., Birur, B., Bearden, M. F., Aguilar, B., Ghelani, K. J., & Fargason, R. E. (2018). Sensory Reduction on the General Milieu of a High-Acuity Inpatient Psychiatric Unit to Prevent Use of Physical	Beobach-tungsstudie	sensory reduc-tion interven-tions on a high-acuity in-patient milieu	Gestaltung psy-chiatrischer Stationen	percent-age of pa-tient hours on the PICU during the 4:00 p.m. to 7:00 p.m. time	Re-duk-tion ku-mula-tive Dauer S/R	mean per-cent-ages of pa-tient time in restrain	reduc-tion = 72% (from 1.77% to .51%) median pre = 1.37,	re-duc-tion > 0% favors interven-tion	high risk of bias	not seri-ous	serious	not se-rious	sehr niedrig

Restraints: A Successful Open Quality Improvement Trial. Journal of the American Psychiatric Nurses Association, 24(2), 133–144. https://doi.org/10.1177/1078390317736136				period in restraints per 1,000 patient hours (primary)		ts on the PICU during pre- and post-measurement periods	median post = 0.18, U = 4, p = .02							
Baumgardt, J., Jäckel, D., Helber-Böhlen, H., Stiehm, N., Morgenstern, K., Voigt, A., Schöppe, E., McCutcheon, A. K., Lecca, E. E. V., Löhr, M., Schulz, M., Bechdorf, A., & Weinmann, S. (2019). Preventing and Reducing Coercive Measures-An Evaluation of the Implementation of the Safewards Model in Two Locked Wards in Germany. Frontiers in psychiatry, 10, 340. https://doi.org/10.3389/fpsyt.2019.00340	Beobachtungsstudie	Safewards Model	Komplexe Behandlungsprogramme – Safewards	cumulative duration of coercive intervention per patient, ward a	Reduktion kumulative Dauer S/R	U value	-0.098 (p=0.922)	nicht signifikant	High Risk of Bias	serious	serious	serious	sehr niedrig	

Baumgardt, J., Jäckel, D., Helber-Böhlen, H., Stiehm, N., Morgenstern, K., Voigt, A., Schöppe, E., Mc Cutcheon, A. K., Lecca, E. E. V., Löhr, M., Schulz, M., Bechdorf, A., & Weinmann, S. (2019). Preventing and Reducing Coercive Measures-An Evaluation of the Implementation of the Safewards Model in Two Locked Wards in Germany. <i>Frontiers in psychiatry</i> , 10, 340. https://doi.org/10.3389/fpsyt.2019.00340	Beobachtungsstudie	Safewards Model	Komplexe Behandlungsprogramme – Safewards	cumulative duration of coercive intervention per patient, ward b	Reduktion kumulative Dauer S/R	U value	-0.556 (p=0.579)	nicht signifikant	High Risk of Bias	serious	serious	serious	
	Beobachtungsstudie	Safewards Model	Komplexe Behandlungsprogramme – Safewards	duration of coercive interventions regarding the overall duration of stay, ward a	Reduktion kumulative Dauer S/R	RR	0.71	nur deskriptiv	High Risk of Bias	serious	not serious	serious	

Wards in Germany. Frontiers in psychiatry, 10, 340. https://doi.org/10.3389/fpsyt.2019.00340													
Baumgardt, J., Jäckel, D., Helber-Böhlen, H., Stiehm, N., Morgens- stern, K., Voigt, A., Schöppe, E., Mc Cutcheon, A. K., Lecca, E. E. V., Löhr, M., Schulz, M., Bechdolf, A., & Weinmann, S. (2019). Preventing and Reducing Coercive Measures-An Evaluation of the Implementation of the Safewards Model in Two Locked Wards in Germany. Frontiers in psychiatry, 10, 340. https://doi.org/10.3389/fpsyt.2019.00340	Beobach- tungsstudie	Safe- wards Model	Komplexe Be- handlungspro- gramme – Safe- wards	duration of coercive interven- tions re- garding the overall duration of stay, ward b	Re- duk- tion ku- mula- tive Dauer S/R	RR	0.14	nur de- skrip- tiv	High Risk of Bias	seri- ous	not se- rious	serious	
Alexandra Hernandez, Sanaz Riahi, Melanie I. Stuckey, Barbara A. Mildon and Philip E. Klas- sen.(2017).Multidimen- sional approach to re- straint minimization: The journey of a spe- cialized mental health	Beobach- tungsstudie	Method to avoid re- strictions "Recovery Rounds" --> rec- ommen- dation of	Komplexe Be- handlungspro- gramme – Six Core Strategies	Sec red hrs/m step beta2	Re- duk- tion ku- mula- tive Dauer S/R	beta	-1264,5 (p=0,002)	< 0 fa- vors post- inter- ven- tion	High Risk of Bias	seri- ous	not se- rious	not se- rious	niedrig

organization. URL: https://pub-med.ncbi.nlm.nih.gov/28960744/		the 6 CS (Method e zu Ver- meidung von Ein- schränku- ngen)												
Alexandra Hernandez, Sanaz Riahi, Melanie I. Stuckey, Barbara A. Mildon and Philip E. Klas- sen.(2017).Multidimen- sional approach to re- straint minimization: The journey of a spe- cialized mental health organization. URL: https://pub-med.ncbi.nlm.nih.gov/28960744/	Beobach- tungsstudie	Method to avoid re- strictions "Recov- ery Rounds" --> rec- ommen- dation of the 6 CS (Method e zu Ver- meidung von Ein- schränku- ngen)	Komplexe Be- handlungspro- gramme – Six Core Strategies	Sec red hrs/m step beta3	Re- duk- tion ku- mula- tive Dauer S/R	beta	25 (p=0,55)	not signi- ficant	High Risk of Bias	seri- ous	not se- rious	serious		
Alexandra Hernandez, Sanaz Riahi, Melanie I. Stuckey, Barbara A. Mildon and Philip E. Klas- sen.(2017).Multidimen- sional approach to re- straint minimization: The journey of a spe- cialized mental health organization. URL:	Beobach- tungsstudie	Method to avoid re- strictions "Recov- ery Rounds" --> rec- ommen- dation of the 6 CS	Komplexe Be- handlungspro- gramme – Six Core Strategies	Res red hrs/m step beta2	Re- duk- tion ku- mula- tive Dauer S/R	beta	-122,5 (p=- 0.734)	not signi- ficant	High Risk of Bias	seri- ous	not se- rious	serious		

https://pub-med.ncbi.nlm.nih.gov/28960744/		(Method e zu Vermeidung von Einschränkungen)											
Alexandra Hernandez, Sanaz Riahi, Melanie I. Stuckey, Barbara A. Mildon and Philip E. Klasen.(2017).Multidimensional approach to restraint minimization: The journey of a specialized mental health organization. URL: https://pub-med.ncbi.nlm.nih.gov/28960744/	Beobachtungsstudie	Method to avoid re-strictions "Recovery Rounds" --> recommendation of the 6 CS (Method e zu Vermeidung von Einschränkungen)	Komplexe Behandlungsprogramme – Six Core Strategies	Res red hrs/m step beta3	Reduktion kumulative Dauer S/R	beta	12.8 (p=0.688)	not significant	High Risk of Bias	serious	not serious	serious	
Putkonen, A., Kuivalainen, S., Louheranta, O., Repo-Tiihonen, E., Ryyänänen, O.-P., Kautiainen, H., & Jari Tiihonen, B. (2013). Cluster-randomized controlled trial of reducing seclusion and restraint in secured care of men with schizophrenia. Psychiatric Services, 64(9),	RCT	staff, patients, and doctors were trained for six months in applying six core	Komplexe Behandlungsprogramme – Six Core Strategies	seclusion-restraint time	Reduktion kumulative Dauer S/R	IRR (95%-CI)	intervention wards: IRR over time=.85 , CI=.78–.92, p<.001 control wards: IRR over time=.1.	IRR < 1 means reduction in seclusion-restraint and	Low risk	serious	not serious	not serious	

850–855. http://dx.doi.org/10.1176/appi.ps.201200393 .		strategies to prevent seclusion-restraint; six months of supervised intervention followed					09, CI=.94–1.25, p=.24 difference between the groups: p = .001	observation days					
Dike, C. C., Lamb-Pagone, J., Howe, D., Beavers, P., Bugella, B. A., & Hillbrand, M. (2021). Implementing a program to reduce restraint and seclusion utilization in a public-sector hospital: Clinical innovations, preliminary findings, and lessons learned. <i>Psychological services</i> , 18(4), 663–670. https://doi.org/10.1037/ser0000502	Beobachtungsstudie	ARS-SIG, state hospital program adapting 6CS Strategies 1. Leadership Toward Organizational Change 2. Workforce Development-3h 3. Use of Restraint and Seclusion	Komplexe Behandlungsprogramme – Sonstige	total patient restraint hours per 100 patient days	Reduktion kumulative Dauer S/R	Vergleich von Durchschnitt Intervention mit Durchschnitt Baseline; Effektivitätsstärke	0.11 (t=-10.54, p<0.01), d=5.27	> 0 favors intervention	high risk of bias	not serious	not serious	serious	niedrig

		Prevention Tools 4. Use of Data to Inform Practice 5. Consumer Roles in Inpatient Settings 6. Debriefing Techniques												
Hirsch, S., Baumgardt, J., Bechdorf, A., Bühling-Schindowski, F., Cole, C., Flammer, E., Jaeger, S., Junghanss, J., Kampmann, M., Sauter, D., Muche, R., Vandamme, A., Steinert, T., & Mahler, L. (2025). Umsetzung der DGPPN-S3-Leitlinie zur Prävention von Gewalt und Zwang: Prä-post-Analyse der randomisierten kontrollierten PreVCo-Studie [Implementation of the guidelines on the prevention of violence and	Beobachtungsstudie	Strukturierte Implementierung der Leitlinie zur Vermeidung von Zwang zu einer Verbesserung leitlinienkonformen Arbeitens und der Reduktion	Komplexe Behandlungsprogramme – Sonstige	Kumulative Dauer von Zwangsmaßnahmen pro Bett und Monat	Reduktion kumulative Dauer S/R	Median (IQR) der Paardifferenzen	0.45 (9.04) p = .067	not significant	Low risk	not serious	not serious	serious		

coercion: pre-post analysis of the randomized controlled PreVCo study]. Psychiatrische Praxis, 52(3), 141–149. https://doi.org/10.1055/a-2440-8795		von Zwang in der klinischen Arbeit											
Steinert, T., Baumgardt, J., Bechdorf, A., Bühling-Schindowski, F., Cole, C., Flammer, E., Jaeger, S., Jung-hanss, J., Kampmann, M., Mahler, L., Muche, R., Sauter, D., Vandamme, A., & Hirsch, S. (2023). Implementation of guidelines on prevention of coercion and violence (PreVCo) in psychiatry: a multicentre randomised controlled trial. The Lancet regional health. Europe, 35, 100770. https://doi.org/10.1016/j.lanepe.2023.100770	RCT	Implementation of guidelines on prevention of coercion and violence (PreVCo) Rating Tool	Komplexe Behandlungsprogramme – Sonstige	cumulated duration of coercive measures used per month and occupied bed (hours)	Reduktion kumulative Dauer S/R	median difference between matched pairs (interquartile range)	2.81 (31.30)	not significant	Low risk	not serious	not serious	serious	
Czernin, K., Bermpohl, F., Heinz, A., Wullschleger, A., & Mahler, L. (2020). Auswirkungen der Etablierung des psychiatrischen	Vergleichsstudie	Recovery-orientated psychiatric care concept	Komplexe Behandlungsprogramme – Weddinger Modell	kumulative Dauer von Zwangsmaßnahmen in h,	Reduktion kumulative	U (Mann-Whitney-U-	71.5; p=0.009	p <0.05 favors intervention	critical risk of bias	not serious	not serious	serious	niedrig

Behandlungskonzepts „Weddinger Modell“ auf mechanische Zwangsmaßnahmen [Effects of the Psychiatric Care Concept "Weddinger Modell" on Mechanical Coercive Measures]. Psychiatrische Praxis, 47(5), 242–248. https://doi.org/10.1055/a-1116-0720		"Weddinger Modell"		Median (IQR)	Dauer S/R	Test, Wilcoxon - Rangsummen-Test)							
Czernin, K., Bermpohl, F., Heinz, A., Wullschlegel, A., & Mahler, L. (2020). Auswirkungen der Etablierung des psychiatrischen Behandlungskonzepts „Weddinger Modell“ auf mechanische Zwangsmaßnahmen [Effects of the Psychiatric Care Concept "Weddinger Modell" on Mechanical Coercive Measures]. Psychiatrische Praxis, 47(5), 242–248. https://doi.org/10.1055/a-1116-0720	Vergleichsstudie	Recovery-orientated psychiatric care concept "Weddinger Modell"	Komplexe Behandlungsprogramme – Weddinger Modell	Anteil der kumulativen Dauer von Zwangsmaßnahmen an der Aufenthaltsdauer in %, Median (IQR)	Reduktion kumulative Dauer S/R	U (Mann-Whitney-U-Test, Wilcoxon - Rangsummen-Test)	60; p=0.006	p <0.05 favors intervention	critical risk of bias	not serious	not serious	serious	
Korezelidou, A., Welte, A., Oster, A., & Mahler, L. (2025). Overcoming the lack of alternatives - Changes in the use of	Beobachtungsstudie	recovery-, resilience-, and patient-	Komplexe Behandlungsprogramme – Weddinger Modell	Total duration of CM per case in hrs, M MD RA	Reduktion	% reduction	23.36 8.00 0.5–308.83 pre vs.	reduction > 0 favors	high risk of bias	not serious	not serious	serious	

coercive measures after implementation of the recovery-oriented "Weddinger Modell" in acute psychiatric care. Journal of psychiatric research, 181, 405–410. https://doi.org/10.1016/j.jpsychires.2024.11.032		centered "Weddinger Modell" (WM) f			ku-mulative Dauer S/R		16.09 6.16 0.08–181.08 post 31.1% reduction	intervention					
Korezelidou, A., Welte, A., Oster, A., & Mahler, L. (2025). Overcoming the lack of alternatives - Changes in the use of coercive measures after implementation of the recovery-oriented "Weddinger Modell" in acute psychiatric care. Journal of psychiatric research, 181, 405–410. https://doi.org/10.1016/j.jpsychires.2024.11.032	Beobachtungsstudie	recovery-, resilience-, and patient-centered "Weddinger Modell" (WM) f	Komplexe Behandlungsprogramme – Weddinger Modell	total CM duration after WM-MIP	Reduktion kumulative Dauer S/R	exp. B	exp. B = 0.719, 95%-CI = 0.483–1.068, p = 0.102	not significant	high risk of bias	not serious	not serious	serious	
Beaglehole, B., Beveridge, J., Campbell-Trotter, W., & Frampton, C. (2017). Unlocking an acute psychiatric ward: the impact on unauthorised absences, assaults and seclusions.	Beobachtungsstudie	changed from two locked and two unlocked wards to four	Organisatorische und institutionelle Interventionen	mean rates of monthly seclusion (hours/month)	Reduktion kumulative Dauer S/R	RR	0.47	< 1 favors open wards	low risk of bias	not serious	not serious	serious	niedrig

BJPsych bulletin, 41(2), 92–96. https://doi.org/10.1192/pb.bp.115.052944		open wards											
Van Melle, A. L., Noorthoorn, E. O., Widdershoven, G. A. M., Mulder, C. L., & Voskes, Y. (2020). Does high and intensive care reduce coercion? Association of HIC model fidelity to seclusion use in the Netherlands. BMC psychiatry, 20(1), 469. https://doi.org/10.1186/s12888-020-02855-y	Beobachtungsstudie	audits with high and Intensive Care (HIC) monitor The association between HIC monitor scores and the use of seclusion and forced medication was analyzed, corrected for patient characteristics	Organisatorische und institutionelle Interventionen	hours seclusion per admission hours	Reduktion kumulative Dauer S/R	student t test	0.0258 hrs/hrs vs. 0.042 hrs/hrs (p<0.001)	x<y and p< 0.05 favors high HIC score	serious risk of bias	not serious	not serious	serious	
Sigrunarson, V., Moljord, I. E., Steinsbekk, A., Eriksen, L., & Morken, G. (2017). A	RCT	implemented services called	Psychotherapeutische Angebote	days under coercion	Reduktion	p-value (Mann-Whitney U test)	Median (lower, upper quartile)	intervention and	Some concerns	not serious	not serious	serious	niedrig

randomized controlled trial comparing self-referral to inpatient treatment and treatment as usual in patients with severe mental disorders. Nordic journal of psychiatry, 71(2), 120–125. https://doi.org/10.1080/08039488.2016.1240231		‘self-referral to inpatient treatment’ (SRIT) for patients with severe mental disorders			ku-mulative Dauer S/R	Whitney test)	Intervention = 0 (0, 148.5); Median (lower, upper quartile) TAU = 0 (0, 31); p> .05	TAU not different					
Hvidhjelm, J., Brandt-Christensen, M., Delcomyn, C., Møllerhøj, J., Siersma, V., & Bak, J. (2022). Effects of Implementing the Short-Term Assessment of Risk and Treatability for Mechanical Restraint in a Forensic Male Population: A Stepped-Wedge, Cluster-Randomized Design. Frontiers in psychiatry, 13, 822295. https://doi.org/10.3389/fpsyt.2022.822295	RCT	Short-Term Assessment of Risk and Treatability (START)	Risikovorhersage und frühe Interventionen	total duration (in minutes) of mechanical restraint use (secondary)	Reduktion kumulative Dauer S/R	adjusted RR	0.01	< 1 favors intervention	Low risk	not serious	not serious	not serious	
Hvidhjelm, J., Brandt-Christensen, M., Delcomyn, C., Møllerhøj, J., Siersma, V., & Bak, J. (2022). Effects of Implementing the Short-	RCT	Short-Term Assessment of Risk and	Risikovorhersage und frühe Interventionen	total duration (in minutes) of mechanical restraint	Reduktion kumulative	further adjusted RR	0.00	< 1 favors intervention	Low risk	not serious	not serious	not serious	mäßig

Term Assessment of Risk and Treatability for Mechanical Restraint in a Forensic Male Population: A Stepped-Wedge, Cluster-Randomized Design. Frontiers in psychiatry, 13, 822295. https://doi.org/10.3389/fpsyt.2022.822295		Treatability (START)		use (secondary)	Dauer S/R								
Emma Griffin.(2022) Seclusion Reduction on an Adult Inpatient Psychiatric Unit: A Quality Improvement Project. URL: https://pubmed.ncbi.nlm.nih.gov/34846230/	Beobachtungsstudie	Implementation of a standard debriefing process based on 6CS	Verhaltenstherapeutische und traumatherapeutische Nachbesprechungen	seclusion hours per 1000 patient care hours (pre-post)	Reduktion kumulative Dauer S/R	% reduction	0.38 pre vs. 0.44 post 15.8% increase	no significance testing	very high risk of bias	serious	not serious	serious	
Goulet, M. H., Larue, C., & Lemieux, A. J. (2018). A pilot study of "post-seclusion and/or restraint review" intervention with patients and staff in a mental health setting. Perspectives in psychiatric care, 54(2), 212–220. https://doi.org/10.1111/ppc.12225	Beobachtungsstudie	To develop and evaluate a "post-seclusion and/or restraint review" (PSRR) intervention implemented in an	Verhaltenstherapeutische und traumatherapeutische Nachbesprechungen	time spent in seclusion (pre-post, median)	Reduktion kumulative Dauer S/R	% reduction in median	significant reduction (p = .030)	reduction > 0 favors intervention	very high risk of bias	serious	not serious	serious	sehr niedrig

		acute psychiatric care unit.											
Goulet, M. H., Larue, C., & Lemieux, A. J. (2018). A pilot study of "post-seclusion and/or restraint review" intervention with patients and staff in a mental health setting. Perspectives in psychiatric care, 54(2), 212–220. https://doi.org/10.1111/ppc.12225	Beobachtungsstudie	To develop and evaluate a "post-seclusion and/or restraint review" (PSRR) intervention implemented in an acute psychiatric care unit.	Verhaltenstherapeutische und traumatherapeutische Nachbesprechungen	time spent in restraint (pre-post, median)	Reduktion kumulative Dauer S/R	% reduction in median	no significant reduction (p = .277)	reduction > 0 favors intervention	very high risk of bias	serious	not serious	serious	

Reduktion von freiheitsbeschränkenden Zwangsmaßnahmen – somatische Zwangsbehandlungen

Literatur	Studientyp	Intervention	Intervention-Kategorie	Outcome einzeln	Outcome-Kategorie	Schätzer	Ergebnisse einzeln	Interpretation	Risk of Bias gesamt	GRADE E - Inconsistency	GRADE - Indirectness	GRADE E - Imprecision	Evidenzqualität - gesamt
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Stensgaard, L., Andersen, M. K., Nordentoft, M., & Hjorthøj, C. (2018). Implementation of the safewards model to reduce the use of coercive measures in adult psychiatric inpatient units: An interrupted time-series analysis. Journal of psychiatric research, 105, 147–152. https://doi.org/10.1016/j.jpsychires.2018.08.026	Beobachtungsstudie	Safewards model ten interventions	Komplexe Behandlungsprogramme – Safewards	Forced nutrition (pre-post; N/year (%))	Somatische Zwangsbehandlung	% reduction	0.9 (0.1%) to 0.3 (0.1%) 0.0% reduction p < .001	reduction > 0 favors intervention	high risk of bias	serious	not serious	serious	
Stensgaard, L., Andersen, M. K., Nordentoft, M., & Hjorthøj, C. (2018). Implementation of the safewards model to reduce the use of coercive measures in adult psychiatric inpatient units: An interrupted time-series analysis. Journal of psychiatric research, 105, 147–152. https://doi.org/10.1016/j.jpsychires.2018.08.026	Beobachtungsstudie	Safewards model ten interventions	Komplexe Behandlungsprogramme – Safewards	Forced treatment of somatic disease (pre-post; N/year (%))	Somatische Zwangsbehandlung	% reduction	12.9 (2.1%) to 16.3 (2.8%) 33.3% increase p < .001	reduction > 0 favors intervention	high risk of bias	serious	not serious	serious	sehr niedrig
Harpøth A, Kennedy H, Terkildsen MD, Nørre-mark B, Carlsen AH, Sørensen LU. (2022) Do improved structural surroundings reduce restrictive practices in	sonstiges siehe Notizen	We examine if the use of RPs was reduced by the structural change of relocating a	Gestaltung psychiatrischer Stationen	Involuntary electroconvulsive therapy (pre-	Reduktion Epilepsien S/R	% reduction	15 (0%) pre vs. 8 (0%) post p = .690 0.0% reduction	not significant	high risk of bias	serious	not serious	serious	sehr niedrig

psychiatry? URL: https://pub-med.ncbi.nlm.nih.gov/36404331/ . DOI: 10.1186/s13033-022-00562-7		170-year-old psychiatric university hospital (UH) in Central Denmark Region (CDR) to a new modern purpose-built university hospital.		post, n (%)									
Harpøth A, Kennedy H, Terkildsen MD, Nørre-mark B, Carlsen AH, Sørensen LU. (2022) Do improved structural surroundings reduce restrictive practices in psychiatry? URL: https://pub-med.ncbi.nlm.nih.gov/36404331/ . DOI: 10.1186/s13033-022-00562-7	sonstiges siehe Noti- zen	We examine if the use of RPs was reduced by the structural change of relocating a 170-year-old psychiatric university hospital (UH) in Central Denmark Region (CDR) to a new modern purpose-built university hospital.	Gestal- tung psychiat- rischer Statio- nen	Involun- tary nu- trition (pre- post, n (%))	Reduk- tion Epi- soden S/R	% re- duc- tion	20 (1%) pre vs. 45 (2%) post p < .0001 100.0% in- crease	re- duc- tion > 0 fa- vors inter- ven- tion	high risk of bias	serious	not seri- ous	serious	
Harpøth A, Kennedy H, Terkildsen MD, Nørre-mark B, Carlsen AH, Sørensen LU. (2022) Do	sonstiges siehe Noti- zen	We examine if the use of RPs was reduced by the	Gestal- tung psychiat- rischer	Involun- tary treat- ment of	Reduk- tion Epi- soden S/R	% re- duc- tion	94 (2%) pre vs. 86 (3%) post p < .012	re- duc- tion > 0	high risk of bias	serious	not seri- ous	serious	sehr niedrig

improved structural surroundings reduce restrictive practices in psychiatry? URL: https://pubmed.ncbi.nlm.nih.gov/36404331/ . DOI: 10.1186/s13033-022-00562-7		structural change of relocating a 170-year-old psychiatric university hospital (UH) in Central Denmark Region (CDR) to a new modern purpose-built university hospital.	Stationen	a somatic disorder (pre-post, n (%))			50.0% increase	favors intervention					
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Reduktion freiheitsbeschränkender Zwangsmaßnahmen – subjektives Erleben

Literatur	Studientyp	Intervention	Intervention-Kategorie	Outcome einzeln	Effekt-schät-zer	Ergeb-nisse ein-zeln	Inter-pretation	Risk of Bias gesamt	GRADE - Incon-sis-tency	GRADE - Indi-rectness	GRAD E - Im-precision	Evi-denzqua-lität - ge-samt
Stoll, J., Westermair, A. L., Kübler, U., Reisch, T., Cattapan, K., Bridler, R., Maier, R., & Trachsel, M. (2022). A two-center pilot study on the effects of clinical ethics	Beobach-tungsstudie	Monthly moral case deliberation (MCD)	Fort- und Wei-terbildungspro-gramme	CAT Ap-proval for coercive measures (mean (sd) pre-post)	SMD (Stan-dar-dized Mean Diffe-rence)	SMD = - 0.53 n.s.	not signifi-cant	very high risk of bias	not se-rious	not seri-ous	serious	niedrig

support on coercive measures in psychiatry. BMC psychiatry, 22(1), 370. https://doi.org/10.1186/s12888-022-04024-9												
Indregard, A. R., Nussle, H. M., Hagen, M., Vandvik, P. O., Tesli, M., Gather, J., & Kunøe, N. (2024). Open-door policy versus treatment-as-usual in urban psychiatric inpatient wards: a pragmatic, randomised controlled, non-inferiority trial in Norway. The lancet. Psychiatry, 11(5), 330–338. https://doi.org/10.1016/S2215-0366(24)00039-7	RCT	Open-door policy versus treatment-as-usual	Organisatorische und institutionelle Interventionen	patient experience of coercion (Experience of Coercion Scale (ECS))	mean difference (95% CI)	-0.5 (-0.8 to -0.2)	< 0 favors intervention	Some concerns	not serious	not serious	serious	niedrig

Mitarbeiterschulungen und Deeskalationstechniken

Studie	Studienart	Diagnose / Zielgruppe	Outcome	Intervention	Effektschätzer	Ergebnis	Risk of Bias gesamt	GRADE - Inconsistency	GRADE - Indirectness	GRADE - Imprecision	GRADE - Publication bias	Evidenzqualität gesamt
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Ye, J., Xiao, A., Yu, L., Guo, J., Lei, H., Wei, H., & Luo, W. (2018). Staff Training Reduces the Use of Physical Restraint in Mental Health Service, Evidence-based Reflection for China. Archives of psychiatric nursing, 32(3), 488–494. https://doi.org/10.1016/j.apnu.2017.11.029	Review-Evidenz-basierste Refelktion aus China	Mental Health Service	adverse effect of physical restraint	training programmes		RR, 0.16; 95% CIs = 0.09 to 0.30; Z = 5.96; p < 0.00001)	high	serious	not serious	not serious	not serious	low
Celofiga, A., Kores Plesnicar, B., Koprivsek, J., Moskon, M., Benkovic, D., & Gregoric Kumpercak, H. (2022). Effectiveness of De-Escalation in Reducing Aggression and Coercion in Acute Psychiatric Units. A Cluster Randomized Study. Frontiers in psychiatry, 13, 856153. https://doi.org/10.3389/fpsyt.2022.856153	Cluster RCT	acute psychiatric units	aggressive incidents	training in verbal and non-verbal de-escalation techniques for the staff teams on experimental wards + routine training	risk ratio	Experiment: - 70% Controll +14%	some concerns	not serious	not serious	not serious	not serious	low
Haefner, J., Dunn, I., & McFarland, M. (2021). A Quality Improvement Project Using Verbal De-Escalation to Reduce Seclusion	Beobachtungsstudie	psychiatric hospital	rate aggressive behavior	Implementation of Team STEPPS educational	/	After the implementation of the educational program there	high	serious	not serious	not serious	not serious	

and Patient Aggression in an Inpatient Psychiatric Unit. Issues in mental health nursing, 42(2), 138–144. https://doi.org/10.1080/01612840.2020.1789784				program / verbal deescalation training		was a statistically significant difference in the rate of charting aggressive behavior ($p=0.024$). Pre rate was 17.3% and post rate was 11.4%. Clinically significant reduction in seclusion event ($p=0.349$). Pre rate 5.9% and post rate 4.4.%						
Välimäki, M., Lantta, T., Anttila, M., Vahlberg, T., Normand, S. L., & Yang, M. (2022). An Evidence-Based Educational Intervention for Reducing Coercive Measures in Psychiatric Hospitals: A Randomized	RCT	Psychiatric Hospital	Anzahl Zwangsinjektionen	intervention wards		from 317 events among 4163 patients (7.6%) in 2015 to 486 events among 4089	some concerns	not serious	not serious	serious	not serious	moderate

Clinical Trial. JAMA network open, 5(8), e2229076. https://doi.org/10.1001/jamanetworkopen.2022.29076						patients (11.9%) in 2017 compared with an increase in the usual practice group from 414 events among 4186 patients (9.9%) in 2015 to 481 events among 4092 patients (11.8%) in 2017.						
Celofiga, A., Kores Plesnicar, B., Koprivsek, J., Moskon, M., Benkovic, D., & Gregoric Kumerscak, H. (2022). Effectiveness of De-Escalation in Reducing Aggression and Coercion in Acute Psychiatric Units. A Cluster Randomized Study. Frontiers in psychiatry, 13, 856153. https://doi.org/10.33	Cluster RCT	acute psychiatric units	Restraint duration, h	training in verbal and non-verbal de-escalation techniques for the staff teams on experimental wards + routine training	risk ratio	Experiment: -36% Control +28,4%	some concerns	not serious	not serious	serious	not serious	very low

89/fpsyt.2022.856153												
Dike, C. C., Lamb-Pagone, J., Howe, D., Beavers, P., Bugella, B. A., & Hillbrand, M. (2021). Implementing a program to reduce restraint and seclusion utilization in a public-sector hospital: Clinical innovations, preliminary findings, and lessons learned. <i>Psychological services</i> , 18(4), 663–670. https://doi.org/10.1037/ser0000502	Beobachtungsstudie	large public psychiatric hospital	restraint hours	ARS-SIG Core Strategies	/	reduction 89%... 5300--> 570	some concerns	not serious	not serious	serious	not serious	
Dike, C. C., Lamb-Pagone, J., Howe, D., Beavers, P., Bugella, B. A., & Hillbrand, M. (2021). Implementing a program to reduce restraint and seclusion utilization in a public-sector hospital: Clinical innovations, preliminary findings, and lessons learned. <i>Psychological services</i> , 18(4), 663–670. https://doi.org/10.1037/ser0000502	Beobachtungsstudie	large public psychiatric hospital	Mean annual restraint hours	ARS-SIG Core Strategies	/	decrease from 5,300 hr to 570 hr, a 89% decrease (t 10.54, p < .01, d 5.27)	high	not serious	not serious	serious	not serious	
Guzman-Parra, J., Aguilera-Serrano, C., Huizing, E.,	Beobachtungsstudie	acute psychiatric wards	restraint hours	a) leadership, (b)	/	-1.79%, p < .001	high	serious	not serious	not serious	not serious	

Bono Del Trigo, A., Villagrán, J. M., García-Sánchez, J. A., & Mayoral-Cleries, F. (2021). A regional multicomponent intervention for mechanical restraint reduction in acute psychiatric wards. <i>Journal of psychiatric and mental health nursing</i> , 28(2), 197–207. https://doi.org/10.1111/jpm.12669				analysis of the situation, (c) awareness training for the heads of the wards, (d) unified record of MR and € staff training								
McDonnell, A. A., O'Shea, M. C., Bews-Pugh, S. J., McAulliffe, H., & Deveau, R. (2023). Staff training in physical interventions: a literature review. <i>Frontiers in psychiatry</i> , 14, 1129039. https://doi.org/10.3389/fpsyt.2023.1129039	Literatur Review	care settings	res freq	training programmes	/	there is very little evidence to suggest that staff training in physical intervention skills leads to meaningful outcomes.	high	not serious	serious	serious	not serious	
Ye, J., Xia, Z., Wang, C., Liao, Y., Xu, Y., Zhang, Y., Yu, L., Li, S., Lin, J., & Xiao, A. (2021). Effectiveness of CRSCE-Based De-escalation Training on Reducing	Cluster RCT	psychiatric hospital	Duration of physical restraint (hour)	CRSCE-based de-escalation training +routine training	nurse bed ratio	After deescalation training, the average duration of physical restraint	some concerns	not serious	serious	serious	not serious	

Physical Restraint in Psychiatric Hospitals: A Cluster Randomized Controlled Trial. <i>Frontiers in psychiatry</i> , 12, 576662. https://doi.org/10.3389/fpsyt.2021.576662						of experimental group presented a decreasing trend ($F_{\text{time}} = 9.174$, $P < 0.001$) and was remarkably lower than control group						
Ye, J., Xiao, A., Yu, L., Guo, J., Lei, H., Wei, H., & Luo, W. (2018). Staff Training Reduces the Use of Physical Restraint in Mental Health Service, Evidence-based Reflection for China. <i>Archives of psychiatric nursing</i> , 32(3), 488–494. https://doi.org/10.1016/j.apnu.2017.11.028	Review-Evidenz-basierste Refelktion aus China	Mental Health Service	duration (hour)	training programmes		IV = -0.88; 95% CIs = - 1.65 to -0.10; Z = 2.22; p = 0.03	high	serious	not serious	not serious	not serious	
Barbui, C., Purgato, M., Abdulmalik, J., Caldas-de-Almeida, J. M., Eaton, J., Gureje, O., Hanlon, C., Nosè, M., Ostuzzi, G., Saraceno, B., Saxena, S., Tedeschi, F., & Thornicroft, G. (2021).	Umbrella Review		use of restraint	staff training		RR = 0.74, 95% CI 0.62–0.87	high	not serious	not serious	serious	not serious	very low

Efficacy of interventions to reduce coercive treatment in mental health services: umbrella review of randomised evidence. The British journal of psychiatry : the journal of mental science, 218(4), 185–195. https://doi.org/10.1192/bjp.2020.144												
Celofiga, A., Kores Plesnicar, B., Koprivsek, J., Moskon, M., Benkovic, D., & Gregoric Kumperscak, H. (2022). Effectiveness of De-Escalation in Reducing Aggression and Coercion in Acute Psychiatric Units. A Cluster Randomized Study. Frontiers in psychiatry, 13, 856153. https://doi.org/10.3389/fpsyt.2022.856153	Cluster RCT	acute psychiatric units	Restraints	training in verbal and non-verbal de-escalation techniques for the staff teams on experimental wards + routine training	risk ratio	Experiment: - 50% Control - 2%	some concerns	not serious	not serious	not serious	not serious	
Guzman-Parra, J., Aguilera-Serrano, C., Huizing, E., Bono Del Trigo, A., Villagrán, J. M., García-Sánchez, J. A., & Mayoral-Cleries, F. (2021). A regional multicomponent intervention for	Beobachtungsstudie	acute psychiatric wards	restraint episodes/1000 bed	a) leadership, (b) analysis of the situation, (c) awareness training for the	/	-0.45%; p = .149	high	serious	not serious	not serious	not serious	

mechanical restraint reduction in acute psychiatric wards. Journal of psychiatric and mental health nursing, 28(2), 197–207. https://doi.org/10.1111/jpm.12669				heads of the wards, (d) unified record of MR and € staff training								
Hirsch, S., & Steinert, T. (2019). Measures to Avoid Coercion in Psychiatry and Their Efficacy. Deutsches Arzteblatt international, 116(19), 336–343. https://doi.org/10.3238/arztebl.2019.0336	Review	psychiatry	Reduction of coercion coercion	Staff training, Organization, Risk assessment, Environment, Debriefings, Psychotherapy, Advance directives.		Complex intervention programs to avoid coercive measures, incorporating elements of more than one of the above categories, seem to be particularly effective	high	serious	serious	not serious	not serious	
Hirsch, S., & Steinert, T. (2019). Measures to Avoid Coercion in Psychiatry and Their Efficacy. Deutsches Arzteblatt international, 116(19), 336–343. https://doi.org/10.3238/arztebl.2019.0336	Review	psychiatry	reduction of the frequency of coercion	Staff training, Organization, Risk assessment, Environment, Debriefings, Psychotherapy, Advance directives.		Complex intervention programs to avoid coercive measures, incorporating elements of more than one	high	serious	serious	not serious	not serious	

						of the above categories, seem to be particularly effective						
McDonnell, A. A., O'Shea, M. C., Bews-Pugh, S. J., McAulliffe, H., & Deveau, R. (2023). Staff training in physical interventions: a literature review. <i>Frontiers in psychiatry</i> , 14, 1129039. https://doi.org/10.3389/fpsyt.2023.1129039	Literatur Review	care settings	frequency restraint	training programmes	/	there is very little evidence to suggest that staff training in physical intervention skills leads to meaningful outcomes.	high	serious	serious	serious	not serious	
Ye, J., Xia, Z., Wang, C., Liao, Y., Xu, Y., Zhang, Y., Yu, L., Li, S., Lin, J., & Xiao, A. (2021). Effectiveness of CRSCE-Based De-escalation Training on Reducing Physical Restraint in Psychiatric Hospitals: A Cluster Randomized Controlled Trial. <i>Frontiers in psychiatry</i> , 12, 576662. https://doi.org/10.3389/fpsyt.2021.576662	Cluster RCT	psychiatric hospital	Use of physical restraint in patients admitted within 24 h (%)	CRSCE-based de-escalation training +routine training	nurse bed ratio	Ftime = 3.500, P < 0.001 -> controll Fgroup = 12.065, P = 0.006	some concerns	not serious	serious	not serious	not serious	

Ye, J., Xia, Z., Wang, C., Liao, Y., Xu, Y., Zhang, Y., Yu, L., Li, S., Lin, J., & Xiao, A. (2021). Effectiveness of CRSCE-Based De-escalation Training on Reducing Physical Restraint in Psychiatric Hospitals: A Cluster Randomized Controlled Trial. <i>Frontiers in psychiatry</i> , 12, 576662. https://doi.org/10.3389/fpsyt.2021.576662	Cluster RCT	psychiatric hospital	Use of physical restraint of inpatients (%)	CRSCE-based de-escalation training +routine training	nurse bed ratio	Ftime = 3.651, P < 0.001--> controll group = 5.374, P = 0.04	some concerns	not serious	serious	not serious	not serious	very low
Ye, J., Xia, Z., Wang, C., Liao, Y., Xu, Y., Zhang, Y., Yu, L., Li, S., Lin, J., & Xiao, A. (2021). Effectiveness of CRSCE-Based De-escalation Training on Reducing Physical Restraint in Psychiatric Hospitals: A Cluster Randomized Controlled Trial. <i>Frontiers in psychiatry</i> , 12, 576662. https://doi.org/10.3389/fpsyt.2021.576662	Cluster RCT	psychiatric hospital	Numbers of accidents caused by physical restraint	CRSCE-based de-escalation training +routine training	nurse bed ratio	Experiment: 24 --> 13 Controll 29 --> 11	some concerns	not serious	serious	not serious	not serious	
Ye, J., Xia, Z., Wang, C., Liao, Y., Xu, Y., Zhang, Y., Yu, L., Li, S., Lin, J., & Xiao, A. (2021).	Cluster RCT	psychiatric hospital	numbers of injury of nurses caused by	CRSCE-based de-escalation training	nurse bed ratio	Experiment: 15 --> 4 Controll 13 --> 16	some concerns	not serious	serious	not serious	not serious	

Effectiveness of CRSCE-Based De-escalation Training on Reducing Physical Restraint in Psychiatric Hospitals: A Cluster Randomized Controlled Trial. <i>Frontiers in psychiatry</i> , 12, 576662. https://doi.org/10.3389/fpsyt.2021.576662			conducting physical restraint	+routine training								
Ye, J., Xiao, A., Yu, L., Guo, J., Lei, H., Wei, H., & Luo, W. (2018). Staff Training Reduces the Use of Physical Restraint in Mental Health Service, Evidence-based Reflection for China. <i>Archives of psychiatric nursing</i> , 32(3), 488–494. https://doi.org/10.1016/j.apnu.2017.11.026	Review-Evidenz-basierste Refelktion aus China	Mental Health Service	frequency %	training programmes		(RR, 0.74; 95% CIs = 0.43 to 1.28; Z = 1.07; p = 0.28)	high	serious	not serious	not serious	not serious	very low
Ye, J., Xiao, A., Yu, L., Guo, J., Lei, H., Wei, H., & Luo, W. (2018). Staff Training Reduces the Use of Physical Restraint in Mental Health Service, Evidence-based Reflection for China. <i>Archives of psychiatric nursing</i> , 32(3),	Review-Evidenz-basierste Refelktion aus China	Mental Health Service	prevalence	training programmes		RR, 1.01; 95% CIs = 0.45 to 2.24; Z = 0.02; p = 0.98	high	serious	not serious	not serious	not serious	

488–494. https://doi.org/10.1016/j.apnu.2017.11.027												
Dike, C. C., Lamb-Pagone, J., Howe, D., Beavers, P., Bugella, B. A., & Hillbrand, M. (2021). Implementing a program to reduce restraint and seclusion utilization in a public-sector hospital: Clinical innovations, preliminary findings, and lessons learned. <i>Psychological services</i> , 18(4), 663–670. https://doi.org/10.1037/ser0000502	Beobachtungsstudie	large public psychiatric hospital	seclusion hours		/	decrease of seclusion hours from 327 hr. to 232 hr, a 29% decrease	high	not serious	not serious	serious	not serious	low
Välimäki, M., Lantta, T., Anttila, M., Vahlberg, T., Normand, S. L., & Yang, M. (2022). An Evidence-Based Educational Intervention for Reducing Coercive Measures in Psychiatric Hospitals: A Randomized Clinical Trial. <i>JAMA network open</i> , 5(8), e2229076. https://doi.org/10.1001/jamanetworkopen.2022.29076	RCT	Psychiatric Hospital	Isolationsdauer	intervention wards			some concerns	not serious	not serious	not serious	not serious	

Välimäki, M., Lantta, T., Anttila, M., Vahlberg, T., Normand, S. L., & Yang, M. (2022). An Evidence-Based Educational Intervention for Reducing Coercive Measures in Psychiatric Hospitals: A Randomized Clinical Trial. JAMA network open, 5(8), e2229076. https://doi.org/10.1001/jamanetworkopen.2022.29076	RCT	Psychiatric Hospital	Isolation rate	intervention wards	The overall number of seclusions was 1209 (14.5%) in 2015 and 1349 (16.5%) in 2017. In the intervention group, the occurrence rate of seclusion at the ward level decreased by 5.3% from 629 seclusions among 4163 patients (15.1%) to 585 seclusions among 4089 patients (14.3%) compared	some concerns	not serious	not serious	not serious	not serious	very low
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						with a 34.7% increase from 580 seclusions among 4186 patients (13.9%) to 764 seclusions among 4092 patients (18.7%) in the usual practice group.						
Dixon, M., & Long, E. M. (2022). An educational intervention to decrease the number of emergency incidents of restraint and seclusion on a behavioral health unit. <i>The Journal of Continuing Education in Nursing</i> , 53(2), 70-76.	pre-post quai-experimental design	Psychiatric inpatients	incidence of seclusion	educational program		4.33 preintervention, 1.67 postintervention	high	not serious	not serious	very serious	not serious	
Newman, J., Paun, O., & Fogg, L. (2018). Effects of a staff training intervention on seclusion rates on an adult inpatient psychiatric	pre-post quai-experimental design		seclusion rates	staff training		reduction from 2.95 seclusion hours per 1000 patient hours to	high	not serious	not serious	serious	serious suspicion	

unit. <i>Journal of psychosocial nursing and mental health services</i> , 56(6), 23-30.						0.29 seclusion hours						
Celofiga, A., Kores Plesnicar, B., Koprivsek, J., Moskon, M., Benkovic, D., & Gregoric Kumperscak, H. (2022). Effectiveness of De-Escalation in Reducing Aggression and Coercion in Acute Psychiatric Units. A Cluster Randomized Study. <i>Frontiers in psychiatry</i> , 13, 856153. https://doi.org/10.3389/fpsy.2022.856153	Cluster RCT	acute psychiatric units	SOAS-R>9	training in verbal and non-verbal de-escalation techniques for the staff teams on experimental wards + routine training	risk ratio	Experiment: -84% Control +20%	high	not serious	not serious	not serious	not serious	low
Dike, C. C., Lamb-Pagone, J., Howe, D., Beavers, P., Bugella, B. A., & Hillbrand, M. (2021). Implementing a program to reduce restraint and seclusion utilization in a public-sector hospital: Clinical innovations, preliminary findings, and lessons learned. <i>Psychological services</i> , 18(4), 663–670. https://doi.org/10.1037/ser0000502	Beobachtungsstudie	large public psychiatric hospital	staff injuries	ARS-SIG Core Strategies	/	reduction 18%....225-->184	high	not serious	not serious	serious	not serious	very low

Dike, C. C., Lamb-Pagone, J., Howe, D., Beavers, P., Bugella, B. A., & Hillbrand, M. (2021). Implementing a program to reduce restraint and seclusion utilization in a public-sector hospital: Clinical innovations, preliminary findings, and lessons learned. Psychological services, 18(4), 663–670. https://doi.org/10.1037/ser0000502	Beobachtungsstudie	large public psychiatric hospital	Mean annual staff injuries	ARS-SIG Core Strategies	/	decrease from 225 injuries to 184, an 18% decrease (t 6.61, p < .01, d 3.31)	high	not serious	not serious	serious	not serious	
Dike, C. C., Lamb-Pagone, J., Howe, D., Beavers, P., Bugella, B. A., & Hillbrand, M. (2021). Implementing a program to reduce restraint and seclusion utilization in a public-sector hospital: Clinical innovations, preliminary findings, and lessons learned. Psychological services, 18(4), 663–670. https://doi.org/10.1037/ser0000502	Beobachtungsstudie	large public psychiatric hospital	workman's compensation medical costs	ARS-SIG Core Strategies	/	workmen's compensation medical costs decreased from \$780,937 to \$527,715, a 24% decrease (t 4.11, p < .01, d 1.45)	high	not serious	not serious	serious	not serious	very low

Offene Türen

Studie	Popula- tion	Outcome	Interven- tion/Studiende- sign	Ergebnis	Schätzer	Effektgröße	Risk of Bias gesamt	GRADE -Effekt- stärke	Evidenzquali- tät
Steinauer et al., 2017	Behand- lungs- fälle	Coercion Index mit 1:1 Betreu- ung	unverblindete mit 3 Untersu- chungszeiträu- men (Prä-Post Türöffnung)	Period 2: RR = 0.59 [0.32- 1.10], Period 3: 0.17 [0.07- 0.45]	Risk Ratio	$\eta^2 = 0.001/\eta^2 = 0.183$	moderat	groß	
Steinauer et al., 2017	Behand- lungs- fälle	Coercion Index ohne 1:1 Betreu- ung	unverblindete mit 3 Untersu- chungszeiträu- men (Prä-Post Türöffnung)	Period 2: RR = 0.44 [0.22- 0.90], Period 3: 0.15 [0.05- 0.45]	Risk Ratio	$\eta^2 = 0.028/\eta^2 = 0.215$	moderat	groß	
Ueberberg et al., 2025	unfrei- willig un- terge- brachte psychiat- rische Patien- ten	Häufigkeit mehrfa- cher 1:1 Betreuung	Prä-Post-Ver- gleich nach Im- plementierung von "open-door policy" in einem akutpsychiatri- schen Kranken- haus	$\chi^2 = 20.24 (3)$, $p < 0.01$	mean diffe- rence	$\eta^2 = 0.0151$	moderat	nicht groß	
Ueberberg et al., 2025	unfrei- willig un- terge- brachte psychiat- rische Patien- ten	Häufigkeit von min. einer 1:1 Betreuung	Prä-Post-Ver- gleich nach Im- plementierung von "open-door policy" in einem akutpsychiatri- schen Kranken- haus	$\chi^2 = 12.03 (1)$, $p < 0.01$	mean diffe- rence	$\eta^2 = 0.0947$	moderat	nicht groß	moderat
Ueberberg et al., 2025	unfrei- willig un- terge- brachte	kumulative Dauer von 1:1 Betreu- ung	Prä-Post-Ver- gleich nach Im- plementierung von "open-door	$U = 206200.50 (-$ $3.47)$, $p < 0.01$	mean diffe- rence	$\eta^2 = 0.004$	moderat	nicht groß	niedrig

	psychiatrische Patienten	(Stunden/Minuten)	policy" in einem akuten psychiatrischen Krankenhaus						
Ueberberg et al., 2025	unfreiwillig untergebrachte psychiatrische Patienten	Häufigkeit mehrfacher Fixierungen	Prä-Post-Vergleich nach Implementierung von "open-door policy" in einem akuten psychiatrischen Krankenhaus	$\chi^2 = 10.90 (3)$, $p = 0.010$	mean difference	$\eta^2 = 0.0902$	moderat	nicht groß	
Indregard et al., 2024	Patienten in psychiatrischem Akutkrankenhaus	Häufigkeit von Aufgehalten mit mechanischer Fixierung (in %)	RCT open-door policy (2 wards)	0.9 [0.3;3.4]	Risk Ratio	$\eta^2 = 0.01$	moderat	nicht groß	
Indregard et al., 2024	Patienten in psychiatrischem Akutkrankenhaus	Häufigkeit von Aufgehalten mit physischer Fixierung (in %)	RCT open-door policy (2 wards)	1.4 [0.7;3.0]	Risk Ratio	$\eta^2 = 0.00$	moderat	nicht groß	
Wolf et al., 2021	Behandlungsfälle mit unfreiwilliger Unterbringung	Häufigkeit von Fixierung	Implementierung von Soteria-Elementen einschließlich offenen Türen, Untersuchung im Prä-Post-Design	$F(1/97) = 6.27$, $p = 0.014$	mean difference	$\eta^2 = 0.0622$	hoch	nicht groß	
Ueberberg et al., 2025	unfreiwillig	Häufigkeit von	Prä-Post-Vergleich nach	$\chi^2 = 1.48 (1)$, $p = 0.230$	mean difference	$\eta^2 = 0.0332$	moderat	nicht groß	niedrig

	untergebrachte psychiatrische Patienten	mindestens einer Fixierung (Anteil)	Implementierung von "open-door policy" in einem akuten psychiatrischen Krankenhaus						
Cibis et al., 2017	(untergebrachte) Patienten auf psychiatrischen Akutstationen	Verhältnis von nicht erfolgten zu erfolgten Fixierungen	Vergleich zwischen Stationen mit durchgehend geschlossenen und zu 90% geöffneten Türen	$\chi^2 = 1.10$, $p = 0.300$	rate difference	$\eta^2 = 0.001$	moderat	nicht groß	
Ueberberg et al., 2025	unfreiwillig untergebrachte psychiatrische Patienten	kumulative Dauer von Fixierung (in Stunden/Minuten)	Prä-Post-Vergleich nach Implementierung von "open-door policy" in einem akuten psychiatrischen Krankenhaus	$U = 212600.50$ (-1.44), $p = 0.150$	mean difference	$\eta^2 = 0.001$	moderat	nicht groß	
Mann et al., 2021	alle von Zwang betroffenen Patienten	kumulierte Dauer von mechanischer Fixierung bei Patienten über 65 Jahren	Vergleich von 4 Krankenhäusern mit unterschiedlichen Konzepten zur Türöffnung (geschlossene Türen als Referenzkategorie), retrospektive Routinedaten (2 Jahre)	B: 1.1 [0.6; 2.0], C: 2.7 [1.4; 5.5], D: 1.0 [0.6; 1.7]	Odds Ratio	$\eta^2 = 0.07$	hoch	nicht groß	sehr niedrig

Mann et al., 2021	alle von Zwang betroffenen Patienten	kumulierte Dauer von mechanischer Fixierung bei Patienten unter 65 Jahren	Vergleich von 4 Krankenhäusern mit unterschiedlichen Konzepten zur Türöffnung (geschlossene Türen als Referenzkategorie), retrospektive Routinedaten (2 Jahre)	B: 3.4 [2.3;5.1], C: 1.0 [0.7;1.5], D: 1.1 [0.7;1.6]	Odds Ratio	$\eta^2 = 0.10$	hoch	nicht groß	
Hochstrasser et al., 2017	Behandlungsfälle	Anteil von Isolierung betroffener Patienten	Langzeitbeobachtungsstudie (6 Jahre)	$p < 0.001$	Odds Ratio	$\eta^2 = 0.059$	gering	nicht groß	
Hochstrasser et al., 2018	Behandlungsfälle	Anteil von Patienten mit mindestens einer Isolierung	Prä-Post-Vergleich (je 16 Wochen) bei Türöffnung auf psychiatrischen Intensivstation	$p = 0.032$	Odds Ratio	$\eta^2 = 0.056$	hoch	nicht groß	
Schneeberger et al., 2017	Behandlungsfälle in psychiatrischen Krankenhäusern	Anwendung von Isolierung oder Fixierung	naturalistische Beobachtungsstudie (15 Jahre), Krankenhäuser mit und ohne Open-Door-Policy	0.369 [0.198, 0.691]. $P = 0.002$	Odds Ratio	$\eta^2 = 0.0702$	gering	nicht groß	
Jungfer et al., 2014	unfreiwillige Behandlungsfälle	Anzahl von Isolierung betroffener Patienten	Längsschnittbeobachtungsstudie nach Intervention einer "less restrictive policy"	$\chi^2 (1) = 5.8, p = 0.016$	mean difference	$\eta^2 = 0.002$	hoch	nicht groß	sehr niedrig

Hochstras-ser et al., 2017	Behand-lungs-fälle	durch-schnittli-che Anzahl von Isolie-rungen	Langzeitbe-obachtungsstu-die (6 Jahre)	$p < 0.001$	mean diffe-rence	$\eta^2 = 0.027$	gering	nicht groß	
Hochstras-ser et al., 2018	Behand-lungs-fälle	durch-schnittli-che Anzahl von Isolie-rungen	Prä-Post-Ver-gleich (je 16 Wo-chen) bei Türöff-nung auf psychi-atrischen Inten-sivstation	$p = 1.00$	mean diffe-rence	$\eta^2 = 0.000$	hoch	nicht groß	
Indregard et al., 2024	Patien-ten in psychiat-rischem Akut-kranken-haus	Häufigkeit von Auf-enthalten mit Isolie-rung (in %)	RCT open-door policy (2 wards)	1.0 [0.3;3.1]	Risk Ratio	$\eta^2 = 0.00$	moderat	nicht groß	hoch
Hochstras-ser et al., 2017	Behand-lungs-fälle	durch-schnittli-che Dauer von Isolie-rungen	Langzeitbe-obachtungsstu-die (6 Jahre)	$p < 0.001$	mean diffe-rence	$\eta^2 = 0.112$	gering	groß	
Beaglehole et al., 2017	nicht spezi-fisch an-gegeben	durch-schnittli-che Dauer von Isolie-rungen in Stunden	Prä-Post-Ver-gleich nach Öff-nung von vier ge-schlossenen bzw. teilweise ge-schlossenen psy-chiatrischen Sta-tionen	$p = 0.001$	mean diffe-rence	$\eta^2 = 0.206$	hoch	nicht gültig	
Wolf et al., 2021	Behand-lungs-fälle mit	gericht-lich ange-ordneter	Implementierung von Soteria-Ele-menten ein-schließlich	$\chi^2(1/97) = 0.72, p = 0.79$	mean diffe-rence	$\eta^2 = 0.0074$	moderat	nicht groß	niedrig

	unfreiwilliger Unterbringung	Zwangsmedikation	offenen Türen, Untersuchung im Prä-Post-Design						
Hochstrasser et al., 2017	Behandlungsfälle	Anteil von Zwangsmedikation betroffener Patienten	Langzeitbeobachtungsstudie (6 Jahre)	$p < 0.001$	Odds Ratio	$\eta^2 = 0.032$	gering	nicht groß	
Jungfer et al., 2014	unfreiwillige Behandlungsfälle	Anzahl von Zwangsmedikation betroffener Patienten	Längsschnittbeobachtungsstudie nach Intervention einer "less restrictive policy"	$\chi^2 (1) = 0.08$, $p = 0.775$	mean difference	$\eta^2 = 0.000$	hoch	nicht groß	
Lang et al. 2010	Patienten auf akut psychiatrischer Station	Anzahl von Zwangsmedikationsfällen	Prä-Post-Vergleich (je 6 Monate bei Türschließung vs. -öffnung einer akuten psychiatrischen Station)	$\chi^2 = 4.646$, $p = 0.037$	mean difference	$\eta^2 = 0.015$	moderat	nicht groß	
Indregard et al., 2024	Patienten in psychiatrischem Akutkrankenhaus	Häufigkeit von Aufhalten mit langfristiger Zwangsmedikation (in %)	RCT open-door policy (2 wards)	1.4 [0.9;2.1]	Risk Ratio	$\eta^2 = 0.00$	moderat	nicht groß	
Ueberberg et al., 2025	unfreiwillig untergebrachte	Häufigkeit von min. einer	Prä-Post-Vergleich nach Implementierung von "open-door	$\chi^2 = 0.63 (1)$, $p = 0.430$	mean difference	$\eta^2 = 0.0217$	moderat	nicht groß	

	psychiatrische Patienten	Zwangsmedikation (Anteil)	policy" in einem akuten psychiatrischen Krankenhaus						
Wolf et al., 2021	Behandlungsfälle mit unfreiwilliger Unterbringung	Häufigkeit von notfallmäßige Zwangsmedikation	Implementierung von Soteria-Elementen einschließlich offenen Türen, Untersuchung im Prä-Post-Design	$\chi^2(1/97) = 0.059, p = 0.81$	mean difference	$\eta^2 = 0.0006$	moderat	nicht groß	
Mann et al., 2021	alle von Zwang betroffenen Patienten	Häufigkeit von Zwangsmedikation (in %) bei Patienten über 65 Jahren	Vergleich von 4 Krankenhäusern mit unterschiedlichen Konzepten zur Türöffnung (geschlossene Türen als Referenzkategorie), retrospektive Routinedaten (2 Jahre)	B: 2.7 [0.7; 8.75], C: 5.2 [1.7;15.8], D: 8.0 [3.1;20.7]	Odds Ratio	$\eta^2 = 0.17, \eta^2 = 0.24$	hoch	nicht gültig	
Mann et al., 2021	alle von Zwang betroffenen Patienten	Häufigkeit von Zwangsmedikation (in %) bei Patienten unter 65 Jahren	Vergleich von 4 Krankenhäusern mit unterschiedlichen Konzepten zur Türöffnung (geschlossene Türen als Referenzkategorie), retrospektive Routinedaten (2 Jahre)	B: 0.5 [0.3;0.8], C: 0.5 [0.3;0.8], D: 1.9 [1.1;3.0]	Odds Ratio	$\eta^2 = 0.03$	hoch	nicht groß	

Cibis et al., 2017	(untergebrachte) Patienten auf psychiatrischen Akutstationen	Verhältnis von nicht erfolgten zu erfolgten Zwangsmedikationen	Vergleich zwischen Stationen mit durchgehend geschlossenen und zu 90% geöffneten Türen	$\chi^2 = 7.60$, $p = 0.006$	rate difference	$\eta^2 = 0.008$	moderat	nicht groß	
Hochstrasser et al., 2018	Behandlungsfälle	Anteil von Patienten mit mindestens einer Zwangsmedikation	Prä-Post-Vergleich (je 16 Wochen) bei Türöffnung auf psychiatrischen Intensivstation	$p = 0.160$	Odds Ratio	$\eta^2 = 0.057$	hoch	nicht groß	
Hochstrasser et al., 2017	Behandlungsfälle	durchschnittliche Anzahl von Zwangsmedikationen	Langzeitbeobachtungsstudie (6 Jahre)	$p = 0.003$	mean difference	$\eta^2 = 0.054$	gering	nicht groß	
Hochstrasser et al., 2018	Behandlungsfälle	durchschnittliche Anzahl von Zwangsmedikationen	Prä-Post-Vergleich (je 16 Wochen) bei Türöffnung auf psychiatrischen Intensivstation	$p = 0.529$	mean difference	$\eta^2 = 0.053$	hoch	nicht groß	
Ueberberg et al., 2025	unfreiwillig untergebrachte	Häufigkeit von mehrfacher Zwangsmedikation	Prä-Post-Vergleich nach Implementierung von "open-door policy" in einem	$\chi^2 = 1.04$ (1), $p = 0.600$	mean difference	$\eta^2 = 0.0278$	moderat	nicht groß	

	psychiatrische Patienten		akutpsychiatrischen Krankenhaus						
Cibis et al., 2017	(untergebrachte) Patienten auf psychiatrischen Akutstationen	Verhältnis von nicht erfolgten zu erfolgten besonderen Sicherungsmaßnahmen	Vergleich zwischen Stationen mit durchgehend geschlossenen und zu 90% geöffneten Türen	$\chi^2 = 0.360$, $p = 0.550$	rate difference	$\eta^2 = 0.0004$	moderat	nicht groß	
Steinauer et al., 2017	Behandlungsfälle	(täglicher) Anteil untergebrachter Patienten	unverblindete mit 3 Untersuchungszeiträumen (Prä-Post Türöffnung)	Period 2: RR = 0.80 [0.66-0.98], Period 3: 0.33 [0.25-0.42]	Risk Ratio	$\eta^2 = 0.046/\eta^2 = 0.070$	moderat	nicht groß	niedrig
Indregard et al., 2024	Patienten in psychiatrischem Akutkrankenhaus	Häufigkeit von Aufhalten mit einmaliger Zwangsmedikation (in %)	RCT open-door policy (2 wards)	1.0 [0.4; 2.6]	Risk Ratio	$\eta^2 = 0.02$	moderat	nicht groß	hoch
Hochstrasser et al., 2018	Behandlungsfälle	Anteil von Patienten mit mindestens einer Zwangsmaßnahme	Prä-Post-Vergleich (je 16 Wochen) bei Türöffnung auf psychiatrischen Intensivstation	$p = 0.059$	Odds Ratio	$\eta^2 = 0.041$	hoch	nicht groß	sehr niedrig

Hochstrasser et al., 2018	Behandlungsfälle	durchschnittliche Anzahl von Zwangsmaßnahmen	Prä-Post-Vergleich (je 16 Wochen) bei Türöffnung auf psychiatrischen Intensivstation	p = 0.646	mean difference	$\eta^2 = 0.007$	hoch	nicht groß	
Ueberberg et al., 2025	unfreiwillig untergebrachte psychiatrische Patienten	Häufigkeit der Kombination von Zwangsmaßnahmen (Anteil)	Prä-Post-Vergleich nach Implementierung von "open-door policy" in einem akuten psychiatrischen Krankenhaus	$\chi^2 = 102.7$ (2), p < 0.01	mean difference	$\eta^2 = 0.0766$	moderat	nicht groß	
Indregard et al., 2024	Patienten in psychiatrischem Akutkrankenhaus	Häufigkeit von Aufgehalten mit irgendeiner Zwangsmaßnahme (in %)	RCT open-door policy (2 wards)	1.3 [0.97; 1.6]	Risk Ratio	$\eta^2 = 0.00$	moderat	nicht groß	
Krückl et al., 2023	Behandlungsfälle in psychiatrischem Krankenhaus	Häufigkeit von irgendeiner Zwangsmaßnahme	Vergleich von Kombinationen von Aufgehalten auf offenen (O) vs. geschlossenen (C) Stationen	O-O: 0.33 [0.17; 0.63], p < 0.01; O/C - O: 0.09 [0.02; 0.44], p < 0.01, C - O: 0.26 [0.11; 0.61], p < 0.01, C - O/C: 2.97 [1.02,	Odds Ratio	$\eta^2 = 0.0854$, $\eta^2 = 0.3058$, $\eta^2 = 0.1212$; $\eta^2 = 0.0826$	hoch	nicht gültig	

				8.61], p = 0.046					
Ueberberg et al., 2025	unfreiwillig untergebrachte psychiatrische Patienten	Häufigkeit von mind. einer Zwangsmaßnahmen (Anteil)	Prä-Post-Vergleich nach Implementierung von "open-door policy" in einem akutenpsychiatrischen Krankenhaus	$\chi^2 = 7.08 (1)$, $p < 0.01$	mean difference	$\eta^2 = 0.0053$	moderat	nicht groß	

Ethikberatung

Studie	Studiendesign	Diagnose / Zielgruppe	Outcome	Medikation/Intervention	Ergebnis	Risk of Bias gesamt	GRADE - Inconsistency	GRADE - Indirectness	GRADE - Imprecision	Evidenzqualität
Stoll J, Westermair AL, Kübler U, Reisch T, Cattapan K, Bridler R, Maier R, Trachsel M. A two-center pilot study on the effects of clinical ethics support on coercive measures in psychiatry. BMC Psychiatry. 2022 Jun 1;22(1):370. doi: 10.1186/s12888-022-04024-9. PMID: 35650555; PMCID: PMC9156353	pre-post study	pre-post study	any formal coercion	moral case deliberation	pre-intervention: 17.2%, post-intervention: 9.6%	High risk	not serious	not serious	serious	very low
Stoll J, Westermair AL, Kübler U, Reisch T, Cattapan K, Bridler R, Maier R, Trachsel M. A two-center pilot	pre-post study	pre-post study	rate of coerced medication	moral case deliberation	pre-intervention: 4.8%, post-intervention: 4.1%	High risk	serious	not serious	serious	

study on the effects of clinical ethics support on coercive measures in psychiatry. BMC Psychiatry. 2022 Jun 1;22(1):370. doi: 10.1186/s12888-022-04024-9. PMID: 35650555; PMCID: PMC9156353										
Stoll J, Westermair AL, Kübler U, Reisch T, Cattapan K, Bridler R, Maier R, Trachsel M. A two-center pilot study on the effects of clinical ethics support on coercive measures in psychiatry. BMC Psychiatry. 2022 Jun 1;22(1):370. doi: 10.1186/s12888-022-04024-9. PMID: 35650555; PMCID: PMC9156353	pre-post study	pre-post study	intensity of coercion	moral case deliberation	pre-intervention: 86.8 ± 45.3 h , post-intervention: 14.5 ± 12.1 h	High risk	not serious	not serious	serious	low
Stoll J, Westermair AL, Kübler U, Reisch T, Cattapan K, Bridler R, Maier R, Trachsel M. A two-center pilot study on the effects of clinical ethics support on coercive measures in psychiatry. BMC Psychiatry. 2022 Jun 1;22(1):370. doi: 10.1186/s12888-022-04024-9. PMID: 35650555; PMCID: PMC9156353	pre-post study	pre-post study	intensity of coerced medication	moral case deliberation	pre-intervention: 1.3 ± 0.7 , post-intervention: 1.2 ± 0.4 per patient, n.s.	High risk	not serious	not serious	serious	low

Stoll J, Westermair AL, Kübler U, Reisch T, Cattapan K, Bridler R, Maier R, Trachsel M. A two-center pilot study on the effects of clinical ethics support on coercive measures in psychiatry. BMC Psychiatry. 2022 Jun 1;22(1):370. doi: 10.1186/s12888-022-04024-9. PMID: 35650555; PMCID: PMC9156353	pre-post study	pre-post study	mean duration of restraint episodes	moral case deliberation	pre-intervention: 55.2 ± 24.7 h , post-intervention: 10.1 ± 9.9 h	High risk	serious	not serious	serious	very low
Stoll J, Westermair AL, Kübler U, Reisch T, Cattapan K, Bridler R, Maier R, Trachsel M. A two-center pilot study on the effects of clinical ethics support on coercive measures in psychiatry. BMC Psychiatry. 2022 Jun 1;22(1):370. doi: 10.1186/s12888-022-04024-9. PMID: 35650555; PMCID: PMC9156353	pre-post study	pre-post study	absolute frequency of restraint episodes	moral case deliberation	pre-intervention: 1.7 ± 0.8 h , post-intervention: 1.5 ± 0.6 h n.s.	High risk	not serious	not serious	serious	low low
Stoll J, Westermair AL, Kübler U, Reisch T, Cattapan K, Bridler R, Maier R, Trachsel M. A two-center pilot study on the effects of clinical ethics support on coercive measures in psychiatry. BMC Psychiatry. 2022 Jun 1;22(1):370. doi:	pre-post study	pre-post study	rate of mechanical restraint	moral case deliberation	pre-intervention: 3.2%, post-intervention: 1.8%	High risk	not serious	not serious	serious	

10.1186/s12888-022-04024-9. PMID: 35650555; PMCID: PMC9156353										
Stoll J, Westermair AL, Kübler U, Reisch T, Cattapan K, Bridler R, Maier R, Trachsel M. A two-center pilot study on the effects of clinical ethics support on coercive measures in psychiatry. BMC Psychiatry. 2022 Jun 1;22(1):370. doi: 10.1186/s12888-022-04024-9. PMID: 35650555; PMCID: PMC9156353	pre-post study	pre-post study	mean duration of seclusion episodes	moral case deliberation	pre-intervention: 73.9 ± 102.3 h , post-intervention: 10.0 ± 12.6 h	High risk	very serious	not serious	very serious	very low
Stoll J, Westermair AL, Kübler U, Reisch T, Cattapan K, Bridler R, Maier R, Trachsel M. A two-center pilot study on the effects of clinical ethics support on coercive measures in psychiatry. BMC Psychiatry. 2022 Jun 1;22(1):370. doi: 10.1186/s12888-022-04024-9. PMID: 35650555; PMCID: PMC9156353	pre-post study	pre-post study	absolute frequency of episodes in patients subjected to seclusion	moral case deliberation	pre-intervention: 2.2 ± 2.5 h , post-intervention: 3.4 ± 6.6 h	High risk	not serious	not serious	serious	low
Stoll J, Westermair AL, Kübler U, Reisch T, Cattapan K, Bridler R, Maier R, Trachsel M. A two-center pilot study on the effects of clinical ethics support	pre-post study	pre-post study	rate of seclusion	moral case deliberation	pre-intervention: 16.7%, post-intervention: 9.6%	High risk	not serious	not serious	serious	

on coercive measures in psychiatry. BMC Psychiatry. 2022 Jun 1;22(1):370. doi: 10.1186/s12888-022-04024-9. PMID: 35650555; PMCID: PMC9156353										
Stoll J, Westermair AL, Kübler U, Reisch T, Cattapan K, Bridler R, Maier R, Trachsel M. A two-center pilot study on the effects of clinical ethics support on coercive measures in psychiatry. BMC Psychiatry. 2022 Jun 1;22(1):370. doi: 10.1186/s12888-022-04024-9. PMID: 35650555; PMCID: PMC9156353	pre-post study	pre-post study	intensity of seclusion	moral case deliberation	pre-intervention: 156.2 ± 268.8 h , post-intervention: 39.8 ± 95.2 h , n.s.	High risk	very serious	not serious	very serious	very low

Abkürzungsverzeichnis zum Anhang

ABS	Agitated Behavior Scale
ACES	Agitation-Calmness Evaluations Scale
AEs	Adverse Effects
BARS	Barnes Akathisia Rating Scale
BPRS	Brief Psychiatric Rating Scale
CABS	Corrigan Agitated Behaviour Scale
CGI-I	Clinical Global Impression-Severity of Illness Scale
CGI-S	Clinical Global Impression-Improvement Scale
CI	Confidence Interval
EEG	Electroencephalogram
IM	Intramuscular
MBPRS	modified Brief Psychiatric Rating Scale
NNT	Number Needed to Treat
PANSS	The positive and negative syndrome scale
PEC	PANSS Excited Component
OAS	Overt Aggression Scale
RCT	Randomized controlled trial
RR	Relative Risk
SAS	Simpson-Angus Scale
YMRS	YoungMania Rating Scale

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