How implementation science can help us reduce coercion? A Finnish & FOSTREN perspective

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Who has experienced, that something is implemented, and after XX months/years nobody is using that intervention/tool/program anymore?

Content of this presentation

- 1. A little bit about the Finnish network
- 2. FOSTREN results related to implementation science
- 3. Implementation insights from my Finnish projects





The Finnish network

- Current name: Eettisyys itsemääräämisoikeuden rajoittamisessa -verkosto
- ~ Ethical deprivation of selfdetermination

- 23 organisations/~70 members involved, including
- 19 welfare counties/regions
- All forensic state hospitals (2)
- Prison health services (1)
- One University (where I work)
- National Institute for Health and Welfare

 Previously: Network for reducing coercion in care, established



Key activities

- Established after national target was set to reduce coercion by 40% in 2010
- Member meetings, yearly national congress, working groups (quality standards)
- First (small) budget from ministry in year 2023





Has this work been succesful?

 Based on our register study: the overall prevalence of coercive treatment on inpatients was 9.8%, with a small decrease during 2011–2014. Only the use of limb restraints showed a downward trend over time. Geographic and care provider variations in specific coercive measures used were also observed.



Time trend of prevalence of different coercive treatment methods: raw data and smoothed curve by quadratic function





Compulsory treatment 2017 ->

Bodily search and physical examination, restrictions on contact, isolation from other patients, applying limb restraints, restraining a patient physically as part of care, involuntary medical procedure / examination, restrictions on freedom of movement, confiscation of possessions and inspection of possessions

!! Severe quality issues 2020-2023 in this register

 Psychiatric inpatient care, patients per 1000 inhabitants



International network – FOSTREN Working group 4 Implementation science





Fostering and Strengthening Approaches to Reducing Coercion in European Mental Health Services

- A network of researchers and practitioners focused on reducing the degree to which mental health services use coercion in mental health care
- A COST Action funded by European commission (2020-2024)
- A consortium with currently 38 participating countries and 217 members







Working group 4: Implementation science

- Objective: To summarise current knowledge on the most effective methods for implementation / transformation of health services as it relates to the specific issue of reducing coercion in mental health services.
- An overall implementation model will be formulated based on the analysis of the WG and implementation packages for different contexts (e.g. high vs. low resource services) will be created







Implementation models and coercion reduction programs: results from a systematic review

SYSTEMATIC REVIEW article

Front. Psychiatry, 15 June 2023 Sec. Forensic Psychiatry Volume 14 - 2023 | https://doi.org/10.3389/fpsyt.2023.1158145

Models, frameworks and theories in the implementation of programs targeted to reduce formal coercion in mental health settings: a systematic review





Review questions

- Which are the interventions applied by the studies of implementation?
- Which models, frameworks, or theories (hereafter models) are used by the studies of implementation of coercion reduction programs in mental health settings?
- What are the outcomes of implementation studies of coercion reduction programs?





Definitions

- Models enhance dissemination and implementation (D/I) of health care innovations
- Sometimes called 'implementation interventions', 'implementation packages', 'implementation protocols', 'knowledge translation' etc...but they all:
 - ✓ Target on behavioral change (on different levels/phases)
 - ✓Ensures all essential implementation strategies are included
 - ✓Makes the process more systematic
 - ✓Can improve health and intermediate (e.g. attitudes) outcomes, and resource use

Forman-Hoffman et al. 2017, Powell et al. 2012, Tabak et al. 2012, Tansanella & Thornicroft 2009

Methods

- A systematic review, protocol register 10/2021 (Prospero)
- Database searches: 9 databases; 5295 hits (duplicates removed)
- Abstract and title screening completed January 2022
- Full-text screening (185 full-texts)
- →5 full-text are included from database search + 4 from manual search, in total 8 studies (9 articles)
- Descriptive and narrative analysis





5 papers are included from databases

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Feature Article

Implementing the Dynamic Appraisal of Situational Aggression in Mental Health Units

Tella Lantta, MNSc, RN 🔳 Michael Daffern, PhD, MPsych (Clin), BSc(Psych), GCHE 🔳 Raija Kontio, PhD, RN 🔳 Maritta Välimäki, PhD, RN



International Journal of Nursing Studies Volume 88, December 2018, Pages 114-120



Implementation of the Safewards model in public mental health facilities: A qualitative evaluation of staff perceptions

Niall Higgins ^{a, b} 옷 쩓, Thomas Meehan ^{c, d}, Nathan Dart ^b, Michael Kilshaw ^e, Lisa Fawcett ^b



Archives of Psychiatric Nursing Volume 30, Issue 6, December 2016, Pages 722-728

Implementation of a Recovery-Oriented Training Program for Psychiatric Nurses in the Inpatient Setting: A Mixed-Methods Hospital Quality Improvement Study ★

Renee John R. Repique ^a 😤 🖾, Peter M. Vernig ^a, John Lowe ^b, Julie A. Thompson ^c, Tracey L. Yap ^c

Front. Psychiatry, 24 May 2019 | https://doi.org/10.3389/fpsyt.2019.00340

Preventing and Reducing Coercive

Implementation of the Safewards Model in

Johanna Baumgardt^{1,2*†}, Dorothea Jäckel^{‡†}, Heike Helber-Böhlen¹, Nicole Stiehm¹,
Karin Morgenstern¹, Andre Voigt¹, Enrico Schöppe¹, Ann-Kathrin Mc Cutcheon¹,
Edwin Emilio Velasquez Lecca¹, Michael Löhr^{3,4},
Michael Schulz^{3,4}, Andreas Bechdolf^{1,5,6}

Measures—An Evaluation of the

Two Locked Wards in Germany

ORIGINAL RESEARCH article

Stefan Weinmann^{1,7}

and



Evidence-Based Practice: Implementing Trauma-Informed Care of Children and Adolescents in the Inpatient Psychiatric Setting

Renae Hale¹ and M. Cecilia Wendler²

Journal of the American Psychiatric Nurses Association 1–10 © The Author(s) 2020 Article reuse guidelines: sagepub.com/journals-permissions DOI: 10.1177/1078390320980045 journals.sagepub.com/home/jap







4 additional papers (3 studies)

Implementing the START:AV in a Dutch Residential Youth Facility: Outcomes of Success [Translational Issues in Psychological Science]



International Journal of

International Journal of Mental Health Nursing (2020) 29,608-621

ORIGINAL ARTICLE

Mental Health Nursing

'Why didn't you just give them PRN?':

Contextual Barriers and Enablers to Safewards Implementation in Victoria, Australia: Application of the Consolidated Framework for Implementation Research

Justine Fletcher^{1+†}, Lisa Brophy^{2†}, Jane Pirkis^{1†} and Bridget Hamilton^{3†}

Patient Preference and Adherence

ORIGIN/
ORIGIN/
Using the Dynamic Appraisal of Situationa
Aggression with mental health inpatients:
a feasibility study

This article was published in the following Dove Press journal: Patient Preference and Adherence 28 April 2016 Number of times this article has been viewed

Tella Lantta¹ Raija Kontio¹⁻³ Michael Daffern⁴ Clive E Adams⁵ Maritta Välimäki^{1,6,7} **Purpose:** This paper aims to explore the acceptability of Dynamic A Aggression (DASA) from the perspective of patients, its actual use by and the predictive validity of the DASA instrument. **Methods:** A feasibility study design incorporating quantitative and qual



used. The study was conducted in three mental health inpatient units at tOPEAN COOPERATION IN SCIENCE & TECHNOLOGY

A qualitative study investigating the factors influencing implementation of sensory modulation approaches in inpatient mental health units

FSSTREN

doi: 10.1111/inm.12693

What are the interventions studied

Study	Safewards	Violence risk assessment	Recovery- oriented training for staff	Sensory modulation	Trauma-informed care
Baumgardt 2019	X				
De Beuf 2019		x (START:AV)			
Fletcher 2021	Х				
Hale 2020					х
Higgins 2019	х				
Lantta 2015,2016		x (DASA)			
Repique 2016			x		
Wright 2020 F©STREN				Х	R

ATION DLOGY

What implementation models were found?

	To guide			To evaluate	/analyze			
Study	Ottawa Model of Resear- ch Use (OMRU)	lowa Model for Evidence Based Practice– Revised	Skolarus & Sales implemen- tation approach	Implementa tion Outcomes Framework (IOF)	Consolida- ted Framework for Implemen- tation Research (CFIR)	Theoreti- cal Domains Frame- work (TDF)	Behavio- ral Change Wheel	Promoting Action on Research Implementation in Health Services (PARIHS)
Baumgardt 2019			х					
De Beuf 2019				Х				
Fletcher 2021					Х			
Hale 2020		Х						
Higgins 2019							Х	
Lantta 2015,2016	х							
Repigue 2016								v

What implementation outcomes were found?

- We sought implementation outcomes as defined by Proctor et al. (2011)
- acceptability
- adoption
- appropriateness
- feasibility
- fidelity
- implementation costs
- penetration
- sustainability



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None of the studies reported all of eight implementation outcomes

- The number of implementation outcomes mentioned varied between 3 and 5 outcomes.
- Acceptability (7 out of 9 papers), appropriateness (8/9) and sustainability (7/9) were most commonly named in the papers, whereas penetration was found in only one of the studies.
- However, most of the studies only mentioned an outcome by the name in their paper and did not report any actual data about the outcomes.



Acceptability and adoption

- In most of these studies (n=4), acceptability of the intervention was evaluated from the staff's viewpoint with mixed views towards the intervention
- One study included patient perspective

- Three papers reported data about adoption, all from the staff's perspectives
- All three studies found that there is scope for improving adoption of the intervention during and after the implementation period





Appropriateness and feasibility

- Two papers reported data about **appropriateness** from staff viewpoint
- In one study, intervention (START:AV) received mixed views about if it was useful for treatment.
- In one study, evaluation revealed both appropriate and inappropriate ways sensory modulation approaches had been used in care.

- Two papers reported data about **feasibility** from the staff viewpoint
- One study asked staff about their intervention's practicality. Staff thought that they lacked time to use the intervention and it took more time than expected.
- One study evaluated how the intervention actually worked. DASA predicted aggression as expected.





Fidelity and implementation costs

- Two of the included studies provided data on **fidelity** based on staff implementation activities
- Both of the studies reported a high level of fidelity when implementing Safewards
- However, in one study, some wards were only implementing 1-4 interventions (out of 10)

• None of the included studies provided data about implementation costs





Penetration and sustainability

- Only one paper provided information about **penetration**.
- This study evaluated if the intervention (START:AV) was integrated in the setting's treatment plans and case conferences.
- The integration of the tool into the treatment process seemed to improve over time.

- Only one paper provided information about sustainability, from staff viewpoint.
- According to this study, there was a 9.3% reduction of physical holding and seclusion holds 12 months later after implementing trauma-informed care in children and adolescent inpatient services





Conclusions

- We screened 5295 coercion reduction intervention studies but of those we could only find nine (0.2 %) that had used a named implementation model
- Systematic implementation models appear to be seldom used (or named) when efforts are being made to embed interventions aimed at reducing use of coercive measures in routine mental health care
- Quality of the included studies was mostly quite low (MMAT), with the exception of two qualitative papers
- Based on our review, it is unclear what are the costs and resources needed to implement complex interventions with guidance of a implementation model
- Including service users and carers perspectives needs to be included in future studies





Implementation science approach in my Finnish projects





EVIDENCE-BASED VIOLENCE RISK ASSESSMENT IN PSYCHIATRIC INPATIENT CARE: AN IMPLEMENTATION STUDY

Tella Lantta







Focus on the process





Focus on setting the stage

International Journal of Mental Health Nursing

Original Article | 🙃 Full Access

Facilitators for improvement of psychiatric services and barriers in implementing changes: From the perspective of Finnish patients and family members

Tella Lantta RN, PhD, Postdoctoral researcher (Academy of Finland) , Minna Anttila PhD, Docent, Senior researcher, Jaakko Varpula RN, MNSc, Doctoral candidate, Maritta Välimäki RN, PhD, Docent, Professor

First published: 20 November 2020 | https://doi-org.ezproxy.utu.fi/10.1111/inm.12815

We approached the study using the Theoretical Domains Framework (TDF) (Cane *et al.* <u>2012</u>). The TDF is a healthcare methodological tool that can be used to identify barners and enablers for behaviour change at the individuar and organizationan evels (Cane *et al.* <u>2012</u>; Sargent *et al.* <u>2017</u>). Furthermore, the framework explains facilitators and implementation barriers from different viewpoints (Sargent *et al.* <u>2017</u>; Shaw *et al.* <u>2016</u>). An explanatory



Focus on planning

- eDASA+APP FI project (2022-2026) -NCT06342531
- Electronic Dynamic Appraisal of Situational Aggression + Aggression Prevention Protocol





eDASA + APP

- Electronic DASA (Dynamic Appraisal of Situational Aggression, Ogloff & Daffern 2006)
- Aggression Prevention Protocol (APP)
- The APP offers recommendations for aggression prevention strategies or nursing interventions that correspond to the low, medium or high risk level (as measured using the eDASA)
- Based on two Australian studies the use of the eDASA+APP helps to reduce incidents of aggression and restrictive practices in mental health units



Maguire T, Daffern M, Bowe SJ, McKenna B. Evaluating the impact of an electronic application of the Dynamic Appraisal of Situational Aggression with an embedded Aggression Prevention Protocol on aggression and restrictive interventions on a forensic mental health unit. Int J Ment Health Nurs. 2019 Oct;28(5):1186-1197. ; Griffith JJ, Meyer D, Maguire T, Ogloff JRP, Daffern M. A Clinical Decision Support System to Prevent Aggression and Reduce Restrictive Practices in a Forensic Mental Health Service. Psychiatr Serv. 2021 Aug 1;72(8):885-890.



Developing and testing eDASA + APP FI

- 1. Exploring nurses' attitudes towards risk assessment, management, and positive risk*
- 2. Modifying eDASA + APP to Finnish context in workshops co-production
- 4. Development of eTraining module
- 5. Integrating eDASA to Apotti (EPIC based patient data management system) and testing FI version in inpatient wards (~30 units)

6. Patient engagement will be realized through "bed-side" assessments i.e. by using a tablet-computer or a laptop

* Downes C, et al. Survey of mental health nurses' attitudes towards risk assessment, risk assessment tools and positive risk. J Psychiatr Ment Health Nurs. 2016;23(3-4):188-97.



Focus on planning

 The Johns Hopkins Evidence Based Nursing Model (JHEBNM)'* Starting from a clinical problem – already familiar environment – simple 3-stage process: 1) need,
2) evidence-based knowledge, 3) translating evidence to practice, implementation, continuous evalution, dissemination

+ co-design of the Finnish eDASA+APP

CFIR Card Game**

→Pre-implementation workshop for nurse managers and champions: barriers and facilitators

*Dang D, Dearholt S. 2017. Johns Hopkins nursing evidence-based practice: model and guidelines. 3rd ed. Indianapolis, IN: Sigma Theta Tau International.

Piat M, Wainwright M, Sofouli E, Albert H, Casey R, Rivest MP, Briand C, Kasdorf S, Labonté L, LeBlanc S, O'Rourke JJ. The CFIR Card Gan new approach for working with implementation teams to identify challenges and strategies. Implement Sci Commun. 2021;2(1):1.



To conclude – how implementation science can helps us to reduce coercion

Focus on planning which tools to use to promote implementation Focus on the process -Setting/evaluating the stage – analytical which elements are approach to integral and needs to be understanding your planned environment Sustainable change



Thank you for your attention!

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