Evidence-Based and Structurally-Informed Interventions for Reducing Time in Restraint and Seclusion

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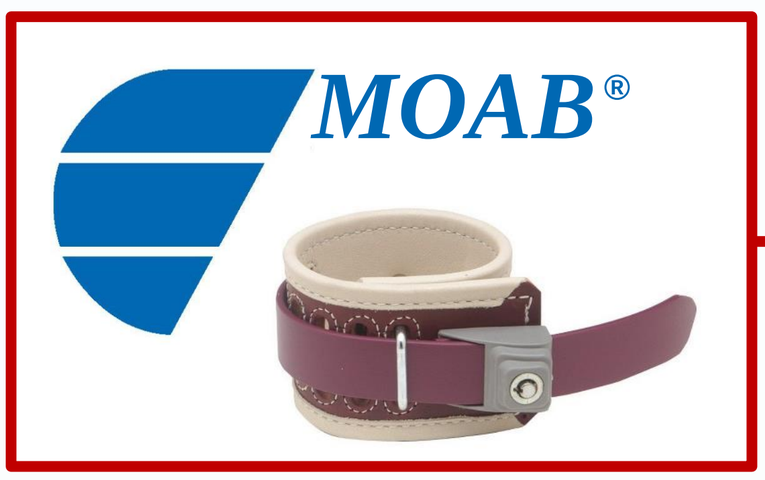
INTRODUCTION

- Research on restraint and seclusion (R/S) has demonstrated variations in practice, racial inequities, and adverse effects.[1-3] These findings suggest a lack of evidence-based practice.
- While prior projects have aimed to reduce the incidence of R/S, very little study has been given to reducing the time in R/S or to mitigating the harms of these interventions when required.
- The existing literature largely emphasizes the importance of staff champions and one-off educational initiatives that aim to completely eliminate R/S.[3] These methods are unlikely to promote enduring institutional change.
- Our unit implemented a series of structural interventions to target the more readily achievable goals of reducing R/S time while emphasizing trauma-informed and patient-centered care.

METHODS

- An internal review of R/S incidents on our unit provided baseline data, which highlighted potential areas for improvement including time in restraints, type of restraint, and variations in practice.
- The writers then undertook an extensive review of the literature on existing R/S reduction interventions, staff training models, and violence prediction tools.
- Multidisciplinary team meetings were held with all stake-holders to discuss alternatives to current practices.
- Interventions were implemented gradually with ongoing data collection to monitor for staff assaults, the incidence of R/S, the time in R/S, inequities in the use of R/S, and staff attitudes concerning the interventions.

RESULTS



Evidence-Based Structural Interventions

Category	Intervention	Year
Recurring Staff Training	Internal review on restraint equity and staff presentations (BIAS Project)	2018
	Shift from MOAB to the Richmond BETA de-escalation training model[4,5]	2020
	Bias at the Bedside trainings	2020
Multidisciplinary Collaboration	Diversity and Inclusivity Committee	2019
	Regular meetings between security and nursing leadership	2019
	Regular joint simulation training involving nursing, security, and physicians	2021
Standardized Assessments	Internal actuarial risk prediction score for all admissions (Blake 11 Red Dot protocol)	2015
	Brøset Violence Checklist (BVC) on every nursing shift[6]	2018
	Mechanical Restraint-Confounders, Risk, Alliance Score (MR-CRAS) to standardize release from restraints[7]	2020
Procedural Changes	Shift in restraint leadership from security to nursing	2019
	Debriefing protocol with questions on cultural context and trauma	2020
	Restraint chair introduced[8]	2020

MR-CRAS
Mechanical Restraint-Confounders, Risk, Alliance Score

1. Was this patient restrained because of inability to comply with COVID respiratory isolation? Y N
2. Was the restraint chair used for this restraint? Y N

Confounders (mark with X if present)	Time	Time	Time	Time	Time	Time	Time	Time
Withdrawal or cravings								
Resistance to treatment								
Delusions								
Disorganization								
Hallucinations								
Pt wants to remain restrained								
Risks (mark with X if present)	Time	Time	Time	Time	Time	Time	Time	Time
Irritable								
Boisterous								
Threats of self-harm								
Verbal threats								
Threats of physical harm								
Self-harm								
Attacking objects								
Violence against clinicians								
Parameters of Alliance (score: 0, 1, or 2)		Scoring (0=No degree, 1=Low degree, 2=High degree)						
	Time	Time	Time	Time	Time	Time	Time	Time
Is there contact (communication) with the patient?								
Is there cooperation with the patient?								
Can the patient's behavior be corrected?								
Does the patient have insight into their situation?								

CONCLUSIONS

- Staff assaults did not increase during the intervention period. Reducing iatrogenic morbidity and total time in R/S is an achievable goal without compromising staff or patient safety.
- Evidence-based tools can standardize practice and inform the creation of a multi-pronged structural intervention that promotes health equity.
- Intervention acceptability and fidelity is dependent on interdisciplinary collaboration and buy-in from all members of the treatment team.
- Future directions include examining R/S incidence, type, and time to formally assess the impact of these interventions.

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