

Improving Patient Care by Utilizing an Evidence-based Education to Reduce Seclusion

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Introduction

- In psychiatric health settings, agitated behavior is an acute emergency often requiring immediate intervention to control symptoms and decrease the risk of patient self-harm and injury to others (Gaynes et al., 2017).
- Seclusion and restraints are widely used to manage acutely disruptive behaviors in psychiatric settings (Knox & Holloman, 2012). The use of seclusion is controversial and has been deemed an encroachment on human right and dignity which can cause psychological trauma, physical injury, deterioration of illness, long hospitalization stay, increase readmission rate and death.
- Modern clinical interventions of aggressive behaviors advocates for the use of less coercive interventions such as verbal de-escalation in which the patient becomes a collaborative partner with staff members in managing behavior (Richmond et al., 2012; World Health Organization, 2017).

Purpose

- To reduce the rate of patient seclusion and aggression by educating nurses on implementing the TeamSteps tools

Literature Review

- Seclusion and restraint are cohesive, high-risk containment interventions that contribute to the problem of violence against patients and staff members in psychiatric healthcare settings (Gabriel et al 2017).
- The use of Seclusion and restraints is associated with physical and psychological harm to patients and staff in addition to inflating healthcare costs (Carlson & Hall, 2014).
- Effective de-escalation can help reduce the use of seclusion and restraint in psychiatric settings (Puttkammer & Moreno, 2016).
- Verbal de-escalation can reduce the use of coercive approaches such as seclusion and restraints in the management of aggressive patients (Hallet & Dickens, 2017)
- The skill of verbal de-escalation is a critical requirement for healthcare providers who handle potentially aggressive patients (Richmond et al., 2012).
- Staff training targeting de-escalation of aggressive behaviour increase the use of de-escalation techniques among staff, which is associated with reduced number of aggressive patients (Gaynes et al. 2016)

Methodology

- The research setting is a hospital in a mid-sized city in North Central US which provides nursing care for psychiatric patients aged 18 and above.
- The study utilized a quasi-experimental, pre-test/post-test study design and used restraint track log data and patient charts to evaluate the relationship between the implementation of the intervention and the dependent variables (seclusion events and incidents of patient aggression).
- The project employed the TeamSTEPPS evidence-based program to help inform nurses about verbal de-escalation which helps to reduce seclusion and patients' aggressive behaviour.
- Data analysis applied a descriptive analysis method to assess each individual variable and an ANOVA analysis to determine if there was a change in each of the primary outcomes variables from pre (January to February 2018) to post (February to March 2019).

Results

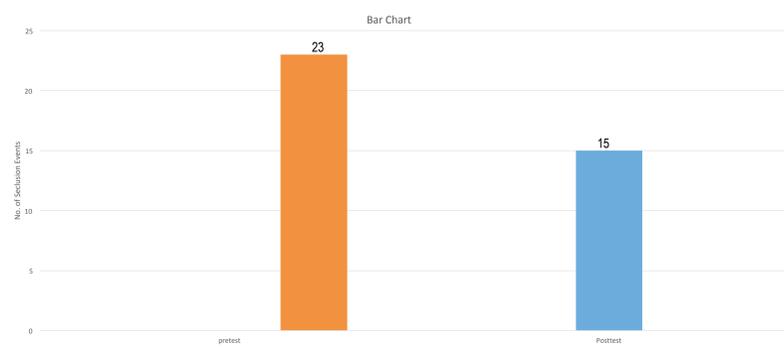
Descriptive data

- A total of 31 nurses working in the hospital participated in the study. Nine (29%) of the nurses were male and 22 (71%) were female. Most of the nurses who participated (n=12, 38.7%) were 35-44 years, had an experience lesser than five years (n=16, 51.6%), and had a bachelor's degree (n=22, 72.4%).
- The patient population included all the patients admitted over the course of the two months of the pre-test period and two months in the post-test period. Of a total of patients admitted in the pre-test (n=388), 52% (n=203) were male and 48% (n=185) were female. The majority of were aged 26-35 years-old (n=149, 38%), and had a schizophrenia diagnosis (n=118, 30%). 211 (54%) of the patients were admitted voluntarily and 177 (46%) were admitted involuntarily. 267 (69 %) of the patients were compliant with treatment while 177 (31%) of the patients were non-compliant
- Of a total of patients admitted in the post-test (n=342), 54% (n=185) were male and 46% (n=157) were female. The majority were 26-35 years-old (n=101, 30%) and had a schizophrenia diagnosis (n=107, 31%). Also, 203 (59%) of the patients were admitted voluntarily and 139 (41%) were admitted involuntarily. Moreover, 218 (64 %) of the patients were compliant with treatment while 124 (36 %) of the patients were non-compliant.

Seclusion Rates

- The data analysis demonstrated that the usage of seclusion by psychiatric nurses decreased significantly as demonstrated by a 35% decrease in the number of seclusion events in the post-test (n=15) from the pre-test (n=23) (p< .001) (Figure 1).
- The observed decrease was not dependent on the psychiatric nurses' level of education, age, and years of experience as shown by the homogeneity Test of Characteristics between Pre-test and Post-test nurses' groups

Figure 1: Comparison of pre-test and post-test frequency of Seclusion events

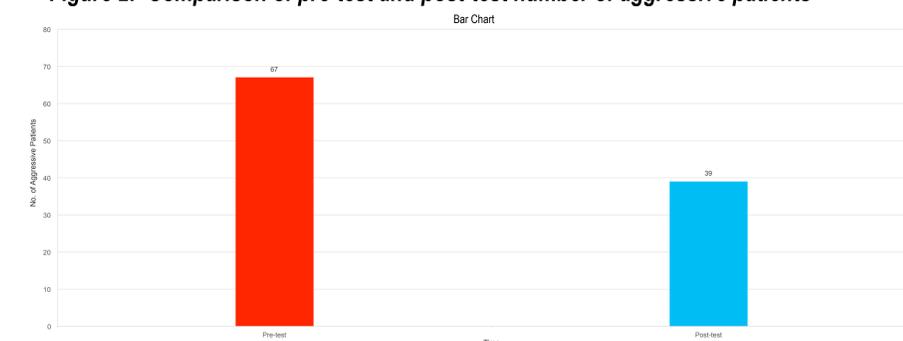


Results Cont.

Aggressive behaviour

- There was a statistically significant decrease in the number of aggressive patients in the post-test compared to baseline (p< .001). Prior to the intervention, the number of aggressive patients was 67 patients while in the post-test, the number of aggressive patients was 39 patients (42%) (Figure 2).
- There were no significant differences in the number of patient admissions in the pre-test (n=388) and post-test (n=342). Also, the observed decrease was not dependent on the patient's age, gender, diagnosis, admission status, and medication compliance as shown by the homogeneity Test of between Pre-test and Post-test patient group's Characteristics.

Figure 2: Comparison of pre-test and post-test number of aggressive patients



Discussion

- Consistent with past research (Stead et al., 2009), this study demonstrated that staff training on verbal de-escalation decreased the use of seclusion intervention and patients aggressive behaviour.
- The implementation of the TeamSTEPPS evidence-based program was associated with a significant reduction in the number of seclusion events (35% decrease, p< .001) and significant reduction in the number of aggressive patients (42% decrease, p< .001) in the post-test compared to baseline
- The observed decrease in the usage of seclusion from baseline to post-test suggests that a TeamSTEPPS educational intervention on verbal de-escalation directed at nurses is an effective behavior change strategy that increases staff awareness on the importance of verbal de-escalation in the management of aggression in psychiatric settings.
- Staff affirmed that TeamSTEPPS was effective intervention.
- The decrease in the number of aggressive patients in the post-test demonstrates that verbal de-escalation is an effective intervention in the management of aggression in patients with mental disorders.
- De-escalation approaches may result in better benefits over seclusion. Patients expressed satisfaction with the intervention

Limitations and Future Research

- The study was performed in a single setting using a small sample of participants and as such, future studies with larger sample sizes from multiple settings are needed to enhance the generalizability of findings
- The collection of data did not put into consideration patients who may have had multiple seclusion and aggression events and as such, the reduction in seclusion events and number of aggressive patients may have resulted from the discharge of the patients in the post-test. Further research that use the same group of patients are required to verify the effectiveness of such intervention.

References

References provided upon request
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Don't shut the door!

Verbally de-escalate...
Seclusion has no therapeutic value!!!

