The Implementation of SBAR among Mental Health Nurses to Reduce Medication Errors

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BACKGROUND

Ineffective handoff communication can precipitate adverse events that can result in poor outcomes for patients. Recognizing that there is no standardized format of staff handoff communication between shifts at a psychiatric hospital prompted the need for implementation of a standardized communication tool, Agency for Healthcare Research and Quality's (AHRQ)Team STEPPS 2.0 SBAR.

PURPOSE AND HYPOTHESIS

The purpose of this quality improvement project is to find out if or to what extent will application of the Agency for Healthcare Research and Quality's (AHRQ)Team STEPPS 2.0 SBAR reduce medication inaccuracy among mental health staff nurses in a clinical setting over a four-week period

METHODS

This quality improvement project utilized a quasi-experimental design to evaluate the correlation between the variables of SBAR and medication errors. A paired sample t test was conducted to compare the means between two similar samples involving pre-posttest results of the SBAR intervention. Data was analyzed using SPSS version 28. Descriptive statistics method was used to analyze the impact of SBAR intervention on medication error rates

Population of Interest - Inpatient mental health nursing staff of LPNs and RNs who are directly involved in handoff reports and medication administration who would be influenced by utilization of the SBAR communication tool.

Setting – The location for the project's implementation was within an inpatient mental health unit of a psychiatric hospital in the state of Maryland

Interventions – The SBAR interventions were conducted over a 4-week period and included participants who are licensed practical nurses (LPNs) and registered nurses (RNs) on an inpatient psychiatric unit in Maryland

Ethics/Human Subjects Protection - Ethical considerations were upheld by adhering to the project's site and Touro University Nevada's guidelines

RESULTS

The results indicate there is indeed a difference in average mean of total errors between pre and post audits, indicating that the post-audit errors were much less than the pre-audit ones. Pre-audit errors were average mean of 1.2 while those of post-audit were 0.4, representing 67% reduction. The statistics t(31.2) = 2.25, p = .03 were statistically significant.

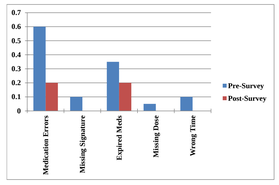
Table:

Independent T-Test for Medication Chart Audits

Variables		N	Mean	SD[1]	SE[2] Mean	t[3]	df[4]	Sig.[5]
Total Errors[6]	Pre-Audit	20	1.20	1.36	0.30	2.25	31.20	0.03
	Post-Audit	20	0.40	0.82	0.18			

1 - Standard deviation
2 - Standard Error
3 - T Test Statistic
4 - The degrees of freedom
5 - Statistical significance (2-tailed)
6 - Equal variances not assumed

Bar Chart Showing the Differences Between Pre and Post Medication Chart Audits



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CONCLUSIONS

The findings suggest that the implementation of the AHRQ's Team STEPPS 2.0 SBAR may improve medication errors, however further data analysis is necessary for sustainability.

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