4-26-2024

Impact of Fall Education to Oncology Staff on Oncology Patient Fall Rates

Danni Sloane
Providence St. Joseph Health

Impact of Fall Education to Oncology Staff on Oncology Patient Fall Rates

Danni Sloane DNP, CEL, MSN, BSN, RN

Providence St. Joseph Health
PROVIDENCE Portland Medical Center
MAGNET RECOGNIZED AMERICAN NURSES CREDENTIALING CENTER

Background

- Falls and fall-related injuries impact patients' health outcomes and are the most reported adverse event in hospitals.
- Patient falls also affect reimbursement rates, can increase length of stay by about 6.3 days, and increase undue patient harm.
- An increase of patients falls on the medical and surgical oncology acute care units have caused undue physical harm, increased moral distress, mental fatigue, and burnout in nurses; as well as placing financial burdens on the healthcare system.
- Implementing fall education and interventions aligns with national patient safety goals, is a top-priority project, is in alignment with the organization's strategic plan, and is a cost-savings topic related to reimbursement rates.

Purpose

- Several evidence-based fall bundles have been shown to help reduce patient falls.
- The hospital where the intervention was implemented has many fall-risk interventions. However, there is no standardization of interventions or education for the caregivers implementing fall prevention interventions, making it a non-standardized approach. The purpose of this project is to evaluate the effect of tailored fall education to oncology RNs and CNAs on fall reduction on the medical and surgical oncology acute care units.

Complete list of references, link to free publication download, and more data available here:

Interventions/Methods

- This project used a quasi-experimental design with a pre- and post-test evaluating the nursing staff's knowledge pre- and post-fall education.
- Retrospective and prospective reviews of patient fall rates, were conducted two months before the fall educational sessions, and prospective reviews were conducted after implementing fall education.

Evaluation/Results

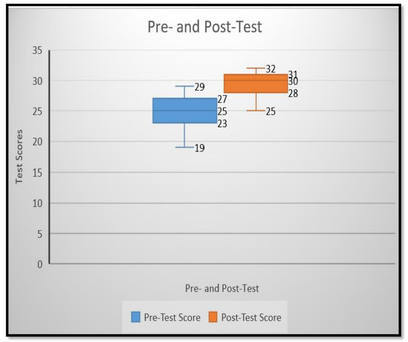
- There was a statistical significance in knowledge gained about fall prevention and fall precautions when comparing the pre- and post-knowledge test given to the nurses and nursing assistants in the medical and surgical oncology units.
- This project did not show statistical significance in the fall rates pre- and post-education.

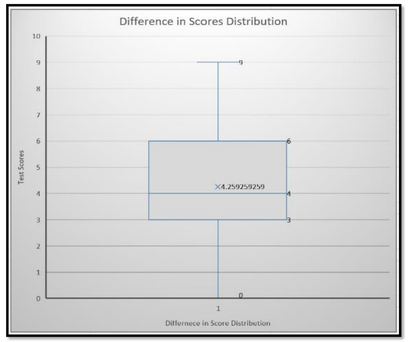
Discussion/ Implications

- The implications for practice are immense. It will be essential to ensure that the organization updates its education of new nursing staff regarding fall education to ensure that all new nursing staff are equipped with the same fall education, and that the new practice does not fall by the wayside.
- Some limitations of the project were the number of participants, a 10-day labor stoppage during the post-intervention phase, and short staffing post-implementation.
- The researcher will suggest the organization continue to monitor the long-term results of patient falls via the NDNQI database.

Acknowledgments: Thank you to the caregivers on both units, and the support for this project.

Statistical Analysis of Pre- and Post- Education





	Pre-Test Score	Post-Test Score
Mean	25.07407407	29.33333333
Variance	7.225071225	3.230769231
Observations	27	27
Pearson Correlation	0.41661127	
Hypothesized Mean Difference	0	
df	26	
t Stat	-8.727778924	
P(T<=t) one-tail	1.66373E-09	
t Critical one-tail	1.70561792	
P(T<=t) two-tail	3.33E-09	
t Critical two-tail	2.055529439	

Statistical Analysis of Pre- and Post- Falls Data

For ALL Units

Unit	Pre-Fall Rate	Post-Fall Rate	Difference in Score
7N	0.15	0.17	0.02
7S	0.08	0.09	0.01

Hypotheses:	u = distribution mean	
H0: Null Hypothesis	u = 0	The means of before and after were the same
H1: Alternative Hypothesis	u ≠ 0	The means of before and after were different
	TWO TAILED	
Significance:	a = 0.05	
Sample	2 Units before and after intervention	
p-value:	0.204832765	

t-Test: Paired Two Sample for Means

	Pre-Test Score	Post-Test Score	
Mean	0.115	0.13	
Variance	0.00245	0.0032	
Observations	2	2	
Pearson Correlation	1		
Hypothesized Mean Difference	0		
df	1		
t Stat	-3		
P(T<=t) one-tail	0.102416382		
t Critical one-tail	6.313751515		
P(T<=t) two-tail	0.204832765		High p value, above .05, we fail to reject null hypothesis
t Critical two-tail	12.70620474		

Fail to reject the null hypothesis. We cannot determine the means are siginificantly different.
Therefore there is not sufficent evidence to determine that the post test falls were different from the pre test falls.