DELAY IN PATIENT DETERIORATION RECOGNITION AND ACTION TAKEN IN TRIAGING PATIENTS DUE TO INEFFECTIVE COMMUNICATION AND ESCALATION

Balreet Kaur A/P Baljit Singh | KPJ Tawakkal KL Specialist Hospital

ASQua ASIAN SOCIETY FOR QUALITY IN HEALTH CARE

KPJ TAWAKKAL SPECIALIST HOSPITAL

Abstract

Background:Delay in patient deterioration recognition and action taken in triaging patients due to ineffective communication and escalation. The researcher is having a problem in the local setting based on an audit done in KPJ Tawakkal KL Specialist Hospital. From year 2021 till September 2022 audit shows the main non-compliance arise from documentation completeness which lead to delay in recognition (95%) for 2021 and (93%) respectively till September 2022, (97% to 95%) on action taken on Early Warning Signs. The consequences are score will impact overall accuracy, on action to take, activation of RRT will be delayed, and adverse events will take place. Delay in recognition is a problem hence staff nurses' knowledge, attitude and compliance will be assessed using surveys pre and post-training. Aim: To evaluate the effect of Early Warning Signs training on knowledge, attitude, and compliance among staff nurses at A&E. Design: A quantitative, quasi-experimental, retrospective study using pre-test and post-test designs. Settings: Accident and Emergency Department of a Private Hospital in Klang Valley. Participants: All Staff Nurses in Accident and Emergency Department. Method: Purposive sampling data will be collected. Results: The study shows that the respondents who have good knowledge about the early warning system recognition pre-training are n=16 respondents (80.0%) and n=18 (90.0%) post-training. As for attitude, all staff has a positive attitude about the early warning system which are n=20 respondents (100.0%) pre and post-training This study shows that the respondents who takes action on early warning system pre-training, n=15 respondents (75.0%) and n=19 (95.0%) post-training. A Repeated Measure Anova Test was performed to assess the association between Knowledge and Attitude therefore, the training program should be continued.

Contact

Name of Main Author : Balreet Kaur A/P Baljit Singh
Institution : KPJ Tawakkal KL Specialist Hospital
Telephone : 016 7375743
E-Mail : balreet@kpjtawakkal.com

Introduction

Compliance on documentation of Early Warning signs among staff nurses at the Accident and Emergency Department is mandatory to tackle early deterioration of patients. If these is recognized and acted upon earlier with proper communication and escalation, complications may be reduced hence adverse event prevented.

Methodology

The researcher used Quantitative, Quasi Experimental, pre-test-post-test design and retrospective data collection in this study. The dependent variable is measured twice before and after intervention and there is no control group and randomization in this study design (Stratton, 2019).The researcher obtained data on purposive sampling. All staff nurses in Accident and Emergency Department were involved in this study. Data collected using questionnaire (Part A&C) and retrospectively using KPJ Clinical Information System (KCIS) for Part B also by doing pre training and post training survey (quasi experimental pre and post-test design). There was intervention and the experimental group was a single group. There was no randomization as only 1 group will be involved.

Table 1.0: Pair T Test for Knowledge

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	PRE	1.05	20	.224	.050
	POST	1.00	20	.000	.000

Table 1.0 shows first objective of this study is to assess the knowledge of staff nurses for effective communication and Reliability analysis exhibited the value of Cronbach's Alpha value (α) at 0.762. Paired T Test was used as there are two groups under comparison and may depend on each other (Potochnik et al., 2018). Table shows pair T Test of paired sample statistics. There was a significant difference between pre-test and post- test training. This study shows post training, staff knowledge has increase as shown in standard error mean post training (0.000).

Result

Table 2.0: Pair T Test for Attitude

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	PRE	1.80	20	.616	.138
	POST	1.40	20	.503	.112

Table 2.0 shows second objective, to assess the attitude of staff nurses. Table shows pair T Test of paired sample statistics. There was significant difference between pre-test and post-test training.Standard error mean is lesser post training which shows staff shows better attitude post training.

Table 3.0: Pair T Test for Compliance

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	PRE	1.25	20	.444	.099
	POST	1.05	20	.224	.050

Table 3.0 shows third objective is to assess the compliance of staff nurses in documenting early warning signs elements for proper escalation in KPJ Clinical Information system (KCIS) pre and post training.There was a significant difference between pre-test and post-test training. The study shows compliance rate have improved post training.

Table 3.1: Paired Sample Test for Compliance

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	PRE - POST	.200	.410	.092	.008	.392	2.179	19	.042

Table 3.1 shows paired Sample Test for Compliance. The sig (2 tailed) value is 0.042 which is < 0.05 hence the findings show statistically significant difference pre and post training.

Table 4: Repeated Measures Design Anova

Descriptive Statistics

	Mean	Std. Deviation	N
Attitude Pre	1.80	.616	20
Attitude Post	1.40	.503	20
Knowledge Pre	1.05	.224	20
Knowledge Post	1.00	.000	20

Table 4.0 shows fourth objective to determine the comparison between knowledge and attitude of staff nurses. A repeated measures Anova was done as comparison of Knowledge and Attitude. Repeated measures Anova found that there were differences on knowledge and attitude.

Discussions

This study presents a study framework on pre and post intervention which is pre and post training. Early recognition of vital sign is important to ensure clinical Interventions are carried out in a timely manner to prevent morbidity and mortality. Early Warning Signs provide nurses and doctors with crucial safety information, identifying patients who require thorough monitoring, supplemental measures or referral to Intensive Care Units (Eddahchouri et al., 2021).

Conclusion

From the analysis carried out, it is important to emphasize the importance of documentation of Early Warning Signs among staff nurses and also clinicians and communicate on escalation. Post training, there is increase in Knowledge among staff nurses hence training is important to also increase staff confidence. Even if the patient deteriorate, staff nurses will be able to tackle immediately by proper communication and escalation.

References

Eddahchouri, Y., Koeneman, M., Plokker, M., Brouwer, E., van de Belt, T. H., van Goor, H., & Bredie, S. J. (2021). Low compliance to a vital sign safety protocol on general hospital wards: A retrospective cohort study. International Journal of Nursing Studies, 115, 103849. https://doi.org/10.1016/j.ijnurstu.2020.103849

Pietrzykowski, T., & Smiłowska, K. (2021). The reality of informed consent: empirical studies on patient comprehension—systematic review. Trials, 22(1), 1–8. https://doi.org/10.1186/s13063-020-04969-w

Potochnik, A., Colombo, M., & Wright, C. (2018). Statistics and Probability. Recipes for Science, Table 2, 167–206. https://doi.org/10.4324/9781315686875-6

Stratton, S. J. (2019). Quasi-Experimental Design (Pre-Test and Post-Test Studies) in Prehospital and Disaster Research. Prehospital and Disaster Medicine, 34(6), 573–574. https://doi.org/10.1017/S1049023X19005053