Safe Patient Care: Knowledge, Attitude and Practice Among ICU Nurses

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ABSTRACT

The present study describes nurses' knowledge, attitude and self-reported practice regarding safe patient care. A quantitative descriptive correlational design study, using purposive sampling technique was conducted on 70 ICU nurses.   The overall result indicates that majority of the sample has good knowledge (93%) and positive attitude (87%) towards safe patient care. All sample (100%) reported good patient safety practices. The findings of the study also show no association between knowledge with educational status and years of experience ($\chi2$ =0.021, 0.86) at 0.05 level of significance. The association between attitude with educational status and year of experience ($\chi2$ =152.56, 80.2) are statistically significant at .05 level. While there is a correlation exists between knowledge and practice (r=0.361, p=0.002) at 0.05 level of significance, the correlation between knowledge and attitude (r=0.208, p=0.084), practice and attitude (r=0.032, p=0.795) are not significant at 0.05 level.

Keywords: knowledge, attitude, practice, safe patient care, ICU nurses

INTRODUCTION

Today, nursing has become an exciting profession in the world. Trained nurses embodied in compassion are the greatest blessings to humanity. Nurses are exceptional; they have a responsibility to support safe patient care. Their role involves a balanced mixture of their knowledge, attitude and practice.

BACKGROUND OF THE STUDY

Qualified nursing professionals across the globe have a fascinating interest towards safe patient care.[1] Safe patient care and the efforts to define its quality began with Florence Nightingale in the 1850s, when she used statistical methods to identify the relationship between patient outcomes and environmental conditions.[2] This noble history on outcome measurements attracted the respect and warm approval from statisticians and epidemiologists alike.[3] Nightingale style and innovative thinking are indispensable in modern nursing, as both strive to provide safe patient care.[4]

SIGNIFICANCE OF THE STUDY

The principle of safe patient care resides 'in the prevention of harm to patients'. Moreover, it is the prevention of errors among health care professionals and subsequent adverse events among patients in hospitals.[5] According to the updates on patient safety by WHO (2018), there is 1 in 300 chance of a patient being harmed during health care, 421 million hospitalizations in world annually and approximately 42.7 million adverse events occur in patients during these hospitalizations[6] Patient safety has become increasingly imperative to hospitals. Nurses are the driving force behind patient perceptions of safety and it also is a concern among nursing professionals.[7]

PURPOSE OF THE STUDY

The overall purpose of this study was to explore the knowledge, attitude and practice of ICU nurses

regarding safe patient care and to explain their relationships, and their association with the year of experience and educational status of the sample.

STATEMENT OF THE PROBLEM
A study to assess the knowledge, attitude and practice of safe patient care among ICU nurses in a selected hospital, Ernakulam.

OBJECTIVES
1. To assess the knowledge regarding safe patient care among ICU nurses.
2. To assess the attitude regarding safe patient care among ICU nurses.
3. To assess the practice regarding safe patient care among ICU nurses.
4. To find the association between the study variables and selected demographic variables
5. To determine the correlation between the study variables

ASSUMPTIONS OF THE STUDY
The study assumes that medical ICU nurses may have knowledge, positive attitude and adequate patient safety practices. The knowledge, attitude and practice regarding safe patient care may vary among medical ICU nurses.

RESEARCH HYPOTHESES
The following hypotheses were tested at 0.05 level of significance.

H_1: There will be correlation between knowledge and attitude regarding safe patient care.

H_2: There will be correlation between attitude and practice regarding safe patient care.

H_3: There will be correlation between knowledge and practice regarding safe patient care.

H_4: There will be an association between knowledge, attitude and practice with selected demographic variables of the sample.

DELIMITATIONS
The study is delimited to single setting, medical ICUs, self reported scores of practice and staff nurses.

REVIEW OF LITERATURE
The result of a cross sectional comparative study (Attia Bari et al. 2017) on knowledge of patient safety among 150 PG residents and 150 nurses in a tertiary care hospital showed a high level of positive perception with higher mean score among nurses compared to PG residents (p= 0.004) [8]. Brasaite I, et al. (2014) conducted a study on attitude regarding patient safety in a sample of 1082 health care personnel, including physicians, nurses and nurse assistants from three hospitals in western Lithuania. The result showed a positive attitude among the sample with regard to patient safety practices [9]. A descriptive survey by K. Lalrindiki et al. (2013) on the knowledge and practice regarding safe patient care among 50 staff nurses revealed that 58 % of subjects were with average knowledge, and 56% had average practice; there was a positive correlation (r=0.558) between knowledge and practice [10].

RESEARCH METHODOLOGY

➤ Research approach: Quantitative
➤ Research design: Correlational descriptive survey [11]
➤ Setting: selected hospital in Ernakulam
➤ Study variables: Knowledge, attitude and practice regarding safe patient care
➤ Sample: staff nurses from Medical ICUs
➤ Sampling technique: Purposive sampling

Sampling process: The sample for this study was recruited using non-probability purposive sampling technique. They were staff nurses in medical ICUs during data collection period. Head nurses, shift in-charges and supervisors were excluded from the data collection.

Tools and techniques
A. **Tool -1**, the section A consists of demographic variables which includes educational status and years of experience. Section B includes Structured Knowledge Questionnaire (20 items) developed based on International Patient Safety Goals (IPSG) [12] .The knowledge scores are: 1-6 'poor knowledge', 7-13 'average knowledge', 14-20 'good knowledge'.
B. **Tool -2**, is a Safety Attitude Questionnaire (30 items) measured the mind-set of ICU nurses regarding safe patient care. It is a 5-point scale attitude to safe patient care. The attitude scores are: 30 - 70 'negative attitude', 71-110 'neutral attitude', 111-150 'positive attitude'.
C. **Tool - 3**, is Safety Practice Check Lists (20 items) based on IPSG, measured self-reported patient

care safety practices[12]. The practice scores are: 1-6 'poor practice', 7-13 'average practice', and 14-20 'good practice'.

DATA ANALYSIS

Table 1: Distribution of sample based on years of experience and educational status

(n=70)

Sample variables	Classification	Frequency (f)	Percentage (%)
Years of experience	1-4	35	50
	4-8	32	45.7
	8-12	3	4.3
Educational status	BSc Nursing	33	47.2
	GNM Nursing	37	52.8

Table 1 show that 50% have 1-4 years of experience, another 45.7% with 4-8 years and the rest 4.3% with 8-12 years. Regarding the educational status 47.2% are B.Sc. nurses and 52.8% are GNM nurses.
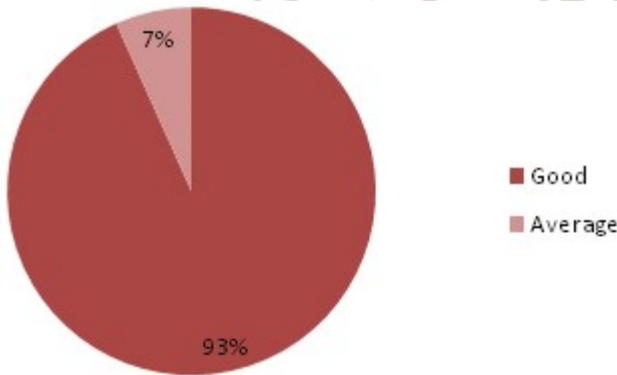

Figure 1: Knowledge scores on safe patient care

Figure 1 shows that majority of the sample 65 (93%) are having good knowledge whereas 5 (7%) are having average knowledge regarding safe patient care.
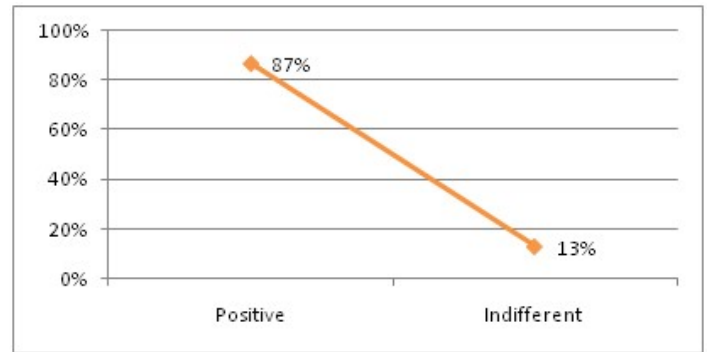

Figure 2: Attitude towards safe patient care

Figure 2 shows that majority 61(87%) of the sample are having positive attitude and 9(13%) having neutral attitude towards safe patient care.
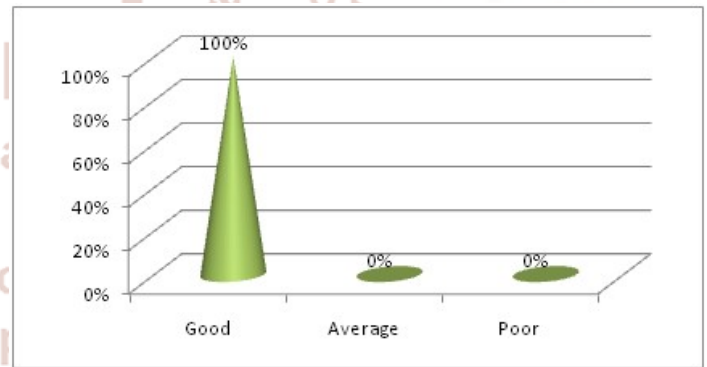

Figure 3: Practice of safe patient care.

Figure 3 shows that the entire sample (100%) has good practice regarding safe patient care.

Table 2: Association between knowledge and selected demographic variables

(n=70)

Variables	Category	Knowledge				df	χ^2	Tabulated value
		Average		Good				
		f	%	f	%			
Educational status [#]	GNM	2	2.9	35	50	1	0.021^{ns}	3.84
	B.Sc	3	4.3	30	42.8			
Years of experience[#]	1-4	4	5.7	31	44.3			
	>4	1	1.4	34	48.6	1	0.86^{ns}	3.84

ns: not significant at 0.05 level;# Yates correction done

Table 2 shows association between knowledge with educational status and years of experience. The obtained χ^2 values (χ^2 =0.021, 0.86) are not statistically significant at 0.05 level. Hence the null hypothesis is accepted, showing no significant association between knowledge with educational status and years of experience.

Table 3: Association between attitude and selected demographic variables

(n=70)

Variables	Category	Attitude				df	χ^2	Tabulated value
		Neutral		Positive				
		f	%	f	%			
Educational status #	GNM	6	8.6	31	44.3	1	152.56*	3.84
	B.Sc.	3	4.3	30	42.8			
Years of experience#	1-4	3	4.3	32	45.7	1	80.2*	3.84
	>4	6	8.6	29	41.4			

Significant at 0.05 level; # Yates correction done

Table 3 shows association between attitude with educational status and years of experience. The obtained value (χ^2 =152.56, 80.2) is statistically significant at 0.05 level. Hence the null hypothesis is rejected and research hypothesis is accepted, showing significant association between knowledge with educational status and years of experience.

Table 4: Correlation between study variables

(n=70)

Variables	Pearson's Correlation (r)	p value
Knowledge and attitude	0.208	0.084[ns]
Attitude and practice	0.032	0.795 [ns]
Knowledge and practice	0.361	0.002**

*** Significant at 0.05 level*

Table 4 depicts no correlation between knowledge and attitude (r=0.208, p=0.084), practice and attitude (r=0.032, p=0.795) regarding safe patient care. The correlation between knowledge and practice (r=0.361, p=0.002) is statistically significant at 0.05 level.

RESULTS

With regard to the years of experience, 50% of the sample has 1-4 years, 45.7% have 4-8 years and 4.3% have 8-12 years of experience. Among the sample, 47.2% are B.Sc. nurses and 52.8% are GNM nurses. Majority of the sample has good knowledge (65, 93%) and positive attitude (61, 87%) towards safe patient care. All sample (70, 100%) reported good patient safety practices. The findings of the study also show no significant association between knowledge with educational status and years of experience. The obtained χ^2 values (χ^2 =0.021, 0.86) are not statistically significant at 0.05 level. The association between attitude with educational status and year of experience (χ2 =152.56, 80.2) are statistically significant at .05 level. While there is a correlation exists between knowledge and practice (r=0.361, p=0.002) at 0.05 level of significance, no correlation is found between knowledge and attitude (r=0.208, p=0.084), practice and attitude (r=0.032, p=0.795) regarding safe patient care.

DISCUSSION

A large part of the patient care is the effort of nurses. Nurses apply their knowledge, skills and experience to care for the various and changing needs of patients[13]. The quality of care by nurse correspond with outcome measures of quality in a hospital[14].The present study also illustrates that nurses have a good knowledge and practice regarding safe patient care are and their attitude is positive towards safe patient are. This findings contradict the findings of a study[9] that indicated a quite a low level of safety knowledge among health care professionals. The findings of an another study[15] that investigated the level of knowledge, attitudes, and practices of nurses about preventing the spread and management of HAIs at University Clinical Center of Kosovo (UCCK) support the present study. The general level of knowledge of nurses about the spread of HAIs was 90%, about the attitudes was 84.4% and about the nurses' practices was 76.2%.

IMPLICATIONS OF THE STUDY

Nursing Practice: Advanced basis such as guidelines and protocols help to adhere to safe patient care by nurses. Nurses must continue to identify knowledge; attitude and practice gap as well. They must sustain their proficiency through training and in service education.

Nursing Education: Nursing students must be provided with opportunities to participate in patient

safety practices through effective clinical instructions and training. Nursing clinical should be conducted emphasizing safe patient care.

Nursing Administration: Nurse Administrators should round on patients time to time to ensure safe patient care, using evidence based findings and make available clinical guidelines and protocols for the new nurses and nursing students.

Nursing Research: Nurse Researchers can conduct interventional studies regarding safe patient care. They can also conduct studies on factors contributing to safe patient care.

CONCLUSION
The present study claims that Medical ICU nurses have good knowledge, attitude and practice regarding safe patient care. Their knowledge and practice have a positive correlation. The study concludes that good knowledge, attitude and practice enhance safe patient care. Nurses are the driving force behind patient perceptions of safety and satisfaction.

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