

KAP ANALYSIS AMONG NURSES WORKING IN A TERTIARY CARE HOSPITAL REGARDING PATIENT SAFETY

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(Received, 27th August 2024, Revised 30th November 2024, Published 15th December 2024)

Abstract: Patient safety is a critical aspect of healthcare quality, requiring healthcare professionals, particularly nurses, to possess adequate knowledge, maintain a positive attitude, and adhere to safe practices. This study evaluates the knowledge, attitudes, and practices of nurses regarding patient safety in a tertiary care setting. **Objective:** To assess the knowledge, attitudes, and practices of nurses regarding patient safety at a tertiary care hospital. **Methods:** A cross-sectional study was conducted in the Nursing Department of Nishtar Hospital, Multan from October 2023 to October 2024. A total of 100 nurses from all departments with at least one year of working experience and a bachelor's degree were included in the study. A 42-item questionnaire containing four sections was employed to assess participants. **Results:** The mean knowledge score was 8.9 ± 1.43 among which 60% had good knowledge and 40% had poor knowledge about patient safety. The mean attitude score was 56.59 ± 10.23 among which 59% had a positive attitude and 41% had a negative attitude. The mean practice score was 5.71 ± 1.65 among which 60% had good practices and 40% had poor practices. Multiple regression analysis showed that knowledge score has no significant predictors. However, age and knowledge of patient safety during education were significantly associated with attitudes. Knowledge of patient safety during education was also significantly associated with practices. **Conclusion:** The knowledge, attitudes, and practices regarding patient safety were satisfactory in nurses working in tertiary care hospitals. However, improvements are required in hospital culture and policies to enhance patient care.

Keywords: Knowledge, Nurses, Nursing, KAP.

Introduction

A major part of providing the best treatment to patients is maintaining high-quality care by adhering to health standards and safety measures and providing affordable services. Patient safety plays a vital role in preventing errors and adverse patient outcomes which are among the leading causes of mortality according to an IHI report.¹ Due to a lack of adequate policies and administrative negligence, the incidence of these errors is more frequent in developing countries like Pakistan.²

Nurses are the backbone of the health care system and ensure patient safety by examining patients more often and detecting risks timely. Hence, it is significant that nurses are equipped with the latest knowledge and positive attitudes to promote quality care and the safety of patients.³ This can be achieved by conducting risk assessment surveys and reviewing policies frequently.⁴ Nurses should be trained during their education about patient safety, communication, and stress management.⁵

In Pakistan, the rate of mortality due to errors, negligence, and failure to report from healthcare providers is high. Nurses being a big part of the healthcare force, are mostly responsible for these adverse outcomes. This study was conducted to assess the knowledge, attitudes, and practices of nurses regarding patient safety at a tertiary care hospital.

Methodology

A cross-sectional study was conducted in the Nursing Department of Nishtar Hospital, Multan from October 2023

to October 2024. A total of 100 nurses from all departments with at least one year of working experience and a bachelor's degree were included in the study by non-probability sampling technique. Students and nurses on a short-term contract were excluded. All participants provided their informed consent to become a part of the study. The ethical board of the hospital approved the study.

A 42-item questionnaire containing four sections was employed to assess participants. The first section inquired about demographic and social data, qualifications, and job details. The second section included 11 questions that could be answered by yes or no to evaluate the knowledge of nurses. The third question included 15 questions to measure the attitudes of nurses which could be answered on a Likert scale from 1 to 5 with 1 being strongly disagree and 5 being strongly agree. Practices were assessed by eight questions which could be answered by yes or no. The Cronbach's alpha of the questionnaire was 0.9.

All data was analyzed by SPSS version 26. Descriptive analysis was conducted to evaluate demographic variables and KAP scores which were presented by mean \pm SD or percentage. Predictors of KAP scores were assessed by multiple regression analyses.

Results

A total of 100 nurses were included in the assessment. 90 (90%) nurses were female and the mean age of participants was 36.8 ± 5.53 years. The mean experience duration was 14.7 ± 7.0 years. 90 (90%) had a bachelor's degree and 10

(10%) had a master's degree. 50% of nurses worked in all departments and 30% worked a double job (Table I). The mean knowledge score was 8.9 ± 1.43 among which 60% had good knowledge and 40% had poor knowledge about patient safety. 90% of nurses reported hospital environment as the major cause of healthcare errors but only 50% of the participants thought that these errors make a healthcare professional incompetent. 94% of nurses agreed that positive hospital culture facilitated patient safety and 82% thought that patients also play a role in this regard. The mean attitude score was 56.59 ± 10.23 among which 59% had a positive attitude and 41% had a negative attitude. 76% of the nurses felt comfortable raising a concern regarding their patients but 46% reported that these concerns were not addressed appropriately. 77% of nurses said that they would prefer to be a patient in their institute when the need arises and 70% reported that medical errors are handled well in their hospital.

The mean practice score was 5.71 ± 1.65 among which 60% had good practices and 40% had poor practices. 85% of participants were informed about the teamwork in their department, 80% reported that their supervisor promoted patient safety practices and 70% agreed that they received feedback about errors. The KAP scores of participants are shown in Table II.

Multiple regression analysis showed that knowledge score has no significant predictors. However, age and knowledge of patient safety during education were significantly associated with attitudes. Knowledge of patient safety during education was also significantly associated with practices. Total knowledge score was significantly associated with total attitude score ($r=0.208$, $p=0.0$) and total practice score ($r=0.299$, $p=0.0$). In addition, the total attitude score was also significantly associated with the total practice score ($r=0.632$, $p=0.0$).

Table I: Participants' sociodemographic details

Variables	N (%)
Mean age	36.8 ± 5.53
Sex	
Male	10 (10%)
Female	90 (90%)
Mean experience	14.7 ± 7.0
Mean job hours per week	36.2 ± 4.18
Marital status	
Single	15 (15%)
Married	85 (85%)
Qualification	
Bachelors	90 (90%)
Masters	10 (10%)
Department	
Emergency	20 (20%)
Midwifery/ Maternity	25 (25%)
Surgery	5 (5%)
All departments	50 (50%)
Work at another hospital	30 (30%)
Patient safety education during professional degree	63 (63%)

Table II: KAP scores of study participants

Scores	Mean \pm SD / N (%)
Mean knowledge score	8.9 ± 1.43
Good knowledge	60 (60%)
Poor knowledge	40 (40%)
Mean attitude score	56.59 ± 10.23
Positive attitude	59 (59%)
Negative attitude	41 (41%)
Mean practice score	5.71 ± 1.65
Good practice	60 (60%)
Poor practice	40 (40%)

Discussion

This study was conducted to analyze the knowledge, attitudes, and practices of nurses regarding patient safety. The results revealed satisfactory KAP scores which is similar to findings reported by developed countries.6, 7 Our scores are significantly better than those reported by other developing countries.8, 9, 10

A total of 60% of participants in our study possessed good knowledge about patient safety with a mean score of $8.9 \pm$

1.43. These findings are similar to some studies and higher than other studies.11, 12 Participants recognized the hospital environment and culture as contributors to patient safety. The knowledge score was not influenced by demographics indicating that a good knowledge score was contingent upon experience and training rather than professional education. This finding is different from other studies that report an association between knowledge scores about patient safety and qualification.13

A total of 59% of participants had a positive attitude toward patient safety with a mean score of 56.59 ± 10.23 . This score is lower than studies conducted in developing countries which may be due to better educational programs and frequent training workshops for healthcare professionals.¹⁴ However, the majority of the participants were able to be vocal about their concerns and communicate about the medical errors. This is contrary to other studies where nurses were reluctant to report errors due to fear of punishment.¹⁵ Age and knowledge of patient safety during education were significantly associated with attitudes, as reported by previous studies.¹⁶

A total of 60% of participants had good practices with a mean score of 5.71 ± 1.65 . This score is similar to other studies.¹⁷ Although nurses reported a teamwork environment only 20% of participants reported a blame-free response to medical errors which is significantly lower than in studies in developed countries.¹⁸ But a strong leadership regarding patient safety as reported in our study was rarely reported in other studies.

Our study has some limitations. Our results could not be generalized as non-probability sampling was employed for the inclusion of participants. Secondly, bias may have influenced the findings as the questionnaire was self-reported.

Conclusion

The knowledge, attitudes, and practices regarding patient safety were satisfactory in nurses working in tertiary care hospitals. However, improvements are required in hospital culture and policies to enhance patient care.

Declarations

Data Availability statement

All data generated or analyzed during the study are included in the manuscript.

Ethics approval and consent to participate.

Approved by the department Concerned. (IRBEC-NNCM-04332/23)

Consent for publication

Approved

Funding

Not applicable

Conflict of interest

The authors declared an absence of conflict of interest.

Authors Contribution

ASAD (Clinical Nursing Instructor)

Final Approval of version & Data Analysis

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Revisiting Critically, Drafting, Concept & Design of Study

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Revisiting Critically

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