



Knowledge Regarding Patient Safety in Operation Theatre among Operating Room Nurses: A Descriptive Study

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Abstract

The present study was conducted to assess the knowledge regarding patient safety in operation theatre among operating room nurses of selected hospital, Kottayam. Objectives of the study were to assess the knowledge regarding patient safety in operation theatre among operating room nurses and to find out the association between knowledge of operating room nurses regarding patient safety in operation theatre and demographic variables. Convenience sampling technique was used to select 30 subjects from the operating room nurses of selected hospital, Kottayam. The tool for data collection was a structured questionnaire to assess the knowledge of operating room nurses regarding patient safety in operation theatre. The result showed that majority of the subjects 19(63.34%) had good knowledge, 10(33.33%) had average knowledge and only 1(3.3%) had poor knowledge regarding patient safety in operation theatre. The study findings revealed that there is no significant association between knowledge of operating room nurses regarding patient safety and selected demographic variables. From this study it is indicated that majority of the subjects had good knowledge regarding patient safety in operation theatre.

Keywords: Knowledge; Operating Room Nurses; Patient Safety; Operation Theatre

Introduction

Patient safety is an essential discipline evolved to address the growing complexities of health care ensuring harm free care. Effective patient safety measures are fundamental to deliver quality health care services by minimizing risks and preventing adverse outcomes. The primary objective of patient safety is to identify, assess and mitigate potential hazards, safeguarding patients from harm during the delivery of health care. Through relentless learning from errors and adverse events, patient safety promotes a culture of quality

improvement [1].

A study from 56 countries in 2004 stated that the annual major surgery volume was estimated to be 187-281 million operations, accounting for approximately one operation every year for every 25 human beings alive [2]. In subsequent studies data were obtained from 194 member states of world Health Organization for the years 2005 to 2012. According to these studies 3312.9 million operations took place in 2012 showing an increase from the 2004 estimate of 2264 million operations [3]. The incidence of post-operative infections

reported among the developed countries like UK and USA was approximately 5% and 5-6%, whereas in developing countries like India it is much higher, reporting 10-25% [4]. The main problem encountered in the practice of surgical safety is that existing practices are not adequate in some countries to ensure the safety of patients. Lack of resources is the main reason behind this, particularly in developing countries. Good infection prevention and control is essential to ensure the safety of the patient undergoing any surgical procedure in the operating theatre. The surgical site infections (SSIs) constitute 20% of the total hospital acquired infections [5].

Nurses play a pivotal role in direct patient care and safety surveillance in the operating theatre. This role suggests a need for consensus on a core set of measures that can be used to monitor safe practices and guide resources allocation decision that affect patient outcome in operation theatre [6]. An operating room nurse can completely prevent all type of surgical negligence in operation theatre such as performing wrong site surgery, leaving foreign object in patient body after surgical procedure, improper sterilization of instruments and so on. This y monitoring patients before, during and after surgery, detecting errors, understanding care process, proper communication and maintenance of supplies and equipment's of surgery. So it very important that an operating room nurses must possess adequate knowledge regarding patient safety [7].

Methodology

This descriptive study was conducted among 30 operating room nurses selected using convenience sampling at selected hospital, Kottayam. In this study, knowledge regarding patient safety in operation theatre is research variable which is observed in natural setting without manipulating it. In addition demographic variables such as age, gender, education, total year of experience in Operation Theatre and total years of experiences are studied to establish its relation with the research variables. Structured knowledge questionnaire which consists of 30 questions to assess the knowledge regarding patient safety in operation theatre among operating room nurses and each correct answer carries a score one was prepared by investigators. The total score is 30; the total score is classified as poor, average and good. To ensure content validity of the tool, the tool was given to three experts from the field of Medical Surgical Nursing department. As per the suggestions and opinion from the experts' 4 items were deleted from the tool. Formal written permission obtained from principal, Caritas College of Nursing and Director of Caritas Hospital and Institute of Health Sciences and also from the Supervisor and In charge of the operation theatre. The data collection was on 15/09/2022; the subjects were informed about the study and ask for their willingness to participate in the study. A

structured questionnaire was distributed to elicit knowledge of operating room nurses regarding patient safety in operation theatre. It took 15-25 minutes to complete the questionnaire.

Results

Socio Demographic Data of Study Subjects

The present study revealed that 18(60%) of subjects belongs to 31-40 years of age, 7(23.3%) of subjects belongs to the age group of 21-30 years, 5(16.7%) belongs to 41-50 years of age and no one belongs to >50 years of age. Among the 30 sample all subjects 30 (100%) are females. The educational status of the samples revealed that 20(66.7%) belongs to general Nursing, 6(20%) belongs to BSc Nursing and 4(13.3%) belongs to post basic BSc nursing. The total years of experience of the sample shows that 13(43.3%) of subjects had 11-15 years of experience, 7(23.3%) of subjects had 6-10 years of experience, 6(20%) of subjects had up to 5 years of experience and 4 (13.3%) of subjects had above 15 years of experience. The total years of experience in operation theatre of the sample shows that 10(33.3%) of subjects had 11-15 years of experience, 9(30%) of subjects had up to 5 years of experience, 8 (26.7%) of subjects had 6-10 years of experience in operation theatre and 3(10%) of subjects had > 15 years of experience.

Knowledge Level of Operating Room Nurses Regarding Patient Safety in Operation Theatre

Range of score	Knowledge level	Frequency	Percentage (%)
0-10	Poor	1	3.33
Nov-20	Average	10	33.33
21-30	Good	19	63.34

Table 1: Frequency and percentage distribution of level of knowledge of operating room nurses regarding patient safety in operation theatre.

Demographic variables	Chi-square	df	Level of significance
Age	0.8	1	NS
Total years of experience	0.2	1	NS
Total years of experience in operation theatre	0.01	1	NS

$X^{2(1)} = 3.84$, Significance level= 0.05

Table 2: Chi-square values of selected demographic variables, df and level of significance.

The data presented in the above table shows that the obtained chi-square values of age, Total years of experience and total years of experience in operation theatre is less than the table value at 0.05 level of significance. There is no significant association between age, total years of experience and total years of experience in operation theatre and knowledge level of operating room nurses regarding patient safety in operation theatre.

Discussion

Operating room nurses face on-going criticism and scrutiny regarding the relevance of their nursing practice to ensure patient safety in surgical environment. The adaptation of operating room nurses to technological advancements has transformed nursing roles to render higher quality health care services. A solid grasp of patient safety protocols still remain essential for the operating room nurses to function effectively and efficiently. In this study majority of the subjects 19(63.34%) had good knowledge, 10(33.3%) had average knowledge and only 1(3.33%) had poor knowledge regarding patient safety in operation theatre. From the study, it shows that there is no significant association between knowledge of operating room nurses regarding patient safety in operation theatre and selected demographic variables.

A descriptive study to assess the nurses' performance regarding patient safety in operating room at Zagazig University Hospitals revealed that 74% of studied nurses under the study had unsatisfactory level of knowledge and 54% had unsatisfactory level of practice regarding patient safety in operating room. The result showed that 96% of studied nurses had positive attitude regarding patient safety in operating room [8]. In contradictory, in this study majority of the subjects 19(63.34%) had good knowledge regarding patient safety in operation theatre. The present study findings showed that there is no significant association between age, total years of experience and total years of experience in operation theatre and knowledge level of operating room nurses regarding patient safety in operation theatre. This result was consistent with the study titled "Team steps improving operating room efficiency and patient safety" that there was no statistically significant relation between nurse's practice and their age, occupation and years of experience [9].

Operating room nurses should be able to gain up-to-date knowledge regarding patient safety. Without developing an adequate knowledge regarding patient safety in operation theatre can still put a patient at risk of unwanted complication. Nursing education should focus more in teaching and practicing nursing students at operation theatre for gaining better knowledge and skill in handling and caring patient without causing any harm before, during and after surgeries. In service training and workshop can help nursing

professionals stay updated on knowledge [10]. The study is descriptive in nature including only 30 samples selected by convenient sampling technique even though there are 72 operating room nurses in the study setting is the only limitation of generating the result [11].

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