A Study to Assess the Impact of Self Instructional Module Regarding Knowledge on Patient Safety Measures Among Staff Nurses in Srm General Hospital, Kattankulathur, Tamil Nadu, India

Section A-Research paper

A STUDY TO ASSESS THE IMPACT OF SELF INSTRUCTIONAL MODULE REGARDING KNOWLEDGE ON PATIENT SAFETY MEASURES AMONG STAFF NURSES IN SRM GENERAL HOSPITAL, KATTANKULATHUR, TAMIL NADU, INDIA

R. Shenbagam[1], D. Siva shanmugam[2], Dr. T. Suseelal[3*], Dr. C. Kanniammal[4].

Abstract

Globally patient safety is one of the important aspect of nursing care. Inspite of expert treatment and care at times medical errors and patient falls and injuries are reported. The present study aims to assess the knowledge of staff nurses in SRM general hospital on patient safety measures and planned to educate them with self instructional module on areas of inpatient care in hospital. A Single blinded quantitative experimental descriptive research design was used in this study. After decision from expert committee and explaining and getting consent by convenient sampling technique pre knowledge on patient safety was assessed with 30 self structured objective type questions among 100 staff nurses. Patient safety on medication errors, patient falls and injuries, prevention of infection was explained to the staff nurses and a module was given to the staff nurses. After 3 days post test was done with same questionnaire. The result revealed in the pre test 16% of the staff nurses had good knowledge and in post test 89% of staff nurses had excellent level of knowledge on patient safety issues. The pre mean value was 11.29 with SD 3.65, and the post test mean value was 25.79 with SD 2.43.The study was found significant with P<0.01. The study concluded that there was improvement in the staff nurses knowledge on patient safety measures and the hypothesis formulated was proved.

Keywords: Patient safety, Medication errors, Patient falls, Injuries, Prevention of Infection, Self instructional module.

[1,2,3*,4]SRM College of nursing, SRM IST, Kancheepuram – 603203, Tamil Nadu, India

Corresponding Email. [3*]Suseelal.john@gmail.com

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1. Introduction

In clinical practice mistakes and negative outcomes are still common despite enhanced attention to patient safety and quality of health care. Understanding the major contributing factors to medical errors and identifying efficient measures to decrease them are crucial in order to enhance patient safety[1]. Security of patient is a severe world wide problem of public health. In latest years many nations have progressively acknowledged the significance of offering patient safety.

The economic advantages of enhancing patient safety are convincing. Studies demonstrated that some Nations spend between US$ 6 billion and US 29 billion a year for additional hospitalization proceeding cost infection in hospitals lost revenue and medical expenses. Quality Nursing care and safety environment improve the satisfaction of patients and their compliance to treatment.[3] Industries perceives higher hazards as aviation and nuclear power have much better record of safety than health care. There is a chance that in an aircraft a traveler may be harmed. By contrast there is one in three hundred chance that a patient will be harmed during medical care.[4]

The medical team is prepared to prevent all hospital acquired infections and injuries. Safety precautions are at times neglected due to lack of man, materials and money. Due to today's busy life patient's family members are unable to provide proper care to their family members. Also the staff nurses those who surrounds the patient needs more knowledge and they should update the nursing care according to the current scenario.[5] Patients safety is important in hospital and home set up to prevent geriatric problems. It is the responsibility of medical professionals to teach health care professionals, patients, and family members.[6]

Brasaiteal.etal; (2016) conducted a cross sectional survey on patient security attitudes abilities and expertise among 1082 hospitals. Employees in 3 multi profile clinics in western Lithuania were assessed. There outcome indicated reinforcement of leadership qualities. Universities may need more support in developing their patient security abilities.[7] Yawaralam A. etal ; (2016) done a project on awareness to implementation on quality of patient safety indicators among 85 nurses with stratified random sampling in 10 units of the hospital by using qualities and patient safety awareness tool. Their result showed the compliance on quality and patient safety policies was lower than the knowledge.[8] Introducing the safety culture into the organization of health care is one aspect of patient safety, which is supposed to contribute considerably to improving patient safety. Safety culture has become a major issues for a health care organization that strives to enhance patient safety and some safety research has shown that the organization needs to modify its culture to make it a reality. Recent studies have evaluated the safety culture of various kinds of health care organizations and the safety culture of hospitals has been related to patient safety.[9]
Assessment of a health care organizations present safety culture is the first step in identifying the most difficult

regions for enhancement. Because knowledge attitudes and behavior patterns of the health care employees are critical to promoting the workplace climate required to ensure a safety culture for an organization. Very little information is accessible in Italy.[10]

The   aim of this research is to investigate nurses understanding of evidence based patient safety policies and to assess their attitudes to prevent and manage medical errors. In order to provide quality nursing care to the inpatients and to improve the knowledge of staff nurses on patient safety measures the researchers were interested to proceed with this study. This study also bridge the gap between theory and practice.[11]

2. Materials and Methods

It was a single blinded quantitative study with experimental descriptive design based on knowledge assessment of patients safety measures among staff nurses in SRM General hospital Kattankulathur. Formal approval was obtained from SRM Institute of Ethical committee. After explaining the need for the study and getting the written consent data was collected from 100 staff nurses by using convenient sampling technique. The data was collected from 23 January to 31 January 2019. Pilot study was done with 10 staff nurses and it seems feasible to proceed with the main study. The reliability of the tool was assessed by test retest method. The knowledge score reliability correlation coefficient value is 0.8. pre test was done by using demographic variables like age, gender, education and clinical variables such as orientation to patient safety, year of orientation, usual duty shift, information about medical errors. The patients safety measures includes 30 self structured multiple choice questions on prevention of falls and injury, prevention of infection and medication administration and general patient safety measures. Each correct answer was given a score of one and wrong answer was given a score of 0. The main study data collection was done from 23.1.19 to 31.1.2019 at SRM general hospital.100 samples were selected according to the criteria. The purposes of the study were explained and the pre test questionnaire was given to them. The staff nurses were informed that their response will be kept confidential. Approximately each of them took about 15 – 20 minutes for answering the questions. The self instructional module on patient safety measures was given to the participants after collecting the pre test. After three days post test was collected with the same questionnaire. Adequate co operation was gained by the investigator with the staff nurses The collected data was entered in the X-el sheet and it was analysed by SPSS Version 16.0. The p value < 0.05 was used for statistical significant.

3. Results

The demographic variables revealed among 100 staff nurses majority of the participants (63%) of them belongs to age group of 21-25 years, (28%) of them belongs to age group of 26-30 years, (6%) of them belongs to 26- 30 years, (3%) of them belongs to 31-35 years. Regarding gender majority (75%) of the participants were females   and (25%) of them were males. Considering marital status majority of them were

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(64%) were unmarried and (36%) married. In relation to education majority (61%) of them studied BSc Nursing, (28%) of them completed diploma degree, (9%) of them studied master degree, (2%) of them completed post basic Nursing. Regarding year of experience majority (60%) of them belongs to 1-5 year experience, (29%) belongs to 6-10 year experience, (8%) of them belongs to 11-15 year of experience and (3%) of them were above (20%) experience. Considering orientation to patient safety measures majority of them (88%) were oriented before and (12%) not oriented. Regarding duty schedule (51%) of them were on morning shift, (42%) were on afternoon shift and (7%) of them were on night shift. About knowledge on medical error (35%) staff nurses were aware of patients fall, (45%) were known about needle stick injury and (20%) of them had knowledge on death due to fall.

Table 1: Frequency and percentage distribution of knowledge of staff nurses before and after training on patient safety measures.

N=100

S. No.	Knowledge Level	No. of respondents			
		Before training	%	After training	%
1	Poor	12	12	0	0
2	Fair	72	72	0	0
3	Good	16	16	11	11
3	Excellent	0	0	89	89

Above table reveals the post test knowledge level on patient safety measures after education had improved 89 percentage

Table2: Over all knowledge score of staff nurses before and after training on patient safety measures

N=100

S. No.	Knowledge	N	Mean	S.D	t-value	DF	P-value
1	Before training	100	11.29	3.652	-31.551	99	0.000**
2	After training	100	25.79	2.430			

*-Significant at P <0.05

The p-value from the table above is highly significant at 0.001 level since it is less than P<0.05.Hence there is high significant difference between the mean values of knowledge score before and after the training

Regarding the association with demographic variables and the post test knowledge level on patient safety measures all the variables are not significant since the P value is > 0.05.

4. Discussion

The patients and relatives are unaware of hazards and dangers. At times the patients are unable to tell their complaints. The staff nurses are more knowledgeable about nosocomial infections, falls, injuries, unnecessary bleeding, pain and complications. The present study helped the researchers to educate the staff nurses on patients safety measures during their stay in hospital. Its a wonderful opportunity to serve the human being than doing any other job. SRM Medical and Nursing students and staff of the hospital are providing excellent care to all the patients. Even then at times the negligence of the patients, family members caused very few incidents. Also missing care and errors in procedures can create pain and problems to the patients. It is a difficult situation to the patients and family members. This study is an eye opener to the staff nurses to provide excellent care and to keep vigilant supervision on the patients in the wards Regarding the assessment on knowledge of patients safety in the pre test 12% staff nurses belongs to poor level knowledge, 72% staff nurses belongs to fair level knowledge, 16% staff nurses belongs to good level knowledge. None of them had excellent level of knowledge. The assessment on knowledge before training mean value (11.29), SD (3.652) . After the education with self instructional module the post test revealed that among 100 samples, 11% staff nurses had good level of knowledge and 89%staff nurses had excellent level of knowledge on patient safety measures. The mean value was (25.79) with SD (2.43) and the p value<0.05 level. It was highly significant and the research hypothesis formulated in the study was accepted. The study findings correlate with the study done by Yavaralam A etal;(2016) on assessment of patient safety with p value =.008. The study recommend

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that patients safety must be reinforced to the health care team. The managers and leaders must train the subordinates on all areas of medical treatment and nursing care to facilitate quality inpatient care. So that the patients and relatives will be happy and satisfied when they are discharged.

5. Conclusion

The present study assessed the level of knowledge on patient safety measures among staff nurses and educated them with self instructional module. The post test revealed high level of knowledge on patient safety measures among the staff Nurses. Hence the nurses will be competent to provide care to the inpatients and they can be prevented from unnecessary pain and complications by excellent treatment and nursing care by the health professionals.

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