A DESCRIPTIVE STUDY TO ASSESS THE LEVEL OF KNOWLEDGE ON PATIENT SAFETY AMONG III-YEAR BSC NURSING STUDENTS AT CSI ELIZA CALDWELL COLLEGE OF NURSING IN TIRUNELVELI DISTRICT.

This research paper is a part of Ph.D thesis of The TamilNadu Dr.M.G.R Medical University

T.Kumudha, Ph.D Scholar<sup>1</sup>, CSI Elza Caldwell of Nursing, Corresponding Author

Dr.D. Celina, Ph.D, Vice Principal <sup>2</sup>, Omayal Achi College of Nursing, Research Guide

S. Jebalinu, Asst.Professor<sup>3</sup> CSI Elza Caldwell of Nursing, Co-Author

### **ABSTRACT**

Patient safety is the prevention of errors and adverse effects to patients associated with health care and to do no harm to patients. In the newspapers and other social medias, we are coming across the medical errors that are happening frequently which are not only affecting patients life and suffering of their families but also create a disturbance in life of medical staff both emotionally and financially. A descriptive (Non experimental) research design was adopted in this study. Target population was BSc Nursing Students at CSI Eliza Caldwell College of Nursing. Accessible population was III-year BSc Nursing Students at selected nursing college. The Samples selected was III-year BSc Nursing Students at selected nursing college. The sample size comprises of 50 III-year BSC Nursing Students. Non probability purposive sampling technique was adopted in this study. The findings of the study shows that majority of students had 30 (60%) inadequate level of Knowledge ,15(30%) had moderate level of Knowledge and 5(10%) had adequate level of knowledge. This study shows that overall experience of conducting this study was enriching, hence it gave an opportunity to the investigator to acquire new information, skill, as well as a rich learning experience.

### INTRODUCTION

Patient safety is an integral part of health care and is defined as the patient's freedom from unnecessary or potential harm associated with health care delivery. Patient safety is one of the dimensions of treatment quality, along with availability, acceptability, effectiveness, efficiency and people-centeredness. It covers various aspects that are central to the provision of quality health services. It concerns safe surgical treatment and safe delivery, injection safety, blood safety, medication safety, medical devices, safe transport and donation of organs, tissues and cells. (Lucian Leape, 2023).



Peer Reviewed Journal ISSN 2581-7795

Student nurses are an integral part of the healthcare system as they undergo extensive training to become compassionate and skilled nurses. With their dedication and passion for helping others, student nurses play a critical role in providing quality patient care and promoting the health and well-being of their communities (Godoy, 2023).

An estimation of 1 in 10 patients suffers from harm in healthcare. Over 3 million deaths occur annually in low to middle income countries, whereas 4 in 100 people die due to unsafe care. More than 50% of harms can be preventable from medication error. About 40% of patients in primary care settings endure harm whereas 80% of this harm can be avoidable, caused by various factors like medication errors and patient falls (World Health Organization, 2023).

In India, more than 10,0000 patients die every year due to medical errors caused by doctors and nurses with inadequate knowledge and skills to treat patients when they are brought to the hospital. (Harvard University,2022)

Today a gap of evidence about the extent and type of the role of nursing education in Patient safety improvement.as well as perceived confidence of undergraduate nursing students in specific patient safety areas still exit. The present study aim to assess the level of knowledge on patient safety among III-year BSc Nursing students

### STATEMENT OF THE PROBLEM

A descriptive study to assess the level of knowledge on patient safety among III-year BSc Nursing students at CSI Eliza Caldwell College of nursing in Tirunelveli district.

#### **OBJECTIVES**

- ❖ To assess the level of knowledge on patient safety among III-year BSc Nursing students.
- ❖ To determine the association between the level of knowledge on patient safety among III-year BSc Nursing students with their selected demographic variables such as age in years, religion, total month of clinical exposure and previous knowledge of patient safety.

# **HYPOTHESES**

❖ H₁: There was a significant association between the level of knowledge regarding patient safety among III-year BSc Nursing students with their selected demographic Variable.

### **ASSUMPTIONS**

- ❖ The students have inadequate knowledge regarding patient safety.
- ❖ Patient safety is an important tool for nursing care in every nurse's life.
- Student nurses need to learn more about patient safety.

## **DELIMITATIONS**

The study was delimited to 50 III-year BSC Nursing students.



Peer Reviewed Journal ISSN 2581-7795

The study was delimited to duration of 1 week.

### RESEARCH METHODOLOGY

A descriptive (Non experimental) research design was adopted in this study. Target population was BSc Nursing Students at CSI Eliza Caldwell College of Nursing. Accessible population was III-year BSc Nursing Students at selected nursing college. The Samples selected was III-year BSc Nursing Students at selected nursing college. The sample size comprises of 50 III-year BSC Nursing Students. Non probability purposive sampling technique was adopted in this study.

#### SAMPLING CRITERIA

#### **Inclusion criteria**

- ❖ III-year BSc Nursing Students studying in selected Nursing college
- ❖ III-year BSc Nursing Students who are willing to participate in the study
- ❖ III-year BSc Nursing Students who are available during data collection period

### **Exclusion criteria**

- ❖ III-year BSc Nursing Students who are not willing to participate in this study
- ❖ III-year BSc Nursing Students who are absent during data collection

### **SETTINGS OF THE STUDY**

The study was conducted at CSI Eliza Caldwell College of Nursing which consists of approximately 200 students who are studying BSc Nursing degree programme.

## DATA COLLECTION PROCEDURE

After getting concern from the participants the researcher explained the need and purposes of the study and data collection was done with the data collection tool and structured knowledge questionnaire to the participants.

#### ETHICAL CONSIDERATION

- Ethical clearancewas obtained from the institutional Ethics Committee before concting the study
- ❖ Informed consent was obtained in the written form from all the participants before commencing the study.
- ❖ Justice, privacy and confidentiality was maintained during the data collection period.
- \* The sample has the freedom to withdraw from the study at any time.

## **DESCRIPTION OF THE TOOL**

The tool consists of two sections

# Section-A: Background variable

It consists of age in years, religion, total month of clinical exposure and previous knowledge regarding patient safety.

### **Section- B: Structured Knowledge questionnaire**



It consists of 20 structured knowledge questionnaires.

#### **SCORING INTERPRETATION**

S.No	Level of knowledge	Score/Percentage		
1	Inadequate knowledge	<50		
2	Moderate knowledge	51-74		
3	Adequate knowledge	75-100		

### PLAN FOR DATA ANALYSIS

Both descriptive and inferential statistics were used to analyze the data.

## **DESCRIPTIVE STATISTICS**

Mean and standard deviation was used to assess the level of knowledge regarding patient safety among III-year BSc Nursing students.

### **INFERENTIAL STATISTICS**

The Chi-square test was used to analyze the association between the demographic variables and level of knowledge regarding patient safety among III-year BSc Nursing students.

#### FINDINGS OF THE STUDY

The findings of the study were analyzed based on the objectives of the study.

Table I: Distribution of samples according to their demographic variables

(N=50)

S.No	Demographic Variables	f	%	
1	Age in years			
	A) 18-20	50	100%	
	B) 21-23	0	0%	
2	Religion			
	A) Christian	27	54%	
	B) Hindu	23	46%	
3	Total month of clinical exposure			
	a) 1-3 month	50	100%	
	b) 4-6 month	0	0%	
	c) 7-9 months	0	0%	
4	Previous knowledge of patient safety			
	A) Yes	15	30%	
	B) No	35	70%	



Peer Reviewed Journal ISSN 2581-7795

**Table 1** shows that majority of the samples 50 (100%) belongs to the age group 18-20 years. Regarding religion majority of the samples 27(54%) were Christian whereas 23 (46%) were belongs to Hindu. Regarding Total month of Clinical Exposure majority 50(100%) had 4-6 Month of clinical exposure. Regarding the Previous knowledge of patient safety, only 15(30%) were having Previous knowledge of patient safety whereas 35(70%) have no knowledge of patient safety.

This study is congruent with the study done by Nur Farhana, et.al (2020) a cross-sectional study on Perception, Knowledge And Attitude Towards Patient Safety Among Nursing Students In A Private College In Malaysia at School of Nursing, Malaysia. Ninety-two nursing students were recruited using the purposive sampling method. A self-administered questionnaire on patient safety was adapted. The findings show that the nursing students had a positive perception of the importance of patient safety in both education and the need for adequate skills. Moreover, 90.3% of students demonstrated a positive attitude toward the importance of patient safety. The majority (98.9%) of the nursing students also demonstrated good knowledge about patient safety. The minimum desirable rates of positive responses of 60% were exceeded among nursing students in all three aspects.

The first objective was to find out the level of knowledge regarding patient safety among III-year BSc Nursing students.

TABLE 2: Frequency and percentage distribution of the level of knowledge regarding patient safety among III-year BSc Nursing students.

S.No	Level of Knowledge	f	%	
1	Adequate knowledge	5	10	
2	Moderate knowledge	15	30	
3	Inadequate knowledge	30	60	

The above findings shows that majority of them 30 (60%) had inadequate level of knowledge, 15(30%) had moderate level of Knowledge and 5(10%) had adequate level of Knowledge.

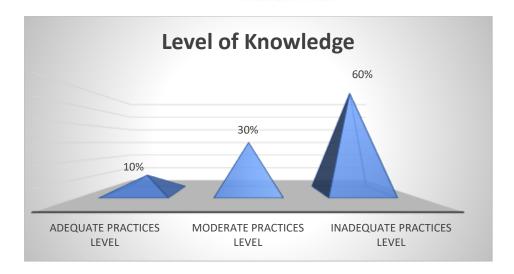


Fig.I Frequency and percentage distribution of level of knowledge regarding patient safety among III-year BSc Nursing students

This study is consistent with another study done by Lenora Duhn, Elizabeth Van Den Kerkhof, (2012), a cross-sectional study on patient Safety Among Undergraduate Nursing Students at Canada. In this study, students in all 4 years of an undergraduate program were asked to complete the Health Professional Education in Patient Safety Survey. Eightyone percent (238 of 293) of students completed the questionnaire. Responses were favorable with students reporting confidence in learning about a variety of patient safety competencies. Of note, there were decreasing levels of confidence in the third-year and fourth-year students and low-to-moderate correlation between classroom and clinical responses. These results support the importance of consistently engaging students in safety principles early in and throughout their health care.



The second objective was to find out the association between the level of knowledge on patient safety among III-year BSc Nursing students with their selected demographic variables

Table 3: Association between the level of knowledge regarding patient safety among III year-BSc Nursing students.

	DEMOGRAPHIC		dequate nowledge	Moderate knowledge		Inadequate knowledge		Chi
S.No	VARIABLES	f	%	F	%	f	%	Square
	Age in years							0
	A) 18-20	5	10%	15	30%	30	60%	Df=2
1	B) 21-23		0%		0%		0%	NS
	Religion							4.9
	A) Christian	2	4%	5	10%	20	40%	df=2
2	B) Hindu	3	6%	10	20%	10	20%	NS
	Total month of clinical							
	exposure							
	a) 1-3 month	5	10%	15	30%	30	60%	0
	b) 4-6month		0%		0%		0%	df=4
3	c) 7-9 months		0%		0%		0%	NS
	Previous knowledge of							
	patient safety							0.32
	A) Yes	2	4%	4	8%	9	18%	df=2
4	B) No	3	6%	11	22%	21	42%	NS

The above table shows that association between the level of knowledge among III-year BSC Nursing students and their selected demographic variables shows that the calculated value is less than the tabulated value (at P<0.05 level-significant). So, it is concluded that there is a no significant association between the above mentioned demographic variables.



Peer Reviewed Journal ISSN 2581-7795

#### **NURSING IMPLICATIONS**

- The result of the study encourages the student nurse to conduct inservice education on patient safety programme.
- Nurse can prepare the protocol regarding patient safety programme.
- Nurse educator can train and encourage the student nurses to implement patient safety programme. The study can motivate student nurses to explore new strategies for efficiency.
- > Evidence based practice should be encouraged about patient safety programme.

#### LIMITATIONS

- ➤ The sample size was limited to only 50 III-year BSc nursing students; hence generalization is not possible.
- Extraneous variables are controlled to some extent only.
- > No intervention was given.

#### RECOMMENDATIONS

On the basis of the findings of the study, the following recommendations have been made for the further study:

- ✓ A descriptive study can be conducted to assess the knowledge and attitude of student nurses towards patient safety programme.
- ✓ The study may be replicated with randomization in selection of a larger sample thereby findings can be generalized.
- ✓ A study can be conducted by including a greater number of variables and at different geographic locations.

### **SUMMARY**

This study shows that overall experience of conducting this study was enriching, hence it gave an opportunity to the investigator to acquire new information, skill, as well as a rich learning experience. The experience of the investigator during the study and the findings helped the investigator to give suggestions.

## CONCLUSION

The conclusion drawn from the findings of the study are as follows: -



Peer Reviewed Journal ISSN 2581-7795

- ❖ The findings of the study enlighten the fact that patient safety programme can be used as a cost-effective nursing intervention in promoting knowledge among student nurses.
- ❖ The demographic variables did not show any association with level of knowledge among students on patient safety programme.

### **REFERENCES**

- 1. World Health Organization, Patient Safety, facts on patient safety, technical report 26 August 2019.
- 2. Gaal et.al, What do primary care physicians and researchers consider the most important patient safety improvement strategies? BMC Health Services Research 2011, 102.
- 3. Butoul Alshaish Alanizy et.al, Are patients knowledgeable of medical errors and medical complications? Riyadh, J Family Med Prime Care. 2021 Aug. 10(8).
- 4. Gwen Sherwood Quality and safety education for nurses, Making progress in patient safety, July 10, 8(3) Published online 2021 June 2.
  - 5. Maria Dimitriadou, The knowledge about patient safety among undergraduate nurse students in Cyprus and Greece, BMC Nurs. 2021, 20:110.