



# A STUDY TO ASSESS THE EFFECTIVENESS OF KNOWLEDGE REGARDING UNIVERSAL SAFETY PRECAUTIONS AMONG NURSING STUDENTS IN SELECTED COLLEGE AT MALAPPURAM DISTRICT.

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## Abstract

A study to assess the effectiveness of knowledge regarding universal safety precautions among nursing students in selected college at malappuram district. The objective of the study was a) Assess the level of knowledge regarding universal safety precautions. b) To evaluate the effect of knowledge regarding universal safety precautions among nursing students. c) To find out the association between the pre-test level of knowledge with selected demographic variables among nursing students. A Quasi experimental, one group pre test post test design was adopted for the study. Purposive sampling technique was used. Sample Size was 75 students, studying in 3<sup>rd</sup> semester. The investigator used Questioner method for assessing knowledge regarding universal safety precautions among nursing students. Structured teaching program was conducted to the students. Post test was conducted using the same research tool. The collected data were analyzed by using descriptive and inferential statistics. The result of pre test shows that out of 75 students 70(93.33%) student have moderate knowledge, 5(6.67%) students have adequate knowledge on universal safety Precautions. After providing structured teaching program the result of the post test showed that the students 15(20%) student have moderate knowledge, 60(80%) students have adequate knowledge. It was analyzed that there is significant improvement in post-test knowledge scores. There was an association between knowledge and selected demographic variables Gender and Source of Knowledge. The finding of the study suggests that structured teaching program is effective in increasing the knowledge of Students.

Key words: Nursing Student, Universal safety precautions

## BACKGROUND OF THE STUDY

Universal Precautions are vital measures that have been adopted to help prevent health workers from being occupationally infected as well as reduce nosocomial infection. Standard precautions are fundamental infection control measures implemented across all healthcare settings to minimize the risk of infection transmission. These measures include practices such as hand hygiene, the use of protective barriers (e.g., gloves, gowns, caps, and masks), proper handling of medical devices and equipment, maintaining environmental cleanliness, adherence to appropriate waste disposal protocols, and ensuring patient accommodation is tailored to infection control requirements. These precautions are critical in safeguarding both healthcare workers and patients from potential infection sources.

## NEED FOR THE STUDY

Infections in health care services represent a global problem and constitute one of the main causes of morbidity and death associated with clinical, diagnostic and therapeutic procedures. Besides their range for patients, healthcare workers are at equal risk of occupational hazards.

Infections, arise in the hospitals are termed as hospital associated infections. Such infections have also been called as 'Nosocomial Infections' and sometimes 'Hospital Acquired Infections'.

As exposure is a constant premise for professionals as well as patients, intervention measures have been proposed to minimize this situation, with the implementation of Universal Safe precautions as one of the strategies.

## OBJECTIVES:

- ❖ Assess the level of knowledge regarding universal safety precautions.
- ❖ To evaluate the effect of knowledge regarding universal safety precautions among nursing students.
- ❖ To find out the association between the pre-test level of knowledge with selected demographic variables among nursing students.

## HYPOTHESIS:

- ❖ H1: The mean of post test level of knowledge will be significantly higher than the mean of pretest level of knowledge among nursing students.
- ❖ H2: There will be a significant association between the post test level of knowledge among nursing students and selected demographic variables.

## STATEMENT OF THE PROBLEM

A study to assess the effectiveness of knowledge regarding universal safety precautions among nursing students in selected college at Malappuram district.

## OPERATIONAL DEFINITION

**Assess:** In this context, "assess" refers to the systematic process of evaluating or measuring nursing students' knowledge and practices regarding universal safety precautions. This can involve various methods such as tests, surveys, observations, or practical evaluations.

**Effectiveness:** Effectiveness refers to the degree to which the knowledge and practices related to universal safety precautions are successfully applied by nursing students. This could be measured by the reduction in incidents of infection, adherence to safety protocols, or the improvement in safety outcomes.

**Knowledge:** This refers to the understanding and awareness that nursing students have regarding universal safety precautions. It includes their familiarity with guidelines, protocols, and the importance of these precautions in preventing infection and ensuring patient safety.

**Universal Safety Precautions:** Universal safety precautions are a set of infection control guidelines designed to protect healthcare workers and patients from exposure to infectious diseases. These precautions include hand hygiene, wearing gloves, masks, and gowns, safe injection practices, and proper disposal of sharps and contaminated materials.

**Nursing Students:** This term refers to individuals currently enrolled in a nursing program, who are in the process of acquiring the knowledge, skills, and practices necessary to become professional nurses. Their education includes both theoretical knowledge and practical training in areas such as universal safety precautions.

## STUDY DESIGN

In the view of the nature of the problem selected for the present study, the research design selected was a Quasi experimental, one group pre test post test design

## SETTINGS:

The study was conducted in Alshifa College of Nursing, Perinthalmanna

## POPULATION

The population for present study 3<sup>rd</sup> SEMESTER B.Sc Nursing Student in Alshifa College of Nursing, Perinthalmanna

## SAMPLE:

75 Students in 3<sup>rd</sup> SEMESTER B.Sc(Nursing) Student in Alshifa College of Nursing, Perinthalmanna.

**SAMPLING:**

The student were selected using Purposive sampling technique

**INCLUSION CRITERIA**

- ▶ Students who are willing to participate.
- ▶ Both genders.

**EXCLUSION CRITERIA**

- ▶ Student who not are willing to participate
- ▶ Student who are absent on the day of data collection.

**RESEARCH TOOLS/INSTRUMENT**

Research tool consists of 2 parts. Part 1-Demographical variables of the student, Part 2 contain multiple choice questions to answer the knowledge of universal precaution. It consist of 20 multiple choice questions to answer the knowledge of universal precaution. A score of “one” was given for every correct answer and score of “zero” was given for every wrong answers. The total score was converted into percentage and interpreted as follows.

S.No	Measurement Scale	Score
1	Adequate Knowledge	16-20
2	Moderate knowledge	8-15
3	Inadequate knowledge	1-7

**METHODS OF DATA COLLECTION**

The formal permission was obtained from the Principal of Alshifa College of Nursing, Perinthalmanna, to conduct the study with a commitment to adhere to the rules and regulations of the college. A total of 75 students were selected through a Purposive sampling technique based on inclusion and exclusion criteria.

After providing general instructions, verbal consent was obtained from the participants. The researcher then collected demographic data variables from the participants. A pre-test was conducted using Questioner method on Knowledge on Universal safety precaution. Following this, Structure teaching programme was held on the Participants. Post-test was taken on next day by using same the Questioner method on Knowledge on Universal safety precaution.

## PLAN FOR DATA ANALYSIS:

The plan for data analysis includes descriptive statistics i.e., frequency, percentage, mean and standard deviation whereas for inferential statistics, it includes the t value and chi square test.

## RESULT:

Table :1

S.NO	DEMOGRAPHICAL VARIABLES	n	f
1	Gender		
	a. Male	15	20.00%
	b. Female	60	80.00%
2	Age		
	a. 18-19 Years	34	45.33%
	b. 19-20 Years	26	34.67%
	c. 20-21 Years	5	6.67%
3	d. Above 21	10	13.33%
	Marital status		
	a. Married	7	9.33%
4	b. Unmarried	68	90.67%
	Source of knowledge		
	a. Book	8	10.67%
	b. Faculty class	48	64.00%
	c. Internet	17	22.67%
	d. Family member	2	2.67%

**Table: 1** described about the frequency, percentage distribution of demographic variable. Distribution of the subject by Gender revealed that majority of the subject, i.e. out of 75 Students 60(80%) are in Female, As per the finding of the study, the majority of the subject, i.e. out of 75 Students 26(34.67%) of them were age between 19-20 years, with regards marital status out of 75 students 68(90.67% are unmarried), out of 75 students 48(64%) are Gain knowledge by faculty class.

**Table2-Frequency percentage and distribution of samples on the level of knowledge regarding universal safety precautions among nursing students.**

S.No	Measurement Scale	Score	Pre test		post test	
			n	f	n	f
1	Adequate Knowledge	16-20	5	6.67%	60	80.00%
2	Moderate Knowledge	8-15	70	89.33%	15	20.00%
3	Inadequate Knowledge	1-7	0	0%	0	0.00%

**Table-3 Comparison of mean pre- test and post-test score: -. N=75**

S.No	Universal safety precautions	Mean	SD	Mean Different	T Test
1	Pre Test	11.96	2.5	4.9	11.1
2	Post Test	16.7	2.2		

**Table 4: Association between level of knowledge and demographic variable**

S.No	Demographical Variables	Adequate knowledge		Moderate knowledge		Chi-Square
		n	f	n	f	
1	Gender					8.33
	a. Male	8	10.67%	7	9.33%	df=1
	b. Female	52	69.33%	8	10.67%	S*
2	Age					0.69 df=3 NS
	a. 18-19 Years	28	37.33%	6	8.00%	
	b. 19-20 Years	20	26.67%	6	8.00%	
	c. 20-21 Years	4	5.33%	1	1.33%	
	d. Above 21	8	10.67%	2	2.67%	
3	Marital status					2.52
	a. Married	4	5.33%	3	4.00%	df=1
	b. Unmarried	56	74.67%	12	16.00%	NS
4	Source of knowledge					13.11
	a. Book	6	8.00%	2	2.67%	df=3
	b. Faculty class	44	58.67%	4	5.33%	S**

c. Internet	9	12.00%	8	10.67%
d. Family member	1	1.33%	1	1.33%

## CONCLUSION:

The study finding expressed that the most of the 3rd semester B.Sc. Nursing student had Adequate knowledge and there is association between post-test score and level of knowledge in selected demographical variables.

## RECOMMENDATIONS:

- The same study can be conducted in different institution.
- The study can be done on small population.

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