



“A Study To Assess Knowledge Regarding Prevention And Management Of Needle Stick Injury Among Nursing Students In Selected College, Thrissur”

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Abstract : Needle stick injuries (NSIs), also referred to as sharp injuries, percutaneous injuries and sharp exposures, represent accidental breaks in the skin with needles, scalpels or other sharp objects that have been in contact with a source such as patient's blood or body fluids. Needle stick injuries are more common among health care workers. This can be prevented by those individuals who have basic knowledge about prevention and management of needle stick injury. Hence, the study was undertaken to assess the knowledge regarding prevention and management of needle stick injury among nursing students in selected college, Thrissur. The objectives of the study were to assess the knowledge regarding prevention and management of needle stick injury among nursing students and to associate the level of knowledge regarding prevention and management of needle stick injury with their selected socio-demographic variables. The design of the study was descriptive and was conducted among 100 BSc nursing students from Aswini College of Nursing, Thrissur. The samples were selected using a simple random sampling technique. Data was collected by using structured knowledge questionnaire regarding prevention and management of needle stick injury. The result showed that 5 samples (5%) had inadequate knowledge, 43 samples (43%) had adequate knowledge and 52 samples (52%) had average knowledge. There is significant association between the level of knowledge regarding prevention and management of needle stick injuries with their selected demographic variable such as year of study. The study concluded that majority of the BSc nursing students had average knowledge on prevention and management of needle stick injuries.

Key Words: *Needle stick injuries , BSc Nursing students*



INTRODUCTION

A needle stick injury is penetrating stab wound from a needle or other sharp object that may result in exposure to blood or other body fluids. Needle stick injuries are occupational hazards for millions of healthcare workers. Health care workers are at higher risk acquiring blood borne pathogens such as HIV, hepatitis B and C and other diseases. Studies show that HIV and hepatitis B are among the important diseases transmitted by needle stick injuries.

The frequency of such incidents depend on the workload, use of universal precautions, safety devices and medical discipline. The lack of knowledge, access failure to use appropriate practice in the form of personal protective equipment contributes to increasing incidence of needle stick injury among health care workers. It has also been observed that the stress at work place can also put health care workers at increased risk for needle stick injuries. Generally, needle stick injuries cause only minor bleeding or visible trauma. However, even the absence of bleeding the risk of viral infection still remains. In turn, a needle stick injury may also pose a risk for a patient if the injured health care worker has a blood borne illness.

NEED OF THE STUDY

According to the United States National Institute of Occupational Safety and Health (NIOSH), needle stick injuries are caused by hypodermic needles, blood collection needles, intravenous (IV) stylets, and needles used to connect parts of delivery systems. Health care workers are at risk of needle stick injuries, if injured, may be involved with serious infections or blood borne pathogens such as HIV/AIDS, hepatitis B virus (HBV) and hepatitis C virus (HCV). According to WHO, needle stick injuries are responsible for the global incidence of HBV, HCV and HIV/AIDS was 36.7%, 39%

and 4.4% respectively.

Needle stick injuries are the most efficient method of transporting blood borne pathogens among health care workers as well as nursing students. Due to deficit knowledge regarding management of needle stick injury, most of the nursing students are at high risk for exposure. So knowledge of nursing studies regarding prevention and management of needle stick injury is an essential factor.

Statement of the study

A study to assess the knowledge regarding prevention and management of needle stick injury among nursing students in selected college, Thrissur

Objectives of the study

- To assess the knowledge regarding prevention and management of needle stick injury among nursing students.
- To associate the level of knowledge regarding the prevention and management of needle stick injury among nursing students with their selected socio-demographic variables.

Hypothesis (tested at 0.05 level of significance)

H₀: There is no significant association between the selected demographic variables and knowledge score of subjects .

H₁: There is significant association between the selected demographic variables and knowledge score of the subjects .

Methodology

Research Approach : In the study quantitative research approach was used .

Methods of data collection

Data collection procedure are the means of gathering



information to address the research problem . Data collection was done on 16/08/2023 . A formal permission was obtained from the principal , Aswini college of nursing Thrissur. Firstly the investigator established a good rapport with the students and started to gather data from all the subjects who met the inclusion criteria. Oral consent was obtained from the students. A total number of 100 samples were selected through simple random sampling technique. A demographic data was collected initially, and the semi-structured questionnaire was given to the sample. The samples were advised to answer the question and return the tool after 20 minutes. The samples were cooperative during the time of data collection.

Research Design : In this study descriptive survey design was used.

Demographic Variables : In this study the demographic variables are year of studying, exposure to educational programme on needle stick injury and exposure to needle stick injury. Population : In the study the population selected comprises of nursing students. Targeted population : It includes all the BSC Nursing students in selected college.

Accessible population : The accessible population comprised of second semester ,third semester , third year and fourth year students who reside within the campus of Aswini college of nursing , Thrissur .**Sampling Technique**

: The samples were collected through simple random sampling technique.

Sample Size : The sample of the present study comprised of 100 BSC nursing students in Aswini college of Nursing , Thrissur .

Sample Criteria Inclusion Criteria

The study involves BSC Nursing students who are:

- available at the time of data collection
- present during the course of study
- willing to participate in the study

Exclusion Criteria :

The study exclude BSc Nursing students who are:

- absent during the time of study
- not willing to participate in the study

Description and scoring

Section A : Distribution of demographic profile of BSc nursing students

Section B : Distribution of knowledge among BSc nursing students

Section C : Association of level of knowledge with selected demographic variables

RESULT FINDINGS :



Section A : Distribution of demographic profile of BSc nursing students .

Table 1 : Frequency and percentage distribution of the demographic profile of the subjects.

SI.N O	DEMOGRAPHIC VARIABLES	FREQUENC Y	PERCENTAGE
1.	Year of studying		
	a) Second Semester	25	25%
	b) Third Semester	25	25%
	c) Third Year	25	25%
	d) Fourth Year	25	25%
2.	Exposure to educational program regarding NSI		
	a)Yes	93	93%
	b)No	7	7%
3.	Exposure to needlestick injury		
	a)Yes	28	28%
	b)No	72	72%
	If yes, number ofexposure		
	a)Once	18	64.3%
	b)Twice	5	17.85%
	c)More than twice	5	7.85%



SECTION B : Description on the level of knowledge among BSC nursing students regarding needlestick injury

SI.NO	Level of knowledge	Frequency	Percentage
1.	Adequate knowledge	4 3	43%
2.	Average knowledge	5 2	52%
3.	Inadequate knowledge	5	5%

DISCUSSION

The first objective was to assess the knowledge regarding prevention and management of needle stick among BSC Nursing students.

The present study reveals that out of 100 BSC Nursing students 43% have adequate knowledge , 52% have average knowledge and 5 % have inadequate knowledge regarding prevention and management of needle stick injury.

The second objective was to associate the level of knowledge regarding prevention and management of needlestick injury with their selected socio demographic variables .

The present study reveals that there is a significant association between the level of knowledge and selected socio demographic variable such as year of studying .

CONCLUSION : From this study it is clearly evident that the majority of the students have average knowledgeregarding prevention and management of needle stick injury .

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