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Research article

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A study to assess the effectiveness of planned teaching programme on needles tick injury among 2 year basic.b.sc nursing students in selected nursing college at vijyapur

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ABSTRACT

Background

Needle stick injury is so much common to the nursing students because they are unaware of its complications in future. The teaching programme may help the students to prevent the risk to get needle stick injury.

Aims and objectives

The study aimed at assessing the existing knowledge about needle stick injury; find the effectiveness of planned teaching programme and to determine the association between existing knowledge with selected demographic variables.

Materials and methods

Knowledge is assessed by structured knowledge questionnaire; data is analyzed by descriptive and inferential statistics

Results

The study results show that 48.7% students had average knowledge and 43.% had good knowledge in pre test. In post test 48.7% had good knowledge and 51.3% had excellent knowledge. There is a significant difference between pre test and post test of knowledge scores as shown by t test ($t = 3.028$). There is a significant association between source of information regarding needle stick injury with pre test knowledge scores ($X^2 = 8.065$, $df=3$).

Conclusion

The study concludes that planned teaching programme is helpful for increasing the knowledge. Some more study is required to generalize the findings regarding needle stick injury to aware the health care workers.

Keywords: Needle sticks injury, Planned teaching programme, Nursing students, and Effectiveness.

INTRODUCTION

There are institutions in India that is providing nursing education. The increased demands of nurse in national and international level had created and impact in our educational system. Since last few years has shown, that the lot of males and females are interested in selecting their career as nurse whether in India or at international level. Hence our educational system need to be rigid and more practice based so that our product can be compete and prove their best ability in national and international level. The nursing students are posted from the first year to various hospitals where they can gain their practical experiences which range from vital signs taking, giving oral and parenteral medications. Nursing students are therefore at increased risk for acquiring blood borne infections. The level of risk depends on various factor such as the number of patients with that infections, the technique of handling blood and blood borne products the precautions they take during performing the procedure.

Because of the environment in which they work, many health care workers are at an increased risk of accidental needle stick injuries (NSI). As a result, these workers are at risk of occupational acquisition of blood borne pathogens such as HIV, hepatitis B and C, and other diseases. The average risk of transmission of HIV to a health care worker after percutaneous exposure to HIV-infected blood has been estimated as 3 in 1000 [1, 2]. According to a WHO study, the annual estimated proportions of health-care workers (HCW) exposed to blood-borne pathogens globally were 2.6% for HCV, 5.9% for HBV, and 0.5% for HIV, corresponding to about 16,000 HCV infections and 66,000 HBV infections in HCW worldwide [3].

Because needle stick injuries are often under reported, health care institutions should not interpret low reporting rate as low injury rate. Injuries recorded through standard occupational reporting systems may underestimate the true injury rate, as much as 10-fold [4]. Needle stick injuries have significant indirect consequences in health care delivery especially so in the developing countries, where already the qualified work force is limited with respect to the disease burden in the population. These injuries not only potentiate health consequences but also cause emotional distress in health care workers which results in

missed workdays and directly affects the health care services and resources.

Problem Statement

“A Study to assess the effectiveness of planned teaching programme on needles tick injury among 2 year Basic.B.Sc nursing students in selected nursing colleges at Vijyapur”

Objectives of the Study

1. To assess the pre test level of knowledge on needle stick injury as measured by structured knowledge questionnaire
2. To Evaluate The Effectiveness Of Planned Teaching Programme On Needle Stick Injury
3. To find out the association between pre test knowledge scores with selected demographic variables.

Hypothesis

Will be tested at 0.05 level of significance

H₁: there is significant difference between pre test and post test knowledge scores regarding needle stick injury

H₂: there will be a significant association between pre test knowledge scores with selected demographic variables.

Operational definitions

Effectiveness

It refers to the gain in knowledge scores of students after administrating planned teaching programme on needle stick injury.

Planned teaching programme

It refers to the systematically planned teaching strategy design to provide information to students on needles tick injury

Needle stick injury

It refers to the accidental injury with a needle the is contaminated with blood or body fluids in working areas like hospital

Nursing students

Students who are studying under graduation in nursing at selected college.

Assumptions

It is assumed that

- Student nurses may have some basic knowledge regarding needle stick injury.
- The knowledge will vary with educational status and economic state of individual
- Participants will be willing to participate and give reliable information
- Teaching strategy is effective in improving the knowledge

MATERIAL AND METHODS

Source of data

In this study the data will be collected from nursing students from a selected nursing college at Vijayapur.

Research design

Pre experimental- one group pre test post test design was used.

Setting

The study is conducted at selected nursing college at Vijayapur District.

Population

Population includes nursing college students.

Sampling technique

Purposive sampling method was used.

Method of data collection

Knowledge is assessed by structured knowledge questionnaire; data is analyzed by descriptive and inferential statistics

RESULT OF THE STUDY

Section 1: Demographic data

Table 1: represents 76.9% students belongs to 18-20 years of age group, 2.56% of students belongs to > 25 and 22-25 years of age group each. (N=39)

Age in years	F	%
18-20	30	76.9
20-22	7	17.9
22-25	1	2.56
>25	1	2.56
Total	39	100

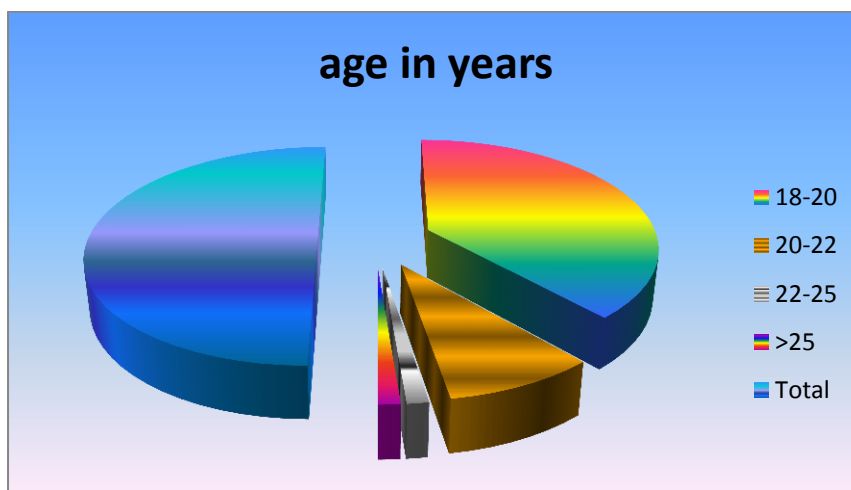


Fig no 1: split diagram shows that sample distribution according to age in years.

Table 2: shows that 84.62% students belong to female and 15.38% belongs to male.

Gender	F	%
Male	6	15.38
Female	33	84.62
Total	39	100

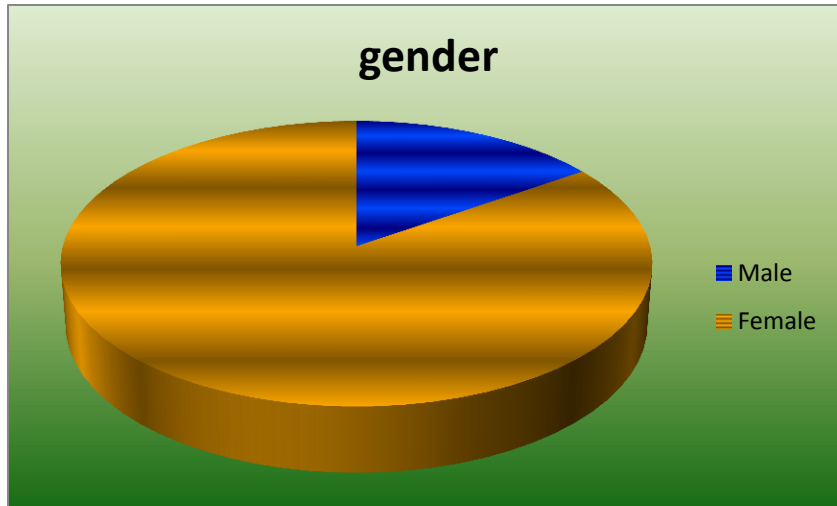


Fig no 2: pie diagram shows that sample distribution according to gender wise.

Table 3: shows that 46.15% students parents belongs to below PUC education and graduate education each.

Educational status of parents	F	%
Below PUC	18	46.15
Graduate	18	46.15
Post graduate	2	5.12
Illiterate	1	2.56
Total	39	100

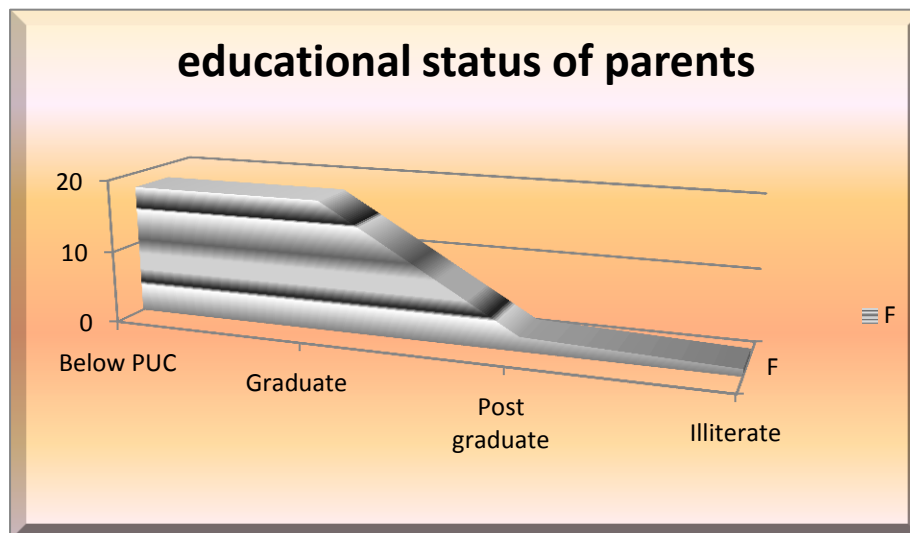


Fig no 3: Area diagram depicts that sample distribution according to educational status of parents.

Table 4: Represents that 43.58% of students' parents belongs to other occupation, 38.46% belongs to private employee.

Occupation of the parents	F	%
Govt employee	7	17.94
Private employee	15	38.46
Other	17	43.58
Total	39	100

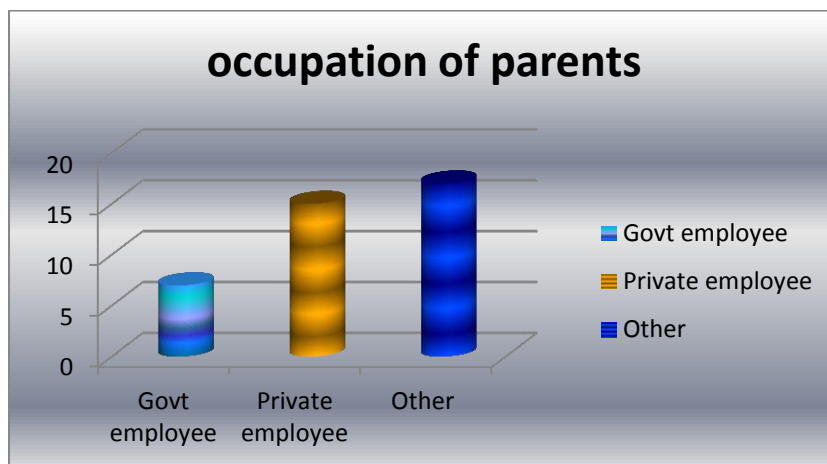


Fig no 4: cylindrical bar diagram shows that sample distribution according to occupation of parents

Table 5: shows that 58.97% of students are Hindu, 38.46% belongs to Christian and 2.56% belongs to muslim religion.

Religion	F	%
Hindu	23	58.97
Muslim	1	2.56
Christian	15	38.46
Total	39	100

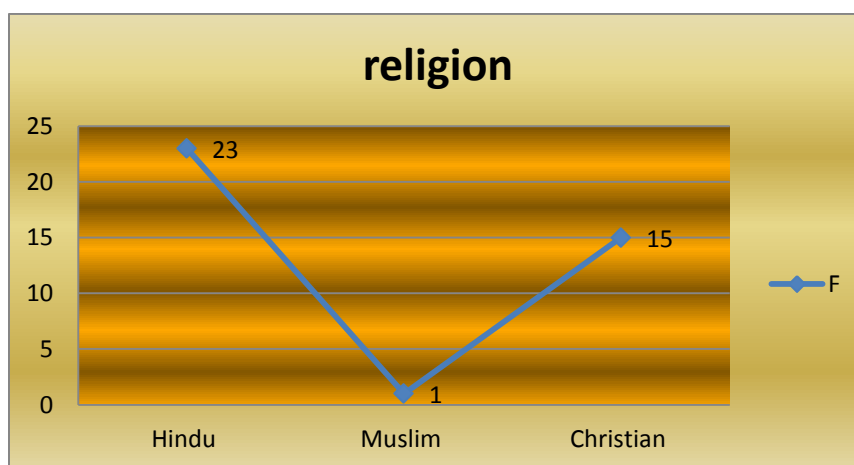


Fig no 5: line diagram shows that sample distribution according to religion.

Table 6: shows that 58.97% of students are got information from health personal, and 7.69% students got from mass media.

Source of information	F	%
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Health personal	23	58.97
Friends	7	17.94
Mass media	3	7.69
No where	6	15.38
Total	39	100

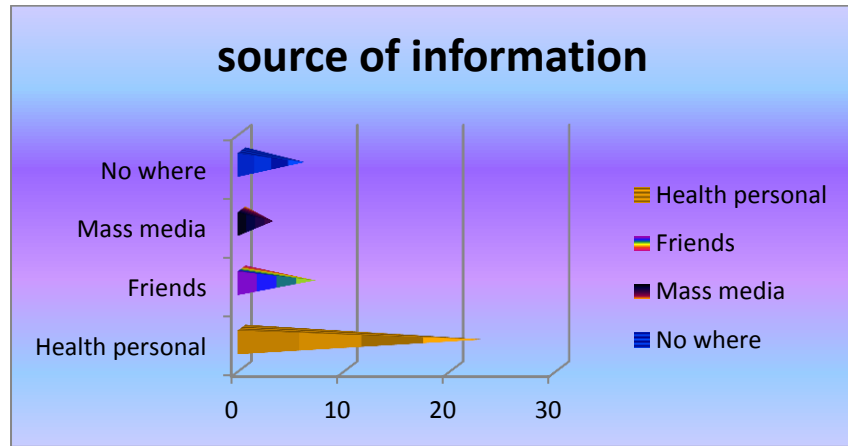


Fig no 6: cone diagram shows that sample distribution according to source of information.

Section 2: comparison of pre test and post test

Table 7: shows that 48.7% students had average knowledge, 43.5% students had good knowledge in pre test where as 51.3% students had excellent knowledge and 48.7% had good knowledge in post test.

Grade of knowledge	Score	Pre test		Post test	
		Frequency	%	Frequency	%
Poor	0-5	3	7.7	0	0
Average	6-10	19	48.7	0	0
Good	11-15	17	43.5	19	48.7
Excellent	16-20	0	0	20	51.3
Total		39	100	39	100

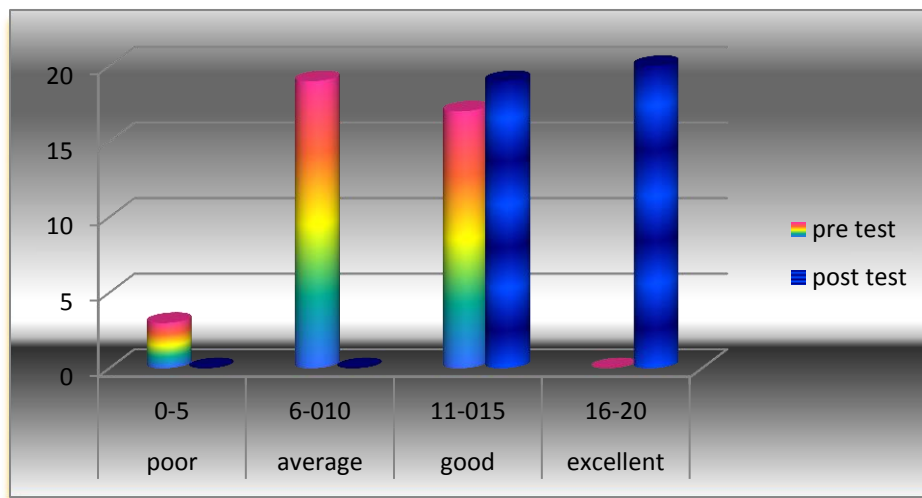


Fig no 7: cylindrical bar diagram shows that comparison between pre test and post test knowledge scores.

Section 3: effectiveness of planned teaching programme

Table 8: represents that there is a significant difference between pre test and post test knowledge scores.

Values	Mean	SD	T value	Significance
Pre test	9.51	2.35	3.028	S
Post test	15.54	1.15		

Section 4: association between knowledge scores with selected demographic variables

Table 9: shows that there is a significant association between source of information with knowledge scores.

S No	Demographic variable	Chi square value	D f	Significance
1	Age in years	1.42	3	NS
2	Gender	0.28	1	NS
3	Educational status of parents	1.22	3	S
4	Occupation of parents	3.215	2	NS
5	Religion	2.9	2	NS
6	Source of information	8.065	3	S
7	Experience of needle stick injury	0.129	1	NS
8	Have you attended any workshop	2.25	1	NS

S: significant

NS: Non significant

d f 1= 3.84, d f 2= 5.99, d f 3= 7.86

DISCUSSION

The study results show that 48.7% students had average knowledge and 43% had good knowledge in pre test. In post test 48.7% had good knowledge and 51.3% had excellent knowledge. There is a significant difference between pre test and post test of knowledge scores as shown by t test ($t = 3.028$). there is a significant association between source of information regarding needle stick injury with pre test knowledge scores ($X^2=8.065$, $df=3$).

CONCLUSION

The study concludes that there is a significant difference between pre test and post test knowledge scores, planned teaching programme shows improvement in knowledge scores. Similar study can be conducted for generalize the findings. Some more effective measure can be taken to reduce risk to exposing the needle stick injury among nursing students.

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