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# A STUDY TO ASSESS THE PRACTICE LEVEL REGARDING NEEDLE STICK INJURY AMONG NURSING STUDENTS IN CHERRAAN'S COLLEGE OF NURSING AT COIMBATORE

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## ABSTRACT

**Statement of the problem**

*A study to assess the practice level regarding needle stick injury among nursing students in cherraan's college of nursing at Coimbatore was undertaken by a group of students in partial fulfillment of the requirement for the degree of Bachelor of Nursing during the year 2022.*

**Objectives of the study**

- *To assess the practice level to prevent needle stick injury among nursing students.*
- *To identify the association between selected variables such as age, sex, educational qualification, surgical details and knowledge and practice level among nursing students.*

**Research design and method**

*The research approach adopted for the study was qualitative . The conceptual framework adopted for the present study was based on general adoption system . The data was collected from 2nd year B.Sc Nursing students selected by non probability convenience sampling technique to assess the practice level regarding needle stick injury among nursing students.*

**Result**

*Descriptive statistical methods like mean, percentage, standard deviation and inferential statistics liked ' t ' test and chi-square was used to analyze the collected data.*

- *The percentage distribution of students according to demographic variables, majority of them 25 (83.33%) were in the age of 19-20 years, 16 (53.33%) were in the gender of female, 11 (36.66%) were in the monthly income of >10k, 23 (76.66%) were in family type of nuclear family, 22 (73.33%) were in area of rural, 17 (56.66%) were in father occupational status of self employee, 13 (43.33%) were in mother occupational status of un employee, 22 (73.33%) were in father educational status of $1^o$&$2^o$ Education, 17 (56.66%) were in mother educational status of $1^o$&$2^o$ Education, 20 (66.66%) were in know about needle stick injury of yes, 27 (90%) were in previous needle stick injury of no.*
- *The pre-test mean level of knowledge score was 13.63 with SD of 2.08. After the intervention, the post-test mean level of knowledge score was 13.33 with SD of 2.58. The mean difference between the pre-test and post-test was 0.30. Paired t test was employed and the calculated t value was 1.08 which indicates the significant difference between pre-test and post-test level of knowledge score at 0.05 level. Hence, this finding shows that the practice has a significance effect in increasing the level of practice among practice level regarding Needle stick injury.*

**Conclusion**

- *It was found that the main conclusion of the presents study status that in the pre-test, most of the students had adequate knowledge on needle stick injury. Effectiveness to improving in their knowledge. The study results show that there is significant association between the level of practice with their selected demographic variables. These the variables calculated by chi square test at $p<0.05$, therefore the investigator was proved the hypothesis is accepted for this study.*

**KEY WORDS:** *Assess, Practice, Students, College, Needle stick injury.*

## INTRODUCTION

Human beings are the greatest creation of God. Each organ in our body has its unique function towards successful maintenance of health. WHO designs health is a state of complete physical, mental and social well being not merely an absence of disease or infinity. If illness occurs each individual wishes to consult doctor. In service cases they will admit in the hospital. The first line of care in the hospitals is given by the nurses.

Nurses are also a human being. They also want to lead the life without illness. All nurses are coming after finishing their student periods. To the people they deliver the care. But they are at the risk of so many health problems.Some of the health

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problems varicose vein, hypertension, and infection high risk for communicable diseases, respiratory infection and emotional disturbances. One of the most presenting needle stick injuries. Assessing the knowledge level, give an idea about needle stick injury also makes awareness among the nursing students who are doing their postings in the clinical area.

A needle stick injury is defined as an accidental skin penetrating stab wound from a hollow – bore needle containing another person blood {or} body fluid. Sharp injury is defined as the skin penetrating stab wound caused by sharp instrument and accidents in a medical settings.

The activities associated with the majority of needle stick injuries are administrating injections, withdrawing blood, recapping needles disposing off needles, handling trash and dirty linen and missing the target while attempting to transfer blood are any other body fluid from a syringe to a specimen container

In India, around 3-6 billion injections are given per year of which two third injections are unsafe (62.9%) and the use of glass syringe is constantly associated with a higher degree of unsafeness. The routine use of sharp instruments in dental treatment the presence of blood and saliva and the diverse bacterial flora in the oral cavity all contribute to the hazardous nature of the dental work place for blood borne infections preventing needle stick injury is a challenge faced in virtually every medical work place.

**Statement of the Problem**

A study to assess the practice level regarding needle stick injury among nursing students in Cherraan's college of nursing at Coimbatore.

**Objectives**

- To assess the practice level to prevent needle stick injury among nursing students.
- To identify the association between selected variables such as age, sex, educational qualification, surgical details and knowledge and practice level among nursing students.

**Hypotheses**

**H1:** There is significant improvement between pre-test and post-test level of knowledge of student nurse regarding needle stick injury and its prevention.

**H2:** There is significant association between the pre-test level of practice regarding needle stick injury with selected demographic variables.

**Operational Definitions**

**Practice**

In this study, practice refers to the verbal response expressed by the nursing students regarding Needle stick injury which is measured by knowledge questionnaire.

**Needle Stick Injury Management**

In this study, Needle stick injury management means the discarded materials which are generated during procedure, diagnosis, treatment, vaccination of human being.

- **Assumption**

Adequate knowledge regarding Needle stick injury will enable the nursing students implement in **clinical** and community care setting.

**Projected Outcome**

- This study useful to reveal the practice level of nursing students regarding Needle stick injury.

## RESEARCH METHODOLOGY

**Research approach**

Research Approach is a plan and procedure that consists of the steps of broad assumptions to detailed methods of data collection, analysis, and interpretation.

- The research approach selected for the study was qualitative approach has been adopted. Since the study attempts to assess the level of knowledge regarding needle stick injury among nursing students in cherraan's college of nursing.

**Research design**

- Research design refers to the framework of market research methods and techniques that are chosen by a researcher.
- A research design is a researchers overall plan for obtaining answer at to the research questions or for testing the research hypothesis.
- The approach selected for this study was qualitative design because it gives information regarding the co relation of knowledge level and prevention in those population.
- A pre – experimental one group pre – test, post – test research design.

**Setting of the study**

Research setting is the physical, social, or experimental context within which research is conducted.

- The study was conducted in cherraan's college of nursing Coimbatore.

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**Population of the study**

Study population is a subset of the target population from which the sample is actually selected. It is broader than the concept sample frame. It may be appropriate to say that sample frame is an operationalized form of study population.

- The study of population comprised of students who are studying 2nd years nursing students in cherraan's college of nursing.

**Sample**

Sample is a group of people, objects, or items that are taken from a larger population for measurement.

- Sample is a small portion of population which represents the whole population.
- The sample size consisted of 30 nursing students.

**Sample selection**

In qualitative research, only a sample (that is, a subset) of a population is selected for any given study. The study's research objectives and the characteristics of the study population (such as size and diversity) determine which and how many people to select.

**Inclusion criteria**

- Students with age 19 to 21.
- Students who are willing to participate in the study.
- It includes the students who are going to posting in hospital.

**Exclusion criteria**

- Students who are not willing to participate in the study.

**Sample technique**

Sampling is a method that allows researchers to infer information about a population based on results from a subset of the population, without having to investigate every individual.

- Non probability convenient sampling technique was used for the study.
- Based on the objectives a questionnaire was prepared to assess the knowledge and practice of needle stick injury.
- The questionnaires are less costly and less time consuming then interviews and offers the possibility of anonymity and ensures that there will be no interviewer bias.
- The tool used for research study was knowledge questionnaire to assess the knowledge and practice of needle stick injury.
- The tool was formulated based on the review of literature and discussion with the expert in the field, after construction of an initial model of questionnaire, it was modified several times by consulting with the experts in the field of medicine and nursing.

**Description of tool**

Tools for assessing the practice of needle stick injury.

**Reliability**

- Reliability refers to how consistently a method measures something.
- The tool was administered to 30 students. The value was calculated by correlation co-efficient method and the reliability by pear son –product moment method.

**Pilot study**

- A pilot study can be defined as 'small study to test research protocols, data collection instruments, sample recruitment strategies, and other research techniques in preparation for a larger study.
- The main aim of pilot study was to find out the feasibility of the study. For this study 10 samples were selected from cherraan's college of nursing. The pilot study revealed that the study was feasible.

**Data collection process**

The data was collected from cherraan's college of nursing, Coimbatore. Before collection of data formal permission was obtained from principal of cherraan's college of nursing department. After getting the permission the data was collected from 2nd year of nursing 30 student, Who have the posted to the hospital.

**Variables**

- Following variables will be compared in data analysis.
- Knowledge and practice.
- Demographic variables will be compared to estimate the risk group.

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**Independents variable**

- An independent variable is the variable you manipulate, control, or vary in an experimental study to explore its effects. It's called "independent" because it's not influenced by any other variables in the study. Independent variables are also called: Explanatory variables (they explain an event or outcome).

**Dependent variable**

The dependent variable is the variable that is being measured or tested in an experiment. The level of knowledge of nursing students.

**Data analysis plan**

- Descriptive statistics (example: demographics) was explained.

Chi-square test was used to find association between knowledge and practice of needle stick injury.

## ANALYSIS AND INTERPRETATIONS

This chapter presents the analysis and interpretation of data collected to assess the practice level regarding Needle stick injury. The data were analysed according to the objectives of the study. They are to assess the practice level regarding needle stick injury.

**Objectives of the study**

- To assess the practice level regarding Needle stick injury among nursing students.
- To identify the association between the selected variable such as age, sex, educational qualification, and practice level among the nursing students.

**Section A: Description of demographic variables of students who are studying in Cherraan's college of nursing.**

**Table 4.1 Frequency and percentage description of demographic variables of students who are studying in Cherraan's college of nursing.**

**(N=30)**

| SL.NO | Demographic Variables | | Frequency | % |
|---|---|---|---|---|
| 1. | Age | 18 Years | 1 | 3.33 |
| | | 19 -20Years | 25 | 83.33 |
| | | >20 Years | 4 | 13.33 |
| 2. | Gender | Male | 14 | 46.66 |
| | | Female | 16 | 53.33 |
| 3. | Monthly Family Income(Rupees) | Less than10000 | 11 | 36.66 |
| | | 10001-15000 | 8 | 26.66 |
| | | 15001-20000 | 6 | 20 |
| | | Above20001 | 5 | 16.66 |
| 4. | Family type | Nuclear Family | 23 | 76.66 |
| | | Joint Family | 6 | 20 |
| | | Extended Family | 1 | 3.33 |
| 5. | Area Of Residency | Urban | 8 | 26.66 |
| | | Rural | 22 | 73.33 |
| 6. | Father Occupation Status | Private Employment | 8 | 26.66 |
| | | Self Employment | 17 | 56.66 |
| | | Government Employment | 1 | 3.33 |
| | | Un Employment | 4 | 13.33 |
| 7. | Mother Occupation Status | Private Employment | 3 | 10 |
| | | Self Employment | 12 | 40 |
| | | Government Employment | 2 | 6.66 |
| | | Un Employment | | |
| 8. | Father Education | Illiterate | 3 | 10 |
| | | $1^0$&$2^0$ Education | 22 | 73.33 |
| | | Under Education | 4 | 13.33 |
| | | Post Education | 1 | 3.33 |
| 9. | Mother educational status | Illiterate | 7 | 23.33 |
| | | $1^0$&$2^0$ Education | 17 | 56.66 |
| | | Under Education | 5 | 16.66 |
| | | Post Education | 1 | 3.33 |
| 10. | Know About Needle Stick Injury | Yes | 20 | 66.66 |
| | | No | 10 | 33.33 |
| 11. | Previous Needle Stick Injury | Yes | 3 | 10 |
| | | No | 27 | 90 |

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**SECTION-B : Association between the practice with selected demographic variables**

**(N=30)**

| S. NO | DEMOGRAPHIC VARIABLES | LEVEL OF PRACTICE | | | | | | TOTAL | CHI-SQUARE | Df | P VALUE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | INADEQUATE | | MODERATE | | ADEQUATE | | | | | |
| | | F | % | F | % | F | % | | | | |
| 1. | **Age** | | | | | | | | 0.82 | | |
| | a)18 years | 0 | 0 | 0 | 0 | 1 | 3.33 | 1 | | 4 | 9.49 |
| | b)19-20 years | 0 | 0 | 10 | 33.33 | 15 | 50 | 25 | | | NS |
| | c)>20 years | 0 | 0 | 2 | 6.66 | 2 | 6.66 | 4 | | | |
| 2. | **Gender** | | | | | | | | 7.22 | 2 | 5.99 |
| | a)Male | 0 | 0 | 2 | 6.66 | 12 | 40 | 14 | | | S |
| | b)Female | 0 | 0 | 10 | 33.33 | 6 | 20 | 16 | | | |
| 3. | **Monthly income** | | | | | | | | 3.46 | 6 | 12.59 |
| | a)Less than 10k | 0 | 0 | 6 | 20 | 5 | 16.66 | 11 | | | NS |
| | b)10k-15k | 0 | 0 | 4 | 13.33 | 4 | 13.33 | 8 | | | |
| | c)15k -20k | 0 | 0 | 1 | 3.33 | 5 | 16.66 | 6 | | | |
| | d)Above 20k | 0 | 0 | 1 | 3.33 | 4 | 13.33 | 5 | | | |
| 4. | **Family type** | | | | | | | | 2.59 | 4 | 9.49 |
| | a)Nuclear family | 0 | 0 | 11 | 36.66 | 12 | 40 | 23 | | | NS |
| | b)Joint family | 0 | 0 | 1 | 3.33 | 5 | 16.66 | 6 | | | |
| | c)Extended family | 0 | 0 | 0 | 0 | 1 | 3.33 | 1 | | | |
| 5. | **Area** | | | | | | | | 0.025 | 2 | 5.99 |
| | a)Urban | 0 | 0 | 3 | 10 | 15 | 50 | 8 | | | NS |
| | b)Rural | 0 | 0 | 9 | 30 | 3 | 10 | 22 | | | |
| 6. | **Father occupation status** | | | | | | | | 0.846 | 6 | 12.59 |
| | a)Private employment | 0 | 0 | 3 | 10 | 5 | 16.66 | 8 | | | NS |
| | b)Self employment | 0 | 0 | 7 | 23.33 | 10 | 33.33 | 17 | | | |
| | c)Government employment | 0 | 0 | 0 | 0 | 1 | 3.33 | 1 | | | |
| | d)Unemployment | 0 | 0 | 2 | 6.66 | 2 | 6.66 | 4 | | | |
| 7. | **Mother occupation Status** | | | | | | | | 4.43 | 6 | 12.56 |
| | a)Private employment | 0 | 0 | 2 | 6.66 | 1 | 3.33 | 3 | | | NS |
| | b)Self employment | 0 | 0 | 6 | 20 | 6 | 20 | 12 | | | |
| | c)Government employment | 0 | 0 | 0 | 0 | 2 | 6.66 | 2 | | | |
| | d)Unemployment | | | | | | | | | | |
| 8. | **Father education** | | | | | | | | 0.877 | 6 | 12.59 |
| | a)Illiterate | 0 | 0 | 1 | 3.33 | 2 | 6.66 | 3 | | | NS |
| | b)1 / 2 graduate | 0 | 0 | 9 | 30 | 13 | 43.33 | 22 | | | |
| | c)Under graduate | 0 | 0 | 2 | 6.66 | 2 | 6.66 | 4 | | | |
| | d)Post graduate | 0 | 0 | 0 | 0 | 1 | 3.33 | 1 | | | |

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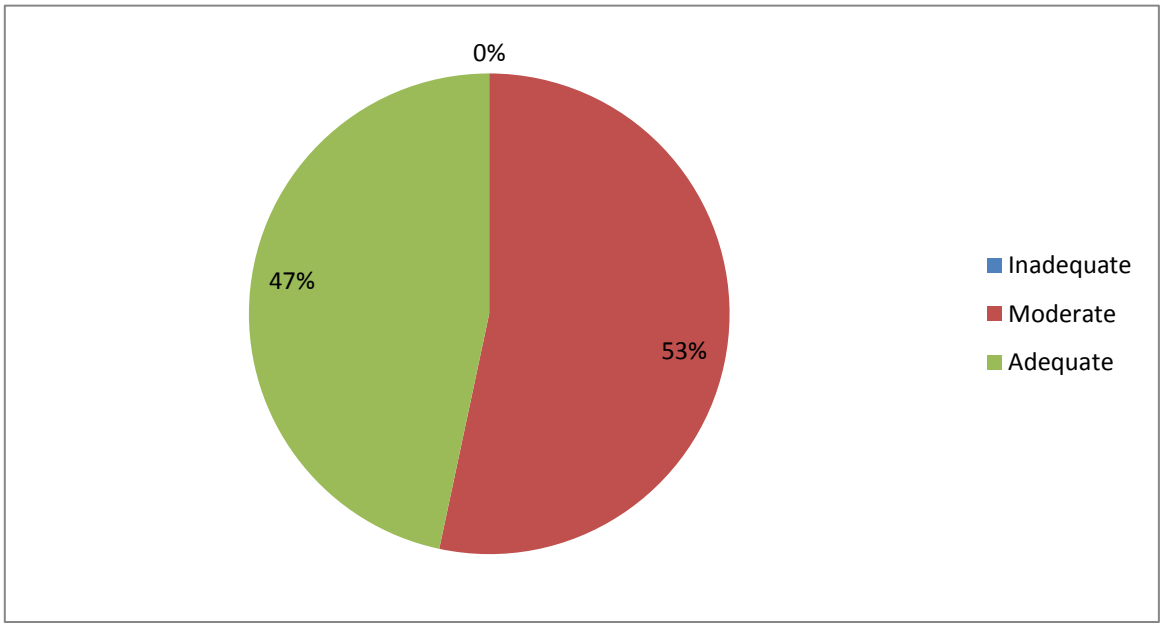
| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **9.** | **Mother education**<br>a)Illiterate<br>b)1 / 2 graduate<br>c)Under graduate<br>d)Post graduate | <br>0<br>0<br>0<br>0 | <br>0<br>0<br>0<br>0 | <br>4<br>7<br>0<br>1 | <br>13.33<br>23.33<br>0<br>3.33 | <br>3<br>10<br>5<br>0 | <br>10<br>33.33<br>16.66<br>0 | <br>7<br>17<br>5<br>1 | 5.688 | 6 | 12.59<br>NS |
| **10.** | **Know about needle stick injury**<br>a)Yes<br>b)No | <br>0<br>0 | <br>0<br>0 | <br>7<br>5 | <br>23.33<br>16.66 | <br>13<br>5 | <br>43.33<br>16.66 | <br>20<br>10 | 0.61 | 2 | 5.99<br>NS |
| **11.** | **Previous needle stick injury**<br>a)Yes<br>b)No | <br>0<br>0 | <br>0<br>0 | <br>0<br>12 | <br>0<br>40 | <br>3<br>15 | <br>10<br>50 | <br>3<br>27 | 8.22 | 2 | 5.99<br>S |

**S*:Significant at p<0.05 level; NS: Non significant; $X^2$: Chi-square value**

The above Table:4.2 The result shows that frequency, percentage and X distribution on level of practice on needle stick injury among nursing students with their demographic variables, it's reveals that there is significant association found between post-test level of practice at gender and previous Needle stick injury (p<0.05) level, there is no association found between the other demographic variables such as age, monthly income, family type, area, mother occupational status, father occupational status, mother educational status, father educational status, knows about needle stick injury.

**Table: 4.2.1 Data on frequency and percentage distribution of pre-test of practice level of needle stick injury among nursing students.**

| S.No | Pre-test of practice regarding needle stick injury | Frequency | Percentage |
|---|---|---|---|
| 1 | Inadequate | 0 | **0** |
| 2 | Moderate | 16 | 53.33 |
| 3 | Adequate | 14 | 46.66 |
| **4** | **Total** | **30** | **99.99** |




**Data on frequency and percentage distribution of pre-test of practice level regarding needle stick injury among nursing students.**

Table: 4.2.1 shows that during pre-test 16( 53.33%) of students had moderate level and 14(46.66%) of students had adequate level practice regarding needle stick injury.

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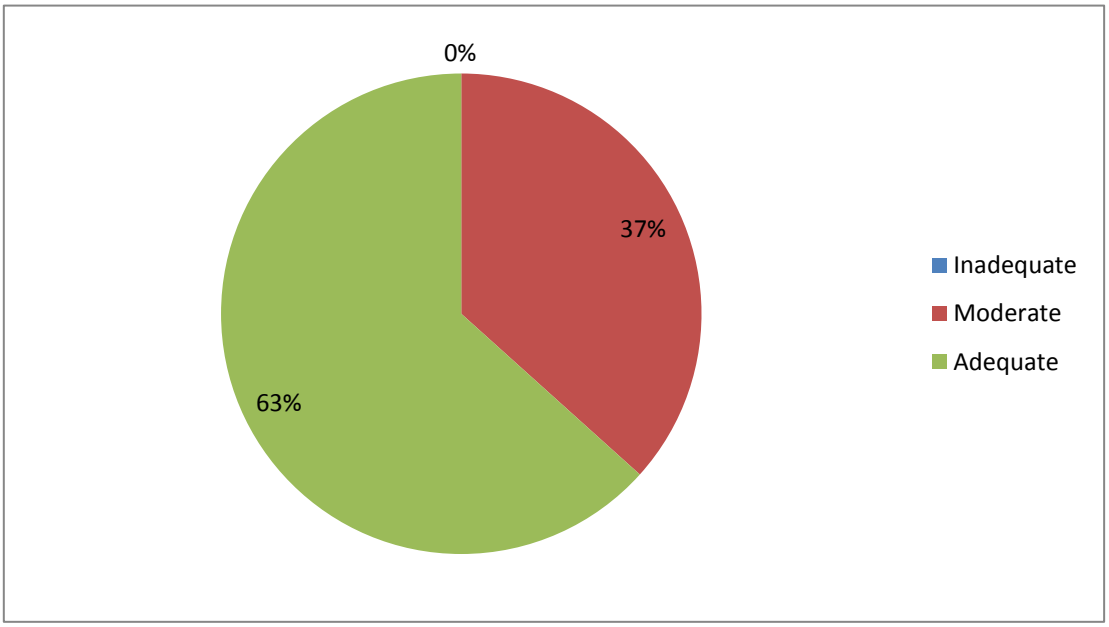
**Table: 4.2.2 Data on frequency and percentage distribution of post-test of practice level of needle stick injury among nursing students.**

| S.No | Post-test of practice regarding needle stick injury | Frequency | Percentage |
|---|---|---|---|
| 1 | Inadequate | 0 | **0** |
| 2 | Moderate | 11 | 36.66 |
| 3 | Adequate | 19 | 63.33 |
| **4** | **Total** | **30** | **99.99** |




**Data on frequency and percentage distribution of post-test of practice level regarding needle stick injury among nursing students.**

Table: 4.2.2 shows that during post-test 11(36.66%) of students had moderate level and 19(63.33%) of students had adequate level practice regarding needle stick injury.

## SECTION – III

**Data on mean, standard deviation and mean percentage of pre-test and post-test of practice level regarding needle stick injury among nursing students.**

**Table: 4.3.1 Data on mean, standard deviation and mean percentage of pre-test and post-test of practice level regarding needle stick injury among nursing students.**

| S.No | Practice regarding needle stick injury | Maximum score | Mean | Standard deviation | Difference in Mean % |
|---|---|---|---|---|---|
| **1** | **Pre-test** | **30** | **13.63** | **2.08** | **45.43%** |
| **2** | **Post-test** | **30** | **13.33** | **2.58** | **44.43%** |
| **Total** | | **60** | **26.96** | **4.66** | **89.86 %** |

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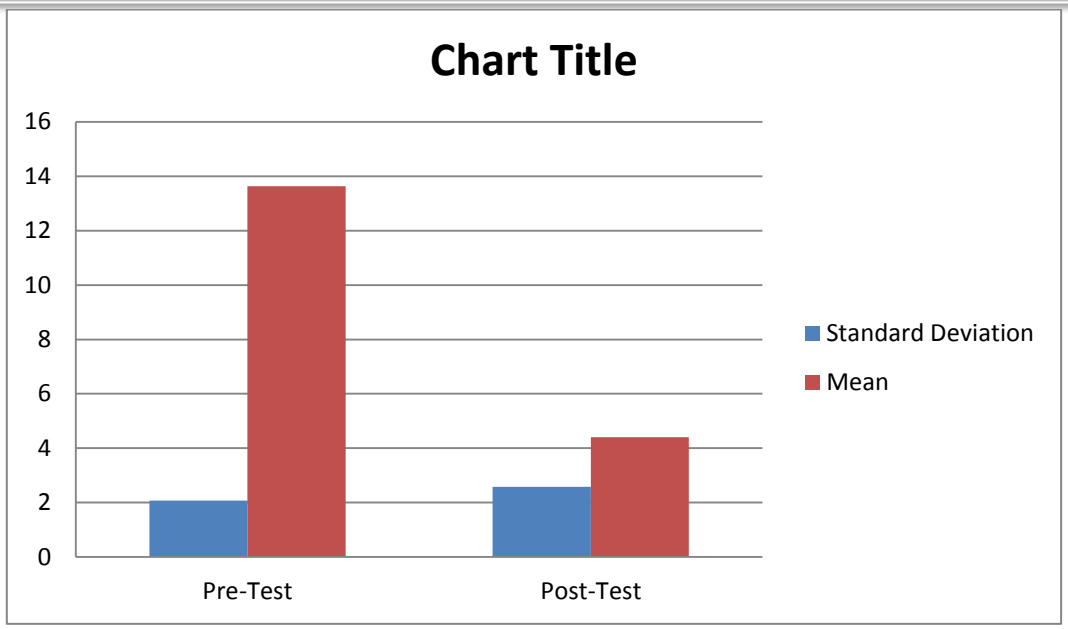
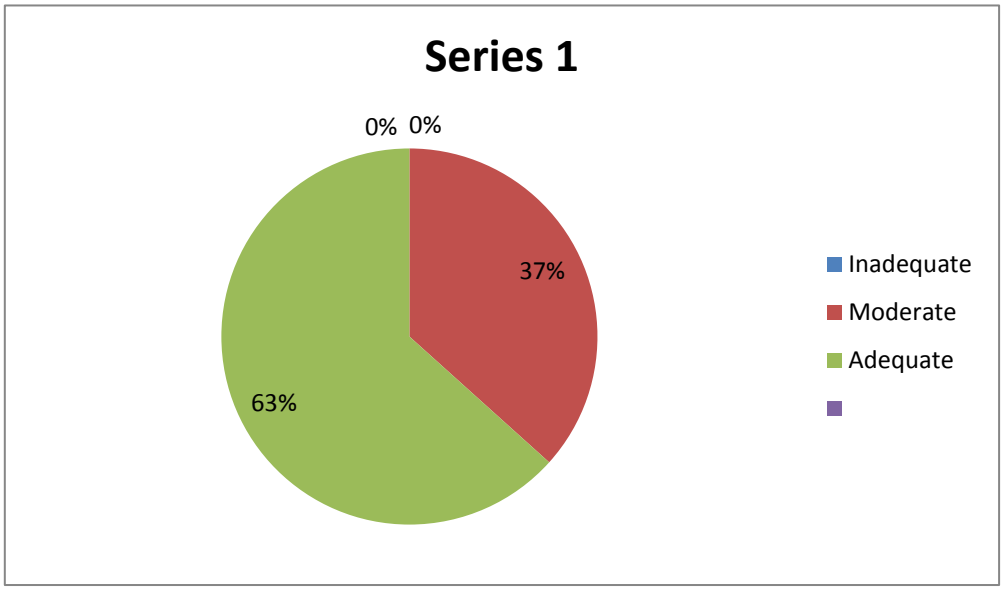



The above Figure 4.3 shows that the pre-test mean level of knowledge score was 13.63 with SD of 2.08. After the intervention, the post-test mean level of knowledge score was 13.33 with SD of 2.58. The mean difference between the pre-test and post-test was 0.30. Paired t test was employed and the calculated t value was 1.08 which indicates the significant difference between pre-test and post-test level of knowledge score at 0.05 level. Hence, this finding shows that the practice has a significance effect in increasing the level of practice among practice level regarding Needle stick injury.




**Data on frequency and percentage distribution of post-test of practice level regarding needle stick injury among nursing students.**

Table: 4.2.2 shows that during post-test 11(36.66%) of students had moderate level and 19(63.33%) of students had adequate level practice regarding needle stick injury.

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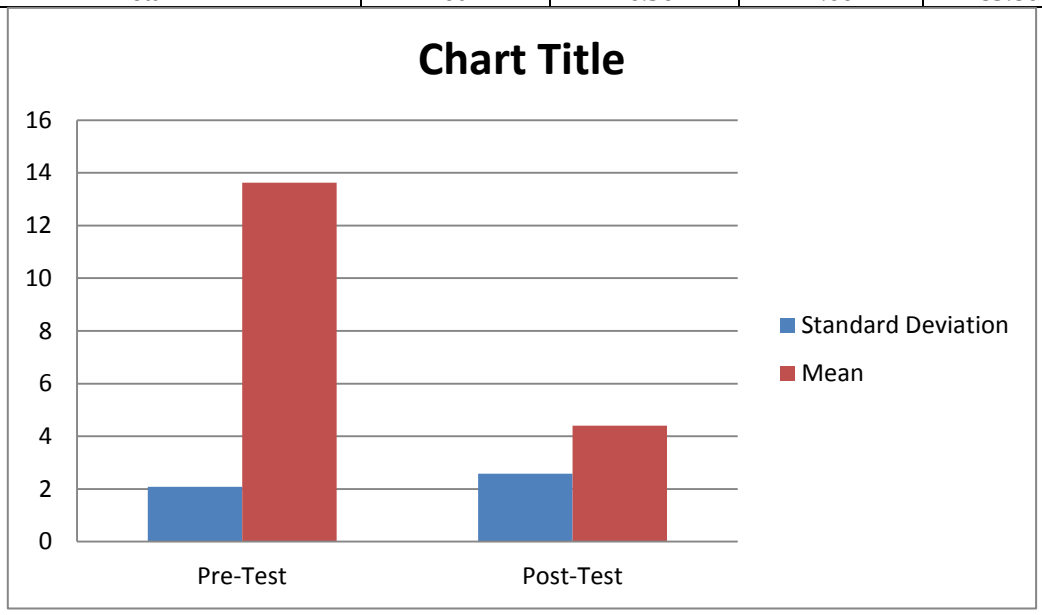
## SECTION – III

**Data on mean, standard deviation and mean percentage of pre-test and post-test of practice level regarding needle stick injury among nursing students.**

**Table: 4.3.1 Data on mean, standard deviation and mean percentage of pre-test and post-test of practice level regarding needle stick injury among nursing students.**

| S.No | Practice regarding needle stick injury | Maximum score | Mean | Standard deviation | Difference in Mean % |
|---|---|---|---|---|---|
| 1 | Pre-test | 30 | 13.63 | 2.08 | 45.43% |
| 2 | Post-test | 30 | 13.33 | 2.58 | 44.43% |
| Total | | 60 | 26.96 | 4.66 | 89.86 % |




The above Figure 4.3 shows that the pre-test mean level of knowledge score was 13.63 with SD of 2.08. After the intervention, the post-test mean level of knowledge score was 13.33 with SD of 2.58. The mean difference between the pre-test and post-test was 0.30. Paired t test was employed and the calculated t value was 1.08 which indicates the significant difference between pre-test and post-test level of knowledge score at 0.05 level. Hence, this finding shows that the practice has a significance effect in increasing the level of practice among practice level regarding Needle stick injury.

## CHAPTER -5

**Discussion, Summary of findings, Conclusion, Nursing implication, Nursing administration, Nursing education, Nursing research and Recommendations**

- This chapter discusses the main finding of the research study and review that are relation to the findings from the results of the present study. For this study the data was obtained regarding practice on needle stick injury among the nursing students at cherraan's college of nursing, Coimbatore. The researchers has undertaken the study entitles assess the practice regarding needle stick injury and it's awareness among nursing students at cherraan's college of nursing, Coimbatore.

**Objectives of the study**

- To assess the practice level regarding Needle stick injury among nursing students.
- To identify the association between the selected variable such as age, sex, educational qualification, and practice level among the nursing students.

**The first objectives of the study was to assess the practice level regarding needle stick injury among the nursing students.**

- The percentage distribution of students according to demographic variables, majority of them 25 (83.33%) were in the age of 19-20 years, 16 (53.33%) were in the gender of female, 11 (36.66%) were in the monthly income of >10k, 23 (76.66%) were in family type of nuclear family, 22 (73.33%) were in area of rural, 17

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(56.66%) were in father ocuupational status of self employee, 13 (43.33%) were in mother occupational status of un employee, 22 (73.33%) were in father educational status of $1^{o}$&$2^{o}$ Education, 17 (56.66%) were in mother educational status of $1^{o}$&$2^{o}$ Education, 20 (66.66%) were in know about needle stick injury of yes, 27 (90%) were in previous needle stick injury of no.

**The second objectives of the study was to identify the association between the selected variable such as age, sex, educational qualification, and practice level among the nursing students.**

- The result shows that frequency, percentage and X distribution on level of practice on needle stick injury among nursing students with their demographic variables, it's reveals that there is significant association found between post-test level of practice at gender and previous Needle stick injury ($p<0.05$) level, there is no association found between the other demographic variables such as age, monthly income, family type, area, mother occupational status, father occupational status, mother educational status, father educational status, knows about needle stick injury.

## HYPOTHESIS

**H1: There is significant improvement between pre-test and post-test level of knowledge of student nurse regarding needle stick injury and its prevention.**

- From the finding of the present study, it was concluded that the practice on needle stick injury improves the practice of students who participated in the study. Thus the hypothesis was proved statistically.

**H2: There is significant association between the pre-test level of practice regarding needle stick injury with selected demographic variables**

- There was statistical association between of pre test level of practice regarding needle stick injury among students with their selected demographic variables.

**Summary of the finding:**

- The primary aim of the present study was to assess the practice level regarding needle stick injury among nursing students in Cherraan's college of nursing at Coimbatore.

**Objectives of the study:**

- To assess the practice level regarding Needle stick injury among nursing students.
- To identify the association between the selected variable such as age, sex, educational qualification, and practice level among the nursing students.

**Hypothesis of the study:**

- **$H_1$:** There is significant improvement between pre-test and post-test level of knowledge of student nurse regarding needle stick injury and its prevention.
- **$H_2$:** There is significant association between the pre-test level of practice regarding needle stick injury with selected demographic variables.

**Methods of the study:**

- Quasi experimental research design was adopted for this study. There are 30 second year B.Sc. nursing students in cherraan's college of nursing at Coimbatore and non probability convenience sampling techniques was used to collect the data. The data was collected with the help of quantitative instrumental questionnaire to assess the level of practice regarding needle stick injury which consists of 20 questionnaire and demographic variables of nursing students.
- For conducting pilot study, the investigator administered quantitative questionnaire to assess the level of practice of nursing students at cherraan's college of nursing in Coimbatore.
- The final study was conducted in the month of February to March 2022.By Non probability convenience sampling techniques the data was collected from 30 nursing students. Pre-test was conducted for the students administering quantitative instrument questionnaire to assess the practice on needle stick injury among nursing students. After the pre-test practice on selected aspects of Needle stick injury was performed to nursing students through verbal explanation and explaining with flash cards on prevention of needle stick injury for the period of 30 minutes. Evaluation of practice was conducted by post-test, after one day of implementation of practice a post-test was conducted from the same people by using the same quantitative questionnaire.

**Significant of findings are as follows**

- The percentage distribution of students according to demographic variables, majority of them 25 (83.33%) were in the age of 19-20 years, 16 (53.33%) were in the gender of female, 11 (36.66%) were in the monthly income of >10k, 23 (76.66%) were in family type of nuclear family, 22 (73.33%) were in area of rural, 17 (56.66%) were in father ocuupational status of self employee, 13 (43.33%) were in mother occupational status of un employee, 22 (73.33%) were in father educational status of $1^{o}$&$2^{o}$ Education, 17 (56.66%) were in mother educational status of $1^{o}$&$2^{o}$ Education, 20 (66.66%) were in know about needle stick injury of yes, 27 (90%) were in previous needle stick injury of no.
- The pre-test mean level of knowledge score was 13.63 with SD of 2.08. After the intervention, the post-test mean level of knowledge score was 13.33 with SD of 2.58. The mean difference between the pre-test and post-

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test was 0.30. Paired t test was employed and the calculated t value was 1.08 which indicates the significant difference between pre-test and post-test level of knowledge score at 0.05 level. Hence, this finding shows that the practice has a significance effect in increasing the level of practice among practice level regarding Needle stick injury

- The result shows that frequency, percentage and X distribution on level of practice on needle stick injury among nursing students with their demographic variables, it's reveals that there is significant association found between post-test level of practice at gender and previous Needle stick injury ($p<0.05$) level, there is no association found between the other demographic variables such as age, monthly income, family type, area, mother occupational status, father occupational status, mother educational status, father educational status, knows about needle stick injury.

**Nursing implication**

- The present study was one of the initial efforts to assess the level of practice regarding Needle stick injury among 2nd, year B. Se nursing students. So the student nurses can able to gain knowledge regarding Needle stick injury and implement Needle stick injury among their clinical posting Some of the implications derived from the present study in various areas of nursing are as follows:

**Nursing education**

- Nursing educator should encourage the nursing student to improve knowledge about Needle stick injury.
- Nurse educator develop skill, knowledge about Needle stick injury in nursing practice, helps the students become aware of the variety of ways in which they can promote coping with Needle stick injury.
- The study helps nursing educator to understand practice regarding Needle stick injury
- The collected material helps to update the knowledge on evidence based practice.
- Student has to update their knowledge regarding Needle stick injury which is an essential prevention during clinical posting.
- The faculty member has to motivate the student to learn about the Needle stick injury.

**Nursing research**

- The finding of this research motivate the researcher to conduct research in various setting.
- Research can be conducted to find the effectiveness of counselling in terms of better improvement in level of knowledge regarding Needle stick injury.
- The study may help to the research scholars to investigate further research in Needle stick injury.
- The study finding may support for conducting further study in Needle stick injury.
- The findings of the study would help to expand scientific body of Professional knowledge an Needle stick injury.

**Nursing administration**

- Nurse administrators should motivate the subordinates to participate in various programmes and improving their knowledge and practice, with regard to needle stick injury.
- Nurse educators can organize seminars on needle stick injury.
- Nursing officers can motivate the nurse to organize health camps programme to urban and rural people at least twice in a month, to motivate the students on needle stick injury.
- Nurse educators can create awareness among nursing students regarding needle stick injury.
- Nursing supervisors can encourage the nurse to conduct the health awareness programme and regular health visits to the urban and rural students to insist to needle stick injury.

**Recommendation**

Based on the research findings the recommendations are as follows.

- Similar study can be conducted for a large sample and different setting.
- Studies may be conducted to evaluate the effectiveness practice.
- A similar study may be conducted on a large students for wider generalization.
- Similar study can be conducted by using experimental and control group.
- A study can be conducted among group of people.
- Educational programme on needle stick injury can be conducted for the students.

**Conclusion**

- It was found that the main conclusion of the presents study status that in the pre-test, most of the students had adequate knowledge on needle stick injury. Effectiveness to improving in their knowledge. The study results show that there is significant association between the level of practice with their selected demographic variables. These the variables calculated by chi square test at $p<0.05$, therefore the investigator was proved the hypothesis is accepted for this study.

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