

# A Study to Assess the Effectiveness of Structured Teaching Programme on Knowledge and Practice Regarding Cardiopulmonary Resuscitation among 1st Year BSc Nursing Students

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**Abstract:** Sudden cardiac arrest is a catastrophic medical emergency that may occur at any time in the hospital or pre - hospital setting. Cardiopulmonary resuscitation (CPR) and basic life support (BLS) are important lifesaving, first - aid skills. Objectives: To assess the knowledge and practice regarding cardiopulmonary resuscitation among 1st year bsc nursing students. Design: Quasi experimental design and approach in which one group pre and post design without control group. Sampling: Purposive sampling technique The sample size was 60 students in a selected college. Tool was valid and reliable questionnaire on Cardiopulmonary resuscitation which had been designed by the researcher. Result: pre - test mean score of the student was 9.6 and post - test of the mean score was 25.5. And Standard deviation was 39.25. The obtained 't' - value was 3.142 was greater than the table value (2.02) at 59 degree of freedom at 0.05 level of significance. Therefore it was concluded that there was significant gain in knowledge through structured teaching programme and Regarding practice mean pre - test skill score was 4.8, post - test practice score was 12.1. And Standard deviation was 23.89. The calculated value 2.384 was greater than the table value (2.02) at 0.05 level of significance. Therefore, it was concluded that there was significant gain in skill through structured teaching programme.

## 1. Introduction

Sudden cardiac arrest is a catastrophic medical emergency that may occur at any time in the hospital or pre - hospital setting. Cardiopulmonary resuscitation (CPR) and basic life support (BLS) are important lifesaving, first - aid skills. CPR is an emergency procedure that is performed to manually preserve intact of brain function until further measures can be taken to restore spontaneous blood circulation and breathing in the person who is experiencing the cardiac arrest. It involves chest compressions and artificial respiration. BLS refers to the maintenance of airway patency and the support of breathing and circulation without the use of equipment, other than a protective device. Therefore, knowledge of CPR is crucial to the improvement of patient survival.

### Objectives

- To assess the pre - test and post - test knowledge and practice regarding cardiopulmonary resuscitation among 1st year BSc Nursing students.
- To evaluate the effectiveness of structured teaching programme by comparing pre and post - test knowledge and practice regarding cardiopulmonary resuscitation among 1st year BSc Nursing students.
- To find out the correlation between knowledge and practice of 1st year BSc Nursing students.
- To find out the association between knowledge and practice regarding cardiopulmonary resuscitation among 1st year BSc Nursing students with selected socio demographic variables.

### Hypothesis

H1: There is a significant difference between pre - test and post - test knowledge and practice score regarding cardiopulmonary resuscitation.

H2: There is significant correlation between knowledge and

practice on cardiopulmonary resuscitation among 1st year BSc Nursing students.

H3: There is a significant association between the knowledge and practice with selected demographic variables of the 1st year BSc Nursing students

## 2. Methodology

The design selected for the present study was quasi experimental design and approach in which one group pre and post design without control group. Purposive sampling technique was used to select samples. The sample size was 60 students in a selected college.

### Description of the Tool:

The questionnaire consists of 2 parts.

Part A: It consists of demographic characteristics such as age, sex, Father's education, Mother's education, Type of family, Residential area, Religion, previous knowledge of CPR.

Part B: It consists of knowledge items regarding CPR. This section consists of 45 items. Each item has four options with one most correct answer. For each item, the correct answer carries the score of 'one' and wrong answer carries the score of 'Zero'. There for 45 items there was 45 maximum obtainable score. Practice questionnaires consist of 10 questions to assess the practice.

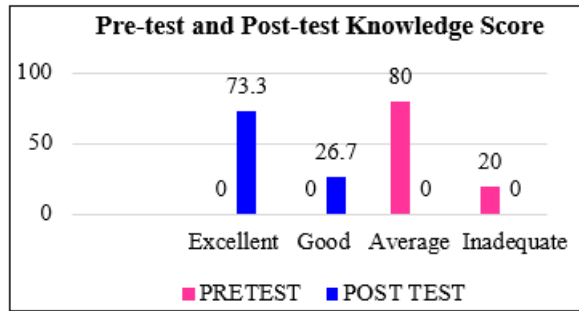
## 3. Data Analysis and Interpretation

Data on pre - test and post - test level of knowledge among students regarding cardio pulmonary resuscitation:

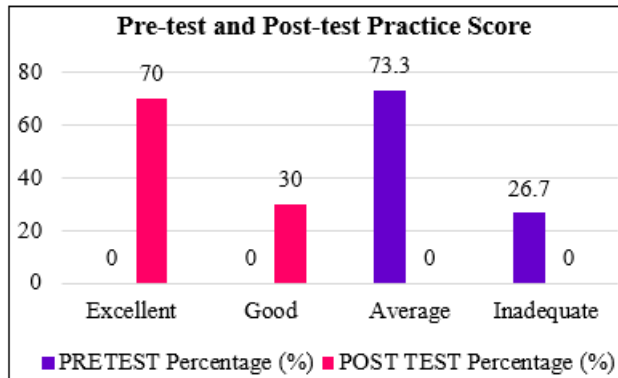
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Data on pre - test and post - test score of Practice among students regarding cardio pulmonary resuscitation:



Correlation coefficient between knowledge and practice regarding CPR shows a positive correlation existed between knowledge and practice regarding CPR. Hence, as the level of knowledge increases and the level of practice also increases.

Chi square was calculated to find out the association between the knowledge scores and demographic variables of the 1st year BSc Nursing students. Significant association was found between knowledge scores of 1st year BSc Nursing students regarding Cardiopulmonary Resuscitation with their demographic variables such as Previous knowledge and Source of information ( $P < 0.05$ ). No significant association was found between knowledge scores of 1st year BSc Nursing students regarding Cardiopulmonary Resuscitation with their demographic variables such as age, sex, father's education, mother's education, residential area, type of family ( $P > 0.05$ ).

Chi square was calculated to find out the association between the practice scores and demographic variables of the 1st year BSc Nursing students. Significant association was found between practice scores of 1st year BSc Nursing students regarding Cardiopulmonary Resuscitation with their demographic variables such as Previous knowledge and Source of information ( $P < 0.05$ ). No significant association was found between practice scores of 1st year BSc Nursing students regarding Cardiopulmonary Resuscitation with their demographic variables such as age, sex, father's education, mother's education, residential area, type of family ( $P > 0.05$ ).

#### 4. Conclusion

The study was conducted to assess the effectiveness of structured teaching programme on knowledge and Practice regarding cardiopulmonary resuscitation among Bsc Nursing

1<sup>st</sup> year students. The knowledge and practice of the students improved after the structured teaching Programme. So, the investigator accepts the research hypothesis.

#### References

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