

“A Study To Assess The Effectiveness Of Planned Teaching Programme On Adult Cardiopulmonary Resuscitation Among B.S.C Nursing 3rd Year Students At Kims College Of Nursing Amalapuram”

AFFILIATION DETAILS

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ABSTRACT

Quasi experimental study was conducted to assess the effectiveness of planned teaching programme on adult cardiopulmonary Resuscitation among B.sc nursing 3rd year students at KIMS college of nursing Amalapuram. **OBJECTIVES OF THE STUDY**1 To assess the knowledge regarding adult cardiopulmonary Resuscitation among B.sc nursing 3rd year students.2 To assess the pre test knowledge regarding adult cardioPulmonaryResuscitation among B.sc nursing 3rdyear students 3. To assess the effectiveness of planned teaching programme regarding ault cardioPulmonaryResuscitation among B.sc nursing 3rd yearstudents 4. To associate the post test level of knowledge scores regarding adult cardiopulmonary Resuscitation among B.sc nursing 3rd year students. The research approach used for this study was evaluation approach and the design selected Quasi Experimental study with pre test –post test design. A total of 50 nursing students were participated in the study. The data was entered in the master sheet for analysis and interpretation. Descriptive and inferential statistical procedures such as frequencies, percentages, mean, standard deviation, paired t-test and chi square tests were used.

Key Words

S- Significant

SD-Standard Deviation

Df -Degree of Freedom

χ^2 -Chi-Square

P-Probability

INTRODUCTION

Background of the study

The most important thing for us is to save lives”

The heart is the centre of cardiovascular system and it is vitally responsible for just about everything that gives body life ranging from the transportation of oxygen to the success of the immune system. However, the foods we eat and the amount of activity choose to take part in dramatically affect the overall health of the heart and the many other tissues that make up cardiovascular system. The heart is a muscular organ about the size of a closed fist that functions as the body’s circulatory pump. It takes in deoxygenated blood through the veins and delivers it to the lungs for oxygenation before pumping it into the various arteries which provide oxygen and nutrients to body tissues by transporting the blood throughout the body³

CPR can consist of many different things, but the initial, vital part is Basic Life Support (BLS). Cardio means “of the heart” and pulmonary means “of the lungs”. Resuscitation is a medical word that means “to revive” or bring back to life. Sometimes cardio pulmonary resuscitation (CPR) can help a person who has stopped breathing, and whose heart may have stopped beating, to stay alive. Chest compression to breathing ratios is set at 30 to 2 in adults. CPR alone is unlikely to restart the heart. Its main purpose is to restore partial flow of oxygenated blood to the brain and heart. The American Heart Association establishes the standards for CPR and is actively involved in teaching BCLS and ACLS to health professionals. The American Heart Association recommends that nurses and physicians working with patients be certified in BCLS and ACLS. . The AHA recommends using a ratio of 30:2 for compressions and mouth-to-mouth breathing. In other words, for every 30 chest compressions you perform on a person, you should breathe into his or her mouth twice CPR involves chest compressions for adults between 5 cm (2.0 in) and 6 Cm [2.4inc]deep and at a rate of at least 100 to 120 per minute the rescuer also provide artificial ventilation by either exhaling air into the subject's mouth or nose (mouth to mouth resuscitation) or using a device that pushes air into the subject's lungs (mechanical ventilation). Current recommendations place emphasis on early and high-quality chest compressions over artificial ventilation; a simplified CPR method involving chest compressions, is only recommended for untrained rescuers. In children, however, only doing compressions may result in worse outcomes because, in children, the problem normally arises from arespiratory, rather than cardiac, problem. Chest compression to breathing ratios is set at 30 to 2 in adults. CPR alone is unlikely to restart the heart.

METHODOLOGY

Research approach

The investigator selected “Quantitative approach” as research approach on the basis of the problem and objectives to be accomplished. In this study, approach was administered in order to assess the effectiveness of structured teaching programme on knowledge and skill regarding CardioPulmonaryResucitation among B.sc Nursing 3rd year students.

Research design: Research design adopted for the present study is quasiExperimental research design i.e. One group pre -test and post-test Research design.

Setting: The study was conducted in kims College of Nursing Amalapuram.

Sample size: The present study the sample consists of 50 B.sc Nursing 3rd year students .

SAMPLING CRITERIA:

Inclusion criteria:

1. Third year BSC nursing students who are willing to participate in this study
2. Third year BSC nursing students who are available at the time of data collection

Exclusion criteria:

1. Third year BSC nursing students those who are not cooperative
2. Third year BSC nursing students those who are not available at the time of data collection

Sample technique: A sample random technique sampling was used in this study

SELECTED OF VARIABLES:

Independent variable: planned teaching programme regarding adult cardiopulmonary Resuscitation among B.sc nursing 3rd year students at KIMS college of nursing Amalapuram

Dependent variable: level of knowledge on a adult cardiopulmonary Resuscitation among B.sc nursing 3rd year students at KIMS college of nursing Amalapuram.

DEVELOPMENT AND DESCRIPTION OF THE TOOL

Tool development and time consuming process. .it consist of defining the construct to be measured, formulating the items, assessing the items for content validity, estimating the reliability and conducting the pilot study
The tool use for research study was self administered structured knowledge questionnaire which was prepared to assess the knowledge of adult cardio pulmonary resuscitation

METHOD OF DATA COLLECTION:

Tools for data collection : structured questionnaire.It was divided into three parts

PART-1: It consists of demographic data.

PART-2: It consists of structured questionnaire related to knowledge regarding cardiopulmonary Resuscitation.

PART-3: it consist of checklist to assess the skill regarding cardiopulmonary Resuscitation.

SCORING KEY

The knowledge and practice on adult cardio pulmonary resuscitation was measured in terms of knowledge scores. Each correct answer was given a score of one and a wrong answer given a score of zero. The total score was 30

CONTENT VALIDITY

When an instrument measures what is supposed to be measuring it is valid content validity refers to the degree to which the items in an instruments adequately represent the universe of content

To obtain content validity of the tool prepared tool with objectives operational definition and criteria checklist was submitted to experts .the experts were requested to check for relevance adequacy and appropriateness of the tool a few items were modified based on the suggestions of the experts and there by content validity were ascertained

RELIABILITY The reliability of the tool was tested by using split half technique employing spear man Brown's Prophecy formula. The Karl Pearson co-efficient correlation was established by deviation method. The 'r' value is 0.89 and the tool was found to be reliable.

DATA COLLECTION PROCEDURE

Formal written permission was obtained from principal of KIMS college of nursing. Data was collected 12/10/2022 to 11/ 12/2022 at KIMS college of nursing amalapuram selected nursing students were selected by using non probability convenient technique . All the selected students are students requested to assemble in the classroom then the investigator given self introduction explained the purpose of data collection to the student willingness to participate in the study was

ascertained. the students were assured the anonymity and confidentiality of the information provided by them structured knowledge questionnaire was administered to the nursing student with therequired information and the structured teaching programme was given on the same day and conducted by using the same structured knowledge questionnaire

PLAN FOR DATA ANALYSIS

The data was edited , coded and entered in excels sheet. The data were analyzed, using SPPS version 10 and the probability of less than 0.05 was considered statically significant the data were analyzed as follows

Section 1: back ground factors of nursing student were analyzed by using frequency and percentage distribution

Section 2: pre and post test knowledge of nursing student regarding Cardio pulmonary resuscitation by using mean standard deviation and percentage.

ANALYSIS

Data analysis based on following hypothesis

H1 -There is a significant difference between pre-test and post-test level of knowledge regarding adult cardiopulmonary Resucitation among B.sc nursing 3rd year students at KIMS college of nursing Amalapuram.

H2-There is a significant association between the level of knowledge regarding adult cardiopulmonary

Resuscitation among B.sc nursing 3rd year students at KIMS college of nursing Amalapuram with their selected socio demographic variable.

TABLE 1
Frequency and Percentage Distribution of B.SC Nursing 3rd year students according to Demographic variables. n=50

S. NO.	DEMOGRAPHIC CHARACTERISTIC	Frequency (f)	Percentage (%)	
1	Age in years	17-19 years	14	29%
		20-22 years	36	71%
		23-25 years	0	0%
		Above 25 years	0	0%
2	Religion	Hindu	11	21%
		Muslim	4	9%
		Christian	35	70%
		Others	0	0%
3	Type of family	Nuclear family	11	22%
		Joint family	39	78%
		Extended family	0	0%
4	Education	Primary education	11	20%
		Secondary education	24	46.6%
		Higher education	12	25%
		Graduation	3	9%
5	Occupation	Govt.employee	5	13%
		business	5	13%
		Private employee	36	73%
		laborer	4	11%
6	Monthly income of the family	Rs.3000-5000/-	35	58.3%
		Rs.5001-10000/-	25	41.7%
		Rs.10001-15000/-	0	0%
		>Rs.15001/-	0	0%
7	Previous knowledge on CPR	Yes	28	56%
		No	22	44%
8	Source of information	Personnel	10	16%
		News paper	15	30%
		Family members	1	4%
		magazines	24	50%

The above table shows that out of 50 B.sc Nursing students Regarding age, 29%(14) of respondents are in the age group of 17-19 years, 71%(36) of respondents are in the age group of 20-22 years, there are no respondents in the age group 23-25 years and above 25 years. According to their religion, 21% (11) of students are Hindu, 9 % (4) of students are Muslim, and 70% (35) of students are Christian.

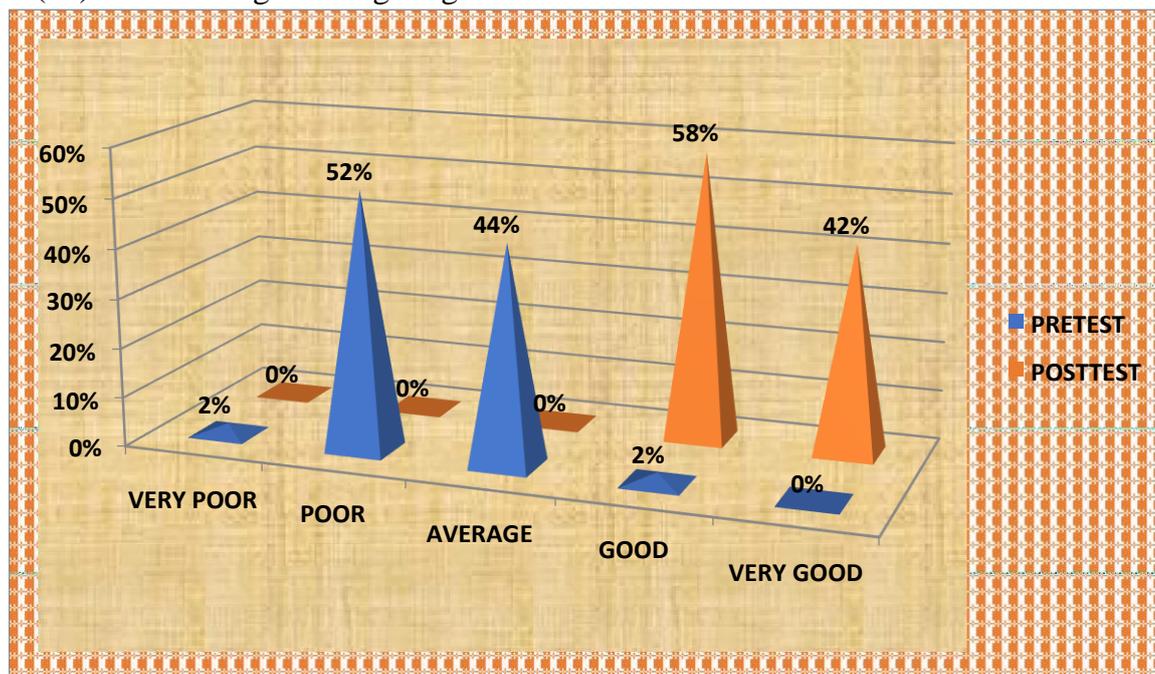
In view of Monthly income per month of sample, majority 58.3% were getting Rs3000-5000/- per month and 41.7% were Rs.5001-10000/- per month. According to the father's educational status of B.SC III yr students, 20 % (11) are primary education, 46 % (24) are secondary education, 25%(12) are higher education, 9%(3) are higher education and above.

According to the father's occupational status of B.SC III yr students, 13%(5) are government employees, 11%(4) are laborer, 13%(5) are business and 73%(36) belongs to private employee.

According to the type of family, 22 % (11) of students belong to joint family, 78 % (39) of students belong to nuclear family

According to their previous knowledge, 56 % (28) of students are having previous knowledge about CPR and 44 % (22) of students are not having knowledge about CPR.

According to the source of information, 86 % (24) of students got through personnel, 3.5 % (01) of students through newspaper, 7 % (02) of students family members, and 3.5 % (01) of students got through magazines



shows pretest overall level of knowledge for degree students. 52% of students had poor knowledge and 44% of degree students had average knowledge. Posttest overall knowledge level for degree students. 58% of students had good knowledge and 42% of degree students had very good knowledge. The above tables shows that the knowledge scores pre test mean was 58.18 with 1.35 standard deviation and that of post test was 9.84 with 1.36 standard deviation. The calculated 't' value was 32.99, which is higher than the table 't' value 2.66 at 59df with 0.001 level of significance. It shows that there is significant difference ($p < 0.001$) in pre test and post test knowledge scores.

Hence it concluded after Structured teaching programme on regarding Cardio Pulmonary Resuscitation the knowledge scores have been increased. The formulated hypothesis for the present study "there will be significant difference in the pre test and post test knowledge scores of Bsc Nursing students on CPR" has been accepted because of the significant difference in the pre test and post test knowledge scores which is evident by the 't' values. Hence H_1 is accepted.

DISCUSSION

An Quasi experimental study was conducted to assess the effectiveness of structured teaching programme on Cardio Pulmonary Resuscitation regarding knowledge and practice among third year nursing students (20-22yrs) in KIMS college of nursing, Amalapuram." The sample size was 50 nursing students. Data was collected by using structured Questionnaire from. The discussion of the study is based on findings obtained from the statistical analysis. The findings were discussed in relation to the objective of the study. It shows that frequency and percentage based on knowledge scores of the Nursing students about CPR. Below average (0-49.9%) indicates the scores in between 0 to 9, Average (50-74.9%) indicates the score between 10-14 and Above average (75-100%) indicates the scores between 15- 20. Table no.2, 34 (56.7%) were under below average knowledge level in pre test whereas in posttest were found nil, 26 (43.3%) were under average knowledge level in pre test whereas 12 (20%) were average knowledge level in post test, above average

knowledge level in pre test were found nil whereas 48 (80%) were under It revealed that chi square analysis at 0.05 level of significance computed between post test knowledge of Nursing students with their selected demographic variables. The computed chi square value for education of mother, occupation of mother, type offamily, previous knowledge and source of information were 11.33, 9.32, 8.08 , 4.06 and 9.90 and the table value of chi square was 7.82 at 3df and 5.99 at 2df and 0.05 level of significance. It shows there was significant association between post test knowledge scores on Cardio Pulmonary Resuscitation examination with education of mother, occupation of mother, type of family, previous knowledge and source of information. Where as there was no significant association between post test knowledge of Nursing students with age, religion and education father and occupationof father where the obtained chi square values were not significant at 0.05 level of significance.

CONCLUSION

Out of 50 students, It shows that the pre test mean knowledge was 8.93 and pre test practice scores was 2.93. The calculated r value 0.68 was higher than the table r value 0.325 at 59df and 0.01 level of significance. The post mean knowledge was 15.20 and posttest mean practices was 7.20 and calculated r value was 0.61 which is higher than table r value 0.325 at 59df and 0.01 level of significance.

. These differences indicate that planned teaching programme was highly affected in B.sc nursing 3rd year students. Reveals that there was significant association between pre test knowledge scores on CPR with education, income and source of information among nursing students where the obtained chi square values significant at 0.05 level of significance.

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