Original Research Paper

Nursing

A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING CARDIO PULMONARY RESUSCITATION AMONG B.SC.NURSING 1ST YEAR STUDENTS IN SELECTED COLLEGES OF NURSING , BHILAI, C.G.

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ABSTRACT **Background:**Cardio pulmonary resuscitation is an important medical procedure which is performed in an effort to manually preserved intact brain function until further measure are taken to restore normal spontaneous blood circulation and breathing in a person in cardiac arrest.It is a combination of rescue breathing and chest compression .which is delivered to the victim who is to be in cardiac arrest being important members of the health care team medical student are deemed to passes the basic skills and expertise whichare needed to perform CPR.**Objectives:1.**To assess the knowledge score regarding cardio pulmonary resuscitation among B.Sc. nursing 1st year student before intervention and after intervention. **2.**To compare knowledge score regarding cardio pulmonary resuscitation among B.Sc. nursing 1st year student before and after intervention.**3.** To find out the association in knowledge score regarding cardio pulmonary resuscitation among B.Sc. nursing 1st year student with their selected socio demographic variables before intervention. **Method:** In this study the research approach was pre experimental pre-test & pos-test design without control group design was applied. Total 40 samples selected by purposive sampling technique. The intervention Structured Teaching Programme was introduced to the group after the pre test. Knowledge was assessed by self structured questionnaire assessed by questionnaire before and after the intervention**. Results:**The result revealed that meanpre-test 82.5 % students had inadequate knowledge and 17.5 % students had moderate knowledge. And during post test 85% students had moderate knowledge and 15% students had adequate knowledge.**Conclusion:** The study concluded that, structured teaching programme about Cardio Pulmonary Resuscitationshould be implemented to improve the knowledge amongthe B.Sc. nursingstudents.

KEYWORDS : Effectiveness, StructuredTeachingProgramme,Knowledge,Cardio pulmonary resuscitation.

INTRODUCTION

Cardio pulmonary resuscitation is an important clinical procedure which is performed in an effort to manually preserved intact brain function until further measure are taken to restore normal ordinary blood circulation and breathing in a person in cardiac arrest. It is a combination of rescue breathing and chest compression which delivered to the victim who is to be in cardiac arrest being key members of the health care team medical student are deemed to convey the basic skills and expertise which are needed to perform CPR [1].

According to American Association the ability to responce quickly Cardiac arrest continuous to be a major cause of premature death in much of the world todayalthough the epidemiology of cardiac arrest has been well studied in many developed countries.[2] There are still no studies done on evaluation of knowledge, attitude and practice on CPR in AYUSH university .This study was emphasized on assessment of knowledge attitude and practice on CPR so it may provide baseline information for other researcher and health professional who are interested on same area. Besidethis it initiated responsible bodies to treat cardiac arrest patient in order to take action.[3]

The ability to respond quickly and effectively to cardiac arrest situation rests on health care team.CPR involves physical intravenous to create artificial circulation through rhythmic pressing on the patient chest to manually pump blood through the heart, called chest compression and usually also involves the exhaling into the patient to ventilate the lungs and pas oxygenthe blood called artificial respiration. Some protocols new downplay the importance of the artificial respiration and focus on the chest compression only.[4]

CPR is generally continued usually in the presence of advanced life support (such as from EMS providers) until the patient regain a heart beat (called "return of spontaneous circulation" or "ROSC") or is declared dead. Acc. To Lewis EF.AL (2002)

A number of studies have confirmed that CPR can be life saving when provided either by laypersons or medical professional. In several large investigations the prompt delivery of CPR served as a important prediction of survival bystander CPR may almost double the chances of survival. 5.7 0ther works has shown that the probability of survival from cardiac arrest falls by 10-15% per minute without treatment, and well performed CPR likely shift this curve towards higher probability of survival.

The deficiencies in CPR quality for both out of hospital and in hospital cardiac arrest. Practice of BLS amongst medical and nursing students has always been a neglected subject [5]. Cardiac Life Support training is a critical component of undergraduate teaching. The training helps to develop an organized thinking process in the students.[6]

The deterioration in knowledge can occur within two weeks of initial CPR training which is evidenced by inability of practice retention among physicians, nurses, and the lay public [7].

PROBLEM STATEMENT –A study to assess the effectiveness of the planned teaching programme on knowledge regarding cardio pulmonary resuscitation among B.Sc.nursing 1st year student of M.J. college of nursing .

Objectives of the Study

1) To assess the knowledge score regarding cardio pulmonary resuscitation among B.Sc. nursing 1st year student before intervention and after intervention.
2) To compare knowledgescore regarding cardio pulmonary resuscitation among B.Sc. nursing 1st year studentbefore and after intervention.
3) To find out the association in knowledge scoreregarding cardio pulmonary resuscitation among B.Sc. nursing 1st year student with their selected socio demographic variables before intervention.

Hypothesis-

H1:-There issignificant difference in knowledge scoreregarding cardio pulmonary resuscitation among B.Sc. nursing 1st year student before intervention and after intervention.

H2:-Thereis significant association in knowledge score regarding cardio pulmonary resuscitation among B.Sc. nursing 1st year student with their selected socio demographic variables before intervention

Methodology-
Research approach: quasi experimental one group pre-test & pos-test design.

Setting of the study: This study was conducted in M.J. college of nursing at Bhilai.

Research variables:
Independent variables: In this study the Structured Teaching Programme was independent variable**.**

Dependent Variables: Knowledge of B.Sc. Nursing 1stYear Student on CPR.

Demographic variables: This includes age of students, Sex, Education, Religion, Duration of Stay, Types of Family, Monthly income, Diet Pattern, Marital Status, Residence Degree Students (18.21Years)

Sample size: The sample size of the study was 40 studentsselected by purposive sampling technique.

Criteria for Samples Selection:
A. Inclusion Criteria
• B.Sc. Nursing 1stYear students
• Who were willing to participate in the study

B. Exclusion Criteria
• B.Sc. Nursing 1st Year students,
• Who were not present at the time of data collection.

Description of Tool
A self structured questionnaire were prepared and organized into the following section.

Section – A
It deals with demographic data includes age, gender religion, family Members belong to medical Nursing profession etc.

Section – B
It includes 35 questions. Regarding CPR this section consist of question which deal with definition of CPR, incidence of CPR, techniques of CPR andmethods of CPR.

Scoring mode: - Each correct answer was a score of 1 and incorrect was score of 0. Maximum scoring possible was 35 in knowledge questionnaire and minimum was 0.

Data collection procedure-
After getting ethical permission was obtained by ethics committee formal permission were taken from respective principal of selected college. The sample was taken by non-probaility purposive sampling technique and all potential participants matching the inclusion and exclusion criteria. Self-introduction was given to the students. After that purposes and benefits of study were explained to the students an informed consent was taken.Questions were explained to the students if any of the students was not able to understand. Then, pre- test was taken and later students were provided teaching on CPR. Post- test was conducted 7 days of intervention.

Plan for data Analysis
Statistical analysis is the organization and analysis of quantities data using statistical procedures including both descriptive and inferential statistics.

RESULT
Section I–Description of sociodemographicvariablesof B.Sc. Nursing 1stYear Student.

Table-no 1-frequencyandpercentage Distributionofb.sc. Nursing 1stYear Student According To Theirsocio- Demographic Variables.

S.No	Demographic Variables	Frequency (F)	Percentage (%)
1	**Age**		
	18	10	25%
	19	17	45%
	20	9	20%
	21	4	10%

2.	**Sex**		
	Male	3	7.50%
	Female	37	92.50%
3	**Types of family**		
	Nuclear	25	37.50%
	Joint	15	62.50%
4	**Types Of Religion**		
	Hindu	31	77.50%
	Christian	8	20%
	Muslim	1	2.50%
	Others	0	0%
5.	**Parents & Education**		
	Educated	36	90%
	Illiterate	4	10%
6.	**Family Monthly Income**		
	10,000	11	27.50%
	15,000	8	17.50%
	20,000	4	10%
	25,000 & Above	17	45%
7	**Types Of Residential**		
	Urban	15	37.50%
	Rural	25	62.50%
8	**Food Habit**		
	Vegetarian	16	16.40%
	No vegetarian	24	60%
9	**Familymember BelongTo Medical Profession**		
	Yes	11	60%
	No	29	72.50%
10	**Pervious Knowledge**		
a	YES	37	92.50%
b	NO	3	7.50%

SectionII:-Findingsonknowledge regarding cardio pulmonary resuscitation among B.Sc. nursing 1st year.

Table2: Mean, standarddeviation, meandiffference of overall pre test and post test level ofknowledge regarding cardio pulmonary resuscitation amongB.Sc. nursing 1st year.

Over comparison	Total score		
	Mean	SD	Mean difference
Pre-test	8.125	3.52	10.625
Post-test	18.75	2.31	

TableNo.2 Reveal sthat them eanpret estscore of knowledge was 8.125± 3.52 which was increasedto18.75±2.31 after post test. The mean difference was 10.625 which rejects the nullhypothesis and accepts the research hypothesis that therewill be significant difference in knowledge score regarding cardio pulmonary resuscitation among B.Sc. nursing 1st year.

Section III:- Association in knowledge score regarding cardio pulmonary resuscitation among B.Sc. nursing 1st year student with their selected socio demographic variables before intervention.

Sr. No.	Demogrphic	DF	x^2	p-value	Level of significant
1	Age	6	6.33	12.59	NS
2	Gender	2	0.56316	5.99	NS
3	Resident	2	1.95094	5.99	NS
4	Religion	6	4.907	12.59	NS
5	Previous Knowledge	6	0.807	12.59	NS
6	Family monthly Income	6	13.36	12.59	**Significant**
7	Food Habits	2	0.46	5.99	NS
8	Types Of Family	2	8.29	5.99	**Significant**
9	Parents Education	2	0.94	5.99	NS
10	Medical Profession	2	0.007	5.99	NS

Table 3 shows that the variables consist of age, gender, resident religion, previous knowledge, food habits, parents educations and medical profession have no significant association was found between the knowledgescore regarding cardio pulmonary resuscitationwith their selected socio-demographical variables.

NursingImplication

According to Tolsma (1995) the section of the research report that focuses on nursing implication usually includes specific suggestions for nursing practice, nursing education, nursing administration and nursing research.

Nursing practice

Nurses have the responsibility to improve the knowledge level of degree students. The present study will help the nurse to know the effectiveness of structured teaching programme on knowledge regarding Cardiopulmonary Resuscitation. It will help in creating the awareness among students about the Cardiopulmonary Resuscitation. Cardiopulmonary Resuscitation is one of the emergency management.

Nursing education:

Student has to update their knowledge regarding Cardiopulmonary Resuscitation in emergency management. The faculty member has to motivate the student to learn about the Cardiac arrest and its immediate care.

Nursing administration:

The present study proposed to help the health administrator to create awareness about the effectiveness of structured teaching programme on knowledge regarding Cardiopulmonary Resuscitation among degree students to give a valuable life. Administrators have to educate the students through media regarding the practice of CPR.

Nursing research:

The study will be valuable reference for further research. The findings of the study would help to expand the scientific body of professional knowledge upon which further research can be conducted.

Limitation:

The study was limited to degree students between the age group of (18-21yrs) students.

The study had only one group to prove the effectiveness of Structured teaching programme

The samples were selected by purposive sampling technique.

Recommendations:

The study can bereplicated in large sample size. A similar study can be done in different settings and in different population. A comparative study can be done to having twogroups.

CONCLUSIONS:

The findings of the study revealed that STP was an effective method to enhance the knowledge of undergraduate students regarding cardiopulmonary resuscitation. So the study concluded that structured teaching program had a great potential for improving the knowledge of undergraduate students.

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