“STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING CARDIO PULMONARY RESUSCITATION AMONG IV YEAR B.SC. NURSING STUDENTS OF SELECTED NURSING COLLEGES AT TUMKUR, KARNATAKA WITH A VIEW TO DEVELOP AN INFORMATIONAL BOOKLET”

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ABSTRACT

One of the major causes for death is sudden cardiac death in many countries. Defibrillation and other advanced life support measures are not immediately available in many situations. Professional helps are not easily available especially in urban settings. Educated and skilled bystanders can perform CPR (cardio pulmonary resuscitation) in these situations to save life of many. So it is an important responsibility of educators to pass the knowledge and skills of CPR to their trainees, which may help to manage a stressful situation. It has been proved that if CPR performed correctly, may positively influence survival of cardiac arrest victims.

KEYWORDS: *Cardio Pulmonary Resuscitation, IV Year B.Sc. Nursing, Informational Booklet, Cardiac Death, Defibrillation, Structured Teaching Programme*

Received: Aug 08, 2020; **Accepted:** Aug 28, 2020; **Published:** Nov 06, 2020; **Paper Id.:** IJESRAUG202015

INTRODUCTION

Cardio (of the heart) pulmonary (of the lungs) resuscitation (to revert) is a medical term that used to denote restarting of temporarily stopped heart & lungs function. CPR can help a person who has stopped breathing and heart beating, to stay alive. Those who are confront with emergency situations like police officers, fire & safety officers, lifeguards, doctors, nurses, paramedics, ambulance staffs etc. are all required to do training in CPR. Not only the persons who handle emergencies, but also nursing students, teachers, child care workers, parents etc. also must do training in CPR.

The professionals who are working hospital settings should be knowledgeable and skilled in CPR procedure, because cardiac arrest may occur at any time or setting that leads to cessation of breathing and heart function. There are two components of resuscitation measures- basic cardiac life support (BCLS) and advanced cardiac life support (ACLS). The standards for CPR are established by “The American Heart Association” and are actively involved in training BCLS and ACLS to every health professionals. They recommend certification in BCLS and ACLS for nurses and physicians. Formal classes, cognitive and motor skill tests are involved in certification. Remember, CPR alone is not enough for saving lives of cardiac arrest victims. It plays a vital part in the survival chain that helps the victim to meet advanced help. The survival chain composed of following: activation of EMS system, CPR, defibrillation and advanced care.

OBJECTIVES OF THE STUDY

- To check the existing knowledge of students on CPR(cardio pulmonary resuscitation).
- To check the posttest knowledge score of students on CPR (cardio pulmonary resuscitation).
- To find out significant differences between pre &posttest knowledge scores.
- To find out the association of posttest knowledge score with selected demographic variables
- To develop an informational booklet.

RESEARCH METHOD

The research of the study was pre-experimental and design was one group pretest-posttest. The selected population was IV year B.Sc. nursing students. The sample consists of 60 students from Sri Ramanamaharshi College of Nursing, Sridevi College of Nursing and Aruna College of Nursing, Tumkur Karnataka. Purposive sampling was used for selection of students. The pretest conducted and after that STP was given to the students. After a week of pretest, the posttest was conducted with questionnaire schedule with the same questionnaire. Descriptive and inferential statistics were used to analyse the data.

RESEARCH DESIGN

Population	O1	X	O2
	Pretest ON 1 ST DAY	Intervention ON 1 ST DAY	Posttest ON 7 TH DAY
IV Year B.Sc. nursing students studying in selected nursing colleges at Tumkur. Sample size -60	Knowledge Assessment by using structured questionnaire regarding CPR.	Administration of structured teaching program regarding CPR.	Assessment of knowledge and skills by the same structured questionnaire and check list regarding CPR.

RESULTS

The data analysis was based on the study objectives and hypotheses. Descriptive and inferential statistics were mean, mean percentage, frequency, and standard deviation with tabular presentation of the data. Paired 't' test was used to compare the knowledge scores of pretest and posttest. For finding the association of selected variables with posttest knowledge and skills scores, χ^2 test was used.

The study findings revealed that 33.33% of students were belongs to 21-22 years age group; 41.67% of students were belongs to 23-24 years age group and 25% of students were belongs to above 25 years age group. In the study 63.33% of female nursing students and 36.67% of male nursing students were participated. 56.67% respondents were Hindus, 10% were Muslims and 33.33% of respondents were Christians. 30% of participants belong to family with monthly income below Rs.10,000/- and 70% belong to family with monthly income above Rs.10,000/-. Forty seven percent of the participants previously attended CPR classes and 53% had not attended. The study included 33.33 % of B.Sc. Nursing IV year students from Sridevi College of Nursing, Sri Ramanamaharshi College of Nursing and Aruna College of Nursing,

Tumkur, Karnataka respectively.

The mean knowledge score of pretest was **16.55**, and that of posttest was **32.47**. Standard deviation of pretest is **3.784** and for posttest is **1.228**. The mean skills score of pretest was **5.13**, and that of posttest was **7.15**. Standard deviation of pretest is **0.74** and for posttest is **0.36**. This indicates that, the STP was effective in increasing the knowledge as well as skills regarding CPR for B.Sc. nursing IV year students.

Chi-square computed between posttest knowledge scores of IV year B.Sc. Nursing students with their selected demographic variable; N=60

Variables	Knowledge		Chi Square	df	Inference
	Below median	Above median			
1. Age					
a. 21-22 years	11	9	3.662	2	S
b. 23-24 years	14	11			
c. >25 years	6	9			
2. Gender					
a. Male	22	16	1.069	1	NS
b. Female	9	13			
3. Religion					
a. Hindu	20	14	1.794	2	NS
b. Christian	8	12			
c. Muslim	3	3			
4. Income					
a. Less than 10,000	9	9	0.12	1	NS
b. More than 10,000	23	19			
5. previous classes attended					
a YES	10	18	4.55	1	S
b NO	18	12			

S= Significant, NS= Not Significant

Chi-square computed between posttest skills scores of IV year BSc nursing students with their selected demographic variables. N=60

Variables	skills		Chi Square	df	Inference
	Below median	Above median			
1. Age					
d. 21-22 years	8	12	8.321	2	S
e. 23-24 years	15	10			
f. >25 years	3	12			

2. Gender					
c. Male	18	20	3.98	1	S
d. Female	6	16			
3. Religion					
d. Hindu	12	22	0.962	2	NS
e. Muslim	2	4			
f. Christian	14	6			
4. Income					
c. Less than 10,000	6	12	1.86	1	NS
d. More than 10,000	20	22			
5. previous classes attended					
a YES	6	12	1.21	1	NS
b NO	9	18			

S= Significant, NS= Not Significant

DISCUSSIONS

All the peoples, especially the professionals who are working hospital settings should be aware and trained to do CPR procedure. There are two components of resuscitation measures- basic cardiac life support (BCLS) and advanced cardiac life support (ACLS). ACLS need equipment and advanced setting. Whereas BCLS need no such things, it needs a trained person. CPR can be done by a person alone or by the assistance of someone else. To perform CPR or to make assistance of common people, all persons especially health care professionals need to be trained. Such immediate and skilful actions can save life of many.

The pretest findings of the study revealed that the score were: mean 16.55, standard deviation 3.784 and mean score percentage was 37.61 %. And for skills the mean percentage is 51.33%, standard deviation is 0.74 and mean is 5.13. This shows that the knowledge and skills of nursing students regarding CPR was inadequate

After STP, the samples have showed improvement in the knowledge and skill of CPR. The scores in posttest are: mean 32.47, standard deviation was 1.228 and mean score percentage was 73.79%. Hence the overall improvement in knowledge mean score is 15.93. In posttest skills mean percentage is 71.5% SD is 0.36 and mean 7.15 hence the overall improvement in skills mean percentage is 20.17

INTERPRETATION AND CONCLUSIONS

The study findings proved that, the knowledge and skills of nursing students regarding CPR in pretest was inadequate. In this study, the structured teaching programme tested was found effective. The study proved that Age and previous CPR classes attended showed significant association with posttest score. Whereas religion, gender and family income are not significant, it also indicates the importance of frequent education programs to update the knowledge regarding CPR.

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