

# Original Research Paper

Nursing

# EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING "CARDIOPULMONARY RESUSCITATION" AMONG PLUS TWO STUDENTS

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# **KEYWORDS:**

Cardiopulmonary resuscitation (CPR) is a life saving technique useful in many emergencies, including a heart attack or near drowning, in which someones breathing or heart beat has stopped. It is an emergency procedure that combines chest compressions often with artificial ventilation in an effort to manually preserve intact brain function until further measures are taken to restore spontaneous blood circulation and breathing in a person who is in cardiac arrest The cardiopulmonary resuscitation (CPR) guidelines of compression-only life support (COLS) for management of the victim with cardiopulmonary arrest in adults provide a step wise algorithmic approach for optimal outcome of the victim outside the hospital by trained lay persons. Adolescents are the main targeted groups in this study as they have less knowledge regarding CPR.

# NEED FOR THE STUDY

Basic life support (BLS) and cardiopulmonary resuscitation (CPR) are urgently required and must be performed when cardiac arrest occurs. These lifesaving procedures must be learned by healthcare professionals. In developed countries, members of the public, academics, and students learn how to carry out these emergency procedures. Knowledge of these simple procedures determines successful outcome. Basic life support (BLS) is a simple and effective maneuver that if performed well and in a timely manner will increase survival rate in most emergency situations. This indicates the need for teaching and training non-health professionals and laypersons to provide effective and safe resuscitation prior to hospital care, as outcome would improve significantly according to several published studies.

Sudden cardiac arrest is a major public health problem in the world. Immediate initiation of high-quality cardiopulmonary resuscitation (CPR) significantly increased patient survival rate. Therefore, it is very important to train young people and increase public awareness of CPR for the long-term benefit of the community.

# STATEMENT OF THE PROBLEM

 Effectiveness of structured teaching programme on knowledge regarding cardiopulmonary resuscitation among plus two students in selected Government Higher Secondary School.

# **OBIECTIVES**

- To assess the knowledge regarding CPR before structured teaching programme.
- To assess the level of knowledge regarding CPR after structured teaching programme.
- To find out the association between the pretest score of knowledge regarding CPR among students with selected demographic variable.

# **HYPOTHESES**

- H1-There will be a significant difference in level of knowledge regarding CPR among student.
- H2-There will be significant association between the post test score of knowledge with selected demographic variable.

#### RESEARCH METHODOLOGY

# Research approach

The research approach used for the present study was quantitative evaluative approach.

# Research design

The research design used for the present study was one group pre test and post test design.

#### Variables

- Independent variable is structured teaching programme.
- Dependent variables is level of knowledge of CPR.
- Demographic variables are age, gender, residential area and type of family

**Setting of the study**: The setting of the present study was Govt. Higher Secondary School.

**Reference Population** was plus two students in Balaramapuram.

Sample was plus two students in Govt.Higher Secondary School.

Sample size is 30.

Sample technique: Simple Random Sampling technique

# **DEVELOPMENT OF TOOLS**

There are two section of tool being used. They are demographic variables and knowledge level.

SECTION 1 consists of demographic variable such as

- Age
- Gender
- · Residential area
- Type of family

#### **SECTION-2**

Scoring key consisted of questionnaire with 20 closed ended questions  $% \left( 1\right) =\left( 1\right) \left( 1$ 

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Level of knowledge	Score	Percentage	
Poor knowledge	0-7	0-30%	
Average knowledge	7-14	31-65%	
Adequate knowledge	14 – 20	66 – 100%	

# METHOD OF DATA COLLECTION

Consent collected from the participants and a structured questionnaire distributed and answers were collected to assess the knowledge regarding Cardio Pulmonary Resuscitation. It consist of 20 multiple choice question. The structured teaching programme was conducted and post test collected after 3 days.

## **RESULTS**

The data was organized and presented under the following sections

- Section 1- Description of sample characteristics.
- Section2- Level of knowledge regarding CPR among plus two students before and after structured teaching programme.

 Section3-Association between pre test score of knowledge regarding CPR with their selected demographic variables.

# Section 1

# Distribution of sample characteristics.

Distribution and percentage of plus two students according to age.

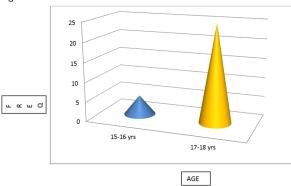


Figure 3:Bar diagram depicting percentage distribution of sample characters.

The above figure shows that majority of subjects belongs to the age group of 17-18yrs.

# Distribution and percentage of sample according to Residence.

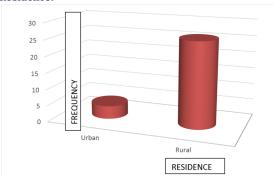


Figure 5:Bar diagram depicting percentage distribution of sample characteristics.

The above figure shows that 5(16.67%) were urban and 25(83.33%) were rural.

# Distribution and percentage of sample according to Gender.

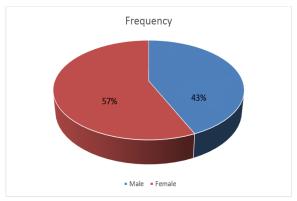
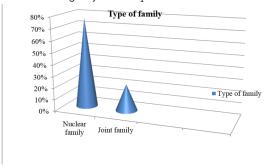


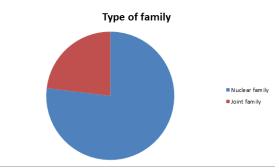
Figure 4:Pie diagram depicting percentage distribution of sample characters.

The above figure reveals that 13(43%) were males and 17(57%) were females.

Distribution and percentage of sample according to Type of family.

 Majority of sample 76.6% belongs to nuclear family and 23.33% belongs to joint family.





Section 2:Distribution of subjects according to post test knowledge score.

Table 2: depicts that 67% (20) of the subjects have adequate knowledge,33%(10) subjects have average knowledge.

Sl.No	Level of knowledge	Frequency	Percentage
1	Poor knowledge	0	0%
2	Average knowledge	10	33%
3	Adequate knowledge	20	67%

Table 3:Mean and standard deviation of level of knowledge after structured teaching programme.

The above table depicts that knowledge score after structured teaching programme was  $14.33\pm1.72$  change in knowledge score was statistically significant P<0.05.

### Section 3

It shows that there is no association between knowledge regarding CPR and selected socio-demographic variables.

Area	Mean	Standard	Paired't	Table	Level of
		deviation	'value	value	significance
Structured	14.33	1.72	4.70	2.05	0.05
questionnaire	İ				
to assess the	İ				
knowledge					
regarding	İ				
cardio	İ				
pulmonary	İ				
resuscitation					

# RESULTS

#### Section 1

- Sample characteristics
- Majority of samples 83.3% belongs to 17-18 years of age and 16.6% belongs to 15-16 years.
- Majority of samples 56.66% belongs to female and 43.3% belongs to males.
- Majority of the sample 83.3% belongs to rural area and 16.6% belongs to urban area.

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Majority of sample 76.6% belongs to nuclear family and 23.33% belongs to joint family.

#### Section 2

Level of knowledge regarding CPR among plus two students before and after structured teaching programme. Majority of the sample 66.67% have good knowledge and 33.33% have average knowledge regarding CPR after structured teaching programme. Paired 't' test showed that table value is less than calculated value. So there is significant difference in knowledge regarding CPR after STP (t=4.70) when p>0.05 there is an improvement in post test score of CPR among plus two students.

#### Section-3

- Association between level of knowledge regarding CPR with their selected demographic variables.
- Chi-square test was employed to find out the association between level of knowledge regarding CPR with their selected demographic variables. There was no significant association found between post test score of knowledge regarding CPR and other selected demographic variables.

# NURSING IMPLICATIONS NURSING EDUCATION

- Nursing curriculum must be focused on improving and updating knowledge
- Community health nurse should conduct educational programme on CPR
- Provide definitive care by using community facilities through family health center like National programme for prevention and control of disease and under Integrated disease surveillance project.

# NURSING ADMINISTRATION

- Set the standards for improving the level of knowledgeregarding CPR.
- Providing education to patients and relatives.
- Provide adequate information regarding CPR in collaboration with nursing department and nursing administrator should take initiatives in educational programmes like code blue system.
- Conducting outreach programmes like Basic life support (BLS), Heart saver, first aid CPR, Adult and child CPR anytime.

## NURSING PRACTICE

- Nurses play an important role in improving on CPR among adolescent through School Health Nursing programme
- Conduct programmes on importance of CPR and administration of CPR for both students and teachers.

# NURSING RESEARCH

- More and more research can be carried out on different aspects of CPR.
- Future investigator could use findings and methodology as reference materials.
- Other researchers conducting further studies in same field can utilize suggestions and recommendations.

# REFERENCES

- KannuChatterjee "CARDIOLOGY AN ILLUSTRATED TEXTBOOK", first
- edition, volume 1 Jaypee publishers, Pp-1166-1130 Susan L.Wood., "CARDIAC NURSING "sixth edition , Wolter and Kluwer publishers,Pp-273
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- Majority of sample 76.6% belongs to nuclear family and 23.33% belongs to joint family.