

ORIGINAL RESEARCH

A quasi experimental study to assess the effectiveness of structural teaching programme on knowledge regarding cardiopulmonary resuscitation among arts students of selected colleges of Moga, Punjab

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Abstract

A quasi experimental study to assess the effectiveness of Structural teaching programme on knowledge regarding Cardiopulmonary resuscitation among arts students. The purpose of the study was to acquaint arts students with adequate knowledge regarding cardio pulmonary resuscitation which may help them to take measures during any Emergency situation to save the life of the person. The objectives of the study **were to** assess the pre-test knowledge regarding cardiopulmonary resuscitation among the arts students. In this study the post-test mean knowledge score of arts student regarding cardiopulmonary resuscitation of experimental group was higher than the post –test mean knowledge score of control at $p < 0.05$ level. This indicates the structural teaching programme was effective. The maximum 67% arts students had good knowledge score and 33% arts students had average knowledge after structural teaching programme regarding cardiopulmonary resuscitation.

Keyword- Effectiveness, Knowledge, Cardiopulmonary resuscitation, Students, demographic variables

Introduction

Cardio pulmonary resuscitation is a medical word that means “to revive” or bring back to life. Cardiopulmonary resuscitation is an important lifesaving first aid skill, practiced throughout the world. Sometimes Cardio pulmonary resuscitation can help a person who has stopped breathing and whose heart may have stopped beating. People who handle emergencies such as police officers, firefighters, paramedics, doctors and nurses are all trained to do cardio pulmonary resuscitation. Many other teenagers and adults like lifeguards, teachers, college students, child care workers and may be parents how to do Cardio pulmonary resuscitation.

Tran berg T. Scand J (2015)¹ When someone's blood flow or breathing stops, seconds count. Permanent brain damage or death can happen quickly. Cardio Pulmonary Resuscitation is an emergency procedure for a person whose heart has stopped or is no longer breathing. Cardio Pulmonary Resuscitation can maintain circulation and breathing until emergency medical care arrives. Cardiopulmonary resuscitation uses chest compressions to keep blood circulating until emergency help arrives. If you training use chest compressions, clear the airway, and do rescue breathing. Rescue breathing helps get oxygen to the lungs for a person who has stopped breathing

Statement of the problem

A quasi experimental study to assess the effectiveness of structural teaching programme on knowledge regarding cardio-pulmonary resuscitation among arts students of selected colleges Punjab.

Objectives of the study

1. To assess the pre-test knowledge regarding cardiac pulmonary resuscitation among arts students.
2. To assess the post-test knowledge regarding cardiac pulmonary resuscitation among arts students.
3. To compare the pre-test and post-test knowledge regarding cardiac pulmonary resuscitation among arts students.
4. To find out the relationship between the knowledge of arts students and selected demographic variables such as age in years, gender, standard of education, education of father, education of mother, occupation of father, occupation of mother, family monthly income in rupees, area of residence and source of information.

Operational Definitions

1. **Assess:** It refers to evaluation of the knowledge regarding Cardiopulmonary resuscitation of Arts student.
2. **Effectiveness:** It refers to extent to which the structural teaching program will achieve the desired effect in improving the knowledge of Arts students regarding Cardio-pulmonary resuscitation.
3. **Structural Teaching Programme:** It refers to the planned or written information regarding Cardiopulmonary resuscitation procedure will be provided with the help of audio visual aid.
4. **Knowledge:** It refers to correct response given by Arts students as measured through structural questionnaire regarding Cardiopulmonary resuscitation.
5. **Cardiopulmonary resuscitation:-**Cardio-pulmonary resuscitation is an emergency procedure which is performed in Emergency condition to revive the person whose heart has been stopped suddenly it includes clearing air way, breathing and chest compression.
6. **Arts students:-** The students who study humanities like history, civics, geographic.

Hypothesis

H₁: the mean post test knowledge score of arts students with significantly higher than the mean pretest knowledge score in experimental group.

Delimitations

1. The study was limited to arts students.
2. The study was limited selected colleges of Moga,Punjab.
3. Arts students were not present at the time of study

Research design

A non randomized control group research design was adopted for the study.

Experimental group O₁ X O₂

Control group O₁ O₂

O₁=pre-test

X=structural teaching programme

O₂=post test

Research setting

The study was conducted at selected arts Colleges Moga, Punjab. The selection of an appropriate setting is important because the setting can influence the way the people behave, feel and how they response.

Target population

According to Polit & Hungler (2002)“ A population is the entire aggregation of cases that meets a designated set of criteria for researcher.”The target population of the study was arts students of selected Colleges of Punjab.

Sample size and sample technique

The Researcher selected a sample of 60 arts students of selected colleges of Moga, Punjab by using Purposive sampling method technique 30 arts students as experimental were selected from Sukhdeva Krishna college of education for girls Moga as control group and 30 arts students from Jagat Sewak Khalsa college for women.

Demographic variables

In this study, selected demographic variable were Age in years, Gender, Standard of education, Education of Father, Education of Mother, Occupation of father, Occupation of Mother, Family monthly income in rupees Area of residence, Source of information.

Independent variables

In the present study, the independent variable was Structural Teaching Programme regarding cardiopulmonary resuscitation.

Dependent variables

In this study, the dependent variable was knowledge of arts students regarding cardiopulmonary resuscitation

Inclusion criteria

1. Who were willing to participate in the study
2. Who were available during data collection

Exclusion criteria

1. Who were not willing to participate
2. Who were not available during data collection

Selection & development of the tool

As the study to assess the effectiveness of structural teaching programme on the knowledge of arts students regarding cardiopulmonary resuscitation at selected colleges Moga, Punjab. Therefore structural questionnaire was prepared to assess the knowledge regarding cardiopulmonary resuscitation. Preliminary drafting of 30 multiple choice questions was prepared after extensive review of literature and consulting with various experts in the field of nursing and medical surgical nursing.

Description of tool

The tool was consisting of two part:-

Part1-Demographic variable

The part consists of items for obtaining personal information about subjects such as Age in years, Gender, Standard of education, Education of Father, Education of Mother Occupation of Father, Occupation of Mother, Family monthly income in rupees, Area of residence, Source of information

Part II- A self structural Questionnaire to assess the knowledge of arts students regarding Cardio Pulmonary Resuscitation.

This part consists of multiple choice questions regarding knowledge of arts students regarding Cardiopulmonary Resuscitation. A total of 30 questions are included and each question had one correct response and three incorrect responses. The correct response awarded one mark and the incorrect responses awarded zero marks.

Ethical considerations

With the view of ethical considerations the investigator has taken permission from the ethical committee of Dr Shyam Lal Thapar College Of Nursing, Moga to conduct the research study in selected colleges of Moga.Than discussed type of study with principal of selected arts colleges and written permission obtained. Thereafter the investigator explained the purpose of study will be kept confidential and information only for research purpose. Procedure were told about and how to prevent individual in emergency condition. They were also informed about their right to refuse from participating in the study It will be kept confidently and will only be used for research purpose..

Plan of data analysis

Analysis of the data was done in accordance with the objectives. It was done by descriptive and inferential statistics, such as mean, percentage, standard deviation, correlation coefficient and t-test and ANOVA. Bar and pie diagrams were used to depict the findings.

Resuscitation according to Area of Residence

Table 4(j)

Relationship between Mean pretest and post-test Knowledge score regarding Cardio Pulmonary Resuscitation Among students in Experimental and Control group, According to Source of information.

Source of information	Knowledge Score													
	n	Experimental group						Control group						
		Pretest Mean	SD	Posttest Mean	SD	df	t	Pretest n	Mean	SD	Posttest Mean	SD	df	t
a)Mass Media	8	13.5	3.50	22.1	4.07	8	3.366***	7	11.8	2.11	11.5	1.90	6	.679 ^{NS}
b)Family Members	8	13.8	2.53	22.8	1.35	7	13.74***	11	14.9	2.52	14.9	3.08	10	1.91 ^{NS}
c) Peer group	7	14.8	4.56	22.7	3.86	6	11.34*	8	13.8	3.60	14.1	4.70	7	386 ^{NS}
d) Health Care Professional	6	18.3	3.26	25.5	1.51	5	8.215***	4	17.2	1.25	18.2	1.70	3	2.449 ^{NS}
df			F	P	F	P		F	P	F	P			
Variance within the Group	26													
Between the Group	3		2.574 ^{NS}	.000 ^{NS}	15.241	.522		26.894	.852	39.573 *			0.92	

Maximum Knowledge Score=30

NS(Non Significant)

Minimum Knowledge Score=0

**Significant $p < 0.01$

***Significant $p < 0.001$

Conclusion

The knowledge score of arts students in experimental group regarding cardio pulmonary resuscitation was average (50%) and Poor (50%) Before imparting the structural teaching programme but after imparting the structural teaching programme knowledge of arts students were good (67%) and average (33%).

The mean post test knowledge score (23.1) of experimental group was highly significant as compare to mean pre test knowledge (14.3) of experimental group whereas there was no significant change in mean pretest knowledge score (14.9) and post test knowledge (14.2) of control group.

The post test knowledge score of arts students regarding cardio pulmonary resuscitation of experimental group was highly significant than post test knowledge score of control group at $p < 0.05$ level, this indicated that structural teaching was effective. **H₀** Was no significant difference between pretest and post score of experimental group, at < 0.05 level of significance hence null hypothesis was rejected and **H₁** the mean post test knowledge score of arts students of experimental group after structural teaching programme regarding cardio pulmonary resuscitation was significantly higher than their mean pretest knowledge at < 0.05 level of significance was accepted.

Recommendations

1. The study can be replicated on the larger sample to validate and generalize findings.
2. The same study can be conducted as a longitudinal study.
3. The same study can be conducted on a different age group.
4. Similar study can be done using other teaching strategies i.e. self instruction, computer assisted instruction.
5. An exploratory study can be done to assess the knowledge and attitude of peoples regarding cardio pulmonary resuscitation.
6. A study may be conducted among Nursing students, Non medical students regarding cardio pulmonary resuscitation.

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