ISSN: 2582-7162

Original Article

A Pre-Experimental Study to Assess the Effectiveness of Video Assisted Teaching Programme on Knowledge Regarding Basic Life Support (Bls) Among Degree Students of Selected College at Jaipur

Priyanka[1], Krishnwatar Khandelwal[2]

[1]Master of Science in Nursing in Medical Surgical Nursing, RUHS College of Nursing Science, Jaipur

[2]Guide, Nursing Tutor, RUHS College of Nursing Science, Jaipur

Corresponding Author:

Priyanka, [1]Master of Science in Nursing in Medical Surgical Nursing, RUHS College of Nursing Science, Jaipur

E-mail: shekhawatpriyanka1396@gmail.com

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How to cite this article: Priyanka, Khandelwal K. A pre-experimental study to assess the effectiveness of video assisted teaching programme on knowledge regarding basic life support (BLS) among degree students of selected college at Jaipur. GFNPSS-IJMR 2024; 5:6: 2641-2646

Submitted:04-June -2024: **Accepted:**02-July-2024: **Published:** 07-July -2024

Abstract

Introduction: Cardiopulmonary Resuscitation is an emergency procedure used to treat victims of cardiac and respiratory arrest. Basic Life Support is that particular phase of emergency cardiac care that externally supports the circulation and ventilation of the victim of cardiac arrest or respiratory arrest through cardiopulmonary resuscitation.[1] The heart is the center 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.[2]

Materials & Methods: Research approach: In this study the quantitative research approach adopted by the researcher in which the problem selected. the present study is pre-experimental one group pre-test post-test research design. The sample for the present study were degree students of Maheshwari Girls P.G. College at Jaipur. The sample for the present study will be 100-degree students of Maheshwari Girls P.G. College Jaipur. The study was conducted at Maheshwari Girls P.G. College Pratap Nagar, Jaipur.In this study, non-probability convenient sampling method will be used to select the sample, as researcher found it appropriate for this study.In this study, the population include degree students of Maheshwari Girls P.G. College Jaipur.

Results: Obtain post-test value is (21.31) was higher than pre-test mean value (12.45), the mean difference value is (8.86) and the obtain “t” value is 17.95 which is greater than table value 't'(99) =1.98. Since the obtained “t” value is highly significant at $p \leq 0.05$ level. Therefore “t” value is found to be significant.

Conclusions: Finding revealed that majority of students had poor knowledge regarding basic life support.

Keywords: Pre-experimental; Basic Life Support; Video Assisted Teaching

Introduction:

Basic life support is that particular phase of emergency cardiac care that externally supports the circulation and ventilation of the victim of cardiac arrest or respiratory arrest through cardiopulmonary resuscitation[3].

Cardiopulmonary resuscitation involves chest compression at least 5cm deep and at the rate of atleast 100 per min in an effort to create artificial circulation by manually pumping blood through the heart.Current recommendation place emphasis on high quality chest compression over artificial respiration, a simplified cardiopulmonary

https://doi.org/10.46376/ijmr/05.06.2024:2641-2646

resuscitation method involves chest compression only is recommended for untrained rescuers.[4]

Being at the heart of the health care delivery is an enormous challenge for nurses, but it is also a golden opportunity to save the life of patient. A high level of knowledge and skill of CPR is expected from all nurses to save the life of victim who had cardiac arrest.[5]

According to the article in "Nursing Times", the physicians, dentists, nurses and health care professionals should be adequately and regularly trained in CPR. Hospital resuscitation is an important life saving measure.[6]

The American heart association estimated that in the world among the overall population the incidence of death due to cardiac arrest varies between 0.2 to 0.4 percent per year.7

Cardiac pulmonary resuscitation is a critical component of basic life support. Cardiac pulmonary resuscitation is a potential life saver because it is associated with survival and has the potential to prevent sudden death. All health care providers who are in contact with the patient should have regular resuscitation training as recommended by the American heart association resuscitation guideline.[8]

At first only medically trained personnel were allowed to perform CPR, since chest compression could produce internal injuries. The rediscovery of external cardiac massage , known as chest compression , which was reintroduced to patient care in 1958 by William Kouwenhoven. Kouwenhoven and his colleagues set a new land mark for effective external cardiac compression, coupled with mouth to mouth breathing in the resuscitation of victim who had total circulatory stand still.[9]

The overall prevalence of cardiac arrest is 3-20 per 1000 population. Although this exceeds 100 per 1000 in those aged 65 years and over and in worldwide incidence, up to 14 million inhabitants and average is 15/1000 inhabitants in adults and in children less than 16 years of age was ascertained and was estimated at 0.87 in 100,000.10

Materials & Methods: The methodology of the investigation is of vital importance. "Research methodology is a way to solve the problems.

Research approach: In this study the quantitative research approach adopted by the researcher in which the problem selected.

Research design: Keeping in view the objectives of the study the research design adopted for the present study is pre-experimental one group pre-testpost-test research design. The purpose of the study was to assess the effectiveness of video assisted teaching programme on knowledge regarding Basic Life Support among degree students.

Variables of the study: Variables are the condition or characteristics that the researcher manipulates, controls or observes.Variables under this study are as follows: -

Dependent Variable: In this study the dependent variable is knowledge regarding basic life support among degree students.

Independent Variables: In this study the independent variable is video assisted teaching programme on knowledge regarding basic life support among degree student.

Sample- A sample is a subset of a population selected to participate in research study.The sample for the present study were degree students of Maheshwari Girls P.G. College at Jaipur.

Sampling size- Sampling size refers to the number of sampling units included in the study.The sample for the present study will be 100-degree students of Maheshwari Girls P.G. College Jaipur.

Setting of the study: The study was conducted at Maheshwari Girls P.G. College Pratap Nagar, Jaipur.

Sampling technique: In this study, non-probability convenient sampling method will be used to select the sample, as researcher found it appropriate for this study.

Population: In this study, the population include degree students of Maheshwari Girls P.G. College Jaipur.

Data collection tools and techniques: "Data collection tools are the device that the researcher uses to collect the data. The type of data collection tool required depends upon the nature of the data to be gathered to answer the research questions."Based on the objective of the study and review of literature data collection tool was prepared. Tools for data collection adopted by structured knowledge questionnaire to assess the effectiveness of video assisted teaching programme on knowledge regarding basic life support among degree students of Maheshwari Girls P.G. College Jaipur.

https://doi.org/10.46376/ijmr/05.06.2024:2641-2646

Development and description of the tool: A structured knowledge questionnaire constructed by reviewing related literature and by consultation with subject experts in the field, by consulting various books, journals and reports basic life support. Expert opinion from teachers and experts.

Results

Organization of findings

In order to find the results, the data were tabulated, analyzed and interpreted using descriptive and inferential method. The data are presented under the following headings:

SECTION-A
SELECTED SOCIO-DEMOGRAPHIC VARIABLES OF SAMPLES

TABLE-01Frequency and percentage distribution of degree students as per socio-demographic variables

SNO.	DEMOGRAPHIC VARIABLES	FREQUENCY	PERCENTAGE
1	**Type of degree course**		
	Undergraduate	50	50%
	Postgraduate	50	50%
2	**Stream**		
	Science	35	35%
	Commerce	29	29%
	Arts	36	36%
3	**Source of information about Basic life support**		
	Media	37	37%
	Books	27	27%
	Any training taken	13	13%
	Health professional	23	23%
4	*Any family member working in health sector*		
	Yes	51	51%
	No	49	49%
5	**Area of residence**		
	Urban	47	47%
	Rural	53	53%

Table No-02Frequency and Percentage Distribution of Degree Students According to their Courses

N=100

SNO.	DEMOGRAPHIC VARIABLES	FREQUENCY	PERCENTAGE
1	**Type of degree course**		
	Undergraduate	50	50%
	Postgraduate	50	50%

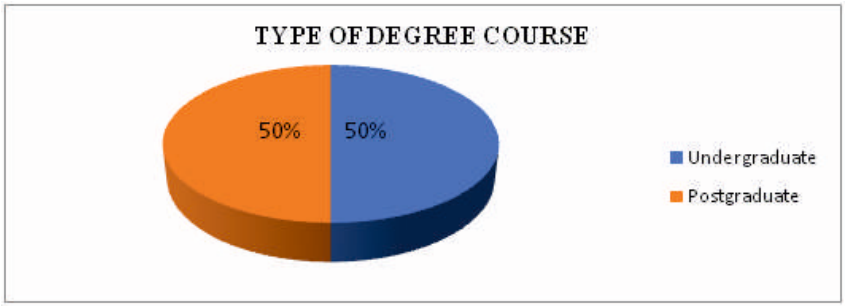

Figure no-01 Frequency and percentage distribution of degree students according to their course.

https://doi.org/10.46376/ijmr/05.06.2024:2641-2646

TABLE NO-03 FREQUENCY AND PERCENTAGE DISTRIBUTION OF DEGREE STUDENTS ACCORDING TO THEIR STREAM

SNO.	DEMOGRAPHIC VARIABLES	FREQUENCY	PERCENTAGE
2	**Stream**		
	Science	35	35%
	Commerce	29	29%
	Arts	36	36%

TABLE NO-04 FREQUENCY AND PERCENTAGE DISTRIBUTION OF DEGREE STUDENTS REGARDING SOURCE OF INFORMATION ABOUT BASIC LIFE SUPPORT

SNO.	DEMOGRAPHIC VARIABLES	FREQUENCY	PERCENTAGE
3	Source of information about Basic life support		
	Media	37	37%
	Books	27	27%
	Any training taken	13	13%
	Health professional	23	23%

TABLE NO-05 FREQUENCY AND PERCENTAGE DISTRIBUTION OF DEGREE STUDENTS ON THE BASIS OF ANY FAMILY MEMBER WORKING IN HEALTH SECTOR.

SNO.	DEMOGRAPHIC VARIABLES	FREQUENCY	PERCENTAGE
4	**Any family member working in health sector**		
	Yes	51	51%
	No	49	49%

TABLE NO-06 FREQUENCY AND PERCENTAGE DITRIBUTION OF DEGREE STUDENTS ACCORDING TO AREA OF RESIDENCE

SNO.	DEMOGRAPHIC VARIABLES	FREQUENCY	PERCENTAGE
5	**Area of residence**		
	Urban	47	47%
	Rural	53	53%

SECTION-B

TABLE N0-07COMPARISON OF PRE-TEST AND POST-TEST KNOWLEDGE SCORE

LEVEL OF KNOWLEDGE	MARKS	PRE-TEST		POST-TEST	
		FREQUENCY	PERCENTAGE	FREQUENCY	PERCENTAGE
Inadequate knowledge	0-10	50	50%	10	10%
Moderate knowledge	11-20	40	40%	30	30%
Adequate knowledge	21-30	10	10%	60	60%

https://doi.org/10.46376/ijmr/05.06.2024:2641-2646

SECTION-C

TABLE NO-08 EFFECTIVENESS OF VIDEO ASSISTED TEACHING PROGRAMME REGARDING BASIC LIFE SUPPORT AMONG DEGREE STUDENTS

	Pre-test		Post-test		Mean difference	Paired 't' test value	Degree of freedom	Inference
	Mean	SD	Mean	SD				
Overall pre-test and post-test knowledge score	12.45	5.99	21.31	6.67	8.86	17.95	99	S*

S* Significant

Table No-08 shows that the obtain post-test value is (21.31) was higher than pre-test mean value (12.45), the mean difference value is (8.86) and the obtain "t" value is 17.95 which is greater than table value 't'(99) =1.98. Since the obtained "t" value is highly significant at $p \leq 0.05$ level. Therefore "t" value is found to be significant.

SECTION-D

TABLE NO-9: LEVEL OF ASSOCIATION BETWEEN KNOWLEDGE OF DEGREE STUDENTS AND SELECTED SOCIO-DEMOGRAPHIC VARIABLES

S.No	Demographic variables	Knowledge score			Chi-square	DF	Tabulated value	LOS@0.05
		Inadequate	Moderate	Adequate				
1	Type of degree course				0.48	2	5.99	NS
	Undergraduate	26	20	4				
	Postgraduate	24	20	6				
2	Stream				12.1675	4	9.49	S
	Science	10	18	7				
	Commerce	18	10	1				
	Humanities	22	12	2				
3	Source of information about basic life support				33.3081	6	12.59	S
	Media	30	6	1				
	Books	13	13	1				
	Any training taken	3	6	4				
	Health professional	4	15	4				
4	Any family member in health sector				11.8848	2	5.99	S
	Yes	17	28	6				
	No	33	12	4				
5	Area of residence				21.7383	2	5.99	S
	Urban	12	27	8				
	Rural	38	13	2				

NS-Not significantS-Significant

Conclusions

This chapter deals with the analysis and interpretation of the results of the study. The data gathered and analyzed by using descriptive and inferential statistics. Chi-square test was used to find association between the knowledge with selected demographic variables. Finding revealed that majority of students had poor knowledge regarding basic life support.

Recommendation

Keeping in view the findings of the presents study, the following recommendation were made:

- A similar study can be conducted on larger and wider sample in order to draw generalization.
- A similar study can be replicated on different settings.
- A similar study may be replicated with a control group.
- Study may be conducted to find effectiveness between structured teaching programme and self-instructional module regarding the same topic.

Financial support and sponsorship: No

Conflict of Interest: There are no conflicts of interest

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https://doi.org/10.46376/ijmr/05.06.2024:2641-2646

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