



## EFFECTIVENESS OF VIDEO ASSISTED TEACHING PROGRAMME ON KNOWLEDGE REGARDING ADULT CPR AMONG UNDERGRADUATE STUDENTS IN SELECTED COLLEGES

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### ABSTRACT

**Background:** Cardiac Pulmonary Resuscitation is one of the most commonly performed medical interventions. Knowledge of CPR (Cardiac Pulmonary Resuscitation) is very necessary for performing first aid procedure.

**Objective:** to assess the effectiveness of video assisted teaching program on knowledge regarding adult CPR among undergraduate students.

**Methodology:** The study was conducted in the month of september 2019. The pre-experimental study was conducted with the technique of convenient sampling on 100 undergraduate students.

**Results:** As per pretest knowledge of undergraduate students, 74% of students have average knowledge and 24% have poor knowledge and only 2% have good knowledge. After video assisted teaching program, posttest had conducted and results revealed that majority (75%) of students has average knowledge, and 24% students have good knowledge and only 1% students have poor knowledge. Thereafter, paired t test was used to identify the pre and post knowledge scores of the undergraduate students regarding adult CPR. The finding show the significance difference, in pretest the score obtained is 44.27% and in posttest the score is 62.07%. The difference is 17.80. It shows that the video assisted program that we gave was effective. Chi-square test was used to assess the relationship of knowledge scores regarding adult CPR with the socio demographic variables such as age, gender, residence, type of family, previous knowledge regarding adult CPR, source of knowledge regarding adult CPR etc.

### INTRODUCTION

Each year, a number of the persons suffer with an accident or illness, severe enough to stop their breathing and leads to respiratory arrest. In a small number of these cases, Sudden cardiac arrest is a major cause of death occurs when heartbeat and breathing stops. Every nurse and physician should be skilled in CPR because cardiac arrest may occur at any time or in any setting. CPR alone is not enough to save lives in most cardiac arrest. It is a vital link in the chain of survival that supports the victim until more advanced help is available. The chain of survival is composed of the sequence includes early activation of the EMS systems, early CPR, early defibrillation and early advanced care (American CPR Care Association, 2018)<sup>1</sup>. The chest compression, as the only CPR, is well accepted worldwide. The IRC guideline does not intend to deny our population of the benefits of defibrillation nor does it discourage the use of defibrillation in victims of

cardiac arrest. Automated external defibrillators (AEDs) are not readily available in most parts of the country. Hence, They added the layer of COLS for laypersons who are unlikely to have access to AEDs and who will call for help and provide effective chest compressions, until personnel trained in Basic Cardiopulmonary Life Support (BCLS) arrive. BCLS training does include AED use and breathing support, even outside the hospital. (Indian Resuscitation Council)<sup>2</sup>

### RESEARCH PROBLEM

A Study to assess the effectiveness of video assisted teaching program on knowledge regarding adult CPR among undergraduate students in the selected colleges of Punjab.

### OBJECTIVES

1. To assess the pretest knowledge level regarding adult CPR among undergraduate students in selected colleges.
2. To provide video assisted teaching program on knowledge regarding adult CPR among undergraduate students in selected colleges.
3. To assess the post test knowledge regarding adult CPR among undergraduate students in selected colleges.
4. To compare the pretest knowledge with the post test knowledge regarding adult CPR among undergraduate students in selected colleges.
5. To find out the association between knowledge regarding adult CPR among undergraduate students with selected socio-demographic variables.

### METHODOLOGY

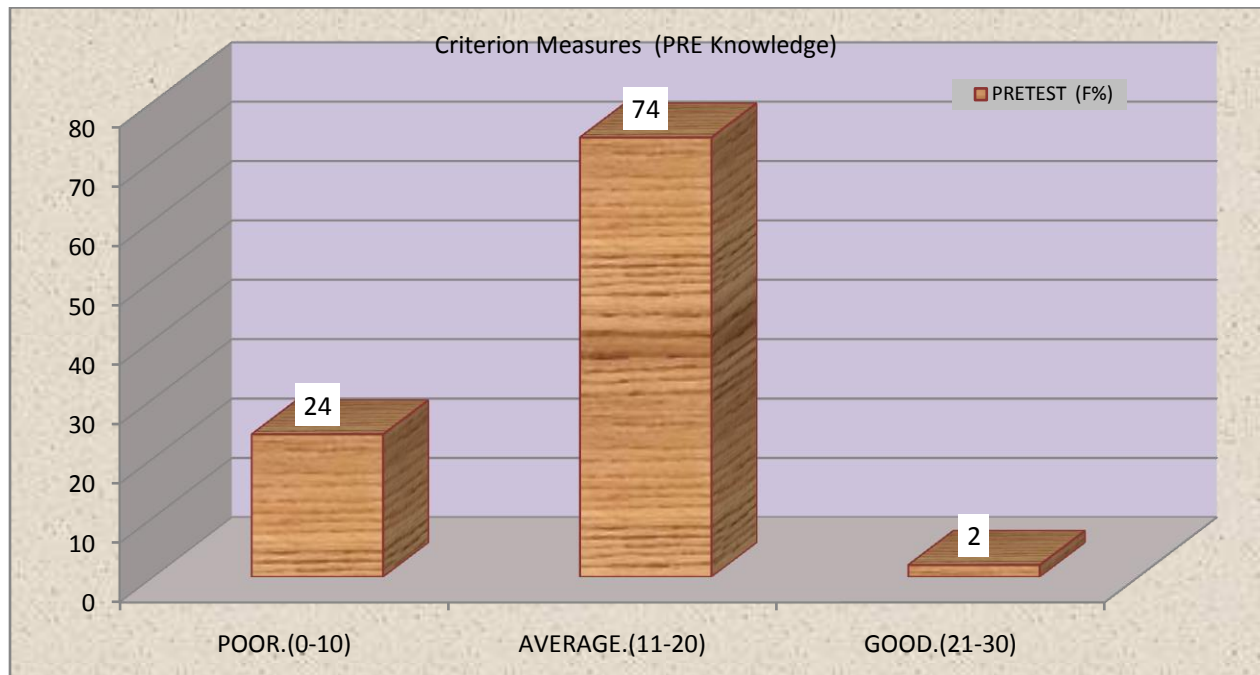
The study was conducted in Government Rajindra College, Bathinda and D.A.V. College, Bathinda in Punjab. 100 undergraduate students were selected using convenient sampling technique. Structured knowledge questionnaire was used to collect the data. Analysis of the data was done in accordance with the objectives. It was done by using descriptive and inferential statistics such as mean, percentage, standard deviation, correlation coefficient, Chi-square test and Paired T-test. Bar diagrams were used to depict the finding of the study.

### RESULTS

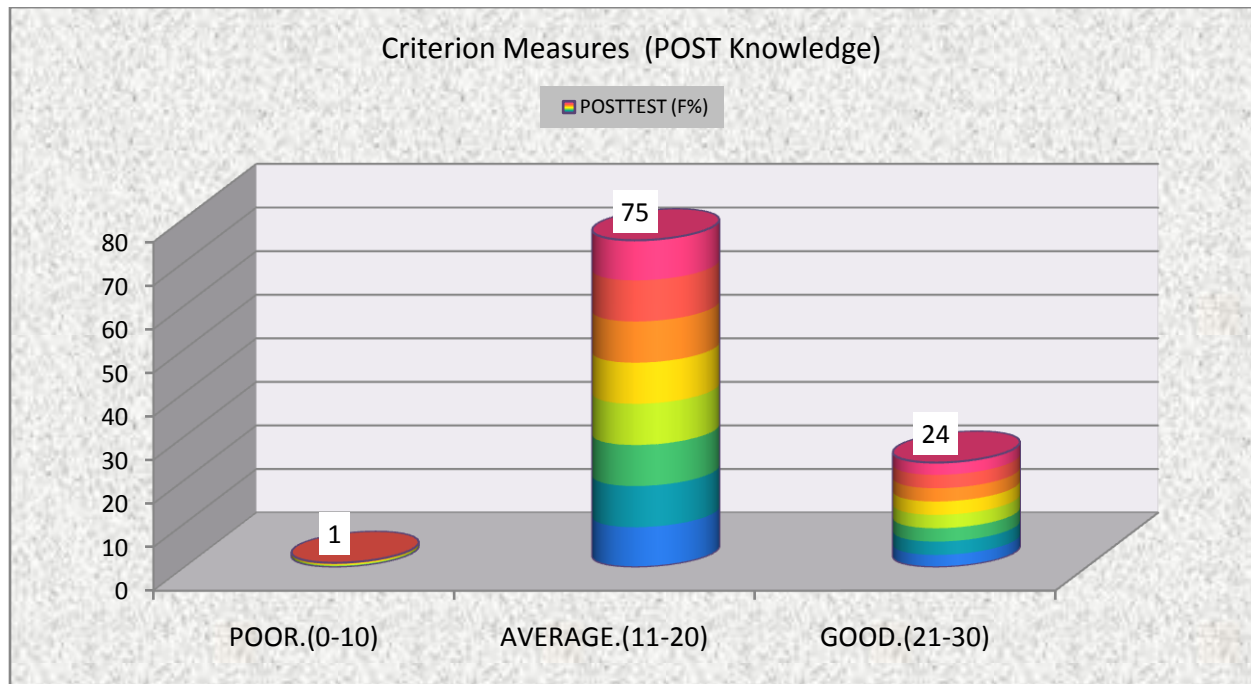
**Table No 1: Frequency Distribution of Demographic variables.**

Sr. No.	Variables	Frequency	Percentage
<b>1.</b>	<b>Age (in years)</b>		
	17-19	45	45%
	20-22	52	52%
	23-25	3	3%
	26-28	0	0%
<b>2.</b>	<b>Gender</b>		
	Male	25	25%
	Female	75	75%
<b>3.</b>	<b>Residence</b>		
	Rural area	44	44%
	Urban area	56	56%

<b>4.</b>	<b>Type of family</b>		
	Joint	36	36%
	Nuclear	61	61%
	Extended	3	3%
<b>5.</b>	<b>Previous knowledge regarding CPR</b>		
	Yes	45	45%
	No	55	55%
<b>6.</b>	<b>Source of knowledge regarding CPR</b>		
	Mass media	46	46%
	Teachers	35	35%
	Family or friends	12	12%
	Health personals	7	7%
<b>7.</b>	<b>Have you Attended any conference/workshop/seminar/training program regarding CPR</b>		
	Yes	32	32%
	No	68	68%



**Fig. 1 Percentage distributions of undergraduate students regarding adult CPR according to the pretest knowledge score**



**Fig. 2** Percentage distributions of undergraduate students regarding adult CPR according to the posttest knowledge score

**Table No 2: Comparison of pretest and posttest knowledge scores of undergraduate students regarding adult CPR**

Paired T Test	Mean±S.D.	Mean%	Range	Mean Diff.	Paired T Test	P value	Table Value at 0.05
PRETEST KNOWLEDGE	13.28±3.288	44.30	8-23	5.340	14.259 *Sig	<0.001	1.98
POSTTEST KNOWLEDGE	18.62±3.162	62.10	9-27				

\*\* Significance Level 0.05  
 Maximum=30  
 Minimum=0

Table 2 shows the Comparison of Pre & Post scores of undergraduate students regarding adult CPR. The comparison is done by paired T-test. The mean difference in pretest knowledge and posttest knowledge is 5.340 and hence, there is a significant improvement in knowledge.

## DISCUSSION

The study findings in pre-test revealed that out of 100 participants, 24% of students had poor knowledge, 74% had average knowledge and the remaining 02% had good knowledge. The above findings were supported by the study conducted by Hassan Zaheer (2009)<sup>3</sup> studied the knowledge of CPR on 61 undergraduate students revealed that out of 61 participants 57.3% have no knowledge related to CPR.

The study findings in post test revealed that out of 100 participants, 75% of students had average knowledge, 24% had good knowledge and the remaining 01% had poor knowledge. This finding is inconsistent with the study conducted by Austin (2002)<sup>4</sup> on study about CPR knowledge score among nurses in Fedrico Hospital in New York found that the pre-test knowledge was around 52% which is increased to 96% in post-test.

The analysis of the data regarding the comparison of pre-test and post-test knowledge score on adult CPR among undergraduate students revealed that comparison of overall mean, SD and mean percentage of pre test and post test knowledge scores show that overall pre test mean score was  $13.28+3.288$  which is mean% is 44.30% where as in post test the mean score  $18.62+3.162$  which is mean % 62.10 revealing the difference of 17.80% shows the effectiveness of video assisted teaching program. A study conducted by Arnold Broom (2002)<sup>5</sup> on knowledge regarding CPR among nurses reveals that by using planned teaching program 48% difference in mean percentage of post-test score as compare to pre-test score.

## CONCLUSION

It is conclude that there is a need to improve the knowledge regarding adult CPR among undergraduate students. Only 24% students had a good knowledge after video assisted teaching program about adult CPR. The video assisted teaching program was effective to improve the level of knowledge of students. Study findings revealed that majority of students had average knowledge (75%) towards adult CPR. The association of knowledge score (per-test and post-test) with selected socio-demographic variables were found to be non significant at 0.05 level of significance.

## REFERENCES

1. American CPR Care Association offers nationally accepted and easy to understand adult, child and infant online CPR Certification, 2018. [www.cprcare.com](http://www.cprcare.com)
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5. Arnold Broom "Advanced Emergency care" 4<sup>th</sup> edition, Lippincott publishers, Philadelphia, 2002. P. No. 127-129.