

**Research Article**
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## A Study to Assess the Effectiveness of Planned Video Assisted Teaching Programme on Cardio Pulmonary Resuscitation among B.sc Nursing Students at Cherraan's College of Nursing Coimbatore District

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### ABSTRACT

**Introduction:** Cardio Pulmonary Resuscitation (CPR) is an emergency lifesaving procedure that is done when someone's breathing or heart beat has stopped. **Aim** To assess the knowledge of nursing students on cardio pulmonary resuscitation.

**Methods and Tools:** A quantitative research approach was used in this study. The design was quasi experimental research design. Structured questionnaire was used to assess the effectiveness of planned video assisted teaching program on cardio pulmonary resuscitation among basic B.Sc. nursing students.

**Results:** The standard deviation of pretest was 2.599 and posttest was 2.284. The paired "t" test was used to compare the pretest and posttest level of knowledge among basic B.Sc. nursing students. The calculated "t" value was 17.84 which were greater than the tabulated "t" value ( $p < 0.05$  level of significance). This showed that there was a significant difference between pretest and posttest level of knowledge. Hence, the stated hypothesis (H1) was accepted.

**Discussion:** Knowledge regarding cardio pulmonary resuscitation after a planned video assisted teaching program shows a significant ( $p < 0.05$ ) result when compared to the pretest knowledge and hence hypothesis was proved. This shows the effectiveness of planned video assisted teaching program is improving the knowledge for nursing students. The study was concluded that the planned video assisted teaching program on knowledge regarding cardio pulmonary resuscitation is highly effective. Since it is easy to understand and effective program, which improves the knowledge of nursing students.

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### Introduction

**Background of The Study:** 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 Cardiopulmonary resuscitation training is mandatory for nursing students and is important as nursing students often discover the victims of in hospital cardiac arrest. Many different methods of improving this retention have been devised and evaluated. However, the content and style of this training lack standardization. Staff should be formally assessed using a manikin with a feedback mechanism or an expert instructor to ensure that chest compressions and ventilations are adequate at the time of training. Remedial training must be provided as often as required. Video self-instruction

has been shown to improve competence in resuscitation. An in-hospital scenario-based video should be devised and tested to assess the efficacy of this medium in resuscitation training for nursing students.

### Section II

**Table 1:** Frequency and percentage distribution of pre-test and post-test knowledge regarding CPR

(n=50)

S. No	Level of knowledge	Adequate Knowledge (13-20)		Moderate Knowledge (7-12)		Poor Knowledge (1-6)	
		n	%	n	%	n	%
1	Pre test	0	0.00	28	56.00	22	44.00
2	Post test	45	90.00	5	10.00	0	0.00

The table 1 reveals the frequency and percentage distribution of pre-test and post-test level of knowledge. It is evident from the above table that in the pre-test 28(56%) of them had moderate knowledge and 22(44%) of them had poor knowledge. In the

post-test 45(90%) of them had adequate knowledge and 5(10%) of them had moderate knowledge about CPR.

**Table 2:** Distribution of mean, standard deviation and “t” value of knowledge among nursing students regarding CPR

(n=50)				
S. No	Assessment Characteristics	Mean	Standard Deviation	“t” value
1	Pre test	7.02	2.599	17.84
2	Post test	15.74	2.284	

The table 2 shows that the mean score of pre-tests was 7.02 and post-test was 15.74. The standard deviation of pre-test was 2.599 and post-test was 2.284. The paired “t” test was used to compare the pre-test and post-test level of knowledge among nursing students. The calculated “t” value was 17.84 which were greater than the tabulated “t” value (17.84 at 0.05 level of significance). This showed that there was significant difference between pre-test and post-test level of knowledge. Hence, the stated hypothesis (H1) was accepted.

### Section III: Data on association between the selected demographic variables and pre-test knowledge regarding CPR among nursing students at Cherraan's College of Nursing.

#### Association between Pretest Levels of Knowledge of Nursing Students with Selected Demographic Variables

Reveals that chi-square test to associate the pre-test level of knowledge with the selected demographic variables like age, gender year of study, residential area, previous knowledge about CPR, undergone any training program on CPR, assisted CPR in emergency unit. While analyzing the statistical significance of (p<0.05) level, it shows that there was a statistical significance association between undergone any training program on CPR and there was no association between age, gender, year of study, type of residential area, previous knowledge about CPR, assisted CPR in emergency unit of selected demographic variables.

#### Description of the Demographic Variables Results

On analysis of the frequency and percentage distribution of demographic variables of the nursing students, the findings of the study revealed that majority of the nursing students,

- Regarding age 19(38%) were belongs to 18 years of age, 17(34%) was belonging to 19 years of age, 14 (28%) were belongs to 20 years of age
- Regarding gender 31(62%) were females and 19 (38%) were females.
- Regarding year of study 42(84%) were belongs to II-year nursing students and 8(16%) were belongs to III-year nursing students
- Regarding residential area 23(46%) were belongs to city, 13(26%) were belongs to rural area, 12(24%) were belongs to semi urban area, 2(4%) was belonging to urban area
- Regarding previous knowledge 30(60%) were belongs to yes, 20(40%) were belongs to no
- Regarding undergone any training program 26(52%) were belongs to yes, 24(48%) were belongs to no
- Regarding assisted in emergency unit 39(78%) were belongs to no, 11(22%) were belongs to yes

#### Limitations

The study was conducted to those who were, available during data collection period in the age group of 18-21years willing to

participate in this study able to read and write English

#### Recommendations

- The similar study can be conducted with larger samples for better generalization.
- The study can be conducted to assess the knowledge of nurses on cardiopulmonary resuscitation.
- The study can be conducted to assess the effectiveness of cardiopulmonary resuscitation among health care professionals.
- The same study can be done on different settings.
- A similar study can be done by increasing time duration and using different themes of mobile phone assisted supportive psychotherapy.

#### Conclusion

The result reveals that the frequency and percentage distribution of pre-test and post-test level of knowledge. It is evident that in the pre-test 28(56%) of them had moderate knowledge and 22 (44%) of them had poor knowledge about CPR. And in the post-test 45(90%) of them had adequate knowledge and 5(10%) of them had moderate knowledge about CPR. This showed that there was significant difference between pre-test and post-test level of knowledge. Hence, the stated hypothesis (H1) was accepted.

#### References

1. Basavanthappa BT (2009) Medical Surgical Nursing,, 2nd Edition, India Jaypee publishers <http://www.jpmedpub.com/jpadmin/tablecontents/978-81-8448-635-3/TOC/TOC.pdf>.
2. Brendan Docherty (2003) Basic Life Support and AED. Clinical Manager Cardiology and Critical Care <https://www.nursingtimes.net/archive/basic-life-support-and-aed-01-08-2003/>.
3. Lippincott Williams, Wilkins (2004) Brunner & Suddarth’s Textbook of Medical Surgical Nursing, 10th Edition <https://www.biblio.com/9780781731935>.
4. Davidson “Davidsons Principle and Practice of Medicine”; 19<sup>th</sup> Edition, churchil livingstone Publishers.
5. Lewis (2004) “Medical And Surgical Nursing, 6th edition, Philadelphia: Mosby Publication <https://simplenursing.co.in/nursing-school-desktop/>.

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