Research Article

A STUDY TO ASSESS THE EFFECTIVENESS OF VIDEO ASSISTED TEACHING PROGRAM REGARDING BLS AMONG THE NURSES AT APOLLO HOSPITALS, CHENNAI

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Abstract

Basic life support (BLS) is a key component of chain of survival. It decreases the chance of mortality. Invented in 1960, CPR is a simple but effective procedure that allows almost anyone to sustain life in the early critical minutes after cardiac and respiratory arrest. The aim of this study to assess the effectiveness of Video assisted teaching program on BLS among Nurses in Apollo Hospitals. The Research approach was Quantitative, pre-test (O1) and post-test (O2) without a control group was used for this study. Convenient Sampling technique was followed and 30 Nurses were selected for this study. Observational Checklist & Structured Questionnaire was used to assess the Knowledge of the Nurses and Video assisted teaching was given after the Pre-test. Data were collected and analyzed which showed, before intervention, 33.33% of the Staff Nurse are having inadequate knowledge score, 56.67% of them having moderate knowledge score and 10% of them are having adequate knowledge. After intervention, none of the Staff Nurse are having inadequate knowledge score, 26.67% of them having moderate knowledge score and 73.33% of them are having adequate knowledge. This study has very high significant at $p \leq 0.001$ level.

Keywords: Video Assisted Teaching program, BLS, Staff nurses.

INTRODUCTION

Cardiovascular diseases are the major public health concern worldwide. Sudden cardiac death (SCD) which is often the first manifestation of cardiovascular disease is also the most common cause of death worldwide. Survival after cardiopulmonary arrest is usually low and depends on early intervention, quality of cardio-pulmonary resuscitation (CPR) and time of initiation of defibrillation post cardiac arrest. Basic life support (BLS) is a key component of chain of survival. It decreases the chance of mortality. Invented in 1960, CPR is a simple but effective procedure that allows almost anyone to sustain life in the early critical minutes after cardiac and respiratory arrest. BLS includes both prompt recognition, immediate support of ventilation and circulation in case of respiratory or cardiac arrest. Sudden cardiac arrest is a catastrophic medical emergency that may occur at any time in the hospital or pre-hospital setting. Cardiopulmonary resuscitation (CPR) and basic life support (BLS) are important life-saving, first-aid skills. CPR is an emergency procedure that is performed in an effort to manually preserve intact of brain function until further measures can be taken to restore spontaneous blood circulation and breathing in the person who is experiencing the cardiac arrest. It involves chest compressions and artificial respiration. BLS refers to the maintenance of airway patency and the support of breathing and circulation without the use of equipment, other than a protective device. Therefore, knowledge of CPR is crucial to the improvement of patient survival. BLS is the foundation for saving lives after cardiac arrest. Fundamental aspects of adult BLS include immediate recognition of sudden cardiac arrest

and activation of the emergency response system, early CPR, and rapid defibrillation with an automated external defibrillator (AED). It is important that at least the health care professionals should know about the basic life support as they encounter such situation often. Such emergency situation can occur almost on daily basis in a hospital setting. Various studies have been carried out to assess the level of knowledge and attitude towards BLS among health care providers, which reflects its importance in the emergency care of the patients. The knowledge of BLS (CPR) is a major determinant in the success of resuscitation and plays a vital role in the final outcome of acute emergency situation. The Objective of this study are to assess the Pre-test level of Knowledge regarding BLS among the Nurses, to evaluate the effectiveness of video assisted teaching program on knowledge regarding BLS among the Nurses, to compare the Pre-test and Post-test level of knowledge regarding BLS among the Nurses.

MATERIALS AND METHODS

The data was collected in 2022. A Quantitative research approach with pre-test (O1) and post-test (O2) without a control group design was used to assess the effectiveness of video assisted teaching program on BLS among Nurses in Apollo Hospitals, Chennai. Ethical clearance and Permission was obtained from Medical Superintendent, Nursing Superintendent and Assistant Nursing Superintendent and consent was taken from the participants before collection of data. Total of 30 Nurses were selected by using convenient sampling technique. The subjects were given Observational Checklist & Structured Questionnaire and Pre-test & Post-test data were collected. Before the questionnaire was given to the participants, consent was taken, objectives were explained to them. The Structured Questionnaire to assess the knowledge

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about BLS comprised of two sections. Section 1 consists of Demography Performa including 5 items to collect information on subject's demography characteristics (Age, Sex, Qualification, Unit and Experience). Section 2 consist of Observational Checklist & Structured Questionnaire 10 multiple choice items to assess the knowledge about BLS. The Maximum score was 1 for each correct answer and Score 0 for each incorrect, not attempted. The knowledge level grading criteria considered appropriate as follows:

Knowledge score interpretation

Min=0 Max=1 Total questions=10 Maximum score= 10

S no.	Grade	score
1	Inadequate knowledge	≤ 5
2	Moderate knowledge	6-7
3	Adequate knowledge	8-10

RESULTS

Figure 1 depicts pretest percentage of knowledge score on CPR. Maximum knowledge score 100% for the questions Anatomy and physiology of heart, code blue alert and they had minimum score for CPR maneuver (13.33%).
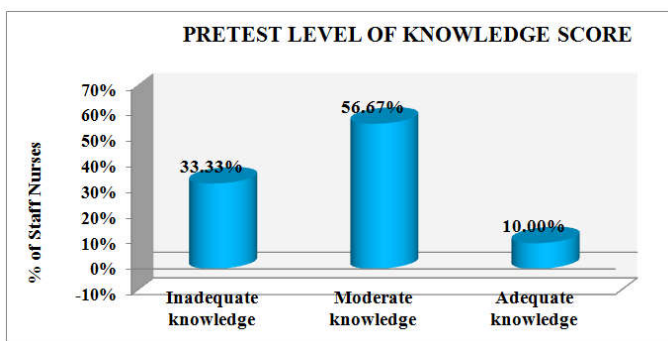

Fig. 1. Percentage wise distribution of pre-test level of knowledge score
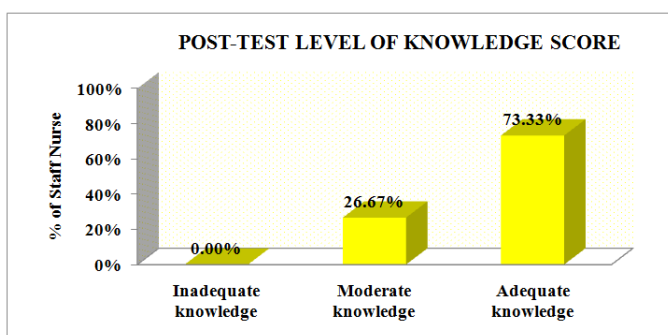

Fig. 2. Percentage wise distribution of post-test level of knowledge score

Table 1. Comparison of pre-test and post-test level of knowledge after video assisted teaching regarding BLS among staff nurse

	No. of Staff Nurse	Pretest Mean±SD	Posttest Mean±SD	Mean difference Mean±SD	Student's paired t-test
Knowledge Score	30	6.13 ± 0.90	9.00 ± 1.02	2.87 ± 1.07	t=14.62 P=0.001*** DF = 29, significant

*** Very high significant at P≤0.001

Table no 1 shows the comparison of overall knowledge score before and after the administration of video assisted teaching program on BLS
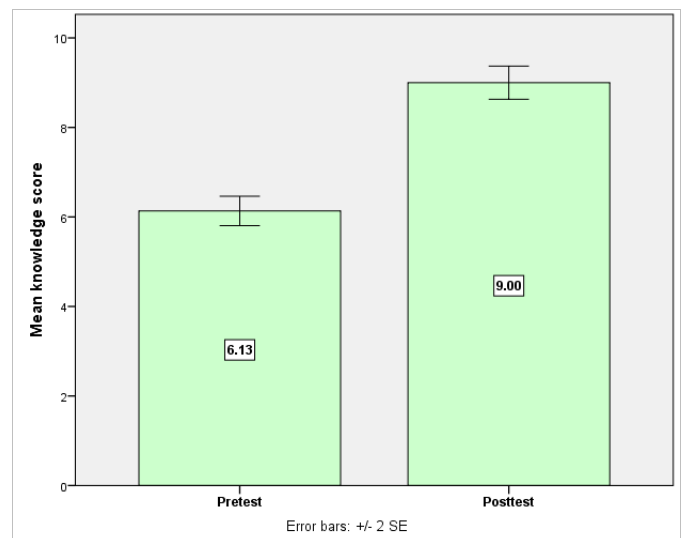

Fig. 3. Simple bar with 2 standard error bar diagram compares the pre-test and post-test Staff Nurse Knowledge score
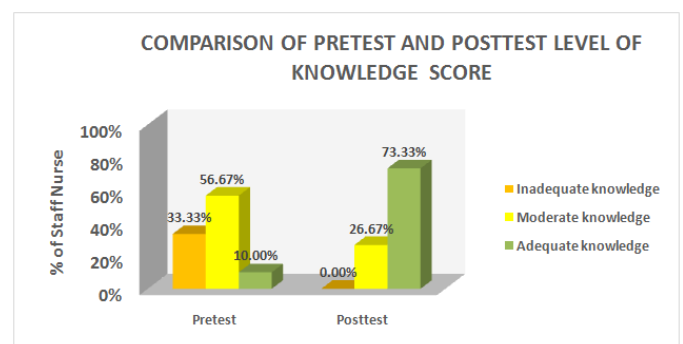

Fig. 4. Percentage wise distribution of comparison of pre-test and post-test level of knowledge score

DISCUSSION

The present study findings were revealed in terms of the objectives for the study. The majority of the nurses were female (98.8%), between age group 20-25 years (64.2%), have done B.Sc Nursing (88.4%), working in ICU (64%) & Ward (49%), holding the post of Staff Nurse (100%) and have taken care of critically ill patients. Figure 4 depicts the comparison of Pre-test and Post-test level of knowledge score regarding BLS among Staff Nurses. Before intervention, 33.33% of the Staff Nurse are having inadequate knowledge score, 56.67% of them having moderate knowledge score and 10% of them are having adequate knowledge. After intervention, none of the Staff Nurse are having inadequate knowledge score, 26.67% of them having moderate knowledge score and 73.33% of them are having adequate knowledge. The study which supports the result of the current study done by Thenmozhi, September 2022, a study was conducted to assess the Effectiveness of Video assisted teaching program on Adult CPR among school students. The finding of the study reveals that 54(90%) had inadequate knowledge and 6(10%) had moderately adequate, whereas in the post-test, 31(52%) had moderately adequate knowledge and 29(48%) had adequate knowledge on CPR and also found statistically significant improvement in the knowledge on CPR at the level of P<0.05.

Another study which supports the result of the current study done by Tukaram B.et.al., July 2018, a study to evaluate the Effectiveness of Video Assisted Teaching in Terms of Improvement in Ability regarding CPR among Students. The findings of the study reveals that Majority of students 55(94.83%) had poor level of ability about CPR, whereas 3(5.17%) of students had good level of ability and none 0 (0%) of students had Excellent ability regarding Adult Cardio Pulmonary Resuscitation (CPR) before administration of Video Assisted Teaching. The post-test data depicts that, none 0(0%) had poor level of ability about CPR, whereas majority of students 52(89.66%) of students had good level of ability and 6 (10.34%) of students had Excellent ability regarding Adult Cardio Pulmonary Resuscitation (CPR) after administration of Video Assisted Teaching. Hence the data reveals the effectiveness of Video Assisted Teaching.

Conclusion

The Present study results revealed that mean knowledge score in post-test (9)is is higher than the mean knowledge score in pre-test (6.13). Considering knowledge score, on an average, Staff Nurse improved their knowledge score from 6.13 to 9.00 after intervention. This difference is statistically significant. It shows that the Video Assisted Teaching Program has an Effective on Knowledge level of Staff Nurses on BLS.

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