

A STUDY TO EVALUATE THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAM REGARDING CARDIAC LIFE SUPPORT (CLS) AMONG STAFF NURSES IN VELLORE DISTRICT OF TAMIL NADU

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ABSTRACT

Heart disease is the world's largest leading cause of death. According to world Health Organization (WHO) estimates, 17.5 million people around the globe, die of Heart disease each year. This is over 31% of all deaths globally. WHO estimates that by 2023 close to 60% of cardiac patients worldwide will be Indian. The aim of the study was to assess the effectiveness of structured teaching programme on knowledge and skill regarding cardiac life support. A pre-experimental one group pre-test post-test design was used to assess the effectiveness of structured teaching programme on knowledge and skill regarding cardiac life support among nursing staffs at Vellore District, Tamil Nadu. A total 110 Staff Nurses were selected through convenience non-probability sampling technique. The data was collected through self-structured knowledge questionnaire and skill checklist on cardiac life support. The tool was developed in three parts, the first part deal with the 14 demographic variable, the part two consist of 64 knowledge questions on cardiac life support and the third part consist of 36 steps of skill checklist. The structured teaching programme on knowledge and skill was effectual in upgrading the knowledge and clinical expertise of the student nurses. Awareness regimen for knowledge on Cardiac life support using structured teaching program on knowledge and skill regarding Cardiac life support among nursing staffs was effective as their knowledge level improved significantly. Researcher discussed about the importance of knowledge about Cardiac life support among nursing staffs to gain attention and to promote effective skill of Cardiac life support in clinical as well as in community area. Researcher also open-up new path for future studies on the topic for more generalized results. This concludes that the structured teaching program was effective in significant improvement of knowledge level and skill score regarding cardiac life support among study participants. Findings stress the need for such teaching and skill programs, which in turn may enhance the overall health standard and save the life of victims.

Key words: Training, CLS, staff nurses.

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INTRODUCTION

Death can occur at any time due to causes like stroke, poisoning, accidents, suicide, injury, medication error, shock and cardiac arrest. Among these, cardiac arrest deaths remain major cause of mortality¹. As per World Health Organization (WHO) census, statistics mortality due to cardiac causes has overtaken mortality due to all cancers put together. Approximately, 4280 out of every one lakh people die every year from cardiac arrest in India alone². The survival rate of intra-hospital post-cardiac arrest patients, related to the identification of cardiac arrest and care performance by nurses trained in Cardiac life support (CLS), and by untrained nurses. Therefore, one of the measures to improve survival is by introducing the concept of “chain of survival” and only qualified health care. physicians, paramedics, nurses, respiratory therapists, pharmacists, and other specially trained health care providers can provide CLS, as it requires the ability to manage the Defibrillation is by far the most effective treatment among the components recommended in the American Heart Association(AHA) Cardiac Life Support (CLS) guidelines³.

OBJECTIVES

1. To Evaluate and compare knowledge practice regarding CLS before and after administration of Structured Teaching Program.
2. To Evaluate and compare practices of staff nurses regarding CLS before and after administration of Structured Teaching Program.
3. To determine the relationship between knowledge and practice of staff nurses regarding CLS.
4. To determine the association of knowledge and practice of staff nurses regarding CLS with selected variables.

MATERIAL AND METHOD

Quasi-experimental One group pre-test post-test design. The design can be represented as:

OK1P1 X OK2P2X1OK3 P 3X1 OP4OK 4P5.

OK1P1= denotes the Evaluation of knowledge and practice regarding CLS before implementation of CLS Structured Teaching Program

X = CLS Structured Teaching Program

OK2P2 = denotes the first post-test Knowledge and practice of staff nurses regarding CLS after implementation of CLS Structured Teaching Program

X1= Individualized feedback on CLS for identified knowledge and practice deficit areas

OK3P3 = denotes the second post-test of knowledge and practice of staff nurses regarding CLS

Op4= denotes the third post-test of practice of staff nurses regarding CLS

OK4P5= denotes the evaluation of post-test knowledge and practice of staff nurses regarding CLS

VARIABLES UNDER STUDY: Demographic Variable

SETTING: The present study was conducted at Vellore District of Tamil Nadu.

SAMPLING: The sampling technique used was random sampling technique.

SAMPLE SIZE: The sample size for the present study was 100.

DESCRIPTION OF TOOLS:

A structured knowledge questionnaire, and observational checklist were used for the data collection in the study. The structured knowledge questionnaire was divided into two parts as under:

SECTION I– Demographic variables of the staff nurses.

SECTION II- Structured questionnaire on basic life support strategies.

MAJOR FINDINGS

1. The mean 4thpost-test knowledge score (36.36) was significantly ($F=322.8$, $P\leq 0.01$) higher than the mean pre-test knowledge score (18.08).
2. The mean 5thpost-test practice score (52.33) was significantly ($F=1073.9$, $P\leq 0.01$) higher than the mean pre-test practice score (12.97).
3. There was no correlation between post knowledge with post practice of staff nurses regarding CLS ($r=0.053$, $p>0.05$).
4. The knowledge and practice of staff nurses regarding CLS was not significantly ($p\leq 0.05$) associated with selected variables.

CONCLUSION DRAWN FROM THE STUDY:

The mean post-test knowledge score in all areas of knowledge questionnaire was significantly higher than pretest knowledge score.

The mean post-test practice score in all the areas of practice was significantly higher than the mean pretest practice score.

DISCUSSION

In the present study the 3rd post intervention of knowledge score 36.3 ± 3.09 and 4th post intervention of practice score 52.3 ± 2.51 with mean difference of 18 in knowledge score and 39.26 in practice score. The computed t value was found to be significant ($t=31.0, p=0.00$) and ($t=26.6, p=0.00$) at 0.05 level of significance. Similarly, in a study, it was reported that on the second post- test the knowledge score 36.6 ± 3.97 and practice score 2.25 ± 18.7 . The difference between mean knowledge and practice score was found to be statistically significant

IMPLICATIONS**Nursing Education**

- Student nurses should be educated about Cardiac Life Support.
- In service education should be planned for the nurses to upgrade their knowledge and practice regarding CLS
- Induction program should be organized by continuous nursing education cell of an institution for the staff nurses regarding evidenced based procedure.
- Educational aids should be developed regarding CLS.

Nursing Administration

- Nurse administrator should organize various in-service education/ program /workshop to update the knowledge and practice of nursing employees on Cardiac life supported.
- Nurse administrator should employ and encourage the use of new and creative teaching strategies utilizing the latest technologies directed towards the goal of enhancing the knowledge and practice of staff nurses regarding CLS.
- Nursing administrator should appoint a nurse responsible for training regarding CLS.

Nursing Practice

- Nurses play a vital role in providing care to the patient, so it is imperative for nurses to provide CLS.
- Nurse educator should use a standardized, valid and reliable structured knowledge questionnaire and observation checklist to evaluate the knowledge and practice among staff nurses.
- Nurse educator should evaluate baseline knowledge and practice of staff nurses regarding CLS.
- Nurses should follow the proper guidelines and technique for Cardiac life support.
- Nurses should re-evaluate the level of knowledge and practice after implementation of Structured Teaching Program to determine the practice.

RECOMMENDATIONS

The study can be replicated on a larger sample of staff nurses in different setting for making broad generalization. A true experimental study can be conducted with Structured Teaching Program regarding CLS. A study can be conducted to evaluate the knowledge and attitude among staff nurses regarding CLS. A descriptive study to evaluate the knowledge and practice of staff nurses regarding CLS. Various teaching strategies like demonstration, video teaching regarding CLS can be developed.

Conflict of Interest: No

Source of Funding: Self

Ethical Clearance: Ethical approval to conduct the study was obtained from the institutional Ethical Committee.

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