# **Original Research Paper**



# **Nursing**

"EFFECTIVENESS OF EDUCATIONAL PROGRAM ON KNOWLEDGE AND PRACTICE REGARDING BASIC AND ADVANCED CARDIAC LIFE SUPPORT (BLS & ACLS) AMONG NURSING OFFICER IN SELECTED HOSPITAL AT DELHI"

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ABSTRACT Background: Heart disease is the world's largest killer, claiming 17.5 million lives every year. About every 29 seconds, an Indian dies of heart problem. As many as 20,000 new heart patients develop every day. In Indian 9 core Indian suffer from heart disease and 30% more are at high risk. The purpose of this study was to assess the effectiveness of educational program on knowledge and practice regarding basic and advanced cardiac life support (BLS & ACLS) among nursing officer in selected hospital at Delhi

Methods: After approval from Institute Ethical Committee and informed consent from the participant, the present study was conducted among nursing officer. A self-administered questionnaire based on knowledge and Practice of basic and advanced cardiac life support was used to collect data.

Results: Majority of nursing officer (71%) who participated in study were having no experience of any short term course/In-service education programme on basic life support (BLS) and advanced cardiac life support (ACLS), of which (70%) were in experimental and (73%) were in control group and (27%) who participated in the study were having life support (BLS) and advanced cardiac life support (ACLS), of which (30%) were in experimental and (27%) were in control group. Majority of nursing officer (83%) who participated in the study were never performed basic life support (BLS) and advanced cardiac life support (ACLS), of which (77%) were in experimental and (87%) were in control group and (17%) who participated in the study were performed basic life support (BLS) and advanced cardiac life support (ACLS) of which (23%) were in experimental and (13%) were in control group.

Conclusions: Patient resuscitation is a challenging situation to be faced by the nursing personnel. It is a professional responsibility to maintain proficiency in CPR skills by the nursing personnel. It is a professional responsibility to maintain proficiency in CPR skills by periodic practice with mannequins as CPR should be administered quickly and accurately when an emergency arises. Nursing educators should be administered quickly and accurately when an emergency arises. Nursing educators should be involved in curriculum design for resuscitation skills teaching

**KEYWORDS**: Basic life support, Advanced cardiac life support, Cardiopulmonary resuscitation, Knowledge, Nursing officer

### 1. INTRODUCTION

Life is a most precious one for each individual, saving life of a person is noble thing in the entire world, now a day most of the death occurs due to the improper management of client, especially in the emergency situation.<sup>1</sup>

Cardio Pulmonary Resuscitation has been divided into basic cardiac life support and advanced cardiac life support because most of the cardio pulmonary arrests occur outside the hospitals and the people who initiate the resuscitation measures in these scenarios are not paramedical or medical personnel. Basic cardiac life support (BCLS), which is usually taught to general population who are the first responders who initiate the resuscitation, measures. So the researcher felt that to know the ability of students to give first aid and Cardio Pulmonary Resuscitation, to assess the coverage of first aid and Cardio Pulmonary Resuscitation training among students in all occupational categories. Basic life support (BLS) refers to maintaining airway and supporting breathing as well as circulation. BLS comprises of the following elements: initial assessment, airway maintenance, expired air ventilation (rescue breathing; mouth-to-mouth ventilation) and chest compression. The combination of all the above is termed as cardiopulmonary resuscitation (CPR)<sup>2</sup>

As a professional, a Nursing officer requires knowledge, skills and must make prompt, correct clinical judgments and decisions. Nursing officer's decision-making in clinical practice is a fundamental means to establish a therapeutic relationship with patients and is crucial to successful nursing performance because it affects nursing practice<sup>3</sup>.

The application of Life Saving was designed and developed which structures the knowledge and practice of BLS and ACLS in clinical contexts, strengthens motivation to learn, develops clinical reasoning skills, and enhances self-directed learning, anywhere and anytime.

# Statement of the Problem

"Effectiveness of Educational Program on Knowledge and Practice Regarding basic and advanced cardiac life support (BLS & ACLS) among nursing officer in selected hospital at Delhi"

### **OBJECTIVES OF THE STUDY:**

- To assess and evaluate the knowledge of nursing officers regarding basic life support (BLS) and advanced cardiac life support (ACLS) before and after administration of Educational Program.
- To assess and evaluate the practice of nursing officers regarding basic life support (BLS) and advanced cardiac life support (ACLS) before and after administration of Educational Program.
- To develop an Educational Program on basic life support (BLS) and advanced cardiac life support (ACLS) for nursing officers.
- 4. To determine the relationship between knowledge and practice of nursing officers after administration of Educational Program.
- To find out the association between post-test knowledge score of nursing officers with their selected socio-demographic variables.
- To find out association between post-test practice score of nursing officers with their selected socio-demographic variables.

### Hypothesis

- H<sub>1</sub>: There will be significant difference between the pre-test and post-test knowledge scores of experimental group & control group as measured by structured questionnaire at 0.05 level of significance.
- H<sub>2</sub>: There will be significant difference between the pre-test and post-test practice scores of experimental group and control group as measured by observation checklist at 0.05 level of significance.

# 2. MATERIALAND METHODS

The research data was collected using a questionnaire prepared in accordance with the necessary literature. The participants consented that the data of this study could be used in any studies planned in the future. They were informed that their answers would be used only for scientific purposes and that their work life or social life would not be affected by it any way. The participants were required to answer fully and to state only the most appropriate answer an error margin of p<0.05 was accepted as statistically significant.

# 2.1 Research Design

A quasi-experimental, pre-test, post-test control group research design was employed in this study.

Table: 1 Schematic Representation Of Research Design

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Groups	PRE TEST	INTERVENTION	POST TEST
Experimen	Assessment of	Educational	Assessment of
t Group	knowledge and	Program on	knowledge and
	practice regarding	Knowledge and	practice
	BLS&ACLS.	Practice	regarding
			BLS&ACLS.
Control	Assessment of		Assessment of
Group	knowledge and		knowledge and
	practice regarding		practice
	BLS&ACLS.		regarding
			BLS&ACLS.

#### 2.2 Ethical Considerations

Participants were given verbal information explaining the purpose of the study, procedures, confidentiality and anonymity preserved. They were also informed about their right to withdraw from the study at any time without losing any benefits of their health care service.

### 2.3 Setting and sample

The study was conducted in selected hospital at Delhi. Following purposive sampling method 200 samples were selected for conducting the main study. 100 samples were for experimental group and 100 for control group.

## 2.4 Procedure and data collection

The participants who met the inclusion criteria were recruited in the study based on purposive

Sampling. The inclusion criteria were (a) Nursing officers who are working in the hospitals. (b) Nursing officer who are willing to participate. (c) Nursing officer who are available at the time of data collection.

### 2.5 Instruments

Following data collection tools were constructed in order to obtain data.

- A structured knowledge questionnaire for assessing the knowledge of nursing officer on basic life support (BLS) and advance cardiac life support (ACLS).
- A structured observation checklist to assess the practice of nursing officers on basic life support (BLS) and advanced cardiac life support (ACLS).
- Educational Program on basic life support (BLS) and advance cardiac life support (ACLS)

## 3. RESULTS

- 1. Findings related to effectiveness of Educational Program on basic life support (BLS) and advanced cardiac life support (ACLS) in terms of knowledge score of nursing officers in experimental & control group.
- The mean post-test knowledge scores of experimental group (38.9) is higher than the mean pre-test knowledge scores of experimental group (21.1) with a mean difference of 17.8.
- The mean post-test knowledge scores (38.1) of nursing officers in experimental group is higher than the mean post-test knowledge scores in the control group (21.1) with a mean difference of 17.
- 2. Findings related to effectiveness of educational Program on basic life support (BLS) and advanced cardiac life support (ACLS) in terms of practice of nursing officers.
- The mean post-test practice scores of experimental group (62.5) is higher than the mean pre-test practice scores of experimental group (22.2) with a mean difference of (40.3).
- The mean post –test practice scores (62.5) of nursing officers in experimental group is higher than the mean post -test practice scores in the control group (22.1) with a mean difference of 40.4.

# CONCLUSION

On the basic of the findings, following conclusions were drawn:

- The present study identified deficit knowledge and practices on basic life support (BLS) and advanced cardiac life support (ACLS)
- Education was necessary for improving the knowledge and practices of the nursing officers on basic life support (BLS) and advanced cardiac life support (ACLS)
- The Educational programme was effective to increase the knowledge of the nursing officers on basic life support (BLS) and advanced cardiac life support (ACLS)
- The Educational programme was effective to enhance the practice

of the nursing officers on basic life support (BLS) and advanced cardiac life support (ACLS).

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