

## “A QUASI EXPERIMENTAL STUDY TO ASSESS THE EFFECTIVENESS OF LECTURE CUM DEMONSTRATION ON KNOWLEDGE REGARDING BASIC LIFE SUPPORT AMONG AUTO RICKSHAW DRIVERS IN SELECTED AREAS OF PUNE CITY.”

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### KEYWORDS

Basic Life Support, lecture cum demonstration, auto rickshaw drivers.

### ABSTRACT:

**Introduction** - Out-of-hospital Cardiac Arrest (OHCA) cases are rising due delay in appropriate interventional and administration of Basic Life Support, it will help in reviving this survival rate. The main objective of the study the effectiveness of lecture cum demonstration regarding Basic Life support among auto rickshaw drivers this awareness which can help the public to take appropriate initiatives during the first initial golden minutes till the arrival of medical help. **Purpose** – The purpose of the study to assess the effectiveness of lecture cum demonstration on knowledge regarding Basic Life Support among auto rickshaw drivers in selected areas of Pune city. **Material and methods** - In the current study quasi-experimental research design was adopted and 100 rickshaw driver was included in this study. In this self- structured questionnaire were administered, after week training on Basic Life Support was provided using through lecture cum demonstration were given to all the participants and to assess the effectiveness of lecture cum demonstration. The posttest were carried out on same participants using same questionnaire. **Result** -The scores of pretest and posttest compared to assess the effectiveness of lecture cum demonstration. In the pretest about 80 % of participants showed poor knowledge and none of the participant had good knowledge. Where during posttest 88 % showed good knowledge and 54 % showed average knowledge. Hence it was proved that lecture cum demonstration is effective shows statistical analysis. In association of pre-interventional knowledge score, none of the demographic variable showed association. **Conclusion** – with this analysis it can be concluded that lecture cum demonstration was effective and this increased the knowledge of auto rickshaw drivers and they were confident to perform Basic Life support during emergency situation and they can save the life of individual.

### INTRODUCTION

In the earlier era, the people used to follow a very active lifestyle adding to which they also followed a balanced diet, adequate sleep and less stressful life, contrary to which in the 21st century the people follow a sedentary lifestyle, high fat and cholesterol diet. [1] In addition they also end up having less sleep and a stressful life along with various types of addictions to alcohol, drugs, and cigarette. All these has lead to various communicable and non- communicable disorders. Globally, cardiovascular diseases (CVDs) are the primary cause of death. 32% of all fatalities worldwide in 2019 were attributed to CVDs, with an anticipated

17.9 million deaths. Strokes and heart attacks was the cause of 85% of all these casualties. Over 75 percent of deaths from cardiovascular diseases (CVD) take place in countries with low incomes. In 2019, non-communicable diseases contributed to 17 million premature deaths (deaths under 70 years of age) among which 38% were caused to CVDs.[2]

Coronary heart disease is the leading cause of death in most developing countries with over half of this due to sudden cardiac arrest. It is widely acknowledged that unless effective CPR is initiated death is inevitable. It has recently been reported that the speed and competence of the first responder are

important factors that contribute to the initial survival of a person following a cardiac arrest. (CPR statistics American Heart Association).

The Basic Life Support is an essential skill taught to General people, they require basic skills of assessment for cardiac arrest and need to initiate Basic Life Support, involving maintaining respiration and circulation until emergency services, or advanced life support services (ACLS) arrive. All people with a responsibility for person must be offer regular training and updates in resuscitation, we all have a responsibility to ensure remain competent to perform resuscitation.

### **NEED OF THE STUDY**

Medical emergencies of various kinds can happen inside the hospital as well as in the community area. Inside the hospital the code blue team i.e. the designated members arrive on spot with the emergency equipment's and medication. Where as in the community area it is the public who will be the first respondents and if the public is made aware of such situation, it can help in sustaining the life of the patient till the medical help arrives. For this it is the responsibility of the health sector and the higher authority people to make the normal non- medical public to be aware on such emergency actions.

As per a News published in Indian Express dated on 29<sup>th</sup> May 2023 says that majority of the people do not look for medical advice and ignore the symptoms, which has led to more than half of heart attack deaths happening on spot before the medical help arrives. If adequate awareness about the signs and symptoms of Cardiac arrest and its actions that has to be adopted during the crucial hours the life's of these patients can be saved and survival rate also can increase<sup>[3]</sup>

As per a News article flashed in Times of India dated on 23 May 2023 about 1.08 Lakhs auto rickshaw drivers are present. As these are the people who are readily available on the roads and also these are the people who are called during an emergency situation for transportation to the hospital. If the auto rickshaw drivers are trained with Basic Life Support (BLS) they can provide cardiopulmonary resuscitation (CPR) on the roads to a casualty with Outside of hospital cardiac arrest (OHCA) till the medical services arrive thus increasing the chances of living in cardiac arrest patients outside of hospital.<sup>[4]</sup>

### **AIM OF THE STUDY**

The current study to assess the effectiveness of lecture cum demonstration on knowledge regarding Basic Life Support among auto rickshaw drivers in selected areas of Pune city.”

### **RESEARCH METHODOLOGY**

#### **Objectives -**

- 1) To determine the knowledge regarding BLS among auto rickshaw drivers before Intervention.
- 2) To determine the knowledge regarding BLS among auto rickshaw drivers after Intervention.
- 3) To determine the effectiveness of lecture cum demonstration regarding BLS among auto rickshaw drivers.
- 4) To associate the Pre-intervention findings with selected demographic variables.

#### **Research Approach – Quantitative Research Approach**

**Design-** Quasi Experimental pre & posttest design **Sample-** Auto rickshaw Driver.

**Sample Size-**100

**Sampling technique -** Non Probability - Purposive Sampling Technique.

#### **Tool Description-**

- Section-A: Demographic Data (Age, marital status, occupation & education )
- Section B: knowledge questionnaire on Basic Life Support (23 self- structured questionnaire)

**Reliability-** In this study test retest method was applied, which follows the stability principle of reliability. Reliability was carried out among 10 samples, r value was **0.84**. Hence the tool was considered reliable.

**Pilot study-** In this study Total sample taken for pilot study were 10. There was no any problem faced. The study were found feasible.

**Results:** Section I – Findings related knowledge pertaining to BLS in Auto rickshaw drivers before Intervention.

**Table no.1: describes knowledge regarding Basic Life Support among auto rickshaw drivers before Intervention.**

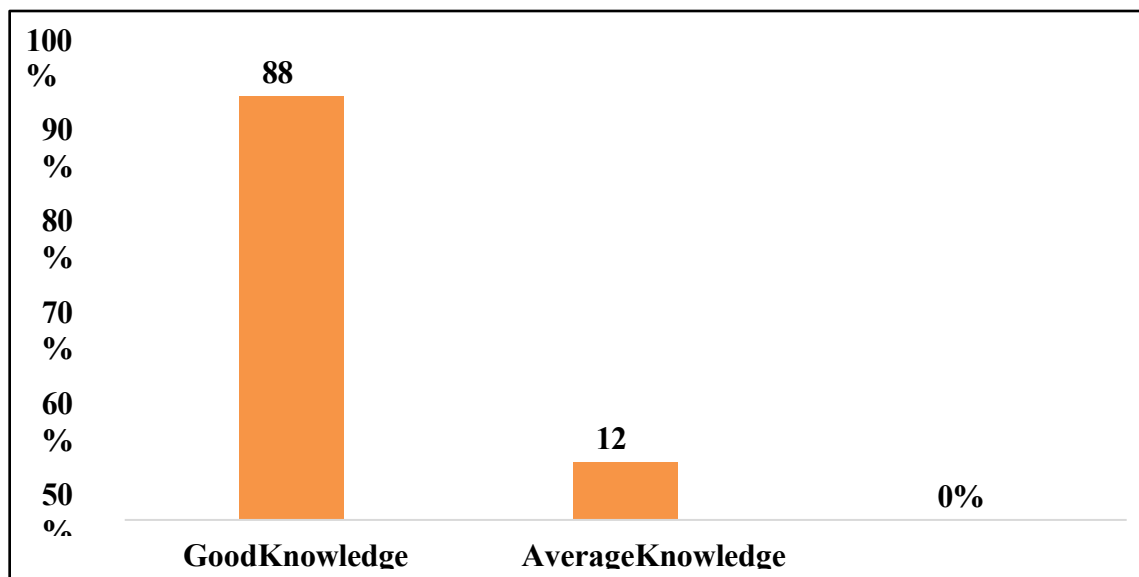
(n = 100)

Criteria	Score	Percentage (%)	Frequency
Good Knowledge	16-23	0%	0
Average Knowledge	8- 15	20%	20
Poor Knowledge	0 -7	80%	80

The above table shows that before the intervention of Basic Life Support, majority of the participants (80%) had poor knowledge, 20% of participants showed average knowledge contrary to which none of the participants showed Good Knowledge.

**Section II- Findings related knowledge regarding BLS in Auto rickshaw drivers after interventions.**

(n = 100)



**Figure no: 1 describes the knowledge level regarding BLS among auto rickshaw drivers after interventions.**

The graph depicts that after the lecture cum demonstration among Auto rickshaw drivers, there is a tremendous change in knowledge level as after intervention the majority of the sample i.e. 88% had

good knowledge, 12% of participants has showed average knowledge compared to which none of the auto rickshaw driver showed Poor knowledge.

**Section III- Determine the effectiveness of lecture cum demonstration pertaining to BLS in auto rickshaw drivers.**

**Table No 2: shows that effectiveness of lecture cum demonstration about BLS on knowledge level of participants.**

(n = 100)

Knowledge Score	Mean Score	Standard Deviation	Degree of Freedom	Calculated 't' Value	Table 't' Value	Level of Significance
Pre Test Score	6.03	1.883	99	44.355	1.660	< 0.001
Post test Score	17.78	1.873				

In the pretest knowledge score 6.03 was mean with the standard deviation of 1.883.also in the post test knowledge test 17.78 was mean and 1.873 was standard deviation .The Paired t test were used, in which the calculated' value i.e. 44.355 was higher than table t value i.e. 1.660 with a 99 degree of freedom which proves that Hypothesis H0 was reject.

**Section IV - Association of Pre-intervention score with selected demographic data.**

The association which was carried out using Chi square test and it discovered that not one of the demographic variables were significantly associated with knowledge as p value was more than, 0.05 level of significance. Hence the (H0) was accepted.

**DISCUSSION**

In this present study pretest questionnaire consisting of 23 question, were administered to auto rickshaw drivers and the knowledge score were bifurcated into good, average and poor knowledge. After the pretest majority of the participant 80 % showed poor knowledge, 20 % of the participants showed average and none of the participants showed good knowledge about BLS.

In this present research the pretest was administered to check on knowledge regarding Basic Life Support, followed to which lecture cum demonstration was given to the auto rickshaw drives using BLS Mannequin. After one-week posttest was conducted on the same sample, scoring was done as good, average and poor knowledge. In the posttest majority of the people had Good knowledge score (88%), 12 % acquired average score and none of sample showed poor knowledge. Hence through this findings and by Inferential statistical calculation (paired't' test) it was proved that lecture cum demonstration was effective on knowledge related to BLS.

Another study was done on Non-Medical Adults to rate the awareness and understanding about BLS and these scores was associated with the demographic variables. For this study convenience sampling technique was used and about 426 Non-medical participants were included. The study concluded that the participants had awareness regarding BLS but had very low knowledge score which indicates that BLS training is required.<sup>[5]</sup>

Another research study was conducted on villagers of rural India and the significance of Basic Life Support training was assessed. 220 villagers were selected through Non-probability sampling method. A pretest was

conducted using a checklist after which training of BLS was provided, posttest was conducted on same sample who's mean average score was 56.51 which comparatively high than pretest mean average score 23.50 through this they concluded that BLS training was effective and had a positive influence on the villagers' of the rural India. <sup>[6]</sup>

## **CONCLUSION**

In this current study the effectiveness of lecture cum demonstration was assessed on knowledge related to Basic Life Support among auto rickshaw drivers. Around 100 participants comprises in this investigation. The pretest knowledge was assessed by distributing the self- structure questionnaire and the score was separated mainly three section i.e. good, average and poor knowledge. In the pretest 80 % participants showed poor knowledge and 20 % average knowledge and 0 % participants showed good knowledge.

After one week of interval time the intervention (lecture cum demonstration regarding Basic Life Support) was implemented on same participants, followed to which posttest was carried out to determine the respondents knowledge. it discovered that most of the respondent there was a major improvement in the knowledge score which was about 88 % in good criteria. <sup>12</sup> % participants showed average knowledge and none of the participants showed poor knowledge in the post test. Hence it was concluded that lecture cum demonstration regarding Basic life Support was effective. The collected data was organized, analyzed and statistically interpreted. Which concluded lecture cum demonstration pertaining to BLS was effective and using Chi square test demographic variable i.e. Age, Marital status, Duration of occupation and Education were not associated.

**Conflict of Interest:** I certify that they have no involvement in any organization or entity with any financial or non-financial interest in the subject matter or material discussed in this paper.

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