



# A STUDY TO ASSESS THE KNOWLEDGE REGARDING BASIC LIFE SUPPORT AMONG STUDENTS AT NURSING COLLEGES OF JODHPUR

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## ABSTRACT

**INTRODUCTION:** In light of the foregoing, the investigator determined that it was essential to assess BLS knowledge among undergraduate students, as well as to update knowledge and develop ability. CPR practice is the best way to learn BLS. Educating students and raising awareness about BLS will help them learn more about it and avoid death due to cardiac arrest. CPR should be started as soon as possible to increase the chances of a good resuscitation and survival.

**AIM OF THE STUDY:** Assess the knowledge regarding basic Life support among students at nursing colleges

**MATERIAL AND METHOD:** A descriptive study was carried out on 200 nursing students of Government College of Nursing Jodhpur. Samples were selected by using Non Probability Purposive Sampling Technique. Data was collected using structured knowledge questionnaire and analyzed by using descriptive and inferential statistics.

**RESULT:** The findings of the study reveals that 61.50% Nursing students had average knowledge, 26% had poor knowledge and 12.50% had good knowledge regarding basic life support However all the demographic variables such as age, gender, place of residence, academic level, history of receiving any first aid training, assisting, witnessing or providing BLS were found to have significant association with the level of knowledge regarding basic life support. The study results showed that the nursing students have average knowledge regarding basic life support.

**CONCLUSION:** It can be reiterated that nursing students have average knowledge regarding basic life support as per current research recommendations. They require simulated practices and Role play to enhance their knowledge and awareness regarding basic life support.

**KEY WORDS:** Knowledge, Nursing students, Basic Life Support.

## INTRODUCTION & BACKGROUND OF THE STUDY

Basic life support is the standard of medical treatment provided to patients with life-threatening illnesses or accidents before they can be admitted to a hospital for full medical care. It can be administered by qualified medical professionals such as emergency medical technicians, paramedics, and people who have completed basic life support training. In the pre-hospital setting, basic life support is commonly used. Basic life support does not usually include the use of medications or invasive techniques, and it can be combined with Advanced Life Support (ALS). After taking a short course, most laymen will master BLS skills.

CPR is a life-saving treatment that is performed when the heart and lungs stop functioning. Out of hospital cardiac arrest is recorded with a wide range of occurrence and outcomes. These variations are due, in part, to differences in the understanding and detection of cardiac arrest, as well as differences in care after it has occurred. Several authors have discussed the issue of poor CPR efficiency, even when it is

performed by medical professionals. A lack of ability retention after various CPR courses has been documented in numerous studies. The recent developments in BLS and ALS algorithms were prompted by studies indicating the need for improved resuscitation techniques.

In Asia, global cardiovascular disease-related deaths affect 80% of the countries. In India, approximately 33%–44% of people in and out of hospitals suffer from cardiac arrest, with 15%–25% of those resuscitated and surviving. A bad outcome is expected by delayed CPR and insufficient coronary and cerebral perfusion during CPR.

According to the World Health Organization, India will account for 60% of all cardiac patients by 2020. In India, nearly half of all cardiovascular deaths occur before the age of 70, compared to just 20% in the West. Heart disease affects 10% of the adult population in urban areas and 5% of the population in rural areas in Karnataka.

In light of the foregoing, the investigator determined that it was essential to assess BLS knowledge among undergraduate students, as well as to update knowledge and



develop ability. CPR practice is the best way to learn BLS. Educating students and raising awareness about BLS will help them learn more about it and avoid death due to cardiac arrest. CPR should be started as soon as possible to increase the chances of a good resuscitation and survival.

### OBJECTIVES OF THE STUDY

- To assess the knowledge of students regarding basic life support at Nursing Colleges of Jodhpur.
- To find out the association between knowledge and selected demographic variables

### OPERATIONAL DEFINITION

- **ASSESS:** In this study refers to a critical analysis of systematic, organized and continuous process of collecting data from the Nursing students regarding basic life support.
- **KNOWLEDGE:** In this study, knowledge is the correct response of students about information regarding basic life support in terms of scores through self-structured questionnaire.
- **BASIC LIFE SUPPORT (BLS):** It is a simple technique used to restore and maintain breathing and circulation in cardiac arrest victims.
- **NURSING STUDENTS:** In this study refers to students of B.Sc. Nursing, Post basic B.Sc. Nursing, and M.Sc. Nursing at selected Nursing Colleges of Jodhpur.

### ASSUMPTION

- It is assumed that most of the Nursing student may have some knowledge regarding basic life support.
- The knowledge regarding basic life support may vary with the selected demographic variables among students at selected Nursing Colleges of Jodhpur

### DELIMITATION

- The study will be limited to the students from Government College of Nursing Jodhpur.

### RESEARCH METHODOLOGY

#### • RESEARCH APPROACH

Quantitative research approach is considered appropriate for the present study.

#### • RESEARCH DESIGN

Descriptive survey design was adopted for this study.

### RESEARCH VARIABLE

#### • Research variable

Research variables are those variable which are observed a measured in natural setting as they exist without any

manipulation in the descriptive study no last effect relationship is examined. In my study the research variables is knowledge of nursing students regarding BLS.

#### • Demographic variable

Demographic variables are the characteristics and attributes of the study sample. In my study the demographic variables are Age, gender, place of residence, academic level, history of receiving any first aid training and history of witnessing /assisting or providing BLS.

### POPULATION

Nursing Students.

### SAMPLING SIZE

In this study, the sample consists 100 nursing students.

### SAMPLING TECHNIQUE

Non-probability purposive sampling technique was used for this study.

### RELIABILITY OF THE TOOL

The reliability was established by using Cronbach's Alpha Coefficient formula and it is found to be reliable ( $r = 0.782$ ).

### MAJOR FINDING OF THE STUDY

**Table 1** Depicted that of Nursing Students participated in the study, majority of Age >24 (79, 39.5%), Gender Male (109, 54.5%), Place of residence Rural (123, 61.5%), Academic level B.Sc. Nursing (136, 68%), any history of receiving any first aid training in past No (163, 81.5%), Have you ever witnessed, assisted or provided BLS Yes (127, 63.5%).

**Table 2** Depicted that the majority (61.50 %) of the nursing student's level of average knowledge with mean  $\pm$  SD is  $15.04 \pm 8.1$  and mean percent knowledge of nursing students 66.13%.

**Table 3** Depicted shows that the knowledge score of nursing students according to different aspects of the BLS were highest 58.62% regarding the 'General Information About BLS' with the mean 2.34 and SD of  $\pm 0.1$ , 54.51% regarding 'Cardiac Arrest' with the mean 2.18 and SD of  $\pm 1.2$ , regarding CPR 46% (a) 'Meaning, Indication And Contraindication' with the mean 1.38 and SD of  $\pm 1.0$ , 51% regarding (b) 'Chest Compressions' with the mean 2.04 and SD of  $\pm 0.3$ , 56.12% regarding (c) 'Ventilation' with the mean 2.24 and SD of 0.4, 42.5% regarding 'Defibrillation' with the mean of 1.7 and SD  $\pm 1.0$  52.25% regarding 'Complications' with the mean 2.09 and SD  $\pm 2.5$ , 35.83% regarding 'Nursing Responsibility' with the mean 1.07 and SD  $\pm 1.6$ .

**Table 1. Frequency and percentage distribution of demographic variables among nursing students (N=200)**

S. No	Socio-demographic variable	Frequency	Percentage	
1.	Age in years	18–20	31	15.5
		21–22	53	26.5
		23–24	37	18.5
		>24	79	39.5
2.	Gender	Male	109	54.5
		Female	91	45.5
3.	Place of residence	Urban	77	38.5
		Rural	123	61.5
4.	Academic level	B.sc Nursing	136	68
		Post basic Nursing	31	15.5
		M.sc Nursing	33	16.5
5.	Any history of receiving any first-aid training in past	Yes	37	18.5
		No	163	81.5
6.	Have you ever witnessed, assisted or provided BLS	Yes	127	63.5
		No	73	36.5

**Table 2. Level of knowledge of the Nursing students regarding BLS. (n=200)**

Level Of Knowledge	Range of scores	Frequency(n)	Percentage (%)
Poor	0–14	52	26%
Average	15–24	123	61.5%
Good	25–30	25	12.5%

**Table 3. Mean, SD and mean percentage of Nursing Students knowledge score regarding BLS (n = 200)**

Area of knowledge	Maximum score	Mean score	SD	Mean%
General Information About BLS	4	2.34	0.1	58.62%
Cardiac Arrest	4	2.18	1.2	54.51%
CPR (A) Meaning, Indication And Contraindication	3	1.38	1.0	46%
(B) Chest Compressions	4	2.04	0.3	51%
(C) Ventilation	4	2.24	0.4	56.12%
Defibrillation	4	1.7	1.0	42.5%
Complications	4	2.09	2.5	52.25%
Nursing Responsibility	3	1.07	1.6	35.83%
Total	30	15.04	8.1	66.13%

## DISCUSSION

In developing countries like India the rate of people dying from cardiac arrest is soaring, this study focused on assessing the knowledge of nursing students regarding Basic life Support and the findings of the study represents that majority 61.50% of the participants had an average knowledge and 26% had poor knowledge whereas only 12.5% had good knowledge regarding Basic life support and it was also revealed that there is significant association between the level of knowledge regarding basic life support with selected socio-demographic variables.

Similar studies were also done in different parts of the country and same results were found that all the healthcare undergraduate students were having average knowledge regarding Basic life Support and all its aspects.

## CONCLUSION

The finding raised concerns about all aspects of basic life support and results showed considerable average knowledge about various aspects of basic life support. This study has made some progress in establishing the current status of nursing students knowledge regarding basic life support and is able to provide a framework for developing nursing students for future practices.

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