

Awareness, Knowledge and Attitude about BLS among Physiotherapists of Bathinda, Punjab - A Questionnaire-Based Survey

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ABSTRACT

The basic life support including cardiopulmonary resuscitation is an emergency procedure to save the life of an individual who suffer from life threatening conditions such as heart stroke. The knowledge of BLS is very much essential for healthcare providers to save the life of an individual in and outside the hospital. The study was conducted after the Ethical approval. The written and verbal consent was taken from the participants followed by the distribution of the questionnaire. The questionnaire was composed of MCQ regarding all three domains Awareness, Knowledge, and attitude. The questionnaire was filled in front of the investigator and was collected for further analysis. The results of the study revealed that 14.81% of participants were having poor awareness of BLS whereas 34.26% were having average and 55.93% were having good awareness. While discussing the knowledge 30.55% were having poor knowledge, 32.41% were having average knowledge and only 37.03% were having good knowledge of BLS. Most of the participants were having a positive attitude toward BLS and 100% of participants recommended the inclusion of BLS in the curriculum. The results of the

study concluded there was a lack of awareness and knowledge about BLS which needs to be improved through proper training and seminars. The participants were having a positive attitude toward Basic life support.

Keywords: Basic life support, CPR, Artificial Breathing, Chest compressions, Defibrillator, Physiotherapy, Healthcare

INTRODUCTION

Basic life support is a foundation of life-saving emergency medical procedures used to save the victim from life-threatening conditions such as cardiac arrest until the victim reached in hospital for medical care.^{1,2,3,4} Irrespective of the situation life-threatening conditions may occur to anyone and anywhere. The life of an individual can be saved with the early detection of symptoms of cardiac arrest, heart attack, stroke, and foreign body airway obstruction.^{3,5,6} The knowledge of basic life support is very important to decrease the mortality rate and increase the chances of survival and improve the quality of community health after life-threatening medical conditions.^{7,8,9}

Basic life support is a systematic sequence of events to be taken that includes early detection of symptoms, CPR, bleeding

control, artificial ventilation, and airway management.^{5,2,10,11,12} Cardiopulmonary resuscitation is a basic medical skill invented in 1960 and it forms the main and crucial component of basic life support.^{2,5} After 3-4 minutes of injury or hypoxia the human brain can undergo irreversible damage, The cardiopulmonary resuscitation must be given to the victim within 1- second of cardiac arrest. The survival rate of an individual decrease by 7-10% after every one minute of the injury and the survival rate is very less if CPR is delayed or neglected and it may cause the death of the victim after 10 minutes.^{9,13,14,15,16}

No Specific equipment or specific setting is required to perform CPR but only proper practice and psychomotor skills are required to perform high-quality CPR.^{16,15, 17} The practice of BLS can save the lives of an individual in most cases if given on time. So, everyone in our community must have appropriate knowledge of BLS. The knowledge and attitude of medical professionals vary according to the survey conducted worldwide in various countries. The Physiotherapists deal with patients with various health issues and they provide treatment ranging from acute to chronic conditions and from on-field to off-field rehabilitation. In these settings, physiotherapists deal with various fetal or non-fetal conditions.¹⁸ Apart from the benefits of exercise some fetal or non-fetal events may occur during physical activity/exercise. Although the supervised exercise program has very less chances of cardiovascular incidences.¹⁹ So the Physiotherapists must have adequate knowledge of BLS. The current study has been conducted to check the awareness, knowledge, and attitude of Physiotherapists in the Bathinda district of Punjab.

MATERIALS & METHODS

The current cross-sectional survey study was conducted after the approval from the Institutional Research Committee of the College of Physiotherapy Ethical committee of Adesh University. The questionnaire for

the study was selected from the previously published study and was upgraded as per recent guidelines of CPR and BLS by the American Heart Association where appropriate.^{20,21}

The questionnaire comprised 3 domains: Awareness domain contains 5 MCQ, Knowledge domain contains 10 MCQ and attitude domain contains 5 MCQ. The written and verbal consent was taken from the subjects. A total of 114 subjects have participated in the study in which students in BPT final year, Physiotherapy interns, and Physio who have recently passed out and have less than 1 year of experience from the Bathinda region were included in the study. All the participants belonged to the age group of 21 to 26 years. The students of BPT 1st, 2nd & 3rd-year professionals and Physiotherapists having more than 1 year of experience were excluded from the study. The questionnaire was answered by the participants in the presence of an investigator to avoid any malpractice. The responses were evaluated based on the main objectives of the study.

RESULT

A total of 114 subjects participated in the study out of which 6 were considered dropouts as they left the questionnaire blank. The collected responses were analyzed for all 3 domains for 108 subjects.

Awareness Domain:

Out of 108 subjects 102 have heard the term BLS and knew its correct expansion, 72 subjects knew about AED and could expand correctly. 75% participants were aware of the first response to an unresponsive and unconscious victim, Awareness score is shown in the table: 1

Category	Awareness	Knowledge
Poor	16 (14.81%)	33 (30.55%)
Average	37 (34.26%)	35 (32.41%)
Good	55 (55.93%)	40 (37.03%)

Knowledge Domain:

The analysis of components under the knowledge domain and individual

components of CPR are shown in Figures 1 and figure 2:

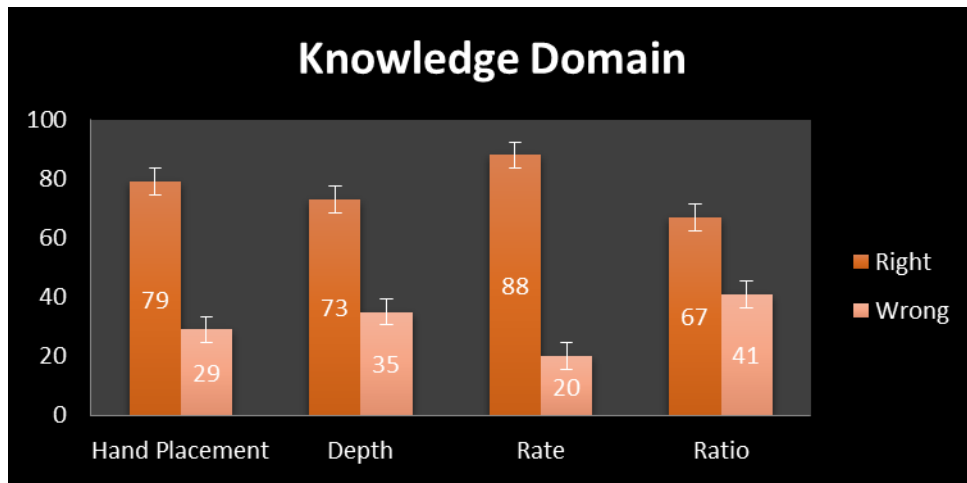


Figure 1: Showing scoring of the knowledge domain

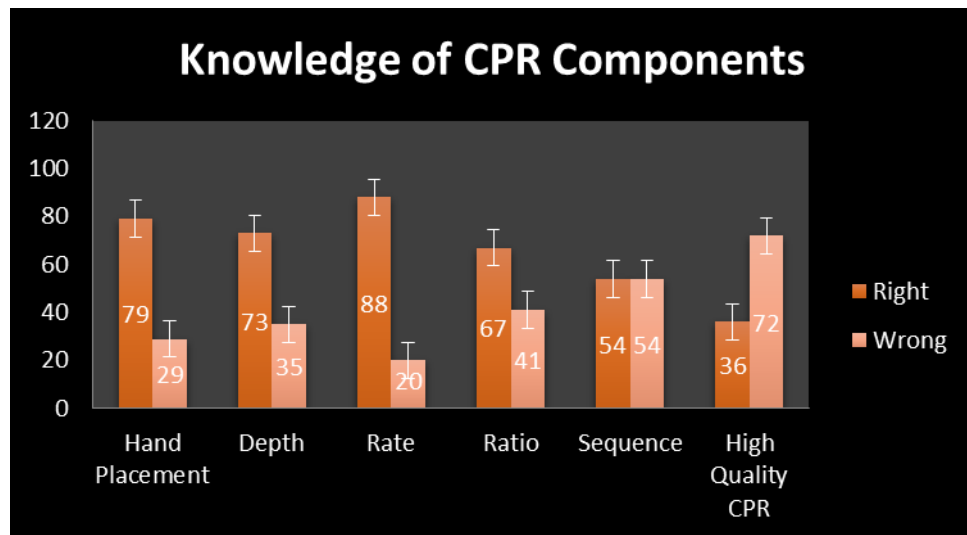


Figure 2: Showing knowledge of individual components of CPR

American Heart Association guidelines for BLS and CPR were used as guidelines for the knowledge domain. The scores of participants in the knowledge domain are shown in table 1.

Attitude Domain:

A total of 62 (57.40%) participants were confident in performing CPR. When asked to

rate themselves on BLS performance 11 (10.18%) of them rated themselves in the poor category, 71 (65.74%) participants rated in the average category, 24 (27.12%) in the good category whereas only 2 (1.85%) participants rated themselves in the excellent category. The reason for reluctance stated by the study participants is shown in table 2:

Reason for reluctance	Number of Participants	Percentage
Fear of causing harm to the victim	53	49.07%
Unaware of the correct procedure	25	23.15%
Fear of being punished	6	5.56%
Not exposed to professional training	24	22.22%

57 (52.77%) of study participants had not undertaken certified BLS training, 43(39.81%) had attended training in the last 2 years while 5 (4.63%) participants had attended certified training but 3-5 years back. When asked about the inclusion of BLS in the curriculum all 100% of participants recommended the inclusion of BLS in the curriculum.

DISCUSSION

CPR is an essential key for saving the lives of victims of cardiac arrest which involves chest compressions and rescue breathing.²² The healthcare professionals and society in and out of the hospital have been trained and upgraded since the first guidelines of CPR are published.²³ The previous studies have been done to explore the knowledge of CPR in physicians,^{24,25} dentists,^{2,26,27} nurses,^{28,29} paramedical professionals,³⁰ radiographers,^{31,32} university students,^{6,12,33} secondary schools students,³⁴ teachers¹⁴ and general public.^{35,36} However there is a paucity of data present about knowledge, awareness, and attitude about BLS among Physiotherapists. The current study reveals the knowledge, awareness, and attitude about BLS among Physiotherapists in the Bathinda district of Punjab. This study also includes the interns of Physiotherapy as they are going to be fresh professionals and they are going to treat patients independently.

The result of the current study shows good awareness (50.93%) of approximately half of the participants and 34.26% showed good awareness. Yet there is a need to explore the awareness of BLS among Physiotherapists of the Bathinda region. There is a fluster lack of knowledge of BLS in Physiotherapists in Bathinda where only 37.03% of participants showed good knowledge of BLS and 32.41% showed average knowledge whereas marked 30.55% of participants showed poor knowledge of BLS which is a matter of concern to train the Physiotherapists for BLS.

Most of the participants were having theoretical knowledge of CPR components of Ideal duration of pulse check, rate of

compressions, Ration of CPR, and depth of compressions but they were not confident in performing CPR. Being a questionnaire-based survey there is a limitation of the current study that the practical hand skills of participants were difficult to evaluate. Further studies can be conducted to overcome this limitation.

CONCLUSION

It is concluded from the results of the study that even a few participants have awareness of BLS but there is a lack of knowledge and skills of BLS and CPR among Physiotherapists they all have a positive attitude towards BLS and they all have recommended the inclusion of BLS in the curriculum.

Declaration by Authors

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