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Research Paper

Basic Life Support Skill Acquisition in Dental Students

Medical Science

KEYWORDS : BLS skills, teaching methods

Dr. Chirag Babu. P. S	Assistant Professor, Department of Anaesthesiology & Critical Care, Member Medical Education Unit, S.S.I.M.S & R.C, Davanagere, Karanataka.
Dr. Sagar. S. M	Department of Anaesthesiology & Critical Care, S.S.I.M.S & R.C, Davanagere, Karnataka.
Dr. Arunkumar Ajjappa	Department of Anaesthesiology & Critical Care, S.S.I.M.S & R.C, Davanagere, Karanataka.

ABSTRACT

Objectives :

This study was conducted on a group of dental students who were unfamiliar with basic life support (BLS) Skills .The objective was to find out whether they could acquire the Skills after BLS training.

Methodology:

32 Dental students participated in the BLS course which lasted for 4 hours .The training included a combination of lectures , video demonstration ,hands-on experience on the mannequin with skilled instructors giving individual feedback and advice. The participants were assessed at the end of the course using a checklist based on American heart association(AHA) training module.

Results:

Out of 32 participants majority of the participants (81.2%) were able to perform all the checklist actions and their skills were satisfactory.

Conclusion:

BLS skills can be acquired in a group previously unfamiliar to BLS with a combination of teaching methods including lectures, video demonstration and hands –on experience on the mannequin.

Introduction

Cardio pulmonary resuscitation (CPR) is a critical component of basic life support (BLS) and the established first line of response to a cardiac arrest. CPR has the potential to save lives in life threatening emergencies.

CPR is a vital skill which must be mastered by all health care professionals. Dental students are concerned with treating disorders related to oral cavity and have less understanding about medical emergencies. But medical emergencies can occur frequently in dental setting and effective management of such situations is of paramount importance. Lack of training and inability to manage such emergencies can lead to loss of life.

Studies have shown that dental students have superficial knowledge of medical emergencies, drugs and equipments [1]. Hence there is need for dental students to acquire more skills in emergency management of which BLS is one of the important skills.

BLS skills teaching should be targeted at these groups in acquisition of skills in order make best use of resources available[2].

Hence our medical school conducts BLS course for health care professionals, as these skills are essential for saving lives.

METHODOLOGY

Thirty two dental students who were unfamiliar to BLS skills were considered for the study.

All participants were provided with the BLS study material 15 days prior to the course. The course was a four hour training program which included lectures and video demonstration followed by hands -on experience on the mannequins.

Participants were trained to acquire various skills including identification of cardiac arrest, Cardiopulmonary resuscitation (CPR) and use of automated external defibrillator (AED).

At the end of the training schedule, the participants were assessed using a check list which was based on American heart association (AHA) training module.

Evaluation of acquisition of cognitive knowledge and psychomotor skills was done by three anesthesiologists who were the trainers of the course.

Table: Performance of participants using checklist

Sl No	Assessment	Yes	No	Total
1	Recognize arrest a) Check Response b) Check pulse			
2	Call for help			
3	Chest compressions a) site b) Rate c) Depth			
4	Ventilation (Bag Mask) a) Triple maneuver b) Mask holding c) Visible chest rise			
5	Defibrillation (AED) a) Attach pads b) Shock delivery			

Results:

All of the 32 participants were dental students out which 15 were males and 17 were females. Out of 32 participants, 26 (81.2 %) performed all the check list actions and their skills were satisfactory.

In our present study the other 6 (18.7%) did not achieve 100% skills.

Discussion:

The fundamental BLS knowledge in dental students is very little. Compared to untrained group, people with previous CPR training were more likely to perform CPR[3].

Studies indicate that majority of health care professionals fail to demonstrate competent BLS skills. One of the attributes for this is non acquisition of skills during BLS training[4]. In contrast, in our study majority (81.2 %) of dental students acquired the necessary skill at the end of the BLS training.

In the BLS course taught in our medical school a traditional instruction method with the trainer using lecture class along with the video demonstration was used initially to teach participants and later hands-on training within small groups led by skilled instructors, who can give individual feed back and advice was done.

In order to ensure better skill acquisition by all, video demon-

stration and providing feedback on performance may be added to the teaching methodology which is shown to the more effective[5].

Conclusion:

BLS is an established first line response to cardiac arrest. The present study shows that a combination of teaching methods including lectures, video demonstration and hands –on experience on the mannequin can be effective in acquisition of BLS skills in a previously untrained group.

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