

## The readiness of teachers in primary schools to deal with cardiac arrest situation

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### ABSTRACT

Progress in deciding the opinion of head-teachers on the instructional and logistical characteristics needed for a fundamental cardiopulmonary resuscitation (b-CPR) program for adolescents in secondary school. The purpose of the thesis is to explore the level of educators' preparation to cope with life-threatening circumstances. This paper aims to determine the connection between the score of the instructor to the questions drawn up and their knowledge of BSL. And we have studied the participants' student conduct without any impact on their behaviour. Teachers from chosen primary schools are the partners. There will also be a record of population characteristics. There will be registered personal data and documents. Some of the information involves the compilation of gender, gender, degree of education and weight data using survey questions. A high degree of secrecy would be ensured through this study. In addition, all information from the participants will be collected voluntarily. The educators would be allowed to have an answer to all the questions. The primary aim of the research is to raise awareness of the importance of critical support for life in schools. At the beginning of each academic year, this study is proposed to create a compulsory training session for teachers, and the outcome is gathered using survey questions to produce using personal information and data such as sex, gender, level of education and weight details.

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### INTRODUCTION

Basic Life Support (BLS) is nursing treatment given in a health care center to people with life-

threatening illnesses or diseases before they are able to receive medical services [1]. For certain people, it raises the probability of survival. Cardiac arrest [2] is one of the common complications that need emergency care. There was a rise in the number of children afflicted with the disease [3]. Any of its causes include respiratory failure [1], shock or trauma, and respiratory disturbance in babies and children. Parents are part of the life of a child who is always trained and knowledgeable, particularly when conscious of the disease, to cope with different circumstances. Any educators had little to no parenting experience [4]. It is, therefore, necessary to research the extent of the awareness of Basic Life Support [5] among teachers. Providers

of medical treatment are often qualified to cope with heart arrest and other life-threatening conditions [6]. They are still stationed away from the bulk of schools and educational buildings, though. Children are frequently prone to behaviours and accidents that can lead to problems in the heart [7]. In the field of play, actions can cause injuries and lead to health problems. Teachers need to learn expertise used in delivering emergency services to victims of cardiac arrest, considering that the difference between the victim's death and recovery may be the urgent response [8].

Symptoms are often difficult to identify in the case of choking, especially when there is a gap between a victim and a by-stander [9]. An infant can not breathe or speak as they feel it, which makes it very dangerous and fatal when an instructor is not educated. It is necessary for a person working with children who are frequently engaged in events that result in incidents and injuries to learn the skills to cope with emergencies [10]. The teacher's reaction time and response period decide the outcome of certain life-threatening circumstances [11]. Generally speaking, children spend a substantial part of their week in school [12]. Teachers and other personnel control their operations. As a result, the possibility of choking is still inevitable while food is eaten. Kids are the most involved individuals [3]. Injuries incurred while playing in the field and during other sports will also result in cardiac arrest. This research examines the ability of educators to comply with emergency situations. The study primarily explores the level of instruction in basic life support [13].

## OBJECTIVES

The primary aim of the research is to raise awareness of the importance of critical support for life in schools. For the purposes of the project, the smallest unit is to create the extent of BSL awareness among primary school teachers [5]. The goal of the research is to examine the degree to which educators are trained to deal with life-threatening situations [6].

### Research concept study design

A cross-section design and a descriptive style of analysis would be the design of the report. Additionally, it is a questionnaire-based and quantitative analysis. The actions of the subjects would be studied without any effect on their behaviour [9]. In order to perform a data review, findings, inference and advice, the results from the ten questions given will be used. The architecture makes it easy to enter the answers to the questions [10]. The grades of the par-

ticipants are translated into high or low. There will also be a record of population characteristics. There will be registered personal data and documents. Sex, ethnicity, level of education and weight [12] are some of the data included. In the correlation analysis of the correlation between the factors and the findings of the research, these are used [10]. A high degree of secrecy can be ensured by the study. In addition, any information from the respondents would be collected on a voluntary basis [2]. It would be recommended to the teachers to have answers to all questions [1]. The architecture requires data to be entered in order to compare and evaluate the negative or positive relationships [7].

### Sample analysis

The result was collected from three schools for the survey. The compilation and review of data is to be carried out within one month [13]. In fact, the survey is planned for one week. Ten teachers from each of the institutions selected will be included in the study [2]. The preference of primary schools to serve the community is less expensive and guarantees accountability for all the participants [7]. The limited sample size increases the survey's precision. It also simplifies the processing of data and eliminates the time and energy involved in the compilation of data [9]. For the research, the target population is Dammam. Before the beginning of the study, each of the teachers shall present a standardized written permission document. In order to ensure a high response time, data collection will be carried out within seven days [11]. During each of the days of the survey, participants may be available. The participants would be eligible to participate only if they belong to the schools selected [1]. The data collection procedures begin with the topic of all the respondents with the ten questions. In order to introduce the respondents to the study, a short reference to the intention and goals of the study is used. The respondents will be presented with a reward for participation [3]. The teachers will provide answers from the choices provided to the ten questions asked. The questions are questions from the American Heart Association for different choices [4].

### The survey questions will be as follows.

1. The compression to ventilation ratio for one rescuer giving CPR to individuals of ANY age is:
  1. 30:1
  2. 30:2
  3. 15:1
  4. 15:2

2. How often should rescuers switch roles when performing two-rescuer CPR?
    1. After every cycle of CPR
    2. After every two cycles of CPR
    3. After every five cycles of CPR
    4. After every 10 cycles of CPR
  3. The proper steps for operating an AED are:
    1. Power on the AED, attach electrode pads, shock the individual, and analyze the rhythm
    2. Power on the AED, attach electrode pads, analyze the rhythm, clear the individual, and deliver a shock
    3. Attach electrode pads, check pulse, shock individual, and analyze rhythm
    4. Check pulse, attach electrode pads, analyze rhythm, shock patient
  4. Where should you attempt to perform a pulse check in a child who is anywhere from one year to puberty?
    1. Brachial artery
    2. Ulnar artery
    3. Temporal artery
    4. Carotid or femoral artery
  5. The initial Basic Life Support (BLS) steps for adults are:
    1. Assess the individual, give two rescue breaths, defibrillate, and start CPR
    2. Assess the individual, activate EMS and get AED, check pulse, and start CPR
    3. Check pulse, give rescue breaths, assess the individual, and defibrillate
    4. Assess the individual, start CPR, give two rescue breaths, and defibrillate
  6. The critical characteristics of high-quality CPR include which of the following?
    1. Starting chest compressions within 10 seconds of recognition of cardiac arrest
    2. Pushing hard and fast
    3. Minimizing interruptions
    4. All of the above
  7. The five steps in the Adult Chain of Survival include all of the following EXCEPT:
    1. Early CPR
    2. Rapid defibrillation
    3. Advanced airway placement
    4. Integrated post-cardiac arrest care
  8. The 2015 AHA guidelines for CPR recommended BLS sequence of steps are:
    1. Chest compressions, Airway, Breathing
    2. Airway, Breathing, Chest compressions
    3. Airway, Breathing, Check pulse
    4. None of the above
  9. Which of the following are signs of airway obstruction?
    1. Poor air exchange
    2. High-pitched noise while inhaling
    3. Inability to speak
    4. All of the above
  10. In an adult with an advanced airway in place during two-rescuer CPR, how often should the breaths be administered?
    1. Every 2 to 3 seconds (20 to 30 breaths per minute)
    2. Every 4 to 5 seconds (12 to 15 breaths per minute)
    3. Every 6 to 8 seconds (8 to 10 breaths per minute)
    4. Every 10 to 12 seconds (5 to 6 breaths per minute)
- All the materials needed to complete the questions will be supplied to the respondents. For participating in the survey, there would be no fees required. In order to prevent the impact of research assistance [4], advice will be minimal. The respondents are a literate audience, and it would, therefore not be appropriate to translate the items [9]. In order to

answer the questions, ample time will also be given. Furthermore, engagement is absolutely voluntary. Whenever a respondent is able to apply, the submission will take place. For data processing, all of the query papers released will be compiled, including those with unanswered items [14]. In order to guarantee precision, checking of the number will be performed in the field. The project managers will perform control of the collection of results. In addition, questions would not be issued to respondents until the initial data collection period [12] is set.

The closed-ended questions used to capture the data improve accuracy and fast processing and review of the data [6]. They can be used to test the level of prior emergency experience and the expertise used by the personnel used for the report. If this is one of the alternatives given, the answer to any of the questions is correct. Any other view of the respondent other than the choices offered cannot be included in the study of the data [3]. A high score is a right question, and, according to the empirical model of the analysis, a low score is an incorrect answer. After the completion and submission of the questions, personal information and descriptions of the respondents are obtained [5].

Stationery, camera, and other hardware instruments needed for data collections provide materials used in the survey. The recording equipment and the draft issue are both critical elements of the study [6]. The research team comprises project managers, project leader, IT technicians, and support or assistant staff. The support staff will provide each instructor with guidance on the completion of the issue. They also carry out the activities of circulating query papers and gathering them [7]. Both the operations of the survey will be supervised by the project manager. He would also have the responsibility of managing the finances. The project boss assigns tasks to the assistant staff [10]. The different systems of data processing are run by IT technicians. To extract useful information, they log and manipulate the collected data. Travel prices, hotel fees, equipment sales and other expenditures will be found in some of the expenses incurred during research [12].

### Processing from data

The collection of data entails the assembly of all comments from each of the respondents. This covers the translation into useful knowledge of the information obtained [1]. The reactions are coordinated, verified, implemented and transformed. They are also derived from the question paper of each person. The material is usually prepared for review by collection. The right and incorrect

answers are turned into scores [5]. In order to move the responses to a linear scale that decides whether the scores are high or low, the cross-section study model is used [7]. This is the translation of knowledge into evidence used in classrooms to assess the ability of teachers to deal with cardiac arrest and choking. In order to guarantee proper structure, data obtained should not be processed without processing. Properly sorted data is required for encoding [4]. One of the approaches to ensure quick and reliable interpretation is to optimize the knowledge gathered from the respondents on the different questions. The next step will be data analysis [6] after the data has been analyzed.

### ANALYSIS OF THE RESULTS

The interpretation of the data entails analyzing the ratings. The whole question paper will be included in the study of the data [3]. Additionally, to obtain the score of each person, all the objects under investigation would be included. For each of the questions, each answer given is contrasted with the expected or correct option [2]. By way of a linear scale, the scores would be graded as low or high. The final ranking will be poor for the majority of teachers with a high score. In that case, there will be few to no basic life-saving skills for the teachers [1]. For BLS preparation, a suggestion should be made. In the other hand, where there is a high score for a significant number of participants, the final score would be high. The unresolved questions in the analysis [9] are not included. In the cases in which the object is used, though, the sample size is limited by the number of blank answers. The correlation is another data study performed using the obtained data. Analyses are made of the population component and the outcomes of the outcome [11]. The approach is used to assess the absence or presence of both a negative and a positive association between variables and the study's result. Regression is used for evaluating the outcomes and interpretation of the association. In addition, it provides a basis for further study and the development of the information body in this area. The data from each vector is compared to the findings of the analysis. Based on the results obtained, a relationship is then established [12]. There may be no association between the population characteristics and the research results. The project will be carried out after the appropriate institutional evaluation or committee [9] has approved it. There is an application attached to the proposal. Prior to the start of the data collection process, the timetable of the operations, as well as the budget, will be drawn up. The project team's preparation will also be conducted [5].

## Hypothesis

The study seeks to develop the connection between the teacher's score and their BSL expertise with questions drawn up.

## CONCLUSION

While there are still some unanswered questions about the medium/long-term potential to maintain these talents, the research demonstrates that primary school students can be successfully taught life-saving [4]. The final result and description of the study demonstrated student activity in primary school teachers using BSL information, while the demographic characteristics will also be reported [10]. Therefore, at the beginning of each academic year, this study is proposed to set up a compulsory training session for teachers, and the outcome of generating using personal data and information such as sex, gender, level of education and weight details is obtained using survey questions [15]. The aim of this research was to determine the level of BSL knowledge among primary school students in Saudi Arabia (SA). Teachers would choose to send the curriculum to health care professionals, but if previously qualified, they would be prepared to teach BSL theory [14].

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## Conflict of Interest

The authors declare that they have no conflict of interest for this study.

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