Knowledge And Attitude Towards First Aid: Cross-sectional Study Amongst UCSI Students

Abstract

In the abstract of this article, the author summarized the key characteristics of the studies including objectives, background, methods, results and conclusions. Background: Nowadays, injury could be one of the significant reasons among university students leading to morbidity and mortality. The morbidity and mortality can be largely lowered by providing proper and adequate training and education of first aid (FA) to university students. This study has aimed to investigate and evaluate the current knowledge and attitude towards the first aid process amongst UCSI students. In addition, quantify the degree of participation of UCSI students in the first aid courses and the willingness to offer first aid measures for those in need. Methods: The study population consists of 400 students who study in UCSI. Self-administered questionnaires in the form of Google Forms were distributed through the probability sampling method to 86 UCSI students. Data were collected between 30th March 2020 until 4th of May 2020. Results: Only 35 (40.7%) of the participants had taken the first aid course. The participants who aged between 23-25 years had the highest knowledge (38.77%). Age of the participants, higher education and taking FA courses significantly increased the knowledge about FA information. When dealing with life-threatening situations, 44 (51.16%) out of 86 respondents knew how to deal with choking and 75 (87.21%) respondents knew how to deal with bleeding emergencies, whereas 64 (74.42%) and 53 (61.63%) respondents knew how to handle bleeding with nose handle bleeding from implement respectively. 60 out of 86 respondents (69.76%) knew how to deal with burns from electric shock whereas only 21 (24.42%) respondents knew how to deal with loss of consciousness. When asked if they were willing to help in real-life situations, 43 (50%) of them willing to help. Conclusion: The knowledge about FA amongst UCSI students is moderate. FA courses can be made more accessible for the population and updated at frequent intervals.

Introduction

Accidents and injuries are part of daily events and it can happen both at home or in the street. These injuries were initially treated by untrained personnel due to lack of health care providers on the accident site. This could put individuals in potentially dangerous situations and lead to more serious consequences. First aid is the assessment and interventions provided by a first aider during an emergency situation with minimal equipment while waiting for appropriate medical personnel to arrive. However, this implementation requires certain levels of both knowledge and practice as well. For example, restoration of upper respiratory tract patency, pulmonary-circulatory resuscitation, applying pressure on a severed vessel and victim placement in a safe position.1 Other than saving lives, first aid also vital in preventing further complications from injury and promoting better recovery for injured people. The major injuries that mostly occur are road traffic accidents which require the appropriate first aid urgently. However, it is also important to minor injuries such as burns, sprains and cuts.

Education about first aid such as physical or online classes through educational institutions

must be universal and for all age groups including teenage, the elderly and even children in kindergarten.3This could build communities that are less vulnerable and more resilient to different kinds of risks which they are exposed. Besides, first aid training was also provided by international organizations and public health campaigns. So, the question to be answered is, what is the percentage of UCSI students that know the basics of first aid and how they react when facing such emergency situations.

Based on the statistics on cause of death, Malaysia 2019, ischemic heart diseases are the principal causes of death (15.6%) followed by pneumonia (11.8%), cerebrovascular disease (7.8%), transport accidents (3.7%) and chronic lower respiratory diseases (2.6%).2For the selected age group, pneumonia (4.8%) was the main causes of death for the population aged 0 to 14 years old. Transport accidents (20.4%) in the age group of 15 to 40 years. For ischemic heart disease, 19.2% in the population aged 41 to 59 years and 16.6% in population aged 60 years and over.2Few reports had shown that the first aid knowledge and attitude among university students were poor. It has been reported that Malaysia had serious and alarming death that lack of appropriate first aid intervention. Therefore, first aid should be implemented to make the difference between life and death. The purpose of this study was to assess and evaluate the level of knowledge and attitude towards different types of first aid among UCSI students, the degree of participation of UCSI students in the first aid courses and willingness to offer first-aid measures for those in need.

Method

Study design

The design of this study was a cross-sectional study, which is an observational study that assesses exposure and the outcome at one specific point in time in a sample population.

Setting

- This study was conducted using simple random sampling method and involved administering questionnaires in the online platform of Google Form.
- Data were distributed and collected from 30th March 2020 until 4th of May 2020.

Participants

- This study was conducted among 86 UCSI students regardless the course they are currently taking.
- Exclusion criteria under this study included those individuals who are under 17 years old, non-UCSI University students, are not currently attending any relevant courses offered by UCSI University and those individuals who have not completely answered all the questions in the questionnaire provided.
- Using the results which are answered from the exclusion criteria, this could cause inaccurate data collected and bias the results.
- On the basis of the inclusion and exclusion criteria, judgment regarding the impact on the external validity of the results can be made.

Variables

- Consent and ethical considerations should be implemented
- The questionnaires were clearly explained to all participants in the online platform of Google Form along with the title and objective of this study.
- The participants have their rights or decisions to willing to answer or purposefully rejecting to answer the questionnaires.
- The privacy and confidentiality of the answers provided from the participants were assured.

Data sources/ measurements

- A self-administered anonymous questionnaire was constructed.
- There was no pictures or graphics displayed in the questionnaire due to copyright issues.
- The questionnaire was pretested, standardized and sample tested before distributing to the participants.
- Only researchers and the individuals who are evaluating the study datary able to assess and authorized the questionnaire to be distributed among the 400 UCSI students.
- The knowledge and attitude towards first aid was assessed though multiple-choice questions (MCQ) and the questionnaire consisted of 4 sections:
- A. Demographics
- B. Knowledge on Basic First-Aid information
- C. Knowledge of life-threatening situations to assess the responses of the population to different situations of injuries and accidents
- D. The respondent’s willingness to help and the interest in taking a first-aid course in the future.

Bias

Selection bias tends to occur as samples are sometimes picked by convenience. It may result in study participants are systematically different in their characteristics compared with eligible participants who were not selected for the study.

Study size

The sample size was calculated based on the following formula: n = [4p (1-p)] / ME2, where n is the sample size, ME is the margin of error and p is the expected prevalence. This formula is adapted from study carried out in UAE as no previous studies were conducted in the neighbouring countries.

• n = [4p (1-p)] / ME2

n = [4 (0.5) (1-0.5)] / 0.052

n = 400 participants

Our study selected 400 participants by convenient random sampling technique among UCSI students.

Quantitative variables

For each respondent, a percentage of the correct answer was calculated as representative of an overall knowledge score. Knowledge was assessed based on the score obtained.

1. Good knowledge: 67% and above
2. Moderate knowledge: 33% to 67%
3. Poor knowledge: below 33%

Statistical methods

Data analysis was performed using Statistical Package for the Social Sciences (SPSS) software version 23. Descriptive analysis was used to explain the mean scores and proportions. Pearson's chi-square (x2) test and variance were used to examine the correlation between knowledge and selected demographics and practices. All analyses were performed using two-tailed hypothesis testing with P value set at 0.05. Results obtained were compared with other articles to evaluate and conclude.

References:

1. Mobarak A, Afifi R, Qulali A. First aid knowledge and attitude of secondary school students in Saudi Arabia. Health 2015;07:1366-78
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3. Bollig G, Myklebust A, Østringen K. Effects of first aid training in the kindergarten: A pilot study. Scand J Trauma ResuscEmerg Med 2011;19:13.