Original Article

Level of Knowledge and Factors Affecting First Aid in Vocational High School Students

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Abstract

Background: This study was carried out with 120 students aiming to evaluate first aid knowledge level and its affectinf factors.

Aim: The first aid knowledge level of the students was evaluated by the questionnaire formed by the researchers based on the literature.

Methodology: It is obtained that the average age of the participants is 19.09 ± 1.12, 56.7 % of the students are female, 64.2% of the students have not taken any first aid courses or lecture before and 91.7 % of them did not have first aid certificate. There was a statistically significant difference between the knowledge levels of the students on different topics related to first aid and the previous education and course taking situations (p <0.05).

Results: When we look at the average responses of the students to the questions about the first aid knowledge, it is found that the correct answer percentages are higher. Although this might be seem acceptable, the existence of the students who give the wrong answer can not be ignored.

Conclusion: Therefore, it is important to remember that in the first aid practice, all students have to be certified in this regard by providing the necessary education and training.

Key words: University students, first aid knowledge levels, affecting factors.

Introduction

First Aid is a drugless practice designed to save lives or prevent the situation from getting worse until helped by a health worker in a situation where any accident or life threatening situation occurs (Kirilmaz ve Arısoy, 2002; Akdemir ve Birol, 2005; Toprak, 2006; Sağlık Bakanlığı, 2016). The conscious first aid to be done in such a situation would reduce the deaths by 20%, as well as increase the success of treatment in a treatment institution (Dundar et al, 1999). Human beings may meet at any time with situations that require first aid throughout their lives. It is possible to save lives with first aid which is a simple but effective and important application which is made in a timely manner. First aid information should first give the individual the vital help he or she will make to the environment of the individual (Cakircali, 2000; Dincer et al., 2000; Bolukbas et al., 2007). At various periods of our lives, it is inevitable that accidents and diseases we encounter in the environment where we operate. Home, work or traffic accidents due to natural disasters and many human lives are lost or maimed. When confronted with situations like this, the scene

will not always be a paramedic, because individuals in the intervention they will do first aid to themselves or others, to sustain life, prevention of injury and plays an important role in the healing process (Senol et al., 1999; Altıntop et al., 2000; Tomruk, 2002; Sozen, 2002; Erkan ve Goz, 2006; Koksoy et al., 2012). Especially in the universities where accidents and first aid are frequently experienced, the knowledge and skills of the students on first aid are very important in this sense (Duman et al., 2013). First-aid courses are among the compulsory courses of curriculum in health-related institutions. However, when the current literature in our country is examined, it is seen that there is a limited number of studies on whether the first aid courses have reached the aim and whether the students who have taken this course have knowledge and skills to do first aid (Polat and Turacı 2003; Sahin 2001; Usaklı and Cengiz 2001;). For this reason, the planned study was conducted to determine the level of knowledge of first aid for university students studying in a health related department.

Research Questions:

• What level of knowledge do vocational school students have about first aid?

• Is there a difference between socio-demographic characteristics and first aid knowledge levels of vocational school students?

Materials and Methods

This study was carried out descriptively to examine the knowledge levels and the influencing factors of healthcare vocational college students' first aid knowledge. Mehmet Akif Ersoy University Health Services Vocational School created a total of 120 students who were educated in 2016-2017 and volunteered to participate in the research.

Personal information form: Students age, gender, class, encounter the situation before the situation requiring first aid, with First aid course or courses to take before the situation is, whether it is a first aid certificate, first-degree relatives in any situation that requires first aid medical staff status and whether to intervene in the state that contain previously consists of eight questions.A questionnaire consisting of 22 questionnaires prepared by the researchers based on the literature was used to measure the students' general first aid knowledge. The questionnaire consists of 30 questions in total.

The data were evaluated using the SPSS 17.0 program, number, percentage distributions, student t-test, and significance level was accepted as $p < 0.05$.

Ethics of Research

Mehmet Akif Ersoy University Ethics Committee numbered 2017/62 was obtained from the Non-Interventional Research Ethics Committee for research. The data were collected by face-to-face interview. The students were informed about the scales used and verbal approvals were taken.

Results

Average age of students participating in the survey; 19.09 ± 1.12. 56.7% of the students are female, 43.3% are male and all of them are in first grade. 51.7% of the students had encountered a situation that required first aid, and 50.8% did not intervene in this situation. 64.2% of the students did not have a course or course related to first aid and 91.7% of them did not have first aid certificate. The difference between the knowledge levels of the students about the first aid and the previous education and course taking situations was statistically significant ($p < 0.05$). (Table 1).

The correct answers to the first-aid questions of the students participating in the survey are shown in Table 2. According to this, if the correct answers of the students to the questions are taken into consideration, it is found that the students' first aid knowledge is quite good. Nearly all of the students (96.7%) made correct first aid. On the other hand, the most misunderstood question is; (Correct answer percentage: 58.3%). Followed by responses to first aid (60%) in patients with low percentage of epileptic seizures and to patient intervention in car traffic (60%).

Discussion

The percentage of correct responses to the questions that measure the level of first aid knowledge of the students participating in the survey is quite high. However, the wrong answers given in some questions reveal that there is a lack of knowledge about first aid. In a study by Duman and his colleagues (2013) to determine the level of knowledge of first aid for university students, the difference between university students' knowledge levels on first aid and gender, department of education, educational status of their parents, ($P < 0.05$), respectively.

Table 1. Distribution of students according to their descriptive characteristics

Features	Mean	SD
Age	**19.09**	**1.12**
	n	**%**
Gender		
Female	**68**	**56.7**
Male	**52**	**43.3**
Have you ever met a situation that required first aid?		
Yes	**62**	**51.7**
No	**58**	**48.3**
Have you ever taken a course or lesson about first aid?		
Yes	**43**	**35.8**
No	**77**	**64.2**
Do you have a First Aid certificate?		
Yes	**10**	**8.3**
No	**110**	**91.7**
Medical personnel in first-degree relatives do you have?		
Yes	**43**	**35.8**
No	**77**	**64.2**
Have you intervened in any situation that required first aid?		
Yes	**59**	**49.2**
No	**61**	**50.8**
Total	**120**	**100**

Table 2. Distribution of correct answers for students to ask first aid ınformation level determination questions

Questions	n	%
Definition of first aid	116	96.7
Effective cardiac massage in chest pressure	84	70.0
Control of consciousness in infants	111	92.5
Correct intervention in foreign body aspiration that completely obstructs the respiratory tract	109	90.8
In which case is the position of the coma given?	114	95.0
First aid in bleeding	107	89.2
First aid in dislocations	89	74.2
In-vehicle car accident first aid	72	60.0
First aid for an epileptic seizure	72	60.0
First aid in drilling abdominal injuries	108	90.0
First aid in burns	96	80.0
The right tourniquet application	76	63.3
First aid for nose bleeding	95	79.2
First aid in frost	100	83.3
Assessment of accident location	101	84.2
Transportation techniques	70	58.3
First aid in insect stings	91	75.8
Correct shock position	96	80.0
What should be done to broken hands and feet?	83	69.2
CPR technique infants	102	85.0
"Heart Massage / Respiratory Rate" ratio	94	78.3
Evaluating the efficacy of artificial respiration	105	87.5
Total	120	100

In our study, we found that there was a significant gender difference in the answers given to the consciousness control in infants when applying first aid, tourniquet in heat burn, first aid in nose bleeding, first aid in evaluation of accident location, application of external heart massage to the point determined in breastbone in infants under 1 year and first aid application in dislocations. (P< 0.05). The percentage of female students responding correctly to these questions was found to be higher than male students. In our study, 51.7% of the students had encountered a situation requiring first aid and 50.8% did not intervene in this situation. 64.2% of the students did not have a course or course related to first aid and 91.7% of them did not have first aid certificate. A large percentage of the students were found not to have health education and no first aid certificates. This finding suggests that students have false beliefs and practices in matters related to First Aid. Ozcelikay and colleagues (1995) determined the levels of first aid knowledge about college students in this study, 71% of students the first aid course

believes that it would be useful to them. In our study, because the question is not directed to the students about the usefulness of a first aid course has been discussed from this angle. Erkan ve Gozun (2006) is working with the aim of determining the level of knowledge of first aid teachers in primary schools. Teachers (73.6%) were found to have knowledge about fever. 96.5% of the class teachers stated that they had epilepsy, 95.9% had cardiac massage and artificial respiration, and 94.5% had no information about shock. In branch teachers, 92.2% were found to be shocked, 89.6% were found to be inadequate about cardiac massage and artificial respiration.

In the study conducted by Koksoy et al. (2012) on evaluating first aid information levels of prisoners, 17.9% of the incidents in prisoners were fainted, 13.4% were broken / dislocated / sprained and 12.5% were incarcerated. The correct answer average of the prisoners' first response to the questions of interest was 42.42 ± 16.44. Prisoners' level of first aid information was found to be low. Our students' first-aid knowledge levels were found to be above the average of looking at the correct answer percentage. This suggests that the average age of students who are quite low compared to prisoners is more informed about first aid. Coskun et al. (2008) found that 67 mothers (30.6%) had at least one first aid in the last three months in a study conducted by 225 mothers in order to determine the frequency of cases requiring first aid and the first aid information levels of mothers with children between 0-14 years It is found that it is necessary. Anneler found that 64.8% of the test that determined the level of first aid information had a weak score and that the information scores of the mothers decreased as age increased and as the education status increased. If there is no age difference among the students and the mean age is 19.09 ± 1.12, the age and first aid knowledge level can not be compared.

Conclusions

Based on the findings from the study, it was found that the percentage of correct answers was higher when the average responses of the students to the questions about first aid information were examined. Although this seems acceptable, the existence of students who respond incorrectly can not be ignored. For this reason, it should not be forgotten that in the first aid practice, the wrong practice can lead to the patient's death or disability.

If it is thought that the students have not taken a course or course before the first aid, it is considered that the percentage of the wrong answers can be decreased by the training done in this subject. In some basic first aid information, students may be misinformed at a high rate; It is necessary for the students to examine the first aid issues that they are missing and to correct these deficiencies. For this reason, it is necessary for all departments to certify their competence in this subject by providing the necessary training and increasing the courses related to first aid in vocational colleges. Regulations that require compulsory or selective first aid courses to be given to curricula of different departments outside the health field in universities can be made or training or seminars can be organized for students on first aid topics. In the later studies, the first aid knowledge levels of the different departments can be evaluated, or the first aid knowledge level after the first aid program can be assessed and the training activity can be determined. After that, studies to measure first aid knowledge, not only students but also academicians and administrative staff, will be more effective in revealing deficiencies.

Acknowledgements

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