

RESEARCH ARTICLE

Student's Knowledge regarding First aid between two non-Medical Colleges in Sulaimani University

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ABSTRACT

Background :First aid is the first treatment a health care worker provides at the site of an accident to a patient who is injured or very sick before the ambulance arrives. First aid providers are those who have the skill and knowledge to deal with life-threatening conditions outside the facilitated environment of a hospital. So the main aim of this research was to compare the Student's Knowledge regarding First aid between School of Islamic Science and School of Science Education in the University of Sulaimani.

Methods:

One hundred students in fourth stage, who aged between (21 - 30) years. A self-reported questionnaire was used to collect the data, structured interviews by the researchers. The Data gathering started on 2thApril 2016, and ended on May 2016. A questionnaire was constructed to the purpose of data collection, which consists of two parts; First part composed of socio-demographic characteristic, the second part composed of student's knowledge concerning First id for (Burn, Bite, Fracture, Airway obstruction).

Results:

The study finding revealed that more than half in both Islamic Science and Science Education students have some knowledge regarding First aid generally (60%) and (58%) respectively. P. Value (0.68) there is no significant difference between two groups (P<0.05).

Conclusion: It is concluded that more than half of students have some knowledge about First aid for bite and fracture. More than half of students have health care profession in the family and they did not know emergency call number. Most of them did not participate in any training or workshop about First aid. Further research needs to be conducted.

Keywords: regarding First aid , Sulaimani University



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Introduction

First aid is the first treatment a health care worker provides at the site of an accident to a patient who is injured or very sick before the ambulance arrives. First aid providers are those who have the skill and knowledge to deal with life-threatening conditions outside the facilitated environment of a hospital(Raje et al ., 2017).

First aid is immediate care given to the injury or suddenly ill person. First aid does not take place of proper medical treatment, it consists only of giving temporary assistance until competent medical care, if needed, is obtained, or until the chance of recovery without medical care is ensured. Most injury and illness require only first aid. It includes assessing the victim for life threatening condition, performing appropriate intervention to sustain life and keeping the person in the best possible physical and mental condition until she/he can enter the emergency or casualty unit in the hospital (Clement, 2012).

In medical colleges, the student's study plan teaches how to manage an emergency case in hospital scenarios, in which drugs and other necessities are available. However, enough knowledge and skills are needed to deal with an emergency outside hospital settings at the site of an emergency may not be significant (Joseph et al ., 2014)

Everybody needs to be aware of basic first aid skills in emergency situations, especially medical students, future health care providers. Worldwide, a lot of studies were conducted to estimate the level of knowledge regarding first aid among different groups including medical students. In the review of previous studies conducted to assess level of first aid skills among medical students we found that a study done in Vydehi Medical College, Bangalore, India, showed that 23.3% student participants had adequate knowledge regarding first aid, 47.3% needed improvement, and 28.7% of them had excellent knowledge.(Chaitali et al ., 2017). Another study was conducted in medical colleges of Lucknow showed that only 11.2% of participants have a good level of awareness about first aid. (Tripathi et al ., 2016)

Locally, a study was conducted in 2021 in Baghdad to assess knowledge of first aid among second and fourth stage students in the College of

Nursing - Baghdad University revealed that students 'knowledge related to first aid measures was insufficient with low and moderate score, and there is no significant statistical difference in knowledge between the second and fourth stage students (Serwan et al ., 2021) .Another study that was carried among medical students at King Saud University in Riyadh reported that (47.4%) of participants answered correctly (Almoammar et al ., 2018). Also, in 2020 a study was done at Saudi universities included medical and nonmedical students, concluded that Only 40.35% (157/389) of the total participants had basic life support (BLS) course in their college syllabus. Good knowledge was generally observed in both medical (61.2%) and nonmedical (53.2%) student participants. Medical students' knowledge regarding first aid was better than nonmedical students in all questions, whereas the results were not statistically significant. (AlQahtani et al ., 2020). So the aim of this study is to compare the Student's Knowledge regarding First aid between college of Islamic Science and college of Science Education in the University of Sulaimani. In addition to identify the student's socio-demographic characteristic in School of Islamic Sciences and School of Science Education.and to determine the student's knowledge concerning First aid in School of Islamic Science and School of Science Education.

Methodology

Design of the Study: A descriptive comparative study design was carried out in order to achieve the objectives of the study. The study was initiated from 2th April 2016 to the end of May 2016

Setting of the Study: The study was carried-out at University of Sulaimani.

The Sample of the Study: A non-probability (purposive) sample of (100) students who aged between (21 - 30) years. In each college (50) students were selected randomly who studied in fourth stage of Islamic Science and Physic department of Science Education colleges.

Data collection: self-reported questionnaire was developed by the researchers for collection of data and structured interviews by the researchers.

- **The Study Instrument:** A questionnaire was designed and constructed by the researchers to measure the study variables and achieve study objectives.

The questionnaire was used for data collection. It composed of two main parts, first part consists of socio-demographic information, which include (age, gender, marital status, residency, heard about First aid, source of information, having health care professional in the family, training and emergency call number). The second part constructed with knowledge of students regarding First aid for (Burn, Bite, Fracture, Airway obstruction).

Statistical data analysis: Data were analyzed through the use of IBM-Statistical Package of Social Sciences (SPSS V.21) which included Frequency, Percentage (%), Mean and Standard Deviation). Inferential statistics include (Chi-square, T test and P. Value).

P. Value considered a significant if $P < 0.05$

Result and discussion

Table (1) distribution of sample according to socio-demographic characteristics

Characteristics	1		2		Chi ²	P
	Freq	%	Freq	%		
Gender						
Male	17	34	10	20	2.49	0.12
Female	33	66	40	80		
Marital Status						
Married	7	14	16	32	4.8	0.32
Not married	43	86	34	68		
Residency						
Urban	33	66	38	76	2.31	0.13
Suburban	15	30	11	22		
Rural	2	4	1	2		
Total	50	100	50	100		
Mean ± Standard deviation	23.1±1.85		23.2±1.87		t = 4	0.69

Variables	1		2		Chi ²	p
	Freq	%	Freq	%		
Heard about First Aid						
Yes	30	60	30	60	1.97	0.16
No	20	40	20	40		
Source of Information						
Internet & reading	20	66.6	22	73.2	0.49	0.78
Training	6	20	4	13.4		
Media	4	13.4	4	13.4		
Having health care professional in the family						
Yes	19	90	17	62.9	0.17	0.68
No	31	62	33	66		
Training						
Yes	10	20	5	10	1.96	0.16

No	40	80	45	90		
Emergency Call						
Yes	23	46	19	38	0.66	0.42
No	27	54	31	62		
Total	50	100	50	100		

1: School of Islamic Science
 2: School of Science Education(physic department).

Table (1) indicates that the most (66%) of Islamic science students and (80%) of Science Education students were female. This table shows that (86%) of Islamic science students and (68%) of Science Education students were not married.

Most of students at the school of Science Education (66%) and School of Islamic science (76%) were reported to be living in urban compared to students lived in rural are (2%) School of Science Education and (4%) School of Islamic science. There is no statistical significant difference between two groups.

In both groups, more than half of participants heard about First aid, School of Islamic Science (60%) and School of Science Education (60%). Internet and reading were reported to be high in the source of information, School of Islamic Science (66.6) and School of Science Education (73.2%). The study undertaken by Afrasyab Khan et al. (2010) in Pakistan found that in all (72.2%) students agreed that they had acquired some First aid information from television, while only (35.4%) had acquired any information from their teachers at college. However, the study was carried out by Abdulrasheed et al.(2014) in the University of Zaria in Nigeria proved that the source of information in those how had previous

knowledge on burns prevention and First aid treatment were school (43.2%), family members (20%), television (7.46%) and radio (6.57%).

This table shows that having health care professional in the family (90%) of Islamic Science and (62.9%) of Science Education. Also this table reveals that most of student in both groups didn't participate in workshop and training about First aid (80%) of Islamic Science and (90%) of Science Education. This finding supported by Hanna H(2013) study in Mosul University, found that the majorities of the students in the study (91.9%) had not participated in the First aid courses, also (96%) found the necessity for learn to the First activity. Another study undertaken by Afrasyab Khan et al. (2010) in Pakistan, proved that only (11.26%) of non-medical students had participated in the First aid training.

Finally, students did not know about the emergency call number (54%) of student in the Islamic Science and (62%) of students in the Science Education. However, Goktas et al. (2014) study in Istanbul, the result showed that 92.6% of students knew the phone number of ambulances in case of emergency.

For all described items in table (1) there is no significant difference between two groups (P<0.05).

Table (2) distributions of knowledge's means and standard deviation for both groups with differences between groups.

	School of Islamic Science		School of Sc Education		Differences		t	P
	Mean	STD	Mean	STD	Mean	STD		
Burn	67	9.95	67	8.46	0	11.27	0	1
Bite	63.8	11.76	64.6	8.38	0.8	12.75	0.44	0.66

Fracture	61.1	7.95	63.1	8.98	2	12.26	1.15	0.25
Choking	68.8	7.99	70.2	9.58	1.4	11.07	0.89	0.38
Total	65	5.21	66.2	5.53	1.12	6.74	1.22	0.23

Table (2) shows the detail of First aid items (Mean & Standard deviation) and it indicates that the Fracture has lowest mean in both school (61.1 ± 7.95) School of Islamic Science and (63.1 ± 8.98) School of Science Education. While it reveals that, the Airway obstruction (Choking) was reported to be high in both school, (68.8 ± 7.99) School of Islamic Science and (70%) School of Science Education. For all described items in table (2) Burn, Bite, Fracture and Airway obstruction; there is no significant difference between two groups ($P < 0.05$), P. Value (0.23).

This finding supported by Ghany et al. (2014) study in Canal University; it revealed that the majority of students (52%) didn't any correct answer about First aid questions for bites while 12.7% of students answered all questions correctly. However, Swetha et al. (2015) study in Bangalore stated that (48%) knew that up back blows were to be given in case of choke on some food. A final study was carried out by Abdulrasheed I et al. (2014) in University of Zaria in Nigeria proved that only (21.5%) of students had previous knowledge of burns prevention and First aid, compare with (77.3%) how had no previous knowledge of burns prevention.

Figure (1) level of Knowledge for Islamic Science students

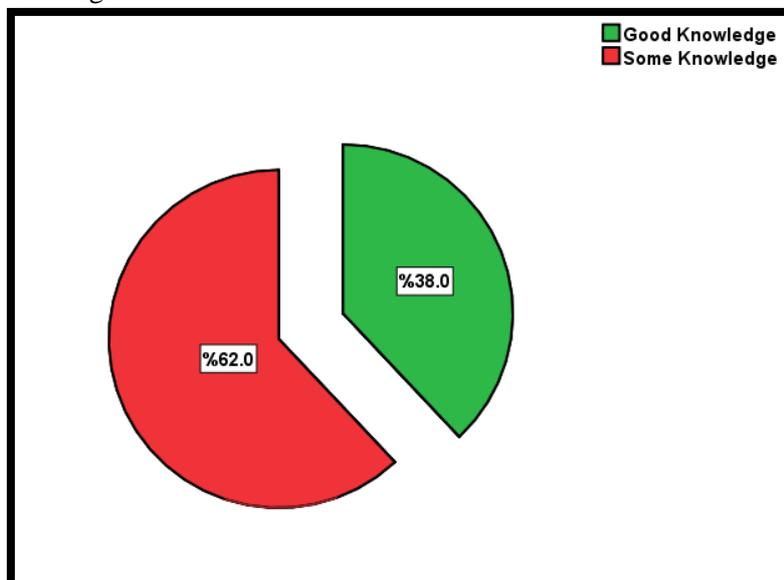


Figure (1) demonstrate that level of knowledge for Islamic Science students regarding First aid 38% of the students have good knowledge and 62% of the student have some knowledge.

Figure (2) level of Knowledge for Science Education students

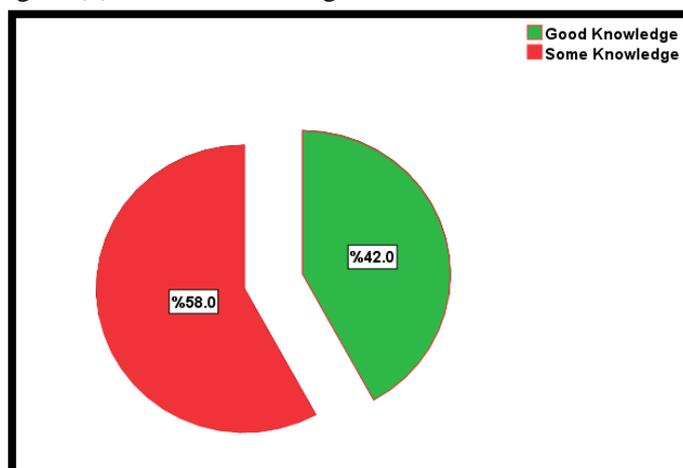


Figure (2) demonstrate that level of knowledge for Science Education students regarding First aid 42% of the students have good knowledge and 58% of the students have some knowledge.

Table (3) Compare level of knowledge between both groups

Levels of Knowledge	School of Islamic Science		School of Science Education	
	Frequency	%	Frequency	%
Good Knowledge	19	38	21	42
Some Knowledge	31	60	29	58
Total	50	100	50	100
X ² : 0.17	p-value: 0.68		Not Significant	

Above table shows that the level of knowledge distributed on good and some knowledge for both groups, more than half in both Islamic Science and Science Education students have some knowledge regarding First aid generally (60%) and (58%) respectively. It seems that Islamic Science students have slightly better knowledge but the difference is not significant statistically.

This finding supported by Seham et al.(2015) study in Tanta University in Egypt,it stated that (75%) of students had not any previous knowledge about First aid and basic life support and the remaining (25%) that had knowledge was received it from School Health Clinic. Joseph & Kumar(2011) was another study that has been supported to this finding in Manalore City of South India, it indicated that (13.8%)of students had good, (68.4%)had moderate and (17.8%)of students had poor level of knowledge about First aid.However, in the study undertaken by Deepack et al. (2012) in Nitte University in Mangalore, the result indicated that the majority (62%) of samples had good knowledge and (38%) average knowledge about the First aid practice.

Conclusion: It is concluded that more than half of students have some knowledge about First aid for bite and fracture. More than half of students have health care profession in the family and they did not know emergency call number. Most of them did not participate in any training or workshop about First aid. Further research needs to be conducted. However, there was a noticeable lack of knowledge regarding questions about shock, superficial wounds, and frostbites which needs more attention from the ministry of education to add the first aid course into the students'

curriculum and to increase the workshops in high schools. First aid is the basic skills needed in emergency situations and save lives.

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