

## Assessment of Nurses' Knowledge Abo First Aids

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### Abstract

### Original Research Article

**Background:** First aid: is an immediate or temporary medical care, applied to injured or ill persons in any health threatening settings in order to save life, prevent degradation of the situation or contribute to a treatment process before professional medical care is available. **Aims:** To evaluate nurses' knowledge about first aids. To identify relationship between level of knowledge and variables of study, To Make a comparison among hospitals in Basra city regarding level of knowledge about first aid. To determine the relationship between the experience and level of knowledge. **Methodology:** A descriptive cross-sectional study, which was carried out in Basra general hospitals, started from December 1st 2017 up to 30 March 2018 in order to assess the nurse's knowledge about first aids. The present study carried out in four hospitals. Basrah general hospital, al taleemi general hospital, al fayhaa general hospital and al mawanye general hospital. A probability (random) sample of (300) nurses males and females in the four hospitals were selected for the purpose of the study, they were working in different wards in the hospital. **Results:** Showed that 35 % were males, and 65 % were females and 50 % of the sample was in the age interval of 19 - 20, and 24.4% of the sample was in the age interval of 29-38, 13.6% of the sample was in the age interval of 39-48, 9.6% of the sample was in the age interval of 49-58 and 2.4% of the sample was in the age interval of 59 and above, and 35 % were males, and 65 % were females, and 51.4 % were secondary education level, and 34.4 % health institution education level, 34.4% were health institute and 11.6% were college graduation, 63.6% of the sample was in the years of employment of 1-10, showed that 18.6% of the sample was in the of the sample was in the years of employment of 11-20, showed that 12.4% of the sample was in the years of employment of 21-30, 5% of the sample was in the years of employment of 31-40, showed that 0.4% of the sample was in the years of employment of 40 and above, and that 33.3% were al thalami general, and 33% were Basra general, 17% were fayhaa general, and 16.7% were al mawanye general. showed that 10.3% of the sample was in emergency, 13.0% was in ICU, 8.4% was in CCU, 32.4% was in surgical ward, 5.0% was in medical ward, 3.0% was in pediatric, 2.0% was in dialysis, 3.7% was in ENT, 9.0% was operations, 1.4% was in neurosurgery ward, 5.6% was in fractures, 4.7% was in gynecology and obstetrics, 1.4% was in military ward, showed that 48 % had 50 - 59 highest degree of score, and 4.6% had 70-79 lowest degree of score, and 42.4% had 60 - 69 score, and 5% had 40-49. i.e. 95 % of the studied sample had got scores above 50 degree i.e. they had past the evaluation formula the study showed that all the nurses from teaching hospital had successful result regarding assessment scores, and 23 % of them got excellent scores, means that the nurses in the teaching hospital had the best knowledge in the first aids than the other hospital, while the Almadwanya and Alfayhaa general hospital had more or less the same results, and Basra general hospital had the least results

**Keywords:** Nurses Knowledge First Aids.

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## INTRODUCTION

First aid is applied to injured or ill persons in any health threatening settings in order to save life, prevent degradation of the situation or contribute to a treatment process before professional medical care is available [1].

At some point in a medical curriculum students are taught how to handle emergencies in a hospital emergency setting where drugs and other necessities are

available. However, the adequate knowledge required for handling an emergency without hospital setting at the site of the accident or emergency may not be sufficient [2].

Studies have found that the knowledge of first aid amongst medical students has always been a neglected subject. Hence, it should not be surprising to note that even junior nursing at certain hospitals cannot perform the first aid skills satisfactorily [3].

As the incidence of medical emergencies are on the rise in recent years it is important to ensure that health personnel are adequately trained to deal with such events[4].

Accidents and injuries are part of daily events, and many of these injuries are initially treated by untrained personnel due to lack of health care providers on the accident site. These accidents and injuries can cause serious consequences if not dealt with properly. Therefore, implementing correct first aid measures is vital for victims in emergency cases and helps to improve the overall outcome of the first aid process in emergency situations. The National First Aid Science Advisory Board defined first aid as making an assessment and implementing interventions that can be performed by a bystander (or by the victim) with minimal or no medical equipment [5]. However, this implementation requires certain levels of both knowledge and practice.

Many factors had been shown to be associated with better knowledge, including taking a first aid course during school [6], having a driving license, or having a higher level of education [7].

Few reports assessing the first aid knowledge were carried out in Arab countries [8,9] and most of them reported that Problem of project: Are the nurses in hospitals Basra having adequate knowledge about first aids?

#### Goals of project

1. To evaluate nurses' knowledge about first aids.
2. To identify relationship between level of knowledge and variables of study
3. To make a comparison among hospitals in Basra city regarding level of knowledge about first aid.
4. To determine the relationship between the experience and level of knowledge.

#### METHODOLOGY

Design of the study: A descriptive cross-sectional study design was carried out in Basra general hospital, started from December 1<sup>st</sup> 2017 up to 30 March 2018.

#### Setting of the study

The present study carried out in four hospitals: Basrah general hospital, al taleemi general hospital, al fayhaa general hospital and al mawanye general hospital

#### The sample of the study

A probability (random) sample of (300) nurses males and females in the four hospitals were selected for the purpose of the study, they were working in different wards in the hospital.

#### Study's instrument

A Closed-ended questions questionnaire was used for the purpose of data collection. The questionnaire contains two parts, the first part consists of 5 items related to Socio-demographic characteristics of the nurses and include: age, gender, working wards, the educational levels, years of employment and. The second part of the questionnaire consists of 44 questions that are concerned the nurses knowledge about first aids. Standardized 3- points Likert scale including: YES, NO, don't KNOW. the already performed questionnaire forma was distributed to 300 nurses were they read the forma and answer them , the forma then collected by the researchers, each forma was scored according to the right typical answer.

#### STATISTICAL ANALYSIS

Analysis was made by using SPSS (Statistical package for Social Sciences) version 16, data was expressed in (frequency and percentage). Correlations were used to examine the association between different variables.

The scoring was graded as follows:

≥70% excellent

51% to 69% adequate

31% to 50% needs improvement

≤30% poor

#### RESULTS

**Table-1: Distribution of the studied sample according to age**

Age intervals	Frequencies	Percentages
19 -28	150	50
29 – 38	73	24.4
39 - 48	41	13.6
49 - 58	29	9.6
59 and above	7	2.4
Total	300	100

The table showed that 50 % of the sample was in the age interval of 19 - 20, showed that 24.4% of the sample was in the age interval of 29-38, Showed that 13.6% of the sample was in the age interval of 39-48, Showed that 9.6% of the sample was in the age interval of 49-58 and showed that 2.4% of the sample was in the age interval of 59 and above.

**Table -2: Distribution of the studied sample according to gender**

Gender	Frequencies	Percentages
Males	105	35
Females	195	65
Total	300	100

This table showed the frequency distribution of the sample according to gender, and it showed that 35 % were males, and 65 % were females.

**Table-3: Distribution of the studied sample according to level of education**

level of education	Frequencies	Percentages
Intermediate	8	2.6
Secondary	154	51.4
Health institute	103	34.4
College graduation	35	11.6
Total	300	100

This table showed that 51.4 % were secondary education level , and 34.4 % health institution education level , showed that 34.4% were health institute and 11,6% were college graduation.

**Table-4: Distribution of the studied sample according to Years of employment**

Years of employment	Frequency	Percent
1-10	191	63.6
11-20	56	18.6
21-30	37	12.4
31-40	15	5
41 and above	1	0.4
Total	100	100

This table showed that 63.6% of the sample was in interval 1-10the years, of employment of 1-10, showed that 18.6% of the sample was in interval 11-20the of the sample was in the years, of employment of 11-20, showed that 12.4% of the sample was in interval 21-30the years ,of employment of 21-30, showed that 5% of the sample was in interval 31-40the years and of employment of 31-40, showed that 0.4% of the sample was in interval 41the years of employment of 40 and above.

**Table-5: Distribution of the studied sample according to hospitals**

Hospital	Freq	Percent
Basra general	99	33
al thalami general	100	33.3
al mawanye general	50	16.7
fayhaa general	51	17
Total	300	100

This table showed 33%the frequency distribution of Basra generalthe sample according to hospital, and it showed that 33.3% of Alwere al thalami

general hospital, and 33% were Basra general, 17% were fayhaa general, and 16.7% of Alwere al mawanye general hospital and 17% of Fayhaa general hospital.

**Table- 6: Distribution of the studied sample according to department**

Department	Freq	Percent
Emergency	31	10.3
ICU	39	13.0
CCU	25	8.4
Surgical ward	98	32.6
Medical ward	15	5.0
Pediatric	9	3.0
Dialysis	6	2.0
ENT	11	3.7
Operations	27	9.0
Neurosurgery ward	4	1.4
Fractures ward	17	5.6
Gynecology & obstetrics	14	4.7
Military ward	4	1.4
Total	300	100

This table showed that 10.3% of the sample was in emergency, 13.0% was in ICU, 8.4% was in CCU, 32.4% was in surgical ward, 5.0% was in medical ward, 3.0% was in pediatric, 2.0% was in dialysis, 3.7% was in ENT, 9.0%was operations, 1.4%was in neurosurgery ward, 5.6% was in fractures, 4.7% was in gynecology and obstetrics, 1.4% was in military ward.

**Table-7: Distribution of the studied sample according to scoring**

Scoring	Freq	Percent
40 - 49	15	5
50 -59	144	48
60 – 69	127	42.4
70 - 79	14	4.6
Total	300	100

The table showed that 5% had scores 40 - 49 (poor scores), 48 % had 50 - 59(moderate scores), and 42.4% had 60 -69 (good scores), and 4.6 % had 70- 79 (excellent score). 95 % of the studied sample had got scores above 50 degree i.e. they had past the evaluation formula.

**Table-8: Distribution of the studied sample for each hospital according to scoring**

Scorings	Hospitals				
	Basra general	Alsadr teaching	Almawanya general	Alfayhaa general	

	hospital	hospital	hospital	hospital	
40-49	99%	00.0%	12%	36%	134%
50-59	5555%	36 36%	21 42%	24 47%	136 45%
60-69	3232%	41 41%	25 50%	21 41%	12 040%
70 - 79	34%	23 23%	36%	36%	35 11%
Total	99	100	50	51	300 10%

The table showed that 4% were having scores less than 50, 45 % were having scores less than 60, 40 % were having scores less than 70 % and 35 % were having scores 70 and above Regarding the scoring according to hospital 9 % of the sample in **Basra** general hospital had scores less 50.

55% less than 60, 32% less 70, and 4% 70 and above that is mean most of the studied sample had past the evaluation successfully.

Regarding Alsadr teaching hospital all the nurses that participate in the assessment had past the evaluation successfully, 36% less than 60, 41% less 70, and 23% 70 and above regarding Alkawanya general hospital, 3 % of the sample had scores less 50, 42% less than 60, 25% less 70, and 3% 70 and above that is mean most of the studied sample had past the evaluation successfully regarding Alfayhaa general hospital, 6 % of the sample had scores less 50, 47% less than 60, 41% less 70, and 6% 70 and above that is mean most of the studied sample had past the evaluation successfully.

**Table-8: Correlation between the scores and Age**

	Scores	Age	Result
Pearson Correlation	1	.238**	significant
Sig. (2-tailed)		.000	
N	300	300	

\*\* . Correlation is significant at the 0.01 level (2-tailed).

This table showed that there is a high significant association between age of the studied population and the scores they get

**Table-9: Correlation between the scores and gender**

	Scores	Gender	Result
Pearson Correlation	1	-.206**	significant
Sig. (2-tailed)		.000	
N	300	300	

\*\* . Correlation is significant at the 0.01 level (2-tailed).

This table showed that there is a high significant association between gender of the studied population and the scores they get

**Table-10: Correlation between the scores and levels**

	Scores	Levels	Result
Pearson Correlation	1	.151**	

Sig. (2-tailed)		.009	significant
N	300	300	

\*\* . Correlation is significant at the 0.01 level (2-tailed).

This table showed that there is a high significant association between levels of the studied population and the scores they get

**Table-11: Correlation between the scores and years**

	Scores	years	Result
Pearson Correlation	1	.215**	Significant
Sig. (2-tailed)		.000	
N	300	300	

\*\* . Correlation is significant at the 0.01 level (2-tailed).

This table showed that there is a high significant association between years of the studied population and the scores they get

**Table-12: Correlation between the scores and hospitals.**

	Scores	Hospitals	Result
Pearson Correlation	1	.107	Significant
Sig. (2-tailed)		.107	
N	300	300	

This table showed no significant between scores and hospitals.

**Table-13: Correlation between the scores and Department**

	Scores	Department	Result
Pearson Correlation	1	.070	Significant
Sig. (2-tailed)		.224	
N	300	300	

This table showed no significant between scores and department

## DISCUSSION

Our study was designed to evaluate the nurses knowledge about first aids, two forma was used for the evaluation, first forma represent the demographic features for the nurses, the second forma consist of forty-four items (question) represents the role of nurses in first aids, was given to the nurses in the various ward in four hospitals to do the evaluation. in our study we find that, the nurses staff in four hospitals was mostly female in gender (65%) which might reflect the acceptable traditional behavior for females to accept females more ( the researchers were both females). also the study showed that 50 % of the staff was in 19 - 20 years old indicating that the staff is in the young group.

In our study we find that 51.4 % were secondary education level, higher percentage that is mean the large number of preparatories nursing in Basra city leading to an increase in the proportion of nurses skilled in hospitals. And showed that 63.6% of the sample was in interval 1-10the years of employment that is mean the nurses in this interval got a good knowledge and experience to make the staff of nurses in this interval more perfect and it showed that 33.3% of All were al thalami general hospital higher percentage and that large number of work there as the hospital in need to many staff of nursing to control the work that led to raise the ratio of the hospital the 33.3%. Regarding scoring we found that all nurses had passed and succeeds and because they had done their jobs in right way and they are skilled enough and able to do their duets. Also our study showed that there is high significant correlation between the scores that the nurses got and the years of employment, that is mean we have to choose nurses having more years of experience that is to do a perfect job.

the table showed that 5% had scores 40 - 49 (poor scores), 48 % had 50 - 59(moderate scores), and 42.4% had 60 -69 (good scores), and 4.6 % had 70- 79 (excellent score ) which is differ from Indian study which showed that Good knowledge about first aid was observed in 13.8% (21/152), moderate knowledge in 68.4% (104/152) and poor knowledge in 17.8% (27/152) participants[10].

When we did a comparison in the scoring the study sample got according to the hospital, the study showed that all the nurses from teaching hospital had successful result regarding assessment scores, and 23 % of them got excellent scores, means that the nurses in the teaching hospital had the best knowledge in the first aids than the other hospital, while the Alkawanya and Alfayhaa general hospital had more or less the same results, and Basra general hospital had the least results

## CONCLUSIONS

1. Half of the sample aged less than 30 years.
2. Half of the sample was graduated from secondary nursing schools.
3. More than half of the sample was having between one to ten years of employment.
4. Most of the sample (90.4 %) got adequate scoring.
5. The nurses of the teaching hospital got the best scores in compare with other hospitals
6. There were a significant association between scores and many variables include age, gender, levels of education, and years of employment.

7. There were no significant association between scores and hospitals or the departments the nurses work.

## RECOMMENDATIONS

1. We have to insist on the continuous education session about first aids for all nurses working at hospitals, and all nurses have to share in such sessions.
2. We have to increase the graduation level of the nurses, to college level
3. Must is teaching the first aids in the curriculum whether preparatory, institute or college of nursing.

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