# **University of Kufa, Faculty of Nursing**

Original Research

# Comparison between Junior and Senior Students at the College of Nursing/ University of Baghdad toward their Knowledge about First Aid

Serwan Jafar Bakey<sup>1</sup> Sadeq Al-Fayyadh<sup>2</sup> Shaymaa M. Hussein<sup>3</sup>

\* Lecturer, Adult Nursing Department, College of Nursing, University of Baghdad, Iraq. \*\* Associate Professor, Adult Nursing Department, College of Nursing, University of Baghdad, Iraq. \*\*\* Assistant Lecturer, Adult Nursing Department, College of Nursing, University of Baghdad, Iraq.

Corresponding author: Serwan Jafar Bakey, Lecturer, Adult Nursing Department, College of Nursing, University of Baghdad, Iraq. E-mail: dr.serwanj@conursing.uobaghdad.edu.iq.

# الخلاصة:

خلفية البحث: الاصابات والحوادث قد تهدد حياة الناس حول العالم خصوصا عند عدم تلقيهم الرعاية الاولية المناسبة من مقدمي الرعاية الصحية ومن ضمنهم الممرضين. معارف طلبة التمريض تلعب دورا مهما في تحسين كفاءتهم لتقديم رعاية عالية المستوى ومن ضمنها الرعاية الصحية الاولية.

الهدف: تقييم معارف طلبة المرحلة الثانية والرابعة في كلية التمريض/ جامعة بغداد المتعلقة بالإسعافات الاولية، واجراء مقارنة بين طلبة المرحلتين تجاه الاسعافات الاولية. المنهجية: اجريت دراسة مقارنة وصفية بين طلبة المرحلتين انفي الذكر لغرض تحقيق اهداف البحث للمدة من 1/ تشرين الثاني / 2019 ولغاية 15/ كانون الثاني / 2021. اختيرت عينة غير احتمالية (غرضية) من 60 طالب وطالبة (30 طالب من المرحلة الثانية و 30 طالب من المرحلة الرابعة). تم جمع البيانات باستخدام استبانة وبواسطة استمارة جوجل. استخدمت اجراءات الاحصاء الوصفي (التكرارات والنسب المئوية والوسط الحسابي) والاحصاء الاستدلالي (اختبار ) في تحليل البيانات.

النتائج: اظهرت النتائج ان معارف الطّلبة المتعلقة بالإسعافات الاولية غير كافية بمعدل قليل او متوسط، كذلك اظهرت النتائج بانه لا توجد علاقة ذات دلالة إحصائية معنوية باختلاف المعارف بين طلبة المرحلتين.

الاستنتاجات: استنتجت الدراسة الى ان معارف طلبة كلا المرحلتين الثانية والرابعة عن الاسعافات الاولية كانت غير كافية.

التوصيات: اوصت الدراسة بضرورة اجراء بحوث مستقبلية على شريحة كبيرة من المجتمع لقياس معارف وممارسات طلبة كلية التمريض تجاه الاسعافات الاولية لتعميم النتائج، اضافة الى ضرورة تضمين تدابير الاسعافات الاولية في البرنامج الدراسي لكلية التمريض، وضرورة مشاركة الطلبة بدورات تدريبية مختصة بتدابير الاسعافات الاولية لغرض تحسين قاعدة الارتكاز العلمية و الكفاءة المهنية المنقذة للحياة.

# **ABSTRACT**

**Background:** Injuries and accidents can threaten lives of people worldwide especially when they do not receive the appropriate first aid from healthcare providers including nurses. Nursing students' knowledge plays a significant role in improving their proficiency to deliver high quality care including first aid.

**Objective:** To assess the knowledge of the second and fourth stage students at the College of Nursing,

University of Baghdad about first aid, and to make a comparison between students of the two stages regarding first aid.

**Methodology:** A descriptive comparative study was conducted between the second and fourth stage students in the College of Nursing for the purpose of achieving the research objectives for the period: November 1, 2019, to January 15, 2021. A non-probability (objective) sample was selected of 60 students (30 students from the second stage and 30 students from the fourth stage). The data was collected using a questionnaire and by the Google

form. Descriptive statistics (frequencies, percentages, and mean) and inferential statistics (t-test) were used in the results showed 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.

**Conclusion:** The study concluded that both the second and fourth stage nursing students' knowledge about first aid was insufficient.

**Recommendation:** The study recommended the necessity of conducting future research on a large

segment of population to measure the knowledge and practices of students of the College of Nursing towards first aid measures and to generalize results, in addition to the necessity of including first aid measures in the education program of the College of Nursing, and the necessity of participation in training courses specialized in first aid measures for the purpose of improving their knowledge base and competencies in this life-saving measure.

**Keyword:** nursing students, first aid.

### INTRODUCTION

People might expose to various life-threatening injuries and accidents, including however not limited to: Road Traffic Accident (RTA), burns, heart attack, and fall from high, stroke, poisoning, and other lethal problems (1). Without receiving the appropriate interventions, the morbidity and mortality rates will be increased with the injured people (1, 2). First aid is an essential approach to manage people with lifethreatening injuries, which assist in decreasing the mortality rates and save lives (3, 4). Healthcare providers, including emergency team, should have the required competencies to provide the optimal care for patients especially those who need first aids care. Nurses, as an essential part of the healthcare team, get their knowledge base during their educational journey in nursing educational institutions.

In addition, nursing students attain and enhance their knowledge base about first aid from the offered educational courses <sup>(4)</sup>. Based on the aforementioned evidence, it is important to determine nursing students' knowledge about first aid during their educational journey. This study aimed to assess nursing students' knowledge toward first aid, and to compare between knowledge of the second and fourth stage nursing students toward first aid. This research endeavor is an important step toward answering a critical question: are

nursing students knowledgeable about the basic life-saving measure? A research-based answer to the aforementioned question would highlight if knowledge deficit is existed, which enable tailored educational intervention. Nurse-student should be armed with the required knowledge and expertise of first aid which enables them to effectively intervene when faced with an emergency situation during their clinical training course and in their routine life.

#### AIMS OF THE STUDY

To assess the knowledge of the second and fourth stage students at the College of Nursing, University of Baghdad about first aid, and to make a comparison between students of the two stages regarding first aid.

#### **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 November 1st, 2019 through January 15th, 2021.
- **Setting of the Study:** The study was carried-out at the College of Nursing, University of Baghdad.
- The Sample of the Study: A non-probability (purposive) sample of (60) nursing students were

- selected (30 from the second stage and 30 from the fourth stage who have been studying in College of Nursing, University of Baghdad).
- Data collection: Data were collected through the use of a questionnaire by means of Google form to collect nursing students' responses from the July5th, 2020 until the July 15th, 2020.
- The Study Instrument: A questionnaire was designed and constructed by the researchers to measure the study variables and achieve study objectives. The construction of the study questionnaire was achieved through the review of literature and related studies. The questionnaire consisted of 2 parts: Demographic Data sheet, which consisted of (5) items, including age, gender, level of education, participation in first aid educational course, and sharing in training sessions related to
- first aid; nurses' knowledge sheet comprised of (35) items that concerned with nurses' knowledge toward first aid.
- Rating and Scoring: The items have been rated and scored according to the following patterns: Threepoint Likert scale is used for rating the items as correct, uncertain, and incorrect; the three points type Likert scale is scored as 3 for correct, 2 for uncertain, and 1 for incorrect, the higher-grade scoring of the questionnaire (MS) the greater knowledge toward first aid.
- Statistical data analysis: Data were analyzed through the use of IBM-Statistical Package of Social Sciences (SPSS) which included descriptive statistics (Frequency (F) Percentage (%), Mean, and Standard Deviation; and Inferential statistics (t-test) (Polit and Hungler, 1999) (8).

# **RESULTS**

Table (1): Distribution of the study sample according to their demographic characteristics

Items	Categories	Second	l Stage Students	Fourth Stage Nursing Students		
		F	%	F	%	
Age	19 – 22	25	83.3	29	96.6	
	23 and over	5	16.66	1	3.33	
	Total	30	100	30	100	
Gender	Female	7	23.3	6	20	
	Male	23	76.6	24	80	
	Total	30	100	30	100	
Education level	Total	30	100	30	100	
	Yes	0	0	0	0	
Participation in First Aid Education course	No	30	100	30	100	
	Total	30	100	30	100	
Sharing in Training	Yes	0	0	0	0	
Sessions Related to First	No	30	100	30	100	
Aid	Total	30	100	30	100	

F= frequency, % percent.

Table (1) presented that 83.3 percent of the second stage students and 96.6 of the fourth stage nursing students were within age group (19 - 24) years old. Moreover, 76.6 percent of the second stage and 80 percent of the fourth stage were male. The same number of both the second stage (30 participants) and fourth stage (30

Page 4

participants) were selected to participate in the study. Neither the second stage participants nor the fourth stage participants were participated in education courses or training sessions related to first aid, which were accounted for 100 percent.

Table (2): Distribution of the study sample according to their total knowledge about First Aid

		•		
Group	N	M	SD	S
Second Stage knowledge about First aid	30	1.7	.507	M
Fourth Stage knowledge about First aid	30	2.3	.061	M

N= Number, M = Mean, SD = standard deviation,  $\{S = \text{significant}, L = \text{low } (1 - 1.5), M = \text{Moderate } (1.5 - 2.5), H = \text{High } (2.5 - 3)\}.$ 

Table (2) presented that mean of the second stage nursing students was 1.7 within the lowest limit of the moderate level; while, the mean of the fourth stage nursing students was about 2.3 within the upper limit of the moderate level. The responses of both groups were within the moderate level of knowledge about the first aid.

Table (3): Comparison between the Second and Fourth grade Nursing Students' knowledge toward First aid

Paired Differences								
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2- tailed)
				Lower	Upper			
Second and Fourth Stage Nursing Student	045	.196	.036	119	.028	-1.26	29	.22

Table (3) presented that there was no significant difference between the responses of the second and fourth stage nursing students toward first aid.

# **DISCUSSION**

Results in Table (1) presented that most of the study sample were male nursing students in both the second and fourth stage within the age group of (19 – 24) years old. In addition, nursing students of both groups had not participated in any educational program or training sessions related to first aid. Pei et al. (2019) conducted a study to determine knowledge and other competencies toward first aid of nursing students in Tianjin University in China <sup>(4)</sup>.

The authors of this research found that 26.9 percent of 475 nursing students were male and the others were female; in addition, approximately half of the

study sample had the opportunity to join training sessions related to first aid <sup>(4)</sup>. Makhlef (2014) also conducted a study to determine knowledge of university students toward first aid at the University of Mosul and found that the majority of nursing students had not participated in any training sessions about first aid <sup>(5)</sup>. It was reported that joining training sessions about first aid is an essential approach to improve knowledge of students toward this concept <sup>(6)</sup>

In addition, first aid training sessions should be included in the educational courses of college

students to improve their knowledge base and competencies toward this essential lifesaving approach (7).

Findings in Table (2) revealed that responses of both groups of nursing students were within the moderate level of knowledge about the first aid. Pei et al. (2019) reported that knowledge of nursing students toward first aid was poor and need to be improved. Also, Gore et al. (2017) reported that knowledge base of medical and non-medical students about first aid was poor and need to be improved through training sessions <sup>(4, 1)</sup>.

Results in Table (3) presented that there was no significant difference between the responses of the second and fourth stage nursing students toward first aid. Pei et al. (2019) reported that there was a significant difference in the knowledge of nursing students at different levels about first aid (P value = .004). This finding could reflect that there was no focus on the first aid concept in the educational

#### REFERENCES:

- Gore, C. A., Sankar, S., Sheriff, S., Smrithika, S. A., & Maiya, S. (2017). A study on knowledge regarding first aid among undergraduate medical students. *Int. J Community Med Public Health*, 4(7), 2555-2557.
- 2. Barutcu, C. D., Cakmak, O., Koksoy, S., & Polat, M. (2017). Level of knowledge and factors affecting first aid in vocational high school students, *International Journal of Caring Sciences*, 10(3), 1563-1569.
- **3.** Barathi, S. & Kala, S. (2019). Assessment of knowledge regarding first aid measures for common injuries in children among school teachers. *Indian Journal of Applied Research*, 9(8), 1-2.
- 4. Pei, L., Liang, F., Sun, S., Wang, H., & Dou, H. (2019). Nursing students' knowledge, willingness, and attitudes toward the first aid behavior as bystanders in traffic accident trauma: A cross-sectional survey. *International journal of nursing sciences*, 6(1), 65-69.

program, which means it should be included in the educational courses and also training sessions for nursing students <sup>(4)</sup>.

#### **CONCLUSION**

The study concluded that both the second and fourth stage nursing students' knowledge about first aid was insufficient.

#### RECOMMENDATIONS

The study recommended doing future studies on a large population to measure nursing students' knowledge and practices toward first aid and to be able to generalize results. First aid concept should be included and highlighted in the educational courses of nursing educational curriculum. In addition, nursing students must be encouraged to participate in training sessions about first aid to improve their knowledge base and be competent in life saving approach.

- **5.** Makhlef, H. H. (2014). Assessment of Mosul University Students' Knowledge about First Aid, *Kufa Journal for Nursing Sciences*, 3(1), 278-285.
- Czyzewski, L., Sobieski, A., Michalak, J., Wereda, D.,
   Mielczarek, K. (2017). Assessment of first aid knowledge among medical and non-medical university students, *Disaster and Emergency Medicine Journal*, 2(4), 150-154.
- Khan, A., Shaikh, S., Shuaib, F., Sattar, A., Samani, S. A., Shabbir, Q., & Rasheed, A. Z. (2010). Knowledge attitude and practices of undergraduate students regarding first aid measures, *Journal of the Pakistan Medical Association*, 60(1), 68.
- 8. Polit, D. & Hungler, B. (1999). Nursing research: Principles and methods. 6th ed., Philadelphia, Lippincott Williams and Wilkins. Pp. 345-398.