Assessment of Nursing Student's Awareness toward First Aid: Suggested Curriculum

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Abstract

Background: Accidents and illness can sometimes be life-threatening, where there is very little time for an aider to react and prevent permanent disabilities or even death. So first aid is first help required in almost all instances of disaster and dangers to save life and prevent injury from becoming worse. **This study aimed to** assess nursing students' awareness toward first aid. Design: a descriptive design. **Setting**: this study was conducted in Ain Shams University hospital, aldemerdash hospital, pediatric hospital, academic heart institute and Cleopatra hospital. Research **subject**: a convenience sample include 130 internship year nursing students - at Faculty of Nursing in Ain Shams University. **Tools**: Students' self-administered questionnaire and Students' observational checklist. **Result:** the study showed that (59.2%) of nursing students had unsatisfactory scores of knowledge regarding to first aid measures, only (55.4%) of them had satisfactory practice level toward first aid measures, and (58.46%) of had positive attitude toward first aid. **Conclusion**: Only less than half of nursing students under study had satisfactory scores of knowledge level. While, slightly more than half of them had satisfactory scores of practice and positive attitude toward first aid measures. Furthermore, there were statistically significant relation between total satisfactory scores of knowledge, practice & attitude of nursing students. **Recommendation**: First aid and basic life support should be an integral part of all nursing faculties curricula to ensure that nursing student could grasp enough knowledge and performance that necessary to help people in emergency situations.

Keywords: first aid, awareness, nursing students.

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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. This refers to assessments and interventions that can be performed by a bystander (or by the victim) with minimal or no medical equipment. The aim is to prevent the condition worsening, protect from further harm, aid recovery and preserve life **(Markenson, Ferguson, Chameides, Cassan, Chung, Epstein, Gonzales, Herrington, Pellegrino, Ratcliff and Singer, 2010).**

Accidents and illness can sometimes be life-threatening, where there is very little time for an aider to react and prevent permanent disabilities or even death, so first aid is first help required in almost all instances of disaster and dangers to save life and prevent injury from becoming worse **(Maheshwari, 2012).**

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 of the site of the accident or emergency may not be sufficient **(Khan, Shaikh, Shuaib, Sattar, Samani and Shabbir, 2010).**

Overall knowledge of first aid among medical, dental, nursing colleges is very poor and needs to be improved. Hence, if a formal first aid session is introduced into a medical curriculum, this will provide students with sound knowledge and practical skills as proven by a United Arab Emirates based study, this should be complimented with hands-on experience or activities in order to increase students' experiences in practical procedures during medical school. **(Joseph, Kumar, Babu, Nelliyanil and B haskaran, 2014).**

Significance of study:

Every day we are at risk of being involved in a natural disaster or accident, whether work related or while we are driving down the road, the following reasons showing how important to learn first aid; as 80% of cardiac arrests happen in the home, only 6.4% of cardiac arrest victims survive because people witnessing

the incident have performed cardiopulmonary resuscitation (CPR), over 200,000 people die of sudden cardiac arrest every year, 50,000 of the 200,000 deaths yearly could 9be prevented, for every minute that an automatic external defibrillator (AED) is unavailable, the victim has a 10% fewer chances of survival and if CPR is given within the first four minutes of a cardiac arrest, the chances of survival double **(Pearn, 2010).**

In Egypt, the annual report of the car accidents and trains revealed the rise in car accidents and the toll of the dead and injured on the roads, bringing the number of car accidents to 14548 in 2015 versus to 14403 incident in 2014, which resulted in the 6203 dead, 19,325 injured, 19116 damaged vehicles. As well as the number of train accidents reached 1235 incident in 2015 versus 1044 incident in 2014, a rise of 18.3% **(Central Agency for Public Mobilization and Statistics, 2015).** Unfortunately, Egypt occupied the highest rate in the mortality of road accidents in the world at the rate of 41.6 per 100,000 people, according to a survey by the Organization has been initiated since 2012 and ends in 2014 and included 178 countries **(World Health Organization[1], 2015).**

As the incidences 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. **(Bildik, Kilicaslan, Dogru, Keles, and Demircan, 2011).**

Aim of the study:

The study aimed to assess nursing students' awareness toward first aid through:

- Assessing of student's knowledge and practice toward first aid measures.

- Suggesting recommended curriculum for first aid based on students' needs assessment.

▪ **Research question**

- To what extent nursing students have awareness toward first aid measures?

-What are the suggested recommendations regarding first aid curriculum for nursing students?

• **Working definition:**

Curriculum in the current study intended by course syllabus.

Subjects and Methods

The present study was carried out through Technical design, Operational design, Administrative design and Statistical design

Technical Design:

The technical design included research design, setting, subjects and tools of data collection.

• **Research design:**

A descriptive design was utilized to meet the aim of this study.

• **Research Setting:**

This study was conducted in the formal training areas to internship nursing students that posed from the faculty to take their training internship year ,it included Ain shams university hospital, Aldemerdash hospital, Pediatric hospital, Academic heart institute and Cleopatra hospital. Assessment of students' practice way conducted at (Al Falah)* training center at Ain Shams University.

*Al falah training center is an educational center affiliated to Ain Shams University hospitals that equipped with equipment and supplies as manikins to perform practical assessment part of this study.

• **Research Subject:**

A convenience sample include 130 internship year nursing students at Faculty of Nursing in Ain Shams University - were recruited from the previously mentioned settings. The study subjects included (50) students from Ain Shams University hospitals, (36) from Aldemerdash hospital, (20) from pediatric hospital, (15) from academic heart institute, and (10) from Cleopatra hospital. Those students were in the same academic year and the majority of them were females (87 students) and singles (115 students).

• **Tools for data collection:**

Two tools were used to collect data:

1.Students' self- administered questionnaire.

2.Students' observational checklist.

I. **Self-administered questionnaire (Appendix I):**

It was used to assess student's level of knowledge regarding first aid. This tool was developed by the researcher in English language after reviewing the related literature and filled by the students. It is quoted from **(Ski Racing Australia**

first aid questionnaire, 2014, Swetha et al, 2015, the Boy Scouts of America,2011 and Khan, et al, 2010)

The questionnaire consisted of three parts:

▪ **The first part:** It concerned with the demographic characteristics of nursing students under study as regard to; age, gender, previous experience and training courses.

▪ **The second part:** It included assessment* of nursing student's level of knowledge regarding first aid that include seven items, these items cover first aid definition, emergency, triage, survey, medical emergencies, injuries, heat stroke, bites and stings.

*The assessment of the student's level of knowledge was in the form of multiple-choice questions (MCQ), true/false and match questions.

▪ **The third part:** it included assessment of nursing student's attitude regarding first aid measures. The attitude scale was developed by the researcher after reviewing the related literature, it include agree, neutral and disagree items* quoted from **(likert scale, 1932 & Khan, et al, 2010).**

*The agree item considered in result distribution as positive attitude and disagree & neutral considered as negative attitude.

II - Observational Checklist (Appendix II):

It was used to assess nursing student's skills regarding first aid measures. This tool was developed by the researcher in English language after reviewing the related literature.it was quoted from **(American heart association, 2011 & Canadian Red Cross Society, 2011).** It was consisted of seven main

procedures related to first aid measures as primary survey, secondary survey, cardiopulmonary resuscitation, caring adult with chocking, recovery position, wound dressing and bandaging fractured limb.

Operational Design:

The operational design included preparatory phase, content validity and reliability, pilot study and field work.

a.Preparatory phase

It included reviewing of the related literature and theoretical knowledge of the various aspects of this issue using books, articles, net, and magazines; in order to be acquainted with the research problem and be able to develop the tools for data collection.

b. Validity and Reliability

Validity

It was used to by a jury of seven experts from Medical Surgical Nursing department- Ain Shams University, who examine the entire questionnaire and checklist and offered their experts opinions on their content. Two types of validity were used at this stage, face and content validity. Face validity aimed at inspecting the items to determine whether the tool measure what it supposed to measure. Content validity was conducted to measure tools appropriateness, relevance, correction and clearance of the tool used and minor modifications were required and done.

Reliability:

▪ Testing reliability of proposed tools was done by Cronbach's alpha test that was valued by (0.84).

c. Pilot study

The pilot study was applied on 10% of nursing student (no= 13 students) chosen from the study settings to test applicability of the tools and clarity of designed questionnaire, as well as to estimate the time needed to answer them. Students included in the pilot study were included in the main study sample.

d. Field work:

The approval letters were obtained from the head nurse and the director of Ain Shams University Hospitals (Aldemerdash Hospital, the Pediatric Hospital, Academic Heart Institute and Cleopatra Hospital) . A letter was issued to each of them explaining the aim of the study in order to obtain permission and cooperation to conduct the study.

Data was collected in three months, from beginning of May 2016 to the end of July 2016. The researcher visited the study settings at the first day of each month in their periodic orientation to submit the questionnaire and the researcher divided the students into groups in the laboratory of Al Falah training center at Ain Shams University to complete the checklists.

The researcher interviewed the nursing students in the hospitals and explained the purpose of the study. The students were assured that information collected would be treated confidentially, it would be used only for the purpose of the research, and only code numbers were used and no names appeared. The questionnaire was distributed and took 30 to 45 minutes to be completed by the students.

Attitude scale as a part of questionnaire was delivered to the nursing students and each student asked to choose response according to the three levels rating scale (agree - neutral - disagree)

Regarding assessment of practice using observational checklist, the researcher distributed the students according to their time schedule at hospitals into groups at the laboratory of Al Falah center. Those observational checklists were completed by the researcher in period ranged from 15 to 25 minutes for every nursing student.

➢ Based on the data collected from the study and students' opinion, a suggested curriculum has been recognized to provide nursing students with basic knowledge, skills and attitude toward first aid measures.

Limitation of the study:

There was a number of internship nursing students (60) working in private and armed forced hospitals could not be reached because of refusal of those hospitals to conducting the study there.

Administrative Design

To carry out the study, an official letters were issued from the head nurse of Ain Shams University hospitals where the internship students working- and also the director of Ain Shams University Hospitals and another official letter to use the skills laboratory in Al Falah training center –Ain Shams University to perform the practical part of the study.

Ethical Considerations

Ethical approval was obtained from the Scientific Ethical Committee of the faculty of nursing of Ain Shams University. The purpose of the study was explained to the students before conducting the study and oral consent was obtained from them to participate in this study. They were given an opportunity to withdraw from the study without given a reason and they were assured that anonymity and confidentiality of information was protected. Ethics, values, culture, and beliefs were respected.

Statistical Design:

Data entry and analysis were organized, categorized, analyzed through a personal computer using the Statistical Package for Social Sciences (SPSS) version 20.0. Quantitative data were presented as mean± standard deviation (SD); Qualitative data were expressed as frequency and percentage.

Results

Table (1) shows percentage distribution of demographic characteristics among nursing students included in the study. The age of the study sample considered in the same age group as they were in the same academic year, (66.9%) were female, (88.5%) were single about (53.8%) of the students had previous experience in first aid , and (7.7 %) attended a training course in first aid.

Figure (1) shows that, about half of nursing students (41%) had a total satisfactory knowledge level toward first aid measures.

Figure (2) shows that the majority as more than half (58.46%) of nursing students have positive attitude toward first aid .

Figure (3) shows that, about half of nursing students (55.4%) had a total satisfactory practice level toward first aid measures.

Table (2) shows no statistically significant relation between gender& marital status of nursing students and their knowledge regarding first aid measures, there is a significant relation between having training course in first aid and their knowledge level and there is also a highly statistically significant relation <0.001 between previous experience in first aid and the nursing students' knowledge level.
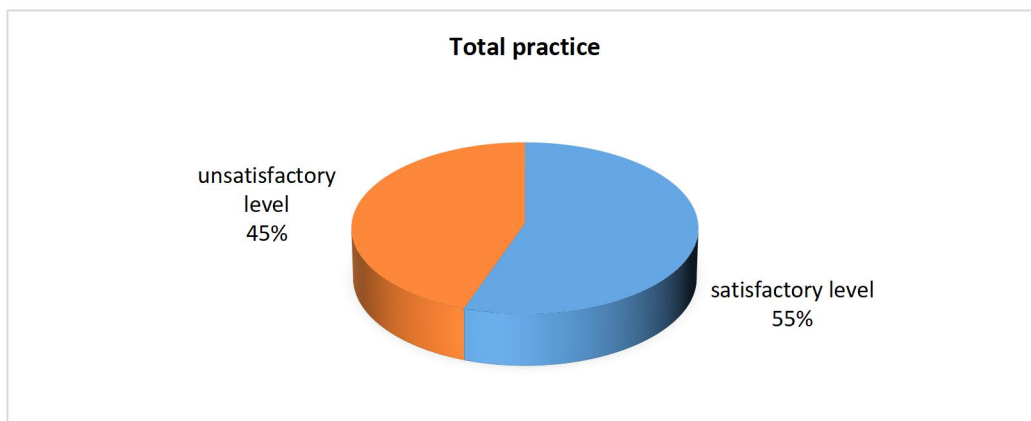
Table (3) shows no statistically significant relation between gender & marital status and attitude of nursing students toward first aid measures, there is a significant relation (0.021) between having training course in first aid and their attitude and there is also a highly statistically significant relation between students whom have previous experience in first aid and their attitude toward first aid.

Table(4) shows statistically significant relation between gender & training course in first aid and total practice level of first aid measures, highly significant relation between previous experience in first aid and the practice level and there is no significant relation between marital status and practice level of first aid measures.

Table (5) shows positive correlation and highly significant relation between total knowledge, practice and attitude toward first aid measures.

Part (I): Nursing students' demographic characteristics.

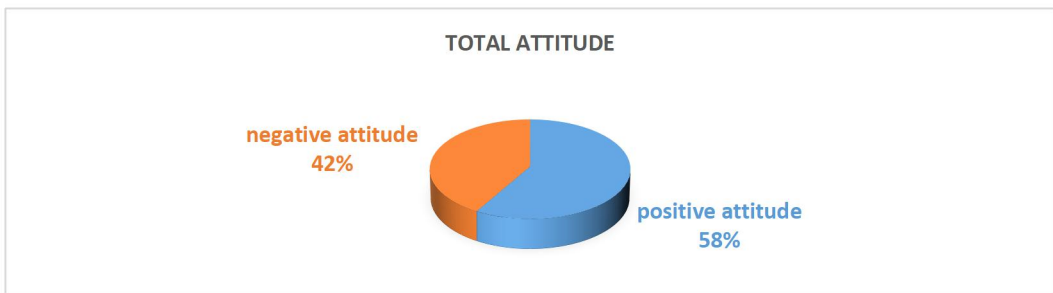**Table (1): Demographic data distribution of the study group.**

Demographic Data	No.	%
Age (years)		
22years		
23years mean = 22.5	130	100
Gender		
Male	43	33.1
Female	87	66.9
Marital status		
Marred	15	11.5
Single	115	88.5
Any previous experience in first aid.		
Yes	70	53.8
No	60	46.2
Source/place of the previous experience in first aid		
Yes (during fundamental nursing course)	70	53.8
Training course in first aid.		
Yes	10	7.7
No	120	92.3
Place of first aid training course		
The private international medical center.	10	7.7

Total practice

unsatisfactory level 45%

satisfactory level 55%

Part (II): Figure (1): The nursing student's total knowledge regarding first aid measures

TOTAL KNOWLEDGE

satisfactorty score
41%

un satisfactory
score
59%

*Satisfactory knowledge level ≥70%   ** unsatisfactory knowledge level ≤ 70%

Part II: Figure (2):Nursing students' total attitude toward first aid measures.

TOTAL ATTITUDE

negative attitude
42%

positive attitude
58%

*Satisfactory practice level ≥80 %   **unsatisfactory practice level ≤80 %

Part III: Figure (3): Nursing students' total level of practice regarding first aid measures.

Part VI: Relation between total satisfactory score of knowledge, practice & attitude and demographic data and correlation between knowledge, practice & attitude of nursing students under study.

Table (2): Relation between total satisfactory score of knowledge and demographic data of the nursing students.

Demographic Data	Total Knowledge N=(130)				Chi-square test		
	*Satisfactory (N=53)		**Unsatisfactory (N=77)				
	No.	%	No.	%	x^2	p-value	
Gender							
Male	21	39.6%	22	28.6%	1.269	0.260	N.S.
Female	32	60.4%	55	71.4%			
Marital status							
Married	7	13.2%	8	10.4%	0.046	0.829	N.S.
Single	46	86.8%	69	89.6%			
Any previous experience in first aid.							
Yes	6	11.3%	64	83.1%	62.255	<0.001	H.S.
No	47	88.7%	13	16.9%			
Training course in first aid.							
Yes	1	1.9%	9	11.7%	4.979	0.044	S.
No	52	98.1%	68	88.3%			

*Satisfactory practice level ≥ 70%   **unsatisfactory practice level≤70%
N.S. = no significant relation   S. = significant relation   H.S. =highly significant relation

Table (3): Relation between total attitude scores of the nursing students and their demographic data.

Demographic Data	Attitude (Total N= 130)				Chi-square test		
	Positive (N=76)		Negative (N=54)				
	No.	%	No.	%	x^2	p-value	
Gender							
Male	21	27.6%	n22	40.74	2.453	0.293	N.S.
Female	55	72.4%	32	59.26			
Marital status							
Marred	6	7.9%	9	16.67	10.814	0.005	N.S.
Single	70	92.1%	45	83.33			
Any previous experience in first aid.							
Yes	62	81.6%	7	12.96	57.672	<0.001	H.S.
No	14	18.4%	47	87.04			
Training course in first aid.							
Yes	10	13.2%	0	0.00	7.697	0.021	S.
No	66	86.8%	54	100.00			

N.S. = no significant relation   S. = significant relation   H.S. =highly significant relation

Table (4): Relation between total practice scores of the nursing students and their demographic data.

Demographic Data	Practice Total N = 130				Chi-square test		
	Done (N=72)		Not Done/done incorrectly (N=58)				
	No.	%	No.	%	x2	p-value	
Gender							
Male	30	41.7%	13	22.4%	4.544	0.033	S.
Female	42	58.3%	45	77.6%			
Marital status							
Marred	6	8.3%	9	15.5%	0.997	0.318	N. S.
Single	66	91.7%	49	84.5%			
Any previous experience in first aid.							
Yes	62	86.1%	8	13.8%	64.721	<0.001	H. S.
No	10	13.9%	50	86.2%			
Training course in first aid.							
Yes	10	13.9%	0	0.0%	6.880	0.009	S.
No	62	86.1%	58	100.0%			

Table (5): Relation between total scores of knowledge, practice ,and attitude of nursing students under study.

Correlation		Total Knowledge	practice	Attitude
Total Knowledge	r		0.481	0.521
	p		<0.001**	<0.001**
Practice	r	0.481		0.377
	p	<0.001**		<0.001**
Attitude	r	0.521	0.377	
	p	<0.001**	<0.001**	

Discussion

The discussion of the findings covered six main parts: the first part concerned with nursing student's demographic characteristics. The second part concerned with nursing student's level of knowledge regarding first aid measures. The third part concerned with nursing student's skills/practice level in first aid measures. The forth part concerned with nursing student's attitude toward first aid measures. The fifth part concerned with the relation between the nursing student's level of knowledge, attitude and practice in relation to demographic characteristics in addition to correlation between knowledge, attitude and practice of nursing students under study.

Part I: Nursing student's demographic characteristics.

Regarding demographic characteristics of the studied nursing students, the results of the current study revealed that all nursing student's ages were considered in the same age group between 22 and 23 years old because they are in the same internship year. More than half of them were female, more than tree quarter of them were single. About half of them had previous experience about first aid measures, they reported that its source was fundamental course lectures at first academic year in nursing faculty at Ain Shams University.

These results were similar to the findings of **Khatatbeh, (2016)** research that titled "First aid knowledge among university students in Jordan" who found that the majority of participants were females (65.9%) with mean age 19.9 years. Only 29.2% of students had previous first aid experience.

Regarding the attendance of previous training courses in first aid, it was found that majority of the studied nursing students didn't receive training course about first aid measures. Only little percentage of them (7.7%) received training course about first aid in their internship period in the international medical center.

That low percentage of first aid trained students might be due to unavailability of frequent first aid training workshops, as well as, lack of nursing students awareness toward importance of the first aid training. However, training courses for nursing students regarding first aid are very important to improve their knowledge and performance that affect positively on their quality of care offered to their patients, saving lives and preventing disabilities.

Part II: Nursing student's level of knowledge regarding first aid measures.

Concerning nursing student's total satisfactory scores of knowledge regarding first aid, the study findings revealed that unfortunately, slightly more than half of the studied nursing students had total unsatisfactory scores of knowledge regarding first aid measures.

In this behave, **Khatatbeh (2016)** in his study found that, there are a large number of health sciences students - even among those trained in first aid-presenting serious lacks of basic first aid knowledge .Overall, first aid knowledge among students at Yarmouk University was considered to be insufficient. He added "to decrease the early mortality and morbidity of accidents and emergencies, first aid should be a standard component and separate course of educational programs introduced at secondary school and college levels as well as in the media".

In another study also, **Khan et al, (2010)** added that, the adequate knowledge required for handling an emergency without hospital setting -at the site of the accident or emergency- may not be sufficient. In **Joseph et al, (2014)** study they concluded that the level of knowledge about first aid was not good among majority of the medical students.

In the current study, lack of knowledge among nursing students may be due to lack of training courses that conducted at faculty or hospitals, moreover, unavailability of guideline

books in work place, as I myself observed that lack of motivation to the students, absent of a separate formal first aid curriculum in their faculty study, also may be due to even lack of students interest to increase their awareness by self-education.

In the current study, it was noticed that the highest satisfactory knowledge scores were in first aid emergencies that may mostly encounter the nursing student in their practical life as CPR or wounds. This meant that not only first aid training required at nursing and medical colleges, it has to be reinforced periodically. As there may be lack of training courses, unavailability of guideline books in work place, lack of formal first aid curriculum in faculty study or even lack of students interest to increase their awareness by self-education. It's better to the nurse to learn first aid measures before she/he need it in emergency situation.

Part (III): Nursing students' practice level toward first aid measures.

Concerning nursing students total satisfactory scores of practice regarding first aid, the study finding revealed that, slightly more than half of the studied nursing (55.4%) had total satisfactory scores of practice regarding first aid measures.

The current study showed that, more than two thirds of nursing students had satisfactory practice score in application of basic adult CPR, and that is may be due to recurrent previous experience and expose to CPR situations in their periodical practical areas. More than half of them had unsatisfactory practice scores in recovery position, adult

chocking and applying bandaging for fractured part.

The present findings were close to **Rajakumari, (2015)** study who emphasized that 72% of undergraduate nursing students had poor practice regarding first aid measures.

However, in **Avisar, Shiyovich, Daniel and Nesher, (2013)** study they reported that CPR skills of preclinical medical students deteriorate within a year of CPR training. The decay is significantly more prominent, to an unacceptable level, 2 years post-training.

In the current study, lack of practice among nursing students may be due to lack of nursing students' knowledge that reflected on their performance, lack of orientation program prior to work in hospital units and wards. Moreover, unavailability of guideline books in work place, lack of interest and motivation to the students and lack of in-service training courses, all these factors may be affect nursing students' level of practice. So, that findings implied which procedures considered most needed first aid measures to be improved, included in curriculum or reinforced to nursing students.

Part (IV): Nursing student's attitude toward first aid.

As regarding Nursing student's attitude regarding to first aid **,** the present study showed that, more than half of nursing students had positive attitude toward first aid. This result was in the same line with **Khan et al (2010),** whose study mentioned that more than two thirds of undergraduate medical students had positive attitude toward first aid. As well

as **Joseph et al (2014),** study who mentioned that 94.4% medical students had positive attitude toward first aid and wanted first aid training to be part of their curriculum.

In the current study, the nursing students' attitude toward first aid considered positive because the majority agreed that first aid should be a separate curriculum in their nursing college. As well as, the majority wished to have a periodical training courses from their faculty and approximately half of them valued the importance of public and laypersons increasing awareness of first aid.

Khan et al (2010 study support the current study as (94%) of undergraduate medical students realized that first aid training should be part of the curriculum with 84% suggesting that it should be part of pre-university curriculum.

Part (V): the relation between the nursing student's level of knowledge, attitude and practice in relation to demographic characteristics in addition to correlation between knowledge, attitude and practice of nursing students under study.

Concerning the relation between total satisfactory scores of nursing students' knowledge, attitude & practice and their demographic characteristics, this study revealed that there were highly statistical significant relations between the nursing students' knowledge, attitude & practice with their previous experience in first aid and significant relation between their knowledge, attitude & practice and training course attendance in first aid.

These results were supported by **Mauritz, Pelinka , Kaff, Segall and Fridrich (2003)** study who showed a clear relationship between the level of first aid training and the quality of first aid measures employed by bystanders, there was other supporting from **Rajakumari 2015** study who mentioned that the effectiveness of structured teaching programme showed high level of significant at p<0.001 level.

In the current study, that relation between total satisfactory scores of nursing students' knowledge, attitude & practice and their demographic characteristics indicates that education and continuous training has a vital role in improving the knowledge, attitude and practice of the students and consequently improving the quality of care rendered to victim needing first aid measures. As in **Rajakumari, 2015** study that showed that programme was an effective method to improve the knowledge, attitude and practice of first aid measures.

Concerning the correlation between total satisfactory scores of nursing students' knowledge, attitude and practice, this study revealed that there were appositive and highly significant relation between knowledge, attitude and practice of nursing students with each other. This result is highly supported by the **Rajakumari ,2015** study who reported that the post test level of knowledge mean score was 15.25 with S.D 1.02 , practice means score was 15.18 with S.D 1.65 and the attitude mean 12.39 with S.D 1.748 that clearly indicates a positive correlation between knowledge and practice (r = 0.12) which is significant at p<0.05 level and a positive correlation between knowledge and

attitude (r = 0.71) which is significant at p<0.001 level.

This result was in the same line with **Seham, Nagwa and Lulah (2015)** study results which revealed that there were statistically significant positive correlation between knowledge and practice throughout the study, **Muneeswari (2014)** reported that there was statistically significant correlation between post-test knowledge of first aid with performance of the students.

So, as regards to the answer of the research question; regarding students awareness towards first aid measures, the study showed that the only (40.8%) of nursing students under study had satisfactory scores of knowledge level regarding first aid measures. While, (55.4%) of them had satisfactory scores of practice. Only attitude showed positive relation toward first aid measures.

That is supported with **Howard and Honghton, 2012** suggested that nurses would be more willing to offer help if they were confident in their first aid skills. This implies that first aid skills and knowledge could be useful addition to registered nurses' practice.

In the same line; **Singletary et al[2] (2015)** stated that, more research is needed to provide a stronger evidence-base for the best ways of improving the effectiveness of first aid education.

In summary, the results of the present study revealed that, there is a need to focus on development of nursing students' knowledge, attitude and practice, so efforts should be directed toward enhancing first aid awareness among nursing students. Nursing students must

have formal organized first aid curriculum in their faculty, access to updated information at regular interval, learning resources and continuous educational opportunities.

Conclusion:

Based on findings of the present study, it can be concluded that:

Only less than half of nursing students under study had satisfactory scores of knowledge level regarding first aid measures. While, slightly more than half of them had satisfactory scores of practice and positive attitude toward first aid measures. Furthermore, there were statistically significant relation between total satisfactory scores of knowledge, practice & attitude of nursing students under study and their previous experience and attendance of training course about first aid measures.

Recommendations

The results of this study projected the following recommendations:

1) The importance of regular periodical training courses about first aid and basic CPR for post graduate nursing students for continues updating their knowledge and performance.

2) First aid and basic life support should be integral part of all nursing faculties curricula to ensure that nursing student could grasp enough knowledge and performance that necessary to help people in emergency situations.

3) Further studies is recommended to evaluate the reflection of introducing first aid

course on nursing student's performance and consequently on the patients' outcome.

4) The study should be replicated on different faculties /settings in order to generalize the results.

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