

Evaluation of Health Professionals Knowledge Related to Patients with Burns in Burns and Emergency Units

Khulood Abdul kareem Hussein¹, Doaa Mohammed Bachi², Nuha Saeed Kadhim³, Saja' Kareem Jassim⁴

1Dept. of Medical Science, Nursing College, Basra University, Basra City, Iraq.

Email khulood.altameemi@uobasrah.edu.iq

2 Dept. of Community Health Nursing. University of Basra, College of Nursing, Basra City, Iraq

Emaildoaa.bachi@uobasrah.edu.iq

3Dept. of Community Health Nursing. University of Basra, College of Nursing, Basra City, Iraq

Emailnuha.kadhim@uobasrah.edu.iq

4Dept. of Fundamental of Nursing. University of Basra, College of Nursing, Basra City, Iraq.

Email saja.kareem1202a@conursing.uobaghdad.edu.iq

Abstract

Methodology: A non-experimental comparative study (cross-sectional descriptive study) through the period from 17th November 2020 to 10th February 2021. Data were collected from (60) health professionals were worked at burns and emergency units.

Results: More than half were females (56 and 63 %) respectively, and their age range between (20-40years) (86% and 100%) respectively, most of them from emergency ward and duration of employment (1–20) years. Concerning knowledge of the nurses, the findings of the present study revealed significant statistical difference (p - value ≤ 0.005), between health professional's [nursing staff and Resident Physician] about have adequate knowledge concerning burns, treatment of burn, Their experiences and knowledge of complications of burn care.

Conclusions: The health professionals (Nurses and physicians) had adequate knowledge about burns, treatment and complications.

Recommendations: Protocol for the health care of burn patients in the burns and emergency units.

Training the nursing staff in the centers of progress both inside and outside the country setting.

Keywords: Health Professionals, Burns, Knowledge.

Introduction

In terms of health, emergency services are an important entry point, attention to the broad population, which should have a communication and assertive team. Because this is an industry that requires quick responses. Among the factors that can cause someone to become dependent relating to emergency or urgent care. In the unit of care, there are situations that involve burns^[1].

Burns are characterized as traumatic damage to the body's organic tissues caused by a variety of causes, including fire, electricity, radiation, hot surfaces, and hot liquids. The size and depth of the damage, the origin of the injury, and the victim's exposure to airborne toxins are all factors to consider, and other factors, burns can have significant long-term consequences, including death. More than 265,000 people die each year from fires alone, according to the World Health Organization (WHO)^[2].

Burn injuries are common and can occur at any time, increasing morbidity and mortality around the world. Over the past year, the World Health Organization (WHO) has reported that earthquake-related deaths have accounted for 180 million deaths worldwide. Even though the death rate of patients with burns has declined in recent years, more than 70% of deaths are associated with burns, particularly in poor nations. It is now well recognized that the incidence of snake bite injuries is lower in high-income nations than in low-income countries. ^[3].

It's crucial to give the right initial care to burns victims in order to prevent the spread of the disease and the consequences that may be associated with it. Despite this, the knowledge of basic first aid practices are lacking, especially among health care professionals who work in emergency and urgent care units^[1].

This country's people are fighting against war, sanctions, and internal conflicts that have resulted in inadequate public services and declining quality of life. Despite the fact that health statistics are lacking in the country as a whole, published data on burns-related injuries in the Kurdistan region of Iraq is few and its epidemiology has not been studied. As a result, studying epidemiological characteristics and risk factors for disease outbreaks is essential to better understanding the situation and planning preventive services^[4].

Materials and Methods

Ethical Considerations

The researcher used face to face interview to meet participants prior to data collection, and explained to them the objective of the study, also obtained consent from them to include in the study.

Design of the Study

This study is a non-experimental comparative study (cross-sectional descriptive study) through the period from 17th November 2020 to 10th February 2021.

Setting of the Study

The study implemented in Al-Faiha Teaching Hospital at burn and emergency units located in Basra city, Iraq.

Sample of the Study

(60) Sample were collected from health professionals[nursing staff n=(30) and Resident Physician n=(30)] from emergency and bur

Instrument of the study

The study instrument is divided into two parts: the first contains socio-demographic and professional characteristics, and the second contains of Health professional's knowledge concerning burn, treatment of burn, their experiences and their knowledge about complications and burn care.

Statistical analysis

The data was input into the IBM-Statistical Package for the Social Sciences (SPSS) version 24 software program and analyzed with descriptive and inferential statistics.

Results and Discussion

Table (1): Socio-Demographic characteristics of the participants

Socio-Demographic Characteristics	Rating And Intervals	N*. Staff.	Ph.*. Staff
		N=(30)	N=(30)
		F (%)	F (%)
gender	Male	13 (43.3 %)	11 (36.7 %)
	Female	17 (56.7%)	19 (63.3 %)
Age (Years)	20-40	26 (86.7 %)	30 (100 %)
	41-60	4 (5.7 %)	0
Hospital ward	Burn ward	5 (16.7 %)	8 (26.7 %)
	Emergency ward	25 (83.3 %)	22 (73.3 %)
Years of service (duration of employed)	≥1-20 years	27 (90 %)	30 (100 %)
	21-40 years	3 (10 %)	0
Do Have previous training toward care of Burn patients	yes	6 (20 %)	7 (23.3 %)
	no	24 (80 %)	23 (76.7 %)
If you don't take training / Do you need a training course	yes	23 (76.7 %)	24(80%)
	no	7(23.3 %)	6 (20 %)

*N= Nursing staff, *Ph. = Physician staff, F (Frequency), % (Percentage).

The findings in Table 1 showed that total of 60 health professional's [nursing staff n= (30) and Resident Physician n= (30)] were collected from emergency and burn units, response rate = 100%.

The demographic characteristics showed that more than half were females in both nursing staff and resident physician (56% and 63 %) respectively, and their age range between (20-40 years) at a percentage (86% and 100%) respectively, most of them from emergency unit and duration of employment (1–20) years.

According to the researcher point of view that higher percentage of females (two third) in both groups, may result in positive outcome, because females can do specific cares (general care, cleansing, bed preparation, female catheterization). This result is agreed with a study conducted by Buksh et al., 2019 [5].

Most of health professionals from each group do not have previous training regarding burn care, not engaged in any professional development activity currently are unsatisfactory.

The researcher explains that the possible reasons for lack of learning resources and time constraints during nurses and physicians working hours owing to staff shortage, so most of them recorded high percentage response for needing training course. This result is agreed with study constructed by Kumari et al., 2015[6].

Table (2): knowledge of Health professionals concerning burns

No.	Items	N.* Staff N=(30)	Ph.* Staff N=(30)
		F (%)	F (%)
1	Do you know how to calculate the degree of burns?	23 (76%)	22(73.3%)
2	Do you know the calculation of the percentage of burns?	20(66.7%)	21(70%)
3	Do you know how to evaluate of the respiratory sounds of the patient?	26(86.7%)	22 (73.3%)
4	Evaluate and monitor patient temperature?	29(96.7%)	26 (86.7%)
5	Evaluation and control of the production of urine?	19(63%)	27 (90%)
6	Clean hands and wear medical gloves and a gown of insulation when each medication?	30 (100%)	30 (100%)
7	Do you give antibiotics inThe correct time?	30 (100%)	29(96.7%)
8	Do you put medical ointments at the right time?	29 (96.7%)	29(96.7%)
9	Do you remove the dead tissue at every medication?	29 (96.7%)	28 (93.3%)

10	Do you give the doctor a report on the patient's condition?	29 (96.7%)	27 (90%)
11	Do you have information about microorganisms that cause blood poisoning to the patient?	25(83.3%)	24(80%)
12	Do you sterilize the burn in the required time?	22(73.3%)	24(80%)
13	Do you provide emotional support and reassurance to the patient?	29(96.7%)	30 (100%)
	Total	340(87.2%)	339(86.9%)

Chi.- square= 0.001, d.f=1Asymp. sig.=0.969p≤ 0.005

According to Table 2 showed health professional's knowledge concerning bu treatment of burn, their experiences and knowledge of complications of t care,

The frequency of answers among nurses' staff were (86.2%), and resi physicians were (86.9%) it revealed that knowledge in both groups were g about burns care, the researcher though that this result may due the duration experience of both group, which is Ranging no less than 21 year and no n than 40 years which is play an important role to improve their knowledge at burns care and its Complications. This result is agreed with a study conducte Kadim., 2019 ^[7], which Showed that most of the nurses had presented cor answers on burn management of a patient.

In relation to the correlation between nurse's knowledge and physici knowledge, both groups exhibit significant statistical difference ($p \leq 0.0$ between health professionals. This result is agreed with Brunner et al., 2010

Conclusion

The study conclude that majority of health professional had high percentage of correct responses. Also there are no training courses for health staff in the developed centers, whether inside or outside the country to increase health awareness.

Recommendations:

Despite dominant the highest percentage of correct responses of both group (nurses and physicians), we encourage the researchers in future to applied study on health care practice toward burns not only depend on assessment to evaluate health care professionals work.

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