



## Assessment of Nurses' Knowledge regarding Acute Pain in Emergency

### Department

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### ABSTRACT:

Pain as the fifth vital sign is the most common reason for seeking health care. For relieving patients' pain, nurses have an important role, by administering pain-relieving interventions (pharmacologic or non-pharmacologic), monitoring the effectiveness of those interventions, recognizing the adverse effects of drugs, and supporting patients when the prescribed intervention is not enough for relieving pain. Because of nurses' responsibility in pain assessment and management, they need to have enough knowledge of pathophysiology of pain the physiologic and psychological consequences of pain, and the latest methods being used to treat and relieve pain .Descriptive Cross-Sectional Design is adopted in the current study to achieve the early stated objectives. The study started from January 2nd, 2021 until May, 20th, 2021. A Non-Probability (Convenience Sample) of (60) nurses were including in the present study. Sample collect from emergency department that include Medical ward and surgical ward.The results of the present study indicated that the majority of the samples (93.33%) have deficit knowledge, which agree with the results of the study showed that Palestinian nurses in critical care units possess inadequate knowledge about pain management done . The results of the present study indicated that the majority of the samples (93.33%) have deficit knowledge, which agree with the results of the study showed that Palestinian nurses in critical care units possess inadequate knowledge about pain management done. Conclusions according to the present study findings, the researcher can mention the following conclusions:Most of nurses in medical units had knowledge deficit concerning management of acute pain in emergency department. It is found that the most of nurses are middle age group within (35-39) years old. It is concludes that the most of nurses are institute and college graduated, most of the nurses years' experience in medical wards(1-10 years). most of the sample have participating in the sessions training in medical wards but no related to acute pain in emergency department .

Encouraging nurses to update their information by participating in training sessions and conference inside and outside Iraq to improve their knowledge regarding acute pain management in emergency department

**KEY WORDS:** Assessment, Nurses, Knowledge, Pain, Acute pain, emergency.

### INTRODUCTION:

Pain as the fifth vital sign is the most common reason for seeking health care. For relieving patients' pain, nurses have an important role, by administering pain-relieving interventions (pharmacologic or non-pharmacologic), monitoring the effectiveness of those interventions, recognizing the adverse effects of drugs, and supporting patients when the prescribed intervention is not enough for relieving pain. Because of nurses' responsibility in pain assessment and management, they need to have enough knowledge of pathophysiology of pain, the physiologic and psychological consequences of pain, and the latest methods being used to treat and relieve pain (Rafiei1., et al, 2017).

Millions of people worldwide are suffering from pain, whether they are in the hospital, their homes or assisted living facilities.<sup>3</sup> The incidence of moderate to severe pain is 20–80% worldwide. Community-based surveys find that 15–25% of adults suffer from chronic pain at any given time, a figure that increases to 50% in those older than 65 years.Globally, it has been estimated that 1 in 5 adults suffers from pain and that another 1 in 10 adults is diagnosed with chronic pain each year ( Jira, et al.,2018).

Acute Pain is one of the most common complaints that makes patients visit the emergency department (ED) Pain is a subjective and multidimensional event categorized into acute and chronic, and the emergency physicians encounter both the types Pain affects the physical, social, and mental activity of patients and can reduce their quality of life.( Janati ,et al.,2018).

Adequate acute pain management in the prehospital setting is both realistic and achievable, but improvement will require an understanding of the aforementioned pain management barriers and limitations in emergency medical services (EMS) systems, development of pain management policies/strategies ], and investment in pain management education demonstrated that, after a 3-hour educational intervention(McCaul, et al.,2019).

Nurses role in Pain management is a vital component of patient care, particularly in the emergency setting where pain can hinder the opportunities to treat and manage pain causing conditions. Pain remains one of the primary reasons for patients to seek emergency medical care, yet despite this it often remains under-acknowledged, -assessed and -treated Acute pain is of itself very distressing, and if unresolved can lead to complications and, in the longer-term(Sinatra,2010).

Acute Pain remains a significant problem for patients hospitalized in intensive care units (ICUs). As research has shown, for some of these patients pain might even persist after discharge and become chronic. Exposure to intense pain and stress during medical and nursing procedures could be a risk factor that contributes to the transition from acute to chronic pain, which is a major disruption of the pain neurological system..( Kyranou and Puntillo,2012).

## **METHODS AND MATERIALS**

### **Design of the Study:**

A Descriptive Cross-Sectional Design is used through the present questionnaire study in order to achieve the study objectives. The period of the study is from 2<sup>nd</sup> January 2021to 20<sup>th</sup> May 2021.

### **Setting of the Study:**

The study is conducted in Al-Najaf Al-Ashraf City/Al-Najaf Al-Ashraf Health Directorate / Al-Sadder Medical City/ (Emergency department that include Medical ward and surgical ward).

### **Sample of the Study:**

A Non-Probability (Convenience Sample) of (60) nurses were including in the present study. Sample collect from emergency department that include Medical ward and surgical ward.

### **Including Criteria:**

The researcher used the following criteria for specifying the study subjects those who are included in the study, patients out of these criteria are basically excluded:

1. Nurses work at the teaching hospital.
2. Male and female nurses.
3. Nurses work at the morning and night shift
4. Nurses work in the (Emergency department that include Medical ward and surgical ward).

### **Study Instrument:**

An assessment tool is adopted and developed by the researcher to assess the nurses knowledge for patients with emergency acute pain. The final study instrument consists of tow parts:

Part I: Nurses' Demographic Data.

Part II: Nurses knowledge regarding Acute Pain in Emergency Department .

### **Data Collection:**

The data collection is done by utilization of the semi-structured questionnaire and by means of self – reported technique with the object and the researcher use Arabic version of the questionnaire. The data collection process started from March, 1st, 2021 to March, 29th, 2021

### Validity of the Instrument:

A content validity of the study instrument conducted through a group of experts who have more than 10 years of experience in nursing field.

### Statistical analysis:

The data were analyze through application of the descriptive and inferential data analysis methods, included:

- Frequency, percentage, and mean of scores.
- Chi-square.
- Alpha Cronbach for the reliability of questionnaire (Internal consistency ).

## STUDY RESULTS AND FINDINGS

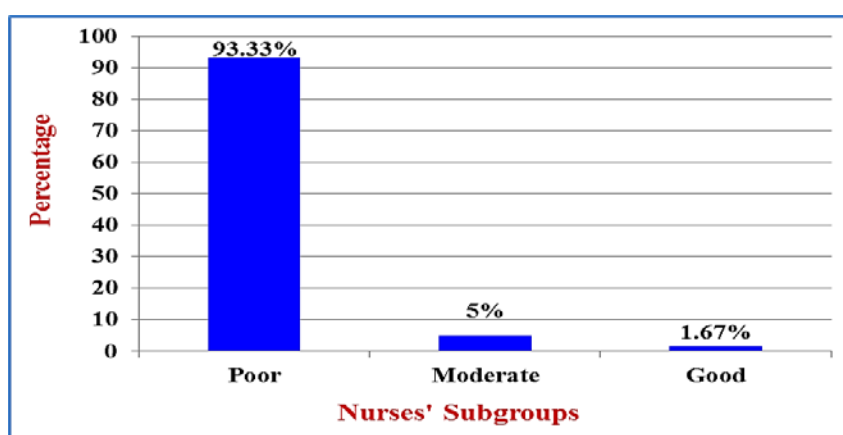
**Table (1)** Descriptive statistics (frequency and percentage) for the demographic data of nurses

Demographic data	Sub-groups	Frequency (N=60)	Percentage
Gender	Male	39	65.0
	Female	21	35.0
Age / years	20-24	6	10.0
	25 - 29	13	21.7
	30 - 34	11	18.3
	35 - 39	17	28.3
	≥ 40	13	21.7
Educational Status	Nursing secondary School Graduated	17	28.3
	Nursing Institute graduated	25	41.7
	Nursing College Graduated	16	26.7
	Postgraduate	2	3.3
Years of experience	1-5	18	30.0
	6-10	16	26.7
	11-15	10	16.7
	16-20	4	6.7
	≥ 21	12	20.0
Years of experience in emergency ward	1-5	27	45.0
	6-10	18	30.0
	11-15	15	25.0
Training sessions related to acute pain	Yes	9	15.0
	No	51	85.0
Number of Training sessions	1-4	39	65.0
	5-8	16	26.7
	9-12	5	8.3

Table (1) shows that the table shows that the majority of the study sample is male (65%) ; those with ages ranging between 35-39 years (28.3%). Also, the result in this table above showed that the majority of nurses graduated from nursing institutes (41.7%). Moreover, (30%) have (1-5) years of experience, while (45%) have (1-5) years of experience and (65%) of them have (1-4) training sessions

**Table (2) :** Frequency and percentage of nurses' subgroups according to their knowledge assessment about acute pain management

Nurses' subgroups	Poor	Moderate	Good
Frequency	56	3	1
Percentage	93.33	5.00	1.67



**Figure (1) :** Percentage of nurses' subgroups according to their overall knowledge assessment about acute pain management

Table (2) and figure (1) are about percentage of nurses' subgroups according to their overall knowledge assessment about acute pain management, it shows that about (1.67%) of the nurses have good knowledge, (5 %) of them have moderate knowledge ; while (93.33 %) have poor knowledge.

**Table (3):** Overall Assessment of Quality of Life for Patient with Epilepsy:

Overall assessment of patients' satisfaction	MS	RS	Assessment
	1.66	55.44	Fail

S

Table (3) shows that the overall assessment of patients' responses to the quality of life for patients with epilepsy scale items is (fail).

**Table (4):** Correlation between Quality of Life for Patients with Epilepsy and their Demographic Data:

Demographic data	Chi Square	df	P value	Sig.
Gender	6.81	1	0.009	HS

<b>Age / Years</b>	<b>1.13</b>	<b>4</b>	<b>0.88</b>	<b>NS</b>
<b>Educational Status</b>	<b>34.63</b>	<b>2</b>	<b>0.000</b>	<b>NS</b>
<b>Years of Experience</b>	<b>0.84</b>	<b>5</b>	<b>0.72</b>	<b>NS</b>
<b>Years of experience in emergency ward</b>	<b>0.26</b>	<b>2</b>	<b>0.64</b>	<b>NS</b>
<b>Training sessions related to acute pain</b>	<b>12.25</b>	<b>1</b>	<b>0.001</b>	<b>HS</b>
<b>No. of Training sessions</b>	<b>1.34</b>	<b>5</b>	<b>0.39</b>	<b>NS</b>

df= degree of freedom ; NS : Non-significant at P value <0.05 ; S : Significant at P≤0.05 ; HS : High Significant at P value ≤0.01

Table (3) Concerning table (3.4) is about the association between the overall assessment of nurses' knowledge regarding acute pain management and their demographic data there is a non-significant difference association ( $P>0.05$ ) between the overall assessment of nurses' knowledge regarding acute pain management and their demographic data, except for gender, Training sessions related to acute pain in which there is a significant ( $P <0.05$ ) association between the overall assessment of nurses' knowledge regarding acute pain management

### Discussion:

As part of the general nurses knowledge regarding acute pain in emergency department , accurate and suitable care is needed to reach desirable aims of the management for emergency patient. The present study achieve many results in this regards. According to (Table 3.1) the result related to demographic data found that majority of the sample in study were male (40%) at age groups (35-39) years old. The result of age group in the match with the results of another study done by (Kizza,et al., 2016) . Also this result is in agreement with another study done by (Salameh,2018) they found that the age group within (28-34) ,( 35-54) were high percent about 95%and 25 repectively. This may be related to older nurses are willing more to participate in study to gain more knowledge and practice while most of the young nurses think they don't need more knowledge as they reach the level to work as mentor

About the gender of the study subjects, the highest percentage of the participants are male (65%) in study. This result is in consistency with (radhi & tafwiq, 2016) who reveal in their study that male are(56%), in addition, another study done by (Hassan& Hassan, 2012) they represented that (77.5%) of nurses were male in the study, This is because of the number of female in the emergency wards are few as well as most of the nurses in the emergency female wards consists of male and female therefore female nurses most of them refuse to participate in this study .

In the present study (41.7%) of the sample in the study are graduated from nursing institute, whereas 26.7% are graduated from nursing college. Many previous studies were in agreement with this result they found that the majority of study samples are graduate from Nursing Institute (Naseer and Hassan 2014; Al-Hamza& Nasir, 2017). Other study done by (Salameh, 2018) in the study was Nurses' knowledge regarding pain management in high acuity care units made up was nursing college (Baccalaureate) Degree were 73.2% of the total population. The highest level of education was mostly the Baccalaureate degree.

Concerning the years of experiences in nursing, the result of present study revealed that the majority of nurses (30%) in study were between (1-5) years, this result is in agreement with (Hussein & Jaddoue, 2015) in their study "Impact of Health Educational Program Upon Nurses' Knowledge Towards Postoperative Wounds Care ". This is because they want to benefit and increase their knowledge as well as accept them to participant in study to gain knowledge.

Regarding years of experience for the nurses in emergency ward in, the highest percent are (45%)for nurses who have (1-5) years of experiences, (Sickder, 2010) in his study "Nurses' Knowledge and Practices Regarding Prevention of Surgical Site Infection In Bangladesh" found that (82.5%) of nurses with years of experience(1-5) , another study to

year experience done by (Salameh, 2018) finding that the Nurses' knowledge regarding pain management in high acuity care units according to experience ' years was less than 10 years. Also in study by (Mohammed, et al, 2020) when study evaluation of nurses' knowledge and attitudes toward pain management at Baghdad teaching hospitals (37%) were for (1-5) years were employment in nursing, This result may happen because the hospital policy use a special staff allocation plan from time to time to occupy the empty places in the hospital with nurses from another area. Therefore, moving the nursing staff to another working place can affect their experience which can be incomplete experience.

About training session, the majority of the sample in study The present study shows that (51%) of nurses were not participating in the training sessions regarding acute pain in emergenc. Samira and Rajaa study finding agree this result through that (82%) of the involved nurses had no training courses in orthopedic. In other study Al-Barwari shows that (95%) of nurses were not participating in the training sessions related to care of fractures. Also in Hussein, and Al-Ganmi, (2013) in their study was done in Baghdad they reveals that (8.0%) only were always participating in training courses. In addition, El Enein study results 97.5% had no training sessions towards fracture care and this result accompany the Islam study result that indicates 98.9% of the study sample does not participating in any training sessions.

Concerning the result related to associations between and demographical data in (Table 3.3) the present study reveals that there is no significant association between nurses knowledge and demographic data of study in related to (age, gender, residency, marital status, level of education, years of experience in nursing and emergency ward, training session, number of training session), this indicates that the nurses in study group are not affected by any of these demographical variables, and their knowledge were poor

### **Conclusion :**

Based on the study results, the study concludes the following :

- 1- Most of nurses in medical units had knowledge deficit concerning management of acute pain in emergency department
- 2- It is found that the most of nurses are middle age group within (35-39) years old. It is concludes that the most of nurses are institute and college graduated, most of the nurses years' experience in medical wards (1-10 years). most of the sample have participating in the sessions training in medical wards but no related to acute pain in emergency department.
- 3- The emergency nurses have inadequate knowledge in some aspects for management of patients' with acute pain
- 4- There is no relation between knowledge and demographical data ( educational level, years of experience, number of training related to acute pain) of the nurses have no effects on knowledge with acute pain.

### **Recommendations :**

Based on the study results and conclusion, the study recommends that:

- 1 Encouraging nurses to update their information by participating in training sessions and conference inside and outside Iraq to improve their knowledge regarding acute pain management in emergency department.
2. or practice, to promote them.
3. Ministry of health and Health directorate have to get befits from educational programs that result from researches and dissertations to improve nurses' knowledge acute pain in emergency department. and make them affordable through booklets or apply educational courses activities.

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