

Evaluation of Nurses' Knowledge and Attitudes toward Pain Management at Baghdad Teaching Hospitals

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Abstract

Poorly managed or unmanaged pain is a problem that affects individuals, entire healthcare systems and societies throughout the world .

Objectives: To assess nurses' knowledge and attitudes about patient's pain management and to find out the relationship between knowledge , attitudes and their demographical characteristic.

Methodology: A descriptive cross sectional design study was carried out among 100 nurses working in male and female surgical wards, ICU, surgical ward, emergency and operating theatre of four teaching hospitals, Baghdad city. Census method was used to select the participants, in which all the nurses working in the selected wards who agreed to participate in the study were selected. Data was collected by distributing structured self-administered questionnaire which was a modified form of a standard tool, that is, Nurses' Knowledge and Attitude Survey Regarding Pain (NKASRP) developed by Ferrel and McCaffery.

Results: The majority of the study were male who accounted for (63%) of the total participants while female constituted (37%). Most of participants (49%) were ages between (18 – 27) years old, a high percentage of them were have institute graduate (40%), (50%) of the nurses were single and the remainder was married. Majority of them (37%) were employee (1-5) years in employment in nursing. Majority of them (45%) were employee (1-5) years in intensive care unit, and finally majority of nurses (77%) have training session about patient's pain management.

Conclusions: This study indicated that nurses' have poor knowledge about pain management, as well as study indicated overall nurses' have positive attitudes toward pain management.

Keywords: *Evaluation, Nurses', Knowledge, Attitudes, Pain Management*

Introduction

Pain is defined as unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage ⁽¹⁾. Chronic and acute pain differs in both mechanism and duration. Acute pain is a behavioral or biochemical cascade initiated by tissue injury ⁽²⁾. Pain is the major symptom that brings patients to the health care setting and is also the commonest symptom that hospitalized patients encounter in general and in surgical settings

in particular. Pain management practices are the activities that are provided by nurses and other health care professionals to ensure that the pain is managed effectively ⁽³⁾. An examination of the prevalence of acute pain in hospitalized adult patients, by way of a systematic review, revealed a range of 37.7%-84.0% of patients reporting acute pain ⁽⁴⁾. Nurses are key contributors to inter professional pain management teams, and are involved in both the assessment and management of pain. It is important to understand pain knowledge and attitudes amongst nursing. Effective pain management is a vital component to quality patient care. Nurses play an essential role in implementing pain management.

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Methodology

A descriptive cross sectional study design was applied for assessing knowledge and attitude of nurses on pain management. The study site was Baghdad teaching hospital, Kase AL- Harere teaching hospital, Al-Kindey teaching hospital and Al- Karama teaching hospital in Baghdad city. The selected wards for the study were male and female surgical wards, ICU, surgical ward, emergency and operating theatre. These wards were selected purposively as the nurses working in these areas have to deal more often with pain management. All the nurses working in the selected wards who agreed to participate in the study were selected. The total number of nurses working in the selected wards was 150. However, as few nurses refused to participate in the study, the total sample size was 100. Modified after literature review and discussion with the experts as well as considering the national context. The tool’s test-retest reliability was $r = 0.85$ and the internal consistency reliability was $\alpha r = 0.75$. Each correct answer was scored 1 and there was no negative marking for wrong answer. The data was collected through distribution of self

-administered questionnaire. The instrument comprised of pre-designed structured questionnaire which included demographic information, 22 multiple choice questions and 10 questions related to nurses’ attitude. The standard tool was used, that is, Nurses’ Knowledge and Attitude Survey Regarding Pain (NKASRP) by Ferrel and McCaffery (5). The data collected from 1st October 2018 to 15th July 2019. The data were analysed through statistical analysis was done using statistical package for social Sciences (SPSS v23.0).

Results

The majority of the participants were male (63%) of the total participants while female constituted (37%). (49%) of participants were ages between (18 – 27) years, majority of them were have institute graduate (40%), (50%) of the nurses were single and the remainder was married. (37%) were employee (1-5) years in nursing, (45%) were employee (1-5) years in ICU, and finally (77%) of nurses’ have training session about pain management.

Table (1) : Mean of Score of Nurses’ knowledge domain concerning Patient Pain Management.

No	Items	correct	ncorrect	MS	A.D
1	Most accurate judge of the intensity of pain is (patient’s)	83.0	.17	.83	G
2	Pain should be assessed before & after administering drugs.	84.0	16.0	.84	G
3	Side effects of narcotics should be observed at least 30 minute after administration	42.0	58.0	.42	P
4	A pain rating scale, is appropriate for patients to use to rate their pain.	79.0	21.0	.79	G
5	A patient’s pain should be assessed at rest and during mobilization	40.0	60.0	.40	P
6	Pain assessment is based on the patient’s behavior and physiological changes.	82.0	18.0	.82	G
7	Patients with a history of substance abuse should not be given.	56.0	44.0	.56	F
8	The most common side effect of morphine.	25.0	75.0	.25	P
9	The recommended route of administration of opioid for pts with persistent cancer -related pain.	22.0	78.0	.22	P
10	Analgesic is considered drug of choice for the treatment of prolonged moderate to severe pain for cancer patients	44.0	56.0	.44	P
11	Analgesics for postoperative pain should initially be given. Around the clock on a fixed schedule	25.0	75.0	25.0	P
12	The most likely reason a pt with pain would request increased doses of pain medication.	54.0	46.0	.54	F
13	How likely it is those pts who develop pain already have an alcohol &/ drug abuse 15min	53.0	47.0	.53	F

Cont.. Table (1) : Mean of Score of Nurses' knowledge domain concerning Patient Pain Management.

14	The time to peak effect for morphine given orally	53.0	47.0	.47	P
15	Patients may sleep in spite severe pain	18.0	82.0	.18	P
16	Valium is not effective pain relievers unless the pain is	42.0	58.0	.42	P
17	Vital signs indicators of the intensity of a patient's pain	8.0	92.0	.08	P
18	Respiratory depression rarely occurs in pt take opioid	60.0	40.0	.60	F
19	useful for treatment of cancer pain	28.0	72.0	.28	P
20	statement is true regarding opioid induced respiratory depression	41.0	59.0	.41	P
21	A 30 mg dose of oral morphine is approximately equivalent to morphine	41.0	59.0	.41	P
22	The most likely reason a patient with pain would request increased doses of pain medication	80.0	20.0	.80	G
	Total	48.1	51.9	.42	p

(A.D.): Assessment Degree, M.s=mean of score [(0 - .49) = Poor knowledge (F); (0.5 - .74) = Fair knowledge (F); (0.75 - 1) = Good Knowledge(G)]

Table (2) Mean of Score of Nurses' Attitudes domain concerning Patient's Pain Management

No	Items	Strong agree	Agree	Disagree	MS	AD
1	Pain is seen in the patient's behavior	58.0	39.0	3.0	2.55	G
2	Distraction reduces pain intensity	43.0	50.0	7.0	2.36	G
3	Non-pharmacological interventions are very effective for mild to moderate pain	39.0	44.0	17.0	2.22	A
4	The use of placebo is important in determining if the patient's pain is real	57.0	41.0	2.0	2.55	G
5	Medical patients usually do not experience pain which is as intense as that experienced by surgical patient	58.0	37.0	5.0	2.53	G
6	When a medical patient complains of pain the best management is to assess the genuineness of the pain	44.0	51.0	5.0	2.39	G
7	Using pain assessment tools usually makes nursing more complicated and consumes time for other ward activities	28.0	61.0	11.0	2.17	A
8	Medical patients who complain of pain often, will be seeking staff attention	22.0	66.0	12.0	2.10	A
9	Nurses are best judges of the patient's pain intensity because they spend 24 hours with the patient	51.0	37.0	12.0	2.39	G
10	Because patients are not medically educated cannot give a reliable report of their pain	61.0	31.0	8.0	2.53	G

(A.D.): Assessment Degree, M.s=mean of score [(1 - 1.66) = poor (p); (1.67 - 2.33)= Acceptance(A) ; [(2.34 - 3) = Good (G)]

Table 3: Association between Nurses Knowledge and socio demographic variables

Variables	df*	Mean Square	F	Sig.
Age	2	.685	1.145	.323
Level of Education	2	.432	.538	.585
Experience Years in Hospital	2	1.766	3.039	.052
Experience Years in ICU	2	2.261	3.281	.042
Training course	2	.251	1.417	.247

*: P ≤ 0.05; **: P ≤ 0.01, χ^2 , t-test

Table 4: Association between Nurses Attitudes and various factors

Variables	df*	Mean Square	F	Sig.
Age	2	.885	1.490	.230
Level of Education	2	2.000	2.595	.080
Experience Years in Hospital	2	4.229	2.364	.099
Experience Years in ICU	2	.282	.387	.680
Training course	2	.420	2.416	.095

Discussion

Throughout the course of the data analysis of the current study, the findings show the majority of the study were male who accounted for (63%) of the total participants while male constituted (37%). Most of the study participants (49%) were ages between 18 and 27 years old. A high percentage of them were institute graduate (40%), most of them (50%) were single, (37%) were for (1-5) years were employment in nursing, Majority of them (45%) were employee (1-5) years in surgical wards, and finally majority of nurses(77%) have training session about patient pain management.

These findings agreed with study done by Benimana, who reported that majority of participants 34 (39.5%) are aged between 31-35 years old; (22.1%) are ranged between (26-30)years and (18.6%) are aged between

(36-40) years , majority of participants 37 (43%) have between (3-10) years of experience in nursing ^(5,6,7) .

Fifty three questions assessed general knowledge of patient pain management. Overall (48.1%) of the participants answered knowledge questions correctly and (51.9%) responded “Incorrect answer”. All general question knowledge concerning method used to reduce or relieve patient pain through non-pharm logical and pharm logical intervention for patients suffering pain. The table (1) informs us that participants have scored 80% and above in only (4) questions. They scored between 50% and 79% in (5) questions and they scored less than 50% in thirteen questions. The highest score was 84%. The table also shows that (83%) knew that most accurate judge of the intensity of the patient’s pain, (84%) of nurses’ answers that pain should be assessed before and after administering drugs .Only (42%) knew

that side effects of narcotics should be observed at least 30 minutes after administration. Ninety seven of them asked pain rating scale, is appropriate for patients to use to rate their he/she pain, low percent of participation answer A patient's pain should be assessed at rest and during mobilization. It also show that (82%) of total population study reported that pain assessment is based on the patient's behaviour and physiological changes. It also shows that (56%) knew the meaning of opioid addiction, (25%) knew that obstructive sleep apnea is the risk factor of opioid induced respiratory depression, only (25%) knew the analgesics for postoperative pain should initially be given around the clock on a fixed schedule. It shows that (54%) knew that then patient will request increased doses of pain medications because he/she is experiencing increased pain. (54%) knew that likely it is those pts. who develop pain already have an alcohol / drug abuse 15 minute, (47%) knew the time to peak effect for morphine given orally is 15 minute and (18%) knew the patients may sleep in spite although severe pain. These findings agreed with study done by Benimana who reported that the (79.1%) knew that respiratory depression can occur in patients receiving opioids, and (89.5%) knew that sedation assessment must be done during opioid pain management because of excessive sedation that precedes respiratory depression. Only 27(31.4%) knew that obstructive sleep apnea is the risk factor of opioid induced respiratory depression. It shows that (70.9%) knew that after the initial dose of opioid is given, other doses will be adjusted according to patient's response. It also shows that 71(82.6%) knew the meaning of opioid addiction, and only (22.1%) knew the manifestations of physical dependence when there is abrupt discontinuation of an opioid⁽⁵⁾. These findings are similar to Yosef as he found that pharmacological knowledge of anaesthetists regarding post-operative pain management in Ethiopia were poor yet being knowledgeable about pharmacology of opioid analgesics was prerequisite for all health care professionals in the effective pain management⁽⁸⁾. Kizza, reported that most of participants had knowledge deficits and bad attitudinal beliefs which lead to ineffective pain management among surgical patients⁽⁹⁾. Another study done by Craig that found poor knowledge and bad attitudes of nurses towards pain management⁽¹⁰⁾. The results are also supported by shahriary et. al who found that oncology nurses lacked sufficient knowledge regarding pain management among cancer pain⁽¹¹⁾. (The study was also supported by study done in Rwanda by Ufashingabire et al., who found that nurses working in ICU had poor

knowledge and bad attitudes towards pain assessment and management⁽¹²⁾).

This finding was in good agreement with that obtained by Tufekci et al. have identified knowledge deficits about pain management and health care professionals misconceptions about pain as the major challenge towards effective pain management. Among the challenges about pain management that are related to health care professionals, there is insufficient knowledge about pain assessment and management, therefore health care professionals need to have recognition of it in order to improve quality of care through pain management^(13,14). The association between socio-demographic and nurses knowledge and attitudes score was explored. There are association between years of employment in nursing and studied sample knowledge at p value 0.05 and also illustrate that no relationship found with rest of studied variables. These findings are in line with study done by Irene, who reported that found no statistically significant evidence for a real difference between mean knowledge scores with respect to unit experience⁽⁶⁾. These findings are in line with study done by Indrah, the student t-test was employed to compare the associations between pain assessment practices and nurses demographic data namely years of experience as a registered nurse, years of experience as ICU and the qualifications⁽¹⁵⁾.

Conclusions

This study demonstrate that, despite poor nurses' knowledge regarding pain management, as well as study indicated overall nurses' have positive attitudes toward pain management. We recommend to There is need to design and implement a continuous professional education program on pain and its assessment with special focus on methods of assessment, guidelines, how to use assessment tools, protocols and charts for proper documentation for critically ill.

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Conflict of Interest: None declared.

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