DOI: 10.33899/mjn.2020.166258 Mosul Journal of Nursing

Awareness of pain among Nurses

Abd-Alrahman Hussein Salih[1] **Dr. Refai Yassein Al-Hussein**[2]

Ahmed Abd-Allah Al-Sabaawi[3]

Abstract

Nurses have a key role in effective pain management, the nurse's accurate assessment, prompt intervention and adaptation of pain relief measures are necessary for positive patient outcomes. This cross-sectional study carried out to highlight awareness of pain for its' importance to nurses. A convenience sample of (107) nurse selected randomly from four teaching hospitals in Nineveh Governorate through the period "December/2009-March/2010". Knowledge and Attitude Survey regarding Pain tool had been used n collecting data from the subjects which was self-administered through interview with each subject in the workplace. The main findings were; "Mean scores of correct answers= 15.65 ± 2.52, Total= 57.63, Percentage= 57.63%, Range= 40.74% - 85.19%", the workplace scores statistical significant differences with awareness as a ward or as a hospital working in. The study concluded that overall awareness was good as a total or as domains except patients' behavior domain while it recommended to include the educational curriculum by pharmacological area, patient assessment and integration of knowledge about pain into daily practice.

Keys; Awareness, Pain, Nurse.

[1] Master in Nursing, Al-Khansa's Teaching Hospital, Nineveh.

[2] PhD in Nursing, Assistant Professor, Technical Institute of Mosul/ Nursing Department.

[3] Diploma in Nursing, Al-Khansa's Teaching Hospital, Nineveh

Introduction

The presence of pain is one of the main reasons why people seek health care, yet pain is often under treated. Inadequate treatment has been linked to health care workers' failure to assess pain and to intervene appropriately [(1)]. Nursing a patient in pain is a challenging task requiring up-to-date knowledge, skilled interventions and attitudes that convey trust, care and an honest belief in what the patient says [(2)]. Under- treatment of pain and lack of knowledge about pain management have been evident for approximately two decades. Because nurses are often the cornerstone of pain management, nurses' knowledge in this area is especially important [(3)]. Therefore, nurses have a key role in effective pain management: The nurse's accurate assessment, prompt intervention, and evaluation of pain relief measures are necessary for positive patient outcomes [(4)]. Most researches about nurses' knowledge regarding pain has taken place in developed countries; however, limited research in this area has taken place in developing countries[(5)]. Several nursing research studies have found nurses to be lacking in knowledge of pain and pain management, as well as lacking skills in pain assessment. Also nurses have more contact with hospitalized patients than any other member of the healthcare team, and the fact that they have the prime role in promoting comfort and pain relief, it is crucial that they are able to make accurate pain assessments [(6)].

So, to highlight this topic as one of the nursing responsibilities, this research was emerged.

Methodology

1. **Design**; Cross-sectional design was carried out for the period through [December/2009 – March/2010].
2. **Setting**; Four Teaching Hospitals in Nineveh Governorate [Ibn-Sina, Al-Jamhori, Al-Salam and Al-Khansa'a].
3. **Sample**; A convenience sample composed of (107) nurse selected randomly from different wards who were willing and interesting in this study (after taking their approval). They are distributed regarding to hospitals working in to: twenty-two from Al-Jamhori, thirty from Al-Khansa's, twenty-five from Al-Salam and thirty from Ibn-Sina teaching hospitals.
4. **Instrument**; Knowledge and Attitude Survey regarding Pain Format was used in the study [(7)]. After adoption of the format, it divided into four categories; Nursing assessment= 8 items [1, 3, 8, 10,20, 22, 25, 26]; Beliefs/ Attitudes= 9 items [2, 7, 9, 15, 16, 17, 18, 24, 27]; Non-Pharmacological interventions= 3 items [5, 6, 19] and Patients' behaviours= 7 items [4, 11, 12, 13, 14, 21, 23]. Each item has two options; "yes=1 score" and "no=zero score". The depended significance level was (p.=0.05).
5. **Method**; Self-administered technique was depended through interview method with the subjects in order to explain and remove any obscurity of any item. Each interview lasted on average (30) minutes.

7. **Pilot study**;

   A. *Validity*; The instrument used is global depended for it is standard.

   B. *Reliability*; The instrument applied on six nurses in Ibn-Alatheer Paediatric Hospital through " Pre and Post" tests of a period of fourteen days between them at the first half of December/2009. Cronbach Coefficient correlation was computed (r.=0.83; P.=0.001).

8. **Statistical analysis**;

   A. *Descriptive analysis*; Frequency, Standard deviation, Minimum, Maximum and Mode were used.

   B. *Inferential analysis*; Analysis of Variance (ANOVA), Pearson's correlation and Chi-Square were used.

9. **Limitation**s;

A. Unwillingness, inattention and distraction of majority of the nursing staff to share as subjects in such research.

B. High level of misconception regarding many items unless they must explained in various expressions.

Results

Table (1); Demographic characteristics of the sample.

Characteristics	No.	%
Gender;		
Male	77	**72**
Female	30	28
Total	107	100
Age:		
30 years or less	60	**56.1**
31-40 years	31	29
41-50 years	12	11.2
More than 50 years	4	3.7
Total	100	100
Educational level;		
Primary nursing school graduate	4	3.7
Preparatory nursing school graduate	51	**47.7**
Institute nursing graduate	29	27.1
College nursing graduate	22	20.6
Post-graduate in nursing	1	0.9
Total	107	100
Ward working in:		
Maternity	24	22.4
Pediatric	26	**24.3**
Medical	13	12.1
Surgical	15	14
Fracture	11	10.3
C.C.U.	18	16.8
Total	107	107
Years of Experience:		
10 years or less	78	**72.8**
11-20 years	16	15
21-30 years	11	10.3
More than 30 years	2	1.9
Total	100	100
Training sessions:		
Never	50	**46.7**
One	16	15
Two	14	13.1
Three	11	10.3
Four	3	2.8
Five	9	8.4
Six	2	1.9
Seven	1	0.9
Ten	1	0.9
Total	100	100

The table depicts the highest percentages of distribution of the sample in regard to the variables as; 56.1% were from the age group (thirty years or less), 72% of the sample were males, 47.7% were preparatory nursing school graduate, 24.3% working in pediatric wards, 72.8% had ten years of experience or less and 46.7% hadn't any training session.

Table (2); Chi-Square of Pain Awareness Items;

No.	Item / Pain	Chi-Square	df	P. value
1.	Reporting and documenting a resident's pain is part of my job.	47.112	1	0.000
2.	Residents talk to me on a regular basis about their pain.	44.495	1	0.000
3.	Levels of pain should be rated by a nurse, not the resident.	0.084	1	0.772
4.	Residents can sleep in spite of moderate or severe pain.	1.579	1	0.209
5.	If the resident can be distracted from pain, he/ she doesn't have as severe pain as he or she reports.	34.776	1	0.000
6.	If a resident's pain is relieved by a "sugar pill or any placebo', the pain is not real.	17.28	1	0.000
7.	The mood of a resident can affect the severity of pain.	49.804	1	0.000
8.	Pain medicine can't really control pain.	1.131	1	0.288
9.	People get addicted to pain medicine easily.	2.701	1	0.1
10.	Experience of pain is often a sign that an illness has gotten worse.	15.71	1	0.000
11.	Residents that are mentally limited do not have has much pain as those who are not impaired.	5.841	1	0.016
12.	Pain is part of the aging process.	0.458	1	0.499
13.	Pain affects the resident's memory.	32.533	1	0.000
14.	Pain affects a resident's food intake.	64.383	1	0.000
15.	Residents only express their level of pain verbally.	47.112	1	0.000
16.	Psycho-social pain s as real as physical pain.	28.271	1	0.000
17.	Pain affects a residents social interaction.	52.27	1	0.000
18.	Residents may not report pain accurately due to fear of disease progression.	24.308	1	0.000
19.	Presence of any family member should affect a resident's pain.	61.318	1	0.000
20.	Vital signs are always reliable indicators of the intensity of a patient’s pain	4.944	1	0.026
21.	children under two years of age have decreased pain sensitivity and limited memory of painful experiences.	1.579	1	0.209
22.	Aspirin and other non-steroidal anti-inflammatory agents are not effective analgesics for painful bone metastases.	4.944	1	0.026
23.	Children less than 11 years old cannot reliably report pain	1.131	1	0.288
24.	Patients’ spiritual beliefs may lead them to think pain and suffering are necessary	3.374	1	0.066
25.	Diazepam is not effective pain relievers unless the pain is due to muscle spasm	2.701	1	0.1
26.	Analgesics for post-operative pain should initially be given around the clock on a fixed schedule	37.093	1	0.000
27.	The most likely reason a patient with pain would request increased doses of pain medication is requesting more staff attention	4.121	1	0.042

The table demonstrates that nine out of twenty-seven item regarding pain (3, 4, 8, 9, 12, 21, 23, 24, 25) hasn't significant differences at any level.

Table (3); Pain Related Awareness by Sample or Nurse's Demographic Characteristics;

Variable	Assessment	Beliefs/Attitude	Non-Phar. Interventions.	Patients' Behaviors.	Total
Age	Person correlation; r.=0.008; p.=0.993.	Person correlation; r.=0.12; p.=0.219.	Person correlation; r.=0.086; p.=0.337.	Person correlation r.=0.023; p.=0.814.	Person correlation r.=0.016; p.=0.872.
	ANOVA; F.=1.104; P.=0.351	ANOVA; F.=0.518; P.=0.672	ANOVA; F.=0.483; P.=0.695	ANOVA; F.=10.402; P.=0.752	ANOVA; F.=0.24; P.=0.868
Gender	ANOVA; F=0.771; P.=0.382	ANOVA; F=0.027; P.=0.869	ANOVA F=0.199; P.=0.657	ANOVA; F=3.973; P.=0.049	ANOVA; F=1.503; P.=0.223
Educational level	ANOVA; F=2.638; P.=0.044	ANOVA; F=1.518; P.=0.202	ANOVA; F=0.641; p.=0.634	ANOVA; F=2.203; P.=0.074	ANOVA; F=0.333; P.=0.844
Years of experience	Person correlation; r.=0.004; p.=0.968	Person correlation; r.=0.114; p.=0.244	Person correlation; r.=0.051; p.=0.6	Person correlation r.=0.003; p.=0.976	Person correlation r.=0.028; p.=0.774
	ANOVA; F.=0.447; P.=0.72	ANOVA; F.=0.659; P.=0.579	ANOVA; F.=2.489; P.=0.065	ANOVA; F.=1.707; P.=0.17	ANOVA; F.=1.797; P.=0.152
Training sessions	Person correlation; r. 0.149; p.=0.127	Person correlation; r.=0.057; : p.=0.563	Person correlation; r.=0.115; p.=0.239	Person correlation; r.=0.000; p.=0.999	Person correlation; r.=0.047; P.=0.633
Ward	ANOVA; F=6.255; P.=0.000	ANOVA; F=0.965; P.=0.443	ANOVA; F=2.634; P.=0.028	ANOVA; F=1.848; p.=0.11	ANOVA; F=3.604; p.=0.005
Hospital	ANOVA; F=5.914; P.=0.001	ANOVA; F=0.85; p.=0.47	ANOVA: F=3.144; p.=0.028	ANOVA; F=8.727; P.=0.000	ANOVA; F=4.833; P.=0.003

The table presents that there are various significance differences in pain as a total and in it's domains in regard to variables. Assessment in regard to; "educational level, ward working in, hospital working in" by using ANOVA test as (F= 2.638; P.

0.044), (F= 6.255; P.= 0.000) and (F= 5.914; P.= 0.001) respectively, Non-Pharmacological interventions in regard to: "ward working in, hospital working in" by using ANOVA test as (F= 2.634; P. 0.028) and (F= 3.144; P.= 0.028) respectively, Patient's behavior in regard to: "gender, hospital working in" by using ANOVA test as (F= 3.973; P. 0.049) and (F= 8.727; P.= 0.000) respectively, and as a total in regard to "ward working in, hospital working in" by using ANOVA test as (F= 3.604; P.= 0.005) and (F= 4.833; P.= 0.003) respectively, while person correlation doesn't indicate any significant relation with any variable.

Discussion

In the present study, the mean scores of correct answers was (Mean= 15.56; Std. Deviation.= 2.52, Minimum= 11, Maximum= 23, Mode= 16, Percentage= 57.63%, Range= 40.74%-85.18%, Total= 27), while eighteen item of the total survey format (66.67%) has significant differences at various levels as in (Table-3). In a study carried out by The Hope National Medical Center, Duarte, California, USA ; Nurses' scores on another scale regarding pain (PNKAS) which composed from forty-two items ranged from '13' to '41' (31% to 97.6%) with a sample mean of '27.9' (66%) [8]. A deficit in knowledge and attitudes related to pain management among Hong Kong Medical Units was prominent (percentage of total score=47.72, range=20-76%) [10]. From a study carried out in nine varied clinical units in a large, university-affiliated, teaching hospital in an urban area of the Northeast in USA to examine the knowledge, attitudes, and clinical practice of registered nurses (N = 120) regarding pain management, mean scores from the nursing knowledge and attitudes survey on pain revealed knowledge deficits and inconsistent responses in many areas related to pain management (mean, 62%; range, 41%-90%) [10-11]. Prominently reported knowledge deficit areas include issues related to pain physiology, pharmacology of analgesic drugs and risks associated with opioid drugs. Generally, nurses' knowledge among nurses at two sites in Eastern Sydney, Australia, was of a moderate standard, with a mean sample scores of 61%. Highest scores were achieved on issues related to nursing assessment and management of pain while knowledge of pharmacological issues attained lowest scores. Various literatures reports the knowledge mean scores of between 41%-72%. Encouragingly, the strongest knowledge domain was 'nursing assessment and management' with a correct rate of 77% [5], while the overall percentage of correct answers in a study done by (Visentin and colleagues) was 61%. [12].

In this study, the mean of correct awareness regarding nursing assessment was (Mean= 4.82; Std Deviation= 1.08; Minimum= 2; Maximum= 7; Mode= 4; Percentage= 53.5%; Total= 8). Five of eight items "62.5%" score various significant differences as; "Reporting and documenting resident's pain is part of my job" at (P.= 0.000), "Experience of pain is often a sign that an illness has gotten worse" at (P.= 0.000)", "Vital signs are always reliable indicators of the intensity of a patient's pain" at (P.= 0.026), "Aspirin and other non-steroidal anti-inflammatory agents are not effective analgesics for painful bone metastases" at (P.= 0.026) and "Analgesics for post-operative pain should initially be given around the clock on a fixed schedule" at (P.= 0.000) as in (Table- 2). In many clinical settings, nurses have a vital role in pain assessment. Surveys of nurses have revealed knowledge deficits in the areas contribute to under-treatment of pain, also nurses may be more influenced by the patient's behavior than the patient's self-report of pain [13]. Fewer than one-half of the nurses surveyed understand that the patient's self report of pain is the single most reliable indicator of pain [3], may have a tendency to underestimate severe pain and overestimate mild pain [6]. Another study found that the patient is the most reliable judge of pain intensity as 98% [14]. People in pain always report their pain to their health care provider. Nurses generally believed physiological signs and behaviors to be better indicators of pain

than verbal communication by patients. More recently a national Delphi survey in Australia by Bookbinder (2005) found that the defining characteristics considered to be critical to nurses' diagnosis of acute pain were: guarding and/or protecting the affected area; abnormal positioning; increased pulse rate/tachycardia and decreased mobility/immobility, as verbal complaints of pain; altered facial expression; crying/moaning [15]. Such research showed that adopting a policing attitude toward patients to confirm that routine medications were given at specified times played a role in preventing pain. Nevertheless, nurses need knowledge and awareness of when and how the timing of medication can be shifted toward ensuring that patients' pain levels are kept to a minimum and not allowing the pain to peak because medications are held until the exact time of the doctors' orders. Effective pain management was observed to occur in only 12% of the observed cases (n = 28), it involved rapid assessment of patients' pain cues, obtaining appropriate medications to alleviate pain, and evaluating the effectiveness within an adequate time course [3]. Nearly half of the nurses in one study stated that they would administer narcotic analgesia to post-operative or trauma patients for a maximum of three days[15]. Visentin and colleagues (2001) indicated that the high percentage of correct answers was obtained to questions regarding; the treatment of chronic pain at fixed times and not as needed as 90% [12]. Other studies have found that a large proportion of nurses do not understand the principle of scheduled analgesic administration [15].

In this study, the mean of correct awareness regarding attitude/beliefs was (Mean= 5.53; Std Deviation= 1.28; Minimum= 2; Maximum= 9; Mode= 6; Percentage= 61.44%; Total= 9). Seven of nine items "77.78%" score various significant differences as; "Residents talk to me on a regular basis about their pain" at (P.= 0.000), "The mood of a resident can affect the severity of his/her pain" at (P.= 0.000)", "Residents only express their level of pain verbally" at (P.= 0.000), "Psycho-social pain is as real as physical pain" at (P.= 0.000), "Pain affects a residents social interaction" at (p.= 0.000), "Residents may not report pain accurately due to fear of disease progression" at (p.= 0.000) and " The most likely reason a patient with pain would request increased doses of pain medication is requesting more staff attention" at (p.= 0.042) as in (Table- 2). Findings from surveys on addiction reveal that the longer the patient receives opioids the more concerned nurses become about causing addiction [3]. Data analysis from a study conducted on 313 nurse in Louisiana revealed misconceptions about analgesic administration and duration, along with an exaggerated fear about the incidence of addiction among patients [16]. As findings from another study involving 217 nursing students in the United Kingdom, it was founded that students exhibited an unrealistic or exaggerated fear of patients' risk of addiction when analgesia was prescribed for routine treatment, more than one half of those surveyed still recounted an exaggerated fear of patients' risk of addiction [14]. Saunders (2006) found among a sample (n = 313) obtained from approximately one fourth of the baccalaureate of science in nursing and associate degree in nursing programs in Louisiana- misconceptions about analgesic administration and duration, along with an exaggerated fear about the incidence of addiction among patients [3]. Other studies have found that a large proportion of nurses have exaggerated fears of addiction and respiratory depression [15]. Saunders (2006) found in his study that the most likely reason for increased requests for analgesia is increased pain as 94% [3]. People in pain demonstrate or show that they have pain - pain can be seen in the patient's behavior [17]. The respondents answered very positively to the question that the patient was the best person to judge the intensity of their pain and that the reason for requesting additional analgesic medication is increased pain [6].

In this study, the mean of correct awareness regarding non-pharmacological interventions was (Mean= 2.31; Std

Deviation= 0.84; Minimum= 0; Maximum= 3; Mode= 3; Percentage= 0.77%; Total= 3). All the three items "100%" score various significant differences at the same significant level (P.= 0.000) which are; "If the resident can be distracted from pain, he/she does not have as severe pain as he/she reports", "If a resident's pain is relieved by a 'sugar pill or any placebo', the pain is not real" and "Presence of any family member should affect a resident's pain" as in (Table- 2). Visentin and colleagues (2001) referred that the question with the lowest number of correct answers (30%) in their study was 'it may often be useful to give placebo to patient in pain to assess if he/she is genuinely in pain' [12]. Matthes and Malcolm (2007) ascertained that there was a severe deficit in knowledge relating to questions about non pharmacological methods of treating pain and opioid use in chronic pain conditions [2]. From another instance, Griffin and colleagues (2008) agreed upon that there is little data exist in the literature about nurses' knowledge, attitudes, or other aspects of decision-making regarding the selection of non-pharmacological pain treatments [18]. Therefore, the nurse should had adequate measurement and management of pain, knowledgeable about the pharmacological interventions of opioid, non-opioid, and adjuvant drug therapies.; The nurse should be knowledgeable regarding non-pharmacologic strategies for pain management (i.e. acupuncture, application of hot and cold, massage, breathing techniques, etc.); knowledgeable that placebos should not be utilized to assess if pain exists or to treat pain [17]. In the other hand, Griffin and colleagues (2008) referred that the wide array of non-pharmacological strategies available for relieving pain, such as distraction and relaxation techniques, has not been used consistently by nurses, While, the most widely-chosen non-pharmacologic methods- those selected by at least half of the nurses in all three vignette situations are sitting with the patient, using TV as a distraction, encouraging deep breathing [18]. Visentin and colleagues (2001) found that the question with the lowest number of correct answers (30%) was 'it may often be useful to give placebo to patient in pain to assess if he/she is genuinely in pain' [12].

In this study, the mean of correct awareness regarding patient's behavior during pain was (Mean= 3.39; Std Deviation= 1.18; Minimum= 0; Maximum= 6; Mode= 3; Percentage= 48.43%; Total= 7). Three of the seven items "42.86%" score various significant differences at different levels; "Residents that are mentally limited do not have has much pain as those who are not impaired" at (P.= 0.016), "Pain affects a resident's memory" at (P.= 0.000) and "Pain affects a resident's food intake" at (P.= 0.000) as in (Table- 2). Saunders (2006) indicated that patients can sleep despite pain as 82%, children under eleven year can reliably report pain as 94%, some patients' religious beliefs encourage them to believe that pain and suffering are necessary as 98% [14]. From another instance, the level of pain is often exaggerated by the patient; It is expected that the elderly, especially the frail elderly, always have some pain, also they can tolerate opioids as 95% [14,17]. Also, Nurse's perception of children's pain levels don't always match children's self-reports, which are considered the most reliable indicators of pain, it also found that 55% of the pediatric nurses surveyed through children over-reported their pain, despite that, on average, the nurses respondents in such study evaluated children's pain at the same high levels at which the children reported it [18].

In the present study, Pain as a total and for any Domain didn't score any significant differences at any level in regard to the age of nurses as in (Table- 3), while as a total pain, males score a high Mean as (15.7), Standard Deviation as (2.565) and Confidence Interval as (15.12 – 16.28). Jastrzab and colleagues (2003) found that younger nurses were more knowledgeable (p.= 0.0001) [5]. Also Yu (2007) referred that there were statistically significant differences based on age [19]. McCaffery and Ferrell (1997) and Yu (2007) agreed upon that there was no significant correlations were found in determining the

relationship between scores and demographic variables (e.g., age, nursing experience, or nurses' estimates of percentage of day spent caring for patients in pain) [8,19].

In the present study, Pain as a total and for any Domain scored significant difference only with nursing assessment in regard to educational level at (p.= 0.044) as in (Table- 3), while as a total pain, preparatory nursing school graduates score a high Mean as (16.04), Standard Deviation as (2.623) and Confidence Interval as (15.3 – 16.78). Education is clearly an important factor in improving the knowledge and attitudes needed in clinical practice [20]. Griffin and colleagues (2008) referred that postgraduate degree prepared nurses scored statistically significantly higher (mean = 31.5, 75%) than nurses with all other levels of educational preparation [18]. Also, several studies conducted in different countries suggest that nurses who are better educated are especially skilled at managing pain [8].

In the present study, Pain as a total and for any Domain scored significant differences with nursing assessment at (p.= 0.000), non-pharmacological interventions at (p.= 0.028) and as a total at (p.= 0.005) in regard to place of nursing work as in (Table- 3), while as a total pain, nursing staff working in orthopedic wards scored a high Mean as (16.55), Standard Deviation as (3.012) and Confidence Interval as (14.52 – 18.57). Critical care nurses were somewhat more knowledgeable about pain and its management than medical or surgical nurses (p=0.02). This might be reflective of the lower patient-nurse ratio, more 'controlled' clinical environment and a tendency towards the availability of more intensive educational infrastructure [5]. Also, hematology/oncology nurses, nurses from the intensive care unit, and nurses from the emergency room/transport scored significantly higher than nurses from other clinical areas [8].

Years of clinical experience, whether respondents were currently practicing nursing were not significantly associated with pain perceptions or with pain management choices. Several studies conducted in different countries suggest that nurses who have more clinical experience are especially skilled at managing pain [18]. Those with a higher percentage of correct scores in another scale (NKASRP-C) had longer clinical working experience and applied knowledge of pain to their daily work [9]. There was no differentiation in nurses' level of experience or qualifications and whether they delivered effective pain management [3]. In the present study, Pain as a total and for any Domain didn't score any significant difference at any level as in (Table- 3), while as a total pain, nursing staff working for more than thirty years scored a high Mean as (18.5), Standard Deviation as (0.707) and Confidence Interval as (12.15 – 24.85).

There were no significant differences among nurses in terms of attendance in an training session on pain management [19]. Recent pain education, whether respondents were currently practicing nursing were not significantly associated with pain perceptions or with pain management choices [18]. These results were in agreement with the findings of the present study as in (Table- 3), while as a total pain, nursing staff attendant to four training sessions scored a high Mean as (16), Standard Deviation as (1.732) and Confidence Interval as (11.7 – 20.3).

Also, nursing staff of (41 - 50) years scores a high Mean as (16.17), Standard Deviation as (2.406) and Confidence Interval as (14.64 – 17.7). Eventually, nursing staff working in Ibn-Sina hospital scored a high Mean as (16.63), Standard Deviation as (2.619) and Confidence Interval as (15.66 – 17.61).

Conclusions

1. Overall awareness regarding pain was good, also regarding assessment,

beliefs/attitudes and non-pharmacological interventions contributing to pain.

2. Somewhat weak awareness among nurses regarding patients' behaviors of patient under pain.

3. Presence of effect of some nursing staff characteristics as; workplace and hospital working in; in awareness of pain.

4. Somewhat impact of some nursing staff characteristics as; gender and educational level in some of the domains of awareness toward pain.

5. Absence of a clear impact of some nursing staff characteristics as; nurses' age, years of nursing experience and training sessions in awareness of pain as a total and in each of its' domains.

Recommendations

1. Inclusion the educational curriculum of academic schools by pharmacological subjects, patient assessment and the integration of knowledge about pain into daily practice.

2. Enhance ongoing medical and nursing teaching.

3. In-depth researches and studies regarding this topic.

References

Bookbinder R.; Advanced Practice nurses' Role in the Treatment of Pain, Can. Nurse, 2005;101(3):30-34.

Clarke E.**;** French B**.**, Bilodeau M.; Capasso V.; Edwards A, and Empoliti J., Pain management knowledge, attitudes and clinical practice: the impact of nurses' characteristics and education, J Pain Symptom Manage. 1996, Jan;11(1):18-31.

Ersek P.; Nursing Students' Knowledge and Attitudes Regarding Pain, Pain Manag Nurs, 2006;7(4): P.P. 167-175.

Griffin R.; Polit D. and Byrne M; Nurses Characteristics and Inferences about Children's Pain, Pediatric Nursing, 2008:34(4), 297-305.

Jastrzab G.; Fairbrother G.; Kerr S. and Mclnemey M: Profiling the 'Pain-Aware' Nurse: Acute Care Nurses' Attitudes and Knowledge concerning Adult Pain Management, Australian Journal of Advanced Nursing, 2003, 21(2): P.P. 27-32.

Kaiser K.; Perrone M.; Tarzian A.; Clyde C. and McCord M.; Pain Management/ Nursing Role/Core Competency; A Guide for Nurses, Board of Nursing , 2001.

Knowledge and Attitude Survey Regarding Pain, Developed by Betty F. and Margo M. at http://Prc.Coh.org, Revised 2008.

L. Plaisance, C. and Logan P.; Nursing Students' Knowledge and Attitudes Regarding Pain, Pain Management Nursing, 2009, Volume 7, Issue 4, Pages 167-175.

Lui, Y.; So, W. and Fong D.; Knowledge and attitudes regarding pain management among nurses in Hong Kong medical units, Journal of Clinical Nursing, Volume 17, Number 15, 2008 , pp. 2014-2021(8).

McCaffery M, Ferrell B. and Pasero C.; Nurses' personal opinions about patients' pain and their effect on recorded assessments and titration of opioid doses, Pain Manag Nurs. 2000 Sep;1(3):79-87.

Refer: Clarke E,; French B,; Bilodeau M,; Capasso V,; Edwards A, and Empoliti J.: Pain management knowledge, attitudes and clinical practice: the impact of nurses' characteristics and education. J. Pain Symptom Management, 1996 Jan;11(1): P.P. 18-31.

Refer; Matthews P. and Malcolm C.; Nurses' Knowledge and Attitudes in Pain Management , British Journal of Nursing , 2007:16(3): P.P. 174 – 179.

Renee C. and Man W.; Pediatric Nurses' Knowledge and Attitudes Survey Regarding Pain, Pediatric Nursing, Nov, 2000.

Rieman M.; Gordon M. and Marvin J: Pediatric Nurses' Knowledge and Attitudes Survey regarding Pain: A Competency Too; Modification, Pediatric Nursing, 2007: 33(4), 303-305.

Saunders B.; Nurses' Strategies for Managing Postoperative Pain, Pain Manag Nurs. 2005;6(1): P.P. 18-29.

Saunders B.; Nursing Students' Knowledge and Attitudes Regarding Pain, Pain Manag Nurs. 2006;7(4):167-175.

Sloman R.; Rosen G.; V . and Shir Y.: Nurses' assessment of pain in surgical patients, Journal of Advanced Nursing, 2005;52(2): P.P. 125–132

Sue S.; Post-Operative Pain Management Knowledge and Attitude of Pediatric Nurses: a New Zealand Regional View, 2005, Research Archive., Victoria, Thesis.

Visentin M.; Trentin L. and Demarco R; Knowledge and Attitudes of Italian Medical Staff towards the Approach and Treatment of Patients in Pain, Journal of Pan and Symptom Management, 2001, 22(5), 925-929.

Yu H;: A Survey of Chinese Nurses' Current Knowledge of Pain in Older People, Journal of Clinical Nursing, 2007: 16(5), 963-970.