

Pain Assessment and Management in Health Care: Nurses' Perspectives

Maha Zaben Alrewaili¹, Fatima Hussein Alghamdi², Faizah Shawhet Alruwaili³, Azizah Sabr Gareb Aldhafeeri⁴, Mariam Nehitar Gadr alshamari⁵, Mashaal Ali Alasmari⁶, Mashaal mohsen alanazi⁷, Marwa mohsen alanazi⁸
^{1,2,3,4,5,6,7,8}Ministry of Health

ABSTRACT

Background: chronic and acute pain are extremely common, particularly among hospitalized surgical patients, cancer patients, and general medical inpatients. More than half of patients report significant pain. The knowledge and attitude of health professionals toward pain management have frequently been described as inadequate. The purpose of this study was to investigate the attitudes and knowledge of nurses working in health care regarding pain management.

Methods: The Nurses' Knowledge and Attitudes Regarding Pain Survey was used in a quantitative, descriptive, cross-sectional design to examine nurses' perception (knowledge and attitude) about pain. We focused on the nursing field to assess nurses' perceptions of pain management. This study included a convenience sample of 200 nurses from hospitals.

Results: Participants who scored 75% were thought to have poor knowledge and an abnormal attitude. Participants with a score of more than 75% were deemed to have adequate knowledge and a positive attitude. According to the findings of the study, the knowledge and attitude percentage means of correct answers about pain management were 61% (SD: 11.97%; 95% CI 59.33-62.6%). Inadequate knowledge and attitude were present in 89.5% of all participants, while adequate knowledge and attitude were present in 10.5%. Previous experience with pain management education was statistically significant (p 0.05).

Conclusion and Recommendation: According to the findings of this study, nurses have insufficient knowledge and attitudes toward pain management. Younger nurses had a more positive attitude toward pain management than older nurses. Pain management education influences both knowledge and attitude. There is a need for innovative training approaches. Pain management education is an important part of the nursing orientation program and should be offered all year to all nurses. The NKASRP should be used as a baseline and follow-up measure to explore and test new evidence-based approaches to pain management among nurses.

KEYWORDS: Perception · Nurses' attitudes · Knowledge · KASRP

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INTRODUCTION

Chronic and acute pain are extremely common, particularly among hospitalized surgical patients, cancer patients, and general medical inpatients. More than half of patients report significant pain [1]. Reducing patients' pain and suffering is critical to providing quality care. Pain has an impact on one's quality of life, physical function, social relationships, and mental health. Other symptoms such as fatigue, sleep disturbance, loss of appetite, and anxiety are frequently associated with pain [2]. As a result, if pain is not treated, it can have complex side effects, such as higher costs and a longer hospital stay, which can disrupt the patient's daily life

[3]. The most common symptom reported by cancer patients is pain [4]. Cancer pain is estimated to affect 39.3% of patients after curative treatment, 55% during anticancer treatment, and 66.4% of patients with advanced, metastatic, or terminal disease [5]. Clinically, pain as the fifth vital sign has been found to be more complex in terms of assessment, evaluation, and management than originally anticipated [6]. Inadequate treatment has been linked to health care workers' failure to assess patients' pain and intervene appropriately [7]. Nurses are critical in the development of pain management plans. Inadequate pain relief is caused by nurses' lack of knowledge about pain assessment and management, as well

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as the prevalence of narcotic addiction. In addition to negative attitudes toward therapeutic levels of analgesia, pain undertreatment increases patient suffering and the amount of pain they experience. A common barrier to effective pain management is a lack of knowledge about pain and its characteristics [8]. The World Health Organization (WHO) recommended that governments develop and implement national pain relief policies and programs. Furthermore, the WHO designated a three-step analgesic ladder educational program in 1969. Nurses play an important role because they are the professionals who have the most frequent contact with patients receiving various levels of care. This puts nurses in a unique position to identify patients who are in pain and effectively assess and manage that pain [9].

According to the Nurses' Knowledge and Attitudes Survey Regarding Pain, nurses in Turkey [10], Italy [11], Iran [12], and Saudi Arabia [13] have insufficient knowledge and attitudes toward pain (NKASRP). Nurses in the United States have been shown to perform better, but many do not meet the 80% passing mark [14]. Despite the fact that many studies have been conducted throughout the world, this study was conducted to assess nurses' knowledge and attitudes toward pain control. The findings were compared to other studies, and an action plan was proposed.

MAIN GOAL

Our goal was to calculate the mean percentage of correct answers and then assess nurses' knowledge and attitudes toward pain management in one of the hospitals in March 2019.

The SMART goal is to achieve a level of nurses' perception of up to 85% by the end of October 2019 by implementing a training program in one of the hospitals.

METHODOLOGY

This research was conducted in a hospital in March 2019. It is a descriptive, cross-sectional study. To participate in this study, a convenience sample was chosen. The criteria for inclusion were met by 200 nurses. The nurses chosen had at least one year of experience and were fluent in English. The Knowledge and Attitudes Survey Regarding Pain, a structured, self-administered instrument, was used to collect data. There are 39 questions in total: 22 true/false, 15 multiple choices, and 2 scenarios. The tool was found to differentiate between levels of expertise. Betty Ferrell invented it in 1987.

She was contacted via email in order to obtain permission to use and translate the tool. The tool can be downloaded from the City of Hope website (<http://prc.coh.org>) [15].

Nurses who correctly answered 75% of the knowledge and attitude questions were considered to have adequate knowledge and a positive attitude. Nurses who scored 75% were deemed to have insufficient knowledge and attitude [16].

Knowledge of Pain: The nurses' knowledge of pain is operationally defined here as their knowledge of pain assessment as well as nonpharmacological and pharmacological pain management as measured by the McCaffery and Ferrell pain tool [17].

Pain Intensity Rating: The following numerical rating scale was used: 0, no pain; 1-3, mild pain; 4-6, moderate pain; 7-9, severe pain; and 10, the "worst pain imaginable" [16]. Participants who met the inclusion criteria were given the questionnaire. The questionnaire was accompanied by an information sheet that explained the purpose of the study. The nurses ensured that the answers were kept confidential and private. There were no names, phone numbers, or identification provided. SPSS v20 software and Microsoft Excel were used for data coding, entry, and analysis. The data were tested at a 95% level of significance, with p values of 0.05 considered significant. Furthermore, Fisher's exact test was used to determine the relationship between demographic data and conceptual variables.

RESULTS: DEMOGRAPHICAL DATA

The sample size was 200 people, with 10% being men and 90% being women. The participants were 67% married, 32% single, and 1% other. In terms of nationality, 46% were Indians, 42.5% were Filipinos, 7.5% were Arabs, and 4% were of other nationalities.

According to the study, the majority of participants (85%) had a bachelor's degree, 8% had a master's degree, and 7% had a diploma. In terms of pain management education, 62.5% had received training, while 37.5% had never attended any pain management sessions. The participants' mean age was 35.43 (SD8.134) years. The average number of years of experience was 11.88 (SD 6.289). The mean correct answer score for knowledge and attitude about pain management was 61% (SD 11.97%; 95% CI 59.33-62.6%; Table 2).

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Table 1. Participants' demographical data

		<i>n</i>	%
Gender	Male	20	10.0
	Female	180	90.0
Marital status	Single	64	32.0
	Married	134	67.0
	Others	2	1.0
Nationality	Arab	15	7.5
	Filipino	85	42.5
	Indian	92	46.0
	Others	8	4.0
Level of education	Diploma	14	7.0
	Bachelor's	170	85.0
	Master's	16	8.0
Pain management education	Yes	125	62.5
	No	75	37.5
Age, years (mean ± SD)	35.43±8.134		
Experience, years (mean ± SD)	11.88±6.289		

Table 2. Mean of correct answers

	Mean ± SD	95% Confidence interval	
		lower	upper
Mean of correct answers	61%±11.97	59.33%	62.6%

According to Table 3, only 10.5% of participants had adequate knowledge and attitudes toward pain, while 89.5% had insufficient knowledge and attitudes toward pain.

Table 3. Distribution of good and inadequate knowledge among nurses

	<i>n</i>	%
Staff who displayed good knowledge	21	10.5
Staff who displayed inadequate knowledge	179	89.5

Fisher's exact test revealed no significant differences in knowledge based on categorical variables. With $p < 0.05$, the pain management program produced statistically significant results. Similarly, nursing experience was statistically significant with $p < 0.05$.

Table 4. Association of nurses' knowledge and attitude with other factors

	Group	Inadequate ^a	Adequate ^b	p value
Gender	Male	95.0%	5.0%	0.347
	Female	88.8%	11.23%	
Marital status	Single	88.9%	11.1%	
	Married	90.3%	9.7%	
Level of education	Diploma	92.9%	7.1%	0.893
	Bachelor's	88.8%	11.2%	
	Master's	93.3%	6.7%	
Pain management education	Yes	80.1%	19.9%	0.035
	No	93.3%	6.7%	
Nationality	Jordan	93.3%	6.7%	0.755
	Philippines	87.1%	12.9%	
	India	91.3%	8.7%	
Years of nursing experience	<5	77.3%	22.7%	0.015
	5–9	87.1%	12.9%	
	10–15	91.5%	8.5%	
	15–20	100.0%	0.0%	
	20–25	90.9%	9.1%	
	>25	100.0%	0.0%	
Age, years	20–29	89.2%	10.8%	0.577
	30–39	87.0%	13.0%	
	40–49	94.9%	5.1%	
	50–60	92.3%	7.7%	

^a Nurses with an inadequate knowledge and attitude about pain management.
^b Nurses with an adequate knowledge and attitude about pain management.

DISCUSSION

Pain management is regarded as an important aspect of nursing that should not be overlooked. This study discovered that nurses working in one of hospitals lacked the knowledge and attitude needed to provide optimal pain management. Inadequate knowledge was distributed to 89.5% of the population, while good knowledge was distributed to only 10.5%. When compared to other studies conducted around the world, these findings revealed that the nurses had insufficient knowledge and attitude. For example, in an Iranian study [12], the mean percentage of correct answers was 66.6%, while in an American study [14], it was 64.6%. However, the situation was better than in some other countries, such as 42% in a Saudi Arabian study [18] and 35% in a Turkish study [10].

This study's sample was heterogeneous, consisting of nurses from various cultural backgrounds (the majority of nurses are expatriates). In terms of the impact of such diversity on NKASRP, the findings were similar to those of studies conducted in Iran [12] and Saudi Arabia [13]. There was no significant relationship discovered. In other words, unlike another study conducted by Alqahtani and Jones [18], which found significant differences in knowledge and attitude scores among culturally heterogeneous nurse populations, nurse competency about pain management did not vary according to culturally related factors.

According to the findings, traditional pain management education for nurses is effective. There was a statistically significant difference between those who had and those who had not received pain management education. These findings matched those of Foyle [19], who discovered a significant relationship between pain management education and contextual variables. Meanwhile, no significant relationship between education level and knowledge and attitude was discovered. Another study [20] produced contentious results, namely, that higher education increased knowledge and fostered a positive attitude toward pain management among nurses. The majority of participants with an inadequate perception of pain had a bachelor's degree. Surprisingly, diploma holders outperformed master's degree holders, despite previous research indicating that a higher level of education has an effect on nurses' knowledge and attitude [21]. There were no statistically significant differences in marital status or gender.

In terms of nursing experience, it was expected that knowledge and attitudes toward pain management would improve with more experience, but the results revealed that nurses with more than ten years of experience had a poorer perception than staff with only five to ten years of experience. Similar findings have been reported in other studies, which discovered that as nurses' experience grows, so do their pain management scores [22].

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We acknowledge the study's limitations. The sample for this study was diverse. The nurses came from a variety of cultural and educational backgrounds. Furthermore, the data were gathered using a convenience sample, which severely limits generalizability and comparisons to other parts of the world.

CONCLUSION

This study found that nurses' knowledge and attitudes toward pain management were deficient. Younger nurses had a more positive attitude toward pain management than older nurses. Pain management education influences both knowledge and attitudes. Innovative approaches to training are desperately needed. Pain management education is an essential component of the nursing orientation program, and it should be provided throughout the year to all nurses. Using the NKASRP as a baseline, new evidence-based approaches to pain management among nurses should be explored and tested.

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