KNOWLEDGE, ATTITUDES AND PRACTICES OF NURSING STAFF TOWARDS POSTOPERATIVE PAIN MANAGEMENT AT HOSPITALS IN AL-KUT CITY

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ABSTRACT

Introduction: Patients who have undergone surgery, in particular, often have severe to moderate discomfort after the treatment. In order to guarantee a speedy recovery for these individuals, pain management is essential. Investigating nurses' knowledge, attitudes, and practices regarding pain evaluation in post-operative patients was crucial. The aim of study was to assess the knowledge, attitudes, and practices of nursing staff towards postoperative pain management at hospitals in Al-Kut City.

Method: This study was a descriptive cross-sectional study that involved 450 nurses working at three hospitals in Wasit, Iraq. Simple random sampling was used to select 150 nurses' staff from each hospital. Direct interview to collect data by using a structural questionnaire. To investigate and assess the results of the examination, utilizing the statistical package for the social sciences (SPSS) version 26.

Results: The findings of this study revealed that (40%) of participants were (20-24) years old. The majority of the nursing staff's responses to questions about their knowledge of postoperative pain management were know and related to the attitude and practice of nursing staff towards postoperative pain management; majority of responds were agree. The high significant association between nursing staff's knowledge, attitude, and practice items towards postoperative pain management and all socio-demographic characteristics except marital status and residence show no significant association with socio-demographic characteristics of nursing staff.

Conclusion: Nurses' knowledge and attitudes toward post-operative pain management practice at Al-Kut City hospitals are generally sufficient. A paradigm shift is required in nurses' handling of postoperative pain. It is critical to provide ongoing professional development programs for nurses in order to ensure their empowerment and keep them up to date on changing trends in postoperative pain management.

Keywords: Knowledge, Attitudes, Practices, Nursing Staff , Postoperative , Pain Management..

INTRODUCTION

Pain is defined as a disturbing mix of sensory and emotional emotions that are either related to or expressed in terms of actual or potential harm to physiological tissues, according to the International Association for the Study of Pain (IASP). However, with respect to post-operative pain, the American anesthesiologist has provided a definition of pain in the post-operative context as the presence of pain experienced by a patient who has undergone a surgical operation. This pain is attributed to the surgical intervention itself [Negewo et al., 2020]. The experience of pain following surgery, commonly referred to as postsurgical or postoperative pain, is a multifaceted reaction to tissue injury incurred during the surgical procedure, which triggers an adverse response within the central nervous system. Postoperative pain is typically experienced with the cessation of anesthesia following a surgical procedure

[Young and Buvanendran, 2014]. Pain is a prevalent factor motivating individuals to seek healthcare services and necessitating hospital admissions, constituting a significant proportion of emergency department visits in the United States [Adams et al., 2020].

There are notable distinctions between chronic and acute pain in terms of their underlying mechanisms and duration. Acute pain refers to a complex series of behavioral and physiological responses that are triggered by tissue injury [Majeed et al., 2020]. Pain serves as the main indicator that prompts patients to seek medical attention, and it is also the most prevalent symptom experienced by hospitalized patients, both in general medical contexts and specifically inside surgical environments. Pain management practices encompass the range of activities implemented by healthcare professionals, including nurses, to ensure the successful treatment of pain [Alzghoul & Abdullah, 2016].

Post-operative pain (POP) is a major problem of public health in both economically developed and underdeveloped nations. The prevalence of unimproved pain following surgery is highly prevalent and has a substantial impact on the morbidity and mortality rates of individuals. Persistent pain can result in both immediate and enduring adverse effects for individuals [Jaleta et al., 2021]. Through a systematic review, an investigation was conducted to determine the frequency of acute pain among adult patients who were hospitalized. The findings indicated that the prevalence of acute pain varied between 37.7% and 84.0% among the surveyed patients [Gregory & McGowan, 2016]. It has been shown that a significant proportion, specifically around 79%, of patients who are admitted to hospitals experience pain. The delivery of POP management necessitates the presence of a sufficient level of knowledge and a positive attitude. Patients commonly encounter varying degrees of discomfort throughout the postoperative phase, ranging from intermediate to severe. The management of pain is a crucial and essential component of nursing care. However, research indicates that the nursing management of postoperative pain continues to be insufficient [Wurjine & Nigussie, 2018]. The presence of untreated and undertreated pain can have a substantial impact on the physical, mental, and spiritual well-being of patients, ultimately affecting their overall quality of life [Aydede, 2017].

Nurses assume a crucial role in the management of POP, necessitating a comprehensive understanding and proficiency in the effective management of such pain [Chatchumni et al., 2016]. Nurses represent the largest demographic among the health-care workforce in the majority of health-care settings, and they maintain continuous, round-the-clock interaction with patients [WHO, 2016]. Therefore, nurses possess a favorable position to effectively address pain management in the postoperative environment and should prioritize the customization of their treatments to accommodate individual preferences and promote comfort. Nevertheless, several prior studies on the management of postoperative pain (POP) have identified less than ideal pain management practices among nurses. The practices are linked to factors such as the professional culture of nurses, the culture within the ward, inadequate knowledge of theory, insufficient focus on pain treatment, and a lack of awareness concerning the data justifying different pain management approaches [Menlah et al., 2018]. A previous study found that nurses lack the skills to diagnose and treat patients' pain, as well as the knowledge and attitudes to manage it. A thorough understanding of the illness, a positive attitude, and the ability to make difficult medical judgements on pain are essential for effective and correct pain therapy [Issa et al., 2017]. About 80% of 23.9 million US surgery patients had mild to severe postoperative pain [Jaleta et al., 2021]. The study found that 88.2% of Ethiopian patients had mild to severe POP and 41.6% had adequate pain management [Eshete et al., 2019]. A different Ethiopian study found 28.6% of patients had mild to severe POP [Jaleta et al., 2021]. In an Indian research, 41% of 1,490 surgery patients had mild to severe pain. An further study included over 6,000 European orthopaedic and general surgical patients. The findings indicated that a significant proportion of postoperative patients, specifically 70% and 48%, reported experiencing moderate and severe levels of post-operative pain, respectively [Adams et al., 2020]. The issue of nurses managing pain after surgery persists despite a great deal of research showing the beneficial effects of pain education programmes on nurses' attitudes and knowledge of pain management [Wurjine & Nigussie, 2018]. This study aims to evaluate the nursing staff's knowledge, attitudes, and practices regarding postoperative pain management in Al-Kut city hospitals.

METHOD

This study was a descriptive cross-sectional study that involved 450 nurses working at three hospitals in Wasit, Iraq. The hospitals included in the study were AL-Zahraa Teaching Hospital, Alkarama

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Teaching Hospital, and AL-Kut Hospital for Paediatric and Gynae Obstetrics. The sampling technique used to select 150 nurses' staff from each hospital was simple random sampling. The data were collected from each nurses' participant over a six-month period, from January 2022 to June 2023, using a direct interview sheet.

A structural questionnaire was used to assess the level of Knowledge, attitudes, and practices of nursing staff towards postoperative pain management at hospitals in Al-Kut city. Data collection was conducted using a questionnaire format, comprising four main sections. The first section focused on socio-demographic characteristics, including age, gender, marital status, residence, educational level, experience years in nursing, experience years in surgical word and, training on pain management. The second section focuses on the nursing staff's knowledge regarding postoperative pain management, specifically addressing (35) items. The third section focuses on the nursing staff's attitude on postoperative pain management, specifically addressing (24) items related to their attitude. The fourth section focuses on the nursing staff's practice towards postoperative pain management, specifically addressing (15) items.

Ethical Considerations, the Wasit Health Directorate and all hospitals included in this study gave their ethical approval. Additionally, before gathering any data from study participants, the nursing staff was individually queried about their willingness to participate in the study verbally. Participants were informed that they might decline or end the interview at any time.

Data analysis methodologies were employed to investigate and assess the results of the examination, utilizing the statistical package for the social sciences (SPSS) version 26. The study involved the calculation of frequency distributions and percentages. A chi-square test was conducted. The process of operationalizing statistical significance entails the employment of a P-value that is either equal to or less than 0.05.

RESULTS

Table 1. Distribution of the study sample according to Socio-Demographic characteristics of nursing students (N=450)

Age	F	%
20 - 24	**180**	**40%**
25 - 29	151	33.6%
30 - 34	56	12.4%
35 and more	63	14%
Total	450	100%
Gender	**F**	**%**
Male	191	42.4%
Female	**259**	**57.6%**
Total	450	100%
Educational Level	**F**	**%**
Secondary	113	25.1%
Diploma	**240**	**53.3%**
Bachelor	90	20%
Master and above	7	1.6%
Total	450	100%
Experience years in surgical word	**F**	**%**
less than years	142	31.5%
1-2	93	20.7%
3-4	**161**	**35.8%**
> 5	54	12%
Total	450	100%
Marital Status	**F**	**%**
Single	**220**	**48.9%**
Married	207	46%
Divorced	17	3.8%
Widowed	6	1.3%
Total	450	100%
Residence	**F**	**%**
Urban	**383**	**85.1%**
Rural	67	14.9%
Total	450	100%
Experience years in nursing	**F**	**%**
< 2	88	19.5%
2 - 5	**215**	**47.8%**
> 5	147	32.7%
Total	450	100%
Training on pain management	**F**	**%**
Yes	**241**	**53.6%**
No	209	46.4%
Total	450	100%

F = Frequency, % = Percentage.

Results of this table show of (450) nurses from socio-demographic characteristics: (40%) of them were (20-24) years old, (48.9%) of them were single, (57.6%) of them were female, (85.1%) of their residences were urban, (53.3%) of their educational level was diploma, (47.8%) of them were (2-5) experience years in nursing, (35.8%) of them were (3-4) experience years in surgical work, and (53.6%) had training on pain management.

Table 2.Knowledge of nursing staff towards
postoperative pain management (N=450)

No.	Items	Know		Not sure		Don't know	
		F	%	F	%	F	%
1	Substance abuse is defined as chronic neurobiological drug addiction	329	73.1%	96	21.3%	25	5.6%
2	Vital signs are always reliable indicators of the intensity of a patient's pain	371	82.4%	70	15.6%	9	2%
3	Aspirin and other nonsteroidal anti-inflammatory agents are not effective analgesics for acute postoperative pain	275	61.1%	126	28%	49	10.9%
4	When you mix painkillers that work in different ways, you may be able to control pain better and have fewer side effects than when you use just one	213	47.3%	167	37.1%	70	15.6%
5	The typical duration of analgesic effects resulting from the intravenous administration of 1-2 mg of morphine is around 4-5 hours	188	41.8%	182	40.4%	80	17.8%
6	The administration of intramuscular Pethidine at a dosage of 75 mg. The value of X is approximately equivalent to the administration of morphine at a dosage of 10 mg intramuscularly	176	39.1%	179	39.8%	95	21.1%
7	The utilization of opioids in patients with a documented history of substance dependence is contraindicated	297	66%	92	20.4%	61	13.6%
8	The term "equianalgesia" means approximately equal analgesia	276	61.3%	138	30.7%	36	8%
9	Once a first administration of an opioid analgesic has been administered, following doses should be appropriately modified	308	68.4%	100	22.2%	42	9.3%
10	Optimal pain relief is achieved with the administration of a single dose of anticonvulsant medications, such as gabapentin (Neurontin)	155	34.4%	186	41.3%	109	24.2%
11	If the source of the patient's pain is unknown, opioid should not be used during the pain evaluation period	282	62.7%	135	30%	33	7.3%
12	It is advisable to conduct sedation assessment while using opioid analgesics for pain management	234	52%	150	33.3%	66	14.7%
13	Benzodiazepines exhibit limited efficacy as analgesics and are hardly endorsed for pain management	179	39.8%	167	37.1%	104	23.1%
14	The preferred method of delivering opioid analgesics to individuals with prolonged surgical pain	259	57.6%	128	28.4%	63	14%
15	The most common way of delivering opioid analgesics to individuals experiencing acute, intense pain of abrupt onset	271	60.2%	134	29.8%	45	10%
16	The administration of analgesics for postoperative pain should be initiated as an initial course of action	318	70.7%	88	19.6%	44	9.8%
17	A patient experiencing significant postoperative pain has been administered morphine injections on a daily basis for a continuous period of three days.The probability of the patient acquiring clinical psychological addiction	223	49.6%	145	32.2%	82	18.2%
18	Are you aware of the duration required for morphine to have its maximum effect when administered intravenously?	183	40.7%	161	35.8%	106	23.6%
19	Are you aware of the duration it takes for morphine used orally to reach its maximum effect?	194	43.1%	125	27.8%	131	29.1%
20	The consumption of analgesics is associated with a growing propensity for psychological dependence	318	70.7%	94	20.9%	38	8.4%
21	Paracetamol injection is used in managing surgical pain	309	68.7%	104	23.1%	37	8.2%
22	Cold and heat therapy are employed as modalities for pain management in surgical patients	244	54.2%	148	32.9%	58	12.9%
23	Pharmacological approaches involving the administration of opioids, such as pethidine and pentazocine, are employed to alleviate pain experienced by individuals undergoing surgical procedures	242	53.8%	148	32.9%	60	13.3%
24	The assessment of pain should be conducted both prior to and after to the administration of analgesic medications	331	73.6%	95	21.1%	24	5.3%
25	Observation constitutes an integral component of the methodology employed in the assessment of surgical pain	325	72.2%	93	20.7%	32	7.1%
26	The side effects of narcotics should be observed at least 20 minutes after administration	284	63.1%	129	28.7%	37	8.2%

No.	Items	Know		Not sure		Don't know	
		F	%	F	%	F	%
27	In cases when the etiology of pain is unknown, it is advisable to refrain from administering analgesics during the pain assessment phase, as this may impede the accurate diagnosis of the underlying cause	**285**	**63.3%**	118	26.2%	47	10.4%
28	It is advisable to promote patients' endurance of pain to the greatest extent feasible prior to resorting to opioid administration	**309**	**68.7%**	99	22%	42	9.3%
29	In order to assess pain, it is necessary to use a pain rating scale that ranges from (0), "no pain at all," to (10) "the worst pain	**240**	**53.3%**	138	30.7%	72	16%
30	The selection of pain treatment for the patient should be determined by the specific type of surgical procedure being performed	**302**	**67.1%**	106	23.6%	42	9.3%
31	The assessment of pain encompasses various aspects, such as the initiation of pain, its length, classification, spatial localization, and the magnitude of its intensity	**315**	**70%**	105	23.3%	30	6.7%
32	The Glasgow Coma Scale (GCS) serves as a measure for evaluating pain	**186**	**41.3%**	162	36%	102	22.7%
33	Use of the Pain Management Assessment Tool is not part of postoperative pain management	**195**	**43.3%**	181	40.2%	74	16.4%
34	Elderly patients cannot tolerate substance to pain relievers	**250**	**55.6%**	153	34%	47	10.4%
35	Ibuprofen, hydromorphone, and gabapentin have demonstrated efficacy in the management of cancer-related pain	**177**	**39.3%**	157	34.9%	116	25.8%

F = Frequency, % = Percentage

This table shows that the majority of the nursing staff's responses to questions about their knowledge of postoperative pain management were know.

Table 3. Attitude of nursing staff towards postoperative pain management (N=450)

No.	Items	Agree		Not sure		Disagree	
		F	%	F	%	F	%
1	The patient's behavior demonstrates their pain	**374**	**83.1%**	58	12.9%	18	4%
2	Distraction reduces pain intensity	**283**	**62.9%**	136	30.2%	31	6.9%
3	Non-pharmacological therapies have demonstrated significant efficacy in managing mild to moderate pain, however their effectiveness in severe pain remains limited	**285**	**63.3%**	120	26.7%	45	10%
4	The utilization of placebo is significant in ascertaining the authenticity of a patient's pain perception	**304**	**67.6%**	94	20.9%	52	11.6%
5	Surgical patients typically encounter a higher intensity of pain compared to medical patients	**287**	**63.8%**	141	31.3%	22	4.9%
6	The nurses' personal experiences with pain have an impact on their approach to pain management for surgery patients	**334**	**74.2%**	93	20.7%	23	5.1%
7	In order to confirm a patient's report of intense pain, it is necessary to depend on discernible alterations in vital signs	**298**	**66.2%**	120	26.7%	32	7.1%
8	The finest experts on a patient's level of pain are nurses	**264**	**58.7%**	136	30.2%	50	11.1%
9	Do you agree with the patient's statement of pain	**252**	**56%**	148	32.9%	50	11.1%
10	Analgesic substance management for drug abuse patients	**232**	**51.6%**	141	31.3%	77	17.1%
11	Patients ask for increased doses of pain relievers	**201**	**44.7%**	137	30.4%	112	24.9%
12	Attention to cultural beliefs and values when caring for patients with pain	**301**	**66.9%**	100	22.2%	49	10.9%
13	Your cultural background influences patient nursing care Pain report	**300**	**66.7%**	115	25.6%	35	7.8%
14	Before administering the subsequent dose of medication for pain, your patient should feel discomfort	**234**	**52%**	137	30.4%	79	17.6%
15	Your response to and management of postoperative pain is influenced by your visual evaluation of the patient who is reporting pain	**287**	**63.8%**	122	27.1%	41	9.1%
16	In every surgical process, pain is anticipated before it is assessed and treated for the patient	**255**	**56.7%**	160	35.6%	35	7.8%
17	Postoperative pain management requires the use of equipment for measuring pain	**297**	**66%**	116	25.8%	37	8.2%
18	Patients should be encouraged to endure as much pain as possible before using an opioid	**347**	**77.1%**	69	15.3%	34	7.6%

No.	Items	Agree		Not sure		Disagree	
		F	%	F	%	F	%
19	A patient has the right to anticipate complete postoperative pain alleviation as a result of care	299	66.4%	94	20.9%	57	12.7%
20	The medication morphine is quite potent.Patients with postoperative pain would be satisfied with just one dose	202	44.9%	190	42.2%	58	12.9%
21	The kind of surgery you have influences how you respond to pain medication	324	72%	94	20.9%	32	7.1%
22	The absence of pain expression should not be interpreted as an absence of discomfort	280	62.2%	125	27.8%	45	10%
23	The patient may sleep despite the pain	246	54.7%	137	30.4	67	14.9%
24	Elderly patients cannot tolerate analgesic medications to relieve pain	249	55.3%	138	30.7	63	14%

F = Frequency, % = Percentage.

This table reveals that the majority of responds on the attitude of nursing staff towards postoperative pain management were in agree.

Table 4. Practices of nursing staff towards postoperative pain management (N=450)

No.	Items	Agree		Not sure		Disagree	
		F	%	F	%	F	%
1	Do you offer direct nursing care to patients experiencing postoperative pain?	361	80.2%	61	13.6%	28	6.2%
2	Do you do pain assessments for patients who are capable of verbal communication?	297	66%	114	25.3%	39	8.7%
3	Do you use a pain assessment tool	255	56.7%	126	28%	69	15.3%
4	What is the frequency with which you utilize a pain assessment tool?	212	47.1%	172	38.2%	66	14.7%
5	The selection of pain treatment for the patient should be contingent upon the specific sort of surgical procedure being performed	293	65.1%	115	25.6%	42	9.3%
6	Is there a discussion on pain scores and management during nurse-to-nurse report?	295	65.6%	110	24.4%	45	10%
7	Do you consistently concur with patients' assertions on their experience of pain?	224	49.8%	146	32.4%	80	17.8%
8	How often you read guidelines	270	60%	140	31.1%	40	8.9%
9	Document outcomes after assessing patients" pain	308	68.4%	104	23.1%	38	8.4%
10	Assessing pain intensity among patients with pain	321	71.3%	95	21.1%	34	7.6%
11	Assessing the localization of pain in individuals experiencing pain	288	64%	112	24.9%	50	11.1%
12	Assessing the initiation and progression of discomfort in individuals experiencing pain	293	65.1%	108	24%	49	10.9%
13	The assessment of psychological, social, and cultural factors in individuals experiencing pain	273	60.7%	128	28.4%	49	10.9%
14	Assessing the Impact of Pain on Functional Outcomes in Patients Experiencing Pain	295	65.6%	101	22.4%	54	12%
15	Perform pain reassessment after analgesics injection	308	68.4%	93	20.7%	49	10.9%

F = Frequency, % = Percentage.

This table reveals that questions referring to the practices of nursing staff in relation to postoperative pain management had the highest percentage of agree responses.

Table 5. Association between nursing staff's Knowledge, Attitude and Practices with regard to their socio-demographic characteristics

Socio-demographic characteristics	Knowledge of nursing staff		Attitude of nursing staff		practices of nursing staff	
	P	Sig.	P	Sig.	P	Sig.
Age	0.000	H.S	0.000	H.S	0.008	H.S
Marital status	0.32	N.S	0.56	N.S	0.81	N.S
Gender	0.000	H.S	0.000	H.S	0.003	H.S
Residence	0.95	N.S	0.75	N.S	0.46	N.S

Socio-demographic characteristics	Knowledge of nursing staff		Attitude of nursing staff		practices of nursing staff	
	P	Sig.	P	Sig.	P	Sig.
Educational Level	0.000	H.S	0.000	H.S	0.002	H.S
Experience years in nursing	0.000	H.S	0.000	H.S	0.003	H.S
Experience years in surgical word	0.000	H.S	0.000	H.S	0.000	H.S
Training on pain management	0.000	H.S	0.000	H.S	0.03	S

P: P. Value, Sig.: Significant, N.S: No significant, S: significant, H.S: high significant

This table shows a high significant association between nursing staff's knowledge, attitude, and practice items towards postoperative pain management, and all socio-demographic characteristics except marital status and residence show no significant association with socio-demographic characteristics of nursing staff.

DISCUSSION

Based on the nursing staff's knowledge of postoperative pain management, the majority of their responses were know. The nursing staff have good knowledge about how to deal with pain after operation and can control to severity of pain, postoperative pain management is very important to comfortable of patient that lead to cure operation. These findings are consistent with research' findings [Negash et al., 2022] This study revealed that a significant proportion of health professionals, specifically 58.4%, possess a commendable level of knowledge pertaining to the management of postoperative pain. This finding aligns with the results of a previous study conducted in the hospitals of Arsi zone, Ethiopia (54.5%), as well as similar investigations conducted in Ethiopia (56.5%) and Ghana (59%), which aimed to assess the knowledge, attitudes, and practices of nurses regarding postoperative pain management [Table 2].

The present study suggests that the vast majority of nursing staff reported agree in their responses regarding their attitude towards postoperative pain management. This outcome confirms the performance of the nursing staff have a good attitude toward postoperative pain management, because respondents thought that the following things affected how well they cared for patients: pain anticipation in all surgical procedures before assessing and treating pain, the use of measurement instruments, the patient's spiritual beliefs, the fact that analgesic opioids shouldn't be given to patients with a history of drug abuse, and the patient's right to expect total POP relief as a result of treatment. The study [Menlah et al., 2018], Our study's findings suggest that nurses exhibited favorable views towards the management of pain. The participants exhibited positive attitudes as they recognized that the absence of pain expression does

not necessarily indicate the absence of suffering. Additionally, they acknowledged the importance of nurses proactively anticipating pain prior to conducting assessments and administering treatments. Furthermore, a majority of the participants concurred that the management of postoperative pain (POP) constituted an integral component of postoperative care management, as well as being a fundamental aspect of the patient's entitlements [Table 3].

Recent research suggests that the nursing staff's responses regarding their practices towards postoperative pain management were mostly in agree. This result reflects that the nursing staff has a good attitude toward postoperative pain management practices. It is important to assess pain to find out what is causing it, if pain management is the right choice, if pain medicine or a change in the dose of pain medication is needed, and if other steps need to be taken. Whether or not the patient needs more interventions, such as a consultation with an expert, to get the best care possible, the nurse should have the right knowledge, practices, and attitudes about pain and how to assess and treat it. Must be backed by the best evidence possible to keep patients from getting hurt. The study [Teshome et al., 2022], The outcomes of the study demonstrated that 81 cases, accounting for 56.25% of the total sample, exhibited favorable practices in the management of postoperative pain. In line with a research investigation carried out at Hawasa University Referral Hospital, The observed phenomenon may be attributed to the resemblance in the socio-demographic attributes of the individuals involved. The educational attainment level and the period of training According to the findings of our study, it has been observed that nurses demonstrate a higher level of engagement in pain management practices following surgical procedures compared to the study

conducted at Arsizonale Hospital, which revealed that 69 individuals, accounting for 47.9% of the sample, demonstrated proficient practice in post-pain management. The observed phenomenon can be attributed to variations in the categorization of practice levels, the magnitude of the sample, and the socio-demographic attributes of the participants [Table 4].

The results of the present study show a high statistically significant association between the items related to the knowledge of nursing staff towards postoperative pain management and all socio-demographic characteristics, except marital status and residence, showing no significant association. These results, due to self-education gained via nursing training, can provide improved understanding regarding postoperative pain and are now the most recommended source of information for nurses seeking to stay current with evidence-based knowledge. Findings of [Negewo et al., 2019] support these; this study found a statistically significant link between the knowledge and attitude of nurses and their attendance in in-service training, with a p-value of less than 0.05. This phenomenon could be attributed to the fact that nurses who undergo training acquire enhanced knowledge and attitudes pertaining to postoperative pain, including its diagnosis and management. There was a statistically significant relationship between the knowledge and attitude of nurses and their engagement in reading books or journals, as shown by a p-value of less than 0.05.

Furthermore, the results of the study show a high statistically significant association between the attitude of nursing staff towards postoperative pain management and all socio-demographic characteristics, except marital status and residence, showing no significant association. The findings suggest that the majority of persons have favourable attitudes towards pain treatment after surgery. This could potentially lead to an improved approach to controlling postoperative pain and eventually increase patients' pain experiences after operations. In the study conducted by [Dessie et al., 2019] The bivariate analysis demonstrated a robust correlation between nurses' views and several variables, such as gender, educational level, nursing rank, access to reading materials, finishing POP management training, and the inclusion of pain management classes in the curriculum. Through the implementation of a multivariate analysis, we have discovered a significant correlation between certain characteristics and a positive perspective. Some factors that have been identified include the presence of a pain management course during pre-service training (AOR = 6.97; 95% CI = 1.94-25.03), completing POP management classes (AOR = 5.00; 95% CI = 2.25-11.10), and the existence of journals or articles (AOR = 1.65; 95% CI 0.06-0.49). Individuals who were taught pain management as part of their educational curriculum were almost seven times more likely to have a positive perspective on postoperative pain management compared to those who did not receive this type of training. Individuals who had prior instruction in managing postoperative pain exhibited a fivefold increase in the likelihood of possessing a good attitude as compared to their counterparts.

The results of the present study show a high statistically significant association between the items related to the practices of nursing staff towards postoperative pain management, and all socio-demographic characteristics, except marital status and residence, show no significant association. These results are due to adequate training, continuing, and updating education programs on pain subjects that have been helpful in developing skills in the area of postoperative pain management. It has been revealed that hospitals provide pain assessment tools and that nurses have the availability of pain assessment tools. It has also been revealed that there was adequate training, continuing, and updating education programs on pain topics that have proven helpful in improving skills in the area of postoperative pain management. Findings [Hamdan, 2019] support these: pain presents a significant challenge in the context of critically ill individuals, necessitating precise evaluation through the utilization of suitable pain assessment instruments tailored to the unique circumstances of each patient. The findings of this study revealed that a significant proportion of nurses working in critical care units employed pain assessment instruments for patients with both communicative and non-communicative abilities. Nevertheless, it was observed that the utilization of the most accurate and dependable tools was not widespread among these nurses. Nursing professionals exhibited limited knowledge of the pain-related behaviors that had the highest predictive value for identifying pain among patients in critical care settings [Table 5].

CONCLUSION

The research's results indicate that nurses employ sufficient knowledge and techniques to mitigate the adverse consequences of postoperative pain management. Nevertheless, nurses possess positive attitudes that can be effectively utilized to facilitate the implementation of evidence-based procedures in the management of postoperative pain. There is a need for a paradigm shift in the management of postoperative pain by nurses. It is imperative to provide nurses with ongoing professional development programs in order to ensure their empowerment and enable them to stay updated on the evolving trends in postoperative pain management. Implementing this approach would guarantee the provision of high-quality care, enhance the delivery of nursing services, augment patient happiness, and eventually enhance patient outcomes.

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