POSTOPERATIVE PAIN MANAGEMENT AT A PRIVATE HOSPITAL IN INDONESIA

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ABSTRACT
Postoperative patients' most prevalent and expected complaint is pain. The pain might interfere with patients' daily activities and, if left untreated, can lead to neurogenic shock. The involvement of nurses in pain management for postoperative patients is critical, both independently and collaboratively, via pharmaceutical and nonpharmacological therapy. The goal of this study was to determine how pain was managed in postoperative patients in a private hospital in Central Indonesia. In this study, a quantitative descriptive method was applied, and a total of 137 documents were gathered from January to March 2018 utilizing a total sample technique in May 2018. According to the findings of the study, 114 patients (83.2%) reported mild pain, 17 patients (12.4%) reported moderate pain, 6 patients (4.4%) reported no discomfort, and no one reported severe pain. It also revealed that 72 patients (53%) received a combination of pharmacology and non-pharmacology pain therapy, 54 patients (39%) received pharmacological pain management, and the remaining four patients (3%) received nonpharmacological pain management. Nurses were found to use a combination of both therapies more than either pharmacological or nonpharmacological treatment alone.

Keywords: Pain scale; pain management; postoperative

INTRODUCTION

Pain is an unpleasant feeling that is subjective in nature and is associated with actual or potential tissue damage (Potter, Perry, Stockert, & Hall, 2013; International Association for the Study of Pain [IASP], 2010). As a result, any invasive procedure, such as surgery, is painful. A postoperative pain is a severe discomfort caused by the surgical process (Black & Hawks, 2009). According to the Patient Bill of Rights, pain alleviation is a fundamental human right (US Pain Foundation, 2017). Nurses can help postoperative patients reducing physical discomfort, promote early ambulation, and improve their quality of life by providing pain management (Potter, Perry, Stockert, & Hall, 2013). It is apparent that nurses play a critical role in the pain management of postoperative patients.

According to a study conducted in 2013 at the Tertiary Hospital in Nairobi, Africa, 58% of patients reported pain after 30 minutes, 55.3& after 24 hours, and 34.7% after 48 hours (Mwaka, Thikra, & Mung'ayi, 2013). Nurhafizah and Erniyati (2012) add that the most commonly expressed postoperative pain at Haji Adam Malik Hospital in Medan, Indonesia, was moderate pain (57.4%), followed by mild pain (22.2%), and severe pain (20.4%).

According to Chanif, Petpichetchian, and Chongchareon (2012), patients who underwent abdominal surgery experienced moderate to severe discomfort in the first 24-48 hours. As a result, to ensure that the patients feel comfortable and receive high-quality treatment, nurses must provide effective pain management methods.

Nonpharmacological and/or pharmacological pain management strategies are available, and nurses initiate a variety of nonpharmacological interventions (Potter, Perry, Stockert, & Hall, 2013). Most nurses, according to Gedara, Kauppinen, and Louarn (2015), adopt collaborative measures. McCartney (2015) further elaborates that the use of analgesics alone is insufficient, hence the nurse should combine nonpharmacological and pharmacological therapies. Due to this background, the goal of this study is to determine pain management for postoperative patients in a private hospital in Central Indonesia.

METHOD

In this study, a quantitative descriptive method was applied, and a total of 134 documents were gathered from January to March 2018 utilizing a total sampling method. The observation chart was used to collect data, and demographic factors such as gender, age, numeric pain rating scale, and pain managements were recorded. The parameters were described using descriptive analysis. This study was presented at the First Cochrane Hongkong Symposium, and the abstract was published in the abstract book (e-version) available at http://1stcochranehksym.nur.cuhk.edu.hk/download/AbstractBook_download.pdf.

RESULT

There were 70 (52.24%) of male patient documents and 64 (47.76%) of female patient documents among the total of 134 medical records. The three most prevalent age categories in this study were 29 (21.64%) senior adults, 28 (20.90%) late middle-aged adults, and 25 (18.65%) early young adults, and the most expressed pain was mild pain (83.58%), followed by moderate pain (12.69%), and no pain indicated (3.73%). There were no reports of severe pain (Table 1).

Table 1. Demographic Data of Patients with Postoperative Pain from January to March 2018 (n=134)

Participants Characteristics	Frequency (n)	Percentage (%)
Gender		
Male	70	52.24
Female	64	47.76
Age (Year)		
17-25	15	11.20
26-35	25	18.65
36-45	18	13.43
46-55	19	14.18
56-65	28	20.90
>66	29	21.64
Pain Scale		
No Pain	5	3.73
Mild	112	83.58
Moderate	17	12.69
Severe	0	0

In total, 70 (53%) of the documents used a combination of pharmacological and nonpharmacological interventions for postoperative pain management, while only 54 (40.30%) of the documents used pharmacological interventions, 4 (3%) used nonpharmacological interventions, and 7 (5%) used no intervention at all (Table 2).

Table 2. Postoperative Pain Management in a Private Hospital in Central Indonesia (n=134)

Pain Management	Frequency (n)	Percentage (%)
Pharmacological	54	40.30
Nonpharmacological	3	2.24
Pharmacological + Nonpharmacological	70	53
None	7	5.22

Table 3 shows that nurses preferred to combine pharmacological and nonpharmacological pain management to patients with mild pain scale (40.3%) and moderate pain scale (11.94%), although 35.82% of the documents show that nurses chose to give pharmacological intervention to those with mild pain scale.

Table 3. Pain Rating Scale and Postoperative Pain Management in a Private Hospital in Central Indonesia (n=134)

Variables	Pain Rating Scale					
	No Pain		Mild		Moderate	
	n	%	n	%	n	%
Pharmaco-logical	5	3.73	48	35.82	1	0.75
Non-Pharmaco-logical			3	2.24		
Pharmaco-logical + Non-Pharmaco-logical			54	40.3	16	11.94
None			7	5.22		

Table 4. Pharmacological Postoperative Pain Management in a Private Hospital in Central Indonesia (n=134)

Drug Classes	Pain Rating Scale					
	No Pain		Mild		Moderate	
	n	%	n	%	n	%
NSAIDs*	5	3.73	27	20.14	2	1.49
Non-Opioid			19	14.17	2	1.49
Opioid			6	4.47		
NSAIDs + Non-Opioid			12	8.95	2	1.49
NSAIDs + Opioid			14	10.44	5	3.73
Non-Opioid + Opioid			15	11.20	2	1.49
NSAIDs + Non-Opioid + Opioid			8	5.97	4	2.99
NSAIDs + Anti Convulsant			1	0.75		
None			10	7.5		

*NSAIDs : Nonsteroidal anti-inflammatory drugs

The drug classes used in this study are shown in Table 4. Nonsteroidal anti-inflammatory drugs (NSAIDs) were found

to be the only drug class used for patients with no report of postoperative pain (3.73%), and the most commonly used in patients with mild pain (20.14%), followed by non-opioid (14.17%) and a combination of opioid and non-opioid (11.2%). While in patients with moderate pain, a combination of NSAIDs and opioid found to be the most used drug class (3.73%). Table 4 also shows that there were 10 (7.5%) documents with any record of pharmacological pain management.

Table 5. Nonpharmacological Postoperative Pain Management in a Private Hospital in Central Indonesia (n=134)

Variables	Pain Rating Scale					
	No Pain		Mild		Moderate	
	n	%	n	%	n	%
Deep Breathing Exercise			30	22.39	7	5.22
Comfortable Position			15	11.20	1	0.75
Relaxation Technique			7	5.22	5	3.73
Comfortable Position + Deep Breathing Exercise			3	2.24	2	1.49
Comfortable Position + Relaxation Technique			2	1.49	1	0.75
None	5	3.73	55	41.04	1	0.75

Table 5 shows various nonpharmacological postoperative pain management found in this study. As shown in table 1, nonpharmacological pain management was used alone or in a combination with pharmacological pain management in a total of 73 (54.47%) records with deep breathing exercise as the most commonly used intervention both in patients with mild pain (22.39%) and with moderate pain (5.22%). It is also revealed that the majority (45.52%) of the documents were discovered without any nonpharmacological pain management.

DISCUSSION

Acute pain generated by tissue damage after a surgical treatment leads in the release of pain mediators, the generation of noxious stimuli, and the stimulation of free nerve terminals and nociceptors. Postoperative pain can have a severe impact on both emotional and physical health, making recovery more difficult (Malek, Sevcik, et al., 2017). Therefore, proper postoperative pain management is critical in preventing and decreasing postoperative complications, and the initial pain may lessen as the wound heals.

The study's findings revealed that the most commonly stated pain was mild pain, and the most prevalent pain management method discovered in this study was a combination of nonpharmacological and pharmacological treatment. This demonstrated that nurses at this hospital

could deliver the highest quality of care for postoperative pain patients, despite the fact that pharmacological or nonpharmacological methods alone are insufficient for pain relief (McCartney, 2015).

This study also showed the most commonly used drug class in pharmacological intervention of postoperative pain relief was NSAIDs. According to the WHO Pain Ladder, this drug class is the sort of medicine that is recommended to alleviate mild to moderate pain or as adjuvant therapy (Potter, Perry, Stockert, & Hall, 2013). It is the widely used since mild discomfort was also the most commonly expressed pain in this study. This study also discovered a combination of drug classes, and according to Slater, Kunnathil, McBride, and Kopala (2010), this strategy can provide successful treatment for up to 90% of people with chronic pain.

On the other hand, the findings of this study revealed a variety of nonpharmacological interventions for postoperative pain relief, with deep breathing exercise being the most commonly employed treatment. This outcome is superior to a similar study conducted at a private hospital in West Indonesia, which revealed that just two forms of nonpharmacological treatments were provided to patients suffering from postoperative pain (Saragih, 2017). Despite the fact that this study did not assess nurses' knowledge of postoperative pain management, the usage of various types of treatments shows nurses' comprehension of pain management. Studies revealed that some obstacles hinder the nurses to provide nonpharmacological pain management such as lack of knowledge and time, nurses' fatigue, nurses' workload and multiple responsibilities (Khalil, 2018; Kia, Allahbakhshian, Ilkhani, Nasiri & Allahbakhsian, 2021). Nurses have to realize that nursing is a lifelong learning. Moreover, various types of nonpharmacological pain management are available to be explored and utilized. It may benefit patients with pain to alleviate fear, anguish, and anxiety, as well as to alleviate pain and provide patients a sense of control (Geziry, Toble, Kadhi, Pervaiz & Nobani, 2018).

CONCLUSION

A mix of nonpharmacological and pharmacological methods was discovered to be the most commonly used postoperative pain treatment strategy at a private hospital in Central Indonesia. It is also figured out that nurses play an important part in pain relief by being able to provide a number of approaches.

ACKNOWLEDGEMENT

We would like to express our gratitude to the Faculty of Nursing, Universitas Pelita Harapan, and the hospital administration for providing us with the incredible chance to complete this study.

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