

KNOWLEDGE AND ATTITUDES AMONG NURSES IN MANAGING POST-SURGICAL PAIN

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ABSTRACT

Post-surgical pain is a complex reaction of the body to tissue damage ranging from skin incisions to damage caused by the surgical process or strain on organs in the body. The aim of this research is to determine the relationship between the knowledge and attitudes of nurses and midwives in dealing with post-surgical pain. The design of this research is quantitative descriptive using the Correlation Study method. The sample in this study was all 36 nurses in the surgical ward at Siti Aisyah Regional Hospital. Data analysis in this research used descriptive tests and chi-square statistics. The results of this study showed that the majority of nurses had good knowledge about post-surgical pain management (80.2%) and had a good attitude in dealing with post-surgical pain (77.8%). Meanwhile, based on the results of the chi square test, the p-value was 0.639 ($p > 0.05$). So it can be concluded that there is no relationship between the level of knowledge and attitudes of nurses in dealing with patients' post-surgical pain. It is hoped that this research can become a reference in preparing optimal pain management in health services, especially surgical wards.

Keywords: Attitude, Knowledge, Pain, Nurses

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INTRODUCTION

Postoperative pain is a common clinical problem and remains a challenge in nursing care. Although pain is a physiological response to tissue trauma following surgery, inadequately managed pain can delay patient recovery. More than 80% of patients have been reported to experience moderate-to-severe acute pain after surgery, while 10–50% are at risk of developing chronic postsurgical pain, which may impair physical functioning and quality of life (Mazda and Jadin, 2021; Moka *et al.*, 2025). Surgery is an invasive therapeutic procedure involving the opening or manipulation of body structures requiring treatment.

Surgical procedures may be performed for various purposes, including establishing a diagnosis, removing the underlying cause of disease, or replacing dysfunctional organs (Bashir, 2020). Pain is a common consequence of surgery and is generally caused by tissue injury resulting from the procedure. Although postoperative pain is expected following surgery, some cases require intensive management (Barbosa et al., 2014; Silpia et al., 2021).

Nurses play a crucial role in successful postoperative pain management because they are the healthcare professionals who interact most frequently with patients during hospitalization. Their responsibilities include assessing pain, monitoring patients' responses to analgesic therapy, providing nursing interventions, and educating patients about pain management. The effectiveness of these roles is strongly influenced by nurses' knowledge and attitudes toward pain management (Yang et al., 2025).

Adequate knowledge of pain mechanisms, assessment methods, and multimodal pain management strategies enables nurses to provide appropriate interventions. Conversely, limited knowledge may lead to suboptimal pain identification and delays in treatment. Nurses' attitudes toward pain also influence the quality of care, as the perception that pain is a condition that should simply be tolerated may contribute to undertreatment and reduce the effectiveness of pain control (Morete-Pinto and Sousa-Correa, 2021).

Despite the development of various pain management guidelines, inadequately treated postoperative pain remains a problem in clinical practice. Therefore, evaluating nurses' knowledge and attitudes is important for assessing nursing readiness to support optimal pain management. This study aimed to analyze the association between nurses' knowledge and attitudes in postoperative pain management at Siti Aisyah Regional Hospital, Lubuklinggau City. According to a preliminary survey at Siti Aisyah Regional Hospital, Lubuklinggau City, 380 inpatients underwent surgical procedures in 2021. These included laparotomy, hernia surgery, procedures related to benign prostatic hyperplasia (BPH), cesarean section, and other surgical interventions among patients with various clinical conditions. Several patients reported postoperative pain ranging from mild to severe, while others had already received pain management interventions.

RESEARCH METHODS

This study used a quantitative descriptive correlational design. It was conducted at Siti Aisyah Regional Hospital, Lubuklinggau City, in February 2022. The population and sample comprised all 36 staff nurses working in the Al-Insan and Ummu Annisah surgical wards. Total sampling was therefore applied. Data were collected using standardized questionnaires measuring knowledge and attitudes related to postoperative pain (Jira et al., 2020). The questionnaire assessing nurses' knowledge of pain consisted of 20 statements scored as correct (1) or incorrect (0), with possible scores ranging from 0 to 20. In this study, nurses were categorized as having poor knowledge when their score was below the mean cutoff of 14.32 and as having good knowledge according to the study's predetermined classification criterion.

The attitude questionnaire consisted of six statements rated on a five-point Likert scale: strongly disagree (1), disagree (2), neutral (3), agree (4), and strongly agree (5), with a total possible score ranging from 6 to 30. Nurses were categorized as having a less favorable attitude when their mean score was <23.77 and a favorable attitude when their mean score was ≥ 23.77 . Data were analyzed using univariate descriptive statistics and bivariate analysis with the chi-square test.

RESULTS AND DISCUSSION

Univariate and bivariate analyses were conducted to describe the frequency distribution of respondent characteristics, nurses' levels of knowledge and attitudes toward postoperative pain management, and the association between the two variables.

Table 1. Respondent Characteristics (n = 36)

Characteristic	n	%
Sex		
Male	8	22.2
Female	28	77.8
Length of employment		
1–5 years	4	11.1
>5 years	32	88.9
Education		
Diploma III in Nursing	25	69.4
Bachelor of Nursing	6	13.9
Bachelor of Nursing + Professional Nurse		16.7
Total	36	100

Table 1 shows that the nurses had a mean age of approximately 34 years, with a minimum age of 25 and a maximum age of 42 years. Most respondents were female (28 nurses; 77.8%), had worked for more than five years (88.9%), and held a Diploma III in Nursing (25 nurses; 69.4%).

Table 2. Frequency of Nurses' Knowledge of Postoperative Pain Management

Knowledge	f	%
Poor	7	19.4
Good	29	80.2
Total	36	100

As shown in Table 2, most nurses had a good level of knowledge regarding postoperative pain management, accounting for 29 respondents (80.2%). Table 3 shows that most nurses had favorable attitudes toward postoperative pain management, accounting for 28 respondents (77.8%).

Table 3. Frequency of Nurses' Attitudes Toward Postoperative Pain Management

Attitude	f	%
poor	8	22.2
good	28	77.8
Jumlah	36	100

Table 4. Nurses' Knowledge and Attitudes Toward Postoperative Pain Management

Table 1: Nurses' Knowledge and Attitudes Toward Postoperative Pain Management					
Knowledge	Attitude				p-value
	Favorable		Favorable		
	N	%	N	%	
Poor	2	28.6	5	71.4	0.639

Knowledge and attitudes among nurses in managing post-surgical pain (Nurhayati)

Good	6	20.7	23	79,3
Total	8	22.2	28	77,8

Based on the chi-square in table 4, analysis using Fisher's exact test, the p-value was 0.639 ($p > 0.05$), indicating no statistically significant association between nurses' level of knowledge and attitudes toward postoperative pain management in the Al-Insan and Ummu Annisah surgical wards.

Respondent Characteristics

The respondent characteristics showed that most nurses were of working age, female, had more than five years of work experience, and held a Diploma III in Nursing. These characteristics indicate that the respondents had substantial professional experience in providing nursing care, including caring for patients with postoperative pain. A relatively long period of employment may contribute to greater clinical experience through repeated exposure to diverse patient conditions and care situations. Work experience may help nurses develop the ability to recognize patient problems and determine appropriate nursing responses. However, these demographic characteristics do not directly indicate nurses' levels of knowledge or attitudes toward pain management because this study did not analyze associations between respondent characteristics and the main study variables.

In addition to work experience, formal education and professional training may influence nurses' understanding of pain management. Nursing education provides foundational knowledge of pain concepts, assessment, and nursing interventions; however, the translation of such knowledge into practice may also be influenced by the work environment, hospital policies, organizational culture, and opportunities for professional development.

Nurses' Knowledge of Postoperative Pain Management

The results showed that most nurses had a good level of knowledge regarding postoperative pain management. This finding indicates that respondents had an adequate understanding of fundamental pain management concepts. The high level of knowledge may be related to respondents' clinical experience, as most had worked for more than five years and had been exposed to the care of postoperative patients in the hospital setting.

These findings are consistent with studies by Eriawan and Ardiana (2013) and Rahim et al. (2019), which reported that most nurses had good knowledge of pain management. This similarity may be related to comparable respondent characteristics, as participants in these studies also worked in hospital settings and therefore had experience assessing and caring for patients with pain-related problems. However, good knowledge does not necessarily indicate that all aspects of pain management are optimally implemented in clinical practice. This study measured nurses' level of knowledge but did not directly evaluate the implementation of pain management interventions. Therefore, a good knowledge classification should not be interpreted as a direct indicator of the quality of nurses' clinical practice.

Nurses' Attitudes Toward Postoperative Pain Management

The results showed that most nurses had favorable attitudes toward postoperative pain management. These positive attitudes reflect recognition of the importance of pain management as an integral component of nursing care. Favorable attitudes may support nurses' engagement in pain assessment, timely responses to patient complaints, and efforts to promote patient comfort during recovery.

This finding is consistent with Dewi and Ropyanto (2018), who reported that most nurses had positive attitudes toward nursing interventions aimed at reducing postoperative pain. The similarity may reflect a shared understanding that pain management is an important component of nursing care. Nevertheless, nurses' attitudes are influenced not only by knowledge but also by external factors such as work experience, service culture, workload, organizational support, and the availability of healthcare resources. Therefore, positive attitudes do not automatically indicate that pain management practices are being implemented optimally.

Association Between Nurses' Knowledge and Attitudes Toward Postoperative Pain Management

Fisher's exact test yielded a p-value of 0.639 ($p > 0.05$), indicating no statistically significant association between nurses' level of knowledge and attitudes toward postoperative pain management at Siti Aisyah Regional Hospital, Lubuklinggau City. The absence of a significant association between knowledge and attitudes suggests that greater knowledge does not necessarily correspond to more positive attitudes. This may occur because attitudes are psychological constructs influenced by numerous factors beyond knowledge, including individual experience, beliefs regarding intervention effectiveness, workplace culture, job demands, management support, and the organizational environment.

This finding is consistent with Yuliana and Rohma (2021), who likewise found no association between healthcare professionals' knowledge and attitudes in the provision of pain interventions. The difference from Hidayatullah et al. (2020), who reported that good knowledge was associated with positive attitudes toward pain management, may be attributable to differences in respondent characteristics, research instruments, sample size, and the healthcare settings in which the studies were conducted. These findings indicate that improving the quality of pain management requires more than increasing nurses' knowledge alone. More comprehensive interventions are needed, including continuing education, strengthened standard operating procedures, clinical supervision, and the development of a care culture that supports evidence-based pain management. However, this study assessed only knowledge and attitudes and therefore cannot explain how these variables relate to actual pain management practices in clinical settings.

Study Limitations

This study has several limitations that should be considered when interpreting the findings. First, the sample was relatively small, consisting of only 36 nurses, which limits the generalizability of the results. Second, the cross-sectional design captured associations between variables at a single point in time and cannot establish causal relationships. Third, the use of self-administered questionnaires may have introduced self-report bias because responses could have been influenced by participants' personal perceptions. In addition, the study was conducted at a single hospital; therefore, the findings may not represent nurses working in other healthcare institutions.

CONCLUSION

Most nurses demonstrated good knowledge and favorable attitudes toward postoperative pain management. Statistical analysis showed no significant association between nurses' level of knowledge and attitudes toward postoperative pain management (p

= 0.639). This finding indicates that good knowledge does not necessarily translate directly into positive attitudes because attitudes may also be influenced by factors such as experience, workplace culture, workload, and the organizational environment. The findings imply that improving the quality of pain management requires not only enhanced knowledge through education and training but also organizational strategies, including strengthened pain-management policies, clinical supervision, and the development of a workplace culture that supports evidence-based nursing practice.

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