



FACTOR ANALYSIS OF KNOWLEDGE ATTITUDE AND CHARACTERISTICS OF NURSES TOWARDS PAIN MANAGEMENT

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ABSTRACT

Pain is an experience of subjective and physiological condition. Accurate pain assessment is essential and effective for the successful implementation of pain management. The inability of nurses to assess pain and poor communication between patients and nurses leads to ineffective pain management. In addition, an adequate level of knowledge and a positive attitude in caring for patients is an important component in the delivery of pain management. Objective: The purpose of this study was to analyze the factor of knowledge and attitude of nurses towards pain management at Haji Adam Malik Hospital Medan. Method: The type of research used in this study was quantitative with a survey method research design. Respondents in the study amounted to 84 nurses in the RB6, RA3, RA4 dan RA5. Bivariate Data Analysis with Chi-Square. Results: The result chi-square test analysis obtained a p-value for the variable of age (0,472). Education (0,790). Experience (0,376), knowledge (0,099), and attitude (0,000). Conclusions: Attitude is the nurse's readiness or willingness to act in the assessment and reassessment of pain, managing pain, and evaluating it. Good nursing attitudes are needed to improve the implementation of pain management at the H. Adam Malik Central General Hospital, Medan.

Keywords: attitude; knowledge; nurse; pain management

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INTRODUCTION

Pain is an unpleasant sensory and emotional experience that is closely related to actual and potential tissue damage (Raja et al., 2021). Unrelieved pain triggers physiological and psychosocial stress responses that affect every system in the patient's body, resulting in detrimental effects (James et al., 2023). These effects include fear, anxiety, sleep disturbances, hopelessness, poor memory, decreased cognitive function, social isolation, and reduced quality of life (James et al., 2023). Pain is a global health problem and a universal human experience that affects all races, genders, ages, geographic locations, and socioeconomic (Macchia, 2024). About 50-80% of inpatients suffer from pain (Wu et al., 2020). Reducing patient pain is a priority need that must be met by nurses (Piyakhachornrot & Youngcharoen, 2024). Around 79% of hospitalized patients experience pain, and the inability of nurses to assess pain, and poor communication between patients and nurses cause ineffective pain management. In addition, an adequate level of knowledge and a positive attitude are important components in the delivery of pain management (Panlican et al., 2020).

Pain management is identifying and managing sensory or emotional experiences related to tissue or functional damage with sudden or slow onset and mild to severe and constant intensity. Pain management aims to reduce pain that interferes with the sufferer's activities. Pain management will be provided when a person feels significant or prolonged pain to reduce the pain felt, improving the function of the affected body part, and improving the quality of life (Zanza et al., 2023). Effective pain management is an important indicator of the quality of nursing care and health care. Carry out pain control with a multidisciplinary team approach by three important members, namely patients, nurses, and doctors. Among the members of this team, only the patient experiences pain and tries to get rid of it (Al-sayaghi et al., 2022). Meanwhile, nurses have a role in controlling pain compared to other team members. This is because the nurse is with the patient for a longer period, the patient learns about previous pain experiences and the coping methods used. Nurses must also teach patients strategies for dealing with pain, implement planned treatment, monitor results, and provide an empathetic approach to patients (Samarkandi, 2018).

Human behavior is very complex and has a very broad scope. Benjamin Bloom stated that people's knowledge, attitudes, and actions are three important components in the formation of behavior, namely knowledge, attitudes, and actions. Nurses' behavior in pain management can be caused by several factors such as nurses' knowledge of the concept of pain, pain assessment and reassessment, pain classification, pain management, and pain evaluation. Meanwhile, attitude is the nurse's readiness or willingness to act in pain assessment and reassessment, pain management, and evaluation (Admass et al., 2020). Based on the results of the study conducted by Liyew et al. (2020), shows that there is a lack of knowledge and attitudes among nurses towards pain management when treating hospitalized patients. Effective pain management requires nurses who can understand the concepts and acquire the knowledge, appropriate attitudes, and effective skills related to pain assessment and management. Nurses must use a systematic process with valid scales for appropriate pain assessment, trust and agree on reported pain levels with the patient themselves, provide support, use pharmacological and nonpharmacological methods of pain management, and evaluate the effectiveness of pain management (Al-sayaghi et al., 2022).

The research results of Çelik et al. (2018) stated that the knowledge scores of nurses in health services related to pain were found to be higher than nurses with a master's or bachelor's degree. Likewise, research conducted by Fauziningtyas et al. (2020) stated that there was no significant difference between increasing the education level of nurses and their knowledge and attitude scores in carrying out pain management. Therefore, The study aims to analyze the knowledge and attitudes of nurses towards pain management.

METHOD

The study was quantitative with a survey design approach. The study was conducted in a room that treats patients with cancer pain at the Haji Adam Malik Central General Hospital, Medan. The sample in this study involved 84 nurses using convenience sampling. The inclusion criteria were all nurses with active service status in rooms RB6, RA3, RA4, and RA5 at the Haji Adam Malik Central General Hospital, Medan, while the exclusion criteria were nurses who were in the process of studying/on leave and nurses who could not be found or refused to take part in this research. Data were collected using a questionnaire. The questionnaire has been tested for validity using content validity by 3 experts, with results >0.8. Knowledge questionnaire with a CVI of 0.83; Attitude of 97 and pain management with a CVI of 0.98. The reliability test of the questionnaire in this study showed a Chronbach Alpha value >0.60, the knowledge questionnaire showed a Chronbach Alpha value of 0.689,

the attitude questionnaire showed a Chronbach Alpha value of 0.652, and the pain management questionnaire showed a Cronbach Alpha value of 0.828. Data were analyzed using chi-square test. This study has received ethical approval from the Health Research Ethics Committee, Universitas Sumatera Utara No.565/KEPK/USU/2023.

RESULTS

Based on table 1, shows that the majority of respondents are female (86.9%), aged 19-44 years (adults) as many as 44 people, aged 35 – 65 years (pre-elderly) as many as 40 people. The majority of education is nursing diploma 3 (63.1%) and 73 people have an average of >5 years of work experience and the highest employment status is a civil servant (65.5%)

Table 1.
Respondent characteristics (n=84)

Respondent characteristics	f	%
Gender		
Male	11	13,1
Female	73	86,9
Age (year)		
19-44 (adults)	44	52,4
35-65 (pre-elderly)	40	47,6
Educational		
Nursing Diploma 3	53	63,1
Ners	28	33,3
Nursing Magister	3	3,6
Experience (year)		
1-5	11	13,1
>5	73	86,9
Employment status		
Civil servant	55	65,5
BLU	9	10,7
PPPK	10	11,9
Contract	10	11,9

Table 2, states that the majority of nurses' knowledge is poor (73.8%), the majority of nurses' attitudes are sufficient (65.5%) and the majority of nurses' pain management is poor (84.5%).

Table 2.
Frequency distribution of respondents regarding knowledge, attitude, and pain management (n=84)

Variable	f	%
Knowledge		
Good	0	0
Sufficient	22	26,6
Less	62	73,8
Attitude		
Good	16	19
Sufficient	55	65,5
Less	13	15,5
Pain management		
Good	0	0
Sufficient	13	15,5
Less	71	84,5

Table 3 shows that there is no relationship among age, education, experience, knowledge, and pain management respectively (0.472; 0.472; 0.790; 0.099), however, there is a relationship between attitude and pain management (0.000)

Table 3.
Cross tabulation among characteristics, knowledge, attitudes, and pain management

Variable	Pain management				Amount		p-value
	Sufficient		Less		f	%	
	f	%	f	%			
Age (year)							
19-44 (adults)	8	9,5	36	42,9	44	52,4	0,472
35-65 (pre-elderly)	5	6	35	41,6	40	47,6	
Educational							
Nursing Diploma 3 Ners	10	11,9	43	51,2	53	63,1	0,472
Nursing Magister	3	3,6	25	29,8	28	33,3	
	0	0	3	3,6	3	3,6	
Experience (year)							
Experienced	11	13,1	62	73,8	73	86,9	0,790
Fewer experiences	2	2,4	9	10,7	11	13,1	
Knowledge							
Sufficient	1	1,2	21	25,0	22	26,2	0,099
Less	12	14,3		59,5	62	73,8	
Attitude							
Good	8	9,5	8	9,5	16	19,0	0,000
Sufficient	5	6,0	50	59,5	55	65,5	
Less	0	0	13	15,5	13	15,5	

DISCUSSION

Knowledge is the factor that most influences the implementation of pain management among medical personnel. Pain management knowledge for nurses can be obtained through formal education in educational institutions or pain management training. It is known that the lack of knowledge about pain management among medical personnel, especially nurses, is due to a lack of formal education and pain management training (Liu et al., 2021). Lack of knowledge regarding pain management was also found in research conducted by Al-Sayaghi et al. (2022) which was conducted from January to February 2022 as many as 291 nurses from King Fahad Hospital, Al Madinah, Kingdom of Saudi Arabia with an average value of Knowledge of pain management is poor, namely 45.29%. This is in line with research by Liyew et al. (2020) which states that the lack of knowledge about pain management among nurses working in hospitals, especially regarding pain assessment and understanding of pharmacology related to pain management, causes pain problems to not be resolved, which can affect physiological status, psychosocial and emotional patients. Based on the research results, it is clear that special training related to pain management is needed that is more scientific and comprehensive to improve the knowledge and attitudes of nurses. Nurses' knowledge had a significant relationship with age previous experience in pain management and specific training in pain management (Ahmadi et al., 2023).

Effective pain management is an important indicator of the quality of nursing care and health care (Alnajjar et al., 2021). Nurses have an important role in pain control compared to other team members. This is because the nurse is with the patient for a longer period, the patient learns about previous pain experiences and the coping methods used. Nurses must also teach patients strategies for dealing with pain, implement planned treatment, monitor results, and provide an empathetic approach to patients (Saleh, 2023). Therefore, nurses are required to have good knowledge of pain management in patients. Attitude is a positive or negative feeling, or mental state that is always prepared, studied, and regulated through experience which has a special influence on a person's response to objects, people, and circumstances. Attitude is a person's closed reaction to a stimulus or object. Attitude is readiness or willingness to act. Attitude is not yet an action or activity, but is a predisposition to the action

of a behavior (Kurnia et al., 2020). The poor attitude of nurses was also found to be related to the attitude of analyzing and reassessing pain. Negative attitudes towards pain management were also found in previous research which showed the majority of respondents (68.8%) had a negative attitude towards pain management, while 31.2% had a positive attitude (Siagian & Simbolon, 2023).

Nurses are key members of multidisciplinary teams in healthcare facilities who specialize in providing healthcare to patients. Nurses play an important role in treating pain effectively through accurate assessment, timely intervention, and evaluation of pain relief interventions (Salim et al., 2020). Attitude is the nurse's readiness or willingness to act in the assessment and reassessment of pain, managing pain, and evaluating it (Admass et al., 2020). The implementation of pain management is influenced by various things and is complex, which can originate from patient factors, health providers, or health provider systems. Patients can influence the implementation of pain management, such as fear of addiction, drug side effects, and becoming tolerant to drugs. Apart from that, the patient considers that pain is something he deserves or that pain is part of the aging process and so on (Potter et al., 2019). Accurate assessment and effective management of pain requires nurses to have appropriate attitudes, and effective skills related to assessment and management of pain. Nurses should use a systematic process with valid scales for appropriate pain assessment, trust and agree on reported pain levels with the patient themselves, provide support, use pharmacological and nonpharmacological methods of pain management, and evaluate the effectiveness of management (Oyakilome et al., 2023).

A study by Brant et al. (2017) stated that nurses who have a high level of knowledge and a good attitude will be able to implement optimal pain management compared to those with a low level of knowledge. This can happen because nurses with higher education have received material related to pain management correctly. This is comparable to other research which shows that as age and experience increase, attitudes towards pain management improve (Adams et al., 2020; Alzghoul et al., 2016; Aqoul et al., 2020; Liyew et al., 2020). Age determines a person's level of maturity and strength. The older you get, the more mature you are in thinking and working. Early adulthood is a productive age and is always full of ideas for work, but early adulthood does not have much experience in implementing them. Age is related to a person's level of maturity and maturity. According to researchers' analysis, age factors can influence nurses' thinking patterns and emotional conditions, but increasing age can cause a decline in nurses' performance. This can be influenced by the physiological decline in the nurse's body (Nasution et al., 2019). Formal education concerns intellectual abilities related to an individual's ability to complete tasks in their work. A person's educational background will influence that person's productivity and performance. One effort to improve nurse performance is to increase nursing resources through education to a higher level (Brant et al., 2017).

Experience is a way to obtain the truth of knowledge. Therefore, personal experience can also be used as an effort to gain knowledge. This is done by repeating the knowledge gained in solving problems faced in the past (Yetti et al., 2020). Experience is gained by nurses from the period they have worked since they started working until now. The longer a person's working period, the person's knowledge and skills will increase. According to researchers, knowledge can be obtained from experience. So the longer a nurse stays in an institution/unit, the more experience she can provide and increase the knowledge and skills of nurses in their duties.

CONCLUSION

There is no relationship between age, education, experience, knowledge, and pain management respectively (0.472; 0.472; 0.790; 0.099), however, there is a relationship between attitude and pain management (0.000). The results of this research can provide input for nursing services, for nursing education, for patients, and further research.

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