



**THE INFLUENCE OF KNOWLEDGE AND ATTITUDE ON IMPLEMENTATION OF ACUTE PAIN REASSESSMENT BY NURSE IN EMERGENCY AND INTENSIVE ROOM AT TYPE B HOSPITAL IN MALANG REGION**

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Received date: 15 July 2018

Revised date: 05 August 2018

Accepted date: 26 August 2018

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**ABSTRACT**

Pain is the most common complaint when a person comes to the hospital. Pain reassessment is one of nursing orders in patients with painful complaints that are rarely performed by nurses. One of the negative effects if the pain reassessment is not done is not knowing clearly whether the patient was free from pain or not. While the peak of the implementation of the review of pain will have an impact on patient satisfaction. The purpose of this research to analyze the knowledge and attitude factors that influenced the implementation of acute pain reassessment by nurses at Emergency and intensive room at Type B hospital in Malang region. This research is a quantitative research used observational analytic design with cross sectional approach. The number of samples in this study were 126 respondents used quota sampling. This research was conducted in 4 hospitals type B Malang Region. The results showed that there was influence of knowledge ( $p = 0,000$ ), attitude ( $p = 0,028$ ) on implementation of acute pain reassessment. It can be concluded that knowledge and attitudes affect the implementation of acute pain reassessment.

**KEYWORDS:** Knowledge, Attitude, Acute pain reassessment, Nurse.

**INTRODUCTION**

Pain is the most common complaint when a person comes to the hospital (Mills, 2011; Shaban et al., 2012; Tood, 2007). In the United States, patients visit with acute pain complaints of 78-86% (Jadmiko, 2016; Mills, 2011; Tood, 2007). Similarly, the results of the UK national Survey in 2012 and 2014 which says that 64 and 61% of patients come to the ER with pain complaints (Wati, 2014). In Indonesia, acute pain is also the most common reason someone comes to the Emergency Room with a prevalence of 70-80% of the total daily visit of Emergency Room patients (Sya'rani & Utami, 2015; Wati, 2014).

Intensive Care Unit (ICU) is part of Intensive Unit with patients who have pain complaints of 71% during receiving treatment (Stites, 2008). Puntillo et al. (2014) added that more than 50% of patients experience pain both at rest and during routine clinical procedures. While in the Intensive Cardiac Care Unit the prevalence of patients with pain complaints is 80% have mild pain and 20% have moderate (Nuraeni, Warya, & Priambodo, 2016).

The International Association for Study of Pain stated pain is an unpleasant sensory, related to potential or actual tissue damage. Individuals experiencing pain will show responses such as increased blood pressure, heart rate, respiratory rate, anxiety to stress as a result of perceived pain. Even pain can also increase morbidity and mortality (Asmadi, 2008; Dewi, 2014; Kartikawati, 2014). Although the response shown by the patient may be dangerous, the patient's pain complaints tend to be overlooked and neglected by the nurse (Abraham et al., 2011).

Nurses have an important role in pain management. Pain reassessment is part of pain management. Where the frequency of pain reassessment is done depends on the type of therapy given. For example, in patients given analgesic injection drugs, patients will be reviewed 15-30 minutes after being given an injection drug. In patients with oral or non-pharmacologic pain medication, given an hour after oral drug administration or non-pharmacological therapy. Or every 8 hours if the pain is mild, 3 hours when the pain is moderate, and one hour if

severe pain (Winnipeg Regional Health Authority, 2012; Yudianta, Khoirunnisa, & Novitasari, 2015).

Pain reassessment is needed to monitor over time the patient's painful development (Mansell *et al.*, 2017). One result if the pain reassessment is not done is not knowing clearly whether the patient has been relieved of the pain or not (Baffoe-twum, 2016). Bozomowski (2012) adds that a thorough review of pain and a review of pain is considered an important factor in improving patient satisfaction because patients feel cared for.

Pain reassessment is a rare intervention by nurses. This is reinforced by the results of a survey conducted by the Joint Commission of 2012 in a primary care clinic for the reason that the inconsistency of pain reassessment in the clinic was found (Ross *et al.*, 2017). In line with the results of study by Ferrante *et al.* (2013) states that of the 19 hospitals involved in the study, only 2 hospitals (15.8%) performed a routine pain reassessment on the ER. There are even 3 hospitals (10.5%) who have never conducted a pain reassessment while the patient is in the ER. Even Baffoe-twum (2016) in his study said that of 6 patients who complained of pain, only 4 patients (67%) performed a pain reassessment within one hour after intervention.

The nurse's knowledge of pain can be one of the factors affecting the implementation of pain reassessment. This is supported by research conducted by Mudiah, Supriadi, & Sureskiarti (2013) states that there is a significant relationship between nurse knowledge with the implementation of non-pharmacological pain management of postoperative patients. While research conducted by Handayani (2017) states that there is no relationship between knowledge with the implementation of Standart Operational Procedures (SOP) assessment of pain reassessment.

Attitude is a reaction or a person's closed response to a stimulus. Attitude can not be seen directly, but through a closed behavior (Notoatmodjo, 2007). Nurse attitudes can affect the nurse's ability to provide pain management. The research conducted (Rieman & Gordon, 2007; Stanley & Pollard, 2013) states that although the nurse's knowledge level of childhood pain management is not significantly different, nurses with more than two years of experience or who have attended the training have a knowledge and attitude score which is much higher in pain management.

**MATERIALS AND METHODS**

This research used observational analytic method with cross sectional approach. The population in this study are nurses who work in IGD and intensive space at type B hospital in Malang region amounting to 187 people. To determine the hospitals used as research sites used simple random sampling method. While for sampling technique used quota sampling. The dependent variable in this study is the implementation of acute pain

reassessment by nurses. Independent variable in this research were knowledge and attitude. This research was conducted in 4 hospital type B in Malang Region.

**RESULTS**

**Table 1: Respondents' Characteristics by Sex, Education Background, Age, Years of Service, Marital Status, and Employment Status.**

Characteristics	Number (n=126)	Percentage (%)
<b>Sex</b>		
Male	56	44,4
Female	70	55,6
<b>Education Background</b>		
Diploma	101	80,1
Bachelor	25	19,9
<b>Age (year)</b>		
20 – 30	64	50,1
31 – 40	44	34,9
41 – 50	19	15,0
<b>Years of Service (year)</b>		
< 2	30	23,8
2 – 5	45	35,7
6 – 10	24	19,0
11 – 15	22	17,7
16 – 20	5	3,8
<b>Marital Status</b>		
Married	88	69,8
Single	38	30,2
<b>Employment Status</b>		
Government Employees	29	23,0
Permanent Employees	44	34,9
Contract Employees	51	45,5
Army	2	1,6

Source: Primary Data (2018)

Table 1 shows that most of the respondents were female (70,6%). At the level of education of respondents, almost all educated D3 Nursing with the number of 101 people (80.1%). Age range data of respondents showed that some respondents were in the age range 20-30 years with 64 people (50,1%). The data of respondent working mass ranged from 2-5 years working in IGD and intensive space for 45 people (35.7%). The marital status data shows that most of the respondents are married with the number of 88 people (69.8%). While the data of employment status of respondents shows that some respondents work as contract or honorary employees as many as 51 people (45.5%).

**Table 2: Distribution of Respondents Based on Knowledge and Attitude.**

Variable	Number	Percentage (%)
Knowledge		
Good	121	96,0
Fair	5	4,0
Total	126	100
Attitude		
Good	117	92,9
Fair	9	7,1
Total	126	100

Source: Primary Data (2018)

From the table 2 show that almost all nurses have good knowledge and good attitude.

**Table 3: Spearman Rank Test Result Knowledge Influence on Implementation of Acute Pain Reassessment by Nurse.**

		Implementation of Acute Pain Reassessment
Knowledge	r	0,316
	p	0,000
	n	126

Source: Primary Data (2018)

Based on table 3 it is known that p value is 0.000 (<0.05), so H0 is rejected. Thus, it can be concluded that there is the influence of knowledge on the implementation of acute pain reassessment by nurses in ER and Intensive Room at Type B hospital in Malang region. With correlation coefficient value of 0.316 (enough strength) with a positive direction. So it can be concluded that the better the nurse knowledge related to pain management, especially pain reassessment, the better the implementation of pain reassessment.

**Table 4: Spearman's Test Result Rank Effect of Attitude on the Implementation of Acute Pain Reassessment by Nurse.**

		Implementation of Acute Pain Reassessment
Attitude	r	0,196
	p	0,028
	n	126

Source: Primary Data (2018)

Table 4 shows that the p value is 0.028 (<0.05), so H0 is rejected. Thus, it can be concluded that there is influence attitude toward the implementation of acute pain reassessment by nurses in ER and Intensive room at Type B hospital in Malang region. With correlation coefficient value of 0.196 (very weak strength) with positive direction. So it can be concluded that the better the nurse attitude in terms of pain management, especially pain reassessment, the better the implementation of pain reassessment.

**DISCUSSION**

**The Effect of Knowledge on Implementation of Acute Pain Reassessment in ER and intensive room**

Based on table 3, the results of this study using spearman rank test showed p value of 0.000 (p <0.05), it is stated that H0 is rejected. So it can be determined that there is an effect of knowledge on the implementation of acute pain reassessment by nurses at ER and intensive room at RS type B in Malang Region. The result of data processing also shows that the value of r positive 0,316. This indicates that the strength of the positive influence and direction of positive relationship on the variable of knowledge on the implementation of acute pain reassessment by nurses at ER and intensive room in RS type B in Malang region. The positive direction has a better meaning of nurse knowledge related to pain management, especially pain reassessment, then the better the implementation of acute pain reassessment.

Based on respondents' answers on knowledge instruments, almost all respondents correctly answered the statement "Pain assessment is part of pain management". Almost all respondents answered correctly because the SOP management of each hospital's pain points there is a review of pain. While the statement "Response reviewed during pain assessment is a verbal response". Stroge & Logina, (2009) states that evaluation of verbal and non-verbal responses is assessed when assessing patient pain. Based on the results of the observations of researchers, almost all respondents conducted an assessment of acute pain by looking at non-verbal response without evaluating the verbal response despite the awareness level of client compos mentis.

A person's knowledge can be influenced by several factors, such as: education background, years of service, information, and experience. In this study almost all respondents are educated diploma of Nursing, with the working period of some respondents ranged from 2-5 years. Information can be obtained from various media either from formal or non formal education. One of them is with the education and training of nursing staff. Research conducted by Johnston et al. (2007) states that by training nursing staff, the level of knowledge, frequency of pain review, and observation of the use of non-pharmacological therapy increases. Similarly, Huth et al. (2010) which states that by providing knowledge that focuses on child pain, will improve the knowledge and attitude of nurses on Mexican nurses. A person with a long duration of working longer has more experience. From that experience one will add a lot of information informally (Suliha, 2002). This is supported by research conducted by Wulandari, Arifah, & Yulian (2012) which states that there is a relationship between the working period of the nurse and the nurse's knowledge about the assessment of pain in infants.

The results of this study are consistent with research conducted by Vael & Whitted (2014) states that knowledge can be done quickly. Other studies also

suggest that the relationship between knowledge and non-pharmacological management of postoperative patients (Mudiah, Supriadi, & Sureskiarti, 2013). The equation of this study with Vael & Whitted (2014) study is the respondents of D3 field of educated research. This research uses Mudiah, Supriadi, & Sureskiarti (2013) research with the number of respondents with diploma of nursing education background and year of service of most respondents between 1- 5 years.

This research is not in line with research conducted by Handayani (2017). Research conducted by Handayani (2017) stating that there is no relationship between the knowledge of nurses with the implementation of SPO assessment of re-pain in Ranap Dewasa RS Panti Waluyo Sawahan Malang. Differences results of this study due to this research, the data retrieval research conducted by the researchers themselves in a single time. While in the research Handayani (2017) data retrieval of the SPO assessment of re-pain and distribution of questionnaires not in one time. And the observation data retrieval of SPO assessment of re-pain is not done alone by the researcher. But researchers coordinate with the head of space. So the respondents do not know if the assessment is being done.

#### **The Effect of Attitudes on the Implementation of Acute Pain Reassessment in ER and intensive room**

Based on table 4 can be interpreted that after spearman rank test, then the significance value obtained at attitude variable equal to 0,028 ( $p < 0,05$ ). So it can be determined that there is influence of attitude toward the implementation of acute pain reassessment by nurses at ER and intensive room at type B hospitals in Malang region. The result of data processing also shows that the value of  $r$  positive 0,196. It shows that the strength of influence is very weak and the direction of positive relationship on the variable of knowledge on the implementation of acute pain reassessment by nurses at ER and intensive room at type B hospitals in Malang region. The positive direction has a better meaning of nurse attitude in terms of pain management, especially pain review, then the better the implementation of acute pain reassessment. Yildirim *et al.* (2008) suggests that nurse attitudes and lack of nurse knowledge related to pain management, can directly affect patient pain levels.

In the instrument of this study, in the statement "after the initial dose of opioid analgesic administration, for subsequent dosage should be adjusted to the patient's response after the review of the pain", the answer most respondents disagree can be interpreted that in the administration of opioid analgesic drug after the first the nurse does not adjust to the patient's response to the intervention given. Though although the nurse is not responsible for prescribing analgesics, but the nurse is responsible for the decision in managing analgesic drugs (Yildirim *et al.*, 2008).

The results of this research are consistent with the results of research conducted by Rieman & Gordon, 2007; Stanley & Pollard (2013) who stated that although the nurse's knowledge level of childhood pain management did not differ significantly, nurses with more than two years of experience or who had attended the training had a much higher knowledge and attitude score in pain management. Equation in this research is nurses have years of work. But, this study is not in line with research conducted by Patiraki (2006) who argued that nurses have a widespread attitude and not in accordance with pain management.

Attitudes are influenced by internal and external factors. Externally, attitudes are influenced by experience, situations, barriers, and drivers. Experience can be affected by years of service (Wulandari, Arifah, & Yulian, 2012). In this study, the working period of some respondents ranged from 2 - 5 years and more than 5 years. That is, the working period of the nurse affects the experience of the respondents in terms of pain management, especially pain review. From the experience of these respondents who then influence the attitude of nurses in carrying out an assessment of acute pain. While one thing that can encourage a person's attitude is with knowledge. This is in line with research conducted by Huth *et al.* (2010) which states that by providing knowledge that focuses on child pain, will improve the knowledge and attitude of nurses on Mexican nurses.

#### **CONCLUSION**

There is influence of nurse knowledge and attitude toward the implementation of acute pain reassessment by nurse of ER and intensive room at type B hospital in Malang region.

#### **ACKNOWLEDGEMENTS**

Our thanks tonurses and the hospitals that have carried out research that has given permission for research, and to all parties that support the preparation of this research article.

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