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The Factors Affecting Pain Intensity to Patient Post Operative Fracture at Jayapura Public Hospital

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ABSTRACT

Background: Fracture is a condition where there is a break in continuity of bone or cartilage tissue in part or in total which causes pain from mild to severe. In addition to postoperative taste can be caused by factors such as patient characteristics, previous surgery history, anxiety and use of painkillers.
Research objectives: To determine what factors are associated with the pain intensity of postoperative fracture patients in Jayapura Hospital
Research Method: Observational analysis with cross sectional study design. The study was conducted in July 2018 in the Surgery Room of Jayapura Hospital with a population of 71 patients post fracture surgery as samples based on consecutive sampling. Data were obtained using a questionnaire, measurement of anxiety using State Anxiety Inventory (S-AI) form Y and Visual Analog Scale (VAS) combined with Numeric Rating Scale (NRS). Data analyzed by chi square and regression logistic.
Results: There is correlation between work status (*p value* = 0,002; RP = 7,833; CI95%= (2,233 – 27,845) with intensity post-operative fracture in public hospital Jayapura and not correlation is age (*ρ-value* = 0,257; RP = 2,229; CI95%= (0,737 – 6,778), sexual (*ρ-value* = 0,146; RP = 2,593; CI95%= (0,864 – 7,777), studies (*ρ-value* = 0,292; RP = 0,462; CI95%= (0,129 – 1,657), ethnic (*ρ-value* = 0,294; RP = 0,435; CI95%= (0,1126 – 1,505), hystory medical surgery (*ρ-value* = 0,124; RP = 0,164; CI95%= (0,020 – 1,348), attitude and believing with paint (*ρ-value* = 0,086; RP = 3,370; CI95%= (0,980 – 11,587), anxiety (*ρ-value* = 0,367; RP = 1,905; CI95%= (0,647 – 5,611), druga analgetic (*ρ-value* = 0,942; RP = 1,208; CI95%= (0,414 – 3,525). The dominant factor is work status with p-value = 0,001 and rasio prevalebce RP = 7,833 (2,233 – 27,485).

Keywords: Pain Intensity, Post Fracture Surgery

1. INTRODUCTION

Fracture is a condition where there is a breakdown of continuity of bone tissue or cartilage either in part or in total (Mansjoer, et al., 2012; Martha., Et al, 2013). The cause of the fracture can be caused by trauma that causes a broken bone to be in the form of direct trauma (injury and accident) and can be indirect trauma due to bone loss (osteoporosis) due to lack of calcium and old age (Ministry of Health, 2010). Data from the World Health Organization (WHO) reports that 50% of broken thigh bones (femur fractures) will cause lifelong disability and cause mortality to reach 30% in the first year due to complications of immobilization (WHO, 2015). This data does not include vertebral and forearm fractures and those who do not receive medical care at the hospital. Based on data from the Hospital Information System (SIRS) in Indonesia in 2015, the incidence of fracture was recorded at around 240 / 100,000 cases in women and men over 40 years of age due to osteoporosis (RI Ministry of Health, 2015).

Health Research and Development Agency, Ministry of Health of the Republic of Indonesia in 2013 conducting Basic Health Research (Riskesdas) found fracture cases of 5.8% caused by sharp object trauma (7.7%) traffic accidents (56.7%) and fell (3.7%) with the highest cases found in

Papua Province (8.3%). Postoperative fracture pain can cause discomfort (Ratnasari, 2012). The form of pain experienced by postoperative patients is acute pain (Wake & Nuaraeni, 2013). Pain in the fracture is caused by an increase in interstitial pressure in a confined room, resulting in reduced tissue perfusion and tissue oxygen pressure. The main symptom is pain that gets worse especially in passive movements and the pain is not lost by narcotics. This happens because fat cells enter the bloodstream and cause low blood oxygen levels which are characterized by respiratory problems, rapid pulse pressure, hypertension, shortness of breath, fever. Pain attacks are usually 2-3 days after injury (Reliance, 2012).

Retrieval of preliminary data in Jayapura Public Hospital, obtained fracture data in 2017 as many as 847 people averaged as many as 71 people. Patients who experience pain are generally treated with analgesic drugs, but from several observations some patients experience moderate to severe pain that is unbearable, so that the patient yells and cries uncontrollably towards the recovery of the results of the surgery he has done. From the results of the interview due to the patient's pain there was a move, so that the surgical wound was open. The purpose of the study is to know the factors that are related to Pain Intensity of Fracture Postoperative Patients in Jayapura General Hospital.

2. MATERIALS AND METHODS

Observational analysis with cross sectional study design. The study was carried out in July 2018 in the Surgical Room of the Jayapura Regional Hospital with a population of 71 postoperative fracture patients as samples based on consecutive sampling. Data were obtained using questionnaires, measurement of anxiety using the State Anxiety Inventory (S-AI) form-Y and Visual Analog Scale (VAS) combined with the Numeric Rating Scale (NRS). Data was analyzed using chi square and logistic regression.

3. RESULTS

Bivariate Analysis

a. Relationship between age and pain intensity of postoperative fracture patients in Jayapura General Hospital

Table 1. Age Relationship with pain intensity of post-fracture surgery patients in Jayapura General Hospital

No	Age	Pain intensity				Number	
		Pain		Not pain			
		n	%	n	%	n	%
1	< 30 year	39	79,6	10	20,4	49	100
2	≥ 30 year	14	63,6	8	36,4	22	100
Total		53	74,6	18	25,4	71	100
p-value = 0,257; RP = 2,229; CI95%= (0,737 – 6,778)							

Source: Primary Data, 2018

Based on Table 1, it shows that of 49 people aged <30 years as many as 39 people (79.6%) experienced pain and as many as 10 people (20.4%) had no pain. While from 22 people aged >30 years as many as 14 people (63.6%) experienced pain and as many as 8 people (36.4%) did not experience pain. Chi square test results obtained ρ-value = 0.257 >0.05. This means that there is no relationship between the age of the patient and the intensity of pain in post-fracture surgery patients in Jayapura Regional Hospital. The prevalence ratio test results were obtained RP = 2,229; CI95% = (0.737 - 6.778) does not include 1 which is interpreted that age is not significant with the intensity of pain in patients after fracture surgery.

b. Sex relations with pain intensity of post-fracture surgery patients in Jayapura General Hospital

Table 2. Sex relations with pain intensity of post-fracture surgery patients in Jayapura Regional Hospital

No	Sex	Pain intensity				Number	
		Pain		Not pain			
		n	%	n	%	n	%
1	Male	33	82,5	7	17,5	40	100
2	Female	20	64,5	11	35,5	31	100
Total		53	74,6	18	25,4	71	100
p-value = 0,146; RP = 2,593; CI95%= (0,864 – 7,777)							

Source: Primary Data, 2018

Based on Table 2, it shows that out of 40 people who were male as many as 33 people (82.5%) experienced pain and as many as 7 people (17.5%) had no pain. While from 31 people who were female as many as 20 people (64.5%) experienced

pain and as many as 11 people (35.5%) experienced no pain. Chi square test results obtained ρ-value = 0.146> 0.05. This means that there is no relationship between the sex of the patient and the intensity of pain in post-fracture surgery patients in Jayapura Regional Hospital. The prevalence ratio test results were obtained RP = 2,593; CI95% = (0,864 - 7,777) with a lower value not including 1 which was interpreted to mean that gender was not significant with the intensity of pain in patients after fracture surgery.

c. Educational relationship with the intensity of pain in post-fracture surgery patients in Jayapura Regional Hospital

Table 3. Educational Relationships with pain intensity of post-fracture surgery patients in Jayapura General Hospital

No	Education	Pain intensity				Numbe	
		Pain		Not pain			
		n	%	n	%	n	%
1	Low	8	61,5	5	38,5	13	100
2	High	45	77,6	13	22,4	58	100
Total		53	74,6	18	25,4	71	100
p-value = 0,292; RP = 0,462; CI95%= (0,129 – 1,657)							

Source: Primary Data, 2018

Based on Table 3, it shows that out of 13 people with low education 8 people (61.5%) experienced pain and as many as 5 people (38.5%) had no pain. Whereas from 58 highly educated people as many as 45 people (77.6%) experienced pain and as many as 13 people (22.4%) experienced no pain. The chi square test results obtained ρ-value = 0.292> 0.05. This means that there is no relationship between patient education and pain intensity in post-fracture surgery patients in Jayapura General Hospital. The prevalence ratio test results were obtained from RP = 0.462; CI95% = (0.129 - 1.657) does not include 1 which is interpreted that education is not significant with the intensity of pain in patients after fracture surgery.

d. Tribal relationship with the intensity of pain in post-fracture surgery patients in Jayapura General Hospital

Based on Table 4, it shows that of 46 people with Papuan tribes as many as 32 people (69.6%) experienced pain and as many as 14 people (30.4%) had no pain. While from 25 people from the Non Papuan tribe as many as 21 people (84%) experienced pain and as many as 4 people (16%) experienced no pain. The chi square test results obtained ρ-value = 0.294> 0.05. This means that there is no relationship between patients with pain intensity in post-fracture surgery patients in Jayapura Regional Hospital. The prevalence ratio test results obtained from RP = 0.435; CI95% = (0.1126 - 1.505) does not include 1 which is interpreted to mean that the tribe is not significant for the intensity of pain after fracture surgery.

Table 4. Tribal relationships with pain intensity of post-fracture surgery patients in Jayapura General Hospital

No	Tribe	Pain intensity				Number	
		Pain		Not pain			
		n	%	n	%	n	%
1	Papua	32	69,6	14	30,4	46	100
2	Non Papua	21	84	4	16	25	100
Total		53	74,6	18	25,4	71	100
p-value = 0,294; RP = 0,435; CI95%= (0,1126 – 1,505)							

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Source: Primary Data, 2018

e. Job relationship with pain intensity of post-fracture surgery patients in Jayapura General Hospital

Table 5. Employment Relationships with pain intensity in post-fracture surgery patients in Jayapura General Hospitalmprove this

No	Occupation	Pain intensity				Number	
		Pain		Not pain			
		n	%	n	%	n	%
1	Not work	47	83,9	9	16,1	56	100
2	Work	6	40	9	60	15	100
Total		53	74,6	18	25,4	71	100
p-value = 0,002; RP = 7,833; CI95%= (2,233 – 27,845)							

Source: Primary Data, 2018

Based on Table 5, it shows that of 56 people who did not work or work irregularly as many as 47 people (83.9%) experienced pain and as many as 9 people (16.1%) were not painful. While from 15 people who worked permanently as many as 6 people (40%) experienced pain and as many as 9 people (60%) did not experience pain. The chi square test results obtained ρ-value = 0.002 <0.05. This means that there is a relationship between the work of patients with pain intensity in post-fracture surgery patients in Jayapura Regional Hospital. The

prevalence ratio test results were obtained Rp. 7.833; CI95% = (2,233 - 27,845) interpreted that patients who did not work or did not work but experienced higher pain 7,833 times than patients who worked permanently.

f. Relationship to surgical history with pain intensity in post-fracture surgery patients in Jayapura Regional Hospital

Table 6. Relationship between surgical history and pain intensity of post-fracture surgery patients in Jayapura General Hospital

No	surgical history	Pain intensity				Number	
		Pain		Not Pain			
		n	%	n	%	n	%
1	Never	39	69,6	17	30,4	56	100
2	Ever	14	93,3	1	6,7	15	100
Total		53	74,6	18	25,4	71	100
p-value = 0,124; RP = 0,164; CI95%= (0,020 – 1,348)							

Source: Primary Data, 2018

Based on Table 6, it shows that out of 56 people who have never had surgery, 39 people (69.6%) experience pain and 17 people (30.4%) have no pain. While from 15 people who had a history of surgery as many as 14 people (93.3%) experienced pain and as many as 1 person (6.7%) had no pain. The chi square test results obtained ρ-value = 0.124> 0.05. This means that there is no correlation between the patient's surgical history and pain intensity in post-fracture surgery patients in Jayapura Regional Hospital. The prevalence ratio test results were obtained Rp. 0.164; CI95% = (0,020 - 1,348) did not include 1 which interpreted that the history of surgery was not significant for the intensity of pain after fracture surgery.

g. Relationship of attitudes and beliefs about pain with pain intensity in post-fracture surgery patients in Jayapura General Hospital

Table 7. Relationship between attitudes and beliefs about pain with the intensity of pain in post-fracture surgery patients in Jayapura General Hospital

No	beliefs about pain	Pain intensity				Number	
		Pain		Not Pain			
		n	%	n	%	n	%
1	Less	26	86,7	4	13,3	30	100
2	Good	27	65,9	14	34,1	41	100
Total		53	74,6	18	25,4	71	100
p-value = 0,086; RP = 3,370; CI95%= (0,980 – 11,587)							

Source: Primary Data, 2018

Based on Table 7, it shows that of the 30 people with less attitudes and beliefs about pain, 26 people (86.7%) experienced pain and as many as 4 people (13.1%) had no pain. While from 41 people whose attitude and belief in good pain were 27 people (65.9%) experienced pain and as many as 14 people (34.1%) had no pain. The chi square test results obtained ρ-value = 0.086> 0.05. This means that there is no relationship between attitudes and beliefs about the pain of patients with pain intensity in post-fracture surgery patients in Jayapura Regional Hospital. The prevalence ratio test results were obtained Rp. 3,370; CI95% = (0,980 - 11,587) with a lower value not including 1 which interpreted that attitudes and beliefs about pain were not significant for the intensity of pain after fracture surgery.

h. Relationship between anxiety level and pain intensity of post-fracture surgery patients in Jayapura General Hospital

Table 8. Relationship between the level of anxiety and the intensity of pain in post-fracture surgery patients in Jayapura Regional Hospital

No	Level of anxiety	Pain intensity				Number	
		Pain		Not Pain			
		N	%	n	%	n	%
1	Anxiety	32	80	8	20	40	100
2	Not anxiety	21	67,7	10	32,3	31	100
Total		53	74,6	18	25,4	71	100
p-value = 0,367; RP = 1,905; CI95%= (0,647 – 5,611)							

Source: Primary Data, 2018

Based on Table 8, it shows that out of 40 non-anxious people 32 people (80%) experienced pain and as many as 8 people (20%) had no pain. While from 31 people who were not anxious as many as 21 people (67.7%) experienced pain and as many as 10 people (32.3%) did not experience pain. The chi square test results obtained ρ-value = 0.367> 0.05. This means that there is no correlation between the patient's anxiety level and pain intensity in post-fracture surgery patients in Jayapura General Hospital. The prevalence ratio test results were obtained RP = 1,905; CI95% = (0.647 - 5.611) with a lower value not including 1 which was interpreted that the level of

anxiety was not significant for the intensity of pain after fracture surgery.

i. The relationship between the type of pain medication and the pain intensity of post-fracture surgery patients in Jayapura Regional Hospital

Table 9. Relationship between types of pain medication with pain intensity in post-fracture surgery patients in Jayapura General Hospital

No	types of pain	Pain intensity				Number	
		Pain		Not Pain			
		n	%	n	%	n	%
1	Non Narcotic	29	76,3	9	23,7	38	100
2	Narcotic	24	72,7	9	27,3	33	100
Total		53	74,6	18	25,4	71	100
p-value = 0,942; RP = 1,208; CI95%= (0,414 – 3,525)							

Source: Primary Data, 2018

Based on Table 9, it shows that of the 38 people with the type of non-narcotic anti-pain medication as many as 29 people (76.3%) experienced pain and as many as 9 people (23.7%) had no pain. While from 33 people there were 24 narcotics pain types (72.7%) experienced pain and 9 people (27.3%) had no pain. The chi square test results obtained ρ-value = 0.942> 0.05. This means that there is no relationship between the type of patient's anti-pain medication and the pain intensity in post-fracture surgery patients in Jayapura Regional Hospital. The prevalence ratio test results were obtained RP = 1,208; CI95% = (0,414 - 3,525) with a lower value that does not include 1 which is interpreted that the type of pain medication is not meaningful to the intensity of pain after fracture surgery.

4. DISCUSSION

Relationship of age with Pain Intensity after fracture surgery

The results showed that the relationship between age and the intensity of postoperative fracture pain (p value = 0.257> 0.05). The results of the study showed that the pain intensity was higher in patients> 30 years old than patients <30 years old, in accordance with research from Gagliese and Katz (2013) which aimed to see differences in opiate use among young patients with elderly patients. The number of young patient respondents was 95 people and elderly patients as many as 105 people. The results of the study showed that younger patients experienced greater pain than older patients. Same is the research presented by Lueck (1992) which aims to assess the intensity and quality of postoperative pain in laparotomy fractures in respondents aged> 30 years. The number of respondents after the fracture operation was <30 years old (69%) and> 30 years old (31%).

The results showed that the average pain intensity at <30 years and> 30 years at 24 hours postoperatively. Further analysis showed no significant relationship between age and the intensity of postoperative fracture pain (p = 0.257). The explanation above provides an overview in this study and it can be concluded that the expression of pain associated with age is caused more by psychological barriers, so that the individual covers the pain sensation that is actually felt. According to Smeltzer and Bare (2012) states that the assessment of pain and the accuracy of treatment must be based on the patient's pain report rather than based on the patient's age.

Relationship between Gender and Pain Intensity after fracture surgery

The results showed that the intensity of postoperative fracture pain in men was lower than that of women. Further analysis showed that there was no significant relationship between respondent's sex with the intensity of postoperative fracture pain (p value <0.146). The results of the study showed that men experienced lower pain intensity than women, according to research conducted by Uchiyama, et al. (2006) aimed at examining gender differences in postoperative pain with cholecystectomy revealed that female patients had higher pain scale values than men at 24 hours after fracture surgery. Different results from Yuan-Yi, et al. (2002) regarding the correlation of patient characteristics, and postoperative relationships with morphine needs and assessment of pain at rest and movement. The study was conducted with a

total number of respondents of 2,298 who received morphine.

The absence of a relationship between pain intensity between men and women in the results of this study can also be influenced by differences in the types of fractures experienced by male and female patients. Many women do it. The different types of surgery affect the magnitude of tissue damage due to incisions made during surgery, so that the intensity of postoperative fracture pain in women is higher than that of men.

2. Relationship between Education Levels and Post Pain Post-fracture Intensity

The results showed that the pain intensity in respondents with secondary education was higher compared to patients with low and high education. Further analysis showed that there was no significant relationship between the level of education and the intensity of postoperative fracture pain (p value = 0.4462). The results of this study are in accordance with the study by Moddeman (2000) which aims to look at the factors that influence the experience of postoperative fracture pain in adult women with the number of respondents as many as 85 patients after cesarean section surgery. The results showed that there was no significant relationship between the level of pain and the level of education.

Tribal relationship with Pain Intensity after fracture surgery

The results showed that the Papuan tribe had the highest post-fracture pain intensity among non-Papuan tribes. Further analysis showed that there was no significant relationship between culture and the intensity of postoperative fracture pain (p value >0.292). The results of this study are also not in accordance with the existing theory that race and ethnicity are important factors for someone in responding to pain (Smeltzer & Bare, 2012). Everyone with a different culture will deal with pain in different ways. People who experience the same pain intensity may not report or respond to pain in the same way. There are differences in the meanings and attitudes associated with pain in various cultures. Culture influences a person how to tolerate pain, interpret pain, and react verbally or non-verbally to pain (LeMone & Burke, 2008).

Patients from Non Papuan tribes who accept pain, so they must feel strong and patient about the pain they feel. Different from the results of this study which shows that Papuan tribes have higher pain intensity than other tribes. The reason for the differences in the results of the research with the theory is that there has been a mixture of respondents' cultures that are not pure anymore in accordance with their cultural background. This mixture of cultures can cause respondents to adopt the values, beliefs, culture, and lifestyle in which the individual lives, so it is important to know how long the respondent has assimilated to the local culture

Job relationship with Pain Intensity after fracture surgery

The results showed that there was a relationship between the work of patients with pain intensity in post-fracture surgery patients in Jayapura Public Hospital (ρ-value = 0.002). This research is in line with previous research conducted by Nurhafizah (2014) which revealed that there is a relationship between work and pain intensity. Data analysis showed that patients who did not work or work irregularly as much as 83.9% experienced pain, while patients who worked still as much as 40% did not experience pain. The prevalence ratio test results were interpreted that patients who did not work or did not work but experienced higher pain 7,833 times than patients who worked permanently.

The existence of a work relationship with the intensity of pain due to patients who are not working will think of additional costs incurred even though they have followed health insurance, but there are some costs beyond the calculation of health insurance, so that patients face the cost problems they face. In addition, patients think about how their survival in earning income because they affect their income

because they cannot work optimally in earning income.

Relationship to Operational History with Postoperative Intensity Pain Fractures

The results showed that respondents who had never undergone surgery had lower pain intensity than respondents who had never experienced a previous operation. Further analysis showed that there was no significant relationship between previous surgical history and the intensity of postoperative fracture pain (p value = 0.124> 0.05). The results of this study are consistent with the research conducted by Perry, et al. (1994), found that 29% of women with abdominal surgery hysterectomy had more severe pain than the experience of previous abdominal surgery pain. The remaining 71% of women who have hysterectomy experience mild pain or the same as previous pain experience.

There is no relationship between previous pain experience and the intensity of postoperative fracture pain, because previous pain experience does not necessarily mean that the individual will receive pain with easier in the future. If individuals have long experienced a series of painful episodes without ever recovering or suffering from severe pain, anxiety can arise. Conversely, if individuals experience pain of the same type over and over again, but the pain is successfully eliminated, it will be easier for individuals to interpret the pain sensation. The impact of the client will be ready to take measures to relieve pain. If someone has never felt pain before, then the first perception of pain can interfere with coping with pain (Potter & Perry, 2012).

The experience of previous pain has implications for assessment nursing. If the patient never feels pain, then the first perception of pain can interfere with coping with pain. For example, post fracture surgery is common for patients to experience severe incision pain for several days. If the patient is not aware of this, the patient will see the onset of pain as a serious complication, so that the patient then lies down on the bed and breathes shallowly, because the patient is afraid something bad will happen, when in fact patients can actively participate in post breathing exercises surgery. The nurse must make an effort to prepare the patient by explaining clearly the type of pain to be experienced and the method that reduces the pain. For patients who have experienced pain before, caregivers need to know whether the experience of pain can be managed properly or not. If the patient has long experienced pain without ever recovering or suffering from severe pain, anxiety or even fear can arise. Conversely, if the patient can deal with pain well, then the patient is better prepared to take the actions needed to relieve pain.

Relationship of Attitudes and Beliefs in Pain with Intensity of Pain Post fracture surgery

The results showed that respondents with less attitudes and beliefs about pain had higher pain intensity than respondents with good attitudes and beliefs about pain. Further analysis showed that attitudes and beliefs about pain had a significant relationship with the intensity of postoperative fracture pain (p value = 0.086> 0.05). The absence of a relationship between attitudes and beliefs about pain with the intensity of pain after fracture surgery is not in accordance with the theory states that attitudes and beliefs about pain can have strong influence on how pain is felt and how to manage pain. Based on this, nurses need to have positive nurse and patient relationships and effective therapeutic communication, where nurses must take the time to talk and listen to patients, respond to patients individually and give consideration to patients who experience limitations in communication.

Relationship of Anxiety Level with Fracture Pain Intensity Postoperatively

The results showed that respondents with severe anxiety levels had higher pain intensity than respondents with moderate anxiety and mild anxiety. Further analysis showed that the level of anxiety was related to the intensity of postoperative fracture

pain (p value = 0.367> 0.05) and was a factor that was not related to the intensity of pain after fracture surgery. The results showed that the anxiety score was significantly related to pain. Unlike the case in the study of Pan, et al. (2006) which aims to look at the relationship between acute anxiety and pain, which was carried out on 34 women who performed section. Pain is measured at rest and activity. Based on the results of this study and supported by several studies and theories that show that the level of anxiety affects the intensity of pain, the level of anxiety has implications in nursing studies. The nurse should be able to find out the patient's anxiety level during the assessment. An instrument that can be used to determine the patient's anxiety level is using the Y-form State Anxiety Inventory (S-AI) developed by Spielbeger. By knowing the patient's anxiety level, the nurse can do several things that can reduce patient anxiety.

Some things that can be done to reduce patient anxiety are by explaining nursing actions that can increase pain such as procedures related to discomfort (invasive action), fostering relationships with patients, and providing health education for pain experienced by patients (Smeltzer & Bare, 2012). In addition, nurses can show concern in various ways such as carefully managing the position of the patient, paying attention to friendliness, trustworthiness, and showing the impression that the patient can accept, trying to keep paying attention and being responsible for the patient's requests, and taking care personal (Potter & Perry, 2012).

Relationship to the type of pain medication with fracture post-operative pain intensity

The results showed that respondents who received lower non-narcotic type pain medication felt pain compared to respondents who received narcotic drugs for pain. Further analysis showed that there was no significant relationship between the type of pain medication and the intensity of postoperative fracture pain (p value = 0.942> 0.05). The results showed that patients aged <30 years used opiates rather than younger ones and scores of Visual Analog Scale (VAS) in older people were lower than those younger.

The absence of different types of anti-pain medication is given, because in the fixed procedure given in Jayapura Public Hospital the patients who experience moderate and severe pain are given narcotic drugs while the patients who experience a negative and no pain are given bobbakrotic drugs, so that by giving this drug the same - the same has the same opportunities as pain intensity.

The dominant factor with pain intensity

Multivariate test results obtained that the dominant factor in post-operative pain intensity is that this work is caused by costs that must be borne and the impact after leaving the hospital to get income, especially for patients who do not work or those who do not work permanently.

5. CONCLUSION

a. There is no relationship between the age of the patient and the intensity of pain in post-fracture surgery patients in Jayapura Public Hospital (ρ-value = 0.257; RP = 2.29; CI95% = (0.737 - 6.778).
b. There was no relationship between patient gender and pain intensity in post-fracture surgery patients in Jayapura Public Hospital (ρ-value = 0.146; RP = 2.593; CI95% = (0.864 - 7.777).
c. There is no correlation between patient education and pain intensity in post-fracture surgery patients in Jayapura General Hospital (ρ-value = 0.292; RP = 0.462; CI95% = (0.129 - 1.657).
d. There is no relationship between the patient's patient with pain intensity in post-fracture surgery patients in Jayapura General Hospital (ρ-value = 0.294; RP = 0.435; CI95% = (0.1126 - 1.505).
e. There is a relationship between the work of patients with pain intensity in post-fracture surgery patients in Jayapura

General Hospital (ρ-value = 0.002; RP = 7.833; CI95% = (2,233-27,845).

f. There is no correlation between the patient's surgical history and pain intensity in post-fracture surgery patients in Jayapura Hospital (ρ-value = 0.124; RP = 0.164; CI95% = (0.020 - 1,348)
g. There is no relationship between attitudes and beliefs about the pain of patients with pain intensity in post-fracture surgery patients in Jayapura Public Hospital (ρ-value = 0.086; RP = 3.370; CI95% = (0.980 - 11.587).
h. There is no correlation between patient's anxiety level and pain intensity in post-fracture surgery patients in Jayapura General Hospital (ρ-value = 0.367; RP = 1.905; CI95% = (0.647 - 5.611).
i. There is no relationship between the type of anti-pain medication for patients with pain intensity in post-fracture surgery patients in Jayapura Hospital (ρ-value = 0.942; RP = 1.208; CI95% = (0.414 - 3.525).
j. The dominant factor in postoperative pain intensity is work with a p-value = 0.001 with a prevalence ratio of Rp = 7.833 (2,233-27,485).

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