The Relationship Between Prayer Intensity and Family Support with Post Surgery Pain

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ABSTRACT

Post operative pain is still a major problem for patients after surgery. Management of pain is still focus on the sensory component. The aims of this research was to explain the intensity of prayer and family support correlated with post operative pain. Analytic correlational was the method of this research. Samples were 40 patients admitted with chronic appendicitis at Nashrul Ummah Islamic Hospital and were found by Total sampling. Analysis of data bivariate test using pearson product moment and multivariate analysis using logistic regression with p significance < 0.05. There is a significant and negative correlation between intensity of praying with post operative pain (p = 0,000; r=-0,914) and also between family support with the post operative pain (p = 0.000; r= 0.704). Jointly a significant relationship exists between the intensity of prayer and family support with the post-operative pain, with values as a correlation coefficient (R) = 0.923, a determinant coefficient (R 2 = 0.852), F regression = 77.772, p = 0.000. The intensity of praying greater impact than the family support against the post-operative pain. The result effective contribution of intensity praying to post-operative pain is 73.1%, meanwhile, the effective contribution of family support is 14%. There is a negative correlation between the intensity's praying and the family support with the post operative pain. tThe intensity of praying is greater impact than the family support.

Keywords: Intensity of Praying, Family support, Post operative pain

INTRODUCTION

Post-surgical pain is acute pain that is obtained and experienced by patients after surgery every day around the world. Brasseur and Poisson states that postoperative pain is still a problem for more than 50% of patients undergoing surgery even though knowledge and methods of pain management are growing rapidly. Surgery generally causes acute pain that requires pharmacological and non-pharmacological treatment (psychological modulation and sensory modulation). The process of causing pain depends on two components, namely the sensory and affective components, but until now pain management is mainly aimed at the sensory component [1].The majority (80%) of patients undergoing surgery experience acute pain and 86% experience moderate to severe pain. Data on post-surgery patients in the last two months who were treated in the Surgery Room of RSI Nashrul Ummah Lamongan totaling 214 people with pain levels varying from moderate to severe pain, almost all of whom used analgesic therapy to reduce pain.

In meeting the psychological needs of patients, nurses need to work with families. Family attention is always coveted by someone who feels they don't get it. Relationships in a good family are an absolute element of the creation of happiness in life. A good relationship will be achieved when the family is developed, and fostered, mutual respect, and mutual attention, in the sense that each other gives awards (respect) in accordance with the status and position of each [2].

Having good family support will give you a feeling of calm, and a positive attitude towards yourself and the pain you are experiencing, or vice versa. Someone who has less support in life tends to look less concerned. When having family support, it is hoped that the patient can maintain his psychological health condition and more easily accept physical changes and control the emotional turmoil that arises. Family support, especially support that is obtained by the closest people, will cause peace of mind and feeling happy [3].

Based on the description above, the authors are interested in conducting research on the relationship between the intensity of prayer and family support for postoperative pain ringing in the Surgery Room of RSI Nashrul Ummah Lamongan. The purpose of this study was to explain the relationship between the intensity of prayer and family support on post-surgical pain.

METHOD

The design used was correlational analysis, with a cross-sectional approach. This research was conducted at Nashrul Ummah Islamic Hospital Lamongan. The population studied were patients with elective Preoperative Appendectomy. With the total sampling technique, a sample of 20 patients was taken.

In collecting data, the researcher approached the respondents to obtain consent from the respondents as research subjects, namely post-appendectomy patients who were treated in the Surgery Room of RSI Nashrul Ummah Lamongan who met the inclusion criteria. After being selected as a

respondent, the researcher will give: Informed Consent to the respondent, and as an act of approval to be used as a research sample, the respondent will give his signature. Then explained how to fill out the questionnaire and gave time to fill out the questionnaire, after being collected by the researcher, then coding, scoring, and tabulating were carried out

Collecting data about the intensity of prayer using a questionnaire consisting of 32 statements with scoring: Respondents answered by giving a mark ($\sqrt{}$). The technique for scoring the intensity of prayer in the questionnaire is using a Likert scale. family support using a questionnaire of 30 statements with scoring: Respondents answered by giving a mark ($\sqrt{}$). The technique for scoring the family support questionnaire is to use a Likert scale. Pain measurement using the Visual Analog Scale scale.

The validity test was carried out quantitatively, namely testing a questionnaire/questionnaire using the Pearson Product Moment correlation coefficient, all questions about the intensity of prayer that were tested were valid, and the r xy value was more than 0.30. Reliability test using Alpha Cronbrach's results of the reliability test conducted in the operating room on 3-4 February 2014 showed that the prayer intensity instrument had a value of r i = 0.7 62 and family support r i = 0.756 This shows that the two instruments have a high reliability value.

Testing for normality using the Shapiro-Wilk test technique Testing the homogeneity of population variations using Levenee's test of homogeneity of variance. Bivariate analysis uses the Pearson Product Moment test while the multivariate test uses a multiple linear regression test.

RESULTS

Table 1 Frequency Distribution of Respondents' Characteristics

Characteristic	Frequency (f)	Prosentase (%)
Gender		
Man	23	43,3
Woman	27	56,7
Age		
20-25 year	9	30,0
26-30 year	7	23,3
31-35 year	5	16,7
36-40 year	9	30,3
Education		
Elementary School	3	10,0
Junior High School	2	6,7
Senior High School	13	43,3
Graduate	12	40,0
Job		
PNS/TNI/Polri	6	20,0
Private employees	6	20,0
Self-employed	5	16,7
Farmer	7	23,3
Doesn't work	6	20,0

Table 2 Average Distribution of Prayer Intensity, Family Support, and Pain Scale in the Operating Room

No	Variabel	n	Mean	SD	Min-Max	95% CI
1	Prayer intensity	30	56,07	15,465	34-92	50,29-61,84
2	Family support	30	90,63	23,040	54-137	82,08-99,24
3	Pain scale	30	4,67	1,749	2-8	4,01-5,35

The prayer intensity variable has a value of r = -0.914 > 0.361 (r table) and a significance of $p = 0.000$ ($p <0.05$), then Ho is rejected, meaning that there is a very strong and significant negative relationship between the intensity of prayer a with postoperative pain. These results mean that the higher the intensity of the prayer, the lower the pain scale.

The family support variable has a value of r = -0.704 > 0.361 (r table) and a significance of $p = 0.000$ ($p <0.05$), then Ho is rejected, meaning that there is a strong and significant negative relationship between family support and postoperative pain. surgery. These results mean that the better the family support, the lower the degree of postoperative pain.

The prayer intensity variable has a value of r = -0.914 > 0.361 (r table) and a significance of $p = 0.00$ ($p <0.05$), then Ho is rejected, meaning that there is a very strong and significant negative relationship between the intensity of prayer with postoperative pain. The family support variable has a value of r = -0.704 > 0.361 (r table) and a significance of $p = 0.000$ ($p <0.05$), then Ho is rejected, meaning that there is a strong and significant negative relationship between prayer intensity and family support with pain post surgery.

The results of a simple regression analysis regarding the relationship between family support and postoperative pain experienced by patients showed a correlation coefficient F of 27.448 > 4.17 (F table) with $p = 0.000 <0.05$. This shows that there is a significant correlation between family support and post-surgical pain. This shows that the greater the family support the patient has, the lower the postoperative pain experienced by the patient, conversely the lower the family support, the higher the postoperative pain experienced by the patient. The determinant coefficient ($r2^)$ was 0.852, which means that around 85.2% the contribution of the variable intensity of prayer and family support to the postoperative pain variable, while the remaining 14.8 is explained by other predictors and other errors *(sampling and non-sampling errors)*.

DISCUSSION

The results of this study prove that The intensity of prayer and family support in reducing the post-surgical pain scale can be seen in the results of the product moment correlation test where r = -0.914 > 0.361(r table) and a significance of p = 0.00 (p < 0.05). Other evidence is also shown in table 4.17 where the results of the linear regression analysis show that the Freg value is 77.772 > 4.17 (F table), which means that the higher the intensity of the patient's prayer, the lower the postoperative pain

experienced by the patient, conversely the lower the intensity of the patient's prayer, then the higher the postoperative pain experienced by patients.

This can be explained using the gate control theory, where pain has two components, namely the sensory component and the affective component. The interaction between the cognition center in the cerebral cortex and the affective motivational system, the limbic system and the hypothalamus as well as unpleasant emotional experiences from the frontal cortex produce perceptions and emotional responses to pain stimuli [4].

Cognitive control can directly affect neurons at the level of the spinal cord. Meanwhile, the influence of the affective motivation system is projected to the dorsal horn of the spinal cord through an endogenous inhibition system [5].

In the hadiths, the arguments for praying include that prayer is worship (HR. pray, pray to Allah, Allah will grant you (HR. Tirmidhi), pray for healing / good health (HR. Tirmidhi). Thus, the essence of a spiritual approach by praying to Allah will lead to the belief that patients can tolerate pain, and can adapt to the pain response that occurs post-surgery.

The relationship between family support and postoperative pain can be seen from the correlation test which shows that there is a significant relationship between family support and postoperative pain where patients who have good family support have a low postoperative pain value r = -0.704 > 0.361 (r table) and a significance of p = 0.00 (p < 0.05). Other evidence is also shown in table 4.20 where the results of the linear regression analysis show that the Freg value is 27.448 > 4.17 (F table), which means that the higher the patient's family support, the lower the postoperative pain experienced by the patient, conversely the lower the intensity of do' a patient, the higher the postoperative pain experienced by the patient.

Family support can help individuals to overcome their problems effectively. Family support can also improve physical and mental health. Family support is associated with reduced symptoms of illness and ability to meet own needs for health care. In addition, social interaction with people who provide family support can give a more positive view of himself [6].

With the presence of the family to give support to the patient, it will have an impact on reducing the anxiety he experiences. Anxiety is an expression of a normal emotional response that arises because of the awareness of the cognitive function about threatening situations and the presence of uncertainty. Preoperative anxiety arises due to environmental changes, lack of knowledge about surgery, anesthesia, pain and various related problems. From various clinical observations it is known that there is a linear relationship between preoperative anxiety and postoperative pain and from Johnson's 1978 study, patients who received information about surgery had better pain tolerance [7].

The relationship between the intensity of prayer and family support with post-surgical pain can be seen from the results of multiple linear regression analysis which shows that the Freg value is 77.772 > 4.17 (F table), which means that there is a significant correlation between the intensity of prayer and family support with postoperative pain. surgery. Thus, the higher the intensity of prayer and family

support, the lower the post-surgical pain, conversely the lower the intensity of prayer and family support, the higher the post-surgical pain.

Based on the existing theory, it is stated that prayer contains a spiritual element for pain, receiving pain is a trial from God which will make a person put more trust in Allah and cause illness and the results of his efforts can be used as a trigger towards his life goals, including when he is sick [8].

In a state of accepting pain as a trial it will reduce the response to the psychological stressor of pain so that it will affect the HPA axis. In the adrenal medulla there will be a decrease in epinephrine catecholamine production. As an effect of decreased epinephrine, in these conditions there will be a decrease in cardiac activity and cardiac output so that it can affect changes in vital signs to normal [9].

By understanding Islamic spirituality regarding illness and therapy, according to Najati 2003, it will make humans have strong motivation, readiness (potential) to draw closer to Allah, return to Him, ask Him for help when in a critical situation, including when sick. So that with this motivation it can affect cognition in the brain towards the response to pain as a psychic stressor [10].

By praying and being supported by the presence of the family, it will be able to reduce the level of anxiety so that a relaxation process will occur, this will have an impact on the work of the large and small nerve fibers, both of which are in the dorsal root ganglion. Stimulation of large fibers will increase the activity of the substantia gelatinosa so that the activity of T cells is inhibited and causes the conduction of stimuli to be inhibited. Large fiber stimulation can directly stimulate the cerebral cortex. The results of this perception will be returned to the spinal cord via efferent fibers and their reactions affect T-cell activity. Stimulation of the small fibers will inhibit the activity of the substantia gelatinosa and open the mechanism door, thus stimulating T-cell activity which will further inhibit pain stimulation[11].

CONCLUSIONS

There is a negative correlation between the intensity's praying and the family support with the post operative pain. tThe intensity of praying is greater impact than the family support.

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