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Emotional Support For Early Mobilization On day 0 Until 4 In Patient Post Operation Total Knee Replacement

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***Abstract*—Patients after Total Knee Replacement (TKR) surgery will experience physical mobility and pain obstacles, so that support is needed for these patients. Purpose: This study analyzes whether there is a relationship between emotional support and early mobilization from 0 to 4 days after TKR surgery. Research Methods: Bivariate analysis in this study using Spearman rho total sample of 47 respondents with consecutive sampling method. Results: The study showed that emotional support was associated with mobilization on the first day (p <0.001) and the fourth day (p <0.03). On the first day of mobilization, the patient still feels severe pain, so emotional support or assistance is needed when doing the mobilization. With the assistance, the patient feels confident in doing the exercises. Meanwhile, on the fourth day, the patient has started walking exercises so that emotional support is needed. With the emotional support, the patient feels comfortable and loved, thereby accelerating the healing process. Conclusion: There is a relationship between emotional support for mobilization on the first day and the fourth day post TKR surgery.**

Keywords—Emotional support, Early mobilization, TKR

I. INTRODUCTION

The problem in the elderly is increasing this is due to an increase in population. The problem that is often found in the elderly is Osteoarthritis (OA). In United States there was an increase in the prevalence of OA from 2013 to 2015 to 54.4 million (22.7%). In Indonesia it has also increased by 24.7% and in Central Java it has reached 25.5% [1]

Increasing the number of OA if it requires proper handling, if not treated immediately the patient will experience immobilization problems. Long or chronic OA will undergo a knee art replacement or what is called Total Knee Replacement surgery. According to the Australian Orthopedic Association (AOA) (2017), in 2016 there was an increase in the prevalence of TKR (Total Knee Replacement). The increase in prevalence is due to aging and due to obesity [2]

Post Total Knee Replacement surgery is performed to reduce pain and impaired mobilization. Patients after TKR surgery need good rehabilitation, if they do not get good treatment, they will experience difficulty in carrying out activities such as going up and down stairs or difficulty walking. To overcome this, patients are encouraged to mobilize early, the goal is to accelerate healing. This is in accordance with the research of Xu et.al (20117), which states that early mobilization can have an effect in accelerating independent activity and reducing joints [3].

In carrying out early mobilization, most patients experience obstacles such as the patient feeling afraid to move the joints because they feel stiffness in the joints, so this action requires motivation from the family to mobilize. The form of support is emotional support where the patient is assisted by the family, given love from the family to motivate mobilization. This is according to the research of Manurung (2017), which states that accompanying patients while doing exercises can accelerate healing [4]. This study aims to determine the relationship between emotional support and early mobilization on day 0 to day 4 in postoperative patients with Total Knee Replacement.

II. METHOD

This research is a quantitative study to examine the relationship of emotional support to early mobilization from day 0 to day 4. The data were taken from distributing questionnaires and the results of observations on Postoperative Total Knee Replacement patients. The data collection method was done by means of analysis using the Spearman rho. The population in this study were post TKR patients at Prof. Dr. Soeharso Surakarta as many as 200 respondents. The sampling technique used was consecutive sampling with a total sample of 47 respondents with inclusion and exclusion criteria. Inclusion criteria include Patients with TKR measures, TKR H0-H4 post operation. While the exclusion criteria included patients with decreased consciousness, the patient has a history of stroke, lower limb fracture patient.

III. RESULT

A. Characteristic Of Responden

Based on table 1, the most postoperative total knee replacement age group is the 60-69 age group at 22%, then the age group over 70 years old is 15%. The older age group

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tends to suffer from osteoarthritis because the aging process they experience causes the elderly to experience physical changes [5]. According to Joyce & Hawks (2014), OA is often found at the age of more than 50 years. The Total Knee Replacement was initially due to OA [6].

Table 1 Frequency Distribution of Respondent Characteristics Based on Age, Gender, Occupation in Post-TKR Operation Patients (n = 47)

Characteristics	Amount (n)	Precentage (%)
Age		
45-59 years	10	21
60-69 years	22	47
>70 years	15	32
Total	**47**	**100**
Gender		
Male	13	27,7
Female	34	72,3
Total	**47**	**100**
Occupational		
Not work	1	2,1
Housewife	15	31,9
Private	14	19,8
Labor	4	8,5
Civil servants	1	2,1
Retired civil servants	12	25,5
Total	**47**	**100**

Based on gender according to table 1, most of the patients who underwent post surgery total knee replacement were female as much as 72.3%, because women besides working also still take care of the household. According to Ahmad et.al (2018), women are more at risk of developing OA [7]. In accordance with the prevalence according to epidemiological studies as much as 10% for men and 83% for women [7]. As you age, a person will experience joint problems, namely loss of flexibility and decreased bone density so that OA often occurs [8].

Based on table 3.1, the percentage of jobs that underwent most post surgery total knee replacement was the housewives group as much as 31.9%. Housewife work can aggravate OA disease suffered by patients. This is because the position in doing household chores mostly uses the knee joint as a support for a long period of time, this worsens the condition of OA.

B. *Emotional Support and Early Mobilization*

Before describing the results of the relationship between emotional support and early mobilization, data on emotional support will be displayed in table 2 and early mobilization in table 3 below:

Table 2 Emotional Support Data Analysis in Post operative Patients TKR (n = 47)

Variable	Low	High	Mean	Median
Emosional Support	22	25	8,7	9

Table 3 Mobilization Data Analysis at Day 0 to 4 in Postoperative Patients TKR (n = 47)

Variable	Not Done	Percentage	Done	Percentage
Mobilization Day 0	15	31,9	32	68,1
Mobilization Day 1	24	51,1	23	48,1
Mobilization Day 2	20	42,6	27	57,4
Mobilization Day 3	17	36,2	30	63,8
Mobilization Day 4	11	23,4	36	76,6

Table 4 The Relationship between Emotional Support and Early Mobilization in Postoperative Patients TKR (n=47)

Early Mobilization										
	Day 0		Day 1		Day 1		Day 3		Day 4	
	p	*r*	*p*	*r*	*p*	*R*	*p*	*r*	*p*	*r*
Emotional Support	0,46	0,11	0,001*	0,46	0,64	0,06	0,12	0,22	0,034*	0,30

Based on table 2, it is found that most respondents have high emotional support and at the level of mobilization it can be seen from table 3.3 that on day 0 most of the respondents had mobilized, then decreased on the first day and increased again on days 2, 3, and 4. The results of table 4 can be seen that emotional support is related to mobilization on day 1 with p value <0.001 and day 4 with p value <0.03.

IV. DISCUSSION

Before discussing emotional support, the researcher will tell about the implementation of mobilization on days 0 to 4. The results of the study show that on day 0 many mobilize, this is because on day 0 of the mobilization, only deep breathing exercises are carried out so that patients who have a history of health can still do exercises on day 0 [9].

On the first day of implementation, the mobilization decreased, this is because on the first day there was movement and needed help from the family, such as patients having to bend their knees after surgery. On the first day, the mobilization decreased because the patient still felt severe pain and was afraid to move, even the family was still afraid to help with the exercise because the patient was in pain. This feeling of fear or anxiety can affect the implementation of mobilization [10]. In addition, the delay in mobilizing is also influenced by several health conditions such as unstable blood pressure, this condition can affect mobilization. This is in accordance with research Chua et.al (2017), comorbidity is related to the ability to undergo mobilization training. On days 2, 3, and 4, respondents have started to experience an increase in mobilizing. This is because the patient's condition has improved and the feeling of pain and anxiety has decreased.

As for the results of the relationship between emotional support and early mobilization, it was found that emotional support was related to early mobilization on the first and fourth days. This is due to mobilization in the early hours of the first day when the patient's health condition is still painful and afraid to move his joints. Because feelings of pain and fear will affect the degree of immobility of the client after TKR [6], so that on the first day the patient needs the help of the closest person to do the exercises compared to days 2, 3.

Emotional support can also affect early mobilization. On the fourth day, this is because on the fourth day you have started to learn to walk so that it takes family members to accompany you because the patient is still at risk of falling, so that emotional support can increase self-confidence to do walking exercises. Supported by the research of Wu et al, which states that the presence of emotional support can increase the patient's confidence for functional abilities. This

is because the closest person can facilitate the healing process, because someone who is sick needs support to provide comfort, a feeling of being appreciation in the form of providing empathy and support [11]. Patients who are waited on by their families when they are sick feel more confident in mobilizing because they feel cared for. Emotional support can also encourage patients to undergo treatment, this is because the support they get from family can be used as motivation for patients to carry out therapy programs [12]. This is also consistent with House & Kahn (1995), emotional support is empathy, concern, and caring (for example, knowledge, advice, or providing information). Social support, one of which is emotional support, can improve psychological health and well-being. The support from the family can have a positive influence on the recipient and can provide encouragement to recover for the patient [13].

V. CONCLUSION

The results of the study, there is a relationship between emotional social support on early mobilization on days 1 and 4. This was because on the first and fourth days, there was more need for assistance during mobilization.

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