

## THE RELATIONSHIP OF MOBILIZATION WITH THE DURATION OF POST-LAPARATOMY WOUND HEALING IN PERBAUNGAN GENERAL HOSPITAL IN 2020

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### ABSTRACT

**Introduction** Surgery is a treatment action that involves making an incision or making a wound in body tissue, with the intention of removing a certain part of the body as a treatment. Operation. Laparotomy is a surgical procedure that involves opening the abdominal wall and chest wall to reach the contents of the abdominal cavity. The digestive surgical procedures that are often performed using a laparotomy incision technique are: herniotomy, gastrectomy, cholecystotomy, hepaterectomy, appendectomy, colostomy, hermorodectomy, cholecystomy, fistulectomy, or fistulectomy . To determine the relationship between early mobilization and the length of wound healing after laparotomy surgery at the Melati Perbaungan General Hospital. 2020. **Design** Correlative descriptive type research with *cross sectional research design* cross sectional where data between the dependent variable (early mobilization) and the dependent variable (length of wound healing) are measured at the same time, but not all research subjects are observed on the same day or time . **Research methods** The data collection method uses primary data, namely the type of questionnaire on the sample. Secondary data is data that supports this research such as health center profiles and annual reports. **Results** From the statistical test results , the value of  $p=0.000$  was obtained , which means there is a significant relationship between early mobilization and wound healing in patients after laparotomy surgery. Meanwhile, the OR value = 0.067, meaning that respondents who do not carry out early mobilization are likely to have a 0.067 times greater risk of slow healing compared to those who carry out early mobilization. **Conclusion** Of the 30 respondents, the majority carried out early mobilization, namely 18 people (60%), who experienced rapid healing of wounds after laparotomy surgery, namely 16 people (53.3%) **Suggestions** Researchers are expected to seek more knowledge about early mobilization and laparotomy .

**Keywords :** *L apparatus , Mobilization , Post-operative*

### INTRODUCTION

Surgery is a treatment action that involves making an incision or making a wound in body tissue, with the intention of removing a certain part of the body as a treatment. Operation. Laparotomy is a surgical procedure that involves opening the abdominal wall and chest wall to reach the contents of the abdominal cavity. The digestive surgical procedures that are often performed using a laparotomy incision

technique are: herniotomy, gastrectomy, cholecystotomy, hepaterectomy, appendectomy, colostomy, hermorodectomy, cholecystomy, fistulectomy, or fistulectomy (Kusmawan, 2010). Post-operative wound healing will proceed normally without leaving scars or tissue scars if accompanied by

normal healing. Normal wound healing is influenced by various factors, namely age, nutritional status, client hygiene, mobility and wound care (Patricia, 2005). and Schaffer 2000)

Mobilization begins immediately on the first post-operative day, and a diet is given according to intestinal tolerance. Mobilization refers to a person's ability to move freely. Mobilization is a person's ability to get up, stand and walk, return to bed or chair (Lewis S, 2000) which can be obtained from patent breathing, circulation and control of pain.

Mobility is one of the factors that has a big influence on the wound healing process because mobility is a basic human need that is needed by individuals to carry out daily activities in the form of joint movements, attitudes, gait and activity abilities, while mobilization includes sitting, getting up from sitting, standing, moving from one bed to another, walking with the help of moving the body as quickly as possible (Nancy R, 2002).

Rapid mobilization is to reduce post-surgical complications, especially atelectasis and hypostatic pneumonia, as well as rapid wound healing (Oswari, 2005). Atelectasis and hypostatic pneumonia are relatively infrequent if the patient is free to move, because ambulation increases ventilation. The speed of recovery for abdominal wounds is faster if ambulation is done early (Suzanne C, 2001). This will prevent muscle and joint stiffness, reduce pain, ensure smooth blood bleeding, improve regulation of body metabolism, restore the physiological work of vital organs (Kusmawan, 2010).

In almost all types of surgery, after 24-28 hours of surgery the patient is recommended to leave the bed to carry out mobilization and ambulation. The attitude of patients who always sleep in bed after surgery can cause pneumonia because the lungs do not develop properly. An immobile pelvis can cause

decubitus due to impaired blood circulation, all of this can slow down healing from surgery (Oswari, 2003). Most surgical patients are encouraged to get out of bed as quickly as possible because the speed of wound recovery will be faster if ambulation is done early (Suzanne C, 2001). Therefore, it is very important for every post-operative patient to carry out early mobilization to prevent complications and speed up wound healing.

According to data from the World Health Organization (WHO 2018), laparotomy patients in the world increase every year by 10%. The number of laparotomy patients has increased very significantly. In 2017, there were 90 million laparotomy surgery patients in all hospitals in the world. In 2018, it is estimated that this will increase to 98 million patients after laparotomy surgery.

Meanwhile in Indonesia in 2018, laparotomy was ranked 5th, the total number of surgical procedures recorded was 1.2 million people, and it is estimated that 42% of them were laparotomy operations (Ministry of Health of the Republic of Indonesia, 2018)

Based on preliminary survey results obtained from medical records in 2020 at the Melati Perbaungan General Hospital, 40 people were recorded as having undergone laparotomy operations, while in 2019 there were 95 people who had laparotomy operations, and in 2020 (January to January 2021) there were 77 people. Meanwhile For the length of healing of laparotomy wounds during 2020 (January to January 2021), 77 people experienced wound healing in 5 days, 6-7 days, 12 people > 8 days, 55 people . 67% experienced prolonged wound healing.

Based on the data above, it can be seen that the length of time for wound healing in laparotomy operations has increased. Apart from that, based on the author's observations in the field, it was found that

there was still a lack of wound care for patients. From the description above, the author is interested in conducting research regarding the relationship between early mobilization and the length of wound healing after laparotomy surgery at the Melati Perbaungan General Hospital. 2020.

#### METHOD

The type of research used is analytical. The design of this research is cross sectional where the data is between the dependent variable (early mobilization) and the dependent variable (length of wound healing). The population in this study were all patients after laparotomy surgery at the Melati Perbaungan General Hospital. Based on data obtained in the Medical Record from 2020 to January 2021, the population in the study was 30 people. The samples in this study were patients after laparotomy

surgery who were treated in the obstetrics room at the Melati Perbaungan General Hospital. Here the sample criteria are, the client after laparotomy surgery, the client is conscious, there is no history of DM, controlled food and food from the hospital, mature age, willing to be a sample, the client can speak Indonesian. So the sample size taken for this study was 77 people or the total population. The research location was carried out in the midwifery room at RSU Melati Perbaungan, carried out from June - July 2020. Univariate data analysis:

#### RESULTS AND DISCUSSION

##### 1. Age

The age characteristics of respondents were divided into three categories, namely early adulthood (21-35 years), middle adulthood (35-55 years) and late adulthood (< 55 years). From the results of research conducted on 30 respondents

The results of other studies use primary references.

The characteristics of the respondents are

**Table 1 : Frequency Distribution of Post-Laparotomy Operation Respondents Based on Age Characteristics in the Obstetrics Inpatient Room at RSU. Jasmine Perbaungan 2020.**

No	Age	Frequency (f)	Percentage(%)
1	Early adulthood	20	66.7
2	Middle adulthood	10	33.3
3	Late adulthood	-	-
	Amount	30	100

**Table 2: Frequency Distribution of Respondents Post Laparotomy Surgery Based on Gender in the Obstetrics Inpatient Room at RSU. Jasmine Perbaungan 2020.**

No	Gender	Frequency (f)	Percentage (%)
1	Man	18	60.0
2	Woman	12	40.0
	Amount	30	100

**Table 3: Frequency Distribution of Early Mobilization in Post-Laparotomy Surgery Patients in the Obstetrics Inpatient Room at RSU. Melati Perbaungan in 2020.**

Early Mobilization	Frequency (f)	Percentage (%)
Yes	18	60.0
No	12	40.0
Total	30	100

Based on table 4.3 above, it is known that of the 30 respondents, the majority carried out early mobilization, namely 18 people (60.0%) and the minority of respondents did not carry out early mobilization, namely 12 people (40.0%).

**Table 4.4: Frequency Distribution of Length of Wound Healing in Post-Laparotomy Surgery Patients in the Obstetrics Inpatient Room at RSU. Melati Perbaungan 2010:**

Duration of Wound Healing	Frequency (f)	Percentage (%)
Fast	16	53.3
slow	4	46.7
Total	30	100

**Table 4: Relationship between early mobilization and length of wound healing in post-laparotomy surgery patients in the obstetrics inpatient ward at RSU. Perbaungan Jasmine:**

No	Early mobilization	Wound healing time				Amount		Or	P. value
		fast		Slow		f	%		
		f	%	f	%				
1		16	53.3	2	6,7	18	60.0	0.067	0,000
2		-	-	12	40.0	12	40.0		
Amount		16	53.3	14	47.7	30	100		

$$X^2 = 22.857 \quad p = 0.000$$

Based on table 2 above, it can be seen that 18 respondents after laparotomy surgery were male (60.0%). Meanwhile, there were 12 female respondents (40.0%)

From table 4.1 above, it can be seen that of the 30 post-operative respondents, the majority were early adults, namely 20 people (66.7%). Meanwhile, there were 10 people in middle adulthood (33.3%)

Of the 30 respondents, the majority of respondents, namely 106 people (53.3%) who carried out early mobilization experienced faster healing of wounds after laparotomy surgery compared to respondents who did not carry out early mobility. If you look more closely, all respondents who did not mobilize early experienced slow wound healing. Meanwhile, of the 18 respondents who experienced early mobilization, 53.3% recovered quickly. Through the Melati Perbaungan in 2020

## 2. Gender

From the results of research conducted on 30 respondents. The distribution of gender category results obtained for respondents after laparotomy surgery in room RB2, H. Adam Malik Hospital, Medan, can be seen in the following distribution table:

## Discussion:

### 1. Univariate Analysis

#### a. Early Mobilization

Based on the research results, it was found that the majority (60%) of respondents carried out early mobilization correctly because of the explanation from the nurse before the operation was carried out that carrying out early mobilization after laparotomy surgery was good for speeding up wound healing and there was

the will of the respondent as well as motivation from the family. In accordance with the theory put forward by Notoatmodjo, (2010) knowledge is a dominant factor that is very important for the formation of a person's actions. With a good knowledge base, a behavior will be more lasting than behavior that is not based on knowledge. A small percentage (4-%) of respondents did not follow the nurse's advice because of the feelings of anxiety and fear experienced by the patient because they were afraid that the stitches would come off and cause pain. Feelings of anxiety and fear experienced by patients due to fear of the stitches coming loose and lack of understanding about early mobilization and the absence of nurses accompanying patients in carrying out early mobilization actions. anxious and afraid. Tia Mitrawat's research results (2014) There is a relationship between early mobilization and the duration of wound healing for post-appendectomy patients in the surgical ward and the 95% CI value = 17,500 (1,233-250,357), meaning that respondents who have an early mobilization level have the opportunity to have wound healing 17,500 times faster than respondents those with early mobilization levels do not move. Apart from that, according to the research results of Pristahayuningtyas, (2016) which examined the Effect of Early Mobilization on Changes in Clients' Pain Levels Post Appendectomy Surgery at Baladhika Husada Hospital, Jember Regency, there was an influence of early mobilization on changes in clients' pain levels post appendectomy surgery.

The average scale result or mean value of the client's pain scale after early mobilization was 5.62 (moderate pain category) with a standard deviation of  $\pm 1.99$ , in this study there were no respondents who experienced the painless category post appendectomy after mobilization. early. The pain scale before and after early mobilization decreased, from a mean of 7.75

which was included in the severe pain scale category to 5.62 which was included in the moderate pain scale category. This shows that the overall pain scale scores of respondents before and after early mobilization have decreased. It is hoped that this early mobilization can be applied as a method of providing nursing care to clients with post-appendectomy surgery . . In almost all types of surgery, after 24-28 hours of surgery the patient is advised to leave the bed for mobilization and ambulation. The attitude of patients who always sleep in bed after surgery can cause pneumonia because the lungs do not develop properly. an immobile pelvis can cause decubitus because blood circulation is disturbed, all of this can slow down healing from surgery (Oswari, 2003: 29-30). Most surgical patients are encouraged to get out of bed as quickly as possible because the speed of wound recovery will be faster if ambulation is done early (Suzanne C, 2001:474). Therefore, it is very important for every post-operative patient to carry out early mobilization to prevent complications and speed up wound healing. It is best to be accompanied by a nurse so that the patient feels calmer and not afraid and to involve his family so that the family can understand the importance of early mobilization for wound healing which can then be achieved. provide motivation to patients.

## CONCLUSION

Based on the results of research regarding the relationship between early mobilization and the length of wound healing after laparotomy surgery in the obstetrics inpatient room at RSU. Perbaungan Melati in 2020, can be concluded as follows:

1. The majority of respondents carried out early mobilization, namely 18 people (60%).
2. The majority of respondents experienced fast healing of wounds after laparotomy surgery, namely 16 people (53.3%)
3. Statistically, a value of  $p = 0.000$  was obtained, which means there is a significant relationship between early mobilization and wound healing in patients after laparotomy surgery. Meanwhile, the OR value = 0.067, meaning that respondents who do not carry out early mobilization are likely to have a 0.067 times greater risk of slow healing compared to those who carry out early mobilization.
4. Respondents who carried out early mobilization experienced faster post-operative wound healing compared to those who did not carry out early mobilization.
5. The respondents' fear and anxiety about carrying out early mobilization cannot be separated from the pain due to the respondents' lack of understanding of the methods and stages of early mobilization.

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