

Relationship of Mobilization With Fecal Impact Events In Post Laparotomy Patients

Dadi Hamdani¹, Fuzti Fauzia²

¹STIKes Muhammadiyah Ciamis, Ciamis, Indonesia, Departemen of Nursing

²Universitas Gunung Jati, Cirebon, Indonesia, Faculty of Medicine

Correspondence author: Dadi Hamdani

Email: dadi_ham@yahoo.co.id

address : Jl. K.H. Ahmad Dahlan No. 20, Ciamis, Jawa Barat, 46216, Indonesia

ABSTRACT

Introduction: In postoperative patients, a patient requires maximum care to support the postoperative wound healing process for healing the patient's healing. The goals of patient care after laparotomy surgery include: Reducing surgical complications, accelerating healing, restoring patient functions as before surgery, maintaining patient self-concept, and preparing patients to go home, this is what makes postoperative patients require maximum care. **Objective:** This study aims to determine the relationship between mobilization and the incidence of fecal impaction in post-laparotomy patients. **Method:** the method used observational research, the population of this study was all post-laparotomy patients in the Wijaya Kusuma BLUD RSU Banjar City from July-August 2014 as many as 33 people using the consecutive sampling technique. **Result:** The results of statistical tests using the Chi-Square Test obtained a value of 0.000. So, it can be concluded that there is a relationship between mobilization and the incidence of fecal impaction in post-laparotomy patients. **Conclusion:** There is a relationship between mobilization and the incidence of impacted feces in postoperative patients, and we hope that future researchers can develop broader research with the latest knowledge and more respondents and use experimental methods

Keywords: mobilization, fecal impact, laparotomy, patient

Introduction

In postoperative patients, a patient requires maximum care to support the postoperative wound healing process for healing the patient's healing. Restoration of physical function of patients after laparotomy surgery is carried out immediately after effective coughing breath exercises, and early mobilization exercises (Smeltzer & Bare, 2008).

The goals of patient care after laparotomy surgery include: Reducing surgical complications, accelerating healing, restoring patient functions as before surgery, maintaining patient self-concept, and preparing patients to go home, this is what makes postoperative patients require maximum care. Postoperative patients who do not get maximum care can slow down the patient's healing. (Smeltzer & Bare, 2008).

To restore the postoperative condition, it is necessary to lie down for a long time depending on the type of surgery. Activity limitations such as walking, eating and drinking, meeting elimination needs, and sleeping needs are also disturbed. Many of the patients complain of not defecating smoothly or are afraid to defecate because they can be surgically injured (Potter & Perry, 2005).

Complaints of difficulty defecating arise due to decreased intestinal motility so that the rate of feces towards the rectum increases. Decreased intestinal motility is caused by prolonged bed rest (immobilization). As a result, feces can be stopped for a long time in the intestine and eventually cause other complaints, such as fecal impaction (Potter & Perry, 2005).

The emergence of impacted fecal complaints due to prolonged bed rest (immobilization). Fecal impaction complaints that often arise are due to the cessation of feces in the large intestine so that the patient's elimination needs are not met. The role of the nurse in meeting the needs of the patient towards the elimination of indispensable needs. Through the 2000 diagnoses established and planned to be improved, it is hoped that the elimination of the patient's needs will be met either independently or with assistance. With the condition of postoperative patients who require treatment, intervention is needed to reduce the effects of prolonged bed rest, namely early mobilization to see the recovery process and can provide satisfaction with the care provided.

This is in line with the opinion expressed by Campbell (2003) that mobility can improve digestive ability while physical immobility contributes to the risk of constipation due to intra-abdominal pressure. Kinunen (2011) found an increase in cases of constipation in patients whose mobility was less than 0.5 km per day, while Ross (2005) found that movement and diet can change the elimination pattern of an elderly person compared to a young person. Meanwhile, the time needed to work normally after surgery is >36 hours to eliminate the effects of anesthesia/medical procedures given to the patient (Ross, 2005).

Meanwhile, records regarding surgical cases in the BLUD of Banjar City General Hospital during the period 2013 were 1134 cases for all types of surgical cases (Medical Record of BLUD Banjar City RSU, 2013). Based on these records, the data for the top 5 hospitalized diseases include inguinal hernia in as many as 189 cases, BPH in as many as 129 cases, acute appendicitis in as many as 96 cases, Obstructive/Paralytic ileus in as many as 60 cases, and Peritonitis as many as 59 cases. Meanwhile, as many as 374 people (32.9%) of the total surgical case patients experienced fecal impaction

The results of observations of 7 patients with surgical cases including prostatectomy, certiorari, and appendectomy in the Surgical Treatment Room BLUD RSU Banjar City on May 12, 2014, it was found that as many as 5 people were afraid to mobilize because of pain. The results of observations of client care with surgical cases in the treatment room for 7 patients who were treated showed that 7 patients complained of difficulty defecating on the 2nd and 3rd day after the surgery process.

The scope of exploration problems explores efforts to meet human needs. Patients after laparotomy surgery are the scope of the problem for 1000 medical surgeries who experience functional disturbances so that it has an impact on meeting basic human needs in this case the need for fecal elimination.

Seeing the phenomenon occurred that as many as 374 people (32.9%) had fecal impaction from the total patients in the Wijaya Kusuma Room in 2013. The number of patients after laparotomy surgery in January-June 2014 was 567 patients. Meanwhile, the number of post-laparotomy patients in June was 36 patients and 12 patients experienced fecal impaction (Medical Record of BLUD RSU Banjar City, 2014).

Objective

This study aims to determine the relationship between mobilization and the incidence of fecal impaction in post-laparotomy patients.

Method

The type of research used is analytical research, the method used in this research is observational research, population of this study was all post-laparotomy patients in the Wijaya Kusuma BLUD RSU Banjar City from July-August 2014 as many as 33 people, the sample size used as research subjects were all patients after laparotomy surgery in the Wijaya Kusuma BLUD RSU Banjar City from July-August 2014 as many as 33 people, sampling technique in this research is using the consecutive sampling technique, this study used two variables, namely mobilization as the independent variable (independent) and the incidence of a fecal impaction as the dependent variable (dependent)..

Results

In this study, mobilization is categorized into active and passive, as shown in the table below:

Table 1. Distribution of Mobilization Frequency in Post Laparotomy Patients

Mobilization	N	%
Active	20	60,6
Passive	13	39,4

Based on the results of the study in table 1, shows that most of the respondents' mobilization was in the active category, as many as 20 people (60.6%), and the rest in the passive category, namely 13 people (39.4%).

The incidence of fecal impaction is categorized into regular and irregular, as shown in table 2 below:

Table 2. Frequency Distribution of Impacted Fecal Incidence in Post Laparotomy Patients

Impacted Fecal Incidence	N	%
Regular	18	54,5
Irregular	15	45,5

Table 2 shows that most of the incidence of fecal impaction in the respondents were in a positive category, namely 19 people (54.5%) and the rest were in the negative category, namely 15 people (45.5%).

Bivariate analysis in this study used the Chi-Square test which was used to determine the relationship between mobilization and the incidence of fecal impaction in patients after laparotomy surgery.

Table 3. Association of Mobilization with Impacted Fecal Incidence in Patients Post Laparotomy

Mobilization	Impacted Fecal Incident				N		ρ value
	Positif		Negatif		n	%	
	n	%	n	%			
Active	6	30,0	14	70,0	20	100	0,000
Passive	12	92,3	1	7,7	13	100	
Total	18	54,5	15	45,5	33	100	

Based on the results of the study in table 3, it can be seen that some of the respondents in the active mobilization category were 20 people (100%) were as many as 14 people (70.0%) of them with negative fecal impaction and as many as 6 people (30.0%) with positive feces. impaction. While the remaining 13 people (100%) were in the passive mobilization category where as many as 12 people (92.3%) of them had positive fecal impaction and 1 person (7.7%) had negative fecal impaction.

The results of statistical tests using the Chi-Square Test obtained a value of 0.000. So, it can be concluded that there is a relationship between mobilization and the incidence of fecal impaction in post-laparotomy patients

Discussion

Changes in the level of physical mobilization can result in movement change instructions in the form of bed rest, restriction of physical movement during the healing process, restriction of voluntary movement, or loss of motor function (Potter & Perry, 2005).

According to Potter & Perry (2005), mobilization refers to a person's ability to move freely, and immobilization refers to a person's inability to move with limitations.

Changes in mobilization are at risk for disturbances in our body systems. The severity of the disorder depends on the client's age, and overall health condition, as well as the level of immobilization, experienced (Smeltzer & Bare, 2008).

This statement is in line with the theory put forward by Potter & Perry (2005) which states that system disturbances in the body that may occur in postoperative patients include

metabolic function abnormalities, increased calcium excretion, decreased intestinal motility, pulmonary complications, orthostatic hypotension. *etc.*

Some respondents have the enthusiasm to mobilize but only a small part of the respondents studied. The respondent's willingness to mobilize is based on the desire to recover quickly and return home. Another factor that can affect the respondent's active post-operative mobilization is a strong desire from oneself and support from the family. In addition, the role of nurses in providing health education also has a role in increasing patient activity in mobilizing.

The emergence of various kinds of complaints needs to be handled either medically or in nursing. There needs to be an intervention, one of which is through the nursing care provided so that potential complaints can be handled immediately, namely by teaching early mobilization techniques gradually starting on the first day on the right and left side of the bed and then until the technique in getting out of bed. until finally able to walk independently without assistance.

Irregularity in the pattern of fecal elimination in patients with prolonged bed rest is one of the effects of decreased physical mobilization. Irregular fecal elimination pattern is caused by decreased stimulation of bowel motility/movement caused by passive physical activity.

This statement is in line with the theory expressed by Tarwoto and Watonah (2005) which states that the factors that influence the decline in the defecation process are age, diet, lack of fluid intake, decreased physical activity, etc.

According to Smeltzer & Bare (2008), the decrease in the pattern of fecal elimination in post-laparotomy patients is caused by impaired mobilization which then results in decreased intestinal peristalsis so that feces accumulate in the intestines and harden and cause fecal impaction.

This is reinforced by the theory put forward by Potter & Perry (2005) which states that problems with the defecation process that occurs in patients with prolonged bed rest, in this case, post-laparotomy patients, include constipation, fecal impaction, diarrhea, pelvic incontinence, bloating and constipation. hemorrhoids.

Another factor that plays a role in the irregular elimination pattern of post-laparotomy patients is the surgical procedure and the drugs consumed. Side effects of anesthetic drugs used can affect intestinal peristalsis work so that fecal stagnation can occur in the intestine for a while until the drug's action wears off.

Complaints of difficulty defecating are usually felt on the 2-3 postoperative days. But a small part of the respondents studied did not experience complaints in fulfilling fecal elimination like other patients. This can be caused by the effect of active body movements that can increase the work of intestinal peristalsis to remove feces. In addition, it can also be caused by the daily nutritional intake of patients who eat a lot of fruits and vegetables that are rich in fiber to facilitate the process of defecation. Many other unexplored factors have the potential to influence how the intestines work to excrete stools every day normally.

Other unknown factors can influence the patient's fecal elimination pattern. So it can have an impact on the patient. This needs to be known further in future research.

Not all of these complaints are found in every patient after laparotomy. Depends on the level of effort to perform the activities that are tolerated to do. The motivation is given by both the family and the nurse as a caregiver in an effort to make the patient independent

needs to be done. So that the patient's independence can be created in meeting the basic needs of life, namely the need for elimination.

Complaints of difficulty defecating arise due to decreased intestinal motility so that the rate of feces towards the rectum slows down. Decreased intestinal motility is caused by prolonged bed rest (immobilization). As a result, feces can be retained in the intestine for a long time and eventually cause other complaints, such as constipation (Potter & Perry, 2005).

This is in line with the opinion expressed by Campbell (2003) that mobility can improve the patient's digestive ability while physical immobility contributes to the risk of constipation due to prolonged bed rest and will eventually lead to increased intra-abdominal pressure.

The opinion of Kinunen (2011) found an increase in cases of constipation in patients whose mobility is less than 0.5 km per day. Meanwhile, Ross (2005) found that mobility and diet can change the elimination pattern of an elderly person more than a young person. To overcome this, nurses should recommend and emphasize that mobility and exercise can reduce intra-abdominal pressure caused by bed rest.

Direct physical activity/mobility has a direct impact on the quality of work of the intestine itself. So it can be interpreted that if there is a decrease in activity due to prolonged bed rest, it means that it directly results in a decrease in the work of the intestines to carry out the digestive process or the production of the results of the digestion process.

Apart from the mobilization factor, there are many other factors that have not been studied that have the potential to have an impact on the elimination pattern, such as side effects of the drugs consumed, the intake of nutrients eaten every day, and many other factors that cannot be mentioned by the researcher.

Statistically, it can be proven that physical mobilization in patients with prolonged bed rest can result in decreased intestinal motility. But basically, it is not something that absolutely causes disruption of the elimination pattern. It is necessary to conduct a deeper assessment by involving more samples and the causes of more complex fecal elimination patterns with a very small error rate so that it can produce meaningful input.

Conclusion

There is a relationship between mobilization and the incidence of impacted feces in postoperative patients, and we hope that future researchers can develop broader research with the latest knowledge and more respondents and use experimental methods

Conflict of Interest

The authors declare no conflict of interest, financial or otherwise.

Reference

1. Arikunto, S. (2009). *Manajemen Penelitian Edisi Revisi*. Jakarta Rineka Cipta.
2. Campbel. (2003). *Mobilisasi Fisik*.
3. Dahlan, M. S. (2011). *Statistik Untuk Kedokteran Dan Kesehatan*. Jakarta : Salemba Medika
4. Firmansyah, A., Setiawan, H., Suhandi, S., Fitriani, A., & Roslianti, E. (2018). Pendidikan Kesehatan kepada Keluarga "Perawatan Luka Pasca Khitan Metode Konvensional yang Optimal". *ABDIMAS: Jurnal Pengabdian Masyarakat*, 1(2), 53-56.
5. Hasan, I. (2005). *Analisis Data Penelitian Dengan Statistik*. Jakarta : Bumi Aksara.

6. Hidayat, A. A. A. (2007). Metode Penelitian Keperawatan dan Teknik Analisa Data. Cetakan Pertama. Jakarta : Salemba medika.
7. Kinunen. (2011). Pengaruh Mobilisasi Terhadap Konstipasi.
8. Notoatmodjo, S. (2010). Ilmu Perilaku Kesehatan. Jakarta : Rineka Cipta.
9. Nursalam. (2008). Konsep dan penerapan metodologi Penelitian Ilmu Keperawatan : Skripsi, Tesis, dan Instrumen Penelitian Keperawatan. Jakarta ; Salemba Medika.
10. Rekam Medik. (2013). Kasus Bedah Laparatomi RSUD Kota Banjar. Banjar : RSUD Kota Banjar
11. Potter & Perry. (2005). Fundamental Of Nursing vol 1 dan 2. Jakarata : EGC
12. Ross. (2005). Mobilitas dan Diet.
13. Sastroasmoro & Ismael. (2005). Prinsip Metodologi Kesehatan. Jakarta : Penerbit FK UI
14. Smeltzer & Bare. (2008). Keperawatan Medikal Bedah Jilid 1. Jakarta : EGC
15. Sugiyono. (2012). Metode Penalitian Kuntitatif, Kualitatif Dan R&D. Bandung : Alfabeta
16. Syarifudin, B. (2010). Panduan TA Keperawatan dan Kebidanan dengan SPSS. Yoyakarta : Grafindo Litera Media.
17. Tarwoto & Watonah.(2006). Kebutuhan Dasar Manusia dan Proses Keperawatan (Edisi 3). Jakarta : Penerbit Salemba Medika
18. Yemima. (2009). Pengaruh Imobilisasi Pada Klien Stroke Yang Mengalami Gangguan Fungsi Motorik Terhadap Kejadian Dekubitus di Rumah Sakit Mardi Rahayu Kudus.