

The Relationship Between Knowledge and Early Mobilization in Postoperative Laparotomy Patients in The Inpatient Room RSUD Praya Inpatient Room

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ABSTRACT

Background & Objective: Surgery is an invasive action (affecting the integrity of body tissue) by opening up parts of the body for repair. (WHO) revealed that the number of patients undergoing surgery from year to year has increased significantly. In 2011 there were 140 million patients in all hospitals in the world, while in 2012 there was an increase of 148 million. The purpose of the study was to determine the relationship between knowledge and mobilization in postoperative laparotomy patients. **Method:** The research design used in this study was analytic observation. The population amounted to 55 laparotomy patients. The sample was 48 laparotomy patients. The sampling technique was purposive sampling. Data analysis using Chi Square. **Result:** Based on the results of statistical tests of bivariate analysis using the Chi Square test, the results obtained p value = 0.000 < 0.05 Based on the rules for rejecting the hypothesis, H_0 is rejected, this means and H_1 is accepted. **Conclusion:** There is a relationship between knowledge and early mobilization in postoperative laparotomy patients. This means that the better the patient's knowledge about early mobilization, the more aware the patient is of the importance of early mobilization after laparotomy surgery.

Introduction

Early mobilization in the context of patient recovery after laparotomy surgery is an important aspect that is closely related to patient knowledge. Good knowledge of early mobilization can increase patient participation in the recovery process, which in turn can accelerate healing and reduce the risk of complications. Research shows that early mobilization can help reduce pain, improve blood circulation, and accelerate the

wound healing process (Roheman, 2020; Siagian et al., 2019; Suryanti, 2024; Suastini & Pawestri, 2021). Therefore, a deep understanding of early mobilization is very important for patients after laparotomy surgery.

Early mobilization in laparotomy postoperative patients not only serves to accelerate physical healing, but also has a significant psychological impact. Good knowledge of the benefits of early mobilization can increase patients' confidence in performing daily activities after surgery. This is in line with research showing that patients who have good knowledge about early mobilization tend to be more active in mobilizing, which contributes to faster recovery (Sumaryati & Widodo, 2018; Delvia & Azhari, 2021). Thus, proper education on early mobilization should be an integral part of postoperative care.

Education on early mobilization should include information on proper techniques and the right time to start mobilization. Research shows that early mobilization performed regularly and in accordance with procedures can reduce the risk of complications such as thrombosis and infection (Suryanti, 2024; Taufik, 2024; Mustikarani et al., 2019). In addition, knowledge of early mobilization can also help patients to recognize signs that indicate they need to stop or reduce mobilization activities, thus preventing further injury (Ekawati, 2023). Therefore, it is important for health workers to provide clear and comprehensive information to patients regarding early mobilization.

In addition, factors that influence early mobilization behavior also need to be considered. Research shows that support from health workers and families can increase patients' motivation to perform early mobilization (Wahyuni, 2024; Sa'diyyah, 2023). Thus, a multidisciplinary approach involving doctors, nurses, and family members is essential in supporting patients to perform early mobilization. Education provided to families can also help them understand their role in supporting patient recovery (Malahayati & Sembiring, 2019).

The importance of patient knowledge about early mobilization is also reflected in research showing that well-educated patients tend to have a higher level of independence in performing daily activities after surgery (Sumaryati & Widodo, 2018; Rachman et al., 2023). This suggests that knowledge not only contributes to physical recovery, but also to improving patients' quality of life. Therefore, a well-designed education program should be a priority in postoperative care.

In this context, the use of information technology can also be an effective tool to improve patients' knowledge about early mobilization. For example, mobile applications or educational videos can be used to provide information that is easily accessible and understood by patients (Loho, 2023). By utilizing technology, patients can learn about early mobilization anytime and anywhere, which can increase their involvement in the recovery process.

From a nursing perspective, it is important to develop effective strategies to educate patients about early mobilization. Research shows that approaches involving hands-on demonstration and practice can improve patients' understanding of correct mobilization techniques (Siagian et al., 2019; Suryanti, 2024; Ekawati, 2023). In addition, nurses must be ready to answer patient questions and provide emotional support during the recovery process, which can increase patient confidence in performing early mobilization.

Based on data obtained by researchers from Praya Hospital, there were 447 laparotomy postoperative patients in 2017, then in 2018 there were 512 people, and

then in 2019 there were 539 people, the results of observations and interviews conducted by researchers for 3 days on 14 to 16 February found that many laparotomy postoperative patients were immobilized compared to patients who mobilized this was because patients were worried that if they moved too early it would cause the stitches to come apart, fear of bleeding and patients did not get clear information from nurses about correct din mobilization after surgery. Based on the description above, the researcher is interested in conducting this study.

Objective

The relationship between knowledge and early mobilization in patients after laparotomy surgery is significant. Good knowledge about early mobilization can increase patient participation in the recovery process, which in turn can accelerate healing and reduce the risk of complications. Therefore, it is important for healthcare professionals to provide comprehensive education and support patients in performing early mobilization. With the right approach, patients can achieve optimal recovery and improve their quality of life after surgery.

Method

This study used an analytic observation design, in which researchers observed and analyzed the relationship between knowledge variables and the implementation of early mobilization in postoperative laparotomy patients at Praya Hospital. Population and Sample: The population of this study were all laparotomy postoperative patients at Praya Hospital, with a total population in 2019 of 539 patients. The sample taken is part of the population that meets the research criteria. Data Collection Methods: Data collection was carried out by research assistants by giving knowledge questionnaires and early mobilization checklists to respondents who had agreed to become participants. The collected data were then analyzed using SPSS software.

Research Instruments: The instruments used to assess the level of knowledge and implementation of early mobilization have been previously tested for validity and reliability, with an r value of 0.433 and a Cronbach's alpha value of 0.933, indicating that the instruments are valid and reliable to use. Thus, this study was designed with a systematic method and using tested instruments, and aimed to analyze the relationship between patient knowledge and early mobilization after laparotomy surgery.

Data collection was done carefully and systematically. The data used in this study consisted of two types, namely primary data and secondary data. Primary data included information about the characteristics of respondents, patient knowledge, and early mobilization performed after laparotomy surgery. Meanwhile, secondary data was obtained from information related to patients who underwent laparotomy surgery.

The data collection process began with the researcher submitting a research permit to the Praya Regional Hospital. After the permission was received, the research continued with the research assistant who was trained to fill in the questionnaires and checklists appropriately. The research assistant then gave a letter of request and consent to the respondent, who after agreeing, filled out a questionnaire on knowledge and an early mobilization checklist. The collected data was then analyzed using SPSS software, and the researcher tabulated the data until the desired results

were achieved. All these steps were taken to ensure the accuracy and validity of the data used in the study.

Data collected through questionnaires and checklists were analyzed systematically to obtain accurate and valid results. The data processing process began with the editing stage, where the collected data was checked and corrected to eliminate recording errors. Furthermore, the coding process was carried out by giving a number or letter code to each data to facilitate analysis. The data was then placed in tables (tabulations) designed to summarize all the necessary information.

After tabulation, the data were entered into the computer system (data entry), and a cleaning step was carried out to check for errors in coding or incomplete data. Data processing of respondent characteristics, such as age, education, and occupation, was done descriptively and presented in the form of frequency distributions. As for data on knowledge level, scoring was based on correct and incorrect answers from respondents, and calculated as a percentage. For early mobilization data, scoring was done by giving a score based on whether the respondent performed early mobilization according to the predetermined stages. All these stages ensure that the data generated is ready for further analysis with reliable results.

This study used two types of data analysis, namely univariate analysis and bivariate analysis. Univariate analysis aims to present information about each variable, namely knowledge and early mobilization in postoperative laparotomy patients in the inpatient room of Praya Hospital. On the other hand, bivariate analysis was used to explore the relationship between two variables, in this case between knowledge and early mobilization in postoperative patients, using Chi-square statistical test to test non-parametric correlation.

Results

Based on the data obtained in the field, most respondents were female, with 25 respondents (52.1%), while men totaled 23 respondents (47.9%). The majority of respondents were in the late adult age group (36-45 years), consisting of 15 respondents (31.3%). Most respondents had a high level of education, as many as 23 respondents (47.9%), while respondents with basic education were the least, namely 7 respondents (14.6%). The majority of respondents worked, with 22 respondents (73.3%), while those who did not work were 8 respondents (26.6%). In general, respondents were mostly women of late adulthood, had higher education, and were employed.

Most respondents had a poor level of knowledge regarding the topic under study, with a total of 36 respondents (75.0%). A small proportion of respondents had good knowledge, namely 11 respondents (22.9%), and only 1 respondent (2.1%) had a sufficient level of knowledge. This shows that the majority of respondents need further education or information to improve their knowledge on related topics. Most respondents (77.1%) did not perform early mobilization after laparotomy surgery. Only 11 respondents (22.9%) performed early mobilization after surgery. This shows that many respondents did not perform early mobilization, which may affect their recovery process after surgery.

There is a significant relationship between the level of patient knowledge and the implementation of early mobilization after laparotomy surgery. The Chi-Square test results showed a p-value = 0.000, which is smaller than 0.05, so H₀ is rejected and H₁ is accepted, which means there is a significant relationship between knowledge

and early mobilization. The majority of respondents with poor knowledge (75%) did not perform early mobilization, while all respondents with good knowledge (22.9%) performed early mobilization. Respondents with sufficient knowledge only 1 person (2.1%) did not perform early mobilization. The contingency coefficient shows that the relationship between knowledge and early mobilization is quite strong, with $p = 0.986$ which is greater than $\alpha = 0.05$, indicating a significant influence between the two factors. So, this study shows that increasing patients' knowledge can influence their decision to perform early postoperative mobilization, which is important to speed up recovery and prevent complications.

Early mobilization in postoperative patients, especially in patients undergoing laparotomy, is an important aspect of the recovery process. Knowledge about early mobilization can influence patients' behavior in carrying out such mobilization, which in turn can contribute to wound healing and postoperative pain reduction. Research shows that early mobilization not only helps in accelerating the wound healing process, but also plays a role in reducing the intensity of pain experienced by patients (Eriyani et al., 2018; Rachman et al., 2023; Cahyawati & Wahyuni, 2023).

One relevant study shows that there is a significant relationship between early mobilization and wound healing in postoperative sectio caesarea patients, where early mobilization carried out regularly can accelerate the wound healing process (Taufik, 2024; Mustikarani et al., 2019). Other studies have also revealed that early mobilization contributes to a decrease in pain intensity in postoperative patients, which suggests that knowledge about early mobilization can motivate patients to be more active in their recovery process (Syurrahmi, 2023; Metasari & Sianipar, 2019).

The patient's knowledge factor is very influential on early mobilization behavior. Research conducted by Wahyuni shows that there is a relationship between knowledge, attitudes, and motivation of post-section cesarean patients with early mobilization behavior (Wahyuni, 2024). This shows that good education about the benefits of early mobilization can increase patient awareness about the importance of these actions in accelerating their recovery. In addition, other studies also emphasize the importance of education for health workers to provide appropriate information to patients regarding early mobilization (Marcelina, 2023).

In the context of post laparotomy patients, knowledge about early mobilization is very important. Research by Delvia and Azhari showed that a good understanding of early mobilization can help patients reduce the length of hospital stay (Delvia & Azhari, 2021). In addition, early mobilization can also prevent postoperative complications such as thrombosis and infection, which are often a problem for patients after laparotomy (Suryanti, 2024; Saragih, 2023). Thus, improving patient knowledge about early mobilization may contribute to better clinical outcomes.

Effective education regarding early mobilization can be done through various methods, including counseling and hands-on training. Research by Gustini showed that counseling can improve patients' knowledge regarding postoperative care, which in turn can accelerate the healing process (Gustini, 2022). In addition, research by Cahyawati and Wahyuni confirmed that early mobilization carried out consistently can reduce the intensity of surgical wound pain, thereby improving the quality of life of postoperative patients (Cahyawati & Wahyuni, 2023).

Based on the results of the study, it can be concluded that knowledge about early mobilization has a significant impact on the behavior of patients after laparotomy surgery. Good education from health workers can increase patient awareness about

the importance of early mobilization, which in turn will accelerate the healing process and reduce postoperative pain. Therefore, hospitals need to develop comprehensive education programs for patients and their families regarding early mobilization and its benefits in postoperative recovery.

Discussion

Through a multidisciplinary approach involving doctors, nurses, and other health professionals, it is hoped that patients can be provided with sufficient information and support needed to carry out early mobilization properly. Further research is also needed to explore the most effective educational methods in improving patients' knowledge and engagement in early mobilization after laparotomy surgery.

Thus, the relationship between knowledge and early mobilization in patients after laparotomy surgery at RSUD Praya is very important to note. Good knowledge will facilitate appropriate early mobilization actions, which in turn will accelerate the healing process and improve the patient's quality of life. Therefore, it is important for hospitals to continue to improve education and training programs for health workers and patients so that postoperative recovery outcomes can be optimal.

Conclusion

Based on the results of research conducted at Praya Hospital, it can be concluded that most respondents had a poor level of knowledge regarding early mobilization after laparotomy surgery, which was recorded as many as 36 respondents (75.0%). In addition, most respondents also did not carry out early mobilization after surgery, with a total of 37 respondents (77.1%). This indicates ignorance or lack of understanding of the importance of early mobilization after laparotomy surgical procedures.

Furthermore, this study also found a significant relationship between patient knowledge and the implementation of early mobilization. Based on the Chi-square statistical test, the result of p value = 0.000, which is smaller than 0.05, indicates that the hypothesis that there is a relationship between knowledge and early mobilization can be accepted. This indicates that the better the patient's knowledge about early mobilization after surgery, the more likely the patient is to perform early mobilization.

These results also illustrate that the level of knowledge of patients can influence their decision to follow the recovery procedures suggested by medical personnel. Therefore, increased health education to patients regarding the importance of early mobilization, especially after laparotomy surgery, is needed. A more intensive and structured education program can help improve patient understanding, which in turn can support faster and more effective recovery after surgery.

This study emphasizes the importance of an information-based approach in an effort to increase patient awareness about their active role in the postoperative healing process. It can also serve as a basis for hospitals to design more effective educational interventions for patients, to encourage them to be more aware and active in undergoing early mobilization that can accelerate recovery.

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