Early Mobilization Affected the Daily Living Activity based on Dependence on Post Patient Section Caesarian Operation

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Abstract
Early mobilization is a therapy for the ability of individuals to move freely, easily, and regularly. Individuals who have had a caesarean section often feel unable to perform daily activities. The research objective was to determine the effect of early mobilization on daily living activities based on dependence in postoperative caesarean section patients at the East Semar District General Hospital, Maluku. The research design used quasi-experimental methods. The population was all patients with post-op section caesarea in the regional general hospital of East Semar Regency. The sample was all patients with post-op section caesarea. The samples were taken by quota sampling. The data were collected by using a Barthel Instrument index, an early mobilization SOP, leaflets, and observation sheets and analyzed with marginal homogeneity test. The results of the study proved that all respondents performed early mobilization, and most respondents experienced the activity daily living category independently in patients with post-operation caesarean sections. The results of the marginal homogeneity test obtained a p value of 0, which means that there was an effect of early mobilization on daily living activities based on dependence on postoperative caesarean section patients at the regional general hospital of East Seram Regency, Maluku. Based on the research results, it is necessary for further researchers to measure all the factors that affect the level of dependence on activity for daily living in the post-operation section caesarean.

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INTRODUCTION

Sectio caesarea is a surgery to give birth to a fetus by opening the abdominal wall and the uterine wall (Benson & Pernol, 2008). After surgery, the mother will feel pain, which results in limited mobilization and disrupted daily living activities. Bonding attachments and the early initiation of breastfeeding are hampered due to pain when the mother moves (Haniyah, Setyawati, Sholikhah, 2016). Indications for sectio caesarea are cephalopelvic disproportion, fetal distress, placenta previa, history of previous caesarean section, abnormal location, eclampsia, and hypertension (Mansjoer et al., 2009). Delivery by caesarean section is considered a way to realize a well-born baby and a healthy mother, not only for babies born alive but also for the hope of sustainable growth and development and no complications experienced by the mother (Sutrimo, 2012). The pain caused by the surgical wound causes the patient to be afraid to move, and the slight range of motion in the postoperative caesarean section causes the client to depend on the family to carry out daily living activities. The caesarean section not only leaves pain that causes the mother to be afraid to move, but there are several other factors that influence the mother not to do range of motion or to be afraid to move. Some of these factors are the level of knowledge, disability, anxiety, fear, frustration due to a loss of control, postpartum depression, pain or discomfort, and loss of self-esteem resulting from changes in body image or body shape (Yugistowyati, 2013).

The pain felt by the mother due to the surgical wound begins to be felt when the anesthesia has disappeared, basically making the mother afraid to move, which causes the mother's mobilization to decrease (Bobak, M. Irene et al., 2010). When the mother is lacking in early mobilization so that daily living activities are disrupted and can also make the patient feel uncomfortable, it has a negative effect on the mother and baby. Patients who have recently had surgery have a reduced range of motion as a result of the surgical wound and also have a fear of moving (Haniyah, S., Setyawati, M. B., & Sholikhah, S. M. (2016).

Early mobilization is a therapy that is often done. Early mobilization has an important role in helping patients do ADL. Postoperative SC patients who are given early mobilization will have a positive impact and can help in the rehabilitation of the patient to facilitate blood circulation so that the wound healing process is faster and the pain felt by the patient is reduced, with a fast wound healing process that will minimize the incidence of infection in the surgical scar, so that patients can perform ADL well (Ratmiwasih, Utami, and Agritubeka, 2017).

Early mobilization is intended to be carried out in the first 6 hours after the operation, namely by bed rest first, but the patient can still perform early mobilization actions such as moving the foot, lifting the heel, stretching and tensing the calf muscles, and shifting the foot. After the first six hours have passed, for the next six to 10 hours, the patient is advised to tilt to the right and left to avoid the occurrence of thrombosis and thromboembolism. And finally, at 24 hours, the patient is required to be able to sit and walk (Ditya, Zahari, and Afriwandi, 2016).

Early mobilization measures aim to make the postpartum mother healthier and stronger; early mobilization also facilitates the release of lochia, facilitates blood loss, accelerates the wound healing process, improves gastrointestinal function, and facilitates the release of breast milk (Manuba, 2012). In patients who have a lack of early mobilization behavior, it is caused by the low level of knowledge in postpartum mothers, both from the level of education and from the lack of information or cultural beliefs that influence patterns and activities. Beliefs that are not in accordance with the principle that patients who have just had surgery are advised not to move because it affects the surgical wound so that the mother can only lie down and do not make early mobilization efforts (Sarcinawati, Lupita, Dion, 2017). Researchers are interested in analyzing the effect of early mobilization on daily living activities in patients with post-caesarean section surgery at the general hospital in the eastern part of Seram Regency, Maluku.

METHOD

This research used a pre-experimental research type with a one-group pre-test and post-test design approach, namely, an experimental design with an experimental design by observing the sample before and after the treatment (Nursalam, 2010). The population in this study was all post-operative caesarean section patients in the post-partum general hospital in the eastern part of...
Seram Regency. The sample is the object under study and is considered to represent the entire population (Notoadmojo, 2010). In this study, the sample was all caesarean section patients from August 1 to 30, 2020, take by using quota sampling. The instrument used to measure each variable was the barthel instrument index; early mobilization SOP; leaflets; observation sheets. In the research process, researchers provided early mobilization starting from the first 6 hours after surgery with the hand technique, moving the foot, lifting the heel, stretching and tensing the calf muscles, and shifting the foot, tilt to the right and left to avoid thrombosis and thromboembolism. And finally, at the end of 24 hours, the patient was required to be able to sit and walk. And on the next day, early mobilization was carried out according to the SOP that had been provided. The researchers measured the level of independence in daily living activities in postoperative caesarean section patients before and after being given therapy.

**RESULT**

General data in this study include age, education, occupation, and number of deliveries. The data are presented as follows:

**Table 1:** Frequency Distribution Based on Characteristics of Respondents at the Regional General Hospital of East Seram Regency, Maluku in 2020

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>f</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17-25 years (late teens)</td>
<td>7</td>
<td>23,0</td>
</tr>
<tr>
<td>26-35 years (early adulthood)</td>
<td>14</td>
<td>47,0</td>
</tr>
<tr>
<td>36-45 years (late adulthood)</td>
<td>9</td>
<td>30,0</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary School</td>
<td>3</td>
<td>10,0</td>
</tr>
<tr>
<td>Junior High School</td>
<td>5</td>
<td>16,7</td>
</tr>
<tr>
<td>Senior High School</td>
<td>10</td>
<td>33,3</td>
</tr>
<tr>
<td>College</td>
<td>12</td>
<td>40,0</td>
</tr>
<tr>
<td>Job</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lecturer</td>
<td>1</td>
<td>3,3</td>
</tr>
<tr>
<td>Honorary</td>
<td>4</td>
<td>13,3</td>
</tr>
<tr>
<td>Housewife</td>
<td>18</td>
<td>60,0</td>
</tr>
<tr>
<td>Government Employees</td>
<td>7</td>
<td>23,3</td>
</tr>
<tr>
<td>Number of maternal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>14</td>
<td>46,7</td>
</tr>
<tr>
<td>2</td>
<td>13</td>
<td>43,3</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>10,0</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100</td>
</tr>
</tbody>
</table>

*Source: Primary Data*

Based on Table 1, it shows that most of the respondents in this study were in their early adulthood, almost half of whom had undergraduate education, worked as housewives, and were the first to give birth. Meanwhile, the specific data for early mobilization and daily living activities for post-cesarean section patients at the Regional General Hospital of East Seram Regency, Maluku, are as follows:

**Table 2:** Frequency Distribution Based on Research Variables at the Regional General Hospital of East Seram Regency, Maluku in 2020

<table>
<thead>
<tr>
<th>Variable</th>
<th>f</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity Daily Living (Pre-Test)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independent</td>
<td>0</td>
<td>0,0</td>
</tr>
<tr>
<td>Mild dependence</td>
<td>0</td>
<td>0,0</td>
</tr>
<tr>
<td>Moderate dependence</td>
<td>0</td>
<td>0,0</td>
</tr>
<tr>
<td>Heavy dependence</td>
<td>0</td>
<td>0,0</td>
</tr>
<tr>
<td>Complete Dependency/ Total Dependence</td>
<td>30</td>
<td>100</td>
</tr>
</tbody>
</table>
Based on Table 2, all respondents before doing early mobilization were in the category of total dependence, and after doing early mobilization, they were in the category of independent dependence at 66% and light dependence at only a small part.

After analysis of the research data using the marginal homogeneity test to determine the effect of early mobilization on daily living activities in patients with postoperative caesarean section, the data are presented as follows:

Table 3. Analysis of the research data using the Marginal Homogeneity test to determine the effect of early mobilization on daily living activities in patients with postoperative caesarean section, the data are presented as follows:

<table>
<thead>
<tr>
<th>Variable</th>
<th>f</th>
<th>%</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independent</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Post</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independent</td>
<td>20</td>
<td>66,7</td>
<td>0,00</td>
</tr>
<tr>
<td>Mild dependence</td>
<td>10</td>
<td>33,3</td>
<td></td>
</tr>
</tbody>
</table>

Based on Table 3 it is known that of all respondents who did early mobilization experienced an increase in daily living activity to become an independent category in (66.7%) patients with postoperative caesarean section.

**DISCUSSION**

A caesarean section is an act to give birth to an abdominal baby through an incision in the abdominal wall and interior uterine wall; usually, a transverse lower segment incision is often performed (Farrer, 2011). Form of childbearing by making a surgical incision through a mother's abdomen (laparotomy) and uterus (hischotomy) to remove one or more babies (Dewi, 2007). Respondents after post-operative caesarean sections have not been able to do any ADL at all because the scar is still wet and the pain is still strong. Problems that arise after a laparotomy are pain in the surgical wound, fear, limitations in moving the joints, and the inability to perform daily activities (standing, walking, and ambulation). Pain is something that needs to be considered by the patient with regard to the level of independence or the level of dependence of the patient on other people in carrying out daily activities or activities of daily living (ADL) (Mulyatsih, 2009).

Factors that influence the respondent's ability to carry out daily living activities in post-caesarean section patients are age and developmental status, physiological health, cognitive function, psychosocial function, stress level, biological rhythm, mental status, and health services. Physiological health factors found that most of the respondents (46.7%) had their first delivery or had their first child. Patients who have their first child or first delivery will have different physiological responses from respondents who have given birth before because of the level of pain they have experienced before. In the psychology dictionary, independence comes from the word independent,” which is defined as a condition in which a person does not depend on other people in making decisions and there is an attitude of self-confidence (Chaplin, 2002), and the psychosocial function shows a person's ability to remember something and practice it in life, especially in parenting (Hardywinoto, 2007).

The age factor was found to be almost half (47.0%) of respondents aged between 26 and 35 years (early adulthood), so that they have good muscle strength, especially doing daily living activities after a caesarean section. Physiological health factors such as respondents strong physical condition mean that they can independently carry out daily living activities. Cognitive function factors such as respondents having good thinking skills, especially in carrying out daily living
activities, are related to the level of education; almost half (40.0%) of respondents have tertiary education (D3 or S1). Cognitive function shows a person's process of receiving, organizing, and interpreting sensory stimuli to think and solve problems (Hardywinoto, 2007). Psychosocial function factors such as respondents feeling happy because they gave birth to a child so that they are eager to carry out daily living activities so that they can be able to take care of children as soon as possible this is related to most (46.7%) respondents experiencing their first birth or having their first child. Psychosocial function shows a person's ability to remember something and practice it in life, especially in raising children (Hardywinoto, 2007). Health service factors such as respondents taking early mobilization actions according to standard operating procedures so that they can accelerate their ability to perform daily living activities and become independent (Pujiono, 2009).

In this study, the aspects that cause differences in the level of dependence on daily living activities are: 10 respondents experience dependence on other people when taking a bath; this is because the respondents have not been able to take a bath independently. 1 respondent experienced urinary incontinence on the second day after removing the catheter; this resulted in edema in the legs so that the catheter was inserted again and removed on the third day. 2 patients experienced urinary incontinence, and 3 patients experienced continence in defecation, namely difficulty in defecating. This is caused because the hormone progesterone increases during pregnancy and for some time after delivery, which can cause constipation.

The results of the study prove that post-cesarean section patients who perform early mobilization are able to increase their muscle strength so that they can carry out their daily living activities independently. According to Budiarti and Marlina (2014), early mobilization measures are carried out after 6 hours post caesarean section surgery, such as moving the legs, lifting heels, stretching, tensing the calf muscles, and shifting the legs; between 6 and 10 hours post caesarean section surgery, it is recommended to tilt to the right and left to prevent thrombosis and thromboembolism. Early mobilization measures after 24 hours are lowering the bed slowly, sitting, and walking. Research by Ditya, Zahari, and Afriwandi (2016) explains that postoperative caesarean section patients who perform early mobilization have the ability to increase their daily living activities independently; this means that early mobilization plays an important role in increasing muscle strength, accelerating wound healing, and reducing pain. Improve physical activity ability. Activity in daily living for the mother after the SC procedure is disrupted due to the effects of pain resulting from the incision, which makes the patient afraid to move and inhibits the initiation of early breastfeeding (Aprilina, H. D., and S. Suparti, 2016).

The research of Ratmiwasih, Utami, and Agritubeka (2017) explains that postoperative caesarean section patients who are given early mobilization will have a positive impact and can help in the rehabilitation of patients to facilitate blood circulation so that the wound healing process is faster and the pain felt by the patient is reduced with the healing process. Fast wounds will minimize the incidence of infection in surgical scars so that patients can carry out their daily living activities independently. Early mobilization is important for post-cesarean section patients for the process of restoring body functions not only to the injured limb but also to the whole body, which will improve daily activities. The more patients move their body members, the more likely it is that the fulfillment of daily activities is faster, and conversely, patients who are afraid to move will experience delayed fulfillment of daily activities (Wulansari, Ismonah, & Shobirun, 2015). But in this study, the researcher did not measure the factors that influence early mobilization, including low knowledge, physical and mental incapacity or weakness, depression, pain or discomfort, and anxiety.

CONCLUSION

The Barthel index is a fairly simple tool for assessing self-care and measuring the daily activity of a person who functions specifically in the application of daily activities and mobility (Lueckenotte, 2000). Activities of daily living are the basic skills and occupational tasks that everyone must have to care for themselves independently, which a person does on a daily basis with the aim of fulfilling his needs in his role as a person in the family and society.

The term ADL includes self-care (such as dressing, eating and drinking, toileting, bathing, decorating, also preparing food, using the telephone, writing, managing money, and so on) and mobility (such as rolling in bed, getting up and sitting down, transferring and shifting from bed to
Early Mobilization Affected the Daily Living Activity based on…

Chair or from one place to another) (Sugiarto, 2005). Based on the results of the study, it is known that the daily living activities of all postoperative caesarean section respondents fall into the category of total dependence; this shows that postoperative patients are very minimal in doing activities independently. Activity daily living, most of the respondents are in the independent category after being given early mobilization for postoperative caesarean section patients, showing that the impact of early mobilization really helps patients improve their daily living activities so that patients can immediately achieve an increasingly optimal recovery.

So it can be concluded by the researchers that there is a significant effect of early mobilization on daily living activities in patients with post-caesarean section surgery at the Regional General Hospital of East Seram Regency, Maluku, in 2020. Besides that, through early mobilization, the uterus will contract properly so that the uterine fundus will harden and form a narrowing of open blood vessels. Thus, the risk of abnormal bleeding can be avoided (Solehati, 2017).

SUGGESTION

Patients and postoperative health services are expected to carry out early mobilization starting at 6 hours post-operative caesarean section, which aims to increase muscle strength, accelerate wound healing, reduce pain, and improve physical activity abilities. The next researcher can examine other factors that cause an increase in daily living activity (age, physiological health, cognitive function, psychological, etc.) in post-Cesarean section surgery, such as the husband’s support and knowledge about early mobilization.

ACKNOWLEDGEMENT

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FUNDING

During the preparation of this research proposal, it was carried out by two people and assisted by one student as a demonstration. The preparation was carried out by researchers (lecturers) as a team from the Nursing Professional Education Study Program at FIKES UNITRI. In the licensing process, the Head of the Nursing Study Program and the Dean of FIKES UNITRI have gone through it. Funding is shared between the research team and the faculty in the context of implementing the research roadmap.

CONFLICTS OF INTEREST

The research process is assisted by students as an experiment or practice before being carried out on real patients. Laboratory staff, in this case the laboratory assistant, assists in preparing ward conditions and providing tools and materials to be used. In this research, in order to avoid conflicts of interest between researchers and research participants, the researchers made research explanation sheets, which were submitted to the participants and explained in detail and openly. Participants were given the freedom to accept or refuse their involvement in this study. Before starting the activity, the researcher also confirmed the research location and the willingness of the research participants according to the title. Each party involved in the research already knew and agreed to this research activity and publication, which received assistance organized by the Nursing Profession Education Study Program at FIKES UNITRI. This research received financial and moral support from the institution, so it is expected to be useful for the level of mobilization of post-SC patients at the study site.
AUTHOR CONTRIBUTIONS
The main author conducts surveys and literature analysis based on critical thinking and the phenomena that occur. There is a gap between the spatial ideal and the real events that occur, namely, the level of mobilization that is expected is not in accordance with existing theoretical concepts.

This was driven by several factors, both from the patient's knowledge and his or her anxiety about the response to pain felt after the SC operation. Furthermore, the main author designed and compiled the research concept framework and determined the theoretical concepts and research hypotheses. Together with the second author, the team compiled the article, analyzed the research implementation methods, and planned data processing. Then, together with the research location, the researcher consolidated and verified the data as well as made a critical revision of the manuscript.

After that, the research team carried out the final approval process for the version to be published, which was also part of the work of the main author. Meanwhile, the second author criticized the research design and analysis testing using tools, data retention, interpreting data, assessing the relevance of the theoretical concepts used, providing instruments, and assessing the suitability of implementation according to standard procedures and research frameworks.

The main author continues to supervise the implementation of the research and conduct explanatory discussions based on directed hypotheses to deepen the research discussion. The results of this study have implications for the implementation of early mobilization carried out in vehicles to overcome the high level of dependence and low adaptability for early mobilization after SC surgery.

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