The Effectiveness of Early Mobilization on Post Sectio Caesarea Wound Healing

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ABSTRACT

Most mothers with post partum sectio caesarea feel worried if her body is moved in certain positions will affect post surgery wound that still hasn't fully recovered, also due to the pain that is felt after anesthesia effects is disappearing1. The purpose of this study was to determine the effectiveness of early mobilization wound healing post sectio caesarea. The type of this research is analytic cross-sectional. Variabel in this research is mobilization as the independent variable and wound healing post sectio caesarea as the dependent variable. The population of this research that is the entire women post sectio caesarea on midwifery room as many as 85 mother. The results showed that’s from 31 respondents did proper mobilization well as many as of 28 respondents (55%) who ware healing fast and 3 respondents (9.7%) are healing slowly. T test test results obtained results of \( \rho = 0.00, \alpha = 0.05 \). Then the Mean \( \alpha. \rho < H_0 \) was rejected and the \( H_1 \) was accepted so there are influences of early mobilization with wound healing. Discuss: There is a relationship between early mobilization and wound healing. In order to improve the quality of health care health professionals are expected to improve their skills mainly in wound care of post sectio caesarea either through seminars or training to provide a better service.

Keywords: Mobilization, Wound Healing, Sectio Caesarea

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INTRODUCTION

Sectio caesarea is an operative procedure performed under anesthesia so that the fetus, placenta and amniotic membranes are delivered through incisions of the abdominal wall and uterus and performed after viability is achieved. Caesarean delivery drains more of the body's ability and recovery is more difficult than if you give birth normally. After sectio caesarea, in addition to the pain of the abdominal incision and the side effects of anesthesia, there will be a lot of discomfort. Most women need a recovery period of several weeks to months to recover their health.

Based on Indonesia's health, the maternal mortality rate (MMR) is still at 228 per 100,000 live births. Based on Indonesia's health, the maternal mortality rate (MMR) is still at 228 per 100,000 live births. Based on the results of mobilization observations conducted on 10 post-caesarean section respondents, data were obtained that 6 mothers were reluctant to do early mobilization because of pain in the post-section cesarean suture wound, while 4 respondents had mobilized to sit. Of the 6 respondents who were reluctant to mobilize early, data were obtained, 5 respondents were still not well.

This sectio caesarea action causes a wound due to an incision in the abdomen. In principle the healing properties of all wounds are the same, with variations depending on the location, severity, and extent of the injury. The ability of cells and tissues to regenerate or return to normal structures through cell growth also affects wound healing. One of the basic concepts of care during the postpartum period of post-cesarean section patients is found that early mobilization is given after sectio caesarea. Mobility improves lung function, minimizes the risk of blood clots forming, improves digestive function, and helps the digestive tract start working again.

One of the efforts to increase mobilization that can be done as health workers (midwives) is providing motivation and health education to patients about early mobilization. In addition, it is expected for maternity mothers and families to pay more attention to the food consumed so that nutrition can be fulfilled properly, and families are reminded to consume drugs in accordance with the dosage recommended by the doctor.

METHOD

This type of research is observational using a correlational design, which examines the effectiveness of early mobilization on post-sectio caesarean wound healing. The population in this study was all post-sectio caesarea mothers who were in the postpartum room of Sidoarjo Hospital. The population at the time of the study was 85 postpartum mothers. In this study, researchers used a consecutive sampling technique, namely sampling where each individual who experienced inclusion criteria was included in the study for a certain period of time so that the number of respondents was met as many as 51 postpartum mothers.
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RESULTS

Based on the research, the results obtained:

Table 1. Univariate Analysis Results

<table>
<thead>
<tr>
<th>No</th>
<th>Characteristic Respondents</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Age 20-35 years</td>
<td>49</td>
<td>96.1</td>
</tr>
<tr>
<td></td>
<td>Age &gt; 35 years</td>
<td>2</td>
<td>2.9</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>51</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Primary school</td>
<td>21</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>Junior/Senior High School</td>
<td>30</td>
<td>59</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>51</td>
<td>100</td>
</tr>
<tr>
<td>3</td>
<td>Parity</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IRT/Housewives</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>17</td>
<td>85</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>20</td>
<td>100</td>
</tr>
</tbody>
</table>

Based on the age characteristics of respondents, data were obtained that most of all respondents were aged 20-35 years as many as 49 respondents (96.1%) while 2 respondents (2.9%) were over 35 years old. The highest level of education for postpartum mothers is Senior High School, which is 30 respondents (59%), as many as 21 respondents (41%) have a junior high school education. While postpartum mothers are almost partially employed, namely as many as 17 respondents (85%) and those as housewives as many as 3 people (15%).
Table 2. Cross-tabulation of the relationship between early mobilization and post-SC wound healing at RSUD Sidoarjo

<table>
<thead>
<tr>
<th>Mobilisasi</th>
<th>Fast</th>
<th></th>
<th>Slow</th>
<th></th>
<th>Total</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
<td>%</td>
<td>f</td>
<td>%</td>
<td>f</td>
<td>%</td>
</tr>
<tr>
<td>Done</td>
<td>28</td>
<td>90.3</td>
<td>3</td>
<td>9.7</td>
<td>31</td>
<td>100</td>
</tr>
<tr>
<td>Not Done</td>
<td>11</td>
<td>55</td>
<td>9</td>
<td>45</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>39</td>
<td>76.5</td>
<td>12</td>
<td>23.5</td>
<td>31</td>
<td>100</td>
</tr>
</tbody>
</table>

P = 0.00    α = 0.05

Based on the cross-tabulation above, data were obtained from 31 respondents who mobilized well, there were 28 respondents (55%) whose recovery was fast and 3 respondents (9.7%) whose recovery was slow. The results of the t test obtained the results \( \rho = 0.00, \alpha = 0.05 \). Then \( \rho < \alpha \) means that \( H_0 \) is rejected and \( H_1 \) is accepted so there is an effect of early mobilization with wound healing at Sidoarjo Hospital.

**DISCUSSION**

**Post SC Wound Healing at RSUD Sidoarjo**

Caesarean section is defined as labor to give birth to a fetus weighing 500 grams or more, through abdominal surgery by cutting the abdominal wall. Cesarean section is an operative procedure, which is performed under anesthesia so that the fetus, placenta and amniotic membranes are delivered through incisions of the abdominal wall and uterus and are performed after viability is achieved \(^9\). While wound healing is the process of replacing and repairing the function of damaged tissue. Wound healing is a complex process involving many cells \(^{10}\). The number of respondents who experience rapid wound healing occurs because they carry out wound care diligently and regularly so that the wound can be flattened properly and can detect early signs and symptoms of infection, besides that respondents can do good prevention. Because the wound care technique is carried out using tools available at the hospital and also using a bandage at the end of its implementation, this action can help tissue healing by conditioning the environment around the wound in a moist and balanced state and helping accelerate the formation of granulation in the proliferation phase. In addition to wound care factors, other wound healing factors such as respondents' age factors where with the age of respondents the wound healing process can run faster, due to the degeneration process, inadequate food intake, and circulation.

**The Relationship of Early Mobilization with Post SC Wound Healing**

Based on the cross-tabulation above, data were obtained from 31 respondents who mobilized well, there were 28 respondents (55%) whose recovery was fast and 3 respondents (9.7%) whose recovery
was slow. The results of the t test obtained the results \( \rho = 0.00, \alpha = 0.05 \). Then \( \rho < \alpha \) means that H0 is rejected and H1 is accepted so there is an influence of early mobilization with wound healing at Sidoarjo Hospital. Many factors can slow wound healing. These factors can be divided into factors that have something to do with the patient (intrinsic), such as unfavorable conditions at the site of the wound, and a number of medical conditions that can cause a bad surrounding environment for wound healing, as well as external factors (extrinsic) such as improper wound management, and other unfavorable therapeutic effects. Wound healing begins from the moment of injury to the body, intact skin is the front line of resistance to the entry of organisms. Wounds having opposite edges, for example surgical wounds, heal quickly with intense first or primary. Johnson & Taylor (2012) states that wound healing begins from the occurrence of injury to the body, intact skin is the front line of resistance to the entry of organisms. Wounds having opposite edges, for example surgical wounds, heal quickly with intense first or primary. There are 4 phases of wound healing including: This vascular phase occurs immediately after tissue damage, Dilation of blood vessels around the wound, causing local erythema, edema, heat, discomfort, throbbing and sometimes functional disorders. Macrophages clean the wound of debris to prepare for the growth of new tissue, During the proliferative phase, the formation of new blood vessels continues along the wound (angiogenesis or neovascularization). This process is very important, because no new tissue can be formed without the supply of oxygen and nutrients carried by the new blood vessels, The initial fibrin clot is replaced by tissue by granulation which after the granulation tissue expands to meet the defect and the defect is covered by an epidermal surface that can work properly, undergoing remodeling. Early mobilization can affect the acceleration of wound healing because early mobilization or ambulation has proven useful for reducing the incidence of thromboembolism and accelerating the recovery of maternal strength. Bed rest is not needed by mothers who receive general anesthesia, epidural or spinal anesthesia, or receive local anesthesia, such as pudendal block. The mother can move freely after the effect of anesthesia wears off, unless she is given analgesics. After the first vital rest period is over, the mother is encouraged to take frequent walks.

The results of this study show that by doing early mobilization, post-sc patients will have good circulation and can facilitate blood circulation which can help in repairing wound tissue for the better. This suggests that early mobilization can help post-sc mothers speed up wound healing. Where the more active the mother is in early mobilization, the faster the healing of wounds. However, in this study there were still respondents who mobilized well, but wound healing remained slow, possibly because respondents had not fulfilled adequate nutrition for postpartum mothers, especially those undergoing cesarean section because in most mothers there is still food taboo without knowing that the food that is taboo is the food needed by mothers during the puerperium.
CONCLUSION

Early mobilization carried out by Post SC patients at RSUD Sidoarjo, most respondents (60.8%) mobilized well, as many as 31 respondents. Post SC wound healing at RSUD Sidoarjo most (76.5%) experienced rapid wound healing. There is a relationship between early mobilization and wound healing at RSUD Sidoarjo. As evidenced by the results of the t test, the results of $\rho = 0.00$, $\alpha = 0.05$. Then $\rho < \alpha$ means that $H_0$ is rejected and $H_1$ is accepted.

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