

THE EFFECT OF EARLY MOBILIZATION TOWARDS SELF-CARE LEVELS IN POST-SECTIO CAESAREA MOTHER WITH SELF-CARE THEORY APPROACH

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ABSTRACT---Background: The number of Sectio Caesarea (SC, or C-Section) births in Indonesia is quite high compared to other countries in Asia. Participation and independence of the mother in postpartum care is needed so that the healing process of the post-SC body can be optimal. Early mobilization is considered as an effort to help speed up the healing of organ systems and their function in the body. However, there are still many post-SC mothers who do not do early mobilization.

Purpose: This research aims to find out whether there is an influence of early mobilization on the degree of independence of care in Post-SC mothers.

Method: This research is a quasi-experimental post test only with control group design. Research instruments include checklist and observation sheets arranged by Nursing Outcomes Classification (NOC). The population of this study was 36 people and the sample size that met the inclusion criteria was 30 people for the treatment and control groups, respectively. Data was analyzed using the Mann-Whitney Test.

Results: The majority of the respondents' age range of 20-25 years and the most labor status is having through SC for 2 times or more. In the previous type of childbirth, majority of the treatment group had spontaneous vaginal delivery (70.6%) while in the control group the most previous labor was SC (61.1%). At the level of independence, the control group was in the category of needing assistance (43%) while the treatment group was in the independent category (86.7%). The results of the data test stated that there were differences between the results of the posttest in the control and treatment groups with $p = 0.004$.

Conclusion: There is an influence of early mobilization on the level of self-care independence in Post-SC mothers.

Keywords---Early mobilization, level of independence, post Sectio Caesarea

I. INTRODUCTION

Caesarean Sectio (SC) is one of the methods used in medical child labor. Caesarean section delivery rates in Indonesia are quite large. The incidence of SC deliveries in Indonesia is quite high compared to other countries in ASIA. WHO set the rate of Sectio Caesarea births to be 5-15% for each country, while in Indonesia the rate of SC births in 2010 had reached 15.3%.¹ In public hospitals, the SC deliveries rate reaches 11% and private hospitals it is

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up to 30%. In Post-SC patients the most common complaint expressed is the pain of the surgical wound. Pain in Post-SC injuries can inhibit the movement of the patient. Postoperative patients including SC surgery still assume that if the body is moved to a certain position post-operation it will affect the surgical wound that has not healed. Despite of this assumption, almost all types of operations require mobilization as early as possible to restore the function of the body as before the operation.²⁻⁵

According to ⁶, in the dependent-independent phase, or commonly called as the taking-hold phase, in which is on the second or third day post-partum, mother naturally will have the desire to do everything independently, at this phase the mother is expected to be able to take care of herself such as meeting nutritional needs, elimination, and personal hygiene. In addition, mothers also began to try to be able to care for her baby such as holding, breastfeeding, putting diapers and bathing her baby. Thus, the effect of early mobilization on mothers cannot be explained further.

In several findings, it was found that patients could mobilize independently. However, some researches also encountered patients who had not mobilized according to standards due to several factors such as the absence of permanent procedures for early mobilization for Post-SC patients, not doing early mobilization according to instructions from health workers, complaint of pain while moving, fearing the stitches will break, mentioning that their culture does not allow movement and activity during the first 24 hours after delivery, there are even cases in which the patients refuse to mobilize due to fear of pain and the effects of the anesthetic that remains. This should not be a reason for patients to not do early mobilization. Early mobilization can be done if the patient is stable and there are no contraindications to do it. Without mobilization, the restoration of the mother's bodily functions will be hampered, in which cannot immediately treat itself independently, while the independence of the mother in the postpartum period is expected, especially in self-care and her baby. Lack of self-care in the mother can cause various problems such as puerperal infection, bleeding, and postpartum affective disorders. Early mobilization in immediate postpartum is very crucial since in the next period, the early postpartum, the mother already has the desire to care for herself and is allowed to stand and walk for self-care.¹⁰⁻¹²

Self-care independence in the postpartum period is not only important to reduce mortality and morbidity, but also to strengthen and enhance healthy living behavior in postpartum mothers. This study is a Quasi-experiment study with a Post Test Only with Control Group design and applied Orem's nursing theory approach on selfcare. The SelfCare nursing theory proposed by Orem states that humans basically have the ability to care for themselves, this theory is seen as applicable to Post-SC mothers. This research will be conducted in two hospitals to prevent respondents from the control group and the treatment group from meeting.^{10,11}

Prior to the early mobilization nursing action, the patient is first given health education with booklet as aids. This method was chosen because it involves various human senses, thus the patient can absorb learning material more optimally. After the patient has a basic understanding of early mobilization, it is hoped that the patient can participate during the mobilization action. Patients are expected to be able to mobilize early in the proper and correct way, allowing them to do activities independently in a short period of time.^{12,13} Thus research needs to be done in order to determine whether there is an influence of early mobilization on the level of independence of Post-SC mothers.

II. METODE

This research is a Quasi experiment with *post test only with control group design*. In this design there are two sample groups; the treatment group and the control group. The treatment group is the group that would receive education and practice early mobilization with *booklet* as assistive device, while the control group is the group that would only receive *booklet* and treatment in accordance with hospital activities.

This research was conducted in two hospitals located in Ngajuk, East Java, Indonesia, making each hospital as treatment and control group respectively. The study was conducted in October 2016 to January 2017. Data collection was conducted on December 17, 2016 - January 14, 2017.

The study population was patients of the hospitals in September to November with an average of 38 patients. The inclusion criteria are as follow: 1) Mother *Post-SC* day 0 2) Education at least junior high school 3) Aged 20-35 years old, while the exclusion criteria are mothers *Post-SC* with complication such as Hypertension and unstable bleeding.

The sampling technique used in this study was *nonprobability* sampling in the form of *purposive* sampling. The sample in this study was 30 respondents in the treatment group and 30 respondents in the control group.

The research instrument used for early mobilization was the Guidance and Teaching Unit with *booklet* compiled by the researchers themselves. Instrument used to measure the level of independence is questionnaire on the independence of self-care for *Post-SC* mothers. Components of self care independence measured in the questionnaire include eating, bathing, hygiene, dressing and elimination based on the *Nursing Outcomes Classification* (NOC) 2013, *SelfCare* domain.

Data is analyzed using descriptive analysis, normality test analysis measure the normality of data distribution using the Sheparo-Wilk statistical test on SPSS software and U-test (Mann-Whitney Test). This research has been declared "Ethically Feasible" with a Certificate of Ethical Feasibility from the Faculty of Nursing, Universitas Airlangga, Surabaya, Indonesia.

III. RESULTS

Characteristics of Respondents

The table below explains the results of the distribution of respondents according to age, education, delivery status, type of previous labor, and indications of delivery.

Table 1: Characteristics of Respondents

Criteria	Treatment Group		Control Group	
	n	%	n	%
Age				
1. 20-25 Years old	11	36.7	12	40
2. 26-30 Years old	10	33.3	11	36.7

3. 31-35 Years old	9	30	7	23.3
Total	30	100	30	100
Education				
1. Middle School	12	40	11	36.7
2. High School	12	40	15	50
3. Higher Education	6	20	4	13.3
Total	30	100	30	100
Labor Status				
1. First time	13	43.3	10	33.3
2. 2 nd time or more	17	56.7	20	66.7
Total	30	100	30	100
Previous Labor				
1. Normal	12	70.6	7	38.9
2. SC/ C-section	5	29.4	11	61.1
Total	17	100	18	100
Labor Indication				
1. Misalignment	4	13.3	8	26.7
2. Early rupture	7	23.3	3	10
3. Gemelli	0	0	1	3.3
4. CPD	2	6.7	1	3.3
5. Narrow hip	2	6.7	2	6.7
6. Induction failure/not progressing birth	6	20	5	16.7
7. Placenta Previa/Solusio Placenta/ Umbilical Prolapse	0	0	1	3.3
8. Hypertension	5	16.7	8	26.7
9. Others	4	13.3	1	3.3
Total	30	100	30	100

Level of Independence of Post-SC Mothers

The results of data tests conducted using the U-test (Mann-Whitney) state that there are differences between the results of the posttest in the control and treatment groups. The test results showed $p = 0.004$ ($\alpha < 0.05$).

Table 2: Level of Independence of Post-SC Mothers

Independence Category	Treatment Group		Control Group	
	n	%	n	%
1. Independent	24	80	12	40
2. Require assistance	5	16.7	13	43.3

3. Dependent	1	3.3	5	16.7
Total	30	100	30	100
U-test (<i>Mann-Whitney</i>)	$p = 0.004$			

IV. DISCUSSION

The results of this study indicate that the level of independence of the respondents in the treatment group were mostly in the independent category, while most respondents of the control group were in the category of require assistance. The category on the checklist that often gets a low score is the bath category. This result is supported by observations which indicate that there were some respondents who have not been able to stand or walk after 24 hours, so that respondents find it difficult to carry out bathing activities. While the category of self-care that often gets a high score is eating. During interviews with several respondents who still required help to go to the bathroom, respondents admitted that they still felt pain in their surgical wounds, making them afraid and ended up limiting their movements. These results are in line with the theory which states that the factor which complicates self-care for mothers is the SC delivery, which causes them a painful wound and thus limit them in movement.^{2,6,14,15}

At the first meeting, respondents were given health education about early mobilization, exercises, and early mobilization assistance. To make it easier for respondents to understand and remember the material about early mobilization, researchers provide booklets that can be used as a guide in implementing early mobilization. The method and media used are based on the theory of health education which states that the more senses involved in the health education process, the more absorbed the information will be. By involving several senses such as seeing, hearing and touching, the respondent can receive and process the provided information better.^{12,16,17}

From the interview results, most respondents in the control group stated that the booklet given had an attractive designs and could be read at any time. Respondents also said that the booklet made it easier for respondents to understand the meaning, objectives, benefits of early mobilization and the steps of early mobilization that must be done. The results of observations on the ability of respondents in explaining about the early mobilization showed that most respondents in the control group were able to explain back the material that was given. These results are consistent with the theory which states that more senses that are involved in the learning process allow patients to understand learning material more optimally.¹⁶⁻¹⁸

Early mobilization can accelerate recovery of the physical condition of the mother, thus the mother can start carrying out self-care activities, this can be seen in the data tabulation of the results of observation carried out on each respondent. In the treatment group that was given the intervention, most of the respondents could carry out the target mobilization according to the determined time. The independence distribution data also shows that in the treatment group, the majority of respondents were able to perform self-care independently. In accordance with the purpose of early mobilization, which is to accelerate the healing of patients by returning certain activities in hope that the patients can function normally and can meet the needs of daily movement.^{2,3}

The theory of self care is also supports the results of this study which mentions that the ability of individuals to perform self-care, commonly known as self-care Agency, is influenced by several factors (Basic Conditioning Factors), one of which is physical condition and knowledge. Improvement of bodily functions through early

mobilization can improve physical condition in Post-SC mother. The ability to carry out activities increases along with the physical condition and knowledge of a person.¹⁵

Another factor that can influence the level of independence of the mother is knowledge. Based on the distribution of respondents according to education, some respondents' latest education was (40-50%) high school. The results of the observation show that in the treatment group that was given a health education intervention regarding early mobilization, the respondents can explain the questions about early mobilization, while in the control group, <50% of respondents can answer all questions. These results indicate that a person's level of knowledge can affect independence since knowledge is a very important domain in determining one's actions. Information about early mobilization that is captured optimally by the mothers will increase the mother's knowledge and will direct them to carry out early mobilization.^{5,9}

Physical condition and experience of Caesarea Sectio surgery also affects the degree of independence of the mother. Data distribution for the indication of SC delivery are 20% of respondents in the treatment group, and 16.7% in the control group undergoing SC surgery due to the indication that labor is not progressing or induction failure. Induction on not progressing labor can increase uterine contractions and cause severe pain as well as fatigue in the mother and fetal distress can occur. In addition, labor that does not progress with failed induction can also cause psychological trauma and anxiety to the mother. Psychological trauma and anxiety in the mother can interfere with the pattern of rest and sleep, causing the mother's fatigue to increase. Severe fatigue causes the mother to not be able to carry out activities optimally and independently, thus the mother's self-care activities require assistance.^{18,20}

V. CONCLUSION

Early mobilization persuasion consisting of providing education about early mobilization, training and assistance in the implementation can increase the level of self-care independence in Post-SC mothers.

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CONFLICT OF INTEREST

There is no conflict of interest

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