



Current Factors Relevant in Postoperative Wound Healing Sectio Caesarea

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ABSTRACT: Delivery by cesarean section has a five times greater risk of complications than normal delivery. One of the most important needs that must be met by postoperative sectio caesarea is good protein intake for wound healing. The purpose of this study was to determine the factors associated with postoperative wound healing Sectio Caesarea (SC). This research design uses descriptive research method. The population in this study were all post sectio caesarea mothers who were treated, totaling 404 people. The number of samples in this study were 52 using accidental sampling technique. This research was carried out from August 30 to September 12, 2021. The analysis was carried out using a computerized process through univariate analysis. Based on the results of the study, it was found that the nutritional factors in wound healing after Sectio Caesarea (SC) were in the fulfilled category (59.6%). Mobilization factors in wound healing after Sectio Caesarea (SC) were in the performed category (61.5%). The resting pattern factor in wound healing after Sectio Caesarea (SC) was in the sufficient category (57.7%). Wound care factors in wound healing after Sectio Caesarea (SC) were in the good category (69.2%). The results of this study can be information and can increase respondents' knowledge about factors related to wound healing after Sectio Caesarea (SC) surgery. Mobilization factors in wound healing after Sectio Caesarea (SC) were in the performed category (61.5%). The resting pattern factor in wound healing after Sectio Caesarea (SC) was in the sufficient category (57.7%). Wound care factors in wound healing after Sectio Caesarea (SC) were in the good category (69.2%). The results of this study can be information and can increase respondents' knowledge about factors related to wound healing after Sectio Caesarea (SC) surgery. Mobilization factors in wound healing after Sectio Caesarea (SC) were in the performed category (61.5%). The resting pattern factor in wound healing after Sectio Caesarea (SC) was in the sufficient category (57.7%). Wound care factors in wound healing after Sectio Caesarea (SC) were in the good category (69.2%). The results of this study can be information and can increase respondents' knowledge about factors related to wound healing after Sectio Caesarea (SC) surgery.

KEYWORDS: Burn Wound Healing, Post Sectio Caesarea (SC)

Received 02 June, 2022; Revised 12 June, 2022; Accepted 15 June, 2022 © The author(s) 2022.

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I. INTRODUCTION

Sectio caesarea lately it has become a trend because it is considered more practical and less painful, so it is not surprising that it has become the second most common obstetric surgery used in Indonesia and abroad. With the cesarean section, not only the mother will be safe but also the number of babies injured due to prolonged labor and traumatic vaginal surgery is reduced. Therefore, the incidence of sectio caesarea from year to year continues to increase accompanied by a decrease in absolute perinatal mortality[1].

The demand for sectio caesarea in a number of developing countries is increasing rapidly every year. The prevalence of cesarean section increased by 46% in China and 25% in Asia, Europe, and Latin America (WHO, 2020). According the data from the Aceh Provincial Health Office in 2020, the number of sectio caesarea reached 54.3% and normal deliveries 45.6% (Aceh Provincial Health Office, 2020). Based on data from the Health Service of Pidie Jaya Regency in 2020, the number of sectio caesarea was 2,360 mothers post sectio caesarea [2].

Post sectio caesarea wounds are scars that are made after a cesarean section when a woman cannot give birth normally. This process is carried out because of an obstacle to carrying out a normal delivery such as the

mother's weak energy to give birth, the baby's heartbeat is weak, the baby's size is too large and others [3]. Post sectio caesarea wound healing is influenced by nutritional factors that play an important role in wound healing, especially nutrients that contain protein, fat, and carbohydrates. Mobilization will increase metabolism thereby increasing oxygenation of breast milk to cells which will help the wound healing process. The pattern of rest is one of the basic needs of the postpartum period, namely by encouraging mothers to do various things [4]. Ningsih study showed the Chi-square statistical test at a 95% confidence level with $\alpha = 0.05$, obtained Asymp. Sig age (0.000), BMI (0.006) and early mobilization (0.001) $< (0.05)$ were associated with post sectio caesarea wound healing in Indonesian Hospitals [5]. The purpose of this study is to determine the factors that are related to wound healing after Sectio Caesarea (SC) surgery.

II. METHOD

Descriptive research method is a research method carried out with the main aim of knowing an objective description or description of a situation. The population in the study were all post sectio caesarea mothers who were treated in the Midwifery Room of the Pidie Jaya Hospital, amounting to 404 people. Number of samples as many as 52 respondents. The technique used in this research is by accidental sampling.

III. FINDINGS

Table 1. Frequency Distribution of Respondents Characteristics by Age (n=52)

Age	f	%
20-30 years old	24	46.2
31-40 years old	20	38.5
41-45 years old	8	15.3

Based on table 1 above, it was found that the age of the dominant respondents was in the age range of 20-30 years, totaling 24 respondents (46.2%).

Table 2. Frequency Distribution of Respondents' Characteristics Based on Education (n=52)

Level of Education	f	%
Elementary school	8	15.4
Junior High School	15	28.8
Senior High School	19	36.5
Diploma/Bachelor	10	19.2

Based on table 2, it was found that the last education of the majority of respondents was in high school education which amounted to 19 respondents (36.5%).

Table 3. Frequency Distribution of Respondents Characteristics by Occupation (n=52)

Profession	f	%
Farmer	19	36.5
Civil servant	9	17.3
Trader	12	23.1
Private sector worker	10	19.2
Housewives	2	3.8

Based on table 3, it was found that the majority of respondents worked as farmers, totaling 19 respondents (36.5%).

Table 4. Frequency Distribution of Respondents Based on Nutritional Factors (n=52)

Nutrition	f	%
Fulfilled	31	59.6
Not fulfilled	21	40.4

Based on Table 4, it can be concluded that nutrition in postoperative wound healing Sectio Caesarea (SC) was fulfilled by 31 respondents (59.6%), compared to 21 respondents (40.4%). Based on Table 5, it can be concluded that the mobilization in wound healing after Sectio Caesarea (SC) was carried out more by 32 respondents (61.5%), compared to 20 respondents (38.5%).

Table 5. Frequency Distribution of Respondents Based on Mobilization Factors (n=52)

Mobilization	f	%
Done	32	61.5
Are not done	20	38.5

Table 6. Frequency Distribution of Respondents Based on Resting Pattern Factors (n=52)

Category	f	%
Enough	30	57.7
Not enough	22	42.3

Based on Table 6, it can be concluded that the pattern of rest in wound healing postoperative Sectio Caesarea (SC) is more adequate as many as 30 respondents (57.7%), compared to the insufficient as many as 22 respondents (42.3%).

Table 7. Frequency Distribution of Respondents Based on Wound Care Factors (n=52)

Injury cure	f	%
Well	36	69.2
Not enough	16	30.8

Based on Table 7, it can be concluded that there were 36 respondents (69.2%) who had better wound care in wound healing postoperative Sectio Caesarea (SC), compared to 16 respondents (30.8%).

IV. DISCUSSION

Characteristics of Respondents

Based on the results of the study, it was found that the age of the dominant respondents was in the age range of 26-35 years, totaling 24 respondents (46.2%). According to Notoatmodjo, that the increasing age, the level of maturity and a person's strength in thinking and working will be more mature, so that they will be more mature in thinking and gain knowledge about wound healing after Sectio Caesarea (SC) surgery. The older a person is, the processes of mental development improve, but at a certain age, the increase in this mental development process is not as fast as when he was in his teens [6].

The last education of the majority of respondents was in high school education which amounted to 19 respondent (36.5%). Education can change a person's behavior. This shows that the higher a person's education, the knowledge will be wider or better, besides that the higher a person's education will make it easier for someone to receive information. The majority of respondents' jobs are in working as farmers, amounting to 19 respondent (36.5%). Furthermore, someone who works can increase knowledge because of association and social interaction compared to people who do not work. The level of income is also based on the level of education, someone with higher education will get a better job so that the income will be higher [6].

Nutritional Factor

Based on the results of the study, it was found that nutrition in wound healing after Sectio Caesarea (SC) was more fulfilled by 31 respondents (59.6%), compared to 21 respondents (40.4%).

Nutrients that play an important role in wound healing, especially nutrients that contain protein, fat, and carbohydrates. Nutrients that contain protein will increase the repair of damaged cells and increase the body's immune system. This is in accordance with the function of protein, namely as a substance for forming antibodies, transporting nutrients, and replacing damaged tissue. Nutrients that contain fat are important in the formation of energy and as a solvent for vitamins A, D, E, and K. Vitamins A, D and E have a role in the body's immunity. Vitamin K plays an important role in blood clotting and bone formation. Nutrients containing carbohydrates play an important role in meeting energy needs during the wound healing process and preventing protein and fat from catabolizing [4]. Study of Puspitasari, showed that there was a relationship between nutritional status (BMI) and postoperative SC wound healing at PKU Muhammadiyah Hospital Gombong with a probability value (Sig) of $0.004 < 0.05$ [7].

Mobilization Factor

Based on the results of the study, it was found that mobilization in wound healing after Sectio Caesarea (SC) was more carried out by 32 respondents (61.5%), compared to 20 respondents (38.5%).

Mobilization will increase metabolism thereby increasing oxygenation to cells which will help the wound healing process. Many studies have found that early mobilization has an effect on wound healing for cesarean

sections. On the other hand, if the patient is not supported and assisted in early mobilization, the wound healing process will take a long time. If a person does not mobilize early, the involution will not be good so that the remaining blood in the uterus cannot be removed, causing infection. With early mobilization, the uterus will contract properly so that the uterine fundus will harden and form a narrowing of the open blood vessels. Thus, the risk of abnormal bleeding can be avoided [8].

This study is in line with the research of Heryani regarding the Effect of Early Mobilization on Post Sectio Caesarea Wound Healing. The results showed that there was an effect of early mobilization on post sectio caesarea wound healing at Arifin Achmad Hospital Pekanbaru (p value = 0.007) [9]. Based on the results of the study, it can be concluded that the mobilization of postoperative wound healing Sectio Caesarea (SC) is in the category performed (61.5%). Post sectio caesarea wound healing is influenced by mobilization factors that will increase metabolism thereby increasing oxygen to cells which will help the wound healing process.

Rest Pattern Factor

Based on the results of the study, it was found that the pattern of rest in wound healing after Sectio Caesarea (SC) was more sufficient for 30 respondents (57.7%), compared to 22 respondents (42.3%).

Post sectio caesarea mothers need adequate rest, about 8 hours of rest at night and 1 hour of rest during the day. Things that mothers can do to meet their rest needs include doing housework slowly and according to ability, taking naps and resting while the baby is sleeping [10]. Roberia's study with the title Factors Associated with Post Sectio Caesarea Wound Healing at H Adam Malik General Hospital Medan in 2018. The results of the study show that the results of the Chi-square statistical test at a 95% confidence level with $\alpha = 0.05$, obtained Asymp. Sig age (0.000), BMI (0.006) and early mobilization (0.001) $< (0.05)$ were associated with post sectio caesarea wound healing at H Adam Malik General Hospital Medan [11].

Based on the results of the study, it can be concluded that the pattern of rest in wound healing after Sectio Caesarea (SC) is in the sufficient category (57.7%). The pattern of rest is one of the basic needs of the postpartum period, namely by encouraging the mother to do various things.

Wound Care Factor

Based on the results of the study, it was found that there were 36 respondents (69.2%) who had better wound healing in postoperative Sectio Caesarea (SC) wound healing, compared to 16 respondents (30.8%) less.

Study of Akbar, Y., Mursal, M., Thahira, H., & Rizana, N mentioned that good wound care will improve the patient's quality of life and will also accelerate the healing of chronic wounds so that it will reduce treatment costs and length of stay [12]. Based on the results of the study, it can be concluded that wound care in postoperative wound healing Sectio Caesarea (SC) is in the good category (69.2%). Wound care is one of the techniques to speed up tissue return to its original shape, wound care management is the main principle for infection control, the wound healing process can be hampered due to infection in the wound and the morbidity and mortality rates increase.

V. CONCLUSION

Based on research on factors related to wound healing after Sectio Caesarea (SC), it was found that nutrition research results in wound healing after Sectio Caesarea (SC) were in the fulfilled category (59.6%). Mobilization in wound healing after Sectio Caesarea (SC) is in the performed category (61.5%). Rest pattern in wound healing after Sectio Caesarea (SC) was in the sufficient category (57.7%). Wound care in wound healing after Sectio Caesarea (SC) was in the good category (69.2%).

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