



RESEARCH ARTICLE

Relationship of Wound Pain Intensity Sectio Caesarea Problems with the Quality of Sleep in Patients Post-Partum

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ARTICLE INFO	ABSTRACT
Received: May 22, 2024 Accepted: Jul 16, 2024	One method of giving birth by caesarean section is the process of giving birth through surgery by making an incision in the mother's stomach (laparotomy) and uterus (histerectomy) to remove the baby. Caesarean section surgery is generally performed when normal vaginal delivery is not possible due to the risk of other medical complications. Based on the patient's condition, Sectio Caesarea (SC) is divided into two, namely, planned (elective) caesarean section and emergency (emergency) caesarean section. The aim of this study was to determine the correlation between the intensity of section caesarean wound pain and sleep quality in post partum patients. The research method was quantitative because the data in this study is in the form of numbers with a cross sectional research design. The population in this study were all post partum patients who underwent section caesarean at Sufina Aziz Hospital in the inpatient ward, totaling 80 people, of which 44 patients were respondents. The results of the research on the pain intensity variable from 44 respondents showed that 6 people (13.6%) experienced mild pain, 4 people (9.1%) experienced moderate pain, and 34 people (77.3%) experienced severe pain, in Sleep quality: 11 people (25%) had good sleep quality, and 33 people (75%) had poor sleep quality. The results of the Spearman rank test between pain intensity and sleep was correlation between the intensity of caesarean section wound pain and sleep quality in post partum patients at Sufina Aziz general hospital. The conclusion from this study is that the majority of patients who undergo section caesarean have poor sleep quality and experience severe pain.
Keywords Pain Intensity Sleep Quality Sectio Caesarea Wound	
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INTRODUCTION

Childbirth is a series of events that ends with the expulsion of a full-term or almost full-term baby, followed by the expulsion of the placenta and fetal membranes from the mother's body through the birth canal or through other avenues, taking place with or without assistance (the mother's own strength) (Trirestuti, 2018). One way of delivery by caesarean section is the process of delivery by surgery by performing a slice of the mother's stomach (laparotomy) and uterus (histerectomy) to remove the baby. Sectio caesarean section surgery is generally performed when normal vaginal delivery is not possible because of the risk of other medical complications (Hartati, 2015; Amalia & Mafticha, 2015).

Based on the patient's condition, the Sectio Caesarea (SC) procedure can be divided into two, namely Planned sectio caesarea (elective) and emergency sectio caesarea chronic and frequent

(emergency). Planned caesarean section (elective) is an operation that has been planned well in advance while emergency caesarean section (emergency) is an operation based on the condition of the mother at the time (Basmanelly, Sari & Malini, 2017). The procedure of the operation that will be performed by the individual includes three phases, namely preoperative, intraoperative, and postoperative phases. Several operations are performed for a reason including to ensure a diagnosis, curative, reparative, reconstructive and palliative (Smeltzer & Bare, 2002 in Apriansyah et al., 2015).

World Health Organization (WHO) set the average standard of SC in a country about 5-15% per 1000 live births prevalence of SC in government hospitals is approximately 11% while private hospitals can be more than 30% (Gibson,2015). The WHO recommendation is certainly based on an analysis of the risks that arise due to SC both risks to the mother and baby. Indonesia, which is a developing country according to (Ministry of Health,2018), shows caesarean births at 9.8% with the highest proportion in DKI Jakarta at 19.9% and the lowest in Southeast Sulawesi at 3.3%, while West Java caesarean births at 8.8%.Data and information from the Ministry of health of the Republic of Indonesia, (2017) the estimated number of maternity/postpartum mothers by province in 2017 is 5. 082537 mom.

Labor pains are unpleasant sensations due to stimulation of sensory nerves. The pain consists of two components, namely the physiological component and the psychological component. The physiological component is the process of receiving these impulses towards the central nerve. While the psychological component includes recognition of sensation, interpretation of pain and reaction to the results of the interpretation of pain.

Problems that arise in the act after SC due to incision by tissue tears of the abdominal wall and uterine wall can cause changes in continuity so that the mother feels pain due to surgery. Post SC patients will complain of pain in the incision area caused by tearing of tissue in the abdominal wall and uterine wall. Back pain or pain in the nape of the neck is also a common complaint Felt by post SC mothers, it is due to the effects of the use of epidural anesthesia during surgery (Fransiska, 2015).

SC childbirth has a positive and also negative impact on the mother. The positive impact of SC action can help the mother's delivery, if the mother is unable to perform vaginal delivery. The impact of pain if left untreated can affect psychological aspects including anxiety, fear, personality changes, behavior and sleep disorders. Physiological aspects of pain affect the increase in morbidity and mortality rates (Wardani, 2014).

According to *World Health Organization* (WHO), States the standard performed operations *Sectio Caesarea* (SC) about 5-15%. Data WHO dalam *Global Survey on Maternal and Perinatal Health* in 2011 showed that 46.1% of all births were conducted through *Sectio Caesarea* (SC) (*World Health Organization*, 2019). Based on RISKESDAS data in 2018, the number of births by the method *Sectio Caesarea* (SC) in Indonesia by 17.6%. Indications for childbirth *Sectio Caesarea* (SC) caused by several complications with a percentage of 23.2% including transverse fetal position/sungsang (3.1%), bleeding (2.4%), seizures (0.2%), premature rupture of membranes (5.6%), long parturition (4.3%), umbilical cord entanglement (2.9%), placenta previa (0.7%),placenta left behind (0.8%), hypertension (2.7%), and others (4.6%) (Ministry of Health,2018).

According to data from SKDI (Indonesian demographic and Health Survey) in 2017, the incidence of childbirth in Indonesia using the SC method is 17% of the total number of births in health facilities.This shows an increase in the number of births through the method *Sectio Caesarea* (SC) (Ministry of Health, 2017). According to data from the North Sumatra provincial Health Office in 2021, the number of cesarean sections was 25,602 people. Based on a preliminary survey conducted at Mitra Sejati Medan hospital, in 2021 the number of pregnant women who performed cesarean delivery was 282 people.

The impact of pain on the daily activities of postpartum mothers include effects on sleep patterns, appetite, concentration, and emotional status of patients (2015). The puerperium is related to sleep pattern disorders, the first three days after delivery are difficult days for the mother due to Labor and difficulty resting. The causes of difficulty sleeping include perineal pain, discomfort in the bladder, and baby disorders that can affect memory and psychomotor abilities. Sleep patterns will return to normal within 2-3 weeks after delivery (2017). The results of the Barichello (2015) Brazil study found that 78.3% of postoperative patients experienced sleep quality disorders.

Research conducted by Faisal Asdar et al (2018) on the relationship of pain intensity with sleep quality in Post-Laparotomy patients at Labuang Baji hospital Makassar where the results of the study are recommended for hospitals and health workers are expected to evaluate and teach patients how to overcome and eliminate pain so that patients' sleep is not disturbed. Research conducted by Hevy Amalia Noviyanti et al (2017) on the relationship of pain intensity with sleep quality in post-caesarean patients where the highest pain intensity research results occurred in post-caesarean clients, namely intense pain intensity with 22 respondents (52.4%) and discomfort there were 20 respondents (47.6%). More than half of the respondents experienced poor sleep quality, namely 28 respondents (66.7%). There is a relationship between pain intensity and sleep quality in post-caesarean patients.

Research conducted by Berlian Kando et al (2018) on factors that affect the decrease in postoperative pain Sectio Caesarea in hospitals. Raflesia Bengkulu where the results of the study there is an average decrease in the level of pain after early mobilization as much as 2.2, a decrease in the level of pain after relaxation techniques by 2.1 and there is an effect of early mobilization to decrease the intensity of pain with a value of p (0.000).

Research conducted by Devi Permata Sari et al (2022) on the relationship of pain levels *Post Sectio Caesarea* With the quality of sleep Postpartum patients in which the results of the study the relationship of pain level with sleep quality of post SC patients in RSU Islam Klaten with p value = 0,000. Research conducted by Akbar Apriansyah et al (2014) on the relationship between the level of pre-operative anxiety with the degree of pain in patients *Post Sectio Caesarea* In Muhammadiyah Hospital Palembang in 2014 where the results of statistical test results showed there was a significant relationship between preoperative anxiety level with the degree of pain post sectio caesarea with a p value of 0.010.

Research conducted by Kriscillia Molly Morita et al (2020) on the effect of Benson's relaxation technique on pain reduction in patients Post Sectio Caesarea surgery at Dr. Achmad Mochtar Bukittinggi where the results of research from 20 respondents obtained independent parametric test results of T-Test samples with a p value of 0.001 ($p < 0.005$).

From the data found in the hospital Sufina Aziz obtained from *medical record* number of patients who had surgery *sectio caesarea* in 2022 there were as many as 749 patients.

Based on data obtained from a preliminary survey at Sufina Aziz Hospital in November, there were 67 patients who performed surgery *sectio caesarea* who feels pain in post-op wounds *caesarea*.

METHOD OF RESEARCH

The research method using cross sectional design with quantitative research type. The research was carried out at Sufina Aziz Hospital, in July – August 2023. The population of this study were all post partum patients who performed sectio caesaria surgery at Sufina Aziz Hospital and sampling using non probability techniques in the form of accidental sampling as many as 44 respondents.

RESULT OF STUDY

Based on the results of research on Relationship of Wound Pain Intensity *Sectio Caesarea* Problems with the Quality of Sleep in Patients *Post Partum* Sufina Aziz Hospital.

Table 1: Frequency distribution of pain intensity respondents in Post-Partum patients at Sufina Aziz Hospital in 2023

Pain Scale		F	%
No pain		-	-
Mild Pain		6	13,6
Moderate Pain		4	9.1
Severe Pain		34	77.3
TOTAL		44	100%

According to tabel 1 the severe pain contains 34 people (77.3%) mild pain as many as 6 people (13.6%) mild pain as many as 4 people (9.1%) and 0 people with no pain.

Table 2: Frequency distribution of sleep quality in postpartum patients the Sufina Aziz hospital in 2023

Sleep Quality		F	%
Good		11	25.0
Disturbance		33	75.0
TOTAL		44	100%

Based on the table 2 can be seen around 33 people (75%) with sleep disturbance, and good sleep around 11 people (25%).

Table 3: Frequency distribution cross-tabulation of pain intensity respondents with sleep quality in Post-Partum patients at Sufina Aziz Hospital in 2023

Pain Intensity	Sleep quality				Total	
	Good		Disturbance			
	n	%	n	%	n	%
No Pain	0	0	0	0	0	0
Mild Pain	6	100	0	0	6	100
Moderate Pain	3	75	1	25	4	100
Severe Pain	2	5,9	32	94,1	34	100
Total	11	33			44	100%

DISCUSSION

The intensity pain to the patient with Section Caesaria

Pain intensity is a description of how severe the pain is felt by the individual. Pain usually occurs due to mechanical or chemical stimulation of the skin area at the ends of the free terms called nosireceptors. Based on the length of time the pain occurs, it is divided into two : acute pain & chronic pain. Based on the results showed that clients who experienced Sectio Caesarea injuries as many as 34 people (77.3%) experienced severe pain, as many as 6 people (13.6%) experienced mild pain, as many as 4 people (9.1%) experienced moderate pain. This shows that more clients are experiencing severe pain but there are still clients who experience moderate and mild pain.

Based on the research results of Noviyanti, et al (2019) " the relationship of pain intensity with sleep quality in post-Caesar surgical patients ". The results obtained there is a significant relationship between pain intensity and sleep quality in caecar surgery patients, where the intensity of severe pain as many as 22 respondents (52.4%) and uncomfortable there are 20 respondents (47.6%) and more than half of respondents experienced poor sleep quality of 28 respondents (66.7%).

This is contrary to a study conducted by Devi Peirmata Sari (2023) which states that as many as 20 out of 30 respondents experience mild pain when experiencing a sectional injury, this is because the patient has had a cesarean section several times. Researchers assume the difference in these results is caused by sampeil in peineiliitiian iinii is pasiiein meingalamii Seictiio Caesareia dii first day so that the pain felt is still on the weight scale.

Sleep quality patients *post-partum with luka sectio caesarea*

The quality of a person's sleep can be determined how to prepare for sleep patterns including the ability to stay asleep, the depth of sleep, and the ease of sleep without medical assistance. Good sleep quality will provide an impact of tranquility in the morning and do not complain of disturbed sleep. Handayani (2016). Based on the results showed that had poor sleep quality as many as 33 people (75%) and had good sleep quality as many as 11 people (25%). This is in line with a study conducted by Chori (2023) with the title patient sleep quality post section ERACS method which states that 66.7% or most respondents have good sleep quality.

The efficiency of sleep habits in this study is 42 patients experienced sleep efficiency of less than 84% and only a small percentage of sleep efficiency is good. Some studies report that sleep efficiency in young adults is 85-90% Sleep Disorders membeirikan influence on sleep quality. In this study, sleep disturbance is a factor that affects the quality of sleep of post-partum mothers with caesarean section, namely 56 patients who experience sleep disorders and only one patient who does not experience sleep disorders. Researchers assume, the poor quality of patient sleep is influenced by factors caused by the new caesarean section process that is one day post-partum.

Relationship of pain intensity to sleep quality patients *post-partum with sectio caesarea*

The results showed that post-partum clients with caesarean section injuries are wound pain that can affect the quality of sleep of post-partum mothers. From the results of this study, it is known that there is a significant relationship between the intensity of sectio caesarean wound pain and sleep quality in post-partum patients with a significant value of 0.000 (<0.05).

Researchers ' assumption of severe pain tends to interfere with the patient's activities and impair the fulfillment of basic needs such as rest and sleep. People who experience severe nyeiri will feel sleep disturbances. This is in line with a study conducted by Sari (2023) which showed the results that patients with moderate pain intensity would have good sleep quality. This is due to the difference in perception of the pain.

This study is also in line with the research Fitri (2013) showed respondents with moderate intensity nyeri tend to have poor sleep quality. The findings in this study are that there are 6 respondents (37.5%) with moderate pain intensity but meimilki good sleep quality. It is associated with peirseipsii and reison seitiiap iindiiviidu in the sense of nyeirii beirbeida-beida. Based on the above data, it can be concluded that the heavier the intensity of pain, the quality of sleep of postpartum patients is getting worse.

There are several factors that can affect the need for sleep, both in quantity and quality, namely: health status, environment, nutrition, drugs and lifestyle. The health Status of the Indian person as well as the physical and psychological health conditions greatly affect the need for sleep. Any physiological changes that cause physical discomfort can cause sleep and rest problems.

CONCLUSION

Based on the results of the study obtained and the data processing carried out by the researchers with the title the relationship between the intensity of sectio Caesarean wound pain and sleep quality in Post Partum patients at Sufiina Aziiz hospital in Medan City in 2023, it can be concluded that the following :

1. The results of research conducted by researchers known from 44 respondents (100%) who have undergone Sectio Caesarea Surgery obtained as many as 34 people (77.3%) experienced severe pain, as many as 6 people (13.6%) experienced mild pain, as many as 4 people (9.1%) experienced moderate pain.
2. The results of research conducted by researchers known from 44 respondents (100%) showed that as many as 33 people (75%), have good sleep quality, and as many as 11 people (25%), have poor sleep quality.
3. Bivariate results with spearman-rho showed a significant relationship between the intensity of pain sectio Caesarea wound with the quality of sleep in post partum patients with a value of 0.000 (alfa < 0.05).

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