

Research Article

Relationship between Pre-Section Anxiety and Postpartum Quality of Life

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ABSTRACT

Anxiety before undergoing Sectio Cesarea (SC) has the opportunity to disrupt the quality of life during the postpartum period, both physically, psychologically, and socially. This study analyzed the relationship between anxiety before SC and the quality of life of postpartum women. SC delivery is the choice of women both for reasons of maternal and infant health and for the choice of birth date. The act of SC is inseparable from the act of severing tissue. Even though SC is the choice of women who will give birth, this action causes fear and anxiety for her. In addition, the incision wound is the cause of pain after SC. Surgical wound pain is often a trigger for discomfort and limitation of movement. The quality of life of postpartum women is part of their satisfaction with their condition. Postpartum women who have not been able to adapt to their condition can interfere with their well-being.

Keywords: anxiety; quality of life; postpartum; pre section cesarea

1. INTRODUCTION

Sectio Cesarea (SC) is a process of removing the fetus by making an incision in the abdomen (Cunningham, 2008) and an incision in the uterus (Das et al., 2021). *Cesarean section* becomes an alternative for a woman in choosing the delivery process. In addition to medical indications and non-medical indications. Cesarean section is performed to save the mother and baby if the client cannot give birth normally (Sulistianingsih & Bantas, 2018); (Kartilah et al., 2022). *Sectio caesaria* is an action that breaks the *continuity* or integrity of the tissue. Tissue disconnection due to cesarean section generally causes pain after the work of anesthetic drugs decreases in effectiveness (Boules et al., 2020). Nursing problems that often arise in post section caesarea patients include pain that causes discomfort, limiting mobilization (Al Rehaili et al., 2023)

The section caesarean wound that causes pain will cause the mother to experience fatigue, lack of confidence in her ability to control emotions, inability to care for herself and her baby (Hsieh et al.,)2018. One study in the United States reported > 80% of patients experienced postoperative pain (Boules et al., 2020). Pain after cesarean section needs to be controlled, if not minimized, it will prolong the healing process and cause complications, which results in a decrease in quality of life and patient satisfaction (Tola et al., 2021).

The World Health Organization (WHO) sets the average standard of cesarean delivery in a country is around 5-15 percent per 1000 births in the world. While in Indonesia based on the results of the Indonesian Health Survey in 2023: 589 reported that the prevalence of delivery at 25.9% percent and the number of cesarean sections in South Sumatra was 17.9% (Puspasari, 2023).

Nowadays, SC is the most popular type of delivery for a variety of reasons. The desire to give birth quickly, *comfortably*, not experiencing pain due to his labor because, unique day and date. This makes many women choose *sectio caesarea* without considering the effects that will occur afterward (Amana et al., 2024). Despite SC being an option, most still feel anxiety (Juliathi et al., 2020)

According to De Pinho et al., (2021) anxiety facing section secaria is caused by fear of the hospital environment (35%), fear of anesthesia (45%), and ignorance of surgical procedures (45%). Anxiety actually has no clearly identified stimulus. It is a manifestation of a process of mixed emotions. Preoperative anxiety can be caused by doubts about the success of the operation and fear of unexpected threats (Ali et al., 2014).

The puerperium lasts for 4 and 6 weeks (Prawirodihardjo; 2020) (Cunningham, 2008). During the *puerperium*, a woman's organ functions return to their pre-pregnancy physiological and anatomical

state (Deniz & Ayaz, 2014). Postpartum recovery is closely related to psychosocial changes and new roles within herself. Her new life position is the basis of quality of life in the postpartum period.

Quality of life, according to the World Health Organization, has six main components. These include physical health manifested by fatigue (Petrou et al., 2004), psycho-emotional status, social relationships, spiritual beliefs, environmental status, family, and beliefs (McGregor et al., 2009). Postpartum quality of life focuses on a woman's satisfaction with her life position.

The prevalence of SC in private hospitals in Palembang annual average every month 60%-80%. While nursing care related to the quality of life of women in the postpartum period has not been used as a care trend, the researcher is interested in analyzing whether anxiety before SC is associated with postpartum SC well-being.

2. RESEARCH METHODS

Descriptive correlation research with *across sectional* approach was conducted in a private hospital in Palembang City from October to December 2024. Data were taken from 50 respondents who gave birth by SC according to the criteria determined by the researcher. The sample size was calculated based on the Dahlan formula, M.S (2012). Sampling was done randomly.

The *variables* analyzed were pre-SC anxiety and postnatal quality of life during treatment. Questionnaires were used as data collection tools. The pre-SC anxiety variable used the *Amsterdam Preoperative Anxiety and Information Scale* (APAIS) questionnaire. The APAIS questionnaire is specifically designed to measure anxiety before surgery. (Moerman & Oosting, 1996); (Ayele et al., 2021). *Postpartum* quality of life variables were measured using the *postnatal quality of life assessment* (Mokhtaryan-Gilani et al., 2022). This PQOL questionnaire specifically measures women's quality of life 0-12 months after childbirth. This instrument is consistent with the new needs and changes for women after childbirth. Univariate and bivariate data analysis using Spearman rank correlation test.

3. RESULTS AND DISCUSSION

The results of the study are presented in tabular form and described as follows

3.1 Respondent Characteristics

Table 1. Frequency Distribution of Pre-Section Women Characteristics in Private Hospitals in Palembang 2024 (n=50)

Characteristics	Amount	Percentage (%)
Age		
26-30 Years	14	28.00
31-35 Years	30	60.00
36-40 Years	5	10.00
>45 Years	1	2.00
Education		
Graduated From High School/Vocational School	2	4.00
D3 Graduate	34	68.00
Bachelor's Degree	12	24.00
Master's Degree	2	4.00
Σ Children Alive		
1 person	20	40.00
2-3 people	27	54.00
>3 people	3	6.00

Based on **Table 1**, the characteristics of respondents based on age are mostly in the range between 31-35 years, as many as 30 people (60.00%). Respondents based on education are most respondents have a D3 education level, as many as 34 people (68.00%). Characteristics of respondents based on the number of living children are most respondents have 2-3 living children, as many as 27 people (54.00%). Women aged between 31-35 years are classified as fertile age, so the number of respondents is dominated by women aged in this range.

The results of univariate data analysis showed that most respondents were 31-35 years old, had a D3 educational background, and had 2-3 living children. Respondents aged 31-35 years indicate that this group is likely to face certain *challenges* when facing the labor process. This could be due to social pressure and the role expected of them as housewives. Older respondents are likely to have broader life experiences and could potentially influence anxiety levels (Bidayati, 2022).

3.1.1 Relationship between Characteristics and Anxiety Pre Sectio caesaria

Table 2. Relationship between Characteristics and Anxiety Level of Pre Sectioin Private Hospitals in Palembang 2024 (n=50)

Characteristics	Pre-Section Anxiety				P. Value	
	Medium	%	Panic	%		
Age	26-30 Years	13	26	1	2	0.886
	31-35 Years	29	58	1	2	
	36-40 Years	5	10	0	0	
	>45 Years	1	2	0	0	
Education	Graduated from high school/vocational school	2	4	0	0	0.008
	D3 graduate	33	66	1	2	
	Bachelor's Degree	12	24	0	0	
	Master's Degree	1	2	1	2	
Number of Children	1 person	19	38	1	2	0.912
	2-3 people	26	52	1	2	
	>3 people	3	6	0	0	

The results of the study in **Table 2**, show that the age group 31-35 years there are 29 (58%) experiencing moderate anxiety and 1 (2%) with panic anxiety and there is no significant relationship between the age of respondents and the level of anxiety ($P = 0.886$). The results of bivariate analysis of the relationship between age and pre-section anxiety level showed a p value of 0.886 ($\alpha \geq 0.05$) meaning that there was no relationship between the age of the respondent and the level of pre-section anxiety. This study is in line with the results of research by (Irawati, 2016) explaining age does not significantly affect the anxiety of mothers facing SC labor. The main reasons for anxiety before surgery include doubts about the success of surgery and fear of the dangers of surgery (Pawluski et al., 2017).

The relationship between respondents' education with moderate anxiety levels is mostly experienced by respondents with D3 education, namely 33 (66%) and 1 (2%) experiencing panic anxiety. The correlation test results obtained a *P-value* of= 0.008, indicating a significant relationship between education level and pre-section anxiety level. The relationship between education and maternal pre-sectional anxiety results showed that education has no relationship with pre-sectional anxiety. This is different from the results of previous studies which state that education can instill a positive understanding that will change the conceptual personality of the mother. The accumulation of knowledge due to education can form a healthy behavior (health behavior) that further improves the physiological and psychological health of the mother. Maternal health ensures the consistency of the mother's adaptive response to maternal anxiety (Hidayat, 2020).

Respondents with a D3 educational background may have a better understanding of their own and their children's *health* and well-being. However, higher education can also increase expectations and pressure, which can contribute to anxiety (Bidayati, 2022). Higher education is often associated with increased pressure and anxiety due to higher expectations (Istiqomah et al., 2021).

The relationship between the number of children and anxiety levels showed that respondents with 2-3 children as many as 26 (52%) experienced moderate anxiety and 1 (2%) panic anxiety. The results of the correlation test analysis obtained a *P-value*: 0.912, indicating no significant relationship between the number of children and anxiety levels. Respondents who have 2-3 living children may face more pressure in meeting the needs of their children, which may affect their quality of life and anxiety levels (Bidayati, 2022). Caring for more than one child can increase workload and pressure, which contributes to anxiety (Arisani & Noordiati, 2021). The relationship between the number of children and pre-sexo anxiety, the results show that there is a relationship between the number of children and pre-sexo anxiety, indicating that previous childbirth experience is not always a protective factor against anxiety. The results of this study are in line with those conducted by Bramita et al., (2024) which explains that there is a relationship between the number of children and anxiety in facing cesarean section. Mothers with more children tend to have higher anxiety before surgery, possibly due to previous unpleasant experiences, increased responsibility for existing children, and concerns about postoperative recovery.

3.1.2 Relationship between Respondent Characteristics and Postpartum Quality of Life

Table 3. Characteristics with Quality of Life of Postpartum Women in Private Hospitals Palembang 2024 (n=50)

	Characteristics	Postpartum Quality of Life			P Value
		Not good	Good	Very good	
Age	26-30 Years	1	13	0	0.503
	31-35 Years	0	25	5	
	36-40 Years	0	4	1	
	>45 Years	0	1	0	
Education Level	Graduated from high school/vocational school	0	2	0	0.961
	D3 graduate	1	28	5	
	Bachelor's Degree	0	11	1	
	Master's Degree	0	2	0	
Number of Children	1 person	0	17	3	0.001
	2-3 people	0	25	2	
	>3 people	1	1	1	

The results of the analysis of the relationship between age and quality of life of postpartum women based on **Table 3**, show that in the age category 26-30 years most have a good quality of life as many as 13 people and 1 person with poor quality of life. No one has a very good quality of life. In the 31 – 35 year category, the majority have a good quality of life, namely 25 people with 5 people having a very good quality of life. While in the 36-40 years category, 4 people have a good quality of life and 1 person is very good. Respondents over 45 years old all have a good quality of life, namely 1 person. *P-value*: 0.503, indicating there is no significant relationship between respondents and postpartum quality of life.

The relationship between education level and quality of life of postpartum women, respondents with high school / vocational education all have a good quality of life, namely 2 people. Respondents who have D3 education, most have a good quality of life as many as 28 people, with 1 person less good and 5 people very good. Respondents with S1 education there are 11 people with good quality of life and 1 person is very good. While respondents with S2 education, all respondents have a good quality of life totaling 2 people. *P-value*: 0.961. The results of statistical tests show that there is no significant relationship between education level and quality of life during the postpartum period.

The relationship between the number of children and the quality of life during the postpartum period is that respondents with 1 child have a good quality of life, namely 17 people and 3 respondents are very good, no one has a poor quality of life. Respondents who have 2-3 children the majority have a good quality of life, totaling 25 people with 2 very good people. While respondents who have > 3 children, 1 person has a poor quality of life, 1 person is good, and 1 person is very good. The statistical test results obtained *P-value*: 0.001, meaning that there is a significant relationship between the number of children and the quality of life of the postpartum period.

The results showed that age and education level did not have a significant relationship with postpartum quality of life ($p > 0.05$) and the number of children had a significant relationship with postpartum quality of life ($p < 0.05$), where respondents with fewer children tended to have a better or very good quality of life. This shows that postpartum quality of life is more influenced by the number of children than the age or education level of the respondent.

3.2 Relationship between Pre Sectio Anxiety Level and Quality of Life of Postpartum Women

Table 4. Relationship between Pre *Sectio secarea* Anxiety Level and Women's Quality of Life Postpartum Period in Private Hospitals Palembang 2024 (n=50)

Pre-Section Anxiety	Postpartum Quality of Life			Σ	P. Value
	Less Good	Good	Very good		
Medium Level	0 (0%)	9 (75%)	3 (25%)	12	0.563
Severity	1(2.8%)	32 (88.9%)	3 (8.3%)	36	
Panic	0 (0.0%)	2 (100.0%)	0 (0.0%)	2	

Referring to the research results in **Table 4**, the distribution of anxiety levels and quality of life during the postpartum *period* at a moderate anxiety level as many as 9 people (75%) have a good quality of life, and 3 people (25%) have a very good quality of life, no respondents have a poor quality of life. Respondents with severe anxiety levels, the majority of respondents have a good quality of life category, namely 32 people (88.9%), while 3 people (8.3%) have a very good quality of life, and 1 person (2.8%) has a poor quality of life. At the panic anxiety level, all respondents, namely 2 people (100%) have a good quality of life category. *There* were no respondents in the category of poor or very good quality of life. Based on statistical tests, the *p-value* obtained was 0.563, which is greater than the commonly used significance level ($\alpha = 0.05$). This indicates that there is no significant relationship between pre-section anxiety level and postpartum quality of life.

The relationship between anxiety levels and postpartum quality of life, the results showed no relationship between pre-section anxiety and postpartum quality of life. Research conducted (Wulandari & Mufdlilah,2020) explains the factors that affect the quality of life of postpartum mothers are age, education, income, parity, history of complications, history of abortion, desired pregnancy, and breastfeeding factors. Pre-section anxiety and maternal quality of life during the postpartum period in this study did not have a significant relationship, perhaps because other factors were more dominant in influencing the quality of life of mothers during the postpartum period. Maternal quality of life during the postpartum period tends to be influenced by physical aspects such as postoperative recovery, social support, baby's condition, and access to health services.

Although pre-sectio maternal anxiety may temporarily affect the mother's emotional state, it will decrease once the surgical procedure is completed and the mother begins to focus on physical recovery and adaptation to her new role as a mother. In addition, effective adaptation techniques, family support, and positive experiences during labor can help reduce anxiety on quality of life.

4. CONCLUSIONS

This research is concluded as follows:

1. Characteristics of respondents including age, education and number of children are: The age of most respondents is between 31-35 years old. The highest level of education is Diploma 3 level and the number of children of respondents is mostly 2-3 children.
2. The relationship between characteristics and pre section caesarea anxiety based on age, the most respondents who experienced moderate anxiety were respondents aged 31-35 years. Based on education with moderate anxiety, most respondents with Diploma 3 education and respondents who experience moderate anxiety are respondents who have 2-3 children. Statistical test results show there is a significant relationship between education level and pre sectio caesarea anxiety level.
3. The relationship between characteristics and quality of life of women in the postpartum period based on age who have good and very good quality of life is the majority of postpartum women aged 31-35 years. Based on the level of education of women who have good and excellent postpartum quality of life are respondents who have Diploma 3 education. Meanwhile, based on the number of children owned by respondents who have good quality of life are respondents with 2-3 children and those who have excellent quality of life are mostly owned by respondents who have 1 child. The results of statistical tests that show there is a significant relationship are between the number of children and the quality of life of the postpartum period.
4. The relationship between the level of anxiety pre sectio caesarea and the quality of life of women in the postpartum period is that women who have a severe level of anxiety the majority have a quality of life in the good category. The statistical test results showed no significant relationship.

RECOMMENDATIONS

For future researchers: this research needs to be carried out further research and is recommended with a mixed method research design to produce better and more complete data.

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AUTHOR'S CONTRIBUTION

All the *research* team as authors have been involved in drafting and discussing the results and contributed from the beginning to the final manuscript.

CONFLICT OF INTEREST

The authors *declare* that they have no conflicts of interest.

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