

THE EFFECT OF POST PARTUM EDUCATION ON PARENTING SELF-EFFICACY AND POST PARTUM BLUES IN PRIMIPARA MOTHERS POST SECTIO CAESAREA AT ESTOMIHI HOSPITAL, MEDAN CITY

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ABSTRACT

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Background: High parenting self-efficacy will reduce the risk of postpartum depression. The prevalence of depression 6 months postpartum overall is 4.0%, with a higher prevalence in urban areas (5.7%) than in rural areas (2.9%). Young mothers in urban and rural regions show different risk factors for postpartum depression. Meanwhile, mothers who have low parenting self-efficacy scores can increase the risk of postpartum depression, inability to care for babies, which will increase infant morbidity and mortality rates, marital conflict, lack of relaxing and enjoyable time with children, and experience great difficulties in carrying out baby care tasks. The purpose of this study is to determine the effect of postpartum education on parenting self-efficacy and postpartum blues in primiparous mothers after cesarean section. Method: This study is a Quasi-Experimental study with a pretest-posttest Non-equivalent control group design. The research method used is postpartum education with leaflets and lectures on parenting self-efficacy and postpartum blues. The study population is post-CS mothers at Estomihi Hospital, Medan. The sampling technique is purposive. The sample size is 38 respondents, consisting of 19 people in the experimental group and 19 people in the control group. Univariate and bivariate data analysis using the Wilcoxon test and ordinal regression test. Results: The statistical test results showed a decrease from the intercept-only model to the final model, namely 26.761 to 5.623, with a difference (Chi-square value) of 21.138, which means there is a real influence with the presence of independent variables. If seen from the significance value, there is a significant influence between postpartum education using leaflets on parenting self-efficacy and postpartum blues because the significance value obtained is $0.000 < 0.05$. Conclusion: There is a significant influence of postpartum education using leaflets on parenting self-efficacy and postpartum blues.

1. INTRODUCTION

According to the World Health Organization (WHO), the standard for performing a Caesarean Section (CS) operation is around 5-15% WHO data in the 2011 Global Survey on Maternal and Perinatal Health shows that 46.1% of all births were carried out by Caesarean Section (CS) (WHO, 2019). Based on RISKESDAS data in 2018, the number of deliveries by Caesarean Section (CS) in Indonesia was 17.6%. Indications for Caesarean Section (CS) delivery were caused by several complications with a percentage of 23.2% including transverse/breech fetal position (3.1%), bleeding (2.4%), seizures (0.2%), premature rupture of membranes (5.6%), prolonged labor (4.3%), umbilical cord entanglement (2.9%), placenta previa (0.7%), retained placenta (0.8%), hypertension (2.7%), and others (4.6%) (WHO, 2024).

According to data from the 2017 Indonesian Demographic and Health Survey (SDKI), the incidence of caesarean section (CS) in Indonesia was 17% of the total number of births in health facilities. This indicates an increase in the number of caesarean sections (Kemenkes RI, 2018). According to a report from Adam Malik Hospital, Medan, North Sumatra Province, in 2019, there were 214 cases of caesarean section in 2018 and 234 cases in 2019 (Sumatera, 2021)

Surgical delivery, or cesarean section, can present different challenges than those experienced by mothers who deliver vaginally. In addition to experiencing physiological changes during the postpartum period, mothers who undergo cesarean sections experience pain around the incision when the effects of anesthesia wear off. This pain can lead to various problems, such as a reluctance to mobilize early. Pain can also

This led to a focus on self-care without caring for the baby. It can also lead to anxiety and reduced confidence in caring for the baby. (Pramudianti et al., 2019)

According to the WHO (2014), worldwide, approximately 13% of postpartum women experience mental disorders. In developing countries, the rate is higher, at 19.8% postpartum. The 2018 Basic Health Research (Riskesdas) reported that the incidence of mental disorders in Indonesia, with symptoms of depression and anxiety, reached 16%, or 14 million people. In Central Java, 11% of postpartum mothers experienced postpartum mental disorders. (WHO, 2024)

The transition to parenthood is considered healthy and successful when the mother can adapt and fulfill her new role, maintain her relationship with her partner, and develop a satisfying relationship with her child. First-time mothers undergoing a cesarean section require physical and psychological preparation to successfully transition to motherhood. One way midwives prepare mothers psychologically is by providing counseling on parenting self-efficacy. (D. Astutiningrum, 2016)

Parenting self-efficacy is a parent's belief in their ability to manage and perform tasks related to caring for a baby under certain conditions. A study by Potter and Hui-Chin demonstrated that mothers with high levels of PSE have better parenting skills, are more responsive to their baby's cues and needs, and have better interactions with their children (Astutiningrum, 2016).

High parenting self-efficacy will reduce the risk of postpartum depression. The overall prevalence of depression 6 months postpartum is 4.0%, with a higher prevalence in urban areas (5.7%) than in rural areas (2.9%). Young mothers in urban and rural areas show different risk factors for postpartum depression. Meanwhile, mothers

With low parenting self-efficacy scores can increase their risk of postpartum depression, inability to care for babies, which will increase infant morbidity and mortality rates, marital conflict, lack of leisure and fun time with children, and experience great difficulties in carrying out baby care tasks (Pramudianti et al., 2019)

Postpartum blues is a feeling of sadness and anxiety experienced by approximately 50-80% of women after giving birth. This condition usually appears in the first two weeks after delivery and often peaks around the third or fourth day after delivery. (Wulandari et al., 2022)

According to Notoatmodjo (2018), health education is the application or implementation of education in the health sector. Operationally, health education encompasses all activities designed to provide and enhance the knowledge, attitudes, and practices of individuals, groups, or communities in maintaining and improving their own health. (Indriani, 2020)

The results of the researcher's initial observations in the postpartum room through interviews with 5 postpartum primiparous mothers with caesarean section, obtained 2 mothers admitted that they did not know at all how to care for their babies and relied more on their parents and traditional birth attendants to care for their babies, 3 others said they knew how to care for their babies but were still afraid, worried and unable to care for their babies so they preferred to hire baby care services at home.

In a study conducted by Astutiningrum (2016), entitled increasing parenting self-efficacy in postpartum mothers through counseling media. Their differences with this study lie in their counseling media, namely, using leaflets, their type of research, and statistical tests. Seeing this problem, the researcher conducted a study on "the effect of postpartum education on parenting self-

Efficacy and postpartum blues in primiparous mothers after cesarean section at Estomihi Hospital Medan. The purpose of their study was to determine the effect of postpartum education on parenting self-efficacy and postpartum blues in primiparous mothers after cesarean section at Estomihi Hospital Medan.

2. METODE

This study is a Quasi-Experimental study with a pretest-posttest Non-equivalent control group design. Their research method used is postpartum education with leaflets and lectures on parenting self-efficacy and postpartum blues. Their study population was post-CS mothers at Estomihi Hospital, Medan. Their sampling technique was purposive, in which respondents were selected based on specific criteria, namely primiparous postpartum mothers who had undergone cesarean section at Estomihi Hospital. Their sample size was 38 respondents, consisting of 19 people in the experimental group and 19 in the control group. Data collection was carried out through pretest and posttest assessments, where the experimental group received postpartum education using leaflets and the control group received education through lectures, followed by measuring parenting self-efficacy and postpartum blues before and after the intervention. The data were then analyzed using univariate analysis to describe respondent characteristics and variable distribution, and bivariate analysis using the Wilcoxon test to assess changes between pretest and posttest within each group, as well as ordinal regression analysis to determine the overall effect of postpartum education on parenting self-efficacy and postpartum blues. This study was conducted after obtaining approval from the Health Research Ethics Commission of STIKES.

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3. RESULTS AND DISCUSSION

This study involved 38 respondents divided into two groups: an experimental group of 19 respondents who received postpartum education in the form of leaflets, and a control group of 19 respondents who received education in the form of lectures. This univariate analysis will describe the frequency distribution of each external variable and the research variable, as shown in the following table:

Table 1: Frequency Distribution of Parenting Self-Efficacy Variables in the Experimental Group and Control Group

Parenting self-efficacy	Experimental Group				Control Group			
	Pretest		Posttest		Pretest		Posttest	
	N	%	N	%	N	%	N	%
Good	1	5.3	11	57.9	1	5.3	3	15.8
Enough	7	36.8	8	42.1	9	47.4	12	63.2
Not enough	11	57.9	0	0	9	47.4	4	21.1
Total	19	100	19	100	19	100	19	100

Based on Table 1 shows that in the experimental group (pretest), most respondents had a poor understanding of parenting self-efficacy, namely 11 respondents (57.9%), while in the post-test group (post-test), some respondents had a good understanding of parenting self-efficacy, namely 11 respondents (57.9%).

In the control group (pretest), most respondents had an understanding of parenting self-efficacy that was less than sufficient, namely 9 respondents (47.4%), while in the control group after (posttest), some respondents had an understanding of parenting self-efficacy that was sufficient, namely 12 respondents (63.2%).

Table 2: Frequency Distribution of postpartum blues variables in the eikspeirimein Group and the control Group

Postpartum blues	Experimental Group				Control Group			
	Pretest		Posttest		Pretest		Posttest	
	N	%	N	%	N	%	N	%
Tall	1	5.3	10	52.6	1	5.3	2	10.5
Currently	7	36.8	9	47.4	9	47.4	10	52.6
Low	11	57.9	0	0	9	47.4	7	36.8
Total	19	100	19	100	19	100	19	100

Based on Table 2 shows that in the experimental group (pretest), the majority of respondents had a low understanding of postpartum blues, namely 11 respondents (57.9%), while in the posttest treatment group, some respondents had a high understanding of postpartum blues, namely 10 respondents (52.6%).

In the control group (pretest), most respondents had low and moderate understanding of postpartum blues, namely 9 respondents (47.4%), while in the control group after (posttest), some respondents had moderate understanding of postpartum blues, namely 10 respondents (52.6%).

Parenting self-efficacy before and after being given education at Estomihi Hospital, Medan.

Table 3 Results of the Wilcoxon Signed Ranks Test Analysis of Parenting Self-Efficacy Pretest and Posttest in the Experimental Group and Control Group.

Parenting self-efficacy	N	Positive Ranks	Ties	Negative Ranks	Sig(2-tailed)
Experimental Group	19	18	1	0	.000
Control Group	19	7	12	0	.008

Based on Table 3, the results of the Wilcoxon signed-rank test analysis show that there were 19 respondents in the

experimental group and 19 respondents in the control group, with the results of understanding parenting self-efficacy increasing more than before. Their results of the Wilcoxon signed-rank test show a significance value of 0.000 and 0.008, which is smaller than 0.05, so it was concluded that there was a significant effect after education using leaflets.

Based on their research results, it can be interpreted from their analysis results of their Wilcoxon signed-rank test, it was found that there were 19 respondents in the experimental group and 19 respondents in the control group, with their results of understanding parenting self-efficacy increasing more than before. Their results of the Wilcoxon signed-rank test showed a significance value of 0.000 and 0.008, smaller than 0.05, so it was concluded that there was a significant effect after education using leaflets.

The results of this study are supported by research (Astutiningrum, 2016). In this study, counseling involving demonstrations and booklets in the experimental group showed a significant impact on increasing Parenting Self-Efficacy (PSE) scores in their cognitive aspect. Their demonstration method and providing booklets to their experimental group were proven to be factors that influenced their increase in these scores. (D. A. Astutiningrum et al., 2016). Counseling using booklets has an effect on parenting self-efficacy in postpartum mothers with CS. (Astutiningrum, 2016) Postpartum blues occur due to a lack of support for their adjustments needed by women in facing their new activities and roles as mothers after giving birth. (Retna & Wulandari, 2020).

In this study, their results show a significant difference in Parenting Self-Efficacy (PSE) levels before and after education at Estomihi Hospital, Medan.

Before their education program, many mothers showed low PSE levels, indicating uncertainty and concern about their ability to care for their babies. After participating in their education program, there was a significant increase in PSE scores, indicating that mothers feel more confident and competent in their parenting roles. Their findings indicate that the education provided had a positive effect on increasing mothers' self-confidence in their ability to care for their babies.

Postpartum blues before and after being given education at Estomihi Hospital, Medan.

Table 4 Results of the Wilcoxon Signed Ranks Test Analysis of Postpartum Bleeding Pretest and Posttest in the Experimental Group and Control Group

Postpartum blues	N	Positive Ties Ranks	Negative Ranks	Sig (2-tailed)
Experimental Group	19	16	3	.000
Control Group	19	6	10	.317

Based on Table 4, the results of the Wilcoxon signed-rank test analysis show that there were 19 respondents in the experimental group and 19 respondents in the control group. In the experimental group, their understanding of postpartum blues increased more than before. Their results of the Wilcoxon signed-rank test show a significance value of 0.000. In the experimental group, the significance value was less than 0.05, so it was concluded that there was a significant effect between before and after education using leaflets. Meanwhile, in the control group, the significance value was 0.317, which was greater than 0.05, so it was concluded that there was no effect between before and after education in the control group.

Based on the results of their study, it can be interpreted that their results of the Wilcoxon signed-rank test analysis show that there were 19 respondents in the experimental group and 19 respondents in the control group. In the experimental group, their results of understanding about postpartum blues increased more than before. Their results of the Wilcoxon signed-rank test show a significance value of 0.000. In the experimental group, the significance value was less than 0.05, so it was concluded that there was a significant influence between before and after education using leaflets on understanding postpartum blues. While in the control group, the significance value was 0.317, which was greater than 0.05, so it was concluded that there was no influence between before and after education in the control group.

The results of this study are supported by research. (Rikhaniarti & Salina, 2022) Conducted on their relationship between parenting self-efficacy and postpartum blues in their intervention group, the results of the $p\text{-value} = 0.032 < \alpha = 0.05$. Their value is sufficient, namely 0.438. Likewise, the control group results $p\text{-value} = 0.049 < \alpha = 0.05$. Their $r\text{-value}$ is sufficient, namely 0.406. This indicates that sufficient parenting self-efficacy can prevent postpartum blues.

Postpartum blues can sometimes progress to depression and even psychosis, which can threaten and endanger the lives of both the mother and her baby, necessitating professional help, particularly psychiatrists, and medication (Rikhaniarti and Salina, 2022). The postpartum period is a crucial period for bonding between mother and baby. Bonding is an emotional connection that develops gradually from birth to attachment. Increasing self-efficacy can boost a mother's confidence in bonding and attachment. Therefore, healthcare providers

need to evaluate postpartum mothers' self-efficacy levels and adjust interventions accordingly if their self-efficacy is low. (Wulandari et al., 2022)

This study showed a significant difference in postpartum bluish levels before and after education at Estomihi Hospital in Medan. Before education, mothers tend to experience higher levels of postpartum blues symptoms, indicating anxiety and feelings of sadness after giving birth. However, after participating in their education program, postpartum blues symptoms decreased significantly. This indicates that the education provided is effective in reducing postpartum blues symptoms, providing emotional support and information that helps mothers feel mentally and emotionally after childbirth. Therefore, education within their time period after delivery or on their first day postpartum is essential.

Analysis of the Influence of Parenting Self-Efficacy and Postpartum Blues Before and After Education at Estomihi Hospital, Medan.

Table 5: The Effect of Postpartum Education on Parenting Self-Efficacy and Postpartum Blues

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	26.761		4	0.000
Final	5.623	21.138	2	0.998

Based on Table 5, it can be found that there was a decrease from the intercept-only model to the final one, namely 26.761 to 5.623, with a difference (Chi-squared value) of 21.138, which means there is a real influence with the presence of independent variables. If seen from the significance value, there is a significant influence between postpartum education using leaflets on parenting self-efficacy and postpartum blues

because the significance value obtained was $0.000 < 0.05$. In the control group, it was concluded that there was no significant influence of postpartum education on parenting self-efficacy and postpartum blues because the significance value obtained was $0.998 < 0.05$.

Based on their ordinal regression test, it was found that there was a decrease from their intercept-only model to their final one, namely 26.761 to 5.623, with a difference (Chi-square value) of 21.138, which means there is a real influence on their price of independent variables. If seen from the significance value, there is a significant influence between postpartum education using leaflets on parenting self-efficacy and postpartum blues because the significance value obtained is $0.000 < 0.05$.

The results of this study are supported by (Rikhaniarti and Salina, 2022). Their results showed that postpartum education, parenting self-efficacy, and cesarean section had a significant effect at the 95% confidence level. This study found that parenting self-efficacy education had an impact on preventing postpartum blues with a P value of 0.000 ($P < 0.005$). In conclusion, there is a significant correlation between social support and the effect of education on increasing parenting self-efficacy, which plays a role in preventing postpartum blues in pregnant women under the age of 20.

Postpartum pain and physical limitations can reduce a mother's ability to care for her baby. Mothers who undergo cesarean delivery often feel fear and anxiety about their own health, which can lower their confidence in caring for their newborn. Parenting self-efficacy is a parent's belief in their ability to manage and carry out tasks related to childcare in various situations (Astutiningrum, 2016). Postpartum blues often arise from a lack of support in adjusting to new roles and activities as a mother after

giving birth. Adequate social support can increase mothers' interest in attending prenatal classes that provide education on parenting self-efficacy. Their goal is to provide knowledge about infant care and nurturing, so mothers feel more confident in caring for their babies. This is especially important for primigravida mothers, who are experiencing motherhood for the first time. A better understanding of what to do after their baby is born can foster a strong bond between mother and child, which in turn can prevent postpartum blues, especially in mothers under 20 years old. (Kasmiati et al., 2023)

Mothers with high self-efficacy tend to be more able to cope with difficult tasks, even after experiencing setbacks. They take responsibility for their infants' needs, provide quality care, adapt to change, and accept their children's needs, all while being able to overcome various challenges. Mothers with high self-efficacy also report lower levels of depression and greater satisfaction with social support. Conversely, parents with low self-efficacy may experience rejection of their infants, negative views of their infants' condition, high levels of stress, and difficulty interacting with their infants, which can lead to depression and frustration. Self-efficacy is also associated with responsiveness, which includes positive parental behavior and sensitivity to their infant's needs. (Supliyani et al., 2024)

This study showed that their levels of parenting self-efficacy and postpartum blues among pregnant women at Estomihi Hospital in Medan experienced significant changes after being provided with leaflet education. Before their education program, mothers tended to exhibit low levels of parenting self-efficacy and were more susceptible to postpartum blues. However, after participating in their education program, there was a clear increase in

parenting self-efficacy and a decrease in postpartum blues symptoms. This indicates that their leaflet education successfully increased mothers' confidence in caring for their babies and reduced their risk of postpartum blues. Theisei's findings emphasize the importance of educational interventions in supporting the mental health and preparedness of new mothers.

4. CONCLUSION

Based on data analysis and discussion in their thesis entitled The Influence of Postpartum Education on parenting self-efficacy and postpartum blues in post-caesarean section mothers at Estomihi Hospital, Medan City, their research that has been conducted can be concluded that there is a significant influence after education using leaflets on parenting self-efficacy. There is a significant influence between before and after education using leaflets on understanding postpartum blues. There is a significant influence between postpartum education using leaflets on parenting self-efficacy and postpartum blues because the significance value obtained is $0.000 < 0.05$. It is recommended for health workers to increase efforts to prevent postpartum blues by providing education consistently. It is recommended for their research to increase their research time on the importance of education, with leaflets on parenting self-efficacy and postpartum blues, with a larger sample. It is recommended for respondents to implement or apply the information that has been obtained.

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