

The Association Between Unplanned Pregnancy and Social Support with the Incidence of Postpartum Depression

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ABSTRACT

Introduction: Postpartum depression is an emotional disorder caused by a failure in the postpartum psychological adaptation process. Postpartum mothers may experience feelings of letdown after giving birth due to the seriousness of the experience of giving birth and doubts about their ability to cope effectively in raising a child. The incidence of postpartum depression globally is 17.22%, while in Asian countries it ranges from 26-85% and this incident has a serious impact on the mother, baby, and family.

Aims: This study aimed to determine the relationship between unplanned pregnancy and social support with the incidence of postpartum depression.

Methods: This research is quantitative research, namely cross-sectional, and was carried out in the Andalas Health Center Working Area, Padang City from June 2023 to May 2024. The sample in this study was mothers who had babies between 4 weeks and 6 months, totaling 152 people. Data were collected using questionnaires and analyzed using univariate and bivariate.

Results: The results of this study show that the incidence of postpartum depression in the Andalas Health Center Working Area, Padang City is as much as 24.3%. The percentage of unplanned pregnancies is

32.2% and the does not receive social support is 49.3%.

Conclusion: There is a significant relationship between unplanned pregnancy ($p = 0.005$) and social support ($p = 0.000$) with the incidence of postpartum depression.

Keywords: Postpartum depression, unplanned pregnancy, social support

INTRODUCTION

Postpartum depression is an emotional disorder caused by a failure in the postpartum psychological adaptation process.¹ Feelings of postpartum sadness caused by reduced maternal freedom, decreased body aesthetics, and reduced social interaction are early signs of postpartum depression which can have an impact on the interaction between mother and baby, and reduce the quality of life.

The incidence of postpartum depression in developed countries is 10% -15%. Postpartum depression affects one in seven women in the United States and 50% of these cases are undiagnosed due to privacy reasons, where mothers are reluctant to reveal their feelings and symptoms to family members or health workers.² Based on a systematic review conducted by Wang., et al (2021), the prevalence of postpartum depression throughout the world is

(17.22%), Eastern Europe (16.62%), and in Southeast Asia (13.53%).³ Developing countries such as Brazil, the prevalence of postpartum depression is above the world average level which ranges from 7.2%-39.4%. In a study in Vietnam, the prevalence of postpartum depression in urban areas was higher (20.4%) compared to rural areas (15.8%).⁴

The risk factors for postpartum depression can occur due to several factors, namely unplanned pregnancy and social support.⁵ An unplanned pregnancy is a pregnancy outside the mother's will, the existence of which was not planned by one or both parties.⁶ Unplanned pregnancies often occur because the number of children is deemed sufficient or the births are too close together. This incident has implications that affect efforts to terminate pregnancy or abortion. Some of them decide to continue the pregnancy because they receive adequate support. This will have an impact on childbirth and postpartum if it is not addressed beforehand by health workers.⁷ Low social support is also a strong predictor of postpartum depression. Social support includes 4 main dimensions, namely information, material, emotional, and partner or partner.⁶

There are several strategies for identifying symptoms of postpartum depression, one of which is using a questionnaire instrument developed specifically for post-natals, namely the Edinburgh Post-natal Depression Scale (EPDS). EPDS is an instrument that is widely known and used to screen for depression in mothers who have given birth, to see whether they have symptoms of depression or not, and to measure the level of risk of developing post-partum depression (PPD).⁸ This EPDS was developed by Cox, et al., (1987) which has been translated and validated by several countries.⁹

MATERIALS & METHODS

This research is quantitative research that uses an analytical research design, namely cross-sectional (cross sectional) which was

carried out in the Andalas Health Center Working Area, Padang City from June 2023 to May 2024. The sample in this study were mothers who had babies between 4 weeks and 6 months, totaling 152 people. Data were collected using a questionnaire and analyzed using the chi-square test. The sampling technique in this research is simple random sampling. The tool used to conduct research is informed consent, the Edinburgh Postnatal Depression Scale (EPDS) questionnaire developed by Cox, et al., (1987) which consists of 10 questions regarding the mother's condition and feelings in the last 7 days. EPDS has been translated and validated into Indonesian with a cut-off point ≥ 13 .¹⁰

RESULT

This research uses primary data from respondents who met the inclusion and exclusion criteria in the Andalas Health Center Work Area from June 2023 to May 2024.

Table 1. Characteristics of Respondents

Characteristics	f (n=152)	%
Respondent's Age		
<35 years	118	77.6
≥ 35 years	34	22.4
Education		
Low	53	34.9
High	99	65.1
Work		
Work	58	38.2
Doesn't work	94	61.8

The characteristics of respondents based on (Table 1.) above show that the majority of respondents were <35 years old with a percentage of 77.6% and respondents with a high level of education were 65.1%. Most respondents in the Andalas Health Center Working Area are not working 61.8%.

Table 2. Incidence of Postpartum Depression

Symptoms of Postpartum Depression	f	%
Yes	37	24.3
No	115	75.7

The description of the incidence of postnatal depression in this analysis, as outlined in the

table, shows that of the total number of 152 respondents, 37 of them (24.3 %) showed symptoms indicating postnatal depression. These findings suggest a significant prevalence of postnatal depression in the

operational scope of the Andalas Community Health Center, with more than a fifth of respondents showing signs of postnatal depression.

Table 3. Association between unplanned pregnancy and postpartum depression

Unplanned Pregnancy	Symptoms of Postpartum Depression						p-value
	Yes		No		Total		
	f	%	f	%	f	%	
No	21	36.8	36	63.2	57	100	0.005
Yes	16	16.8	79	83.2	95	100	

Based on the research results obtained using the chi-square test, the p-value = 0.005 (p<0.05) was obtained, which means there is a association between unplanned pregnancy and postpartum depression in the Andalas Health Center Area, Padang City. As many as 36.8% of respondents who did not plan their pregnancy experienced postpartum depression.

Table 4. Association between social support and postpartum depression

Social Support	Symptoms of Postpartum Depression						p-value
	Yes		No		Total		
	f	%	F	%	f	%	
-Yes	28	37.3	47	62.7	75	100	0,000
-No	9	11.7	68	88.3	77	100	

Based on (Table 3), shows that mothers are more vulnerable to experiencing postpartum depression if they do not receive social support (40.8%). Bivariate analysis obtained a p-value = 0.000 (p<0.05) which shows that there is a significant association between social support and the incidence of postpartum depression.

DISCUSSION

The percentage of incidence of postpartum depression in the Andalas Health Center Working Area, Padang City is equal to 24.3% of respondents so this percentage is greater than the incidence of postpartum depression in Indonesia, namely 11.76%. This incidence rate is lower than research conducted by Sinulingga, Yanis, and Anggraini (2023) which found that the

percentage of postpartum depression incidents in the Andalas Health Center Working Area, Padang City was 36.6% in 2023, where all the results of this study used the EPDS score assessment >12.¹¹ This is because the national data collection on postpartum mothers is more extensive and the survey conducted covers all regions in Indonesia, as well as the differences in percentages found with previous research in Padang City, namely that there are changes in the situation and conditions of society in various aspects of life.³ Incident depression is one of the most common morbidities in the postpartum period. This can be seen from the negative impacts on women, children, extended families and society as a whole.¹²

One of the causes of postpartum depression is unplanned pregnancy. Globally, 44% of pregnancies are unplanned and 56% of unplanned pregnancies end in abortion.¹³ An unplanned pregnancy is a pregnancy that was not planned at the time (mistimed) or occurred at an unexpected time (unwanted). Unplanned pregnancy includes the intentions of the mother and husband separately, namely planned but not on time or simply not planned. Discrepancy between intentions (comparing those not planned by the mother or considered not planned by the husband; not planned by the mother or considered planned by the husband; or planned by the mother or considered not planned by the husband).¹⁴

In this study, unplanned pregnancies were often accepted by the husband if they were

blessed with another child, but this was not approved by the mother herself. This incident happens to most mothers who experience depression, where when their baby is born, the mother feels lazy to take care of her baby and even breastfeed him. According to the mother and husband who were at home when interviewed, this can also cause disharmony in the household because of the problems that always occur every day. It can be concluded that the disharmony resulting from an unplanned pregnancy can affect the mother's psychology in adapting to her current situation and the mother feels depressed which results in continued stress.

This is in accordance with research by Amandya, AKP, Ali, M., Ainun, NH, Alyaa, N., Al, MN, Era, CP (2021) that unplanned pregnancy is a factor associated with postpartum depression with an incidence of 1.54 times greater than a planned pregnancy. The risk of depression will continue to increase even if mothers decide to give birth to their babies. Mothers with unplanned pregnancies are more easily stressed and do not easily adjust to their new role, so mothers are more easily stressed and experience postpartum depression. Unplanned pregnancies with low economic conditions, lack of education, and increased expenditure and energy taking care of children tend to make mothers indifferent and depressed about their condition, causing postpartum depression.

This research is strengthened by research by Surkan, PJ, Sakyi, KS, Christian, P., Mehra, S., Labrique, A., Ali, H. (2017) in Bangladesh, 18% of mothers reported that their husbands physically forced them to do sex at some time, and 11% of them said that this happened often or sometimes. This can have a negative impact on the mental health of mothers in India so there is a possibility that unplanned pregnancy is a pathway to and is the root cause of postpartum depression symptoms.¹⁴

Other studies also say that unplanned pregnancies are also the result of not using contraception or using inconsistent or

incorrect effective methods. Worldwide, around 26.5 million unplanned pregnancies occur each year due to incorrect or failed use of contraceptives. The number of unplanned pregnancies in Moges, Y., Worku, SA, Niguse, A. and Kelkay, B. (2020) research is quite high, namely 20.6%, so the need for communication strategies regarding fertility and family planning programs from both partners is very high. important to pay attention to.¹³

The results of this study also show that insufficient social support can risk postpartum depression ($p = 0.000$) because social support can help overcome individual problems and can increase the individual's sense of self-confidence in their own choices. Apart from that, a person's perception and understanding of something may be based on other people's responses. Social support can come from different sources, such as from loved ones, society, the workplace or organizational members. With social support, individuals will feel confident that they are loved and cherished, appreciated, valued, and part of a social network.¹⁵

In two sub-districts in the Andalas Health Center Working Area, researchers found that there were social disparities where there were inequalities in social life in various aspects so that there was no support during childbirth and postpartum between neighbors. Even her neighbors spread negative rumors about her birth and postpartum. On the other hand, in other sub-districts which have high levels of social support, mothers receive support such as giving congratulations in the form of gifts of baby equipment, money, as well as support such as sharing experiences and exchanging ideas, which can provide a sense of comfort as neighbors and having friends to talk to if they experience problems with the mother's current condition. and the baby openly. In this way, respondents admitted that they felt happy and slightly reduced feelings of anxiety and burden after giving birth. Most respondents also said that mothers felt relieved if they told their neighbors about

the difficulties and joys of taking care of their babies. So that postpartum mothers who have social support do not experience the risk of depression and the results of this study have a significant relationship with the risk of postpartum depression.

Postpartum mothers who have less social support are more likely to experience postpartum depression compared to mothers who have high social support. In a multivariate logistic regression analysis, postpartum mothers with low levels of social support were 1.78 times more likely to experience depression than mothers who had high social support.¹⁶ Women who feel appreciated, cared for and loved by their friends create a sense of self-confidence and feelings of worth. This can be an obstacle for the mother to experience depression. Women who do not receive social support will more easily feel they are worthless.¹⁷

In research by Utomo & Sudjiwanati (2018), social support is a form of support or assistance that involves the exchange of social resources from each individual. The social support provided can provide calm, feelings of being cared for and loved, and create a sense of self-confidence within the individual. Providing social support from people closest to you really helps someone to overcome psychological pressure in difficult and stressful times.¹⁸

There are several factors that determine whether a person receives social support. The following are factors that influence the social support an individual receives. First, the recipient of support, namely a person, will receive social support if he also does things that can trigger other people to provide support for him. Individuals must have a good socialization process with their environment, including helping other people who need help or support, and letting other people know that they need support or help if they really need it.¹⁵

Furthermore, support providers refer to the people closest to the individual who can be expected to be a source of social support. When individuals do not receive social support, it could be that the person who is

supposed to provide support is in a poor condition, such as not having the type of assistance needed by the recipient, is experiencing stress, or has certain conditions that make him unaware that there are people who need his help. Finally, the composition and structure of social networks, namely the relationships that individuals have with people in their family and environment. This relationship can be seen in size (the number of people an individual has frequent contact with), frequency of contact (how often the individual meets these people), composition (whether these people are family members, friends, co-workers, etc.) and intimacy. (closeness of individual relationships and trust in each other).¹⁵

CONCLUSION

Based on the results of research on the relationship between unplanned pregnancy and social support with the incidence of postpartum depression, it can be seen that 24.3% of mothers have symptoms of postpartum depression in the Andalas Health Center Working Area, Padang City and there is a relationship between unplanned pregnancy (p-value = 0.005) and support. husband (p-value = 0.000) with postpartum depression.

Declaration by Authors

Ethical Approval: This research has been declared to have passed ethical review from the Research Ethics Commission of the Faculty of Medicine, Andalas University, with Certificate No: 576/UN.16.2/KEP-FK/2023.

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