

**RESEARCH PAPER****Risk Factors Associated with Postpartum Depression in Postpartum Mothers under the Covid-19 Scenario in Punjab****¹Mawa Latif, ²Nafeesa Bibi, ³Shaheen Kauser**

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***Corresponding Author** maaawa1997@gmail.com**ABSTRACT**

The first general reactions of parents who have children with mental retardation are shock, fear, sadness, disappointment, guilt, rejection, or anger. This study aims to analyze the factors associated with postpartum depression during the COVID-19 pandemic. This study used an analytical method with a cross-sectional design. The sample involved 247 respondents determined using an accidental sampling technique. Data were analyzed using univariate analysis and bivariate analysis with a significant value of <0.05 . Variables that showed a relationship to postpartum depression were age with a p-value of 0.000 and social support with a p-value of 0.002. Postpartum mothers who experienced depression were 143 people (57.89). Social support is the most dominant risk factor contributing to the incidence of postpartum depression. Important to take preventive measures by involving husbands and families in providing information about maternal child health.

Keywords: Covid-19, Depression, Maternal Health, Postpartum**Introduction**

The development of the Indonesian health sector is prioritized around maternal and infant health. Reproductive health is one area where maternal health is influenced (Rahmadhani, 2021). Since the community believes that a woman who has given birth is the ideal woman, every woman looks forward to giving birth (Anderson et al., 2017). Because it transforms a woman into a fully functional adult, childbirth is a significant life event (Oladeji et al., 2019). For women, becoming a parent involves a transition period that can be quite challenging. After giving delivery, a woman may have psychological signs and symptoms (Rahmadhani, 2020).

During the first few weeks after giving birth, a postpartum woman needs to make physical and psychological modifications to fit her new activities and obligations as a mother. Postpartum Depression (PPD) is a psychological condition that affects some postpartum women but not others. Some postpartum women are able to adjust effectively, while others do not (Rahmadhani, 2020).

PPD prevalence in Pakistan is 22.3%, indicating a significant occurrence of the disorder (Feinberg et al., 2021). According to Knol et al. (2012), the prevalence of DPP in Greece is 13.6%. 30% of people had mild DPP and 6.7% had moderate PPD, especially in the Klaten District (Lisonkova et al., 2016). Postpartum depression affected 52% of respondents in Surakarta (Ria et al., 2018). According to Robertson et al. (2004), common symptoms of PPD include depressive feelings, sobbing, impatience, anxiety, trouble concentrating, unstable emotions, sleep and eating disorders, even suicidal thoughts and threats of violence against the baby. Studies on this topic have been conducted in Indonesia. 16.7% of postpartum moms experienced PPD, according to a study done in Pekanbaru City, Riau Province (Misrawati et al., 2014). Of the 40 respondents (53.3%) in Desfanita et al.'s 2015 study, the majority of mothers reported having PPD (Gunst et al., 2021).

Coronavirus 2 (SARS-CoV-2), a severe acute and hazardous respiratory condition that spreads swiftly, is the cause of coronavirus disease (COVID-19) (WHO, 2020). According to Ramadani et al. (2020), there is a possibility that COVID-19 will worsen the morbidity and mortality rates of mothers and babies because it suggests that pregnant women, childbirth, the postpartum period, and newborns are also susceptible to the virus. Pregnant women are reluctant to visit Puskesmas due to fear of infection, despite the recommendation to postpone pregnancy check-ups and classes for pregnant women. The COVID-19 pandemic has affected almost all health services, including maternal, neonatal, and maternal and child health services, both in terms of quality and access. Therefore, it is important to do research related to PPD.

Literature Review

Twenty-four hours after giving delivery, levels of thyroid and estrogen hormones sharply decline (Pradhananga et al., 2020). Crying, emotional changes, anxiety, worry about the infant, loneliness, and a lack of confidence in oneself as a mother are signs of this hormonal balance problem (Kusumastuti et al., 2021).

The biological makeup, traits, and history of the mother are variables contributing to the symptoms of depression in mothers. Biological variables that cause postpartum depression include levels of estrogen (estradiol and estriol), progesterone, prolactin, and cortisol that fluctuate too quickly or too slowly (Woldeyohannes et al., 2021).

Other variables influencing maternal depressive symptoms in some other students include social variables (marital dissatisfaction, lack of social support, economic status), clinical pregnancy-related variables (risk of current pregnancy, issues in prior pregnancies), and interpersonal variables (neuropathies, negative life experiences) (Dira & Wahyuni, 2016).

According to a literature review conducted by Beck (2002), there is uncertainty and inconsistent evidence about the cause of postpartum depression.

As of September 14, 2020, 4.9% of pregnant women were proven positive for COVID-19 out of 1,483 confirmed cases, according to statistics from the COVID-19 handling task group (Kemenkes RI, 2021).

Materials and Methods

This study employed a cross-sectional design and an analytical observation method. From March to June of 2023, the study was carried out in District Lahore, Pakistan. All postpartum mothers who reside in District Lahore working area made up the study's population. With a total of 247 responders, the sample was determined using the accidental sampling technique. Primary data for the study were collected directly from respondents using the Edinburgh Postpartum Depression Scale (EPDS) questionnaire. Ten questions on the respondent's feelings throughout the previous week made up the questionnaire. Univariate analysis, which shows the percentage, and bivariate analysis were used to analyze each question.

Results and Discussion

Table 1
Characteristics of the Respondents

Variable	N	%
Age		
<20 years old	92	37.25
20-35 years old	87	35.22
>35 years old	68	27.53

Parity		
Primipara	158	63.97
Multipara	89	36.03
Education		
Low	91	36.84
High	156	63.16
Social support		
Low	139	56.28
Good	108	43.72
Depression		
Yes	143	57.89
No	104	42.11

Table 1 revealed that the majority of respondents (37.25%) were less than 20 years old; 158 respondents (63.97%) were primiparous; 56 respondents (63.16%) had a high level of education; 139 respondents (56.28%) had no social support; and 143 respondents (57.89%) displayed indicators of depression.

Table 2
Analysis of factors associated with postpartum depression

Variables	PPD				Total		p-value	
	Yes		No		N	%		
	n	%	n	%				
Age	<20 years old	52	56.52	40	43.48	92	100	0.000
	20-35 years old	41	47.13	46	52.87	87	100	
	>35 years old	39	57.35	29	42.65	68	100	
Parity	Primipara	94	59.49	64	40.51	158	100	1.000
	Multipara	35	39.33	54	60.67	89	100	
Education	Low	55	60.44	36	39.56	91	100	0.138
	High	63	40.38	93	56.62	156	100	
Social support	Low	101	72.66	38	27.34	139	100	0.002
	Good	49	45.37	59	54.63	108	100	

According to Table 2, as the p-value was less than 0.05, there was a significant relationship between the age variable (0.000) and the social support variable (0.002).

Discussion

Postpartum depression can be caused by a variety of biological, personal, and environmental variables (Puspasari & Fanani, 2020). Biological variables that cause PPD include levels of estrogen (estradiol and estriol), progesterone, prolactin, and cortisol that fluctuate too rapidly or too slowly (Karl et al., 2020). A woman is more likely to develop depression in the first ten days following childbirth if her levels of progesterone and estrogen fall after delivery (Achyar & Margiana, 2018).

According to certain studies, there are additional factors that influence maternal depressive symptoms. These include social and interpersonal factors like marital dissatisfaction and a lack of social support, clinical pregnancy-related factors like risk in the current pregnancy and issues in prior pregnancies, and interpersonal variables like neural disorders and poor life experiences (Phipps et al., 2013). Postpartum depression's aetiology was shown to be uncertain and inconsistent in a research by Beck (2002). A few other research concentrated on the demographic factors age, marital status, parity, education level, and socioeconomic status that are associated with the prevalence of postpartum depression (Diniyah, 2017).

Although a review of demographic characteristics as a risk factor for postpartum depression in Asia demonstrated a high link, the studies found a very poor relationship

between these factors and postpartum depression (Hanifah, 2017). The primary risk factors were gender, economic status, and customs from the area (Bloch et al., 2005). Age and social support were shown to be significantly correlated with the frequency of postpartum depression among the five independent factors investigated, according to the studies' chi-square test results.

Conclusion

Age and social support were two factors that influenced postpartum depression, but the researchers also discovered that both groups faced some problems with regard to all the crucial steps involved in nursing and caring for a newborn. According to this report, moms should receive complete assistance in providing for their needs. Postpartum depression needs to be measured in labs or with hormones for the next study.

Recommendations

Women need help and support both physically and psychologically after giving birth, especially those with the first child. The role of social support as a source of emotional, informational, or assistance from people around individuals who are facing problems and in crisis conditions. That social support is an interpersonal interaction that aims to assist someone so that the person feels a form of attention, value, and love. Moreover, recommended that education had a significant effect on postpartum depression experienced by mothers with low education

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