

# POSTPARTUM DEPRESSION DURING THE COVID-19 PANDEMIC SITUATION

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## POSTPARTUM DEPRESSION DURING THE COVID-19 PANDEMIC SITUATION

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### ABSTRACT

Covid-19 pandemic conditions have the potential to increase postpartum stress disorders. Postpartum depression (PPD) is a serious emotional/psychological function (mental disorder) that affects 10% -20% of mothers and mostly occurs in the first three months after birth. The effects of PPD are very serious for the mother, and the whole family 25% of maternal mortality in the course of delivery after delivery and also to infant mortality and morbidity. This study aims to determine the incidence of postpartum depression when the Covid-19 pandemic occurs. The research design used was cross-sectional using anonymous online questionnaire. research subjects were postpartum mothers at 1-24 weeks among 106 respondents. Retrieval of data using the Edinburgh Postnatal Depression Scale (EPDS) questionnaire includes 10 questions and respondent characteristics that are distributed online. The results showed that the incidence of PPD reached 28.3%. The proportion of PPD incidence increased based on postpartum time: 10% at less than one month, 32% at 1 month, 19% at 2 months, 31.3% at 3 months and 35.3% at 4 months and over. The various psychological impacts of a pandemic are additional in addition to the psychological impacts on post partum mothers themselves. Certain precautions associated with risk factors need to be carried out through early diagnosis and intervention to minimize PPD and increase the psychological resilience of mothers following childbirth.

**Keywords:** Postpartum depression (PPD), EPDS, Pandemic Covid-19

### Introduction

Every mother has different emotional reactions in dealing with pregnancy, childbirth, and childbirth (Suryati, 2017). Post partum depression (PPD) is a serious emotional/psychological function (mental disorder) that affects 10% -20% of mothers and mostly occurs within three months after birth (Nurbaeti, Deoisres and Hengudomsub, 2018; Harold, 2004).

PPD is a common and serious public mental health problem in the world (O'Hara and McCabe, 2013; WHO, 2008). Its prevalence reaches between 0.5% and 60.8% worldwide (Ghaedrahmati et al., 2017a). A review in Asian countries of 173 studies found that the prevalence of postpartum depression ranged from 3.5% (Pakistan) to 63.3% (Malaysia) (Klainin and Arthur, 2009).

The prevalence of PPD in Indonesia is reported to range from 2.5% to 22.3% (Andajani-Sutjahjo, Manderson and Astbury, 2007; Idaiani and Basuki, 2012). However, based on a prospective longitudinal study conducted in the Jakarta and Banten areas, the prevalence of PPD reached 18.37% at one month, 15.19% at two months, and 26.15% at three months (Nurbaeti, Deoisres, and Hengudomsub, 2018).

Mental health problems are often undiagnosed because if you look at the symptoms such as fatigue and lack of sleep are generally associated with physical conditions, besides being considered part of gender stereotypes commonly experienced by a mother (WHO, 2008). The negative impact of PPD is very serious for mothers, their children, and the entire family. PPD is a factor that causes 20% of maternal deaths in transit after childbirth (Ghaedrahmati et al., 2017; WHO, 2008; UNFPA, 2008; Grace and Sansom, 2008). Mothers with PPD generally have parenting disorders and problems sleeping and breastfeeding their babies within four months of postpartum (World Health Organization (WHO, 2008; Klainin and Arthur, 2009).

Other impacts can occur in babies who are born, threatened infant development, higher rates of malnutrition and stunting, higher rates of diarrheal disease, and infectious diseases and death (Sanderson et al., 2002; Weobong et al., 2015). PPD can also affect the physical, cognitive, social, behavioral, and emotional development of children (WHO, 2008; Stewart, 2007).

Currently, the world is experiencing the Covid-19 pandemic, which is a global public health emergency not only biologically but also economic, social, political, and psychological stability. Previous research has shown that epidemic disease outbreaks and contamination have been accompanied by drastic individual and social psychosocial impacts, which eventually become broader than the epidemic itself (Ornell et al., 2020).

Pandemics can add to the pressure on people, especially on post-partum mothers because they cause fear of childbirth or difficulty in hospital visits, the stress of caring for newborns without assistance, worry about passing the virus to babies and social isolation. (Gantz, 2020). This is also exacerbated by the socio-economic problems faced by these impacts. During this pandemic outbreak, existing research focuses on epidemiological, patient clinical issues, people's behavior in dealing with Covid-19 and mental health in general (Xiong et al., 2020). Research that focuses on maternal health as a risk group is still rare, so researchers are interested in seeing the incidence of PPD during the Covid-19 pandemic. This study aims to describe the incidence of postpartum depression during the Covid-19 pandemic.

### **Research Design and Methodology**

This study used a cross-sectional design and was conducted from 11 July - 12 August 2020 using an anonymous online questionnaire. The population is postpartum mothers (after giving birth) with a limit of fewer than 24 weeks (6 months) who lived in Indonesia during the COVID-19 pandemic. The variables studied included age, education, occupation, parity,

childbirth, and pregnancy as well as the impact of the Covid-19 pandemic. Online questionnaires were given to health workers (midwives) and the general public according to the respondent's criteria. The instrument used was the Edinburgh Postnatal Depression Scale (EPDS) questionnaire which included 10 questions with 4 answer choices, each of which had a score of 0-3. EPDS with a score of  $\geq 13$  identifies that respondents experience PPD (Sit and Wisner, 2010). Depression was categorized into non-depression, risk of depression, and depression. Besides, researchers also asked questions related to the characteristics of respondents and the impact of the Covid-19 pandemic that was felt by respondents.

### Finding and Discussion

The results showed that of the 106 respondents, it was found that 30 people (28.3%) experienced PPD within 1-24 weeks post partum. This prevalence is not much different from the prevalence of PPD during the pandemic that occurred in China which reached 30%. When viewed from a time range (Xiong et al., 2020)..

**Table 1 Frequency Distribution of PPD Based on The Time of Occurrence**

Time	Not PPD		Risk of PPD		PPD	
	f	%	f	%	f	%
< 1 month	7	70	2	20	1	10
1 month	10	40	7	28	8	32
2 months	9	42,9	8	38,1	4	19
3 months	7	43,8	4	25	5	31,3
$\geq 4$ months	14	41,2	8	23,5	12	35,3
<b>Total</b>	<b>47</b>	<b>44,3</b>	<b>29</b>	<b>27,4</b>	<b>30</b>	<b>28,3</b>

PPD can occur immediately after delivery, but may not be noticed immediately because of feelings of sadness, fatigue, anxiety are usually considered normal during the first few days after birth. PPD starts 4-6 weeks post birth and decreases at two months, then increases in the third month and so on. This pattern is in line with previous research (Nurbaeti, Deoisres, and Hengudomsub, 2018).

When a pandemic occurs, the emotional aspect of humans comes first. Emotion is a kind of the first defense system that exists in us as biological beings. Every human being has fear, anxiety, and is threatened if something can hurt or make him uncomfortable (Winahayu, 2020).

The postpartum period is a period of emotional tornadoes where there are frequent mood swings, crying, and irritability that can make respondents feel tired, overwhelmed, and sleep-deprived (Bradley, 2020). The existence of a pandemic allows the situation to add to the spiral of emotions, anxiety, and other mental health struggles. Families and relatives who

usually help provide support for improving mental health during the postpartum period are reduced due to the practice of self-isolation to protect themselves and their babies from the possibility of being exposed to Covid-19.

**Table 2 Frequency Distribution of PPD Events and Characteristics of Respondents**

Variable	Not PPD		Risk of PPD		PPD	
	F	%	F	%	f	%
<b>Age</b>						
20-29	15	28,3	16	30,2	22	41,5
30-39	29	61,7	12	25,5	6	12,8
≥ 40	3	50	1	16,7	2	33,3
<b>Educational level</b>						
Primary school	2	100	0	0	0	0
Junior high school	3	42,9	2	28,6	2	28,6
Senior high school	7	33,3	4	19,0	10	47,6
College	35	46,2	23	30,3	18	23,7
<b>Employment</b>						
Yes	27	47,4	16	28,1	14	24,6
No	20	40,8	13	26,5	16	32,7
<b>Parity</b>						
1	17	39,5	10	23,3	16	37,2
>1	30	47,6	19	30,2	14	22,2
<b>Mode of delivery</b>						
Caesarean	25	47,2	15	28,3	13	24,5
Vaginal	22	41,5	14	26,4	17	32,1
<b>Pregnancy</b>						
Not planned	4	26,7	5	33,3	6	40
Planned	43	47,3	24	26,4	24	26,4
<b>Affected by the pandemic</b>						
Yes	22	35,5	18	29	22	35,5
No	25	56,8	11	25	8	18,2

During the Covid-19 pandemic, health protocols must be applied to all health services. The protocol that mothers and their babies must follow when conducting neonatal visits, schedules and places for services to be arranged and limited adds to the anxiety and fear of the mother. This reason was expressed by many respondents who experienced health impacts.

The characteristics of the respondents studied were age, education, occupation, parity, childbirth, birth attendant, and pregnancy. The proportion of PPD mostly occurs in mothers aged 20-29 years, high school education, unemployed, primiparous, cesarean section delivery, and unplanned pregnancies. The results of this study are in line with previous studies (Xiong et al., 2020; Nasri, Wibowo, and Ghozali, 2017; Lisna Anisa Fitriana, 2014).

The age of 20-30 years is the ideal age to marry and give birth for the first time. Young mothers often experience worry and fear because during the adaptation period the



roles of a mother and wife and new experiences caring for their babies can be psychological stress.

Education has little to do with PPD, but mothers with higher education may have better coping mechanisms in dealing with postpartum. Mothers who do not work have a monotonous routine and social life, only taking care of the house and caring for their children so that boredom and fatigue can trigger ongoing stress. A mother's experience during childbirth (normal/operative) is a stressful condition for herself and her family. If the delivery process is severely traumatized the condition can continue for some time to come.

The results showed 35.5% of respondents with PPD were affected by Covid-19 in their health, social, and economy. The economy is the highest impact felt by respondents in the form of job losses and reduced income followed by social and health. Takwin explained that the multiple impacts of a pandemic can occur in addition to health threats (diseases) that cause anxiety, grief due to loss of family, there are also those whose socioeconomic impacts such as losing their jobs, decreasing income are all a heavy blow to society (Winahayu, 2020)

#### **Conclusion**

The incidence of PPD during the Covid-19 pandemic reached 28.3%. The proportion has increased based on the time of occurrence, namely 10% at less than one month, 32% at 1 month, 19% at 2 months, 31.3% at 3 months and 35.3% at 4 months and over. The various psychological impacts of a pandemic are additional in addition to the psychological impact on postpartum mothers themselves. Certain precautions associated with lower risk need to be implemented through early diagnosis and intervention to minimize PPD and increase psychological resilience in postpartum mothers.

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