

Volume: 11  
Issue: 03  
Years: 2021

Research Article

## Postpartum Mother Psychosocial Conditions With Covid-19 Isolation

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Editor: JS  
Received: 29/07/2021  
Accepted: 07/09/2021  
Published: 27/09/2021  
Available Article :  
10.33221/jiiki.v11i03.1330

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**Conflict of interest statement:** The authors report no conflict of interest in this work

**Funding:** This work is supported by Dana Penelitian funded by Fatmawati General Hospital

### Abstrak

**Background:** Postpartum mothers with COVID-19 isolation can experience feelings of anxiety about being infected and afraid of death, loneliness, loss and sadness so that it can have an impact on the mother's psychosocial condition which can increase to stress and trauma, confusion and anger due to having to undergo the delivery process and self-isolate without family support, Not allowed to be visited or meet anyone. If this condition is allowed to continue without proper treatment, it can result in a psychotic condition

**Objectives:** To identify maternal psychosocial conditions in postpartum mothers in the COVID 19 isolation room

**Methods:** 100 postpartum mothers who were selected according to inclusion and exclusion criteria. The instrument used was a questionnaire on the characteristics of the respondents; the social support questionnaire which is a modification in the Indonesian language of the postpartum support system questionnaire and the family coping questionnaire; and a questionnaire to measure maternal psychosocial conditions using the Edinburgh Postpartum Depression Scale (EPDS).

**Results:** A total of 43% of mothers experienced psychosocial problems, namely major depression. Factors associated with postpartum maternal psychosocial conditions with COVID19 isolation were work, economic status, parity status and social support ( $p < 0.05$ ). The factor that most influenced maternal psychosocial conditions in postpartum mothers with COVID 19 isolation was social support (OR 4.024; 95% CI; 1.601-10.112)

**Conclusion:** Social support is a dominant factor affecting postpartum maternal psychosocial conditions.

**Keywords:** maternal psychosocial, postpartum depression (EPDS), COVID 19.

### Introduction

COVID-19 or commonly called the coronavirus is caused by the SARS COV2 virus. In humans, it can cause a variety of respiratory infections, ranging from the common cold to Severe Acute Respiratory Syndrome (SARS). COVID-19 first appeared in Wuhan, China in December 2019 as an extraordinary event until it finally spread globally into a pandemic.<sup>1</sup> According to

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global data from WHO as of September 6, 2021, there were 220,383,954 positive cases of COVID-19, and 4,561,446 were declared dead. The first case in Indonesia was found at the end of February 2020 and continues to increase until now in September 2021, there were 4,133,433 confirmed positive cases, 3,850,689 declared cured and 136,473 died. This figure is expected to continue to increase.<sup>23</sup>

This massive increase in cases is because COVID-19 is easily transmitted and spreads quickly through small droplets of saliva from COVID-19 sufferers when sneezing or coughing that is inhaled or enters other people through the mucous membranes of the eyes, nose, and mouth. In addition to direct transmission, splashes of saliva can stick to surrounding objects and then be held by other people and enter accidentally when the person touches the face. This disease can attack anyone, with various characters. People with comorbidities and low immunity have a higher chance of getting infected and causing more severe symptoms such as children, the elderly and pregnant and childbirth women.<sup>1,2</sup>

Pregnant women and childbirth are believed to have decreased immunity so that they are more likely to be infected with the COVID-19 virus which can not only have a negative impact on the fetus but can also have an impact on maternal health<sup>4</sup>. The disease has an incubation period of 14 days, symptoms can be mild or severe. If the symptoms are mild, people with COVID-19 can practice social distancing, namely maintaining distance and isolation independently. However, if moderate to severe symptoms develop, hospitalization and isolation are recommended to minimize spread.<sup>5,6</sup>

This isolation or quarantine procedure can take place from the mother's final trimester or before delivery until after delivery. This quarantine can cause feelings of anxiety about being infected and fear of death, loneliness, loss and sadness so that it can have an impact on the psychosocial condition of the mother which can increase to stress and trauma, confusion and anger because they have to go through these times. the process of childbirth and self-isolation without family support, should not be visited. or meet anyone except health workers.<sup>7</sup> The mother's sadness increases when she has to face post-natal pain and can't meet her baby. This is exacerbated by the economic status that may be experienced by mothers and their families due to the pandemic and government policies. If these psychosocial problems continue, it will have an impact on mental health, so that mothers can experience postpartum depression.<sup>8-10</sup>

The mother's psychosocial condition is a psychological and social condition of the mother that can interfere with the mother's emotions and social and is the main cause of negative behavior changes during the postpartum period, breastfeeding and caring for babies to teenagers.<sup>11</sup> Psychosocial problems during the perinatal period include anxiety, postpartum blues, postpartum depression to perinatal psychosis which can be fatal to the mother's physical and mental health, leading to bipolar disorder and attempted suicide. This has an impact on maternal mortality and can indirectly lead to disruption of the relationship between mother and child so that it has a negative impact on child growth and development, neglected immunization schedules, and increased rates of infectious diseases in children.

It has been reported that postpartum depression continued to increase from 18.4% during the period 2005 to 2015. Globally, nearly 20% of women experienced mental health problems in this perinatal period. Fifteen percent of them occur in the prenatal period and increase until postpartum.<sup>12,13</sup> In Indonesia, 22.4% of mothers experience postpartum depression. The incidence of postpartum psychosocial problems is quite high in the world but lacks proper handling and services. One way to prevent it is to find out the causes. So far, various maternal health service programs have been launched by the government through the Ministry of Health. Implementation of material health services

The results of this study provide information to COVID 19 service providers regarding the risk of postpartum depression with COVID 19 isolation, which can be used as a basis for evaluation and intervention programs to improve the quality of delivery services to increase the degree of maternity mothers. physical and psychological health to be able to adapt well to their roles and establish good relationships. both with her baby and with her family.

## Methods

This study used a cross-sectional design for 6 months, July to December 2020 in the isolation room for COVID19 pregnant women. This study aims to determine the mother's psychosocial condition and whether or not there is a relationship between the dependent variable, namely the mother's psychosocial condition, and the independent variable, namely the maternal factor consisting of educational status, occupation, economic status, parity status, and social support. The independent variable and the dependent variable were measured once and at the same time. Respondents were selected by the consecutive sampling method. The sample inclusion criteria in this study were postpartum mothers who were treated in the postpartum COVID-19 isolation room for 2 weeks, married, able to read and write, aware, able to speak Indonesian, willing to be respondents, and willing to be respondents. aged between 20 – 36 years in 2020. The number of respondents in this study was 100 people. The sample size was calculated using the formula for cross-sectional research.

This study used three questionnaires, namely: the respondent characteristics questionnaire. This questionnaire contains maternal sociodemographic data including education, occupation, economic status, and parity status; Postpartum support system questionnaire and family coping questionnaire that has been modified in Indonesian and has been used in Indonesia to measure social support for postpartum mothers, and the Edinburgh Postpartum Depression Scale (EPDS) questionnaire to measure the mother's psychosocial condition. This study uses a standardized questionnaire that has been tested for validity and reliability in previous studies, so that validity and reliability tests are no longer carried out.

## Result

Based on the results of this study, it was found that 43% of mothers experienced psychosocial problems, namely severe depression. Variables of occupation, economic status, parity status, and social support have a relationship with maternal psychosocial conditions in postpartum mothers with COVID-19 isolation ( $p < 0.05$ ). There is one independent variable that is not related to the dependent variable of the respondent, namely the education variable ( $p > 0.05$ ).

**Table 2.** Frequency Distribution of Respondents' Characteristics in COVID-19 Isolation in 2020

Characteristics of Respondents	n=100	
	Frequency (n)	Percentage (%)
<b>Education</b>		
Low (Elementary, Junior High School)	14	14
High School, College	86	86
<b>Job</b>		
Housewife	64	64
Mom works outside the house	36	36
<b>Economic Status</b>		
Low	48	48
High	52	52
<b>Parity Status</b>		
Primipara	39	39
Multipara	61	61

The results of the study found that the majority of mother's education was higher education (high school and university). The respondent's lowest education in elementary school and the highest education is master's degree.

**Table 3.** Distribution of Social Support Frequency Obtained in COVID Isolation Postpartum Mothers in 2020

Maternal Social Support	n=100	
	Frequency (n)	Percentage (%)
Less	37	37
Good	63	63

The majority of respondents in this study received good social support during pregnancy, childbirth and after giving birth from their families and partners.

**Table 4.** Frequency Distribution of Psychosocial Conditions in POSTPARTUM COVID Isolation Mothers in 2020.

Maternal Psychosocial Problems	n=100	
	Frequency (n)	Percentage (%)
Mild Depression	57	57
Severe Depression	43	43

The results of this study indicate that most postpartum mothers with COVID-19 isolation have a risk of mild depression and a small proportion have a risk of major depression.

**Table 5.** Respondent's Characteristic Relationship with Postpartum Psychosocial Condition in COVID 19 Isolation Room

Characteristics of Respondents	Maternal Psychosocial Problems						P-Value	OR	CI 95%	
	Mild Depression		Severe Depression		Total				Min	Max
	n	%	n	%	n	%				
<b>Education</b>										
Low (Elementary, Junior High School)	6	42.9	8	57.1	14	100	0.389	1.94	0.62	6.09
High School, College	51	59.3	35	40.7	86	100				
<b>Job</b>										
Housewife	31	48.4	33	51.6	64	100	0.036	0.36	0.15	0.90
Mom works	10	27.8	26	72.2	36	100				
<b>Economic Status</b>										
Low	22	45.8	26	54.2	48	100	0.049	2.43	1.20	5.51
High	35	67.3	17	32.7	52	100				
<b>Parity Status</b>										
Primipara	17	43.6	22	56.4	39	100	0.05	2.46	1.08	5.62
Multipara	40	65.5	21	34.4	61	100				

The results of this study indicate that work is a factor associated with psychosocial postpartum mothers with COVID-19 isolation.

**Table 6.** Social Support Relationship with Postpartum Psychosocial Condition in COVID 19 Isolation Room

Characteristics of Respondents	Maternal Psychosocial Problems						P-Value	OR	CI 95%	
	Mild Depression		Severe Depression		Total				Min	Mak
	n	%	n	%	n	%				
Good	43	68.3	20	31.7	63	100	0.006	0.28	0.12	0.66
Less	14	37.8	23	62.2	37	100				

Through multivariate analysis, it was found that the most influential factor on the psychosocial condition of postpartum mothers with COVID-19 isolation in this study was the social support received by the mother during the perinatal period, both support from her husband, family and health workers (OR 4,024; 95% CI; 1,601-10,112).

### Discussion

The average level of education in this study shows that the mother's education level is quite good. Education is seen to affect the ability and maturity of mothers in managing stress. This is in line with previous research in Iran that a good level of education will affect the ability to receive various information.<sup>14,15</sup> Based on occupation, the majority of respondents are housewives. The occupations of mothers in this study varied, most of them were private employees consisting of shop employees, honorary teachers, employees of private companies, civil servants, and so on. Working mothers can help the family's economy so that they tend to be able to manage family finances well so that they can improve the family's economic status as well. The economic status of the majority of respondents in this study is sufficient, namely family income above the DKI Jakarta UMR 2020 Rp.4,276,394 The income obtained is based on the total income of husband and wife in one month. Based on this respondent's income, the respondent's economic status is determined. If the income is below the minimum wage, it is categorized as having less economic status, but if the income is above the minimum wage, it is categorized as having sufficient economic status. The next characteristic is parity status.

In this study, the majority of the respondents' parity status were mothers who were multiparous. This is different from previous research regarding the psychosocial condition of postpartum mothers, the majority of respondents were primiparous postpartum mothers.<sup>16</sup> Multiparous mothers have experience giving birth with various previous psychosocial situations and conditions that affect their current psychosocial conditions who have to undergo the experience of giving birth in the COVID 19 isolation room. This may be influenced by experiences in previous deliveries so that multiparous mothers can compare the experience of postpartum care received at the time of delivery. this with experience.

According to Li et al. the support provided by spouses and families, both the support received by the mother since pregnancy, during childbirth and after giving birth, can provide a feeling of calm and relief as well as a pleasant feeling that will affect the mother's feelings, psychosocial conditions for the better and help mothers in achieving change current role.<sup>15</sup> Maternal psychosocial conditions which include anxiety, fear, postpartum blues, postpartum depression to psychosis are conditions that must be prevented, namely by screening as early as possible so that they do not continue and have bad consequences to suicide attempts and death. Globally, the incidence of postpartum depression and psychosocial problems continues to increase.<sup>17</sup> This is certainly worrying, considering that if the mother experiences psychosocial problems, the mother will experience changes in behavior, difficulty eating, impaired achievement of the mother's role which can lead to failure in child care.

This psychosocial problem can happen to anyone. Almost all women can experience mental disorders that continue to develop during pregnancy and the first year after giving birth. Poverty, extreme stress, violence, emergencies such as pandemics and disasters, conflict, and lack of social support increase the risk of these psychosocial problems.<sup>18</sup> If the mother can adapt well to these conditions, postpartum depression will not progress to psychosis. The problem is that the

COVID19 pandemic has increased the number of mental health problems during the perinatal period, and at the same time the number of health visits has decreased.<sup>19</sup> This is because mothers are afraid and worried about going to health facilities for antenatal and postnatal check-ups. This lack of visits can be the cause of the mother not getting the right help and treatment for her physical and mental health problems.

From the table working mothers have a lower risk of depression. Working mothers tend to be able to make independent decisions regarding the health of themselves and their children, making it easier for mothers to achieve adaptation to changes in health status and psychosocial conditions. According to research conducted in the United States, it was found that working mothers have better mental health and a lower risk of experiencing postpartum psychosocial problems, such as postpartum depression.<sup>20</sup> In addition, previous research by Wilcox in India also strengthens the opinion that working mothers tend to be better able to manage family finances well and help increase income so that they can improve the family's economic status.<sup>21</sup> Economic status determines the mother's psychosocial condition. If the family's financial condition and economic status are sufficient, then the mother's health condition will be much better and healthier. Based on research conducted in Bangladesh, it was found that mothers or husbands who lost their jobs that affected the family's financial condition could put mothers at risk for postpartum depression.<sup>22</sup> This is in line with other studies that mothers who experience financial stress and economic difficulties are twice as likely to experience psychosocial disorders during the perinatal period, namely postnatal depression.<sup>9</sup> This can happen because, during the COVID-19 pandemic, many families experienced a decline in income, and lost their jobs. Conditions of economic hardship like this can ultimately have an impact on the physical and psychosocial health of mothers and babies.<sup>23</sup>

Primiparous mothers in this study had a risk of experiencing major depression. This can be because this is the mother's first experience in her new role so she feels unprepared because she has no previous experience and has to undergo COVID-19 isolation. Mother is stressed by changes in her health status, has to undergo separate isolation procedures with her baby, no one is waiting to be able to meet face-to-face with her baby, husband and other family members.<sup>19,24</sup> Parity status is a factor associated with postpartum maternal psychosocial with COVID-19 isolation. This is different from previous studies that measured the psychosocial condition of postpartum mothers using the EPDS that primiparous mothers have environmental mastery and acceptance values that increase and develop starting from pregnancy. postpartum compared to multiparous mothers.<sup>25</sup> Environmental mastery and self-acceptance are closely related to good social support.

Social support in this study is related to psychosocial postpartum mothers with COVID 19 isolation. This further strengthens the results of research conducted by Dadi et al. that social support is very influential in preventing and reducing anxiety and several other psychosocial conditions during the perinatal period, namely 2.47%.<sup>26</sup> The support provided by spouses and families, both the support the mother received during pregnancy, during childbirth, and after delivery, can provide a feeling of calm and relief as well as a pleasant feeling that will make the mother adapt to changes in health. status and mothers do not feel alone.<sup>27</sup> This is in line with other studies that mothers who have a warm relationship with their husbands, get love, appreciation, parenting assistance and full support from their families and partners reduce the risk of psychosocial disorders in this case postpartum depression.<sup>22</sup>

The factor that most influenced the mother's psychosocial condition in postpartum mothers with COVID-19 isolation was social support (OR 4.024; 95% CI; 1.601-10.112). Various studies have mentioned the importance of social support for all aspects of maternal health, both physical and psychological. Social support greatly affects the mother's mental health and improves the mother's psychosocial condition. Mothers with COVID-19 isolation will be more irritable and cry because they are lonely and feel bored and bored. Mothers also have to face the fear of dying from being infected with the virus, which is still a global pandemic. besides that, it is also exacerbated by the economic problems of families affected by the pandemic.<sup>7,24</sup> This is in line with research in the United States (US) that social support prevents and reduces perinatal anxiety in pregnant and postpartum women.<sup>28</sup> (Another supporting research is an

analytical study conducted on 8 studies in Australia which found that social support was very influential in preventing and reducing maternal anxiety during the perinatal period, namely 2.47%.<sup>26</sup> Mothers who have a warm relationship with their husbands and families, get good support will feel relieved, reduce anxiety, not feel alone. getting love, appreciation, child care assistance, and full support from family, partners, and health workers can reduce the risk of psychosocial disorders in this case postpartum depression.<sup>22,29</sup>

Social support for postpartum mothers with COVID-19 isolation can still be provided through messages, telephone, video calls, photos, food delivery, and the needs of husbands and families. While social support provided by health workers can be in the form of clear information, education according to patient needs, friendly service by greeting patients, therapeutic and effective communication, facilitating patient needs related to health, and excellent service.

### **Conclusion**

The results of this study reinforce the importance of early screening for maternal psychosocial conditions in mothers with COVID-19 isolation. The results of this study can be used as an evaluation material for improving maternal services with COVID 19 isolation. Health workers can use the results of this study as a basis for client-focused services, tailored to the client's needs considering that the satisfaction of delivery services is individual and multidimensional, can differ from one patient to another. other patients. Excellent service must view humans as biopsychosocial and spiritual beings so that the provision of maternal care is not only focused on physical needs but also psychological needs.

This study has limitations, namely, the number of samples is still limited which can affect the results of the study. This is due to a decrease in the number of maternal patients from July to August 2020. In addition to the decrease in the number of patients, researchers still have to sort out which patients can be included as potential respondents according to inclusion and exclusion criteria.

### **Conflict of Interest Declaration**

The authors report no conflict of interest in this work

### **Acknowledge**

Thank you to all participant in this study

### **Funding**

This work is supported by Dana Penelitian funded by Fatmawati General Hospital

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