

Research article

Factors Influencing the Incidence of Postpartum Blues During the COVID-19 Pandemic in Cimahi City

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Abstract.

Postpartum blues is a psychological disorder that can be experienced by postpartum mothers with symptoms of anxiety, sadness, crying easily, feeling sensitive and/or unstable, feeling incapable of caring for the baby and/or that she has made mistakes, disturbed sleep, and/or lack of appetite. Since December 2019, the novel coronavirus 2019 (COVID-19) has spread all over the world. The substantial associated morbidity and socioeconomic impacts have necessitated drastic measures on all continents, including national lockdowns, border closures and social distancing. These have impacted various fields and mental health problems in communities, including the mental health of postpartum mothers. The purpose of this study was to identify the factors that have influenced the incidence of postpartum blues during the COVID-19 pandemic in Cimahi City. This study used non-experimental descriptive research methods. The sample included 35 respondents and data were collected by using the Edinburgh Postnatal Depression Scale (EPDS) questionnaire. The variables analyzed in this study were the characteristics of postpartum mothers such as age, education, occupation, parity, and the incidence of postpartum blues. The results showed that there were 15 mothers who experienced postpartum blues, including 53.33% of those over the age of 20. Postpartum blues occurred in 10 primiparous mothers (66.7%), 9 mothers with a junior high school education (60%), and 10 mothers who did not work (66.67%). Maternal age, education, occupational and parity had a significant influence on the incidence of postpartum blues in postpartum mothers during the COVID-19 pandemic. It is recommended that midwives increase knowledge about the importance of husband's support in meeting the psychological needs of mothers to prevent the occurrence of postpartum blues.

Keywords: postpartum blues, age, parity, occupation, education level

1. Introduction

Postpartum blues is a psychological disorder that mothers have after giving birth with symptoms of sadness, easy crying, easily anxious, sensitive, unstable, feeling incapable of caring for the baby, feeling that she has a mistake, disturbed sleep, and the mother feels bad eating [1]. Postpartum blues can occur in any race, ethnicity, and country, this is as described explained that in Greece around 71.3% and in Germany there are

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55.2% of mothers who experiencing the postpartum blues. The results of research conducted at the Boseni Hospital Mojokerto identified that 37 respondents there were 59.5% who experienced postpartum blues, another study was conducted at the hospital Dustira Cimahi found 52.1% of mothers experienced postpartum blues [2, 3]. In Jember Regency in Sukowono Subdistrict, a research was conducted in her research, there were 34 respondents, most of which 64.7% of the respondents experienced postpartum blues[4].

Hormonal factors that influence the postpartum blues are the hormone estrogen, which has an influence on basic emotional processes, arousal, cognition, and motivation so that it can contribute to the occurrence of postpartum blues [5]. The hormone estrogen will increase thyroxine binding globulin and thyroxine levels will increase. Thyroid dysfunction is associated with pregnancy and may contribute to the postpartum blues in some mothers. In addition to thyroid hormone, there are lactogenic hormones oxytocin and prolactin which can affect the behavior and mood of the mother. Estrogen and progesterone modulate oxytocin mRNA expression in brain regions for maternal behavior and lactation. Process Lower oxytocin levels during the third trimester contribute to depression during pregnancy and have an impact on the postpartum period. Cortisol hormone levels that increase during pregnancy that trigger anxiety can also affect the increase in postpartum blues symptoms [5].

Postpartum mothers will feel insecure regarding the occurrence of catastrophic events or natural disasters that can trigger the postpartum blues. The occurrence of natural disasters will also affect the functioning of the family in providing support to postpartum mothers. Disturbed family functions will also affect the family support given to postpartum mothers so that mothers will be vulnerable to experiencing postpartum blues. One example of a natural disaster that can affect the mental health of postpartum mothers and disrupt family functions is the 2019 novel coronavirus (COVID-19) pandemic [6].

Since December 2019, the novel coronavirus 2019 (COVID 19) has spread all over the world [7]. Another impact is the psychology of pregnant women during the COVID-19 pandemic, this is explained in the journal, namely 57% of respondents experience anxiety and 68% experience anxiety related to pregnancy from 1987 respondents in Canada [8]. Another study conducted by Cameron et al (2020) on Maternal Psychological Distress During Covid-19 conducted research on 3 subjects, namely mothers with children 0 to 18 months, 18 months to 4 years and 5 to 8 years. According that mothers with children 0 to 18 months 34.55% of 220 respondents, namely 76 respondents experienced anxiety.6 Based on the phenomenon described above, the researcher

wants to conduct a study entitled "Factors that affect the incidence of Postpartum Blues during the COVID-19 Pandemic in Cimahi City.

2. Methods

The research design used an analytical observational design with a cross sectional approach. with a sampling technique using the Slovin formula totaling 35 respondents and data collected using the Edinburgh Postnatal Depression Scale (EPDS) questionnaire. The tool used to measure postpartum blues is the Edinburgh Postnatal Depression Scale (EPDS). The EPDS is a tool used to review individual reports that are specifically designed to identify mothers with postpartum depression or postpartum blues. This scale has been validated and used in studies in a number of cultures and has been studied as a valid screening tool for postpartum depression and postpartum blues. The variables analyzed in this study were the characteristics of postpartum mothers such as age, education, occupation, parity, and the incidence of postpartum blues. The research procedure is by asking respondents to fill out the EPDS questionnaire about feelings experienced for 7 days. Data processing by using computer program SPSS for windows version 16.0. Bivariate analysis using Chi – Square test.

3. Results

TABLE 1: Relationship of Mother's Age with Postpartum Blues Incidence in 2021.

Age	Post Partum Blues				Total		P value
	Yes		No		n	%	
	n	%	n	%			
≤ 20 years	7	46,7	5	25	12	34,3	0,00
> 20 years	8	53,3	15	75	23	65,7	
Total	15	100	20	100	35	100	

From the table above, it can be explained that most of the postpartum blues occur in the age range of 20 years by 53.33%.

From the table above, it can be explained that most of the postpartum blues occur at a low education level of 60%.

From the table above, it can be explained that postpartum blues mostly occur in mothers who do not work by 66.7%.

From the table above, it can be explained that postpartum blues mostly occur in primiparous parity of 66.7%

TABLE 2: Relationship of Mother's Education with Postpartum Blues Incidence in 2021.

Level Education	Post Partum Blues				Total		P value
	Yes		No				
	n	%	n	%	n	%	
Low	9	60	9	45	18	51,4	0,02
High	6	40	11	55	17	48,6	
Total	15	100	20	100	35	100	

TABLE 3: Relationship between Mother's Work and Postpartum Blues Incidence in 2021.

Working	Post Partum Blues				Total		P value
	Yes		No				
	n	%	n	%	n	%	
Working	5	33,3	7	35	12	34,3	0,00
Not Working	10	66,7	13	65	23	65,7	
Total	15	100	20	100	35	100	

TABLE 4: Maternal Parity Relationship with Postpartum Blues Incidence in 2021.

Parity	Post Partum Blues				Total		P value
	Yes		No				
	n	%	n	%	n	%	
Primipara	10	66,7	9	45	19	54,3	0,01
Multipara	5	33,3	11	55	16	45,7	
Total	15	100	20	100	35	100	

TABLE 5: Factors that influence the incidence of postpartum blues.

Variable	X2	P	OR	CI 95%
Age ≤ 20 years				
> 20 years	1.158	0.00	2.41	0.783-2.219
Level Education				
Low				
High	0.013	0.002	1.04	0.483-2.263
Working				
Working				
Not Working	0.903	0.00	1.26	0.775-2.055
Parity				
Primipara				
Multipara	14.578	0.00	1.31	1.564-3.818

The results of the analysis in table 5 show that there are 4 significant variables, including maternal age, education, occupation and parity. The results of the analysis of the variable postpartum mother's age 20 years obtained a p value of 0.00 ($p < 0.05$), with OR=2.41 which means that postpartum mother's age 20 years has a 2.41 times chance of experiencing postpartum blues compared to with postpartum mothers aged 20-35 years. The results of the analysis of the primiparous parity variable obtained a p value of 0.00 ($p < 0.05$), with OR = 1.31 which means that parity of primiparous postpartum mothers has a 1.31 times chance of experiencing postpartum blues compared to multiparous postpartum mothers. The results of the analysis of the education variable obtained a p value of 0.02 ($p < 0.05$), with OR = 1.04 which means that parity postpartum mothers who have low education have a 1.04 times chance of experiencing postpartum blues compared to postpartum mothers with higher education. The results of the analysis of the work variable obtained a p value of 0.00 ($p < 0.05$), with OR = 1.26 which means that the parity of postpartum mothers who do not work has a 1.26 times chance of experiencing postpartum blues compared to postpartum mothers with work.

4. Discussion

4.1. Analysis of the relationship between age and the incidence of postpartum blues

The results showed that most of them occurred in the age range of 20 years by 53.33% with a p-value = 0.00 (< 0.05), which means that there is a relationship between age and the incidence of postpartum blues. Age factor also affects the occurrence of psychological problems in postpartum mothers. In general, those under 20 years old have limited knowledge about pregnancy or lack of information in accessing existing health services. In addition, at that age, it is also not enough to reach physical, mental maturity, new roles and activities as a mother in caring for her child. The results of this study are in accordance with research conducted by Irawati which states that the incidence of postpartum blues is more experienced by women aged less than 20 years or more than 35 years (81.8%) [9]. It was found that the majority of the mother's age at the time of delivery was in the middle adult age stage as many as 29 respondents and there was a significant relationship between age at delivery and the incidence of baby blues syndrome [10].

4.2. Analysis of the relationship between maternal education and the incidence of postpartum blues

The results showed that postpartum blues mostly occurred in mothers who did not work by 66.7% with a p-value = 0.0 (<0.05), which means that there is a relationship between education and the incidence of postpartum blues. The level of education is very influential on emotional intelligence, mothers who have a high level of education will have a more rational way of thinking, and the easier it is to receive information. Mothers who do not get adequate information about pregnancy and childbirth will generally find it difficult to adjust to their new roles and activities, thereby allowing psychological disorders such as postpartum blues. The results of this study are in accordance with research conducted by Irawati [9], which states that the most education experienced postpartum blues is elementary-junior high school, namely 12 respondents (54.5%) of 15 respondents.

4.3. Analysis of the employment relationship with the incidence of post partum blues

The results showed that postpartum blues mostly occurred in mothers who did not work by 66.7% with a p-value = 0.00 (<0.05), which means that there is a work relationship with the incidence of postpartum blues. Mothers who have higher education will face role conflicts and social pressures between the demands of being a working mother and being a housewife. The results of the study are not in accordance with the theory expressed because mothers who do not work are more focused on what is happening to themselves and their babies, so that if there is a problem, a mother blames herself more so that she is more susceptible to postpartum blues. And by not working, there is a lack of information and insight from friends who can later be used as experience in raising their children. Based on research conducted by Saraswati[11]: it is stated that mothers who only work at home taking care of their children can experience a crisis situation and achieve emotional disturbances/blues because of the fatigue and tiredness they feel. For housewives who take care of all household matters themselves, they may have pressure on their responsibilities either as a wife or as a mother.

4.4. Analysis of the relationship between Parity and the incidence of postpartum blues.

The results showed that most of the postpartum blues occurred in primiparous parity of 66.7% with a p-value = 0.00 (<0.01) which means that there is a parity relationship with the incidence of postpartum blues. A new primiparous woman enters her role as a mother. The results of this study are also in accordance with the research of Adila [12], which states that the birth of the first child shows stress and is associated with a stronger incidence of postpartum blues than the birth of the second or third child [13]. Primiparous women do not have experience in caring for children so that they are afraid and worried about making mistakes in caring for babies. Likewise, in carrying out their duties as a mother, primiparous women feel confused, more burdened and feel their freedom is reduced by the presence of a child, the incidence of postpartum blues is often experienced by mothers who have given birth for the first time because this is related to the mother's ability or experience in dealing with problems that occur in caring for babies [14]. Inexperienced mothers will have an impact on the care given to their babies. Mother's knowledge also has a big influence on the care given to her child

5. Conclusion

From the results of the analysis and discussion, the following conclusions can be drawn: 1) The proportion of postpartum mothers who experience postpartum blues is 42.8%, 2) The most influential factor on the incidence of postpartum blues in postpartum mothers is the risk factor for maternal age, 4) Factors the risk of maternal age, educational factors, occupational factors and parity factors have a significant influence on the incidence of postpartum blues in postpartum mothers during the Covid-19 pandemic.

From the results of the research and the conclusions that have been made, the authors provide some suggestions that may be useful for all parties who play a role in this research. The suggestions are: 1) Primary level health care facilities, both Midwife Independent Practice and Community Health Centers, provide special services to primigravida mothers at risk, especially for young mothers, given that those aged less than 20 years are vulnerable to the incidence of postpartum blues. 2) Health workers should carry out early detection of postpartum blues symptoms, so as to prevent it from developing into postpartum depression, 3) Families are expected to always provide support to postpartum mothers both physically, psychologically and materially, especially husband's support in dealing with postpartum depression. the

role of the mother as a wife and as a mother, 4) For further research with the same problem, it is hoped that it will further deepen the scope of the research so that it can be more useful in the development of science, especially in the field of midwifery.

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