Category: G - Nursing

Section: Nursing in Gynecology and Obstetrics







# Analysis of Factors Related to the Incidence of Postpartum Blues in Adolescent Mother

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#### Abstract

Edited by: Mirko Spiroski Citation: Gartika N, Fatmawati A. Analysis of Factors Related to the Incidence of Postpartum Blues in Adolescent Mother. Open Access Maced J Med Sci. 2024 Jan 27; 12(1):1-5. https://doi.org/10.3889/ oamjms.2024.8511 Keywords: Social support; Adolescent mother;

Postpartum; Postpartum blues \*Correspondence: Nina Gartika, Department of Nursing pondence: Nina Gartika, Department of Nursing,
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Received: 14-Jan-2022
Revised: 23-Feb-2022
Accepted: 25-Jan-2023 Copyright: © 2024 Nina Gartika, Ariani Fatmawat

Funding: This research did not receive any financial

Competing Interests: The authors have declared that no competing Interests: The authors have declared that no competing interests exist Open Access: This is an open-access article distributed under the terms of the Creative Commons Attribution. NonCommercial 4.0 International License (CC BY-NC 4.0) BACKGROUND: Adolescent marriage in Indonesia is very high, this will have an impact on the psychological aspects of adolescents. Postpartum psychological disorders of adolescent mothers are postpartum blues.

AIM: The study aimed to identify factors related to the incidence of postpartum blues in adolescent mothers.

METHODS: This quantitative study used a cross-sectional method involving 90 respondents taken by consecutive sampling. Research sites in Bandung City Special Hospital for Mothers and Children and Al-Ihsan Regional Public Hospital, Bandung District. This research was conducted from May to September 2019. Data collection instruments in this study use the Edinburgh Postpartum Depression Scale. Pregnancy planning uses the London Measure of Unplanned Pregnancy questionnaire. Social support uses a postpartum support system and a family coping questionnaire. The last questionnaire is the psychosocial condition of the mother Postpartum Postnatal Risk Questionnaire. Multivariate analysis using logistic regression tests to determine the factors most related to the incidence of postpartum blues in adolescent mothers.

RESULTS: The results showed that there were 44.4% of adolescent mothers experience postpartum blues. There was a significant relationship between social support and the incidence of postpartum blues (p = 0.001; odds ratio [OR] 11,777; 95% confidence interval [CI] = 3604–109,534) and home living also had a significant relationship with the incidence of postpartum blues (p = 0.002; OR = 9,653; 95% CI = 0.001-0.225). A negative B value at the home living indicated that home living is a preventative factor for postpartum blues in adolescent mothers.

**CONCLUSIONS:** Postpartum blues are influenced by social support, psychosocial conditions, and pregnancy planning. Adolescent mothers need to get attention, especially from their husbands and families during the period of puerperium.

## Introduction

Postpartum blues is a condition of emotional instability such as anxiety and sadness in the short-term usually taking place in the 1<sup>st</sup> week of postpartum [1]. The incidence of postpartum blues in adolescent mothers is around 15% [2].

Adolescent marriages still occur in Bandung Regency because adolescents, especially those living in rural areas, do not have access to education and are generally economically powerless so marriage is considered a life choice that must be lived.

Postpartum blues in adolescents due to pregnancy will have an impact on adolescent psychological conditions such as experiencing prolonged trauma, lack of socialization, and self-confidence crisis [3], [4].

After delivery, the mother will experience physical and psychological changes that are not easily accepted by women [5]. Adolescent postpartum mothers will be at risk of experiencing postpartum blues if left untreated will develop into postpartum depression [6]. This is because they are not ready with their new role [7].

Common symptoms that occur in postpartum blues mothers are easy to cry, feelings of loss, fatigue, exhaustion, poor concentration, unstable mood, and easily stressed [8]. In addition, mothers are more easily offended and eating and sleep disorders [9].

Postpartum blues can be caused due to a lack of social support [10]. Social support consists of four dimensions, namely, information, material, emotional, and partner. All this support affects the mental health of adolescent mothers [11]. Other causes of postpartum blues are hormonal changes, age, education, work, social support, type of authenticity, parity and monthly income [12], and anxiety [13].

The impact of postpartum blues will cause the maternal and child love ties to be disrupted [14], [15], experiencing social interaction disorders in the care of infants [16], the baby will experience social isolation, rejection from the environment, and sadness [17].

Based on the background above, researchers aimed to identify the relationship between social support and pregnancy planning with the incidence of postpartum blues.

#### Methods

The research used is quantitative research with an analytic observation approach and the design used is cross-sectional. The population in this study was 252 mothers. The sampling technique was consecutive sampling with 90 mothers. Research sites in Bandung City Special Hospital for Mothers and Children and Al-Ihsan Regional Public Hospital, Bandung District. This research was conducted from May to September 2019.

Data collection instruments in this study use the Edinburgh Postpartum Depression Scale (EPDS). Pregnancy planning uses the London Measure of Unplanned Pregnancy questionnaire. Social support uses a postpartum support system and a family coping questionnaire. The last questionnaire is the psychosocial condition of the mother Postpartum Postnatal Risk Questionnaire.

Table 1: Frequency distribution of marital status, education, husband's occupation, social support, pregnancy planning, psychosocial conditions, and home living (n = 90)

Variable	Frequency (%)
Marital status	
Married	88 (97.8)
Not married	2 (2.2)
Education	
Elementary	29 (32.2)
Junior high school	37 (41.1)
Senior high school	24 (26.7)
Husband's occupation	
Laborers	58 (64.4)
Private employee	15 (16.7)
Entrepreneur	17 (18.9)
Social support	
Good	63 (70.0)
Poor	27 (30.0)
Pregnancy planning	
Planned	56 (62.2)
Ambivalent	31 (34.4)
Unplanned	3 (3.3)
Postpartum blues	
No	40 (44.4)
Yes	50 (55.6)
Home living	
Self-owned	37 (41.1)
Owned by in-laws	14 (15.6)
Owned by parents	39 (43.3
Psycho-social conditions	
No risk	62 (68.9)
Risky	28 (31.1)

Data analysis consists of univariate, bivariate, and multivariate analyzes. The univariate analysis aimed to describe the characteristics of respondents which include: Education, husband's occupation, marital status and postpartum blues events, social support, pregnancy planning, psychosocial conditions, and home living.

Bivariate analysis used the Spearman rank test which aimed to determine the relationship of social support and pregnancy planning with the incidence of postpartum blues. Multivariate analysis using logistic regression tests to determine the factors most related to the incidence of postpartum blues in adolescent mothers.

### Results

Table 1 shows that the marital status is married as much as 97.8%, most education in junior high as much as 41.1% and most husbands' occupation are laborers as much as 64.4%, most adolescent mothers experience postpartum blues as much as 55.6%, good social support as much as 70.0%, and planned pregnancy as much as 62.2%, most do not have the risk of experiencing psychosocial disorders (68.9%) and stay at home and self-owned more often compared to living in-law's house.

Based on Table 2, the results showed that there is a relationship between social support and postpartum events (p = 0.000) and there is a relationship between pregnancy planning and postpartum blues events (p = 0.001), there is a relationship between home living and postpartum blues (p = 0.000) and psychosocial conditions (p = 0.006).

Table 2: Relationships of type of childbirth, parity, marital status, education, husband's occupation, home living, psychosocial condition of postpartum mothers, social support, and pregnancy planning (n = 90)

Independent variable	Dependent variable	р
Type of childbirth	Postpartum blues	0.867
Parity	Postpartum blues	0.184
Marital status	Postpartum blues	0.195
Education	Postpartum blues	0.806
Husband's occupation	Postpartum blues	0.701
Home living	Postpartum blues	0.000
Psychosocial condition	Postpartum blues	0.006
Social support	Postpartum blues	0.000
Pregnancy planning	Postpartum blues	0.001

Based on the results of multivariate analysis as shown on Table 3, it was found that the factors that had the most significant relationship were social support and home living. Home living had negative *B* values, which means they are a protective factor against the incidence of postpartum blues. That is adolescent mothers who live in their own homes and in-laws have the risk of experiencing postpartum blues.

Table 3: Analysis results of logistic regression analysis factors affecting postpartum blues incidence

Variable	β	Wald	р	Exp (B)	95% CI	
					Lower	Upper
Social support	2.989	11.777	0.001	19.868	3.604	109.534
Home living	-4.043	9.653	0.002	0.018	0.001	0.225
Constant	-2.035	1.033	3.878	0.131		
CI: Confidence inter	val.					

# Discussion

Adolescent marriages still occur in Bandung Regency because adolescents, especially those living in rural areas, do not have access to education and are generally economically powerless so marriage is considered a life choice that must be lived.

Postpartum blues in adolescents due to pregnancy will have an impact on adolescent psychological conditions such as experiencing prolonged trauma, lack of socialization, and self-confidence crisis.

The results showed that respondents who experienced postpartum blues were 55.5%. Postpartum blues occur due to respondents in this study being adolescent mothers. A teenager (age <20 years) is an age at risk of giving birth to a baby (Irawati, 2014). This result is in line with Kim's research (2014) that adolescent mothers have a greater risk of experiencing postpartum depression compared to adolescent mothers. This is caused by emotional conditions that are not yet stable in adolescent mothers.

The results showed that as many as 33.3% of maternal pregnancies were unplanned and had postpartum blues. This study is in shows that mothers who do not plan for pregnancy experience postpartum depression [12], [18]. A psychologically unplanned pregnancy can lead to adolescent mothers rejecting the role of a mother, not being responsible for newborns, feeling angry with their babies, easily offended, more sensitive, and easily stressed [8].

Another factor causing postpartum blues is social support. The results showed that 87.5% of mothers experience postpartum depression caused by a lack of social support. This study is also in line with the results of Kurniasari's research that the lack of husband support is related to the incidence of postpartum blues [19]. Other results also show that social support shows a significant relationship to the incidence of postpartum depression [20].

Social support can come from husbands, parents, friends, and health workers needed by postpartum mothers because after giving birth mothers experience weak conditions both physically and mentally [20]. Mothers who lack attention and support from their husbands and families are prone to postpartum depression [21]. A good husband and wife relationship will be a good source of social support for maternal psychological prosperity [22].

Family support does not affect the incidence of postpartum blues. This is because the family has known psychological disorders during pregnancy, so it is faster to seek help [22]. Support from friends also does not have a relationship with the occurrence of postpartum blues, this depends on the interpersonal skills of adolescents. If adolescents have poor interpersonal skills, then support from others is reduced [23]. Adolescents who already have children will experience interpersonal disorders compared with adolescents who do not have children. This is because adolescents who already have children must care for babies and have an additional role as a mother [24].

Social support provided can be in the form of communication and emotional relations that are warm and

good, especially with mothers [25]. Husbands, friends, and neighbors can provide emotional support, practical support and social support [26], physical, financial, valuation, family, peer, and neighbor support [27]. Four dimensions of social support make a significant contribution during the transition to becoming a mother. This can prevent the occurrence of postpartum blues [28].

Research results by Ria *et al.* showed that family support was very influential in the incidence of postpartum depression [29]. Support provided by the family can provide a sense of calm and comfort. Family support is the greatest strength in women with postpartum [30]. The results of other studies state that social support is one of the factors triggering the occurrence of postpartum blues and leads to postpartum depression [31].

## Conclusions

There was a significant relationship between social support and the incidence of postpartum blues (p = 0.001; odds ratio [OR] 11,777; 95% confidence interval [CI] = 3,604-109,534) and residence also had a significant relationship with the incidence of postpartum blues (p = 0.002; OR = 9,653; 95% CI = 0.001–0.225). A negative B value at the residence indicates that home living is a preventative factor for postpartum blues in adolescent mothers.

Research recommendations for hospitals include spiritual assessments with EPDS instruments and provide interventions for mothers who are at risk of developing postpartum blues during antenatal care. Implementing nurses provide internatal interventions as a preventive measure so that the incidence of postpartum blues does not occur in adolescent mothers.

# **Acknowledgment**

The authors would like to thank for Directorate of Research and Community Service Ministry of Research and Higher Education and Higher Education Assemblies, Research, and Development of Muhammadiyah Center Leaders.

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