



EARLY IDENTIFICATION OF RISK AT POSTPARTUM DEPRESSION AMONG PRIMIPARA ADOLESCENT MOTHER AND ADULT MOTHER: A COMPARATIVE ANALYSIS

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ABSTRACT

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Postpartum depression in parturition mothers will cause considerable damage to the mother, infant and family. The committed research shows no clear result of depression in a mother's age during pregnancy, but depression brings high results in the postpartum period. The research aims to investigate the difference between the risk of postpartum depression in primipara adolescent mothers and middle adulthood mothers. The study design is comparative analysis. The sample size comprised 40 respondents with purposive sampling. The dependent variable is postpartum depression, and independent variables are the adolescent mother and adult mother primipara. Variables of confounding are education, job, economic status, type of childbirth, and family support. Statistical tests are univariate, bivariate with an unpaired statistic-independent test t-test, and multivariate analysis with multiple linear regression. The primipara adolescent mother was risky of experiencing postpartum depression was 55,0% with average \pm SD 12,6 \pm 2,5 from 20 respondents, and the primipara middle adulthood mother was not risky of experiencing postpartum depression was 85,0% with average \pm SD 6,6 \pm 3,4 from 20 respondents; p-value <0,05 or 0,000 <0,005; average difference CI 95% 6,0 (4,0-7,9). The factors that dominated the occurrence of postpartum depression were economic status and family support with p-value 0,001 <0,05, ANOVA test 0,000 <0,05, and R-square 65,90%. The primipara adolescent mother was likelier to experience postpartum depression than the primipara middle adulthood mother. From another variable, the factors which dominated the occurrence of postpartum depression were economic status and family support.

Keywords:

Postpartum depression, Primipara adolescent mother, Primipara middle adulthood mother

BACKGROUND

According to Reva Rubin, a mother who gave birth has a psychological adaptation during childbirth with three phases of adjustment to her new role as a mother is the phase of taking in (dependent phase) where in this phase the mother is dependent on others to fulfill their needs, phase taking hold dependent-independent) phase is often referred to as the independent dependent phase in which the mother occasionally arises the need to get treatment from others and the desire to be able to do everything herself and the latter phase letting go (interdependent behavior) which in this phase is the phase where the mother can accept responsibility for his role as a mother and this will take place after 10 days of childbirth (Maryuani, 2009).

During the adaptation period, the mother will undergo many changes, both physically and psychologically, but if in the process of adaptation change is not done well, it can be possible for the occurrence of pathological condition (Hurlock, 1980).

Most people believe that the right time for a woman to give birth is between the ages of 20-30, and it supports the problem of the optimal period for the baby's care by her mother. The age factor of the woman in question during pregnancy and childbirth is often associated with the woman's mental readiness to become a mother (Syarif & Samrida, 2021). Babies of mothers with postpartum depression exhibit poor behavior and low intellectual abilities and postpartum depression will also have a detrimental effect on the family due to lack of family harmony (Charline, Rohayem, & Khalil, 2014). Mothers who are depressed and not treated / given good health services will be at risk of psychosis where the mother can commit suicide and even can kill the baby (Sulistyawati, 2009).

A study of 50 postpartum mothers who had normal births at Haji Adam Malik Hospital in Medan obtained postpartum women who experienced postpartum depression as much as 16%. In general, postpartum mothers who experience depression do not show symptoms because they are afraid and embarrassed to get the assumption that they are not able to perform the role as a mother. Most mothers have little to express their feelings of depression and reveal more physical symptoms that are disturbing mother activity (Manuaba, 2009).

Based on the preliminary study conducted at Public Health Center of Wajo, Baubau City, Southeast Sulawesi, the number of deliveries in 2017 was 407 deliveries, 422 deliveries in 2018 and 363 deliveries

in 2019. In addition, during the postpartum visit the health worker has never done a postpartum depression screening using EPDS or related research. Based on the explanation, the researcher hopes that this research can help improve mother and child health through depression screening activity on postpartum mothers during the puerperal visit

METHOD

This research used analytic survey design with cross-sectional approach. The sampling technique was purposive sampling. The dependent variable in this research was postpartum depression and the independent variable was adolescent primipara mother and middle adulthood primipara mother and variable of confounding which is education, job, economic status, type of childbirth and family support.

The population in this research was all postpartum mothers who bear normally vaginal at the government clinic in Wajo, Baubau city. Sample in this research was part of population who fulfilled the inclusion criteria. The criteria of inclusion: adolescent primipara mother ages 15-20, middle adulthood primipara mother ages 35-40, mothers who bear vaginal, and mother who has a legal couple according to law and religion. The total sample in this research was 40 respondents divided in two parts which were adolescent primipara mothers (n=20) and middle adulthood primipara mothers (n=20).

In Indonesia, the validity and reliability of the EPDS have been tested by many researchers by measuring the risk of depression during pregnancy and postpartum. one of the studies that have validated the EPDS obtained a validity value of 87.5%, specificity 61,6%, and reliability 67%. Therefore, in this study, there is no longer a validity and reliability test for the EPDS instrument (Soep, 2011). This research was started by collecting related information about the candidate of repondents at the government clinic in Wajo. After all information that was suitable with inclusion criteria was obtained, the researcher came to the house of the candidate of repondents. Next, information related to the purpose and procedure of research given, if the mother understood and disposed to be a respondent would have informed consent. The mother would receive EPDS instrument after filling the form of agreement.

The data processing was done by editing, coding, processing and cleaning using the SPSS program. The analysis statistic used in this research was univariable analysis and bivariable analysis used unpaired statistic independent test t-test and multivariate analysis

used multiple linear regression

RESULT

The normality test shows that the data obtained are normally distributed. Kolmogorov-Smirnov test results for primipara adolescent mother $p = 0,200$; primipara middle adulthood mother $p = 0,086$.

Based on table 1, the result of the characteristic of the distribution of respondents was mostly high-level education for middle adulthood primipara mothers, mostly middle adulthood primipara mothers have jobs, mostly middle adulthood primipara mothers have normal economy status, all middle adulthood primipara mothers did vaginal childbirth and mostly middle adulthood primipara mothers were supported by their families who kept and stayed with them for 24 hours.

Table 2 showed that 11 respondents or 55,0% primipara adolescent mothers would be at risk of experiencing postpartum depression than primipara middle adulthood mothers 17 respondents (85%) would not experience postpartum depression. Because value $P < 0,05$ or $0,000 < 0,05$ with the difference of average CI 95% 6,0(4,0-7,9), so could be concluded that there was an average different in EPDS value between primipara adolescent mother and primipara middle adulthood mother to the occurrence of postpartum depression, where EDPS value of primipara adolescent mother was higher than middle adulthood primipara mother.

In table 3, all values of p value was $p < 0,25$, but childbirth variable did not obtain p value. It concluded that all confounding variables except type of childbirth had relation to the occurrence of postpartum depression. Therefore, all confounding variables except type of childbirth would be listed in multivariate test.

Based on table 4, the result showed that there were 4 models, the selected model for being multivariate result was model 4. The research behind this selection because of the presence of meaning with value p value $< 0,05$. According to ANOVA test, the value obtained was $p < 0,05$ or $0,000 < 0,05$ so that the quality of equation result of linear regression analysis was considered able to use. And also the value or R-square, where this value showed the value of the obtained equation. The closer to 100% the better the equation would be. So, the value of R-square which was 65,90 showed that the obtained equation could explain that the variable of income/economy status and the family support would cause the risk of a occurrence of postpartum depression to primipara mothers. Thus, the risk of postpartum depression was

65,90% and other 34,1% was explained by other not searched variables.

DISCUSSION

Difference of Occurrence of Postpartum Depression upon Primipara Adolescent Mother and Middle Adulthood Mother

The analysis result on the risk of the occurrence of postpartum depression upon primipara adolescent mother and middle adulthood mother at the government clinic in Wajo, Baubau city received values that adolescent mother which may be a risk to experience postpartum depression were 11 respondents or 55,0% than middle adulthood mother who mostly not risky to experience postpartum depression which were 17 respondents or 85,0% with value p value $< 0,05$ or $0,000 < 0,05$ with average difference CI95% 6,0 (4,0-7,9) could be concluded that there was significant and meaningful difference upon the occurrence of postpartum depression to upon primipara adolescent mother and middle adulthood mother.

This is in line with Maureen's research which shows that adolescent primipara mother is the potential to experience postpartum depression which is 25% with a value CI95% with intervals 3,1-21,9. this research mentioned those adolescent mothers who experience postpartum shows high-stress symptoms signed by several symptoms such as unstable emotions, and ignorance of their infant. It clarifies that adolescent postpartum mother often shows the problem to mothers' psychology (Phipps et al., 2013).

Pregnancy and bearing in adolescent age has high risk. The risk is usually emerged due to the unreadiness both psychologically and physically (Rusli & Warni, 2011). Psychologically, the adolescent is usually not ready to commit to her role as a mother. Especially if the pregnancy is not hoped. Finally, not only unread the pregnancy is also not kept by either the mother or the family. The physical risk may also occur to the mother at that age because some of her reproductive organs are not ready yet to carry on her pregnancy (Nunes & Phipps, 2013).

In his research, Anthony states that adolescent has a significant risk of increased postpartum depression and postpartum depression symptom, with prediction prevalence between 26% to 50%. Postpartum depression vital problem because it connects to several health problems for the mother and newborn baby (Idel Riani et al., 2012). The consequences for postpartum depression are very worrying among adolescents because it may be risky to childbirth and hard to become parents (Siti Urbayatur, 2012).

Table 1. Characteristic of Respondent

Variable	Adolescent	Adult	Total	X ²
Education:				
Low	9 (64,3%)	5 (35,7%)	14 (100%)	0,32
High	11 (42,3%)	15 (57,7%)	26 (100%)	
Job:				
Not work	10 (83,3%)	2 (16,7%)	12 (100%)	0,14
Work	10 (35,7%)	18 (64,3%)	28 (100%)	
Economy Status:				
Low	8 (80,0%)	2 (20,0%)	10 (100%)	0,40
Normal	10 (47,6%)	11 (52,4%)	21 (100%)	
High	2 (22,2%)	7 (77,8%)	9 (100%)	
Type of Childbirth				
Vaginal	20 (50,0%)	20 (50,0%)	40 (100%)	-
Family Support:				
Yes				0,50
No	12 (40,0%)	18 (60,0%)	30 (100%)	
	8 (80,0%)	2 (20,0%)	10 (100%)	

Table 2. Comparison of Risk of Postpartum Depression Upon Primipara Adolescent Mother and Middle Adulthood Mother at Postpartum Depression

Variable	Risk of Depression		n	Mean ±SD	Mean Difference (CI 95%)
	Risky	Not Risky			
Adolescent	11(55,0%)	9 (45,0%)	20	12,6 ±2,5	6,0 (4,0-7,9)
Middle Adulthood	3 (15,0%)	17(85,0%)	20	6,6 ±3,4	

Table 3. Difference of Education, Job, Economy Status, Type of Childbirth, Family Support Upon the Occurrence of Postpartum Depression

Variable	Risk Depression		P
	Risky	Not Risky	
Education:			
Low	9 (64,3%)	5 (35,7%)	0,009
High	6 (23,1%)	20 (76,9%)	
Job:			
Work	6 (21,4%)	22 (78,6%)	0,001
Not work	9 (75,0%)	3 (25,0%)	
Status of economic:			
Low	8 (80,0%)	2 (20,0%)	0,001
Normal	6 (28,6%)	15 (71,4%)	
High	1 (11,1%)	8 (88,9%)	
Type of Childbirth			
Vaginal	15 (37,5%)	25 (62,5%)	-
Family Support:			
Yes	5 (16,7%)	25 (83,3%)	0,000
No	10 (100%)	-	

A woman who becomes mother at the adolescent age, in that transition period surely has many things to prepare to make a mother has less burden with the

born of her child and able to inflict worry, dissatisfaction, fear, panic that might occur after birth so she is ready to treat and raise her child (Soep,

Table 4. Effect of Mother's Age, Education, Job, Economy Status, Family Support Upon the Risk of Occurrence of Postpartum Depression

Model	Variable	Coefficient	Coefficient correlation	P	Test Anova	R square
Model 1	Age	-0,118	-0,121	0,291	0,000	63,80%
	Education	-0,075	-0,074	0,507		
	Job	-0,27	-0,025	0,837		
	Income	-0,188	-0,267	0,027		
	support Family	-0,678	-0,607	<0,001		
model 2	Age	-0,123	-0,127	0,248	0,000	64,80%
	Education	-0,078	-0,076	0,485		
	Income	-0,191	-0,271	0,021		
	Family support	-0,688	-0,616	<0,001		
Model 3	Age	-0,122	-0,126	0,25	0,000	65,20%
	Income	-0,211	-0,301	0,006		
	Family support	-0,707	-0,633	<0,001		
Model 4	Income	-0,241	-0,343	0,001	0,000	65,90%
	Family support	-0,745	-0,666	<0,001		

2011; Syarif & Anita, 2021).

A mother, after birth may experience a mood disorder, disappointment, fear, not loving the baby, and guilty due to those feelings. The current psychological disturbance is categorized as a low mental disorder which often ignored by the mother and family. This condition becomes the trigger to bring mother to a worse situation which is psychotic situation (Sari, 2014).

Effect of Social Economy and Family Support Factors on the Risk of Occurrence of Postpartum Depression

In confounding variable analysis (education, job, economic status, type of childbirth and family support) on a dependant variable (postpartum depression risk) was only variable income/economy status and family support which has a value p-value<0,05, and value of R-square was 65,90%, where this value showed how big the received equation value. 65,90% R-square value indicated that the received equation could cause the occurrence of postpartum depression on primipara mother which was 65,90% and 34,1% was explained by other not searched variables. As mentioned by Andry, economy status is very related to risk of a occurrence of postpartum depression because in that phases the family must fulfill the infant and mother needs. If in this phase the mother can not adapt and pass this period finely, the mother will experience long-term stress and be able to make mother depressed(Gondo, 2008; Syarif, 2015).

Hurlock also states that economy status has significant relationship to the occurrence of postpartum

depression. Low economy condition is a frequent background why mom gets depressed, it can be caused by the increasing needs that must be fulfilled such as mother's treatment during childbirth or porturition and the presence of new need for infant. If the family who accept the birth of the baby is within financial problem , it will increase the stress level to mother who eventually affect the psychology (Surkan et al., 2009).

Beck states that there are some factors which able to cause the occurrence of depression in postpartum mothers such as depression in a phase of pregnancy, unreadiness to take care infant, stress in life, worry in phase of pregnancy, less social support, previous depression history, maternity blues, low economic status, and unexpected and not planned pregnancy (Sloanne & Benedict, 2009). The occurrence of postpartum depression is not only to mothers with low economic status but also to mother after childbirth who get no attention and support from family especially husband(Nirwana, 2011). For example, the research committed by Munawaroh who states that mother after childbirth who does not work and simply take care the children and commit her role as wife must still need support from family and husband, because in this phase the mother may experience critical situation even able to cause the occurrence of self disorder/blues. It can be caused by fatigue which experienced by mother, starting from take care family and possibility to have pressure on good responsibility as wife or mother (Hidayatul Munawaroh, 2008).

In line with research comitted by Pamela, she states that family support especially husband has

meaningful relation to the risk of a occurrence of postpartum depression with RR 4,6 and CI 95% 1,5-14,5. It is supported by the statement of Urbayatun, she states that family support especially husband can be emotional support, reward achievement, instrumental achievement and information support. It can be committed with how the husband takes role to take care his baby as early as possible. Because not only introduce the baby to know the figure of father, it can be positive support factor upon the exploration ability of baby in the first month. The presence of husband by wife after childbirth can be a support that able to increase psychology problem of wife, because the mother who has just born the baby and feel the presence of husband's support will decrease her psychology (Kusumastuti et al., 2015; Rusli & Warni, 2011)

Other research committed by (Irawati & Yuliani, 2014) states that less family support especially husband may cause high depression occurrence after childbirth, because the mother after childbirth will feel hard to commit her role mother and the responsibility will be heavier. The support here means attention, communication and intimate emotional relationship, because it is the most meaningful factor that start the occurrence of postpartum blues and depression postpartum. The presence of family support is communication and fine and warm emotional relationship with parents especially mother. From the research can be taken that low and uncertainty of husband and family support will increase the occurrence of postpartum depression.

CONCLUSION

Primipara adolescent mothers were risky to experience postpartum depression were 11 or 55,0% with average \pm s.b 12,6 \pm 2,5 from 20 respondents, while middle adulthood primipara mothers were not risky to experience postpartum depression were 17 or 85,0% average \pm s.b 6,6 \pm 3,4 from 20 respondents at clinic government wajo, Baubau city with value p -value $< 0,05$ or $0,000 < 0,005$; difference average CI 95% 6,0 (4,0-7,9) which explained that there was significant or meaningful. The factor which dominated the occurrence of postpartum depression was economy status and family support with value $0,001 < 0,05$, ANOVA test $0,000 < 0,05$, and R-square 65,90%.

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