

Depresi Pascapersalinan dan Pemberian ASI Eksklusif pada Bayi Usia 0–5 Bulan

Postpartum Depression and Exclusive Breastfeeding In Infants Aged 0-5 Months Old

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ABSTRACT

Exclusive breastfeeding is the most essential period for the early life of an infant. Various factors influence the mother's initiation and behavior of breastfeeding. Including postpartum depression as maternal mental health issue. This study aims to analyze the relationship of postpartum depression with exclusively breastfeeding in infants (0-5 months) in Indonesia. This research is quantitative using secondary data from the National Health Research (Indonesian Basic Health Research) with cross sectional research methods and were processed in 2020. The sample of this study was women aged 15-49 years with infants aged 0-5 months in Indonesia, totaling 2332 people. Bivariate analysis with Chi Square test was found that the relationship of postpartum depression towards exclusive breastfeeding was not significant with p value 0.911 (OR 0.946, 95% CI : 0.355-2.522). While the multivariate test results obtained maternal age, work status, residence and early initiation breastfeeding status (p value <0.05) with each OR respectively 0.770 (95% CI 0.588-1.008), 0.766 (95% CI 0.602-0.976), 0.671 (95% CI 0.537-0.837), and 0.568 (95% CI 0.443-0.728) as the confounding variables. This study concludes that a need to evaluate the early initiation breastfeeding, exclusive breastfeeding program and maternal mental health problems screening during the postpartum period.

Keywords: postpartum; breastfeeding; ages; depression; mental

ABSTRAK

Masa menyusui eksklusif merupakan periode penting dalam kehidupan awal bayi. Berbagai faktor memengaruhi inisiasi dan perilaku menyusui ibu, termasuk depresi postpartum sebagai bagian dari masalah kesehatan mental maternal. Penelitian ini bertujuan menganalisis hubungan antara depresi postpartum dengan praktik menyusui eksklusif pada bayi usia 0–5 bulan di Indonesia. Penelitian ini menggunakan pendekatan kuantitatif dengan data sekunder dari Riset Kesehatan Dasar (Riskesdas) dan desain potong lintang, yang diolah pada tahun 2020. Sampel penelitian mencakup 2.332 perempuan usia 15–49 tahun dengan bayi usia 0–5 bulan. Analisis bivariat dengan uji Chi Square menunjukkan bahwa tidak terdapat hubungan yang signifikan antara depresi postpartum dan menyusui eksklusif (p = 0,911; OR = 0,946; 95% CI: 0,355–2,522). Namun, hasil analisis multivariat menunjukkan bahwa usia ibu, status pekerjaan, tempat tinggal, dan status inisiasi menyusui dini memiliki hubungan signifikan (p < 0,05) sebagai variabel perancu. Studi ini merekomendasikan evaluasi terhadap program inisiasi menyusui dini, promosi menyusui eksklusif, serta skrining kesehatan mental ibu pada masa nifas.

Kata Kunci : postpartum; menyusui; usia; depresi; mental

INTRODUCTION

Exclusive breastfeeding or EBF is the most essential thing in the early life of a baby. By optimally breastfeeding, it can reduce newborn mortality and prevent infant illnesses such as diarrhea, pneumonia, infections and reduce the risk of degenerative diseases in the future

such as obesity and diabetes (Edmond et al., 2006; Gilmour & Shibuya, 2013; Jones et al., 2003; Victora et al., 2016)

However, data from the World Health Statistics or WHS in 2013 reported that the global prevalence of exclusive breastfeeding for under 6 months was only around 38%(Organization, 2013).

This is in line with national reports in Indonesia that the rate of exclusive breastfeeding for infants under 6 months ranges from 38% to 74% (Badan Penelitian dan Pengembangan Kesehatan, 2019; Badan Pusat Statistik Indonesia, 2017). Various historical, socio-economic, cultural and individual factors play a role in influencing mothers in the decisions and behaviour of breastfeeding initiation [(Rollins et al., 2016). This includes the mental health of mothers which affects mothers in breastfeeding and the practice of feeding their babies. Maternal symptoms of anxiety and depression are reported to be associated with shorter length of breastfeeding, tend to force children to eat and provide little or much unhealthy food (Haycraft et al., 2013; Lindsay et al., 2017; Ystrom et al., 2008, 2012).

Internationally, the prevalence of postpartum depression or PPD is between 12% and 18%. In other studies, it is stated that an estimated 12 to 20% of mothers who give birth for the first time experience postpartum depression (Bascom & Napolitano, 2016). Indonesia reports that around 18% to 27% occur sequentially in the first three months after delivery based on studies from 4 Public Health Centers in Indonesia (Nurbaeti et al., 2018). The results of this study indicate that postpartum depression in Indonesia is at a rate that needs attention.

Several studies reported that 68.6% of mothers with postpartum depression stop exclusive breastfeeding in the first 3 months of infant life (Cato et al., 2019a; Holbrook et al., 2013; Mathisen et al., 2013; Silva et al., 2017), and 35.2% stopped exclusive breastfeeding in the first 6 months (Cato et al., 2019b; Feldens et al., 2012; Islam et al., 2017; Orr PhD et al., 2018; Silva et al., 2017). Other studies have also reported that women with PPD tend to lower rates of exclusive breastfeeding, introduce complementary foods or complementary foods earlier (Hajeebhoy et al., 2013), and lack of early or late initiation of breastfeeding or breastfeeding. (Gagliardi et al., 2012) thus associated with increased infant mortality, recurrent diarrhea in infants (Organization, 2001) and an increased

risk of malnutrition (Hajeebhoy et al., 2013) or excess weight in infants.

Research on postpartum depression has been carried out in several countries and certain areas in Indonesia, while research on postpartum depression as a whole through national data with exclusive breastfeeding for infants has not been done much so that it is the background for the authors to see the relationship of postpartum depression to exclusive breastfeeding in infants aged 0-5 months in Indonesia based on secondary data analysis of the 2018 Indonesian Basic Health Research.

METHOD

Two theories that underlie the concept of this research are the interactive theory of breastfeeding (Primo & Brandão, 2017) and the conceptual theory of factors that influence breastfeeding (Hector et al., 2005). The interactive theory of breastfeeding postulates that several concepts have an influence on breastfeeding, modulating in a wider range of views including women's body image; nursing room; mother's role; protection, promotion and organizational support for breastfeeding; as well as family and social authority in breastfeeding (Primo & Brandão, 2017). Meanwhile, the conceptual theory of factors affecting breastfeeding shows three levels of factors that influence breastfeeding practices, namely individual, group and community factors (Hector et al., 2005).

The data used in this study is secondary data, namely the 2018 Basic Health Research data by the Health Research and Development Agency and the research was carried out in March 2020. Then the researcher made a request to use the data on the Research and Development Agency. After being reviewed, the researcher obtained permission to use the given data set.

This study uses a cross-sectional method. The factors analyzed in this study are limited, according to the data and variables contained in the questionnaire, namely data on postpartum depression, exclusive breastfeeding for infants aged 0-5 months in Indonesia as well as socioeconomic and

demographic factors, medical history of mothers and babies.

The population in this study were mothers aged 15-49 years and babies aged 0-5 respondents Indonesian Basic Health Research in 2018 with a sample of mothers aged 15-49 years who had a history of giving birth in the last 1 year who had the smallest biological child aged 0-5 months who were born normally and low birth weight. The number of samples analyzed was 2332 respondents.

The data in this study were analyzed using univariate, bivariate and multivariate analyzes. The bivariate test used the Chi square test and the multivariate test used the Multiple Logistic Regression Test.

RESULT

Univariate Analysis

Through the results of univariate analysis it can be concluded that infants aged 0-5 months are given exclusive breastfeeding as much as 53.7% with the other 46.3% not exclusively breastfed with the distribution of mothers aged 15-49 years who were the study sample

found that a small proportion of mothers experienced Postpartum depression was 2.4% and most of the others (97.6%) did not show depression.

In the socioeconomic and demographic factor, it was found that most of the mothers resided in the city (57.5%) with most of them at the reproductive age, namely 20-35 years (81.9%). Most of the mothers who had babies aged 0-5 months had higher education (51.4%). Most of them are not working (65%) and are at the lowest economic level, namely 62.1%. As well as factors from the medical history of the mother and baby. It was found that most of the mothers had 1 to 3 live births (92.8%), made ANC visits at least 2 times during the 3rd trimester, amounting to 91.6%, as well as routine postpartum visits in both postpartum phases, namely 78% in the postpartum period. up to 3 days thereafter and 73.1% in the postpartum period, namely 4 days to 28 days after delivery, but began to decrease in visits to as many as 51.6% of people in the period 29 days to 42 days after delivery.

Bivariate Analysis

Table 1. Bivariate analysis results

Variables	Exclusive Breastfeeding				p Value	OR	95% CI
	Yes		No				
	n	%	n	%			
Postpartum Depression							
Non-depressive	1222	53,7	1053	46,3	0,911	0,946	0,355-2,522
Depressive	31	55,1	25	44,9			
Socioeconomic and demographic factors							
Place of Residence							
Rural	586	59,2	404	40,8	0,001	1,464	1,177-1,820
Urban	668	49,7	674	50,3			
Age (years)							
20-35 old	1046	54,8	862	45,2	0,085	1,267	0,968-1,659
<20 dan >35 old	207	48,9	216	51,1			
Education Level							
Higher	615	51,3	584	48,7	0,082	0,817	0,650-1,026
Lower	638	56,3	495	43,7			
Occupation Status							
No	850	56	667	44	0,031	1,299	1,024-1,647
Yes	404	49,5	412	50,5			
Economic Status							
Higher	463	52,4	421	47,6	0,485	0,915	0,712-1,176
Lower	790	54,6	657	45,4			
Medical History of Mother and Infant							
Number of living children							
1-3 children	1162	53,7	1000	46,3	0,989	0,997	0,700-1,422

>3 children	90	53,8	77,1	46,2			
Number of ANC visits							
≥2 times	1161	54,4	974	45,6	0,113	1,346	0,931-1,947
<2 times	92	47	104	53			
PNC Status 1							
Yes	976	53,1	862	46,9	0,387	0,882	0,663-1,173
No	278	56,2	216	43,8			
PNC Status 2							
Yes	902	52,9	803	47,1	0,291	0,877	0,686-1,120
No	352	56,1	275	43,9			
PNC Status 3							
Yes	604	53,5	523	46,5	0,886	0,983	0,776-1,245
No	649	54	554	46			
EIBF Status							
Yes	874	58,7	615	41,3	0,0005	1,734	1,353-2,222
No	380	45	463	55			

The table above shows the results of the analysis of the relationship between postpartum depression and exclusive breastfeeding that mothers who provide exclusive breastfeeding are slightly more mothers who experience PPD, namely 55.1% compared to mothers who do not experience PPD, namely 53.7%. Chi Square test results obtained p value 0.911 (p value> 0.05). So it can be concluded that there is no difference in

the proportion of postpartum depression incidence with exclusive breastfeeding.

In socioeconomic and demographic factors, the variables have a significant relationship (p value <0.05) with exclusive breastfeeding, namely residence and work status. Meanwhile, for maternal and infant medical history factors, only the EIBF variable had a significant relationship with exclusive breastfeeding with a p value of 0.0005 (p value <0.05).

Multivariate Analysis

Table 2. Preliminary Modeling of the Multivariate Analysis of Confounding Test

Variabel	P Value	AOR	95% CI
PPD	0,963	0,978	0,378-2,525
Education Level	0,430	1,103	0,864-1,409
Number of ANC visits	0,052	0,692	0,478-1,003
PNC Status 1	0,479	1,122	0,816-1,543
PNC Status 2	0,353	1,142	0,863-1,513
PNC Status 3	0,782	0,964	0,741-1,253
Age (years)	0,048	0,759	0,578-0,998
Occupation Status	0,036	0,770	0,603-0,984
Place of Residence	0,001	0,681	0,542-0,856
EIBF Status	0,0005	0,565	0,441-0,725

After the confounding test is carried out on several variables with the highest p value and seeing the difference between

the old and new ORs, the following is the final model result of the confounding test.

Table 3. Final Modeling of Multivariate Analysis of Confounding Test

Variabel	P Value	AOR	95% CI
PPD	0,963	0,949	0,365-2,468

Age <20 dan >35 old	0,048	0,770	0,588- 1,008
Occupation Status (Occupied)	0,036	0,766	0,602- 0,976
Place of Residence (Urban)	0,001	0,671	0,537- 0,837
EIBF Status (No)	0,0005	0,568	0,443- 0,728

After confounding analysis, age, work status, residence and EIBF variables were confounding variables in the relationship between postpartum depression and exclusive breastfeeding expressed by p value <0.05 with each AOR, respectively 0.770 (95% CI 0.588-1.008) , 0.766 (95% CI 0.602-0.976), 0.671 (95% CI 0.537-0.837) and 0.568 (95% CI 0.443-0.728).

In this multivariate selection, it can also be explained that mothers who have postpartum depression have a 0.949 times greater chance of not exclusively breastfeeding compared to mothers who have postpartum depression. Even if it is seen from the p value, this study has not been able to prove the relationship between postpartum depression and exclusive breastfeeding for infants aged 0 - 5 months in Indonesia.

DISCUSSION

In this study, there are several limitations that the researchers encountered. The data used in this study is secondary data from the results of Indonesian Basic Health Research in 2018, so the variables used in this study are limited to the variables contained in the 2018 Indonesian Basic Health Research data and approved by the data owner for use in this study.

Some of the variables that were not analyzed were due to the missing values after the cleaning process, namely the problem of breastfeeding and the age of the baby when it stopped breastfeeding. In addition, there is data uniformity on the status variable having been given breast milk and researchers cannot control when data collection in the field.

Overview of Exclusive Breastfeeding in Indonesia

The results of data analysis regarding exclusive breastfeeding in Indonesia for infants aged 0-5 months with normal birth weight and normal birth weight from the 2018 Indonesian Basic Health Research report showed that 4 out of 10 (46%) infants aged 0-5 months in Indonesia do not receive breastfeeding exclusive (Badan Penelitian dan Pengembangan Kesehatan, 2019). This data is consistent when compared to what was found in the 2017 Indonesian Demographic Health Survey (IDHS)

report for infants under 6 months of age that 48% of babies in Indonesia do not receive exclusive breastfeeding (Badan Pusat Statistik Indonesia, 2017). In the world, infants aged less than 6 months who are exclusively breastfed are only 37% in low and middle economic countries even though developed countries have a shorter duration of breastfeeding.

Based on the results of measurements of exclusive breastfeeding data, there are still many researchers who use the questionnaire method that measures the status of exclusive breastfeeding the day before, namely 24 hour recall so that the measurement results represent an excessive proportion if it is assumed to be exclusive breastfeeding status or Exclusive Breastfeeding Rate (EBR) for 6 months. infant age (Greiner, 2014).

None of the indicators can provide complete and accurate data in measuring the duration of exclusive breastfeeding that has been achieved at 6 months of age. The best indicator for measuring EBR depends on the objectives of each study. For measurement, 1 simple question about when was first given additional food or drink during this time and at what age was given a main indicator of when exclusive breastfeeding ended and when the predominant breastfeeding started even though the respondent mentioned only breastfeeding so far (Aidam et al.,

2005; Anderson et al., 2005; Merten et al., 2005; Ssenyonga et al., 2004).

Postpartum Depression in mothers aged 15-49 years in Indonesia in 2018

According to the results of the data analysis of this study, the postpartum depression picture was 2.4% of all respondents. In contrast to research conducted by (Nurbaeti et al., 2018) that the prevalence of PPD varies between postpartum time periods, namely, 18.37%, 15.19% and 26.15% of 283 respondents respectively at 1 month, 2 months and 3 months postpartum (Nurbaeti et al., 2018).

However, the prevalence of PPD varies in different countries based on a review of 143 studies in 40 countries, there is a PPD prevalence ranging from 0% to 60% (Halbreich & Karkun, 2006) and the greatest prevalence is in middle-income countries (Almond, 2009). Another study states that in the world the prevalence of PPD varies from 10% to 20% (Bolak Boratav et al., 2016; O'hara & McCabe, 2013; Werner et al., 2015). This variation is due to several differences in the PPD diagnostic tool used, the measurement standard, the measurement time period, the cutoff score in determining the diagnosis, and the population characteristics (Halbreich & Karkun, 2006).

The Relationship between Postpartum Depression and Exclusive Breastfeeding in Infants aged 0-5 months in Indonesia

In this study, the results of the Chi Square test showed that there was no or insignificant difference in the proportion of PPD to exclusive breastfeeding. . This can be due to various things related to measuring survey data taken only at one time. This is in line with several studies which reported that there is no relationship between postpartum depression and exclusive breastfeeding even with the same type of questionnaire, namely EPDS (Balogun et al., 2016; Fallon et al., 2018; Helle et al., 2018; Holbrook et al., 2013; Rose et al., 2016) thus causing varied results and conclusions. In addition, postpartum depression is a psychological problem

that makes it difficult to express it if it is not in a conducive, private and in-depth interview environment.

Other factors that should also be examined are a history of previous depression, complications of pregnancy and childbirth, the health of the baby and the method of delivery where these factors can be predictors for the relationship between postpartum depression and exclusive breastfeeding (Adams et al., 2012; Blom et al., 2010; Carter et al., 2006).

In addition, mothers who have depressive symptoms are reported to have many difficulties in breastfeeding (Edhborg et al., 2005), are dissatisfied with the process of feeding their children (Dennis et al., 2016) and lack of confidence in producing breast milk (Flores-Quijano et al., 2008). Another factor that can affect the relationship between PPD and exclusive breastfeeding is breastfeeding through other media besides direct breastfeeding. So that the proportion of mothers with PPD is not clearly known to provide exclusive breastfeeding directly through the breast or through other media. Through the results of a systematic review design study in Canada (Dennis & McQueen, 2007) reported that bottle-feeding babies were positively associated with postpartum depression.

In the variable of maternal age, several studies confirm this result by providing the opinion that maternal age is related to the continuity of exclusive breastfeeding, so that younger mothers have the risk of earlier giving additional food or drinks to their babies (Tarrant et al., 2010). This is because older mothers have more experience and knowledge of breastfeeding. In addition to not having much experience, younger mothers tend to have lower self-confidence and ability to breastfeed than older mothers so that they have more breastfeeding problems (Monteiro et al., 2014)

In addition, where the mother lived was found to be a significant factor for not exclusively breastfed. Another study in China reported that the common factors associated with duration of exclusive breastfeeding and predominant breastfeeding were location of mother's residence and return to work. Most of the

infants (urban (99.8%), suburban (99.5%) and rural (92.8%)) consumed formula milk at 6 months of age (Qiu et al., 2010).

From this study also found a report that working mothers tend not to exclusively breastfeed their babies. Bai et al. found that only one third of mothers continued to breastfeed after two weeks of returning to work (Bai et al., 2015). Several other studies also stated that the sooner the mother returned to work, the shorter the duration of breastfeeding (Bai et al., 2015; Ogbuanu et al., 2011). A more flexible work schedule that includes ease of breastfeeding and ease of access to private lactation rooms significantly affects the duration of breastfeeding (Rozga et al., 2015).

EIBF was also reported as a significant factor in this study. This statement is similar to several studies in Ethiopia (Beyene et al., 2019; Gizaw et al., 2017; Lenja et al., 2016; Liben et al., 2016; Setegn et al., 2012) that EIBF has a significant relationship with a lower risk of cessation of breastfeeding compared to late initiation of breastfeeding. This is because initiating breastfeeding in the first 1 hour of birth can increase the initial bond between mother and child and the adequacy of breast milk so that it can delay the initiation of additional food other than breast milk.

CONCLUSION

This study has not been able to prove the relationship between PPD and exclusive breastfeeding. However, through this study, there are four fundamental factors that can influence exclusive breastfeeding, namely the mother's age, Early Initiation of Breastfeeding (EIBF), work status and mother's residence. So that the risk of the relationship between postpartum depression and exclusive breastfeeding cannot be separated from these four fundamental variables.

Some recommendations from this study are to enrich the questions on the Indonesian Basic Health Research questionnaire and collect data on exclusive breastfeeding status preferably through a combination of measurements. In addition, there is a need for continuous evaluation of the roles and functions of

breastfeeding counsellor in implementing EIBF in each health facility, observing the process of breastfeeding mothers and providing targeted education about breastfeeding in the postpartum period. In addition, routine early detection, follow-up, and support related to psychosocial problems and breastfeeding problems as well as forms of policy to provide flexibility to working mothers with babies under 6 months old not to return to work immediately or to be able to approach child care facilities and breastfeeding rooms for mothers.

SUGGESTION

For researchers who are interested in the same topic to research using cohort methods or case studies to be able to see a clearer causal relationship. In addition, researchers can expand the determinants of exclusive breastfeeding apart from what has been examined in this study.

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