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Effects of Postpartum Depression Symptoms On the Success of Breastfeeding In Hospital of Bantul

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ABSTRACT

The present trend of problems is that most women combine breast milk and formula milk. Some areas of Indonesia is high because of delayed lactation. Study mentioned more postpartum women with psychological problems that fail to breastfeed. Other studies also mentioned that depression in the puerperal mother may inhibit the sustainability of breastfeeding. Objective The purpose of this study was to determine the effect of postpartum maternal depression symptoms on the success of breastfeeding. This study used a prospective cohort design. In consecutive sampling, consist of 84. The data collected using the Edinburgh Postnatal Depression Scale instrument to assess the symptoms of depression and observation sheets to assess lactation at baseline after delivery. Symptoms of depression have no effect on the success of breastfeeding. p-value 0.6 and OR 1.25 (95% CI: 0,51-3,088). Postpartum women who have no symptoms of depression have the possibility to successfully breastfeed 1.25 times greater than the postpartum women with symptoms of depression. Postpartum women with no symptoms of depression have a likelihood of breastfeeding greater than postpartum women with depressive symptoms, but not statistically significant. after this study, it is desirable to examine or screen for postpartum depressive symptoms using EPDS instruments as a routine screening tool for postpartum to assess depressive symptoms, as well as to monitor lactation during postpartum and lactation mothers. It is desirable to examine or screen for postpartum depressive symptoms using EPDS instruments as a routine screening tool for postpartum to assess depressive symptoms, as well as to monitor lactation during postpartum and lactation mothers.

Keywords: depression, postpartum, breastfeeding

INTRODUCTION

The current problem in breastfeeding is that most women combine breast milk and formula milk. In the United States, exclusive breastfeeding will last for six months only 25.5% (National Center for Health, 2015). In Indonesia, exclusive breastfeeding lasts for 6 months. The precentage is higher than that of in the US by 55.7% (Kementerian Kesehatan Republik Indonesia, 2015). In DIY Province, the breastfeeding rate is higher than the national figure that reaches 70%. Almost all districts in the province of DIY exclusive breastfeeding rate increased every year, including in Bantul district. Although in Bantul the coverage is still below the target of 80%. In Bantul, the rate of exclusive breastfeeding is booked by 74,5% (Dinas Kesehatan Kabupaten Bantul, 2016; Kementerian Kesehatan, 2015).

In some areas of Indonesia, the high failure of breastfeeding is caused by IMD failure, no exclusive breastfeeding program implementation, lack of motivation and support from the mother's relatives and family, working mother, or adequacy of lactation problems (Fikawati & Syafiq, 2009; Permana, 2006). The results of the study mentioned that more postpartum women with mental problems or psychological problems failed to breastfeed (Assarian & Moravveji, 2014). Other studies also mentioned that depression in postpartum may inhibit breastfeeding process(Haku, 2007).

Depression is estimated to be about 20% or more in pregnant women and give birth in developing countries compared to developed Countries (Bitew, Hanlon, Kebede, Medhin, & Fekadu, 2016). 80% of mothers are predicted to experience symptoms of mood disorders within the first few days after delivery (Bloch et al., 2000). Symptoms Depression in the puerperal mother is similar to the symptoms of depression that occur at other times in the life cycle of women. This is different because there are physiological changes during pregnancy and childbirth. Anxiety can also

indicate symptoms of depression (O'Hara & McCabe, 2013).

Several factors that affect depression in the postpartum include age, mother's work and family support (Sri Wahyuni, 2014). Some others also mentioned that the biggest factor is the social factor, there are also symptoms of anxiety and depressive symptoms that occur during pregnancy (Hawes et al., 2003; Palareti et al., 2016) . Mothers giving birth with symptoms of depression will cause negative perceptions to themselves and others including the baby (Stein et al., 2008). It will be very harmful to both mother and baby. Mothers with anxiety, symptoms of depression and stress are more susceptible to breastfeeding failure and improve weaning (Assarian & Moravveji, 2014; Kristen M. Hurley, 2008; Pope, Mazmanian, B??dard, & Sharma, 2016). Other studies described that mothers with depressive symptoms during pregnancy, and childbirth will increase the risk of gastrointestinal infections and respiratory infections in infants (O'Hara & McCabe, 2013).

Preventive behavior and psychosocial assessment have not been done universally in pregnant women and postpartum women in various health services related to depressive symptoms in women with breastfeeding (Almond & Lathlean, 2011; Shrivastava, Shrivastava, & Ramasamy, 2015). Midwives have a very important role in providing postpartum services. In accordance with government programs on postpartum care, Optimized care in pregnancy, childbirth, postpartum period, and more sensitive to maternal reactions should be paid attention because sometimes symptoms of depression do not appear. Midwives can perform comprehensive screening, detect problems and treat or refer clients when there are complications. As for breastfeeding problems, midwives can strengthen breastfeeding counseling. Midwives can also empower families of postpartum women to provide emotional support related to psychological state of the client and breastfeeding situations.

So far, in Kabupaten Bantul, the rate of breastfeeding has not reached 80% and also there is not any research on the effect of depressive symptoms on postpartum, breastfeeding status was also assessed when the time of breastfeeding, when the mother started breastfeeding her baby. So, this study was conducted to determine the effect of postpartum maternal depression symptoms on the success of breastfeeding.

This study may be useful as a contribution to the Midwifery Health Technology Assessment (HTA) for early interventions and screening to prevent mothers from r depression risk during the puerperium that will impact on the success of breastfeeding, which includes the time for breastfeeding. Also, providing treatment when there is a possibility of risk based on the postpartum screening. It is ultimately expected to improve the quality of midwifery services, especially pregnancy care, delivery and comprehensive midwifery services including psychological aspects through screening of symptoms of depression during the puerperium.

METHODS

This study employs longitudinal design with prospective cohort study. This research is to measure or collect data at the certain period of time (Sulistyaningsih, 2012). The location of research is in Panembahan Senopati Hospital in Bantul. This study approach is conducted to identify whether there is an effect of postpartum maternal depression symptoms on the success of breastfeeding including initial lactation after delivery

The Research subject of this study was postpartum with vaginal delivery 0 to 3 days. The criteria of the baby is one month old and the baby's weight is sufficient, the mother can read and write, has no history of mental disorder or depression, not in the treatment of mental disorders, be cooperative and willing to be respondents. The total sample are 84 postpartum mothers who were taken by consecutive sampling.

The participants were given an explanation of the aims and objectives of the study and research methods. The participants were given an explanation to fill out the depression symptom screening questionnaire and social support and will be observed or monitored for lactation and breastfeeding. If the respondents were allowed to go home by the hospital while the monitoring was not complete, the researcher would monitor by Telephone. The monitoring or observation will be carried out for a maximum of three days for each participant.

The data were collected using the Edinburgh Postnatal Depression Scale (EPDS) to assess the symptoms of depression and observation sheets to assess lactation at baseline after delivery. EPDS is developed and validated for pregnancy and postpartum to assess symptoms of depression and anxiety (Cox, Holden, & Sagovsky, 2010; J. L. Cox, J.M, Holden, 1987). In addition, it is the most commonly used instrument for screening

postpartum women the risk of depressive symptoms (Perfetti et al. 2004). Multivariabel regression with SPSS aplication was used to analyze the data.

RESULT AND DISCUSSION

At the beginning of the study, postpartum was screened for depression symptoms and then observed for 72 hours to assess the onset of lactation as an indicator of breastfeeding success. The number of subjects in this study is 84 postpartum mothers. In the implementation, there are 6 respondents who quit. Respondents who quit are the ones who did not attend at the initial observation in the hospital. She is a postpartum woman with problem of delayed lactation, then the researcher contacted her by phone because she was not hospitalized. At the time of observation the respondent can not be reachable by phone and her family did not want provide any responses.

Tabel 1 The distribution of frequency based on the symptoms of depression and successful breastfeeding

Variable	Total N (%)
Symptoms of depression	
No symptoms of depression	33(42,3)
Symptoms of depression	45(57,7)
Successfully breastfeeding	
Successfully breastfeeding	40(51,3)
No successfully breastfeeding	38(48,7)
Total	78 (100)

The majority of respondents had a risk of depression at 57.7% and breastfeeding at 51.3%.

Tabel 2 Cross tabulation between Postpartum Mother with Depression Symptoms and Successful Breastfeeding

Symptoms of depression	Successfully breastfeeding		*p value*	OR	CI 95% (Min-Max)
	Success breastfeeding N (%)	No success breastfeeding (%)			
No Symptoms of depression	18 (23,1)	15 (19,2)	0,6	1,25	0,51-3,088
Symptoms of depression	22 (28,2)	23(29,5		1	

The table above shows that the symptoms of depression have no effect on the success of breastfeeding with p value 0.6 and OR 1.25 (95% CI: 0,51-3,088). It can be interpreted that postpartum women who have no symptoms of depression would have the possibility to successfully breastfeed 1.25 times greater than those who have symptoms of depression.

Tabel 3 Multivariable Analysis between Independent Variables, Unbound Variables and Confounding Variables

Variable	Model 1 OR (95% CI)	Model 2 OR (95% CI)	Model 3 OR (95% CI)	Model 4 OR (95% CI)	Model 5 OR (95% CI)
Symptoms of depression					
No Symptoms of depression	**1,25(0,5-3,08)**	**0,85(0,3-2,38)**	**0,9(0,3-3,09)**	**1,01(0,3-3,2)**	**1,08(0,3-3,2)**
Symptoms of depression	**1**	**1**	**1**	**1**	**1**
Age (year)					
20 until 35		**6,9(2,4-19,3)**	**12,8(3,29-49,9)**	**13,3(3,38-5,24)**	**13,5(3,3-53,9)**
<20 or >35		**1**	**1**	**1**	**1**
Parity					
Multipara			**0,8(0,2-3,38)**	**0,8(0,2-3,38)**	**0,8(0,2-3,36)**
Primipara			**1**	**1**	**1**
Economic status (income)					
Low income				**0,6(0,2-2,1)**	**0,6(0,2-2,1)**
High income				**1**	**1**
N	**78**	**78**	**78**	**78**	**78**
R^2	**0,04**	**0,24**	**0,459**	**0,464**	**0,465**

The outset of lactation is the determining point of the mother for the sustainability and success of breastfeeding. The results show that among the puerperium was successful at 51.3% and who failed to breastfeed at 48.7%. Although few differences were found in the incidence of breastfeeding failure and success among postpartum women with depressive symptoms, frequency distribution postpartum with depressive symptoms is high.

Factors that affect the process of lactation after childbirth are very complex, including symptoms of depression, type of labor and psychosocial factors (Ririn Ariyanti, Detty Siti Nurdiati, 2016). Statistically, the symptoms of depression do not affect lactation in the puerperium, but the incidence of depressive symptoms is high enough, so there is a need for routine examination of depressive symptoms for

every postpartum that can be implemented as prevention for further depressive events in the puerperal mothers. Although the incidence of postpartum women with symptoms of depression is more than postpartum who had no symptoms of depression, successful incidence or failure of breastfeeding the number is relatively the same. It can be explained by a pre-existing study that postpartum pressure will create a situation in which lactation in the puerperal mother will be inhibited (Haku, 2007).

In multivariable analysis, the effect of depressive symptoms decreases after the emergent of confounding variable. It is clearly seen from the value of OR decreases after being analyzed with confounding variables. Thus, the effect of depressive symptoms on the success of breastfeeding is disrupted by confounding variables. The most important confounding variables are age and parity.

Symptoms of depression and psychological disorders are a predictor of lactation delay after delivery (Arifunhera et al., 2015). No significant results can possibly occur because at the time of the study was conducted, observation and data collection were undertaken by a team consisting of 3 people, so,there may be differences in the delivery to the respondent or the difference in perception by respondents. It is also possible that sampling is inadequate, so the populations can not be represented.

It is also possible because the measurement of depressive symptoms is only measured once, so it can not determine the direction of the observed association and there may be other factors that are more influential on the success of breastfeeding. In other studies, however, the rate of recurrent symptoms of depression in the first 7 days, 1 month, 3 months were the same among postpartum women who did not experience a delay in early lactation (Ahn & Corwin, 2015). In another study, it was suggested that the symptoms of depression in the puerperium created a situation where lactation was delayed (Hill & Aldag, 1991).

The direction of the association of symptoms of depression and the success of the initial breastfeeding after delivery remains no clear. Lactation after delivery is closely related to symptoms of depression detected during pregnancy. Breastfeeding can increase the hormone that reduces the response of cortisol that causes mood disorders, so that, symptoms of depression in this period may be reduced (Figueiredo, Dias, Brandão, Canário, & Nunes-Costa, 2013). The incidence of lactation failure and successful lactation at the onset of labor on the research results are almost in the same frequency, but even so, failure at the onset of lactation will be a determinant point of how the mother can breastfeed the next day.

Symptoms of depression and its association with breastfeeding success were assessed from the onset of lactation are closely related to the likelihood of cortisol levels after delivery. In the previous study, cortisol in primiparous puerperium was twice as high as compared with postpartum mothers at early phase after delivery. Thus, delayed lactation is a greater risk to the primiparous nipple mother (Grajeda & Pérez-Escamilla, 2002). No significant result is possible because the symptoms of depression is not a direct cause of delay in lactation but influenced by risk factors for depression symptoms that up to now have not been studied (Pope et al., 2016).

Symptoms of depression and its effects on the success of postpartum breastfeeding from early lactation are associated with oxytocin levels and neuroendocrine responses to lactation but are not a strong predictor (Stuebe, Grewen, Pedersen, Propper, & Meltzer-Brody, 2012). The statement supports the hypothesis on the results of the study, it shows that there is no significant effect of depressive symptoms on breastfeeding success, as there is a need for further research on the association of neuroendocrine in symptoms of depression and lactation. In another study described, the association between depressive symptoms and the success of breastfeeding is a symptom of depression on a continuous basis from the start of the antenatal period (Tang, Binns, & Lee, 2015).

Another thing that allows the lack of influence of depressive symptoms on the success of breastfeeding is the success of breastfeeding as a predictor of symptoms of depression. As stated in the previous research, t symptoms of depression and breastfeeding have a reciprocal relationship. Breastfeeding is important not only for babies but also for mothers. Breastfeeding is a protective factor for postpartum depression (Hamdan & Tamim, 2012).

Mothers who experience delayed lactation early after delivery may have a high risk of depression. The results also note that mothers at risk of depression during pregnancy tend to experience lactation delay in the post-natal phase,

despite hormonal effects are also highly possible. Hormones indirectly play a role in the mechanism. Higher levels of plasma prolactin have mothers who do not breastfeed their babies (Hamdan & Tamim, 2012).

CONCLUSION

Postpartum women with no symptoms of depression have a likelihood of breastfeeding 1.25 times greater than postpartum women with depressive symptoms, but not statistically significant. After this study, it is desirable to examine or screen postpartum depressive symptoms using EPDS instruments as a routine screening tool to assess depressive symptoms as well as to monitor lactation during postpartum and breastfeeders.

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