

Effect Of Kangaroo Mother Care (KMC) On EPDS Score On Post Partum In Midwife Independent Practice Bengkulu Indonesia

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Abstract—Most women experience emotional disturbance after childbirth such as depression, irritability, especially easily frustrated and emotional. Nearly 70 percent of women experience sadness after the birth, and most mothers can quickly recover and achieve stability, but 13% of them will experience postpartum depression. This research is aimed to know the impact of Kangaroo Mother Care to EPDS score On Post Partum in Bengkulu. Experimental quasi-research is used in this research. Subjects on this research are 30 respondents were divided into two groups: KMC group and control group. Data was collected using questioner. Statistical analysis was performed by T-test. There was a significant difference between the mean EPDS Score ($p=0.0001$) of KMC group before and after the intervention. There is a significant relationship between KMC and EPDS Score.

Keywords—Kangaroo Mother Care, EPDS, Post Partum

I. INTRODUCTION

In the post partum period, a mother will experience a process of psychological adaptation, which is a process of accepting a new role as a parent experienced by a woman. This adaptation is divided into several phases, including the phase taking in, phase taking hold, and the letting goes phase. If these three phases cannot be appropriately passed, a mother can experience postpartum disorder [1]

Psychological disorders that arise will reduce the happiness that is felt and affect the relationship of the child and mother in the future, so that it can be understood that almost 70 percent of mothers experience sadness after giving birth, and most mothers can recover and achieve stability, but 13% of them will experience postpartum depression [2]

During the postpartum period, 10% of women experience post-natal psychological disorders, 50-58% of

women experience a type of psychological disorder namely postpartum blues, and 12% of postpartum blues develop into postpartum depression.[3]

According to several studies conducted in various places in Indonesia in 1998-2001, among others, Jakarta, Yogyakarta, and Surabaya found that the incidence of postpartum blues was 11-30% [4]. Post-Partum Blues is a syndrome of minor effects that often occur on day 3 or 4 of the postpartum and peaked between days 5 to 14 of the postpartum [5]

Mood disorders experienced postpartum blues will result in less interest and interest in the baby. Mothers also often do not respond positively to the baby. Postpartum mothers are also not eager to breastfeed their babies so that their baby's growth and development are not like babies whose mothers are healthy [6]

Kangaroo Mother Care is a method of using direct maternal skin contact and baby's skin known to reduce the incidence of postpartum blues, this form of treatment maximizes the mental health conditions of mothers and babies with relative safety, cheapness and is easy to do by [7]. Kangaroo method care is an effective way to meet the most basic needs of babies, namely warmth, breast milk, protection from infection, stimulation, safety, and affection. The advantage of this method is that it will stimulate the mother to release oxytocin and prolactin. Both of these hormones stimulate endorphin release continuously which has an anesthetic effect, flowing love throughout his life, changing an anxious or depressed mother's feelings into a feeling of calm and confidence so that it can reduce the incidence of blues partum postings[1]

Yulia's research with the results that the KMC infant care method can reduce post partum depression scores by 3.17 after being controlled with parity, post partum depression scores in mothers with multi parity higher by 1.73 after being controlled by infant care methods. KMC can predict a 15% reduction in postpartum depression scores

II. METHODS

Experimental quasi-research was used in this study. The design of this study used *two groups of pre-test-post-test design*. The population in this study were postpartum Mother <10 days which inclusion criteria: no complications, accompanied by a husband, Pregnancy is desired or planned, Baby weight > 2500 grams. The subject in this research is that 30 respondents were divided into two groups: KMC treatment group and control group.

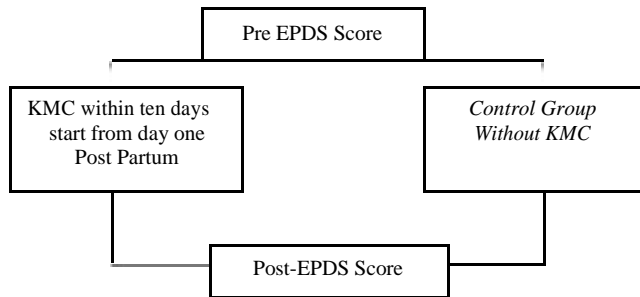


Figure 1. Experiment Design Scheme

The location of the research is in the working area of Independence Midwife Practice in Kota Bengkulu. The study was conducted in June 2016. The data collection technique is performed by filling questionnaire and *Edinburgh Postpartum Depression Scale* (EPDS)[8]. Data analysis was performed by T-test statistic

III. RESULT

TABLE I. RESULTS OF PAIRED SAMPLES T-TEST IN THE KMC TREATMENT GROUP

Variable	Mean \pm SD	P value	N
EPDS Score* Pre	14,67 \pm 6,253	0,01	15
Post	22,87 \pm 3,986		

*EPDS : Edinburgh Postpartum Depression Scale

Table I showed that the mean significance value of EPDS score before and after the intervention is: p-value 0.01, p-value < 0.05, it means there is a significant difference the mean of EPDS in KMC treatment group before and after the intervention.

TABLE II. RESULTS OF PAIRED SAMPLES T-TEST IN THE CONTROL GROUP

Variable	Mean \pm SD	P value	N
EPDS Score* Pre	15,60 \pm 6,220	0,757	15
Post	15,40 \pm 6,522		

*EPDS : Edinburgh Postpartum Depression Scale

Table II showed that the mean significance value of EPDS score before and after the intervention is: p-value 0,757, p value >0,05 it means there is no significant difference the mean of EPDS in control group.

TABLE III. RESULTS OF INDEPENDENT SAMPLES T-TEST BETWEEN KMC TREATMENT GROUP AND CONTROL GROUP

C	Mean \pm SD	P value	n
EPDS Score* KMC	22,87 \pm 3,980	0,010	30
Control	17,00 \pm 7,071		

* EPDS : Edinburgh Postpartum Depression Scale

Table III showed that the significance value of the mean EPDS score in KMC treatment group and control group. The significance value of EPDS score: p-value 0,010, p-value < 0.05 it means there is a significant difference the mean of EPDS score between KMC and Control Group.

IV. DISCUSSION

The results of this study are consistent with the research of de Alencar et al. (2014) which showed the results of 66 mothers (37.3%) with symptoms of depression after being given KMC intervention decreased to 30 mothers (16.9%) with a value of p = 0.0001[7]. The results of this study are also by Rismintari's research with the results of the mother who received the KMC baby care method has a parity coefficient of 1.73 and a model 2 constant of 10.78 and a coefficient of determination of 0.15. These results can explain that the KMC infant care method can reduce post partum depression scores by 3.17 after being controlled with parity, post partum depression scores in mothers with multi parity higher by 1.73 after being controlled by infant care methods. KMC can predict a 15% reduction in postpartum depression scores [9].

Marshall (2006, in Miyansaski, 2013), revealed that there are three types of affective or mood disorders in new mothers from mild to severe, namely: postpartum blues, postpartum depression, and postpartum psychosis. The cause of postpartum blues is not known with certainty. However, the incidence of postpartum blues is influenced by two factors, namely internal factors, and external factors. Internal factors that influence the occurrence of postpartum blues include hormonal fluctuations, psychological factors and personality, a history of previous depression, a history of pregnancy and childbirth with complications, caesarean section delivery, unplanned pregnancy, low birth weight babies (LBW), in mothers who experience difficulties in breastfeeding and mothers who have no experience in caring for babies [10]

The Kangaroo Mother Care method is a method that uses direct contact with maternal skin and baby's skin. It is known to reduce post partum depression scores, especially in cases of LBW (<2500 g). [11]. This form of treatment maximizes the mental health conditions of the mother and baby with relative safety, cheapness and is easily carried out by the mother. The advantage of this method is that it will stimulate the mother to release oxytocin and prolactin. Both hormones stimulate endorphin release continuously which has an anesthetic effect, flowing affection throughout his life, changing an anxious or depressed mother's feelings to a

feeling of calm and confidence so that it can reduce postpartum depression scores [7].

V. CONCLUSION

There is an effect of Kangaroo Mother Care (KMC) to *Edinburgh Postpartum Depression Scale* (EPDS) Score on Post Partum in Kota Bengkulu.

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