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## Effects of massage therapy on depression in post partum mothers

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### **ABSTRAK**

Latar Belakang: Depresi post partum adalah gangguan jiwa yang dapat terjadi setelah kelahiran bayi. Kejadian depresi post partum masih tinggi di Indonesia yaitu 11-30% sehingga menjadi prioritas utama dalam pelayanan kebidanan. Beberapa penelitian menyatakan bahwa depresi post partum disebabkan oleh faktor dukungan yaitu kurangnya dukungan sosial dari orang terdekat ibu, rasa tidak nyaman yang berkepanjangan setelah bersalin, nyeri pada luka perineum serta ketidaksiapan ibu secara psikologi untuk menjadi orangtua. Depresi postpartum berdampak tidak baik pada kesehatan ibu, anak dan keluarga. Ibu post partum yang mengalami depresi post partum akan menurunkan kemampuan dalam mengasuh anak, ketertarikan pada bayinya semakin kurang, tidak berespon baik/positif terhadap bayi dan ibu menjadi malas menyusui, sehingga akan mempengaruhi kesehatan, pertumbuhan dan perkembangan bayi. Salah satu upaya nonfarmakologi untuk mengatasi depresi post partum adalah massage therapy. Massage therapy bisa memperbaiki sirkulasi darah, mengurangi kegelisahan dan depresi, mempengaruhi aliran getah bening, otot, saraf dan saluran pencernaan serta stress.

**Tujuan:** Untuk mengetahui pengaruh massage therapy terhadap tingkat depresi ibu post partum.

Metode: Penelitian ini merupakan penelitian Quasy Experiment dengan Pre-Posttest Design With Nonequivalent Control Groups dengan responden sebanyak 58 orang ibu post partum. Responden dibagi menjadi kelompok intervensi dan kelompok kontrol. Pada kelompok intervensi akan diberikan massage therapy selama 1 kali dalam seminggu selama 4 minggu, sedangkan pada kelompok kontrol diberikan asuhan post partum secara umum. Kedua kelompok dilakukan pengukuran depresi post partum secara pretest-posttest menggunakan kuesioner Edinburgh Postnatal Depression Scale (EPDS). Data dianalisis menggunakan program komputer.

**Hasil:** hasil uji statistik menunjukkan bahwa ada perbedaan bermakna penurunan skor EPDS pada kedua kelompok (p value 0,000).

**Kesimpulan**: penelitian ini menunjukkan bahwa massage therapy efektif menurunkan kondisi depresi pada ibu post partum di di Puskesmas Mengwi I Kabupaten Badung.

KATA KUNCI: depresi; EPDS; nonkomplementer; pijat; postpartum

### **ABSTRACT**

**Background**: A mental illness known as postpartum depression can develop following the delivery of a child. It is a primary focus in midwifery care since postpartum depression still

occurs at a high rate in Indonesia, between 11% and 30%. The lack of social support from the mother's closest friends and family, the mother's continued discomfort after giving birth, the pain in her perineal wound, and her psychological unpreparedness for parenthood, according to several studies, are support factors that contribute to postpartum depression. The health of the mother, the baby, and the family are all negatively impacted by postpartum depression. Postpartum mothers who have postpartum depression will have a reduced capacity to care for children, less interest in their infants, and will not react well or favorably to infants. Mothers will also become sluggish.

Objective: To determine the effect of massage therapy on the level of depression in postpartum women.

Methods: This research is a Quasy Experiment with Pre-Posttest Design With nonequivalent Control Group with 58 postpartum mothers as respondents. Respondents were divided into the intervention group and the control group. The intervention group will be given massage therapy once a week for 4 weeks, while the control group will be given postnatal general care. Both groups were measured for post partum depression by pretest-posttest using the Edinburgh Postnatal Depression Scale (EPDS) questionnaire. Data were analyzed using a computer program.

Results: The results of the statistical test showed that there was a significant difference in the decrease in the EPDS score in the two groups (p-value 0.000).

Conclusions: This study shows that massage therapy is effective in reducing depression in postpartum women at the Mengwi I Health Center, Badung Regency.

**KEYWORD**: depression; EPDS; noncomplementary; massage; post-partum

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#### INTRODUCTION

The period after childbirth or better known as the puerperium is a critical period for a woman due to her psychological state which can interfere with the mother's mental health. Mothers will experience a process of psychological adaptation, namely the process of accepting a new role as parents. If this phase cannot be passed properly, a mother may experience postpartum depression. The incidence is 1 to 2 per 1000 births. About 50 to 60% of women who experience postpartum depression have their first child, and about 50% of women who experience postpartum depression have a family history of mood disorders (1).

According to research, the incidence of postpartum depression in the world occurs in 10-15% of women after giving birth. While in Indonesia 11-30%. Postpartum stress originates from physiological, psychological and environmental sources. As many as 45.3% of postpartum mothers experience stress originating from physiology. Physiological sources consist of discomfort in the abdominal area after giving birth, reduced rest time, wound care for sutures, postpartum blood and scars that don't heal properly. While the stress that comes from psychological as much as 48.4%. The causes of this stress are anxiety about changes in body appearance, lack of information about how to care for the baby, and less time to take care of yourself (2)

As many as 50% of postpartum mothers experience stress originating from the environment which consists of the mother's occupation, social support from those closest to her in the form of support that increases the mother's self-confidence and is caused by economic pressures and family needs since giving birth, baby. Postpartum depression negatively affects the health of mothers, children and families. In mothers it can be in the form of decreased ability to care for children, lack of interest in their babies, not giving a good/positive response to their babies and mothers becoming lazy to breastfeed, which will affect health, growth and development baby (3)

Based on a preliminary study conducted at the Mengwi I Health Center, 5 postpartum mothers on the 10th day often experienced sudden sadness, difficulty sleeping and tired quickly. According to the National Health Mental Association, what is felt by the postpartum mother is a sign of the symptoms of the postpartum mother experiencing depression. Efforts to treat postpartum depression in mothers include medication, psychological therapy, psychosocial and medication without drugs such as exercise, acupuncture and massage therapy.

The results of other studies explain that one of the efforts to reduce fatigue levels and reduce depression without medication is massage therapy (4). Massage has been known to have many health benefits. Massage performed with the proper technique during the postpartum period can improve the mother's recovery and thus increase milk production. Body massage is performed on postpartum mothers. Body massage can reduce anxiety and stress, relax muscles, improve circulation, improve digestion, and reduce pain. Body massage is the manual manipulation of the soft tissues of the body by pressing, rubbing, vibrating, or using the hands and fingers to improve the health of postpartum mothers. Giving massage gives an immediate effect, namely a sense of relaxation (5).

### **MATERIALS AND METHODS**

This research is a quantitative research with a Quasy Experiment research design with Pre-Posttest Design With Nonequivalent Control Groups involving a control group and a treatment group. This research was conducted at the Mengwi I Health Center. The population in this study were all postpartum mothers who were recorded in the registration book at the Mengwi I Health Center. The sample was calculated using the following population formula:

$$n = \frac{2\sigma^2(Z_{1-\alpha} + Z_{1-\beta})^2}{(\mu_1 - \mu_2)^2}$$

Based on calculations using the above formula, 65 respondents were obtained, then it was increased by 10% to anticipate the number of respondents who were absent to 72 postpartum mothers. This sample was divided into 2 groups, namely the control group and the treatment group, each group getting 36 respondents. The criteria for research respondents are based on inclusion and exclusion criteria. Inclusion criteria in this study were postpartum mothers on days 1-3, willing to be respondents by filling out the Consent After Explanation (PSP) sheet, being able to read and write. Exclusion criteria in this study were postpartum mothers who had a history of depression or mental disorders. Respondents in both groups will measure their level of depression using the Edinburgh Postnatal Depression Scale (EPDS).

After the initial measurements were taken for each respondent, the intervention group was given treatment in the form of massage therapy once a week for 4 weeks. The control group was given postpartum care according to the guidelines from the Ministry of Health. After 4 weeks of treatment, depression levels were measured again using the Edinburgh Postnatal Depression Scale (EPDS). Data were analyzed using statistical tests, where this analysis was used to compare pretest and posttest results. This research has received ethical approval from the Bina Usada Bali Health Research Ethics Committee with No: 082/EA/KEPK-BUB-2022.

# **RESULTS AND DISCUSSION RESULTS**

The characteristics of the respondents in this study can be seen in the following table:

**Table 1. Characteristics of respondents** 

		<u> </u>	
Characteristic		Group	— ρ
Characteristic	Control I (n=36)	Intervention in ( $n = 36$ )	
Age ( Years )			
x(SD)	27.31 (6.36)	28.83 (3.61)	
median	27.0	28.0	0.078*
Reach	21-34	21-35	
Education			
Lower than SMA	0	0	
Senior High School	23 (63.9)	21 (58.3)	0.809*
College or University	13 (36.1)	15 (41.7)	
Ditch y			
Primipara	18 (50.0)	22 (61.1)	0.477**
Multipara	18 (50.0)	14 (38.9)	0.477**
Work			
Housewife	15 (41.7)	13 (36.1)	0.809**
Working	21 (58.3)	23 (63.9)	
Complications			
Not	34 (94.4)	33 (91.7)	1,000**
Yes	2 (5,6)	3 (8,3)	
Countermeasures			
Maldaptive	2 (5,6)	3 (8,3)	1,000**
Adaptive	34 (94.4)	33 (91.7)	

Source: Primary Data

Based on **Table 1** it is known that there is no significant difference ( $\rho$ >0.05) in the two groups.

Table 2 . Analysis of differences in EPDS score reduction before and after treatment

Scor EPDS _	Group			ρ
	Control (n=36)	Intervention ( n =36)	_	
Pre Test				
x(SD)	9.19 (1.56)	9.53 (1.45)	0.337*	
median	9.0	9.0		
Reach	7-12	7-12		
Post Test				
x(SD)	8.42 (1.07)	7.56 (0.77)	0.000*	
median	8.0	7.0		
Reach	7-10	7-10		
Delta EPDS				
x(SD)	-0.78 (0.68)	-1.97 (0.94)	0.000*	
median	-1.0	-2.0		
Reach	-2 to 0	-4 to 0		

Source: Primary Data

Based on Table 2, a comparison of postpartum depression conditions was obtained based on the EPDS score. At the pretest it was known that the EPDS score in the control group was lower than the intervention group (9.19 (1.56); 9.53 (1.45), but there was no significant difference in the EPDS score before the study (p value 0.337 in posttest EPDS scores in the control group were higher than in the intervention group (8.42 (1.07); 7.56 (0.77)), statistical test results showed that there was a significant difference in EPDS scores after the study (p value 0.000 The decrease in the EPDS score was less in the control group than in the intervention group (-0.78 (0.68); -1.97 (0.94)), the results of the statistical test showed that there was a significant difference in the decrease in the EPDS score in the two groups (p value 0.000) These results indicate that massage therapy is effective in reducing postpartum depression at the Mengwi I Health Center, Badung Regency.

### **DISCUSSION**

This study showed that the average age of the control group was lower than the intervention group (27.31 (6.36); 28.83 (3.61)) but there was no significant difference in the mean age of the two groups (p value=0.078). ). The recommended maternal age during pregnancy is in the range of 20-35 years. At that time the mother was ready physiologically and psychologically. This is necessary for mothers in dealing with changes during pregnancy, childbirth, postpartum and breastfeeding. Pregnant women under the age of 20 can cause physiological and psychological complications and can even cause death. At the age of 35 over 35 years, physical condition has decreased so that the risk of complications is higher (5).

Unlike previous studies, maternal age does not always correlate with postpartum depression. Mothers who are not at risk may experience an increase in depression compared to mothers who are at high risk. This can happen because age is not always related to the mother's readiness to undergo the postpartum period and care for her baby (Wayani et al., 2014). The same thing was also in other studies, most of the postpartum women who experienced postpartum depression were women of non-risk age (21-34 years) as much as 80.9%. This shows that age does not always guarantee that the mother will have a stable emotional condition and avoid postpartum depression (7).

In this study it was found that most of them had secondary education and there was no significant difference between the two groups (p-value 0.809). The control group has 63.9% secondary education and the intervention group 58.3% has secondary education. The level of education affects the mother's knowledge, especially regarding care for pregnancy, childbirth, postpartum and breastfeeding. Mother's knowledge allows mothers to achieve optimal levels of reproductive health. Knowledge is related to education level, where mothers with higher education tend to have better knowledge about pregnancy and childbirth care (8).

In contrast to the research by Wahyuni, Murwati and Supiati, (2014) which stated that there was no relationship between education and the incidence of postpartum depression (p=0.452). Postpartum mothers with secondary education had 72.7% of postpartum depression and 63.2% of mothers with secondary education experienced postpartum depression.

This study showed that in the control group the number of primiparas and multiparas was the same (50%), while in the intervention group the majority were primiparas (61.1%). The statistical test results showed that there was no difference in parity in the two groups

Maternal parity is the number of births to the mother. Parity describes the mother's experience of the reproductive process. Primiparous mothers who are experiencing the puerperium for the first time can make it difficult for mothers to adapt

during the puerperium compared to multiparous mothers because they already have experience in the postpartum period. Past postpartum experiences can also affect the mother's perception of the postpartum period, therefore it is important for primiparous mothers to receive good care so that their psychological condition can be maintained. (10).

The results of previous studies stated that primiparous mothers experienced changes for the first time; such as physical changes, fatigue and pain after childbirth and hormonal decline, changes in interpersonal and work relationships, worrying about the health and care of the baby; so that mothers are more sensitive to emotional changes and stress triggers (11-13), as well as a correlation between maternal stress levels and depressive symptoms (11).

According to research by Elizabeth, Putri and Samangun, (2021) which explains that there is a significant relationship between parity and the incidence of postpartum depression. Multiparous postpartum women are more at risk of experiencing postpartum depression than primiparous postpartum women. This is because the fatigue factor in multiparous postpartum mothers is higher than that of primiparous mothers. The burden of multiparous mothers having responsibility for their previous children will make mothers tired compared to mothers with their first child

This study shows that most of the respondents work in both groups (p value 0.809). In the control group, 58.3% of the mothers worked, and in the intervention group, 63.9% of the mothers worked. Working for mothers is a regular activity in their daily lives to earn money. Mother's occupation will certainly be related to health conditions during pregnancy and breastfeeding her baby. Work also correlates with mother's time to rest. The more mothers work, the less time they have to rest. This certainly makes the mother tired so that it can have an impact on the risk of increased stress. However, being a housewife doesn't mean you don't have a job. Housewives have routines that require mothers to be responsible for their household chores. These activities sometimes have a higher burden so that the impact of stress can also be felt by housewives (6).

The results of the research Matinnia and Yazdi-ravandi, (2020) explained that working mothers can increase the risk of post-partum depression which is higher when compared to ordinary housewives. This is related to the double burden associated with taking care of the house and work outside the home. This workload causes mothers to be more tired than just ordinary housewives

This is different from research by Wahyuni, Murwati and Supiati, (2014) who in her research results explained that working mothers did not experience an increased risk of postpartum depression and the results were the same as housewives. In fact, housewives have a risk of postpartum depression 10 times greater than working mothers. A mother's self-confidence can diminish if she feels unable to cope and becomes frustrated because of her physical weakness.

In this study, it was seen that most of them had no history of complications of childbirth in both groups (p- value = 1,000). In the control group 94.4% of mothers had no history of complications, in the intervention group 91.7% of mothers had no history of complications. Previous studies have shown that history of childbirth is not associated with postpartum depression. This condition is supported by the results of the descriptive analysis, it was found that only 18.2% of mothers who gave birth experienced depression (9)

This study showed that most of the respondents had adaptive postpartum coping, in both groups there was no difference (p-value 0.000). Most of the control group had an adaptive response (94.4%). Most of the intervention group had an adaptive response (91.7%). In the

opinion of the researchers, the characteristics of postpartum women in both groups were the same in terms of age, education, parity and occupation. Based on age, most of the respondents were at an age that was not at risk of experiencing postpartum depression. Based on education, it was found that most of the respondents were at risk. Based on parity, it shows that most of the respondents are multiparous who are at risk of experiencing postpartum depression. Based on the results of the study showed that the risk of mothers in the intervention group was higher than the control group. The test results showed that the two groups were the same. This shows that the group is homogeneous and comparable

In this study, the pretest data showed that the EPDS score in the control group was lower than the intervention group (9.19 (1.56); 9.53 (1.45), but there was no significant difference in the EPDS score before the study (p -value 0.337) Postpartum depression is a depressive condition that generally occurs in women after giving birth. Symptoms that often occur include excessive feelings of sadness, difficulty getting joy, anxiety, fatigue and symptoms of sleep disturbances to the emergence of repeated thoughts of suicide. Symptoms it appears from the second week of labor to months and even persists (9). This depressive syndrome can also be characterized in mothers who have a history of depression during pregnancy, but these symptoms need to be separated between hormonal factors. The psychological state of postpartum depression is more atypical, triggered by cortisol withdrawal and associated with decreased cortisol levels (17).

Postpartum depression can have a devastating effect on the health of the mother, child and family. The impact of depression on postpartum mothers causes the ability of mothers to care for their children to decrease, mothers become less attentive to their children so mothers tend to be indifferent to their thoughts. The most severe impact is the ability of the mother to breastfeed will decrease because the mother is reluctant to breastfeed her baby. This will have an impact on the baby so that the success factors for exclusive breastfeeding are hampered and the growth and development of the baby is disrupted (18).

Factors causing postpartum depression is prolonged fatigue. During the postpartum period, a mother's physical condition is generally tired after giving birth, but she still has to take care of her child and family. This physical fatigue factor can also be a problem of psychological fatigue so that the mother is unable to carry out her duties as a mother. This condition of incompetence will actually worsen the mental health of the mother. Even mild physical fatigue can exacerbate and even lead to depression (19).

In this study, the EPDS scores in both groups were included in the postpartum depression category. Women who have an EPDS score between 5 and 9 without suicidal thoughts should be reevaluated after 2 weeks to determine whether the depressive episode has worsened or improved. EPDS performed in the first week in women who do not show symptoms of depression can predict the likelihood of postpartum depression at weeks 4 and 8. EPDS cannot detect neurosis, phobias, anxiety, or personality disorders, but can be done as a tool to detect the possibility antepartum depression. The sensitivity and specificity of EPDS are very good. By using a cut of point > 10 out of a total of 30, a sensitivity value of 64% and a specificity of 85% in detecting depression was obtained.

According to Restarina's research, (2017) It was stated that cases of postpartum depression in postpartum mothers were 55.8% in mothers who were not at risk. Cases were divided into 20.9% of mothers with mild depression, 15.1% of moderate depression and 8.1% of mothers with severe depression. This states that the case of postpartum depression is quite high. Mild

and moderate depression can be more easily managed with regular midwifery care and good family support. Mothers with major depression tend to need further treatment.

This is in line with research which shows that 33.3% of mothers experience symptoms of postpartum depression ranging from mild to moderate. The high prevalence of postpartum depressive symptoms is influenced by age, parity and social support in the postpartum period as well as physical condition factors that are not yet strong but the high burden of caring for children is one of the triggers for postpartum depression. . Respondents who received sufficient social support as many as 6 people (20%) and low 2 people (6.7%) tend to be more prone to experiencing postpartum depression even to a moderate level.

According to the researchers' assumptions, the average EPDS of postpartum women is in a state of mild depression. In general, mild depression can still be overcome with appropriate interventions to prevent more severe depression. Therefore, care interventions according to midwifery care standards alone are not enough to reduce postpartum depression. There is a need for complementary interventions that can be carried out by midwives to encourage the release of endorphins so that mothers feel more relaxed and reduce depression.

In this study the posttest data showed that the EPDS score in the control group was higher than the intervention group (8.42 (1.07); 7.56 (0.77)), the results of the statistical test showed that there was a significant difference in the EPDS score after study. (value 0.000). Several strategies in routine midwifery care are providing education to postpartum mothers in the form of: advising rest, motivating mothers to do relaxation therapy and providing support to both health workers and family support (21).

Mothers are also expected to be able to accept pregnancy and changes during pregnancy so that mothers can more easily deal with the postpartum period and the risk of postpartum depression is reduced (22). However, these interventions have not been able to completely reduce the symptoms of postpartum depression.

One form of complementary therapy that is easy to do is massage therapy for post partum mothers. This type of massage can be adjusted according to the needs of the postpartum mother. Massage can relax muscles, improve blood circulation, and reduce stress hormones. Massage also has a positive effect on people with depression and anxiety (23) . Anxiety that lasts a long time will increase the risk of depression.

According to previous research, Endorphin massage performed by husbands for postpartum mothers made a very good contribution in reducing maternal anxiety and increasing selfconfidence. (24) Also, massage is a great way to relieve pain without using drugs. Massage can make the body more relaxed, less painful and reduce the fatigue felt by the mother. This of course makes the mother more comfortable in carrying out her daily activities again (25).

Endorphine massage makes the muscles and nerves of the mother which were previously tense become more relaxed than before the massage. Muscle pressure on the postpartum mother will be reduced. Mothers will have energy again to care for their babies and prevent fatigue. Maternal fatigue is a trigger factor for postpartum depression. It can be concluded that massage is effective in preventing postpartum depression (26)

Massage will put pressure on acupressure points on the back aiming to send signals that balance the nervous system or release chemicals such as endorphins that reduce anxiety and stress. Activation of certain points by tapping along the meridian system, which is transmitted through large nerve fibers to the reticular formation, thalamus and limbic system will release endorphins in the body.

These results were supported by previous research which showed that mothers who were given massage by a therapist for 2 times a week with a duration of 30 minutes could have an impact on reducing symptoms of postpartum depression from 15 people (50%) who had normal conditions. increased to 23 people (76 people). .7%) people who have normal emotional conditions (26).

According to the researchers' assumptions, at the end of the study, the control group's EPDS score was higher than the intervention. This means that the control group still has an average of mild depression when compared to the intervention group, which has an average of almost normal. Massage therapy can scientifically reduce postpartum depression scores compared to standard midwifery care alone.

# The effect of massage therapy on postpartum depression at the Mengwi I Health Center, **Badung Regency**

In this study, the decrease in the EPDS score was less in the control group than in the intervention group (-0.78 (0.68); -1.97 (0.94)), the results of statistical tests showed that there was a significant difference in the decrease in the EPDS score in the control group, control, both groups (p value 0.000). These results indicate that the use of massage therapy is effective in reducing postpartum depression at the Mengwi I Health Center, Badung Regency

Some of the advantages or benefits of massage for postpartum mothers are: reducing pain, supporting uterine health, reducing tension, stress and anxiety, reducing nausea and stimulating peristaltic activity, encouraging deeper breathing and increasing deep breathing, reducing muscle tension, restoring posture balance, normalizes various joint movements, accelerates venous and lymph circulation, brings nutrition to tissues and removes toxic products from the body, reduces swelling, relieves phlegm and normalizes blood pressure, elevates

mood or mood, increases milk production, and encourages full maternal care, love, prepares the mother physically, emotionally and mentally to face the puerperium (28).

Decreased EPDS scores in mothers who detected postpartum blues were given endorphin massage because this massage increases the formation of endorphins in the descending control system and relaxes the muscles. Just below the surface of the skin, attached to the hair follicles, are smooth muscles called the erector pili. This muscle reacts to stimulation by the contractor. When this happens, the muscles pull on the surface of the hair, causing it to straighten and cause goosebumps, when goosebumps, in turn, help create endorphins in the brain, thus providing a relaxing and comfortable effect and reducing stress which is a symptom of postpartum blues with an EPDS score (29).

This is in line with the research of Murwati and Istigomah, (2015)dari delapan ibu yang melahirkan, empat diantaranya (50% which stated that there was a significant effect of massage therapy twice a week with a duration of 30 minutes on postpartum depression (p value = 0.000). This shows that 30 minutes of massage can increase endorphins so that mothers feel relaxed and reduce fatigue so that they are psychologically better.

It is supported by research which shows that there is a difference in the decrease in maternal depressive symptoms score of -6.46  $\pm$  4.16 in the intervention and -4.19  $\pm$  3.75 in the control with an average of 2.26. This proves that giving back massage has a significant effect on reducing maternal depression symptom scores in postpartum mothers compared to those who were not given back massage with p-value = 0.04 95% CI 0.05-4.47. Massage is an effective intervention and has many benefits. Intervention massage, especially back massage, can increase the release of the hormone oxytocin and increase relaxation and reduce anxiety in postpartum mothers. (30).

In the opinion of researchers, massage therapy interventions can cause a decrease in the EPDS score more than in the standard care group alone. The limitation of this study is that massage therapy is carried out by standard enumerators. However, after this research was completed, the massage therapy process was also stopped so that its long-term effects on postpartum mothers could not be known. Further research is needed to ensure the continuity of the effects of massage therapy in postpartum women so that postpartum depression can be fully managed properly.

### **CONCLUSION AND RECOMMENDATION**

There was no difference in the characteristics of the study subjects in the control group and the intervention group (p-value > 0.05). The average EPDS score in the control group was lower than the intervention group (9.19 (1.56); 9.53 (1.45), but there was no significant difference in the EPDS score before the study (p value 0.337). the control group was higher than the intervention group (8.42 (1.07); 7.56 (0.77)), the results of the statistical test showed that there was a significant difference in the EPDS score after the study (P value 0.000) The average decrease in the EPDS score was less in the control group than in the intervention group (-0.78 (0.68); -1.97 (0.94)), the results of the statistical test showed that there was a significant difference in the decrease in the EPDS score in the two groups (p value 0.000 Results This shows that massage therapy has an effect on reducing depression in postpartum women at the Mengwi I Health Center, Badung Regency.

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