International Journal Dental and Medical Sciences Research
Volume 3, Issue 6, Nov-Dec 2021 pp 286-290 www.ijdmsrjournal.com ISSN: 2582-6018

Self Help Psychological Intervention for Postpartum Depression Prevention in Pregnant Woman: A Pilot Study

Rini Asnuriyanti[1]; Syarifah Rauzatul Jannah[2]; Marlina[3]
[1]*Master of Nursing Science, Faculty of Nursing, Universitas Syiah Kuala, Aceh, Indonesia*
[2]*Department of Psychiatry and Mental Health Nursing, Faculty of Nursing, Universitas Syiah Kuala, Aceh, Indonesia*
[3]*Departement Emergency of Nursing, Faculty of Nursing, Universitas Syiah Kuala, Aceh, Indonesia*

Submitted: 01-12-2021 Revised: 11-12-2021 Accepted: 14-12-2021

ABSTRACT: Postpartum depression is a problem that women all over the world have. Indonesia is one of the developing countries that have a high rate of depression. Pregnant women must know what postpartum depression is and prevent it from happening. The study aims to determine the effect of Self-Help Psychological intervention prevention of postpartum depression in pregnant women.The research is a type of quantitative research using a quasi-experimental method consisting of 34 respondents in the intervention group and 34 respondents in the control group. The Self-Help Psychological intervention was given in two sessions consisting of education and skills sessions.The application of Psychological Self Help is effective in preventing postpartum depression and reducing the number of postpartum depressions.
KEYWORDS: Postpartum, Depression, Pregnant, Self Help, Psychological.

I. INTRODUCTION

The World Health Organization (WHO) in 2018 stated that more than 264 million people in the world experience depression, and nearly 800,000 people die by suicide every year due to depression. Of these depression rates, about 10% of pregnant women and 13% of women have just given birth. It is even higher in developing countries such as Indonesia, Malaysia, Vietnam, and others, at 15.6% during pregnancy and 19.8% after delivery. The following research conducted by (Mohamad Yusuff et al., 2015) stated that as many as 14.3% of mothers in Malaysia had experienced postpartum depression. Research in other developing countries states that at least 46.8% of pregnant women experience depression during pregnancy [1]**.**

In Indonesia, according to Basic Health Research (RISKESDAS) data in 2018, the prevalence of depression in the population aged over 15 years in 2013 was 6.1%, increasing to 9.8% in 2018. From the data, the prevalence of depression in women was 7.4%. A study conducted in Indonesia stated that postpartum depression was estimated at 22.3% [2]**.**

According to Brummelte and Galea,the causes of postpartum depression are hormonal changes and psychosocial distress that occur during pregnancy and after childbirth[3]. MeanwhileBrummelte and Galea mentions that the risk factors for postpartum depression are a history of psychopathology, including depression, PTSD, sexual harassment, domestic violence, the stress in life and anxiety during pregnancy, and the absence of social support[3]. Social determinants of health (SDoH), including poor marital status, low socioeconomic status, and stressful life, contribute to the increase in postpartum depression[4, 5].

Research conducted byTrivedi states that the impact of postpartum depression is emotional instability, guilt, dysphoria, confusion, and suicide[6]. Another study states that mothers with depression during pregnancy and after childbirth will experience emotional and cognitive changes [7]. Furthermore, the impact of postpartum depression is the presence of suicidal ideation. It is in line with the results of a study conducted by Tabb et al., in 2020, which stated that as many as 2.3% of mothers who experienced postpartum depression had the desire or idea to commit suicide [8].

Primary prevention needs to be done to reduce the incidence of postpartum depression, and the effort intervenes in the course of the disease before the onset of symptoms [9]. Preventive interventions are needed to prevent postpartum depression either individually or in groups or either in person or online, such as Mindfulness Therapy, Social Support, Peer Support, Self Help Group, and others. Based on research conducted by Lönnbergon pregnant women, it was found that mindfulness therapy can prevent the risk of postpartum depression and reduce stress levels in mothers both during pregnancy and after giving birth[10]. Another intervention to prevent postpartum depression is social support and peer support groups

International Journal Dental and Medical Sciences Research
Volume 3, Issue 6, Nov-Dec 2021 pp 286-290 www.ijdmsrjournal.com ISSN: 2582-6018

for pregnant women, which have been shown to significantly prevent postpartum depression [11, 12].

Another preventive effort that has been proven to prevent the risk of postpartum depression is psychological self-help, which is a type of psychological intervention that can affect mental activity, personality characteristics, psychological problems, and mood change disorders. A meta-analysis conducted by Lin showed that psychological self-help is effective in preventing and treating postpartum depression than other interventions and has the potential to be a method for treating postpartum depression[13]. Furthermore, the study also found that the psychological self-help method that was carried out face to face was more effective than other psychological self-help methods.

Based on the researchers' problems described above, it is necessary to have preventive efforts to prevent postpartum depression. In addition, the mental health system has not been effective, and the lack of knowledge about postpartum depression, especially for pregnant women and childbirth. For this reason, information is needed regarding the mother's knowledge about postpartum depression, its causes, symptoms, complications, how it differs from depression in general, and who is at risk for it. Furthermore, it is essential for mothers to know the best therapy for postpartum depression, how mothers can help themselves, and what can be done to prevent postpartum depression by using Psychological Self Help.

II. MATERIALS AND METHODS

The research is a quantitative research using a quasi-experimental method consisting of an intervention group and a control group. Researchers provide education and use psychological self-help in the intervention group and compare it with the control group. The population in the study were pregnant women in the working area of the Darussalam Public Health Centre in the District of Aceh Besar in 2021, totalling 155 pregnant women. The number or size of the sample in the study was determined based on Cohens Tables. by using two-tailed = 0.05, while the value of Cohens (d) = 0.05 on the large effect size. The number of samples obtained was 74 respondents consisting of 37 respondents in the intervention group and 37 respondents in the control group. The researcher used a purposive sampling method with inclusion criteria of pregnant women with gestational age 4-37 weeks, had a pregnancy check-up at the Darussalam Public Health Centre, District of Aceh Besar, physically and mentally healthy, able to communicate (read and write) and had no pregnancy complications.

The instrument in the study used the demographics and Edinburgh Postnatal Depression Scale (EPDS), consisting of 10 questions. Mothers were asked to do a checklist about the feelings they felt or were closest to their feelings during the last seven days. The study consisted of a pre-test and the intervention implementation using the A Self Help Guide module by the National Health Service (NHS) for two sessions, namely psychoeducation and skills; each session was given 45-60 minutes. Furthermore, researchers conducted a post-test at 21st days after the intervention was completed by re-measuring depression scores using the Edinburgh Postnatal Depression Scale (EPDS). The total length of the research is nine weeks and has been carried out in Darussalam, District of Aceh Besar.

Table 1. Content of a Self Help Guide sessions

Self Help Psychological	
Providing psychoeducation to pregnant women in preventing postpartum depression	Definition of postpartum depression Difference between depression and postpartum depression Causes of postpartum depression Postpartum depression signs and symptoms Who is at risk for postpartum depression What the therapies for preventing and treating postpartum depression are **Making daily plan** **Achievement and pleasure** **The ABC of changing feeling** **Balancing**
Teaching Skills	Progressive Muscle Relaxation

International Journal Dental and Medical Sciences Research
Volume 3, Issue 6, Nov-Dec 2021 pp 286-290 www.ijdmsrjournal.com ISSN: 2582-6018

III. RESULT

In the study, 74 pregnant women were recruited and divided into two treatment groups and a control group. Based on the study results, it was found that most of the respondents were over 30 years old, were in secondary education, and did not have a job. Furthermore, the respondent's gravida status was multigravida, and the gestational age was in the second trimester (Table 2).

In table 3, the researchers saw the difference in EPDS scores after psychological self-help intervention was carried out, and it was found that the Asymp.Sig.(2 Tailed) value was 0.000 and the Z value = -3.738. It shows a significant difference in depression scores at the pre-test and post-test in the treatment group after being given psychological self-help intervention.

Table 4 shows the results of the Mann-Whitney U test with a significance value of 0.002, which means that the p-value <0.05 describes the difference in depression scores after giving psychological self-help interventions. It can also be seen that there is a significant difference in the Mean Ranks of depression scores after the intervention; the intervention group has a higher rank than the control group (45.14 vs 29.86). There is a decrease in depression scores after giving psychological self-help intervention in the intervention group.

Table 2. Frequency and Percentage, of Demographic Characteristic of the Participants in the Intervention Group and Control Group

Variables	Intervention Group n = 34		Control Group n = 34	
	n	%	n	%
Age				
• < 30years	21	47.7	23	52.3
• 31-35 years	14	50.0	14	50.0
• 36-40 years	1	100	1	100
• > 40 years	1	100	0	0
Education				
• Low	2	33.3	4	66.7
• Middle	24	54.5	20	45.5
• High	13	54.2	11	45.8
CurrentJob				
• Not Working	27	50.0	27	50.0
• Civil Servant	4	30.8	9	69.2
• Private Employee	6	85.7	1	14.3
Gestational Age				
• Trimester II	22	47.8	24	52.2
• Trimester III	11	39.3	17	60.7
Number of Deliveries				
• Primi Gravida	18	50.0	18	50.0
• Multi Gravida	15	40.5	22	59.5
• Grande Gravida	1	100	0	0

Table 3: The Comparison of Mean Rank Differences ofDepression Score in Pregnant Women after the Self Help Psychological Intervention within the Intervention Group

	Intervention Group					Wilcoxon signed rank test
Variable	Ranks	n	MR	SR	Z	p- value
Score EPDS	Negative Ranks	4	7.38	29.50		
	Positive Rank	22	14.61	321.50	-3,738	0.000
	Ties	11				
	Total	37				

International Journal Dental and Medical Sciences Research
Volume 3, Issue 6, Nov-Dec 2021 pp 286-290 www.ijdmsrjournal.com ISSN: 2582-6018

Table 4: The Comparison of Mean Ranks Differences of Depression Score in Pregnant Women after the Self Help Psychological Intervention between the Intervention Group and the Control Group

	Intervention Group		Control Group		Mann-Witney U Test	p-Value
EPDS Score	n = 37		n = 37			
	MR	SR	MR	SR		
	45.14	1670.00	29,86	1105.00	402.000	0.002

IV. DISCUSSION

The results showed an effect of providing psychological self-help interventions to pregnant women in preventing postpartum depression. As many as 45% of pregnant women who had received the intervention experienced a decrease in depression scores. Psychological self-help is a psychological intervention that can influence mental activity, personality characteristics, psychological problems, and mood change disorders. Psychological self-help can be applied to pregnant women or after giving birth. Psychological self-help interventions that are carried out face to face are more effective in preventing depression in pregnant and postpartum women[13].

In general, psychological interventions are effective in reducing depressive symptoms and reducing rates of depression during the perinatal period (Branquinho et al., 2021; Kusuma et al., 2019; Lee et al., 2016). Psychological interventions are also assessed to reduce anxiety during pregnancy so that depression can be prevented [11, 12, 14, 15]. In addition, there was a decrease in depression scores in the intervention group due to the provision of complementary therapy, namely progressive muscle relaxation exercises. It is a relaxation therapy that tightens and relaxes the muscles in one part of the body to give a feeling of relaxation [16]. This exercise can significantly reduce stress and anxiety in pregnant women [17, 18].

These findings demonstrate the importance of psychological intervention in pregnant women and screening for depression during pregnancy. In line with the opinion of researchers from the American College of Obstetricians and Gynaecologists, who also stated that depression screening alone is not enough to reduce the rate of the disorder among pregnant and postpartum women, treatment recommendations and follow-up are also important as early detection of depression [19].

Only 10.8% of respondents have low education so that the provision of both psychoeducation and skill interventions has a significant effect on the expected results. Education can show the level of learning so that someone with a high education is considered good at receiving the information provided [20].

V. CONCLUSION

The application of psychological self-help is effective in preventing postpartum depression and reducing the number of postpartum depression. Researchers hope that the prevention of postpartum depression can be applied by screening for depression, providing psychoeducation and skills to pregnant women at health service providers.

VI. ACKNOWLEDGMENTS

Appreciation to all those who helped with the research. Pregnant women and health workers who are in the working area of the Darussalam Health Center, District of Aceh Besar, the Faculty of Nursing, Syiah Kuala University, Aceh, and all parties who have helped carry out the research.

REFERENCES

[1]. Phoosuwan, N., L. Eriksson, and P.C. Lundberg, Antenatal depressive symptoms during late pregnancy among women in a north-eastern province of Thailand: Prevalence and associated factors. Asian Journal of Psychiatry, 2018. **36**: p. 102--107.

[2]. Idaiani, S. and B. Basuki, Postpartum depression in Indonesia women: a national study. Health Science Journal of Indonesia, 2012. **3**(1): p. 3--8.

[3]. Brummelte, S. and L.A.M. Galea, Postpartum depression: Etiology, treatment and consequences for maternal care. Hormones and Behavior, 2016. **77**: p. 153--166.

[4]. Biaggi, A., et al., Identifying the women at risk of antenatal anxiety and depression: A systematic review. Journal of Affective Disorders, 2016. **191**: p. 62--77.

[5]. O'Hara, M.W. and K.L. Wisner, Perinatal mental illness: Definition, description and aetiology. Best Practice and Research: Clinical Obstetrics and Gynaecology, 2014. **28**(1): p. 3--12.

[6]. Trivedi, D., Cochrane Review Summary: psychosocial and psychological interventions for preventing postpartum depression. Primary health care research & development, 2014. **15**(3): p. 231--233.

[7]. Rutherford, H.J.V., et al., Emotion regulation in parenthood. Developmental Review, 2015. **36**: p. 1--14.
[8]. Tabb, K.M., et al., Racial differences in immediate postpartum depression and suicidal ideation among women in a Midwestern delivery hospital. Journal of Affective Disorders Reports, 2020. **1**(September): p. 100008.
[9]. Zhang, Y., et al., Development and validation of a machine learning algorithm for predicting the risk of postpartum depression among pregnant women. Journal of Affective Disorders, 2021. **279**(June 2020): p. 1--8.
[10]. Lnnberg, G., et al., Effects of a mindfulness based childbirth and parenting program on pregnant women's perceived stress and risk of perinatal depression–Results from a randomized controlled trial. Journal of Affective Disorders, 2020. **262**(March 2019): p. 133--142.
[11]. Shorey, S., et al., Evaluation of a technology-based peer-support intervention program for preventing postnatal depression (Part 1): Randomized controlled trial. Journal of Medical Internet Research, 2019. **21**(8).
[12]. Zamani, P., et al., The correlation between perceived social support and childbirth experience in pregnant women. Midwifery, 2019. **75**(2019): p. 146--151.
[13]. Lin, P.Z., et al., Effectiveness of self-help psychological interventions for treating and preventing postpartum depression: a meta-analysis. Archives of Women's Mental Health, 2018. **21**(5): p. 491--503.
[14]. Nillni, Y.I., et al., Treatment of depression, anxiety, and trauma-related disorders during the perinatal period: A systematic review. Clinical Psychology Review, 2018. **66**(June): p. 136--148.
[15]. Ponting, C., N.E. Mahrer, and H.a. Zelcer, Psychological interventions for depression and anxiety in pregnant Latina and Black women in the United States: A systematic review. Clinical Psychology and Psychotherapy, 2020. **27**(2): p. 249--265.
[16]. Ahmadi, T., L. Shabani, and M. Sabzalian, Ahmadi et al., 2020. Protoplasma, 2020.
[17]. Mawardika, T., U. Aniroh, and P. Lestari, Penerapan Relaksasi Otot Progresif Terhadap Penurunan Kecemasan Ibu Post Partum. Jurnal Keperawatan, 2020. **12**(2): p. 277--286.
[18]. Smith, C.A., et al., The effect of complementary medicines and therapies on maternal anxiety and depression in pregnancy: A systematic review and meta-analysis. Journal of Affective Disorders, 2019. **245**: p. 428--439.
[19]. Gorman, J., Postpartum Depression and Opinions on Screening. Master of Social Work Clinical Research Papers, 2017.
[20]. Kettunen, J., Career practitioners' conceptions of social media and competency for social media in career services. 2017.