ORIGINAL ARTICLE

Spiritual Dhikr Reduces Stress and Depression Symptom on *Primigravidas*

SRI WAHYUNI[1, 2]*, ANIES[3], ARIAWAN SOEJOENOES[4], *SUHARTONO TAAT PUTRA[5], M. AMIN SYUKUR[6]*

ABSTRACT

Background: The women are more prone to stress due to circumstances during the first pregnancy.
Aim: To explore the effect of spiritual dhikr on stress and depression symptom in p*rimigravidas*.
Methods: This study was a pretest posttest controlled group trial design, conducted in Community Health Centres. A number of 30 participants received routine midwifery care plus spiritual dhikr, while a number of 27 just received routine midwifery care. All participants completed the Perceived Stress Scale (PSS) and the Edinburgh Postnatal Depression Scale (EPDS). Stress and depression symptoms measured at baseline and one week before due date of childbirth.
Results: The results showed a decrease of PSS score from 24.43 to 20.60 whereas in the control group there was an increase of PSS score from 24.26 to 27.37 (p=.001). There was a decrease mean of EPDS score from pretest to posttest in the intervention group, that was 9.37 to 8.20 in the intervention group, while in the control group there was an increase the score from 9.26 to 10.15 (p=.004).
Conclusion: This study found reduction of stress and depressive symptoms in *primigravidas* who received routine midwifery care plus spiritual dhikr. It is important for midwives to add the spiritual aspect for providing comprehensive midwifery care for the pregnant women.
Key words: stress, depression, spiritual dhikr.

INTRODUCTION

Primigravidas; mother who first became pregnant; are susceptible to stress that a result of changing during pregnancy. Circumstances like anxiety and fear before childbirth, low rates of self-esteem and social support, residential mobility, abuse before/during pregnancy, and experiencing discrimination were significantly affect stress[1]. The women experience some enormous changes as a consequence of the pregnancy leading to a variety of the psychological responses, and this response may range from short-term mood fluctuations to long-term depression. The study concluded that some factors may contribute as the causes are including occupational and family support[2] and negative thoughts in the third trimester of pregnancy[3].

The transition period requires not only physical, psychological, and social readiness, but also an attitude of willingness to accept changes during pregnancy, and be enhanced by providing holistic care. Meanwhile, spiritual holistic psychological care has not been comprehensively as a procedure in the midwifery care of pregnant women, even though is an integral component of holistic care to optimize the women health from pregnancy to childbirth. It is needed the addition of spiritual aspect in midwifery care, so as to improve maternal health, prevent physical health problems caused by psychological problems.

Several strategies have been undertaken to improve interventions such as adding the spiritual aspects and integrating religious elements into interventions[4], which the approaches using belief and spirituality are identified as relevant sources during the pregnancy and childbirth in dealing with stress, difficult situations and insecurities[5].

The spiritual approach is effective in calming the soul, improving the attitude of sincerity and engaging the patient for returning to nature as a human being composed of physical and spiritual elements.[6] Research suggests that the period of pregnancy, childbirth and motherhood is a condition to be closer to God and make life more meaningful with the use of religious beliefs as a powerful coping mechanism[7].

Some studies have concluded that religious instruction was shown to increase religious knowledge and attitudes, and reduces postpartum blues[8] peer activity and spirituality during pregnancy are a protective factor against postpartum depression symptoms and help to deal with early stress in motherhood[9] and up to the next year[10].

Dhikr which has other terms *Zikr, Zekr* and *ḏikr*; that has meaning remembrance, constitutes a ritual of worship that is taught by Islam to remember and get closer to the God in which short phrases or prayers through repeatedly recited silently within the mind or aloud, body movements or vibrations of the heart with resignation and sincerity that contains the meaning of prayer, praise, expression of gratitude to the God, not limited to time and certain readings. Dhikr can be promoted as fostering psycho-physical well-being and incorporated as a possible therapy to practice.[11] Dhikr means remembering, understanding or presenting something through words, thoughts or deeds to get closer to God through resignation, surrender or sincerity[12]

In this research, spiritual dhikr intended to reduce stress during third trimester of pregnancy and before childbirth. Dhikr is expected to enhance calmness, patience, self-control and gratitude, thus increasing positive emotions in mothers who cannot adapt to changes in

[1]*Doctorate of Medical Science / Health Faculty of Medicine Diponegoro University.*
[2]*Midwifery Department of Health Polytechnic of Surakarta. Jl. Ksatrian no. 2 Danguran Klaten, Central Java Indonesia 57425.*
[3]*Faculty of Medicine Diponegoro University Indonesia.*
[4]*Faculty of Medicine Diponegoro University Indonesia and Department of Obstetrics and Gynaecology Dr. Kariadi Hospital Central Java Indonesia.*
[5]*Faculty of Medicine Diponegoro University Airlangga University.*
[6]*Faculty of Ushuluddin and Humaniora Islamic University of Walisongo Indonesia.*
Correspondence to Sri Wahuni E-mail: yuni_punung@yahoo.com. Tel: +628122641459,

pregnancy. This preliminary study aims to explore the effect of spiritual dhikr for stress and depression symptom in p*rimigravida*s.

METHODS

This study is a pretest posttest randomized control group design to explore stress and depression symptoms. The measurement of stress and depression symptoms was done before training. Participants had received grouped training on dhikr in the third trimester pregnancy, to obtain baseline similarity to materials and intervention methods. The two times training took 50-60 minutes each guided by the Islamic religious experts that gave an explanation of interventions based modules. The module included some *surrah* at the Al-Quran, *Sholawat* Prophet Muhammad, several names of God (*Asmaul Husna*), and *Thayyibah* sentences.

The intervention group was administered with two types of interventions: a routine midwifery care based on national guideline and a spiritual dhikr. Participants received twice sessions of the spiritual dhikr, guided by the midwives trained using the module. Each session was lasting for 45-60 minutes. The control group was administered with a routine midwifery care. The posttest was conducted one week before the due date of childbirth to measure stress and depression symptoms.

We applied the following inclusion criteria: normal third-trimester pregnant women and who can read and write in Indonesian. The participants who were on treatment for depression symptoms were excluded from the study.

The permission was asked to the health centre, and then, based on the recommendation of midwives, participant recruitment was conducted. Researchers explained the research objectives, benefits and consequences orally and written to the participants and to provide the participants the opportunity to decide to participate in the study.

The eligible participants of 75 pregnant women on the third pregnancy were recruited from the six Community Health Centres in Klaten Indonesia. The number of 57 participants met the inclusion criteria, randomly allocated to either an intervention or a control group and followed up as participants by signing the informed consent in written by author, who had no professional relationship with the participants.

This study started from the third trimester of pregnancy up to one week before due date of childbirth. The participants completed two questioners: the Perceived Stress Scale (PSS) and the Edinburgh Postnatal Depression Scale (EPDS). Perinatal stress was measured using PSS[13]; which is psychological instruments most widely used to measure stress perception; comprised 10 items, each item was rated on a 5-point scale ranging from never (point 0) to almost always (point 4). The items were scored positive sentence overturned and then summed, with a higher score indicates more stress that is felt. Total score get categorized into: a score ≤18 mild stress, moderate stress score of 19-37, and a score of ≥ 38 severe stress.

Symptoms depression was measured by EPDS[14], comprised 10 items, choice answers should have one according to gradation of maternal feeling. The results obtained are normal ≤10, mild depression 10-12, moderate depression ≥13, and severe depression ≥15. Data collection has been helped by 6 enumerators that have equality of perception by following trainings three times.

Ethical Consideration: Ethical clearance of the study was obtained from the Ethics Commission on Health and Medicine Research at the Faculty of Medicine Diponegoro University - Dr. Kariadi Hospital Central Java Indonesia. All participant was signed the informed consent in Bahasa.

Statistics: Data were tested to compare mean of the two variables before and after interventions in two groups. Statistical analysis was done using SPSS IBM version 20.

RESULTS

Participant Demographics: A total of 57 pregnant women followed the research to completion, 30 for the intervention group and 27 pregnant women for the control group. Table 1 shown a total of 57 participants were included in this study. Participants were primarily in the low-risk age, high school graduate, not working, and household income less than the regional minimum wage.

Table 1: Demography of pregnant women.

Participant Characteristics	**Intervention Group N=30**	**Control Group N=27**	***P value***
	Median (min-max)	**Median (min-max)**	
Age (years)	23(19-33)	23 (16-34)	0.285*
Education: *Elementary *Junior School *Senior High School *College	 1(3.3%) 5(16.7%) 21(70%) 3(10%)	 2(7.4%) 1(3.7%) 22(81.5%) 2(7.4%)	0.380+
Occupational: *Working *Not working	 9(30%) 21(70%)	 8(29.6%) 19(70.4%)	0.976+
Household Income: *≤ Regional Min. Wage *>Regional Min. Wage	 19(63.3%) 11(36.7%)	 16(59.3%) 11(40.7%)	0.752+

*Mann Whitney U test +Pearson Chi-Square

Table 2: Comparison of PSS and EPDS Score of pregnant women.

Variables	**Intervention Group**	**Control Group**	**p**
PSS			
Mean±SD (pretest)	24.43±5.538	24.26 ± 4.417	
Mean±SD posttest)	20.60 ± 3.962	27.37 ± 4.235	<0.001*
Mean±SD	-3.83 ± 3.075	3.11 ± 5.416	
EPDS			
Mean±SD (pretest)	9.37±3.508	9.26±3.071	
Mean ±SD (posttest)	8.20±3.044	10.15±2.492	0.004+
Mean ± SD (∆)	-1.167 ± 2.829	0.889 ± 3.068	

*Independent samples test +Mann-Whitney Test

The PSS Score: It can be seen in table 2 that the intervention group who received routine midwifery care plus the spiritual dhikr experienced a decrease in PSS mean score compared to the control group who only received routine midwifery care. The results show a decrease of means score of PSS from the first measurement to the last measurement that were 24.43 to 20.60 in the intervention group, with the mean difference (∆) was -3.83.

Whereas in the control group there was an increase of means score of PSS from 24.26 in the first measurement to 27.37 in the last measurement, with the mean difference (∆) was 3.11. Based on the independent samples test on the mean difference known that it showed a statistically significant difference ($p<0.001$).

The EPDS Score: Tables 2 showed that there was a decrease mean score EPDS in the intervention group compared with the control group. The EPDS data were Log10 transformed prior to analysis in order to satisfy the normality assumption of the statistical tests. In the intervention group there was a decrease in means EPDS score from the first measurement to the last measurement that were 9.37 to 8.20. The test results revealed the mean difference (∆) of EPDS score was -1.16.

DISCUSSION

This study found a decrease in stress and depressive symptom in pregnant women who received intervention routine midwifery care plus a spiritual dhikr. The results of this study support previous researches that links religiosity and spirituality with better mental health especially for pregnant women.

Stress during the third trimester of pregnancy The stress during pregnancy in this study was represented by the PSS score. There was a decrease in the PSS score during the third of pregnancy up to one week before due date of childbirth on the *primigravidas* who received the routine midwifery care plus spiritual dhikr. This finding on maternal stress is consistent with previous research studies that found the participants' stress level decreased gradually during the third trimester[15].

The results of adding coping skills training during pregnancy had significant influence to decrease the stress level[16] and also relaxation training with dhikr can be used as a way to reduce pregnancy anxiety of first pregnant women[17]. Religiosity and spirituality are associated with decreased anxiety in pregnant women[18]. Religious spiritual beliefs and practices contribute to positive emotions and are an important way that people cope with stress and can help patients to improve emotional adjustment and maintain expectations, goals and meanings[4].

On the other hand, there was increasing in PSS score during the third of pregnancy up to one week before due date of childbirth on the *primigravidas* who just received the routine midwifery care. Pregnancy before childbirth is a condition that puts the mother at risk of stress. It is due to not only physical changes, but also required psychological readiness before delivery. The third trimester of pregnancy up to delivery period leads changing emotional due to anxiety, fear, and feel uncomfortable on conditions upcoming delivery, and several strategies have been undertaken to improve interventions such as adding spiritual aspects and integrating religious elements into interventions[4,19] however there was no association between religiosity and anxiety encountered childbirth[20.]

Therefore by adding of spiritual dhikr on the routine midwifery care increased the pregnant women knowledge and experience gained from the information, understanding and meaning of reading and practice of the dhikr, thus reducing the stress of the pregnant women.

Depressive Symptom during the third trimester of pregnancy: This study used the EPDS as a questionnaire for early screening of depressive symptom in pregnant women. The study findings showed a decrease in the EPDS score during the third of pregnancy up to one week before due date on the *primigravidas* who received the routine midwifery care plus spiritual dhikr. This finding on depressive symptom has been consistent with previous research studies that found the participants' depressive symptoms level decreased slowly start from the beginning of third trimester of pregnancy[15].

Although the findings of depression symptoms in this study were not statistically significant, but at least there was a decreasing trend of EPDS scores on the *primigravidas* who received the routine midwifery care plus spiritual dhikr. Dhikr becomes a medium for soul therapy, remembering the God bring happiness, reassurance, and act as heart disease medicine, which can prevent spiritual emptiness and psychiatric disorders.[12] Spirituality is associated with health for women such as increased perceptions of health status[21], decreased anxiety in pregnant women[18] involvement of doctors and religious leaders raises awareness about postpartum depression.[22] Women with fertility issues use religious coping strategies tend not to experience symptoms of depression[23] and Islamic dhikr has a considerable immediate short-term effect to reduce depression, anxiety and stress in mothers of the Congenital Heart Disease patients[24].

The involvement of religion in mental health through several mechanisms, which is to promote healthy behavior and lifestyle, social support, belief system and frame of mind to improve adaptive coping, improve religious practice, give spiritual direction and meaning of life.[25] Midwifery care with empathy and spiritual emphasis are an important aspect of creating a positive experience in childbirth and breastfeeding, as providing services for mothers can foster self-confidence as mothers, because labor is a natural peak process that makes it possible to embed deep into the mother's psyche.

On the contrary, there was increasing in EPDS score during the third of pregnancy up to one week before due date of childbirth on the *primigravidas* who just received the routine midwifery care. The women experience some enormous changes as a consequence of the pregnancy leading to a variety of the psychological responses, and this response may range from short-term mood fluctuations to long-term depression.

However, the decrease of mean of the EPDS scores may be related to improving the ability of the mothers to adapt during pregnancy, however the results revealed the fact that a decreased the EPDS scores was accelerated or corrected by the addition of the spiritual dhikr in the routine midwifery care. It was proved that the intervention group showed a lower the EPDS score compared with the control

group.

There were outliers on the PSS difference scores in the control group and on the EPDS difference scores in both the intervention group and the control group, it could be because of the small number of samples in this study. The symptoms of depression in this study were measured using the EPDS which was only an early screening for perinatal depression and not followed by other diagnostic confirmations, so it is possible to bias in the classification of depression levels, but the EPDS is a widely validated and accepted screening tool with good sensitivity and specificity, and easy to use by the midwives.

CONCLUSION

[

Using pretest posttest randomized control group design, this preliminary study represented the decrease both stress and depressive symptoms during pregnancy. This research may useful for the pregnant women, considering the spiritual dhikr can increase faith and devotion of pregnant mother along with increasing need of additional spiritual aspect in health service especially midwife services. It is important for the midwife not only provide care for physical and psychological health, but also add the spiritual aspect for providing comprehensive midwifery care for the pregnant women.

Acknowledgements: The authors would like to thank to the pregnant women and midwives in the six Community Health Centres in Klaten Indonesia who have participated in this research, and also to Mr. M. Sholeh, S.Ag (the Islamic religious experts) who has helped the authors in training respondents and midwives. There is no conflict of interest.

Grant Support & Financial Disclosures: None.

REFERENCES

1. Rieger KL, Heaman MI. Factors Associated With High Levels of Perceived Prenatal Stress Among Inner-City Women. JOGNN - J Obstet Gynecol Neonatal Nurs [Internet]. Elsevier Inc; 2016;45(2):180–95. Available from: http://dx.doi.org/10.1016/j.jogn.2015.12.005
2. Wahyuni S, Murwati, Supiati. Faktor Internal Dan Eksternal Yang Mempengaruhi Depresi Postpartum. J Terpadu ilmu Kesehat. 2014;3(2):94–8.
3. Bos SC, Macedo A, Marques M, Pereira AT, Maia BR, Soares MJ, et al. Is positive affect in pregnancy protective of postpartum depression? Rev Bras Psiquiatr. 2013;35(1):5–12.
4. Hefti R. Integrating Religion and Spirituality into Mental Health Care, Psychiatry and Psychotherapy. Religions. 2011;2:611–27.
5. Büssing A, Waßermann U, Christian N, Längler A, Thiel M. Spiritual needs of mothers with sick new born or premature infants — A cross sectional survey among German mothers. Women and Birth. Australian College of Midwives; 2017;
6. Syukur MA. Sufi Healing: Terapi dalam Literatur Tasawuf. Walisongo. 2012;20(2):391–412.
7. Callister LC, Khalaf I. Spirituality in childbearing women. J Perinat Educ. 2010;19(2):16–24.
8. Akbarzadeh M, Mokhtaryan T, Amooee S, Moshfeghy Z, Zare N. Investigation of the effect of religious doctrines on religious knowledge and attitude and postpartum blues in primiparous women. Iran J Nurs Midwifery Res. 2015;20(5):570–6.
9. Mann JR, McKeown RE, Bacon J, Vesselinov R, Bush F. Do antenatal religious and spiritual factors impact the risk of postpartum depressive symptoms? J Womens Health (Larchmt). 2008;17(5):745–55.
10. Cheadle AC., Schetter CD, Lanzi RG, Vance MR, Sahadeo LS, Shalowitz M. Spiritual and Religious Resources in African American Women: Protection from Depressive Symptoms Following Birth. Clin Psychol Sci. 2015;3(2):283–91.
11. Saniotis A. Understanding Mind/Body Medicine from Muslim Religious Practices of Salat and Dhikr. J Relig Health. 2015;(May).
12. Syukur MA. Kuberserah: Kisah Nyata Survivor Kanker yang Divonis Memiliki Kesempatan Hidup Hanya Tiga Bulan. 1st ed. Jakarta: Noura Books; 2012. 99-117 p.
13. Cohen S, Kamarck T, Mermelstein R. A Global Measure of Perceived Stress. Vol. 24, Journal of Health and Social Behavior. 1983. p. 385–96.
14. Cox JL, Holden JM, Sagovsky R. Detection of postnatal depression. Development of the 10-item Edinburgh Postnatal Depression Scale. Br J Psychiatry. 1987;150(6):782–6.
15. Liou S, Wang P, Cheng C. Longitudinal study of perinatal maternal stress, depressive symptoms and anxiety. Midwifery. Elsevier; 2014;30(6):795–801.
16. Runjati, Susanto H, Sawitri DR, Thaufik S. The effect of antenatal class plus coping skill training on the level of stress and childbirth self-efficacy. Adv Sci Lett. 2017;23(4):3329–33.
17. Maimunah A. Pengaruh Pelatihan Relaksasi Dengan Dzikir Untuk Mengatasi Kecemasan Ibu Hamil Pertama. Psikol Islam. 2011;8(1):1–22.
18. Mann JR, McKeown RE, Bacon J, Vesselinov R, Bush F. Religiosity, spirituality and antenatal anxiety in Southern U.S. women. Arch Womens Ment Health. 2008;11(1):19–26.
19. Bahar Z, Okcay H, Ozbicakci S, Beser A, Ustun B, Ozturk M. The Effects of Islam and Traditional Practices on Women's Health and Reproduction. Nurs Ethics. 2005;12(6):557–70.
20. Surbakti T, Joan GA, Ricky R. Hubungan religiusitas dengan kecemasan menghadapi partus pada ibu nullipara di wilayah kerja Puskesmas Parongpong Kabupaten Bandung Barat. J Sk Keperawatan. 2017;3(1):31–6.
21. Musgrave CF, Allen CE, Allen GJ. Spirituality and health for women of color. Am J Public Health. 2002;92(4):557–60.
22. Mohamed HA, Spencer SL, Al Swasy AH, Swidan SE, Abouelenien MS. A social and Biological Approach for Postpartum Depression in Egypt. Woman - Psychosom Gynaecol Obstet. 2014;1(C):30–9.
23. Aflakseir A, Mahdiyar M. The Role of Religious Coping Strategies in Predicting Depression among a Sample of Women with Fertility Problems in Shiraz. 2016;17(2):117–22.
24. Mirzaei T, Nematollahi M, Sabzevari S. Short Term Effects of Islamic Zikr on Anxiety , Stress , and Depression in Mothers of Children with Congenital Heart Disease. 2015;10(4):1–5.
25. Moreira-Almeida A, Lotufo-Neto F, Koenig HG. Religiousness and mental health: a review. Rev Bras Psiquiatr. 2006;28(919):242–50.