International Journal of Medical Science and Clinical Research Studies

ISSN(print): 2767-8326, ISSN(online): 2767-8342

Volume 03 Issue 04 April 2023

Page No: 788-791

DOI: https://doi.org/10.47191/ijmscrs/v3-i4-40, Impact Factor: 6.597

The Effectiveness Yoga-Based Mindfulness on Quality of Life in Pregnant Women

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ABSTRACT

Background and Objectives: Pregnancy is considered a sensitive period in women's life, which is associated with many physical and psychological changes, and each person deals with it differently. Countless studies have confirmed the relationship between stress and anxiety during pregnancy and the mental and physical health of the child. The effectiveness of yoga –based mindfulness on quality of life in pregnant women.

Methods and Materials: The present study was semi-experimental design with pre-test and post-test with control group. The statistical population of this study included all pregnant women referred to Iranian maternal health midwifery clinic in 1401, 30 of these subjects, were selected and randomly assigned (Each has equal chance of being elected) to two groups. Both groups were pre-test and post-test before and after the intervention. The experimental group received 16 sessions of 75 minutes (weekly 3 sessions) under yoga practice. Data collection tools include demographic characteristics and Short form 36 (SF-36) quality of life questionnaire. The collected data were analyzed by covariance analysis using spss-24.

Results: The findings showed that the effectiveness of yoga-based mindfulness treatment had a greater impact on quality of life (P=0/002 ،F=5/969) in pregnant women.

Conclusion: Therefore, it can be concluded that yoga can be used as a convenient, affordable and low-cost treatment for improving the quality of life of pregnant women.

KEYWORDS: Mindfulness based on yoga, quality of life, pregnancy

ARTICLE DETAILS

Published On:
30 April 2023

Available on:
https://ijmscr.org/

INTRODUCTION

The health of pregnant women in any society is among the priorities of that society and is of great importance. Recent studies have shown that more than 90% of women experience some degree of anxiety during pregnancy, and in 20% of women, these stresses are severe(1). Although pregnancy is a common event among women of reproductive age, it is often considered a stressful period with physiological and psychological changes, and these changes can change a woman's ability to perform the usual roles of life (2). Many changes occur during pregnancy in terms of physical, mental, and social health and overall in the quality of life of pregnant women at different ages of pregnancy. Even in a normal pregnancy, these changes change a woman's ability to perform the usual roles of life. During pregnancy, many biological, chemical, physiological and anatomical changes occur in women's bodies. Fatigue, nausea, vomiting, headache, and shortness of breath are among the complications that affect pregnant women(3). These changes are beyond the control of mothers and are considered the first changes that make them mentally and physically vulnerable. In other words, during pregnancy, the physical, mental and social health and overall quality of life of pregnant women undergo many changes (4).

Pregnancy is considered to be a vulnerable period for women, which makes mothers face new problems and difficulties, and these problems may cause disturbances in their mental health and quality of life (5, 6). Quality of life has a multidimensional and complex concept and includes objective and subjective factors and is often defined as a specific understanding of satisfaction in life, physical health, social and family health, hope, social etiquette and mental health of the individual (7-9).

The quality of life during pregnancy can be measured. The presence of anxiety during this period causes the quality of life of mothers to decrease and the health of the mother and the fetus are at risk under the influence of this anxiety. Therefore, in order to reduce anxiety and improve the quality of life of the mother and the health of the baby, interventions should be made to reduce anxiety(10, 11). The result of Zahedi et al.'s study (2014) showed that the average score of the quality of life of pregnant women in different dimensions of health status was from moderate to high, and the average score of the quality of life during pregnancy was lower in mothers with two pregnancies and unwanted pregnancies. With one pregnancy and a desired pregnancy(12). Evidence shows that mental treatments such as mind care, mindfulness, meditation and yoga are widely used in many countries to reduce or control the psychological effects of stress and anxiety(13).

One of the ways to reduce anxiety is mindfulness therapy. Although the roots of mindfulness go back to Eastern countries, the benefits of mindfulness and meditation have almost entered the mainstream of science, and the scientific community has confirmed a positive relationship between mindfulness and meditation with reducing anxiety (14). Since the late 1970s, more than 1,000 medical and psychological studies have been published on mindfulness, demonstrating its validity and wide application. Surveys conducted by the Mental Health Foundation (MHF) in 2010 showed that 75% of people in England believe that mindfulness is beneficial for patients with mental health problems. In addition, recent findings show that interventions based on mindfulness can be effective in the treatment of many psychological disorders and psycho-physical diseases (15).

Considering that the physical conditions during pregnancy can affect the quality of life of mothers and the combination of mindfulness therapy with yoga is suitable for reducing this problem because research has shown that performing gentle exercises and yoga techniques during pregnancy and Breastfeeding helps to reduce during this period. According to the researcher's experience in providing services to these patients, this study was conducted with the aim of "investigating the effectiveness of yoga-based mindfulness therapy on the quality of life of pregnant women".

MATERIALS AND METHODS

In this experimental research of pre-test-post-test type with the control group, the statistical population included 30 pregnant women who referred to the midwifery clinic of the health of Iranian mothers in the city of Mashhad between April 1st and the end of July 2022, which were selected using a purposive sampling method. were chosen. The criteria for entering the study included women who were 14 to 32 weeks pregnant, aged 19 to 40 years, and had not been treated during the last two months under psychiatry and pain medication. which happens during treatment. The study tool included demographic characteristics and a 36-question quality of life questionnaire (SF-36). Demographic characteristics of North San; The level of education, type of pregnancy, etc.

Short form 36 (SF-36) quality of life questionnaire

The quality of life questionnaire included the following components: general health (GH): 6 questions; Physical health (PH): 10 questions; Mental health (MH): 6 questions; Social Functioning (SF): 2 questions; Body pain (BP): 2 questions; The role of physical health in limiting activities (RP): 4 questions; The role of emotional health in creating activity limitation (RE): 3 questions; Vital Energy (VT): 3 questions (12-15). The SF-36 questionnaire has already been translated, validated and standardized for Iranian people by Montazeri et al(Persian version(1,2).

From the integration of the subscales, two general subscales named physical health and mental health are obtained. In Iran, this form was translated into Farsi by Montazeri et al. (2005) and standardized on 4163 people aged 15 years and above (average age 35.1 years), 52% of whom were women. The reported reliability coefficient for the subscales ranged from 77% to 90%, except for the head of life subscale, which was 65%. Overall, the findings have shown that the Iranian version of this questionnaire is a suitable tool for measuring the quality of life. This questionnaire contains 36 questions and measures the quality of life in two general dimensions of physical health and mental health, which 35 questions are summarized in 8 multi-item subscales: in this questionnaire, a lower score indicates a lower quality of life and vice versa.The validity of the tool was confirmed in the project by Montazeri et al. (2005) with content, form and criterion validity. The reliability of the tool with Cronbach's alpha coefficient in the research of Montazeri et al. (2005) for this questionnaire was estimated to be above 0.7. (1). The value of Cronbach's alpha calculated in this study was 0.74.

Intervention method

After completing the quality of life questionnaire, yoga-based mindfulness training was given in 12 sessions for 75 minutes in each session, in the form of tags or groups of two. The educational content started with relaxation movements, and the reason for this choice was to get people's minds away from daily tasks and disturbing thoughts, after these movements, warm-up exercises and then asanas, and finally simpler positions to cool down the body and Relaxation of the body was given to prepare for the final relaxation. Sometimes before relaxation (shavasana), breathing technique (pranayama) was given and a little meditation after breathing technique and then shadasana: breathing technique, meditation, release and body scan. Meditation was mostly in the form of observing the state of breathing and the state of the body. After each exercise, the warm-ups (pawan mats) and asanas were released, and the opportunity to gain awareness of the effect of movement on the body and breathing, etc., at the end, the control group completed the

quality control questionnaire, for No intervention was performed in the control group.

Data analysis

Data were collected using SPSS v. 24.0 (SPSS Inc. Chicago, USA) were analyzed and P values less than 0.05 were considered statistically significant. Data analysis was done using descriptive statistics (frequency, mean and standard deviation for each variable) and analytical statistics (ANOVA, Multivariate analysis of covariance and Spearman correlation coefficient).

Ethical considerations

All participants were informed about the aims and methods of the study. They were also informed that participation in the study was voluntary. Therefore, they could refuse to participate or withdraw from the study at any time, ensuring the confidentiality and privacy of the information.

RESULTS

This study showed that 46.6% in the experimental group were in the age range of 34-40 years and 33.2% in the control group were in the age range of 29-33 years. In terms of education, 54.4% in the experimental group and 54.4% in the control group. 40% had a bachelor's degree. In terms of occupation, 80% in the experimental group and 72.4% in the control group were housewives. 80% in the experimental group and 53.4% in the control group had their first pregnancy. 70% in the experimental group and 60% in the control group had wanted pregnancy. Table No.(1) shows that the score of the quality of life scale and the two subscales of mental and physical health in the two experimental and control groups has a significant difference in the post-test phase, but there was no significant difference in the pre-test phase.

Table No. 1. Mean, standard deviation for quality of life scores and its subscales in the pre-test and post-test

Group	Variable		Mean(SD)
Intervention	Physical health	Pre-exam	228.9(46.06)
		After the test	245.36(45.79)
		Pre-exam	233.83(52.19)
Control		After the test	222.4(50.18)
Intervention	Mental health	Pre-exam	212.24(18.42)
		After the test	246.63(17.11)
Control		Pre-exam	201.72(43.17)
		After the test	219.2(48.98)

The results of Table No.(2) show that mindfulness therapy based on yoga is effective in improving the quality of life of pregnant women. All four relevant multivariate statistics (Pilay's effect, Wilks's lambda, Hotelling's effect and the largest root of zinc) are significant. In other words, between the subjects who received the interventions (experimental group) and the subjects who did not receive the interventions (control group) in the post-test phase, there is a significant difference (0.01) in at least one of the dependent variables.

Table No. 2. The results of multivariate covariance analysis in the post-test

Research steps	Test	Value	F	Degree of Freedom(df)	Error df	P	2η
Post-Test	Pillai effect	0.848	75.029	2	27	000.1	0.58
	Wilks Lambda	0.152	75.029	2	27	000.1	0.58
	Hotelling's work	5.558	75.029	2	27	000.1	0.58
	The largest root-zinc	5.558	75.029	2	27	000.1	0.58

Table No. (3) shows that the univariate test for the dependent variable of mental and physical health is significant (P<0.05).

Table No. 3. Results of mixed design analysis in explaining the variable effect of yoga-based mindfulness therapy on the subscale

Research steps	The dependent variable	The sum of the squares	DF	mean of the squares	F	Significance level
Post-Test	Psychological quality of life	485.64	1	485.64	3.603	0.05
Post-Test	Physical quality of life	3956.08	1	3956.08	3.71	0.05

DISCUSSION

This study was conducted with the aim of investigating the effectiveness of yoga-based mindfulness therapy on the quality of life of pregnant women. The results showed that there was a significant difference in the mean post-test scores of the two experimental and control groups in the quality of life variable. The results are consistent with the research of Muzik et al. (17), Villar-Alises et al. (18). Yoga-based mindfulness training through strengthening emotion regulation skills such as problem solving training and ignoring techniques training can help people in It protects against mood dysfunction caused by stress and rumination (19, 20). In yoga, the mind is considered as the center of disorder and the effort is to return the body to the state of internal balance (21). This study showed that mindfulness therapy based on yoga is effective in reducing anxiety in pregnant women. Until now, doctors recommended that pregnant women exercise for less than 16 minutes each time, but now, it is said that these people can exercise for a long time, but their body temperature does not increase too much. In a new research paper, it is said that babies born to women who exercised consistently and vigorously during pregnancy had no ill effects and were even smarter than other children. Most people think that it is impossible for a pregnant woman to exercise vigorously, because they believe that vigorous exercise causes a lack of oxygen in the baby's brain and damages it. But what damages the child's brain is lack of calories and increased body temperature. In the past, it was said that exercise causes fever and an excessive increase in body temperature during the first month of pregnancy and causes damage to the brain and spinal cord, but a study on pregnant women proved that the increase in body temperature in this group is due to It was an infection, not exercise. Exercising during pregnancy has cardiovascular benefits not only for the mother but also for the child. Maternal exercise during pregnancy has beneficial effects on the automatic nervous system of the fetal heart. The automatic nervous system controls involuntary body activities such as heart rate, blood pressure, and breathing rate in the internal organs. A number of researchers experimented to see if fetuses that were exposed to exercise and meditation in the womb had better autonomic performance compared to fetuses that were not exposed to exercise and meditation.

The results are in line with the research of Ayouzi et al.(22), Doria et al.(23) and Davis et al.(24). Mindfulness is not a method or a technique, but is described as a psychologically accessible way to reduce suffering and expand qualities such as awareness, insight, wisdom and compassion(25-27). Using relaxation training in a wide way and emphasizing it as a valuable anxiety management skill during sessions becomes a stable part of coping skills. Self-regulation of attention through yoga-based mindfulness affects the emotional, sensory and physical components of the body (26). Regular hatha yoga practice increases musculoskeletal flexibility, strength and balance and helps one experience states of deep relaxation and awareness.

Today, the quality of life is considered as one of the important consequences in people's lives and is evaluated as one of the determining indicators affecting life. Quality of life with better physical performance, role playing, general health, energy and vitality, emotional role playing, creates psychological health (28). Mindfulness training based on yoga is a psychological educational approach that teaches participants to practice mindfulness and yoga to reduce stress and improve health(25). and the results of this study showed that it has a positive effect on improving the quality of life of pregnant women.

The lack of ability to control all disturbing variables such as intelligence, other comorbidities such as disorder and medical help before the research was one of the limitations of the study.

ACKNOWLEDGMENT

This article is extracted from the Master's thesis in General Psychology, Azad Salami University, Torbat Jam branch.

CONFLICTS OF INTEREST

The authors declare that they have no conflict of interest.

REFERENCES

I. Kent A. Psychiatric disorders in pregnancy. Obstetrics, Gynaecology & Reproductive Medicine. 2011;21(11):317-22.
II. Abbaszadeh F, Baghery A, Mehran N. Quality of life among pregnant women. Hayat. 2009;15.(1)
III. Hall V, Owens C, Blackwell R. Physiological and hormonal changes and GI problems experienced in pregnancy. Gastrointestinal Nursing. 2015;13(4):17-25.
IV. Carrillo-de-Albornoz A, Figuero E, Herrera D, Bascones-Martínez A. Gingival changes during pregnancy: II. Influence of hormonal variations on the subgingival biofilm. Journal of clinical periodontology. 2010;37(3):230-40.
V. Briscoe L, Lavender T, McGowan L. A concept analysis of women's vulnerability during pregnancy, birth and the postnatal period. Journal of Advanced Nursing. 2016;72(10):233.45-0
VI. Dominguez JE, Krystal AD, Habib AS. Obstructive sleep apnea in pregnant women: a review of pregnancy outcomes and an approach to

management. Anesthesia and analgesia. 2018;127(5):1167.

VII. Moghimian M, Kashani F, Cheraghi MA, Mohammadnejad E. Quality of life and related factors among people with spinal cord injuries in Tehran, Iran. Archives of trauma research. 2015;4.(3)

VIII. Das D. Urban quality of life: A case study of Guwahati. social indicators research. 2008;88:297-310.

IX. Potter J, Cantarero R, Wood H. The multi-dimensional nature of predicting quality of life. Procedia-Social and Behavioral Sciences. 2012;50:781-90.

X. EROGLU S, KARATAS G. The effect of low back pain on quality of life and anxiety levels in pregnant women. Akdeniz Tıp Dergisi. 2021;7(2):212-9.

XI. .Ming W-K, Wu H, Wu Y, Chen H, Meng T, Shen Y, et al. Health-related quality of life in pregnancy with uterine fibroid: a cross-sectional study in China. Health and quality of life outcomes. 2019;17(1):1-11.

XII. Zahedi M, Deris F .The quality of life in pregnant women in Farokhshahr city, 2012. Journal of clinical nursing and midwifery. 2014;3(3):63-9.

XIII. Auty KM, Cope A, Liebling A. A systematic review and meta-analysis of yoga and mindfulness meditation in prison: Effects on psychological well-being and behavioural functioning. International journal of offender therapy and comparative criminology. 2017;61(6):689-710.

XIV. Harrington A, Dunne JD. When mindfulness is therapy: Ethical qualms, historical perspectives. American Psychologist. 2015;70(7):621.

XV. Shonin E, Van Gordon W, Griffiths MD. Mindfulness-based interventions: Towards mindful clinical integration. Frontiers Media SA; 2013. p. 194.

XVI. Montazeri A, Goshtasebi A, Vahdaninia M, Gandek B. The Short Form Health Survey (SF-36): translation and validation study of the Iranian version. Quality of life research. 2005;14:875-82.

XVII. Muzik M, Hamilton SE, Rosenblum KL, Waxler E, Hadi Z. Mindfulness yoga during pregnancy for psychiatrically at-risk women: Preliminary results from a pilot feasibility study. Complementary therapies in clinical practice. 2012;18(4):235-40.

XVIII. Villar-Alises O, Martinez-Miranda P, Martinez-Calderon J. Prenatal Yoga-Based Interventions May Improve Mental Health during Pregnancy: An Overview of Systematic Reviews with Meta-Analysis. International Journal of Environmental Research and Public Health. 2023;20(2):1556.

XIX. Sati A. Yoga intervention: A yoga-based curriculum to develop mindfulness, emotion regulation, and resilience in adolescents. 2016.

XX. Sachdeva A, Kumar K, Anand KS. Non pharmacological cognitive enhancers–current perspectives. Journal of Clinical and Diagnostic Research: JCDR. 2015;9(7):VE01.

XXI. Emerson D, Sharma R, Chaudhry S, Turner J. Trauma-sensitive yoga: Principles, practice ,and research. International Journal of Yoga Therapy. 2009;19(1):123-8.

XXII. Evazei S, Karami J, Hatamian P. The effectiveness of yoga-based mindfulness on anxiety reduction and resiliency promotion in middle-aged women Kermanshah city. Iranian Journal of Nursing Research. 2019;14(2):31-7.

XXIII. Doria S, De Vuono A, Sanlorenzo R, Irtelli F, Mencacci C. Anti-anxiety efficacy of Sudarshan Kriya Yoga in general anxiety disorder: a multicomponent, yoga based, breath intervention program for patients suffering from generalized anxiety disorder with or without comorbidities. Journal of affective disorders. 2015;184:310-7.

XXIV. Davis K, Goodman SH, Leiferman J, Taylor M, Dimidjian S. A randomized controlled trial of yoga for pregnant women with symptoms of depression and anxiety. Complementary therapies in clinical practice. 2015;21(3):166-72.

XXV. Bodhi B. What does mindfulness really mean? A canonical perspective. Contemporary Buddhism. 2011;12(1):19-39.

XXVI. Siegel RD, Germer CK, Olendzki A. Mindfulness: What is it? Where did it come from? Clinical handbook of mindfulness. 2009:17-35.

XXVII. .Grossman P, Van Dam NT. Mindfulness, by any other name…: trials and tribulations of sati in western psychology and science. Contemporary buddhism. 2011;12(1):219-39.

XXVIII. Lee KCG ,Oh A, Zhao Q, Wu F-Y, Chen S, Diaz T, et al. Buddhist counseling: Implications for mental health professionals. Spirituality in Clinical Practice. 2017;4(2):113.