Original Research Paper



EFFECT OF YOGA ON STRESS AMONG THIRD TRIMESTER PRIMIGRAVIDAE MOTHER: AN EXPERIMENTAL STUDY

Prof Dr Santhi Letha

Principal, Sreemookambika College Of Nursing, Kulasekharam, Kannyakumari.

ABSTRACT This study was undertaken under The Tami Nadu DR MGR medical university towards the accomplishment of MSc (N). A primary focus of nursing care during pregnancy is the promotion of good health, pregnancy is crucial period in a women's life from conception until delivery. Maternal psychological stress may be reduced through the practice of specific mind fulness technique. Yoga is used for a variety of immunological, neuromuscular, psychological, and pain conditions. Recent studies indicate that it may be effective in improving pregnancy, labour, and birth outcomes. The purpose of this study to assess the effectiveness of yoga on stress among third trimester primigravidae mother's 60 antenatal mothers selected by simple random sampling technique, two group pretest- post test experimental design was used to conduct the study. The study findings revealed that there was significant difference found between experimental and control group. The pre test mean stress score in experimental group and control group were 38.1 + 8.2, 32.7 + 9.2. The Post test mean stress severe was 2.6 + 2.2, 32.05 + 9.0 and the t = 22.75, p < 0.001. Hence yoga found to be an effective complementary alternative therapy to reduce stress among third trimester primigravidae mothers.

KEYWORDS : Yoga, stress, third trimester, primigravidae.

INTRODUCTION

Pregnancy is a period when biomechanical and physiological changes occur rapidly as the body adapts to support the growing fetus, Every women experience pregnancy differently and the can be variety of physical and emotional symptoms that coincide with it. Pregnancy-related stress. Some women may feel serious stress about pregnancy. They may be worried about miscarriage, the health of their baby or about how they'll cope with labor and birth or becoming a parent. Narindren 2011 prevalence of stress during pregnancy has been found to range from 6% to as high an 52.9%.

High levels of stress that continue for a long time may cause health problems, like high blood pressure and heart disease, stream can increase the chances of having a premature baby born before 37 weeks of pregnancy or a low birth weigh baby weighing less than $5^{1/2}$ pounds sorter body length and smaller head circumference and lower APGAR.

Kamakhya Kumar, Radhika Chandrakar and Purnendra Chandrakar (2016) conducted a study to assess the effect of Yogic package on level of stress of pregnant women. Twenty primi gravidae mothers age group 20 to 30yrs have been taken , single group pre test and post test quasi experimental research design was used, mothers were selected by purposive sampling technique, they performed 45 min yoga included physical poster , breathing , chanting on mantra and relaxation technique Results shows that p < 35.001 and significant at 0.01 level. The findings suggest that yoga is well indicated for pregnant women and decrease the level of stress during pregnancy.

Maternal psychological stressors may be reduced through the practice of specific mind fulness techniques, such as yoga to promote a state of deep relaxation and calmness, yoga primarily focuses in achieving balance between the mind and body through physical poses(asana) breathing method (pranayama and meditation). The reported benefits of these type of yoga include reduced level of anxiety, depression prenatal disorder pain stress and increased relationship severe gestational age birth weight and helps in reducing the occurrence of complication through a balanced effective blood flow in the uteroplacental circulation.

Yoga may be effective in the reduction of negative symptoms associated with pregnancy and birth. Given that 35% of women aged 28–33 years already practice yoga, it is important to evaluate its effects on the maternal experience of stress, anxiety, pain, discomfort, and other variables as well as on labour and birth outcomes. A recent review of yoga for pregnancy related outcomes concluded that yoga is positively indicated for use in pregnancy but the findings are not definitive since some of the trials included in that review were uncontrolled and others demonstrated poor methodological quality for different reasons.

This study was aimed to assess the effect of yoga on stress among third trimester primigravidae mothers in a selected hospital at Kanyakumari District. The conceptual framework for this study was derived from general system theory, Von Bertalanfyy model.

Hypothesis

1. There will be significant effect of yoga on stress among third trimester primigravidae mothers.

2. There will be significant association between stresses among third trimester primigravidae mother with selected demographic variables such as age, religion, education, occupation, income, type of marriage and type of family.

MATERIALS AND METHODS

An experimental design was used in this study. Sample size was 60 third trimester prime gravidae mothers, 30 for experimental and 30 for control group who met the inclusion criteria were selected in simple random sampling method. Study include third trimester primi-gravidae mothers who are above 28 to 36 weeks and age 18-35 years, who speaks Tamil or English, who are willing to participate in the study, who are having no medical, obstetrical or surgical condition complicating pregnancy and who have no indication of onset of labour. Study excluded age below 18 and above 35 weeks of gestation, who were not willing to participate yoga practicing programme and are having high risk pregnancy. The study was conducted in the anti natal clinic of Kanyakumari medical college hospital Nagercoil, permission was obtained from the dean and the duty doctors of antenatal OPD of Kanyakumari medical college hospital 60 third trimester primigravidae mothers (30 for experimental and 30 for control group) were selected in simple random sampling method. The pretest was conducted by using interview schedule and observational check list for both the group of third trimester primigravidae mother. An experimental group mothers were attending Yoga for 2 weeks. Simple pregnancy Yoga package included benefits of Yoga, preparation, breathing techniques, Brahmari (humming bee), Nadisodhana (alternative nostril breathing), dandhasana and savasana (Relaxation) 45 min.

Post test was conducted for both groups with the same tool. Study used proforma for Demographic variables, Stress questionnaire for assessing the stress level, the items were related to stress among third trimester primigravidae mothers. The overall stress level was graded follows: <20% mild stress, 21-40% moderate stress, >41-60% Severe stress level and an Observational checklist consist of physiological variables such as blood pressure, pulse, respiration.

RESULTS

Table 1: Level Of Stress Among Third Trimester Primigravidae Mothers

Stress level	Experimen	Control group		Total		
	No.	%	No.	%	No.	%
Mild	4	13	2	7	6	10
Moderate	11	37	18	60	29	48
Severe	15	50	10	33	25	42

Effect Yoga On Stress Among Third Trimester Primi Gravidae Mothers

Table 2: Mean, SD	Of Pretest And Post Test Scores.	(n=60
-------------------	----------------------------------	-------

Group	Pretest		Post test		Mean	t	df	Table
	Mean	SD	Mean	SD	difference	value		value
Experi mental	38.2	8.2	2.6	2.2	35.5	23.05	58	2
Control	32.7	9.2	32.05	9.0	0.65	0.27	58	2

The above table reveals that the effect of yoga on stress among thirs trimester primigravidae mothers. The difference between pretest score and post test score in the experimental group is found to be statistically significant (t=23.05, p<0.001) indicating significant reduction in the stress level of third trimester primi gravidae mother practicing yoga.

DISCUSSION

The present paper suggests that a yoga program results in benefits during pregnancy as well as throughout labour and on birth outcomes. This budding body of work suggests that improvements were observed on psychological domains during pregnancy and labour (e.g., quality of life and selfefficacy), on physical and pain measures during labour (e.g., discomfort and pain), and on birth variables (e.g., birth weight and number of preterm births). The only adverse health outcome that was reported was uterine contractions, which can be monitored with a modified approach and appropriate activity reduction. Overall, the evidence that yoga is wells suited to pregnancy is positive, but methodological problems with the published literature and a general insufficient wealth of published trials make it impossible to draw any firm conclusion.

In the study of Jahdi et al., fewer mothers in the intervention group needed induction of labor compared to those of the control group. Furthermore, the intervention group had fewer numbers of CS than the control group and experienced a shorter duration of the second and third stages of labor. In the study of Chuntharapat, in the intervention group, the first stage of the labor was shorter and the delivery duration was significantly reduced. In the study of Khavandizadeh et al., childbirth preparation classes led to a shortening of the duration of labor.

Combined exercise can have a beneficial effect on changes and pain during pregnancy, including the beneficial effects of help to prepare the body to withstand the pressure of childbirth, help reduce back pain, help the body to carry extra weight more effectively during pregnancy, improved blood circulation, lowering blood pressure and heart rate. Yoga exercises can relieve muscle tension that may develop during pregnancy and increase the flexibility, muscle strength, endurance, and energy needed for labor, making it easier and shorter.

CONCLUSION

The study concluded that yoga practice during pregnancy reduces maternal stress, that means yogic package which consist of asnas, pranayama relaxation techniques is effective for reduce the stress of third trimester primi gravidae mothers.

REFERENCES:

- Babbar, S.Parks- Savage, Chauhan, S.(2012) Yoga during Pregnancy: A Review. Amer J Perinatol, 29(06), 459-464.
- 2. Narendran.S, nagarathna.R&Nagendra.H(2008) yoga for pregnancy. Banglore: swami vivekanand yoga prakashan
- Saraswati.S(2005). Asanpranayam mudra bandh (pp.41,42,43,44,63-64). Munger, Bihar: Yog publication trust.
- Satyapriya.M, Nagendra.H, Nagarathna.R&Padmalatha.V(2009) Effect of integrated yoga on stress and heart rate variability in pregnant women. International Journal Of Gynecology & Obstetrics, 104(3), 218-222...
- Field T. Yoga clinical research review. Complementary Therapies in Clinical Practice. 2011;17(1):1–8.
- Fink NS, Urech C, Isabel F, et al. Fetal response to abbreviated relaxation techniques. A randomized controlled study. *Early Human Development*. 2011;87(2):121–127.
- Melzer K, Schutz Y, Soehnchen N, et al. Effects of recommended levels of physical activity on pregnancy outcomes. *American Journal of Obstetrics and* Gynecology. 2010;202(3):266.e1–266.e6.
- Urech C, Fink NS, Hoesli I, Wilhelm FH, Bitzer J, Alder J. Effects of relaxation on psychobiological wellbeing during pregnancy: a randomized controlled trial. *Psychoneuroendocrinology*. 2010;35(9):1348–1355.
- Jahdi F, Sheikhan F, Haghani H, Sharifi B, Ghaseminejad A, Khodarahmian M, Rouhana N. Yoga during pregnancy: the effects on labor pain and delivery outcomes (a randomized controlled trial) Complement Ther Clin Pract. 2017;27:1–4. [PubMed] [Google Scholar]
- Chuntharapat S, Petpichetchian W, Hatthakit U. Yoga during pregnancy: effects on maternal comfort, labor pain and birth outcomes. Complement Ther Clin Pract. 2008;14(2):105–115. [PubMed] [Google Scholar]
- Sarwendah DF, Sari DN, Rosalina. Correlation between prenatal yoga and delivery process among mothers in independent midwife clinic "HARTI MUSTAQIM SUMOWONO", semarang, indonesia. 2nd International Conference on Applied Science and Health 2017.70–74.