

VOLUME 9 (SPECIAL ISSUE 2) 2023

ISSN 2454 – 3055

**Manuscripts under Special Issue are published under the
theme “Yoga Practices and Alternative Therapies on
Human Health”**

Guest Editor: Dr. S. Mohanasundaram

Assistant Guest Editors: Mrs. K. Geetha

Mrs. M. Pennarasi

**INTERNATIONAL
JOURNAL OF
ZOOLOGICAL
INVESTIGATIONS**

***Forum for Biological and Environmental
Sciences***

Published by Saran Publications, India



International Journal of Zoological Investigations

Contents available at Journals Home Page: www.ijzi.net

Editor-in-Chief: Prof. Ajai Kumar Srivastav

Published by: Saran Publications, Gorakhpur, India



ISSN: 2454-3055

Effect of Garbha Vidhya on High-Risk Pregnant Women and Their Foetuses

Parthasarathy B.R.

Department of Physiotherapy, Government Cuddalore Medical College and Hospital, Chidambaram 608002, Tamil Nadu, India

Received: 17th March, 2023; Accepted: 5th May, 2023; Published online: 4th September, 2023

<https://doi.org/10.33745/ijzi.2023.v09ispl2.048>

Abstract: The practice of Garbha Vidhya has a number of beneficial impacts on managing stress, and it also helps reduce the number of causes that lead to stress. In addition to this, it ensures that pregnant women have a strong intuitive sense throughout their pregnancy of being in close touch with both their body and their emotions. The aim of this study is to determine whether Garbha Vidhya practices positively effect on pregnant women and the fetuses on experimental group when compared to control one. This is the case regardless of how far along they are in their pregnancy. The pregnant woman's mental and social well-being improves as a result of all of these benefits, which all contribute, in their own indirect manner, to the overall improvement. The strengthening of pregnant women's mental and emotional health, as well as the maintenance of this well-being, helps to build the mother-child bond and contributes to the healthy development of the child by promoting mother-child communication and togetherness. This is true whether the mother's mental and emotional health improves during pregnancy or not. During pregnancy, this link is formed when the pregnant woman's mental and emotional health improves.

Keywords: Garbha Vidhya, Pregnancy, Mother-child bond, Foetuses, Childbirth

Citation: Parthasarathy B.R.: Effect of Garbha Vidhya on high-risk pregnant women and their fetuses. Intern. J. Zool. Invest. 9(Special Issue 2): 276-281, 2023.

<https://doi.org/10.33745/ijzi.2023.v09ispl2.048>



This is an Open Access Article licensed under a Creative Commons License: Attribution 4.0 International (CC-BY). It allows unrestricted use of articles in any medium, reproduction and distribution by providing adequate credit to the author (s) and the source of publication.

Introduction

The time during which a baby grows inside of a woman's womb or uterus is referred to as pregnancy. This time period is referred to simply as pregnancy. From the time of the woman's last menstrual cycle to the time of birth, a typical pregnancy will last around 40 weeks, which is little over 9 months. A pregnancy that poses an elevated threat to the health of either the mother or the developing child is referred to as a high-risk pregnancy. It is possible for a pregnancy to be high risk due to certain health issues as well as

age (such as being above the age of 35 or being under the age of 17 while pregnant). In order to lessen the likelihood of difficulties during these pregnancies, constant monitoring is required. It is known to assist in molding the character and personality of the fetus while it is still developing within the womb, which is referred to as the garbh, and Garbha Vidhya is an ancient spiritual practice that has been practiced in India since Vedic times. Therefore, the most straightforward translation of Garbha Vidhya is "educating the

mind of the fetus while it is still in the mother's womb."

The purpose of this research was to compare the outcomes of a group of pregnant women who practice Garbha Vidhya with those of a control group who are not practicing it.

Materials and Methods

High-risk expectant mothers were included in this clinical trial research after being referred to the Department of Obstetrics and Gynecology at the Government Medical College and Hospital in Cuddalore. Pregnant women were eligible to participate if they were between the ages of 19 and 31, if they gave their informed consent, and were within the study's specified age range. Patients who were pregnant for the first time with a baby of Singleton pregnancy were included in the research. This is a randomized, controlled, single-blind clinical experiment. Twenty patients were divided evenly between an experimental group of ten and a control group of ten.

Inclusion criteria for the study were—(i) All High risk pregnant Women Such as High Blood pressure, Diabetes mellitus etc. were selected; and (ii) Primi Gravida mother with the group of 19 to 31 years were selected. Exclusion criteria for the study were--(i) Type I Diabetes mellitus patients; (ii) Any Co-morbid Condition, like heart disease, kidney failure etc. were not selected; (iii) Status Asthmatics patients; (iv) Abnormal fetus (or) IUGR; (v) Any psychiatric illness; and (vi) Musculoskeletal disorders.

Following the completion of the sampling process and the explanation of the study objectives to the pregnant women in two separate sessions, the demographic information questionnaires were filled out. Garbha Vidhya modalities, such as pranayama, selected Asanas, and Nada Yoga, were used as the intervention in this study. The intervention began in the 12th week of pregnancy and lasted until the 37th week for its participants. Pregnant women's levels of perceived stress were measured using the

Perceived Stress Scale in Weeks 12, 20, and 37 of their pregnancies. From their 12th week to their 37th week of pregnancy, the experimental group participated in a 60 min yoga session five days a week. The pregnant women in the control group got the standard prenatal care.

The questionnaire used for the data collection has the following sections: Age, education, employment, illness, height, weight, BMI, and place of residence are only few of the questions asked in the Demographic Characteristics Questionnaire (DCH). Second, a stress scale measuring how anxious you are throughout the first, second, and third trimesters of your pregnancy; third, details about your pregnancy; fourth, how your labor is induced; and fifth, information on childbirth.

Preeclampsia, birth weight, length of labor, and gestational age at delivery were also recorded. Labor lasted from the first signs of discomfort until after the baby was born and the placenta was separated.

A t-test statistical method was used to compare pre- and post-test scores on the Perceived Stress Scale, birth weight, and delivery style.

Results

The t-test statistical method revealed promising outcomes for the Perceived Stress Scale and the Birth Weight, but not for the Mode of Birth (Normal vs. C-section).

The mean score on the Pre-test (7.60) was greater than the mean score on the Post- exam (5.30) for the Experimental Group. At the 0.05 level of significance, the estimated t-value is 5.129, and the probability value is 0.001. The results of the pre- and post-tests on the Perceived Stress Scale indicate a statistically significant difference in the experimental group.

When comparing the mean values of the Pre-test (8.40) with the Post-test (8.20) (Control Group), the Pre test comes out on top. There is no statistical significance between the computed

Table 1: t-test for Perceived Stress Scale (Experimental Group) in Pre- and Post-test

Group	N	Mean	Standard Deviation	Standard Error Mean	t-value	Probability Value
Pre test	10	7.60	1.90	0.60	5.129	0.001*
Post test	10	5.30	2.00	0.63		

* Highly significant at 0.01 level

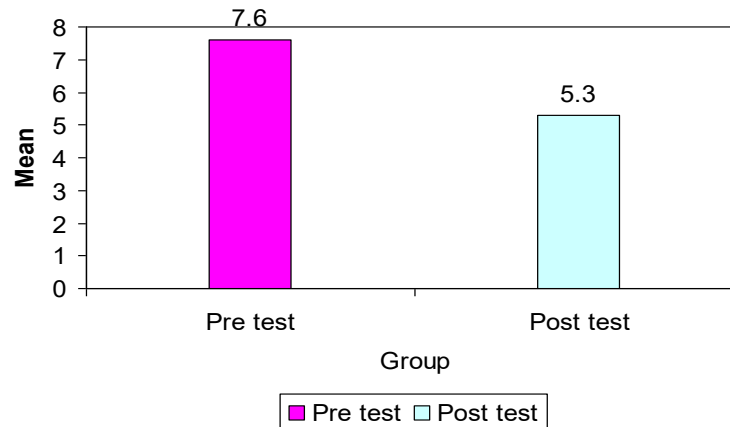


Fig.1: Mean score for perceived stress scale (Experimental group) in pre- and post-test.

Table 2: t-test for Perceived Stress Scale (Control Group) in Pre- and Post-test

Group	N	Mean	Standard Deviation	Standard Error Mean	t-value	Probability Value
Pre test	10	8.40	1.51	0.48	0.688	0.509 (NS)
Post-test	10	8.20	1.32	0.42		

NS – Not Significant

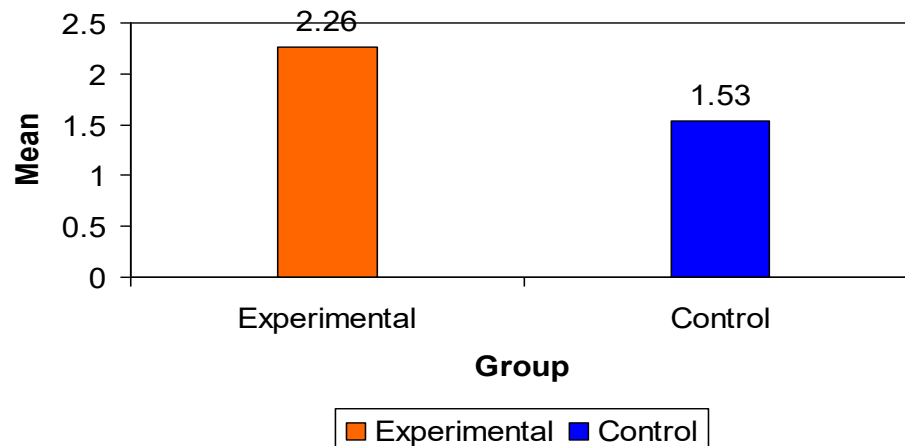


Fig. 3: Mean score for Birth weight score Experimental and control group.

Table 4: t-test for Birth outcome score in Experimental and Control group

Group	N	Mean	Standard Deviation	Standard Error Mean	t-value	Probability Value
Experimental	10	1.30	0.48	0.15	1.964	0.081 (NS)
Control	10	1.00	0.00	0.00		

NS – Not Significant

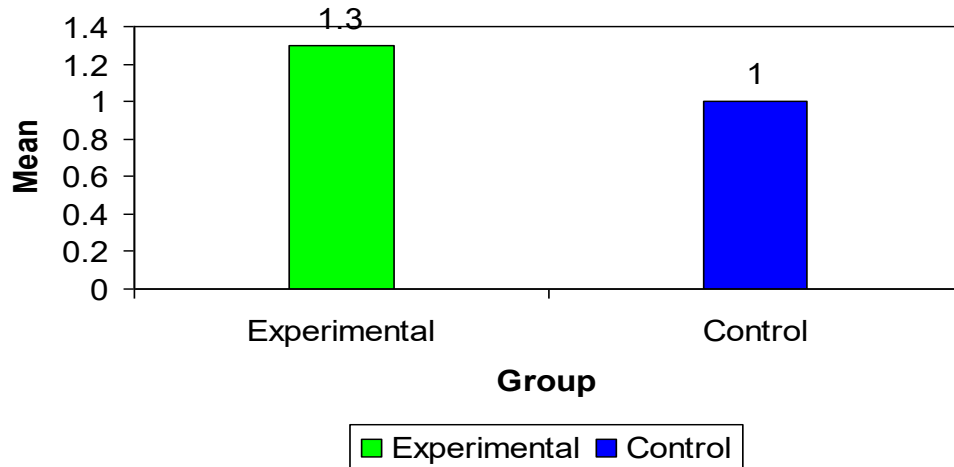


Fig.4: Mean score for Birth outcome score in Experimental and control group.

t-value of 0.688 and the probability value of 0.509. Therefore, it can be stated that the Perceived stress scale in the control group did not change significantly between the pre- and post-tests.

The mean score of the experimental group was 2.26, which was significantly higher than the mean score of the control group, which was 1.53. At the 0.05 level of significance, the estimated t-value is 2.911 and the probability value is 0.017. The results show a statistically significant difference in birth weight score between the treatment and control groups.

When comparing the means of the experimental and control groups, the former (1.30) fared better than the latter (1.00). The determined 't' value is 1.964, and the Probability value is 0.081, both of which are insignificant. There was no statistically significant change in the Birth outcome score between the treatment

and control groups.

Discussion

The physical and mental changes that occur during pregnancy affect every woman in a deep way. Care for the fetus's well-being is paramount at this time.

High-risk pregnancies are associated with higher rates of postpartum bleeding, as well as anesthetic and neonatal (including prolonged stays in the neonatal intensive care unit, newborn respiratory illnesses, jaundice, neonatal infection, poor Apgar score, low birth weight, and neonatal death) issues.

The results showed that the Garbha Vidhya practices significantly influenced the induction of natural labor in the Garbha Vidhya group, to the point where three nulliparous women in the Garbha Vidhya group went to the hospital and had a natural delivery (not statistically

significant), while others in the experimental group opted for cesarean sections. All individuals in the comparison group, on the other hand, underwent cesarean sections. Fewer women in the intervention group required induction of labor compared to the control group in the research by Narendran *et al.* (2005). The second and third phases of labor were also shorter in the intervention group compared to the control group.

The length of the first stage of labor and the time it took to give birth were both considerably decreased in the intervention group and they found that prenatal education programs decreased labor time (Li *et al.*, 2009). Preparing the body for the strain of childbirth, relieving back pain, helping the body carry the extra weight of pregnancy more efficiently, increasing blood circulation, decreasing blood pressure, and slowing the heart rate are just some of the ways in which exercise during pregnancy can ease discomfort.

The birth weight data indicated that the Garbha Vidhya procedure significantly increased the average birth weight of babies born to nulliparous mothers, as compared to babies born to the control group.

Babies whose mothers participated in yoga or massage treatment had significantly greater birth weights compared to babies whose mothers did not participate in these therapies (Field *et al.*, 2004). The birth rate of newborns with an abnormal weight was considerably lower in the yoga group than in the control group, as noted by Narendran *et al.* (2005) in their research on the efficacy of yoga on pregnancy outcomes (gestational age and baby weight). One of the reasons for the discrepancy in the outcomes of these research is that the frequent repeating of Garbha Vidhya throughout pregnancy seems to have varying effects on birth weight.

The experimental group also fared better than the control group on the Perceived Stress Scale. Women whose pregnancies coincide with their

practice of Garbha Vidhya report feeling less stress, which has a beneficial effect on their unborn children.

The causes of stress may be mitigated and stress itself managed with the help of Garbha Vidhya. Having a strong intuitive feeling of intimate touch with one's body and emotions is very important for pregnant women, and this helps guarantee that they have that. The pregnant woman's psychological and social well-being will gain indirectly from all of these advantages. The mother-child connection is established and contributes to the kid's healthy development via increased communication and closeness between the mother and child as a result of the pregnant woman's improved psychosocial health and the preservation of this health.

The small sample size, the inability to accurately assess participants' mental and emotional states because of their silence, the stress and anxiety experienced by pregnant women during childbirth, and the presence of environmental factors (such as distracting noises) were all limitations beyond the control of the researchers. It is recommended that further studies be conducted with bigger sample numbers, that all potential variables influencing delivery and neonatal outcomes be considered, and that other scales be employed.

Conclusion

According to the findings of this research, Garbha Vidhya is an effective method for reducing the likelihood of problems occurring during high-risk pregnancies. In addition, fetuses had a healthy environment while growing within their mothers' wombs, and they reached their developmental milestones sooner after birth. In order to have a pleasant birth and a healthy foetus, it was imperative that all pregnant women adhere to the findings of this research.

References

Field T, Diego M, Dieter J, Hernandez-Reif M, Schanberg S, Kuhn C, Yando R and Bendell D. (2004). Prenatal

depression effects on the fetus and the newborn.
Infant Behavior Developm. 27: 216-229

Li D, Liu L and Odouli R. (2009) Presence of depressive symptoms during early pregnancy and the risk of preterm delivery: a prospective cohort study. Human Reproduction 24: 146-153.

Narendran S, Nagarathna R, Narendran V, Gunasheela S and Nagendra HR. (2005) Efficacy of yoga on pregnancy outcome. J Alternative Complem Med. 11: 237-244.