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RESEARCH ARTICLE

“A STUDY TO ASSESS THE EFFECTIVENESS OF SELECTED YOGA ON THE LEVEL OF ANXIETY, PREGNANCY DISCOMFORTS, CLINICAL PARAMETERS, MATERNAL AND NEONATAL OUTCOME AMONG PRIMIGRAVIDA WOMEN”

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Abstract

Background: Pregnancy is a wonderful landmark in the life of a woman. It is the origin of human life. Pregnancy is a time of physical and hormonal changes and of emotional and psychological preparation for motherhood. Comforting techniques may enhance the women to settle and provide with an appreciation of personal capabilities. Therefore yoga can be an effective way to emancipate women during labour and to assist in attaining and maintaining their optimal level of functioning. Yoga is the great way to stay fit during pregnancy because yoga posture can easily meet the needs of pregnant women. It educates pregnant women to listen to their body and reduce stress and anxiety, and to calm the mind.

Methodology: The research approach selected for this study was Quasi experimental -Pre and Post test design. The intervention for study group consisted of selected yoga which includes Asanas (tadasana, utkatasana, katicakrasana, konasana, ardhatitali, purnatitali), pranayama (nadishodhana, bhramari, sheetkari, sheetali, ‘OM’ chanting), ashwini mudra, deep relaxation practice from 28th weeks of pregnancy till delivery.

Result: There was a significant reduction in level of anxiety and pregnancy discomfort for primigravida women and improved maternal and neonatal outcome. The selected yoga was found to be effective in reduction of anxiety and pregnancy discomfort and improved the maternal and neonatal outcome for study group.

Conclusion: Regular practices of selected yoga were effective in minimizing the level of anxiety during pregnancy, pregnancy discomfort and improving maternal and neonatal outcome.

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Introduction:-

“It is from the womb of a woman that gives life to mankind into the world of light, a world in which to breathe and grow.” -Rooplekha Women are primary care takers, first educators, bearers and nurturers of the next generation. Women’s health is basic to women’s advancement in all folds of endeavor. The pregnancy related disabilities result not only in human suffering but also affect social and economic empowerment. The journey of having a baby and achieving motherhood is a profound event in the life of women. Becoming a mother is a precious gift of God to every woman and Pregnancy is a special time in a Women’s life and it is a dynamic state of physiologic adaptations

to meet the demands of a developing fetus, Childbirth and lactation .Even though becoming a mother is among the pleasurable phenomena in awomen’s life bringing about parent’s happiness, it is accompanied by tensions and worries due to its accompanying physical and psychological changes . The women are not sufficiently supported by the family members, their fears are increased and at the same time lead to depression and anxiety . High levels of anxiety and stress increases the probability of preterm birth, low birth weight, miscarriage and infantile disorders. In common, anxiety disorders are highly found during pregnancy and play a vital role in quality of life . Pregnancy is a wonderful landmark in the life of a woman. It is the origin of human life. Pregnancy is a time of physical and hormonal changes and of emotional and psychological preparation for motherhood. During pregnancy, most of the women experience some of the minor ailments, viznausea and vomiting, backache, constipation, leg cramps, heartburn, varicose veins, frequent urination, low back pain, hemorrhoids, carpal tunnel syndrome and sleep disturbances . The child's mental development depends on the quality of its relationship with the mother that begins from pregnancy. They focus on those elements of maternal functioning which decide about the child functioning in various dimensions and that play a major role in the mother and child interaction. One of them is emotional state of the mother during pregnancy . Maternal stress and anxiety during pregnancy is connected with a host of negative consequences for the fetus and subsequent development. Early gestational stress exposure is amalgamated with negative outcomes at different developmental stages, slowed maturation and behavioral response patterns in fetuses, alterations in neonatal stress regulation and behavioral reactions to stress, blunted cognitive functions and emotional and behavioral problems in infants and toddlers, and reduced brain volume in areas associated with cognitive function in children . Moreover, prenatal maternal stress and anxiety may be risk factors for potential negative consequences for children in later life, such as the development of attention deficit hyperactivity disorder or lowered performance on aspects of executive function. It is a conjecture that maternal stress may affect the intrauterine environment and it alters the fetal development during critical periods, through either activation of the placental stress system, causing the release and circulation of corticotropin releasing hormone, or through diminished blood flow and oxygen to the uterus. It is important to regulate maternal stress and provide expecting mothers with coping strategies for the unpreventable stresses and changes that occur during pregnancy, to increase quality of life and to increase infant health and development. Yoga will be effectual in the reduction of negative symptoms associated with pregnancy and birth. Nearly 35% of women aged 28–33 years already follow yoga regularly, it is salient to assess its effects on the maternal experience of stress, anxiety, pain, discomfort, and other variables as well as on labour and birth outcome . Pain during labour is due to contraction of muscles of the uterus and pressure on the cervix. This pain will be felt as strong cramping pain in the abdomen, groin, and back, as well as an achy feeling.Mollification of pain has been identified as a major source of comfort and support to women in labour. Comforting techniques may enhance a women to settle and provide with an appreciation of personal capabilities. Therefore yoga can be an effective way to emancipate women during labour and to assist in attaining and maintaining their optimal level of functioning . Yoga is the great way to stay fit during pregnancy because yoga posture can easily meet the needs of pregnant women. It educates pregnant women to listen to their body and reduce stress and anxiety, and to calm the mind .

Statement Of The Problem

“A study to assess the effectiveness of selected yoga on the level of anxiety, pregnancy discomforts, clinical parameters, maternal and neonatal outcome among primigravida women in selected hospitals”.

Primary Objective

To identify the effectiveness of selected yoga on maternal and neonatal outcome among primigravida women in study and control group. Within the scope of primary objective the secondary objectives include

Secondary Objectives

1. To assess the pre and post test level of anxiety among primigravida women in study and control group.
2. To compare the pre and post test level of anxiety among primigravida women between study and control group.
3. To assess the pre and post test pregnancy discomforts among primigravida women in study and control group.
4. To compare the pre and post test pregnancy discomforts among primigravida women between study and control group.
5. To assess the pre and post test clinical parameters among primigravida women in study and control group.
6. To compare the pre and post test clinical parameters among primigravida women between study and control group.
7. To evaluate the effectiveness of selected yoga on maternal and neonatal outcome among primigravida women between study and control group.

8. To associate the level of anxiety, pregnancy discomforts, and maternal and neonatal outcome among primigravida women with their demographic variables in study and control group.
9. To identify the correlation between the level of anxiety, pregnancy discomforts, and maternal and neonatal outcome among primigravida women in study and control group

Variables

Independent variables It refers to the selected yoga manipulated by the investigator for the primigravida women. Dependent variables It refers to the level of anxiety, pregnancy discomforts, clinical parameters, maternal and neonatal outcome of the primigravida women. Confounding variables Age in years, education, religion, occupation, monthly income of family, place of residence and type of family.

Study Setting

The setting for study was Institute of Obstetrics and Gynaecology, Govt. Hospital for Women and Children, Chennai- 8 for study group and Chengalpattu Medical College and Hospital, Chengalpattu for control group.

Population

Target Population The target population for the study was all primigravida women. From selected hospitals in Tamil Nadu. Accessible Population The accessible population for this study was primigravida women attending the antenatal outpatient department at the Institute of Obstetrics and Gynaecology, Govt. Hospital for Women and Children, Chennai and Chengalpattu Medical College and Hospital, Chengalpattu.

Sample

Primigravida women who fulfil the inclusion criteria will be the samples of the study.

Sampling Technique

Non probability purposive sampling technique was used. Measurement tool State Anxiety Inventory for adults was developed by Charles D.Spielberger (1977), a standardized tool used to measure the level of anxiety for primigravida women. Pregnancy discomfort was assessed by structured pregnancy discomfort assessment tool. Maternal outcome was assessed by structured maternal outcome assessment tool, and neonatal outcome was assessed by structured neonatal outcome assessment tool.

Intervention

The intervention for study group consisted of selected yoga which includes Asanas (tadasana, utkatasana, katichakrasana, konasana, ardhattali, purnattali), pranayama (nadishodhana, bhramari, sheetkari, sheetali, 'OM' chanting), ashwini mudra, deep relaxation practice from 28th weeks of pregnancy till delivery.

Results:-

In study group, pre test mean anxiety score was 55.26 (SD6.16), and in post test the mean anxiety score had decreased to 34.93 (SD 3.47), paired t-test value was $t=46.70$ at $p=0.001$. In control group, pre test mean anxiety score was 54.84 (SD7.74) and post test mean anxiety score was 53.95 (SD 8.18), paired t-test value was $t=2.36$ at $p=0.05$. In study group, pre test pregnancy discomforts mean score was 3.01 (SD 3.00) while the post test pregnancy discomforts mean score had decreased to 1.18 (SD 1.37), Paired t-test value was $t=9.95$ at $p=0.001$. In control group, pre test pregnancy discomforts mean score was 3.13 (SD 3.59) while post test pregnancy discomforts mean score was 2.41 (SD 2.33), paired t-test value was $t=2.15$ at $p=0.05$. Regarding labour pain, in study group 101(68.2 %) had moderate labour pain and 18 (12.2%) had severe labour pain whereas in control group 63(43.2%) had moderate labour pain and 81 (55.5%) had severe labour pain. Chi square test value was $F2=72.40$ at $P=0.001$ In study group 148(100%) had APGAR 5 minute score ≥ 7 , where as in control group 135(92.5%) had APGAR 5 minutes score ≥ 7 . Chi square test value $F2=11.58$, $P=0.001$, inferred that the intervention was effective in increasing the percentage of APGAR 5 minutes score ≥ 7 of neonate in study group. Chi square test finding revealed that level of maternal outcome had significant association with age 23 to 27 years ($F2=5.89$ at $P=0.05$), rural ($F2=8.62$ at $P=0.05$) and nuclear family ($F2=7.40$ at $P=0.02$). Chi square test findings revealed that education, occupation, religion and monthly income had no association.

Discussion:-

There was a significant reduction in level of anxiety and pregnancy discomfort for primigravida women and improved maternal and neonatal outcome. The selected yoga was found to be effective in reduction of anxiety and pregnancy discomfort and improved the maternal and neonatal outcome for study group.

Implication

It is observed from this study that practicing selected yoga is cost effective as it facilitates the reduction of anxiety, pregnancy discomforts and labour pain. It also improves the maternal and neonatal outcome.

Conclusion:-

Regular practices of selected yoga were effective in minimizing the level of anxiety during pregnancy, pregnancy discomfort and improving maternal and neonatal outcome.

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