INCIDENCE AND IMPACT OF VARIOUS COMPLICATIONS ON PREGNANCY RELATED ANXIETY IN WOMEN ATTENDING AN OBG CLINIC IN A TERTIARY CARE HOSPITAL – ERODE

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ABBREVIATIONS

LBW	Low Birth Weight
GDM	Gestational Diabetes Mellitus
UTI	Urinary Tract Infection
STD	Sexually Transmitted Disease
PIH	Pregnancy Induced Hypertension
NHANES	National Health and Nutrition Examination Survey
ACOG	The American College of Obstetrics and Gynaecologists
PTSD	Post Traumatic Stress Disorder
WHO	World Health Organization
LCP	Life Course Perspective
IVF	Invitro Fertilization
IUI	Intra Uterine Insemination
LSCS	Lateral Section C-section
CPD	Cephalopelvic Dispropotion
SBP	Systolic Blood Pressure
DBP	Diastolic Blood Pressure
PCOD	Poly Cystic Ovary Disorder
PRAQ-R2	Pregnancy Related Anxiety Questionnaire – Revised version 2

INTRODUCTION

Pregnancy is the most beautiful moment which comes along every woman's life. The woman get prepared physically and mentally to bring forth a new life. It is the most dynamic stage in the life of woman. As it is very dynamic, each stage of pregnancy is unpredictable, where the body and the mind are involved. Pregnancy also known as Gestation, is the time during which one or more offspring develops inside a woman.

COMPLICATIONS IN PREGNANCY

Usually pregnancy is normal but sometimes it is associated with some type of complications or comorbidities. As pregnancy itself is associated a slight percentage of risk, the presence of any complication or comorbidities can worsen it. Some complications can affect the health of the women, her baby or both (www.nichd.nih.gov). Certain diseases or conditions the mother had before she became pregnant can also lead to complication during pregnancy (www.healthline.com) and some complications occur during delivery.

The most common complications of pregnancy include:

- ***Pregnancy Induced Hypertension (PIH)*** – High blood pressure, also called hypertension, occurs when arteries carrying blood from the heart to the body organs are narrowed. This causes pressure to increase in the arteries. In pregnancy, this can make it hard for blood to reach the placenta, which provides nutrients and oxygen to the foetus (ACOG/FAQ034, 2016). Reduced blood flow can slow the growth of the foetus and place the mother at greater risk of preterm labor and preeclampsia (ACOG/FAQ034, 2016; Leeman. L et al., 2016).

Women who have high blood pressure before they get pregnant will continue to have to monitor and control it, with medications if necessary, throughout their pregnancy. High blood pressure that develops in pregnancy is called gestational hypertension. Typically, gestational hypertension occurs during the second half of pregnancy and goes away after delivery.

- ***Gestational Diabetes*** – Gestational diabetes occurs when a woman who didn't have diabetes before pregnancy develops the condition during pregnancy. Normally, the body digests parts of your food into a sugar called glucose. After digestion, the glucose moves into your blood to give your body energy. To get the glucose out of your blood and into the cells of your body, your pancreas makes a hormone called insulin. In gestational diabetes, hormonal changes from pregnancy cause the body to either not make enough insulin, or not use it normally. Instead, the glucose builds up in your blood, causing diabetes, otherwise known as high blood sugar.

  Managing gestational diabetes, by following a treatment plan outlined by a health care provider, is the best way to reduce or prevent problems associated with high blood sugar during pregnancy. If not controlled, it can lead to high blood pressure from preeclampsia and having a large infant, which increases the risk for caesarean delivery (www.acog.org, *FAQ177*).

- ***Low amniotic fluid (oligohydramnios)*** – The amniotic sac fills with fluid that protects and supports your developing baby. When there's too little fluid, it's called oligohydramnios. According to the March of Dimes, about 4 percent of

pregnant women have low levels of amniotic fluid at some point, usually in their third trimester (www.babycenter.com).

- ***Preeclampsia*** – Preeclampsia is a serious medical condition that can lead to preterm delivery and death. Its cause is unknown, but some women are at an increased risk. Risk factors include.

  - First pregnancies
  - Preeclampsia in a previous pregnancy
  - Existing conditions such as high blood pressure, diabetes, kidney disease, and systemic lupus erythematosus
  - Being 35 years of age or older
  - Carrying two or more foetuses
  - Obesity (www.acog.org;Hernandez-Diaz et al., 2012)

- ***Placenta previa*** – If you have placenta previa, your placenta is lying unusually low in your uterus, next to or covering your cervix. Placenta previa isn't usually a problem early in pregnancy. But if the placenta remains dangerously low as your pregnancy progresses, it can cause bleeding, which can lead to other complications and may require you to deliver early. The location of your placenta will be checked during your midpregnancy ultrasound exam, but only a small percentage of women who have placenta previa in midpregnancy still have it when they deliver their baby. Placenta previa is present in up to 1 in 200

deliveries. Women who have placenta previa when they give birth have to deliver by c-section (www.babycenter.com)

- ***Infections*** – Infections, including some sexually transmitted infections (STIs), may occur during pregnancy and/or delivery and may lead to complications for the pregnant woman, the pregnancy, and the baby after delivery. Some infections can pass from mother to infant during delivery when the infant passes through the birth canal; other infections can infect a foetus during the pregnancy. Many of these infections can be prevented or treated with appropriate preconception, prenatal, and postpartum follow-up care.

  Some infections in pregnancy can cause or contribute to (ACOG/FAQ034, 2016).

- Pregnancy loss/miscarriage (before 20 weeks of pregnancy)
- Ectopic pregnancy (when the embryo implants outside of the uterus, usually in a fallopian tube)
- Preterm labor and delivery (before 37 completed weeks of pregnancy)
- Low birth weight
- Birth defects, including blindness, deafness, bone deformities, and intellectual disability
- Stillbirth (at or after 20 weeks of pregnancy)
- Illness in the newborn period (first month of life)
- Newborn death
- Maternal health complications

Some other complications during pregnancy may include:

- ***Hyperemesis*** – Although having some nausea and vomiting is normal during pregnancy, particularly in the first trimester, some women experience more severe symptoms that last into the third trimester. The cause of the more severe form of this problem, known as hyperemesis gravidarum, is not known. Women with hyperemesis gravidarum experience nausea that does not go away, weight loss, reduced appetite, dehydration, and feeling faint (www.cdc.gov). Affected women may need to be hospitalized so that they can receive fluids and nutrients. Some women feel better after their 20th week of pregnancy, while others experience the symptoms throughout their pregnancy (National Organization for Rare Diseases, 2015).

- ***Iron – deficiency anaemia*** – Pregnant women need more iron than normal for the increased amount of blood they produce during pregnancy. Iron-deficiency anaemia - when the body doesn't have enough iron - is somewhat common during pregnancy and is associated with preterm birth and low birth weight. Symptoms of a deficiency in iron include feeling tired or faint, experiencing shortness of breath, and becoming pale. ACOG recommends 27 milligrams of iron anaemia. Some women may need extra iron through iron supplements (Astrid C RF et al., 2013). Your health care provider may screen you for iron-deficiency anaemia and, if you have it, may recommend iron supplements (Allen L. H., 2016).

- ***Rh negative disease*** – Rhesus isoimmunization. Rh factor is determined by the presence of a protein surrounding red blood cells. Without the protein, a woman

is considered Rh negative. If the mother is Rh-negative, and her child is born Rh-positive, she starts to build antibodies up against the next Rh positive baby. During the beginning of the pregnancy, the mother is tested to see if she has been sensitized. (Meaning the baby's red blood cells has been affected by the mother's developed antibodies). RhoGAM is a medication given around 28 weeks to prevent the build-up of these antibodies. RhoGAM is given again at birth, only if the baby is Rh-positive (www.cdc.gov).

- ***Ectopic pregnancy*** – Ectopic pregnancies can be caused by an STD, such as chlamydia, or an infection, such as pelvic inflammatory disease. Women who have undergone sterilization procedures or have been diagnosed with endometriosis or other female reproductive disorders are also at risk. If the fallopian tube is getting tighter, or narrower, the egg is fertilized outside the uterus in the tube, hence the name: "Tubal pregnancy." Causes heavy bleeding, severe pelvic pain, and dizziness and may result in death. Emergency surgery or Methotrexate is used for treatment (www.cdc.gov).

- ***Urinary Tract Infections (UTI)*** – A UTI is a bacterial infection in the urinary tract. You may have a UTI if you have -

- Pain or burning when you use the bathroom.
- Fever, tiredness, or shakiness.
- An urge to use the bathroom often.
- Pressure in your lower belly.
- Urine that smells bad or looks cloudy or reddish.
- Nausea or back pain.

Treatment with antibiotics to kill the infection will make it better, often in one or two days. Some women carry bacteria in their bladder without having symptoms (www.cdc.gov).

- ***Mental Health Conditions*** – Some women experience depression during or after pregnancy. Symptoms of depression are:

- A low or sad mood.
- Loss of interest in fun activities.
- Changes in appetite, sleep, and energy.
- Problems thinking, concentrating, and making decisions.
- Feelings of worthlessness, shame, or guilt.
- Thoughts that life is not worth living.

When many of these symptoms occur together and last for more than a week or two at a time, this is probably depression. Depression that persists during pregnancy can make it hard for a woman to care for herself and her unborn baby. Having depression before pregnancy also is a risk factor for postpartum depression. Getting treatment is important for both mother and baby. If you have a history of depression, it is important to discuss this with your health care provider early in pregnancy so that a plan for management can be made (www.cdc.gov).

PREGNANCY RELATED ANXIETY

Pregnancy is one of the most important events in women's' life. Being pleasant, it is one of the most stressful events in the life of a woman and psychologist describes pregnancy as an emotional crisis (Rubertsson C et al., 2014).

If this crisis is not properly managed and controlled, it will turn into a prolonged crisis and will leave countless undesirable consequences on mother and her baby (Glover V, 2014). Feelings of anxiety across pregnancy are relatively common, with about 10 – 15 % of all pregnant women experiencing some level of anxiety or stress during this major transitional phase in one's life (Dayan J et al, 2006). Prevalence of anxiety disorder during pregnancy, in developed and developing countries are 10% and 25%, respectively (Bayrampour H et al., 2015). Pregnant women worry about the upcoming labour and anticipated pain, also referred to as fear of childbirth (Sjögren B., 1997), or they may be concerned about the health of the child they are carrying or the physical changes they experience (Huizink AC et al., 2004). High levels of anxiety, during pregnancy, have adverse effect on mother and baby (Shahhosseini Z et al., 2008).

Anxiety, in early pregnancy, results in loss of foetus and in the second and the third trimester leads to a decrease in birth weight and increased activity of the Hypothalamus – Hypophysis – Adrenal axis (Ding XX et al, 2014). It causes a change in steroidogenes, destruction of social behaviour and fertility rate in adulthood. Also anxiety during pregnancy is accompanied by emotional problems, hyperactivity disorder, decentralization and disturbance in cognitive development of children (Tarabulsy GM PJ et al., 2014).

A study suggested that the level of the heart rate variability in the offspring of anxious mothers be less than the control group (Braeken MAKAet al., 2013). Such children show more fear in dealing with everyday events in their life. Mother's anxiety, during pregnancy, is also associated with poor maternal- child interaction.

In this way it's reported that anxiety and negative mood of mother has been stated as one of the mechanisms of this problem (Webb Ret al., 2014).

These adverse outcomes associated with pregnancy anxiety indicate that adequate assessment of pregnancy anxiety is important to be able to identify women who have particularly high levels of anxiety during the pregnancy period. This will facilitate prevention and intervention efforts to reduce anxiety during pregnancy, with potentially long-term beneficial effects on the child (Glover V., 2014).

Valid assessment tools to determine the level of pregnancy anxiety are therefore required. The Pregnancy-Related Anxiety Questionnaire–Revised Version (PRAQ-R2), a 10-item shortened version of the PRAQ-R, has been psychometrically tested and seems to be a robust predictor of birth-related and childhood outcomes, independent of general anxiety measures (Huizink AC et al., 2002).

Moreover, it has been shown in previous studies that pregnancy anxiety assessed with the PRAQ-R reflects a specific construct that can be differentiated from general anxiety for the most part (Huizink AC et al. 2014), although the two do influence each other over time during pregnancy (Huizink AC et al. 2014) . Other researchers have shown that pregnancy-specific anxieties are even better predictors of adverse birth and child outcomes than general anxieties (Dunkel Schetter C et al., 2012).

The revised PRAQ – R2 was earlier validated in a longitudinal study in Finland. *Pregnancy-specific anxiety* was assessed with Finnish and Swedish translations of the 10-item self-report Pregnancy-Related Anxiety Questionnaire–

Revised (PRAQ-R; Huizink et al. 2004), a shortened version of the 34-item PRAQ (Van den Bergh 1990). Scores on each item ranged from 1 (definitely not true) to 5 (definitely true). The items of the PRAQ-R can be ordered into three subscales. The first subscale, *Fear of giving birth*, consists of three items such as "I am worried about the pain of contractions and the pain during delivery". The second subscale, *Worries about bearing a physically or mentally handicapped child*, consists of four items, including "I sometimes think that our child will be in poor health or will be prone to illnesses". The third subscale, *Concern about own appearance*, consists of three items, such as "I am worried about my enormous weight gain".

Anxiety Measurement

Total Anxiety Score

- Equal to 10 – No Anxiety
- 10 – 20 = Mild
- 20 – 30 = Moderate
- 30 – 40 = Severe
- 40 – 50 = Very Severe

Subscale 1 Fear of Giving Birth

- Equal to 3 – No Anxiety
- 3 – 6 = Mild
- 6 – 9 = Moderate
- 9 – 12 = Severe

- 12 – 15 = Very Severe

Subscale 2 Worries of bearing a handicapped child

- Equal to 4 – No Anxiety
- 4 – 8 = Mild
- 8 – 12 = Moderate
- 12 – 16 = Severe
- 16 – 20 = Very Severe

Subscale 3 Concern of own appearance

- Equal to 3= No anxiety
- 3 – 6 = Mild
- 6 – 9 = Moderate
- 9 – 12 = Severe
- 12 – 15 = Very Severe

EFFECTS OF MATERNAL ANXIETY DURING PREGNANCY

Since ancient times, scientists have written about beliefs that the emotional state of the pregnant mother may affect her unborn child. Today, both animal and human studies support the notion that maternal stress and anxiety during pregnancy can have both immediate and long-term effects on her offspring. However, studies vary substantially in terms of their methodologies and results. Some studies examine isolated stressors, such as death of a spouse or natural disaster, while others look at stressful feelings and daily hassles during pregnancy (Reck C et al., 2013).

Prenatal stress and perinatal outcomes – Maternal stress and anxiety during pregnancy has been associated with:

- Shorter gestation & higher incidence of preterm birth
- Smaller birth weight and length
- Increased risk of miscarriage

Prenatal stress and infant outcomes – Prospective studies have shown that maternal stress and anxiety during pregnancy are related to infant outcomes such as:

- Temperamental problems and increased fussiness
- Problems with attention, attention regulation, and emotional reactivity
- Lower scores on measures of mental development

Prenatal stress and child outcomes – A recent large-scale epidemiological study confirmed some of the infant outcomes above and showed associations between prenatal stress and anxiety and:

- Hyperactivity and inattention in boys
- Emotional problems in girls and boys
- Conduct problems in girls

Prenatal stress and adult outcomes – A number of retrospective and epidemiological studies have linked severe stress during pregnancy (such as experiencing famine, a major earthquake, or other natural disasters) to higher

incidences of mental illness in adult offspring, such as schizophrenia and severe depression.

Moderate stress versus chronic or severe stress – Some studies have shown that mild to moderate levels of stress during pregnancy might actually be good for the baby, resulting in healthier immune systems and better motor development. More research is needed before firm conclusions can be drawn, but it may be that mild to moderate amounts of stress during pregnancy help prepare the baby for later stressors, such as birth (DiPietro, J.A., 2004).

Possible mechanisms – There are no direct neural pathways between the mother and foetus, so scientists have looked for more indirect pathways to understand how a mother's level of stress and anxiety may impact her baby. One possible mechanism is through stress hormones. When we are stressed, a series of chemical changes is set off in our bodies and brains, such as the release of cortisol and adrenaline. Normally, these chemicals help prepare us for danger and are important for our survival; however, if we are chronically stressed and anxious, these stress-related hormones can remain high for too long and wreak havoc on our bodies. Stress hormones in the mother's body do reach the baby. When a pregnant woman is chronically stressed or experiences extreme stress, the baby may be exposed to unhealthy levels of stress hormones, which can impact the baby's brain development. Chronic or extreme maternal stress may also cause changes in the blood flow to the baby, making it difficult to carry oxygen and other important nutrients to the baby's developing organs. In addition, chronically or severely stressed mothers may feel overwhelmed and fatigued which might impact their diet and sleep habits and consistency of prenatal care. All of these factors may help

explain how maternal stress during pregnancy can have long-term effects on the unborn child.

Importantly, studies are beginning to examine what factors might help buffer the effects of stress during pregnancy. One important factor seems to be the mother's level of social support. Other protective factors may include: gaining some control of stressful situations, consistent prenatal care, regular light exercise, adequate rest, healthy eating habits, and avoiding alcohol, tobacco, and other drugs (Huizink, A.C. et al., 2004).

REDUCING STRESS IN PREGNANCY

Stress reduction is considered to be one important way an expectant mother can achieve better health and prevent certain complications. The causes of stress during pregnancy are often varied. A woman may become stressed as her body begins to change, as she experiences the effects of pregnancy-related hormones, or as a result of anxiety or fears about pregnancy and childbirth. Individuals who experience negative or catastrophic life events during pregnancy or who have chronic stress, PTSD, or other mental health concerns may also experience greater levels of stress during pregnancy (Sullivan, R. et al., 2006).

A health care professional will likely advise a woman experiencing stress to cut back on stressful activities, stay healthy and fit by eating nutritious foods and keeping as active as possible, maintain a support network and keep in contact with friends and family, seek and accept help when needed, participate in childbirth education classes, and take up relaxation techniques such as

prenatal yoga or meditation. Professional help from a therapist or counsellor may also be recommended.

The pharmacist can play an important role in reducing pregnancy related anxiety or stress by proper counselling. To create a proper impact of counselling on pregnancy related anxiety, we first need to study the prevalence of anxiety during pregnancy.

This study will help in finding the prevalence of anxiety among pregnant women which can lead to further study of its impact and prevention.

NUTRITION IN PREGNANCY

An adequate nutrition pattern plays an important role in maintaining one's health and well-being. During pregnancy, a woman undergoes major biological, physical, psychological and social transformation (Van Teijlingen E et al., 1998). To cope up with all these changes a pregnant woman needs to be more concerned about the nutrition pattern. Pregnancy although exciting may also lead to uncertainties and concerns about a women's new identity as a mother, triggering her concern about her nutrition patterns (Deutsch FM et al., 1998). Pregnancy particularly a first pregnancy is likely to be more critical for a woman to modify her nutrition related behaviour which was easier at other times. Pregnancy can therefore be considered as a major transition in a woman's life and may have a positive influence on a woman's future health and nutrition behaviour and that of her family (Barry N et al.1998). This phenomenon has been introduced as the "life course perspective" (LCP)

Pregnancy is the most crucial nutritionally demanding period of every woman's life. The high demand of nutrients to deposit energy in the form of new tissue, growth of existing maternal tissues such as breast and uterus and increased energy requirements for tissue synthesis makes pregnant women more vulnerable to malnutrition (Goldberg G, 2002).

Efforts have been made to study insights into the behavioural patterns of pre-conception, antenatal and postnatal smoking behaviours in relation to the LCP (Baker TB et al., 2004). However, studies on nutrition behaviours are scarce.

EXERCISE PATTERN DURING PREGNANCY

Pregnancy is associated with considerable physiological and psychological changes which may promote sedentary behaviours and/or reduced level of physical activity. Reduced physical activity may increase the risk of gestational diabetes, pregnancy induced hypertension, high gestational weight gain, and the long term risk for obesity development, Type 2 diabetes and cardiovascular disease (USDHHS, 2008).

An epidemiological data based on the National Health and Nutrition Examination Survey (NHANES) indicates that only 15% of pregnant women meet the minimum national recommendations of 150 minutes of moderate physical activity per week (Evenson & Wen, 2010, USDHHS, 2008). One reason for this might be due to challenges associated with pregnancy like nausea, fatigue, low motivation, increased body size, pregnancy complications, etc. and the varied perspectives regarding how much physical activity is recommended during pregnancy.

The American College of Obstetrics and Gynaecologists recommends women should perform 30 minutes or more of moderate-intensity exercise most of the days of the week, if not all, during pregnancy (ACOG, 2002). Many healthy pregnant women are either not advised of the benefits of exercise or choose not to participate in any activity as recommended by the American College of Obstetrics and Gynaecologist guidelines (Doran F et al., 2011).

In the Indian scenario, not much importance is given to exercise. They consider doing house chores is sufficient. It was sufficient in the older times as during those times the house chores were equivalent to 30 minutes of any moderate intensity physical activity. Nowadays, in the fast moving world where technology has made everything available at the touch of a finger, has created a more sedentary lot of humans. This sedentary way of living may lead to many health issues.

Pregnancy is a time when a woman has to take care of both hers' as well as the health of the baby. So, extra care needs to be given to their nutritional and physical activity behaviour.

A proper study can help in increasing the awareness of the importance of moderate physical activity during pregnancy and how it can help in reducing unwanted complications. We can also help them understand the do and don'ts to be followed during pregnancy.

MODE OF DELIVERY

Mode of delivery is defined as choosing either the vaginal or caesarean section (C-section) delivery (Belizán JM et al., 2007). Vaginal delivery is the natural method of birth, though about 10% of normal deliveries may be complicated,

caesarean section delivery is suggested to prevent either maternal or foetal morbidities mortality (Mungrue K et al., 2010). However, nowadays, many C-sections are performed upon maternal request with no medical cause.

The rate of caesarean section delivery is rising worldwide. It has become a part of their culture in some countries (Angeja AC et al., 2006). World Health Organization (WHO) recommended that not more than 10-15% of pregnancies should be terminated by C-section (Soltani H et al., 2012). The rate of C-section may be affected by some individual and cultural factors (Althabe F &Belizán JM., 2006). The term "elective caesarean section delivery" refers to those C-section deliveries which are performed with no medical cause (Cunningham F et al., 2014).

It has been documented that mortality and morbidity for C-section deliveries are greater than normal vaginal delivery and C-section delivery, also, increases the expenses up to three times (Lavender Tet al., 2012).

One of the strategies of WHO to promote maternal health is protecting mothers from unnecessary medical technologies (Nouri TS., 2006). Performing C-section deliveries without proper medical indication is announced as immoral by the International Confederation of midwives (Devendra K et al., 2003). Although certain health professionals' authorities have been considering reducing the rate of elective C-section delivery, it is increasing in some countries (Pezeshki Z, 2013).

LITERATURE REVIEW

Forough Mortazavi1. et al., (2018) conducted a study on Validation of the Anxiety Scale for Pregnancy in a Sample of Iranian Women. Pregnancy-related anxiety is a risk factor for poor outcomes. The aim of this study was to validate the Farsi version of the Anxiety Scale for Pregnancy (ASP) in a sample of Iranian women. After translation and back-translation of the ASP, the content validity ratio (CVR) and the content validity index (CVI) of each item were calculated based on the opinions of a panel of 10 experts. Four hundred pregnant women in the third trimester of pregnancy completed the Farsi version of the ASP. For discriminant validity, we compared the ASP mean scores of women with low and high levels of childbirth fear. Confirmatory factor analysis (CFA) was performed to investigate construct validity of the scale. No item had CVR and CVI scores less than 0.62 and 0.8, respectively. The results of the CFA for the ASP were unsatisfactory for the proposed 5-factor model (RMSEA = 0.087, SRMR = 0.092, chi-square/*df* = 4.03, CFI = 0.87, and GFI = 0.91). After removing item 9, satisfactory CFA results were obtained and the structural model fit was confirmed (RMSEA = 0.066 (CI [0.053, 0.078]), SRMR = 0.069, chi-square/*df* = 2.71, CFI = 0.93, GFI = 0.95). Cronbach α coefficient for the 13-item ASP was 0.703. The scale showed moderate correlations with the Spielberger State-Trait Anxiety Inventory (STAI) and Childbirth Attitudes Questionnaire (CAQ) scores (0.61, 0.59, and 0.57, respectively) and could differentiate well between women who preferred caesarean and those requesting vaginal delivery. The present study confirmed the content validity and construct validity of the Farsi version of the 13-item ASP for women in the third trimester of pregnancy.

Vanessa Wall et al., (2017) conducted a study on **Factors associated with pregnancy-related anxiety in Tanzanian women** to identify factors predictive of pregnancy-related anxiety (PRA) among women in Mwanza, Tanzania. It is a cross-sectional study was used to explore the relationship between psychosocial health and preterm birth. The study was done in Antenatal clinics in the Ilemela and Nyamagana districts of Mwanza, Tanzania. Pregnant women less than or equal to 32 weeks' gestational age (n=212) attending the two antenatal clinics participated in the study. PRA was measured using a revised version of the 10-item PRA Questionnaire (PRA-Q). Predictive factors included social support (Multidimensional Scale of Perceived Social Support), stress (Perceived Stress Scale), depression (Edinburg Postpartum Depression Scale) and sociodemographic data. Bivariate analysis permitted variable selection while multiple linear regression analysis enabled identification of predictive factors of PRA. Twenty-five per cent of women in our sample scored 13 or higher (out of a possible 30) on the PRA-Q. Perceived stress, active depression and number of people living in the home were the only statistically significant predictors of PRA in our sample. Their findings were contrary to most current literature which notes socioeconomic status and social support as significant factors in PRA. A greater understanding of the experience of PRA and its predictive factors is needed within the social cultural context of low/middle-income countries to support the development of PRA prevention strategies specific to low / middle income countries.

K. Oliver Schubert et al. (2017) conducted a study on **Trajectories of anxiety and health related quality of life during pregnancy.** Anxiety and health related Quality of Life (HRQoL) have emerged as important mental health measures

in obstetric care. Few studies have systematically examined the longitudinal trajectories of anxiety and HRQoL in pregnancy. Using a linear growth modelling strategy, we analysed the course of State-Trait Anxiety Inventory (STAI) - and Short Form (36) Health Survey (SF-36) scores between the 12^{th} and the 36^{th} week of gestation, in a sample of 355 women. We additionally analysed the impact of depressive symptoms and a chronic medical condition (asthma), on STAI and SF-36 trajectory curves. STAI scores remained stable throughout pregnancy. A previous history of anxiety increased the overall STAI scores. Asthma and depressive symptoms scores had no impact on the STAI trajectory. Physical SF-36 scores decreased over the course of pregnancy, whereas mental SF-36 trended towards improvement. Asthma reduced physical SF-36 overall. While high depressive symptoms decreased the overall mental SF-36, they were also significantly associated with mental SF-36 improvements over time. Anxiety symptoms are stable during pregnancy and are not modulated by depressive symptoms or asthma. Physical HRQoL declines in pregnancy. In contrast, mental HRQoL appears to improve, particularly in women with high initial levels of depressive symptoms.

MulualemEndeshaw. et al., (2017) conducted a study on Effect of Nutrition Education on Pregnancy Specific Nutrition Knowledge and Healthy Dietary Practice among Pregnant Women in Addis Ababa. This study was conducted to assess the effect of nutrition education on the knowledge and practice of pregnant women during pregnancy. A before-after cross sectional study was conducted among 406 pregnant women in Akaki Kality Sub-city, Addis Ababa. Knowledge and practice of pregnant women on pregnancy specific nutrition was assessed before and after receiving education from trained ANC providers. Data was managed using SPSS 20.

Change in nutrition knowledge and dietary practice of pregnant women during pregnancy was analysed by using paired t-test and 95% confidence interval. The response rate of this study was 96.3%. The common source of information for pregnant women on nutrition during pregnancy was health professionals (59%). The mean knowledge and practice score of pregnant women was 5.5 (SD ± 2) out of 9 and 6.2 (SD ± 2) out of 11 respectively. After nutrition education program intervention the proportion of pregnant women with knowledge on proper nutrition during pregnancy increased from 53.9 (95% CI: 48.9, 58.8) to 97% (95% CI: 94.8, 98.5) while the pregnancy specific dietary practice of the pregnant women increased from 46.8% (95% CI: 41.8, 51.7) to 83.7% (95% CI: 79.8, 87.2). Nutrition education during pregnancy by health care providers could improve knowledge and practice of women during pregnancy. Thus, attention should be given to promote nutrition education at the ANC for pregnant women to get reliable and accurate information from health professionals.

Nadia A. Nasir et al., (2017) conducted a study on Knowledge and attitude of pregnant women towards modes of delivery in an antenatal care clinic in Baghdad. The study was designed to provide data on the level of existing knowledge, attitudes and preference of modes of delivery, which can be used as a platform to raise knowledge among pregnant women and their partners and thereby empowering women to make informed choices. This cross-sectional study was undertaken in an antenatal care clinic in Baghdad Teaching Hospital, Medical City, and Baghdad from 1st Feb. -31st May 2016. All 300 pregnant attending the antenatal clinic was interviewed with a structured questionnaire that solicited information on their knowledge, attitudes and preference towards modes of delivery.

Mean age of pregnant women was 28.3 ± 9.8SD years and84.7% was not employed. More than half of them (54.3%) had married at younger age (<20 years). Educational levels were 43.3% primary, 18% secondary and 20.4% university levels. Knowledge of majority of pregnant mothers (82.6%) about modes of delivery was obtained from relatives. Half of pregnant women had good knowledge about modes of delivery, 51.3% of them had negative attitude toward CS, and 62% had positive attitude towards CS delivery in current pregnancy. Study results emphasize the need for educating families, especially pregnant women and their partners about the pros and cons of different modes of giving birth to their babies.

Emilie NorNielsen et al., (2017) conducted a study on Mode of Delivery according to Leisure Time Physical Activity before and during Pregnancy. The multicentre cohort study was conducted on low risk women to examine the association between maternal leisure time physical activity and mode of delivery. It was a Population-based multicentre cohort. From the Danish Dystocia Study, we included 2,435 nulliparous women, who delivered a singleton infant in cephalic presentation at term after spontaneous onset of labor in 2004-2005. We analysed mode of delivery according to self-reported physical activity at four stages, that is, the year before pregnancy and during first, second, and third trimester, in logistic regression models. Further, we combined physical activity measures at all four stages in one variable for a proportional odds model for cumulative logits. Main Outcome Measures. Mode of delivery (emergency caesarean section; vacuum extractor; spontaneous vaginal delivery). The odds of emergency caesarean section decreased with increasing levels of physical activity with statistically significant trends at all four time stages except the third trimester. This tendency was confirmed

in the proportional odds model showing 28% higher odds of a more complicated mode of delivery among women with a low activity level compared to moderately active women. We found increasing leisure time physical activity before and during pregnancy associated with a less complicated delivery among low-risk, nulliparous women.

MarijaKolosova et al., (2017) conducted a study on Nutritional awareness among pregnant women in Latvia. The aim of this study was to analyse the level of nutritional awareness among pregnant women in Latvia. A descriptive cross-sectional study was carried out in Riga Maternity Hospital. 110 pregnant women receiving antenatal care participated in the survey. 64.5% of respondents received recommendations on proper nutrition from health care professionals during pregnancy, whereas only 20.9% were informed in the preconception period. 68.7% of participants, who received information about the principles of healthy nutrition, considered them to be sufficient. The majority of women got the recommendations from gynaecologists-obstetricians- 4.9%. 39.1% of women used non-evidence-based sources when searching for the information about healthy nutrition. 34.5% of all pregnant women had at least one health or social risk factor, which required individualized diet planning, however, 26.3% of them did not receive any recommendations at all. 28.7% of respondents started pregnancy with abnormal Body Mass Index (BMI). Women should be advised to make diet corrections before pregnancy; therefore more consultations in preconception period are needed. Additional educational sources providing information about healthy nutrition should be considered.

A. C. Huizink. et al., (2016) conducted astudy on Adaption of pregnancy anxiety questionnaire–revised for all pregnant women regardless of parity: PRAQ-R2. Feelings of anxiety across pregnancy are relatively common, with about 10–15 % of all pregnant women experiencing some level of anxiety or stress during this major transitional phase in one's life. The adverse outcomes associated with pregnancy anxiety indicate that adequate assessment of pregnancy anxiety is important to be able to identify women who have particularly high levels of anxiety during the pregnancy period. This will facilitate prevention and intervention efforts to reduce anxiety during pregnancy, with potentially long-term beneficial effects on the child. Because of its limited number of items in the PRAQ-R, it is a feasible instrument to include not only in scientific studies of pregnant women and their offspring but also in clinical practice. It is therefore a widely used instrument. The study population was drawn from the ongoing FinnBrain Birth Cohort Study. Women were considered eligible to participate in the study if they had a verified pregnancy, had sufficient knowledge of Finnish or Swedish (the official languages of Finland) to fill in the study questionnaires, and gave written informed consent. Recruitment was based on a personal contact by a research nurse. Parent(s) participating in the study gave written informed consent also on behalf of the child. *Pregnancy-specific anxiety* was assessed with Finnish and Swedish translations of the 10-item self-report Pregnancy-Related Anxiety Questionnaire–Revised a shortened version of the 34-item PRAQ. Participants' age ranged between 18.19 and 42.53 at the 24th week of gestation (mean age 30.60, SD = 4.43). Nulliparous women were somewhat younger than parous women (mean age = 29.40, SD = 4.42 for nulliparous; mean age = 31.95, SD = 4.04 for parous women; $F(1, 1141) = 102.13$, $p < 0.01$). Nulliparous women had a higher mean income

than parous women, but the groups were similar in terms of marital status and education. The purpose of the current study was to test whether a slight rephrasing of 1 item of the 10-item Pregnancy-Related Anxiety Questionnaire–Revised. This conclusion based on our data has implications for the use of PRAQ-R in large-scale studies and for the implementation of the questionnaire in clinical settings or for prevention programs, when an estimate of the level of pregnancy anxiety is required. Our findings support the use of modified PRAQ-R—the PRAQ-R2—in both nulliparous and parous pregnant women. The instrument is brief, valid and feasible, and its predictive abilities have been shown repeatedly, for instance on adverse child behaviours.

Girija Kalayil Madhavan prabhakaran et. al., (2015) conducted a study on **"Prevalence of pregnancy anxiety and associated factors"** to determine the prevalence of pregnancy-specific anxiety (PSA) and its associated factors among pregnant women during the three trimesters of pregnancy. A prospective explorative survey was conducted among 500 low-risk Indian pregnant women of age 18–35 years who attended the major maternity government hospital during the period June 2004–July 2005. An exploratory research design with a prospective cohort approach was adopted for the study. State Trait Anxiety Inventory (STAI) and Pregnancy-Specific Anxiety Inventory (PSAI) were used to collect the data. Highest prevalence of pregnancy-specific anxiety (PSA) was reported during the third trimester of pregnancy. All pregnant women rated high levels of third trimester childbirth anxiety compared to other three components of pregnancy-specific anxiety. Nulliparous pregnant women reported higher levels of PSA than parous pregnant women (M = 134.40, M = 116.8). Young age, nulliparous status and nuclear family

nature were identified as common risk factors of pregnancy-specific anxiety. During the transition to motherhood, the risk factors and timing of heightened pregnancy-specific anxiety differs. Higher prevalence of pregnancy anxiety among nulliparous and younger pregnant women necessitates an integrated routine screening of PSA during prenatal care. They concluded that early detection, prevention and management of pregnancy anxiety will enable women to cope with the challenges of pregnancy.

Robyn J Bruntonet.al., (2015) conducted a study on **Pregnancy anxiety.** It was a systematic review of current scales. Depression in pregnancy is a serious health issue; however, anxiety in pregnancy, with a reported higher prevalence, may also be a serious issue. Anxiety symptoms in pregnancy can relate to several anxiety types, such as general anxiety, anxiety disorders, and pregnancy-related anxiety (PrA), anxiety characterised by pregnancy specific fears and worries. Awareness of these distinctions however, is not always widespread. Both general anxiety and PrA are associated with maternal negative outcomes (e.g. increased nausea) however; PrA is more often associated with negative outcomes for the child (e.g. preterm birth). Furthermore, PrA is potentially a risk factor for postnatal depression with assessment of PrA potentially affording important intervention opportunities. Currently several different instruments are used for PrA however their psychometric properties are unclear. To our knowledge a review of current instruments and their psychometric properties is lacking, this paper aims to fill that gap. Methods: Studies, which assessed PrA, published between 1983 and 2013 in peer-reviewed journals, were identified. Sixty studies were identified after applying inclusion/exclusion criteria, and classified as: pregnancy related anxiety specific, scales for other

constructs, sub scales of another instrument and general anxiety scales. Each scale's strengths and limitations were discussed. The findings may be limited by restricting our review to peer-reviewed journals. This was done however as we sought to identify scales with good psychometric properties. They concluded that currently no scales are available for pregnancy-related anxiety with sound theoretical and psychometric properties. Clinically the need for such a scale is highlighted by the potential intervention opportunities this may afford. Future research should be directed towards the development of such a scale.

Marie-Julia Guittier et al., (2014) conducted a qualitative study on Impact of mode of delivery on the birth experience in first-time mothers. Aqualitative approach using thematic content analysis of in-depth interviews conducted between 4 and 6 weeks' postpartum, in 24 primiparous women who delivered at Geneva University Hospital in 2012. Perceived control, emotions, and the first moments with the newborn are important elements for the experience of childbirth. Depending on the mode of delivery these are perceived differently, with a negative connotation in the case of caesarean section. Other elements influencing the delivery experience were identified among all participants, irrespective of the mode of delivery. They included representations, as well as the relationship with caregivers and the father in the delivery room, privacy, unexpected sensory experiences, and ownership of the maternal role. Women's and health professionals' representations sometimes led to a hierarchy based on the mode of delivery and use of analgesia. The mode of delivery directly impacts on certain key delivery experience determinants as perceived control, emotions, and the first moments with the newborn. The ability/inability of the woman to imagine a second pregnancy is a good indicator of the birth

experience. Certain health professional gestures or attitudes can promote a positive delivery experience. We recommend to better prepare women during prenatal classes for the eventuality of a caesarean section delivery and to offer all women and, possibly, their partners, the opportunity to talk about the experience of childbirth during the postpartum period. The results of this study suggest that further research is required on the social representations of women and health professionals regarding the existence of a hierarchy associated with the mode of delivery.

AIM AND OBJECTIVE

AIM

To check the incidence and impact of various complications on pregnancy related anxiety in women attending an OBG clinic in a tertiary care hospital

OBJECTIVE

Primary Objective:

- To observe incidence of various complications during pregnancy.
- To measure the anxiety level in pregnant women.
- To understand relation between the various complications and pregnancy related anxiety.
- To understand relation between pregnancy related anxiety and various parameters in pregnancy

Secondary Objective:

- To study the daily physical activity pattern.
- To study diet pattern.
- To study their self-medication habits.

PLAN OF WORK

PHASE 1

- Initial study to identify the scope of work
- Literature survey
- Checking feasibility
- Preparation of study protocol
- Designing of questionnaire and data collection form

PHASE 2

- Gaining ethical committee approval
- Selecting appropriate hospital with gynaecology department to conduct the study
- Meeting the gynaecologist to discuss the study protocol
- Getting approval of specific scale from the gynaecologist.
- Data collected from study population after taking appropriate consent

PHASE 3

- Review of lab investigations
- Review of individual case reports
- Analysing the data
- Interpreting Results
- Discussion

PHASE 4

- Collating the results and discussion
- Report preparation
- Submission

MATERIALS AND METHODS

Study Site

MMCH Hospital - Erode

Study Design

This was a prospective observational study

Study Duration

Nine months

Study population

200 Pregnant women

Data Collection

Data collection was done through patient interview and questionnaire.

STUDY CRITERIA

Inclusion Criteria:

- All Pregnant women irrespective of gestational weeks
- Naturally pregnant women with any type of complication.
- IUI and IVF pregnancy cases

Exclusion Criteria:

- Non-consenters
- Mentally challenged patients
- Incomplete data entries.
- Multiple abortions

MATERIALS USED:

- Pregnancy Related Anxiety Questionnaire PRAQ – R2 was used to check the anxiety level of pregnant women.
- The scale was checked and approved by a Gynaecologist.
- The translated version was checked and approved by a Tamil teacher.

DATA ANALYSIS:

The continuous variables of two groups were described and interpreted by student independent "t" tests and more than two groups were analysed and interpreted by one way ANOVA. The categorical variables were described in terms of percentages and interpreted by χ^2 (Chi-square) test. The relation between the continuous variables were analyzed and interpreted by Pearsonic correlation coefficient (r). The P-values less than or equal to 0.05 ($P \leq 0.05$) were treated as statistically significant.

SCOPE OF THE STUDY

- Studying the incidence of various complication in pregnancy can help in understanding ways to cope up with them
- This study can help to check impact of pharmacist counselling on anxiety during pregnancy.
- It can further help to study the impact of anxiety on health of baby and mother.
- A multicentre study could be done to check the comparative nature of the study.

RESULTS AND DISCUSSION

AGE WISE DISTRIBUTION

The following figure shows the age wise distribution of the total study population.

Figure 1: Age wise distribution (N=200)

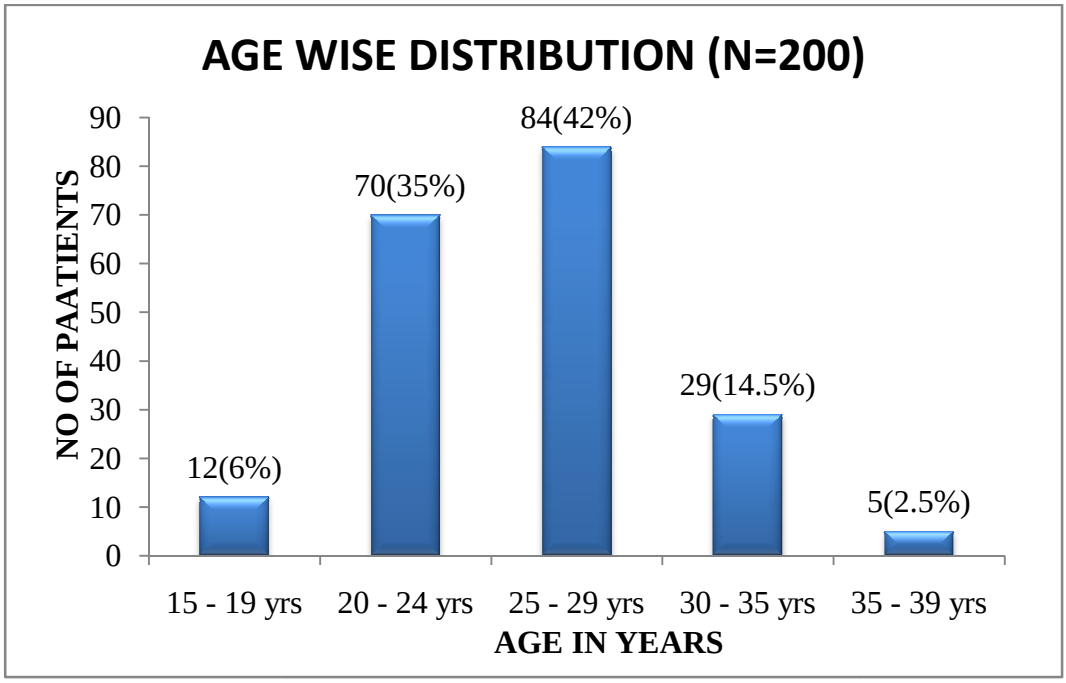


Figure 1 shows the age wise distribution of the study population where the majority (42%) of the population was from the age group 25 - 29 yrs and the least (2.5%) were from the age group 35 - 39 yrs.

EDUCATIONAL STATUS

Total study population was classified according to their education levels as follows:

Figure 2: Educational status (N=200)

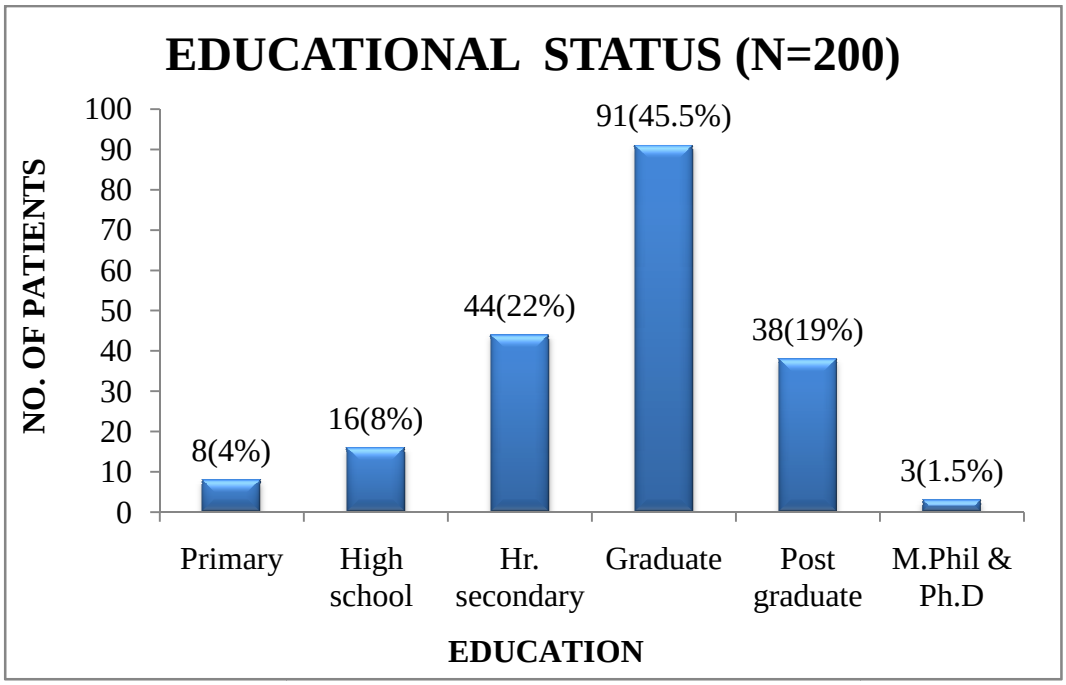


Figure 2 shows that majority of the study population were graduates (45.5%) and the least were highly educated having M.Phil or a Ph.D (1.5%).

OCCUPATIONAL STATUS

Occupation wise classifications of the study population were as follows:

Figure 3: Occupational status (N=200)

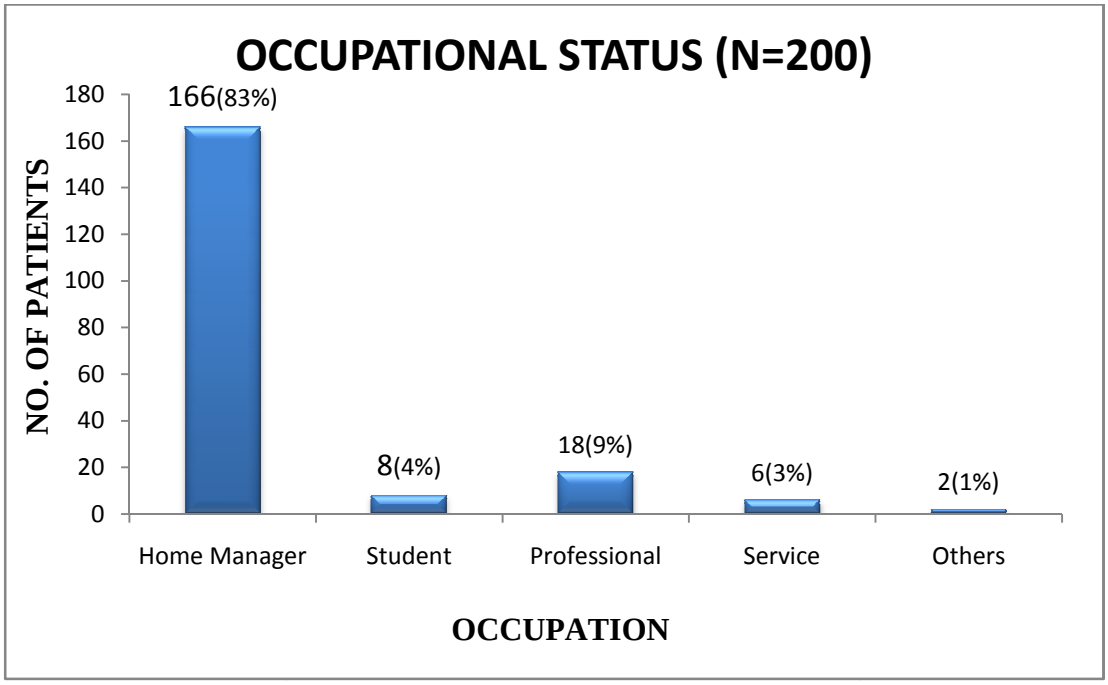


Figure 3 shows that majority of the study population were home managers (83%) followed by 9% being professionals, 4% being students, 3% being in some service and 1% doing other jobs.

PREGNANCY TRIMESTER

All the pregnant women are divided into trimesters according to their months of gestation.

Figure 4: Pregnancy Trimester (N=200)

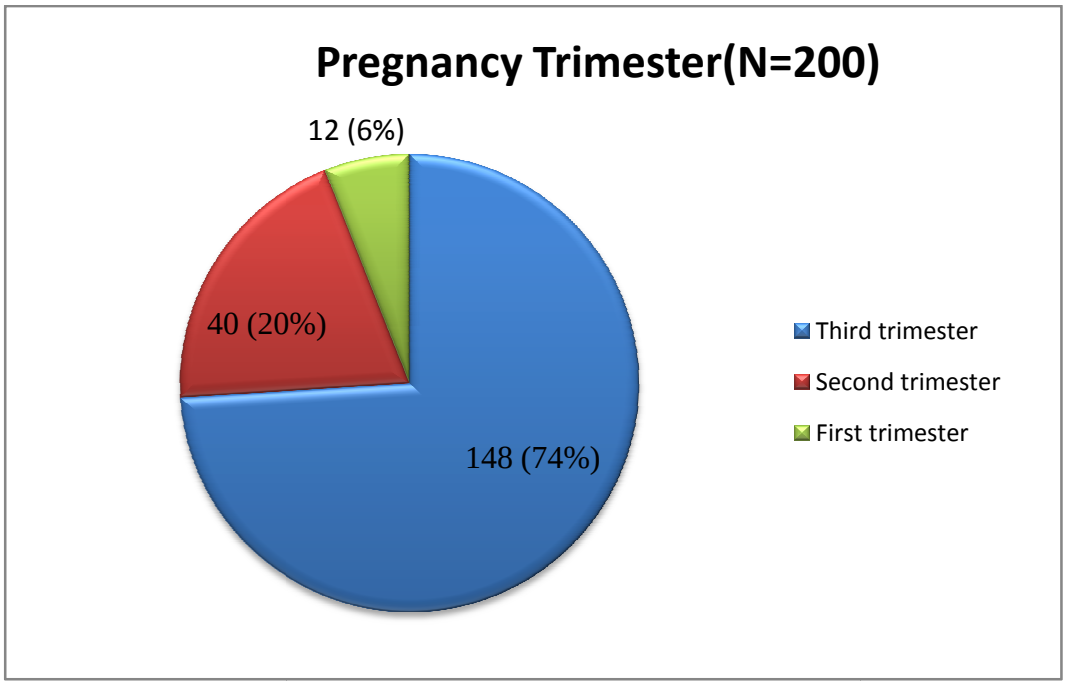


Figure 4 shows that majority of the study population were in the third trimester (74%) and the least were in the first trimester (6%)

PARITY OF PREGNANCY

Study population was divided according to their parity.

Figure 5: Parity of Pregnancy (N=200)

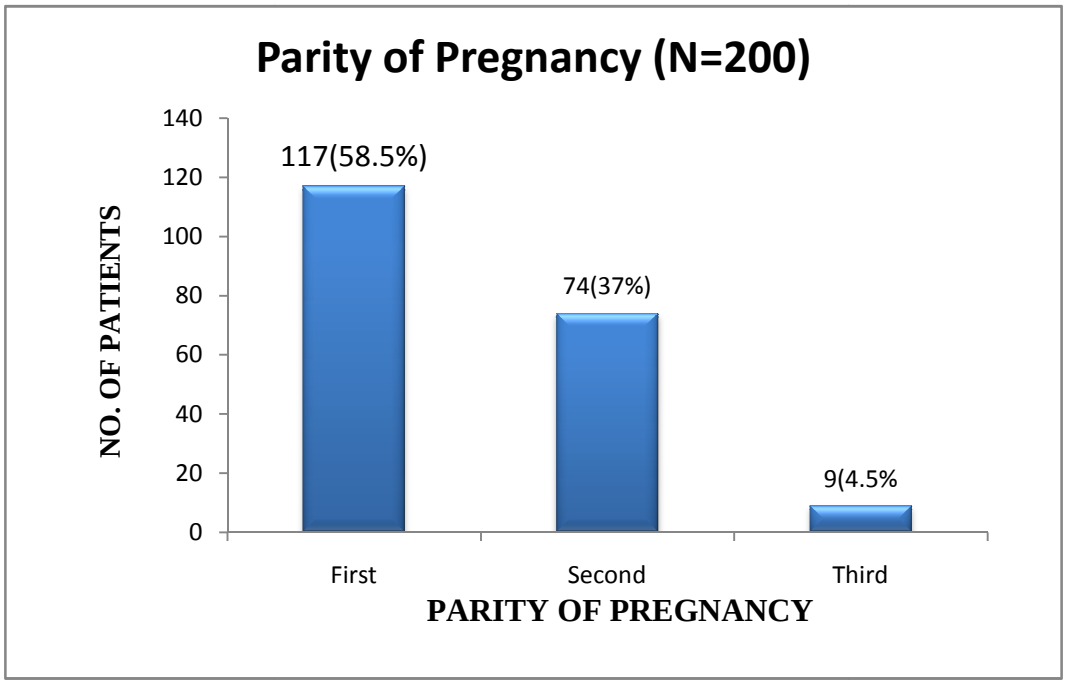


Table 1: Parity of Pregnancy with their respective trimesters (N=200)

Trimester	Parity-1		Parity-2		Parity-3		Total	
	No	%	No	%	No	%	No	%
1st	7	3.5	4	2.0	1	0.5	12	6.0
2nd	21	10.5	15	7.5	4	2.0	40	20.0
3rd	89	44.5	55	27.5	4	2.0	148	74.0
Total	117	58.5	74	37.0	9	4.5	200	100.0
Significance	χ^2 =4.504 df 4, P=0..342							

The table 1 states the trimester according to the parity of pregnant women. The 1st, 2nd and 3rd trimesters were 6.0%, 20% and 74% respectively. Similarly the parity 1, 2 and 3 were 58.5%, 37% and 4.5% respectively.

PREGNANCY SEQUENCE

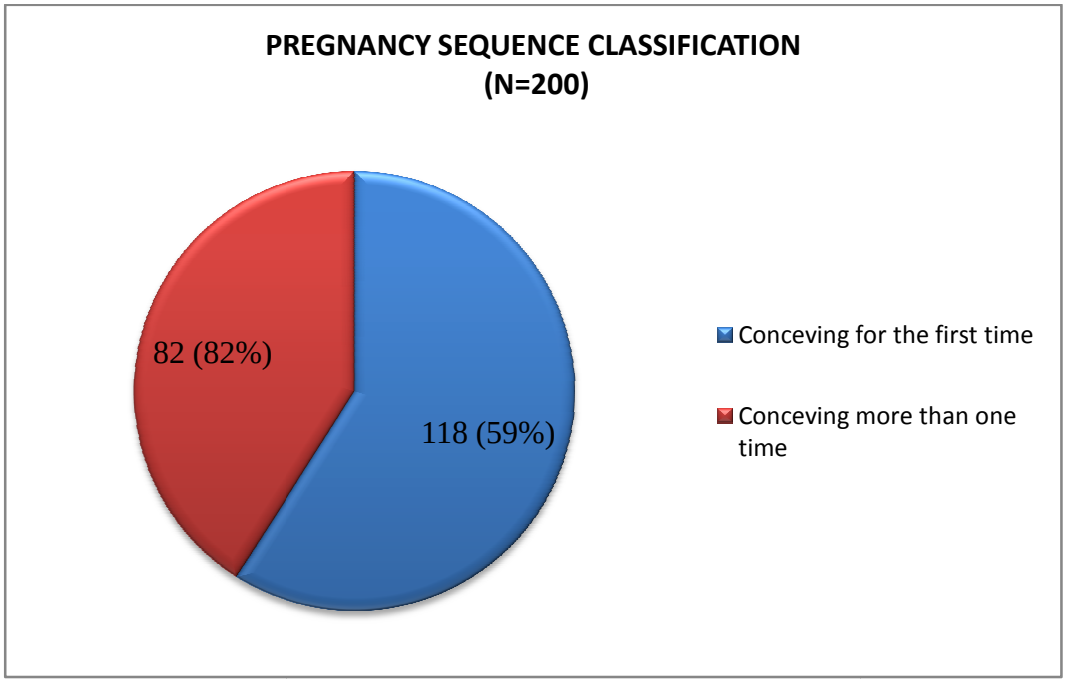
Total study population is divided into two classes like women who conceive for the first time and women who conceive more than one time.

Table 2: Pregnancy sequence classification

Pregnancy sequence class	No. of patients	Percentage (%)
Conceiving for the first time	118	59
Conceiving more than one time	82	41

Table 2 shows, among the total study population 118 (59%) number of the population were conceiving for the first time and 82 numbers of patients which is 41% of the study population were conceiving for more than one time.

Figure 6: Pregnancy sequence (N=200)



HISTORY OF COMPLICATIONS IN LAST PREGNANCY

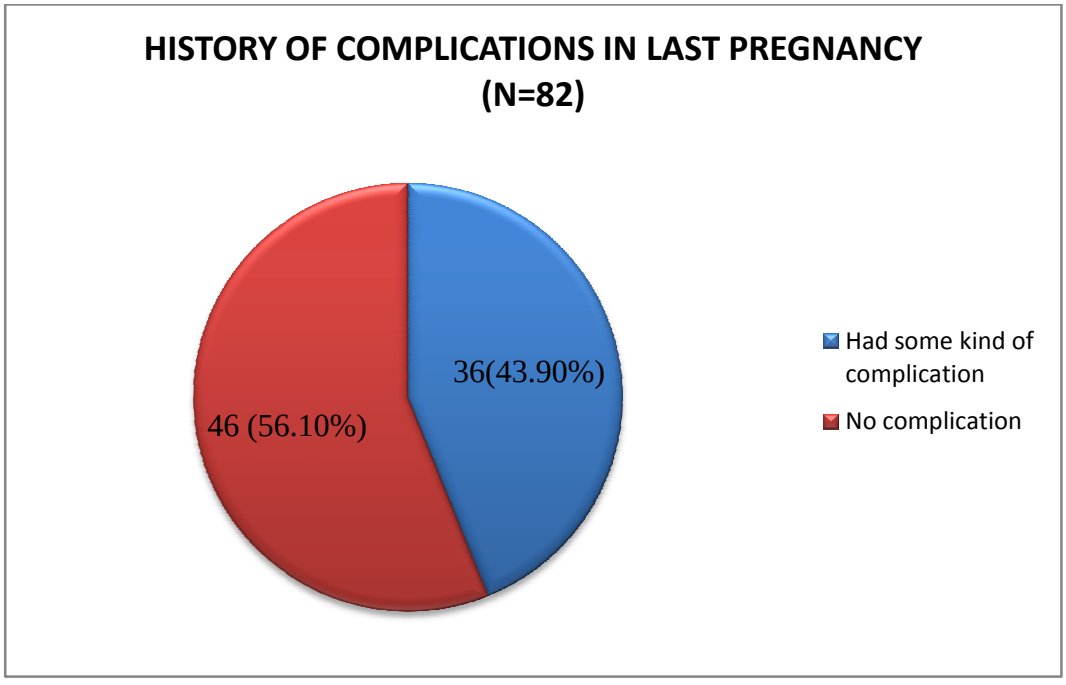
Among the 82 patients whose were conceiving for more than one time, history of complication in last pregnancy were as follows

Table 3: History of Complications in last pregnancy (N=82)

History of Complication in last pregnancy	Number of patients	Percentage (%)
Yes	36	43.90
No	46	56.10

Table 3 shows, among 82 patients conceiving for more than one time 36 patients had a history of some kind of complications in their last pregnancy which is 43.90% of the study population and 46 patients did not have a history of complications in their last pregnancy**.**

Figure 7: History of Complications in last pregnancy (N=82)



OUTCOME OF DELIVERY OF PREVIOUS PREGNANCY

Among the 82 patients whose are conceiving for more than one time, the outcome of the previous pregnancy were as follows

Figure 8: Outcome of delivery of Previous Pregnancy

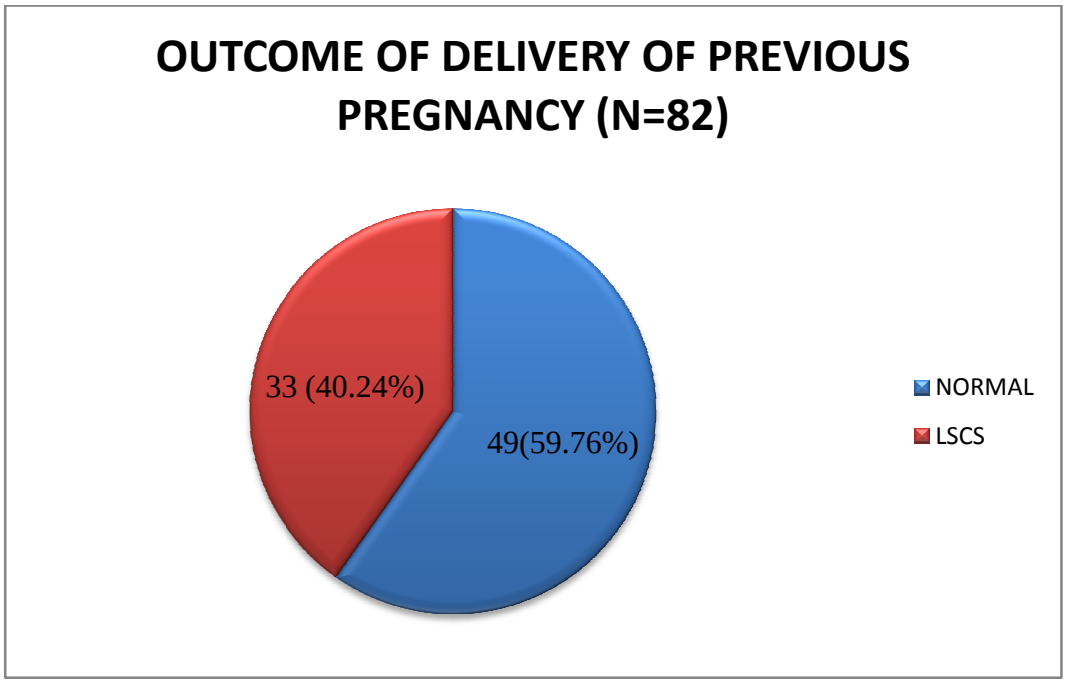


Figure 8 shows that among the 82 patients who are conceiving for more than one time 59.76% patients had a normal vaginal delivery and 40.24% had C-section.

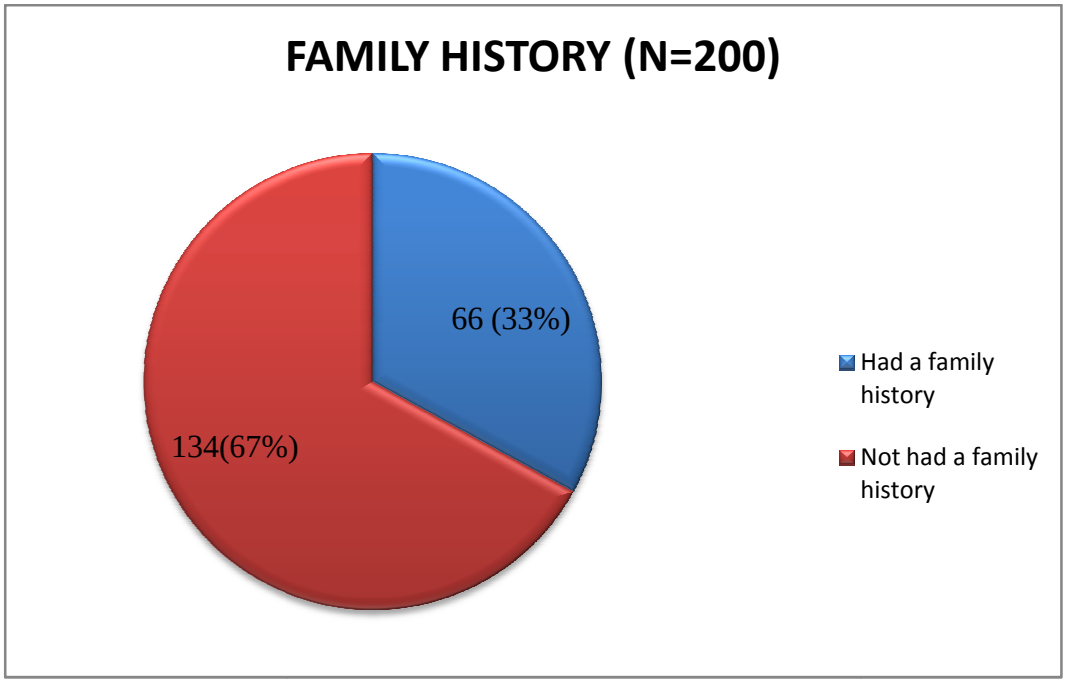
FAMILY HISTORY

Table 4: Family history (N=200)

Family history	No of patients	Percentage (%)
Had a history of some complication	66	33
Not had a history of any complication	134	67

Table 4 shows, among the study population 66 patients in the study population had a family history of some kind of complications which is 33% of the population.

Figure 9: Family history (N=200)



DETAILS OF FAMILY HISTORY

The group is classified according to which parent had complication.

Table 5: Details of family history

CONDITION	FAMILY HISTORY	NUMBER OF PATIENTS
DM	FATHER	18
	MOTHER	13
	FATHER/MOTHER	3
HTN	FATHER	12
	MOTHER	4
	FATHER/MOTHER	2
DM/HTN	FATHER	2
	MOTHER	3
	FATHER/MOTHER	5
ASTHMA	FATHER	1
	MOTHER	2
EPILEPSY	MOTHER	1
HYPOTHYROIDISM	MOTHER	4

ALLERGIES

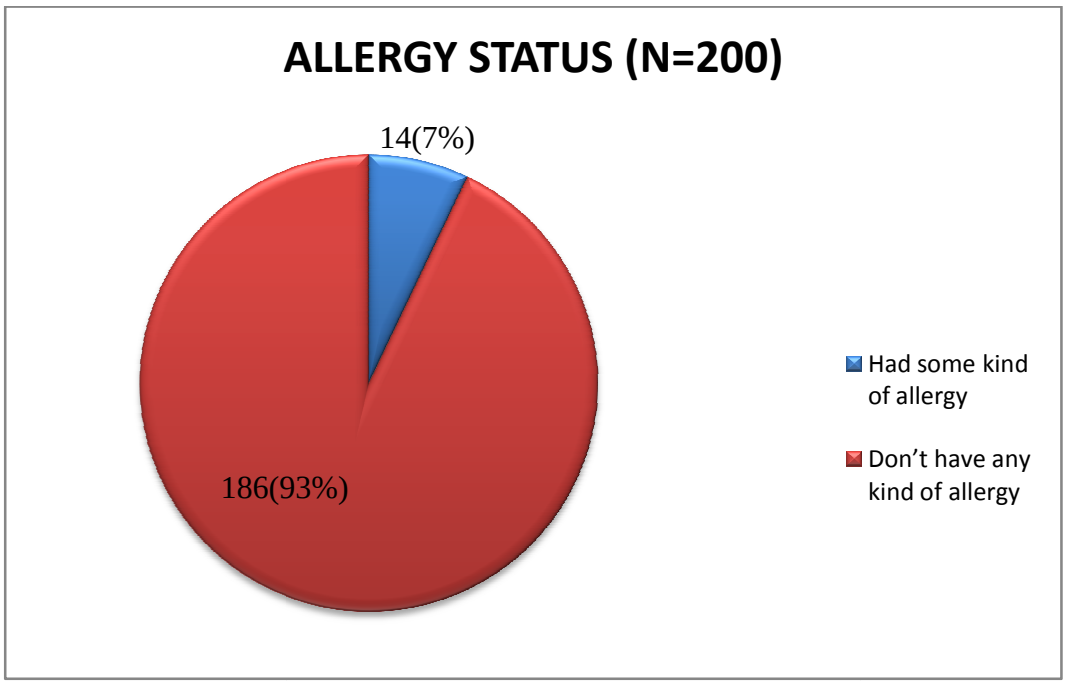
The group is classified into those patients who had some kind of allergy which was noteworthy.

Table 6: Allergy status (N=200)

Allergy Status	No of patients	Percentage (%)
Had some kind of allergy	14	7
Don't have any kind of allergy	186	93

Table 6 shows, majority of the patients don't have kind of allergy (93%) and about 7% of the patients have some kind of allergy.

Figure 10: Allergy Status (N=200)



DETAILS OF ALLERGIES

The study population were found to have the below mentioned allergies.

Table 7: Details of Allergies (N = 200)

TYPE OF ALLERGY	NUMBER OF PATIENTS	PERCENTAGE (%)
DUST ALLERGY	13	6.5
DRUG ALLERGY*	1	0.5
FOOD ALLERGY**	1	0.5

*Paracetamol

**Sour Food

Table 7 shows that 6.5% of the study population has dust allergy and only 0.5% has allergy to Drug (Paracetamol) and sour food.

SURGERIES

The study population was categorised into those who underwent any kind of surgeries and specially those patients who underwent gynaecologically relevant surgeries.

Table 8: SURGICAL HISTORY (N=200)

Surgical History	No of patients	Percentage (%)
Had undergone surgery	47	23.5
Didn't undergo any surgery	153	76.5

Table 8 shows that majority of the patients didn't undergo any surgery prior to current pregnancy (76.5%) and about 23.5% of the patients underwent some kind of surgery prior to current pregnancy.

Figure 11: Surgical History (N=200)

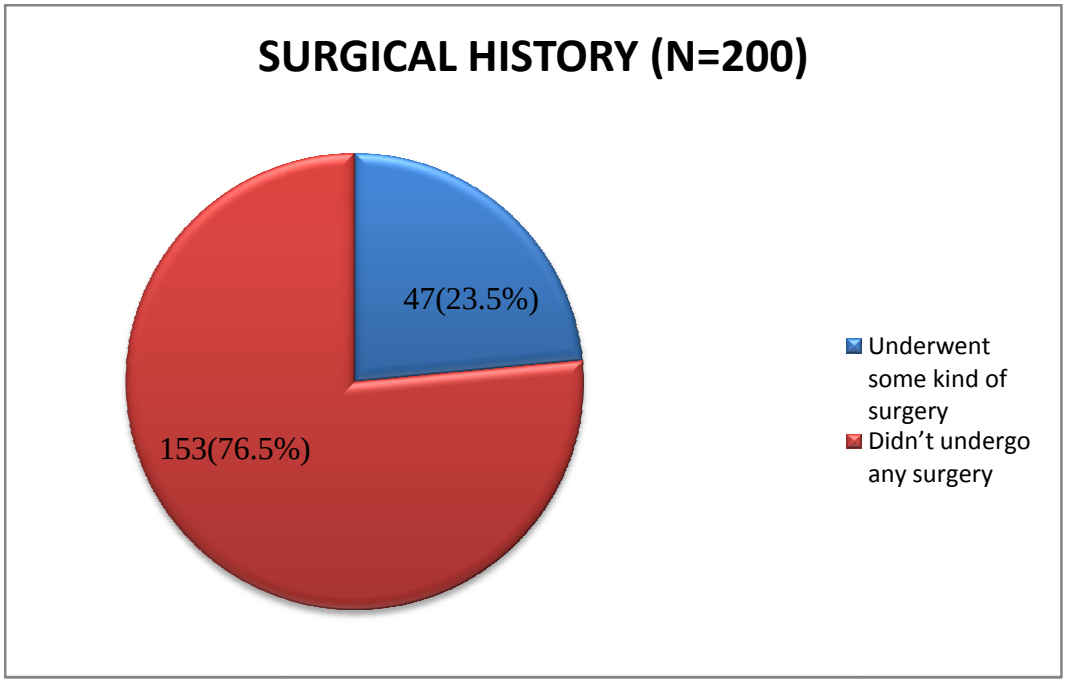


Table 9: GYNAECOLOGICALLY RELATED SURGERY (N=47)

Surgical History	No of patients	Percentage (%)
Had undergone a gynaecologically related surgery	26	55.32
Didn't undergo any gynaecologically related surgery	21	44.68

Figure 12: Gynaecologically related Surgery (N=47)

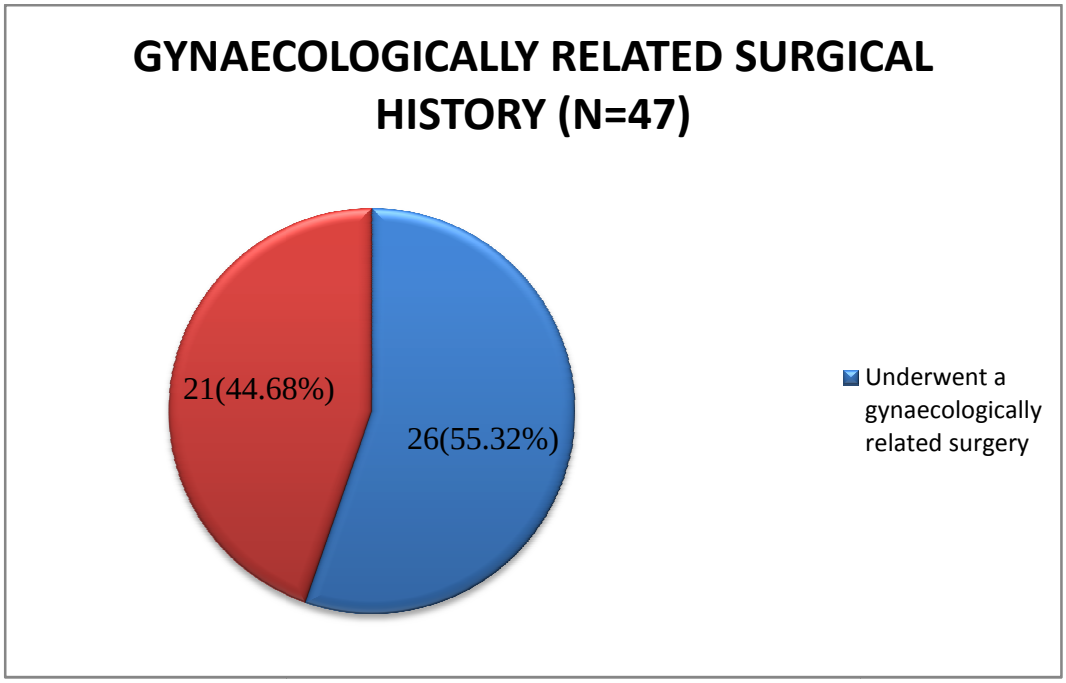
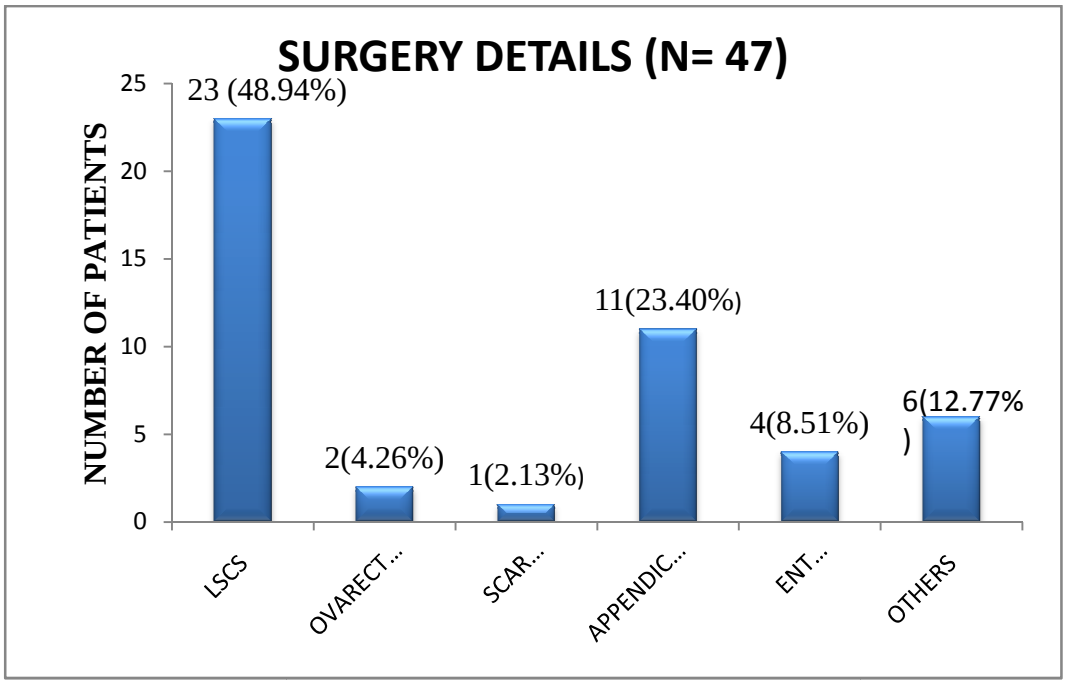


Figure 12 shows that majority of the study population (55.32%) underwent gynaecologically relevant surgeries prior to their present pregnancy.

Figure 13: Details on the type of surgery underwent



The gynaecologically relevant surgeries underwent were LSCS (48.94%), Ovarectomy (4.26%) and Scar Endometriosis (2.13%). The other surgeries underwent were not of any gynaecological relevance.

PAST MEDICAL HISTORY

Figure 14: Past Medication History (N=200)

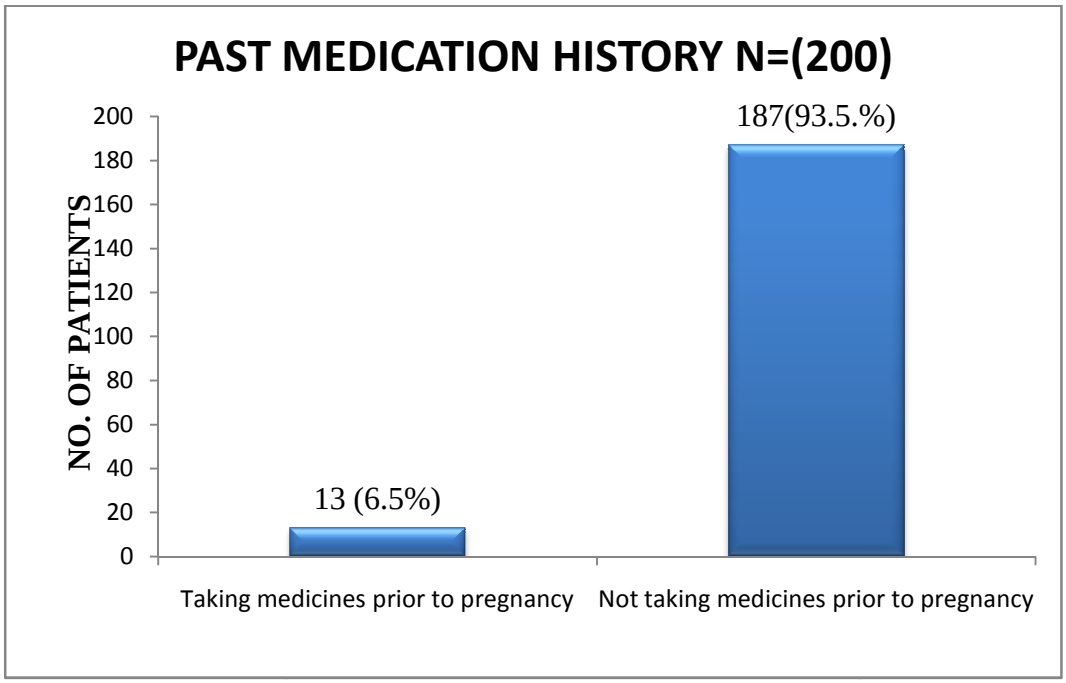


Figure 14 shows that a majority of patients didn't have any past medication history (93.5%) and a small percentage of patients (6.5%) have taken some medicines prior to current pregnancy.

SELF MEDICATION HISTORY

Figure 15: Self Medicine History (N=200)

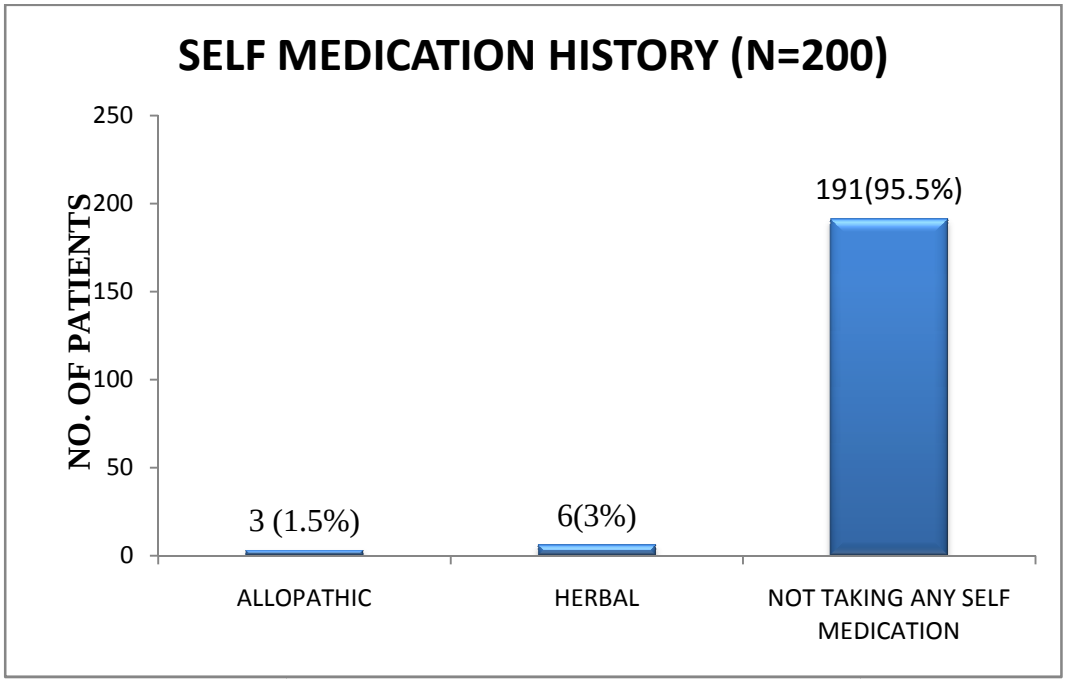


Figure 15 shows, large number of the population (95.5%) have not been taking any self-medications during pregnancy but a small portion of the patients (3%) have been taking some kind of herbal medicine followed by 1.5% of population taking OTC medicines (Paracetamol).

DIET PATTERN

During pregnancy, a woman undergoes major biological, physical, psychological and social transformation. To cope up with all these changes a pregnant woman needs to be more concerned about their nutrition and diet pattern.

Figure 16: Diet pattern (N=200)

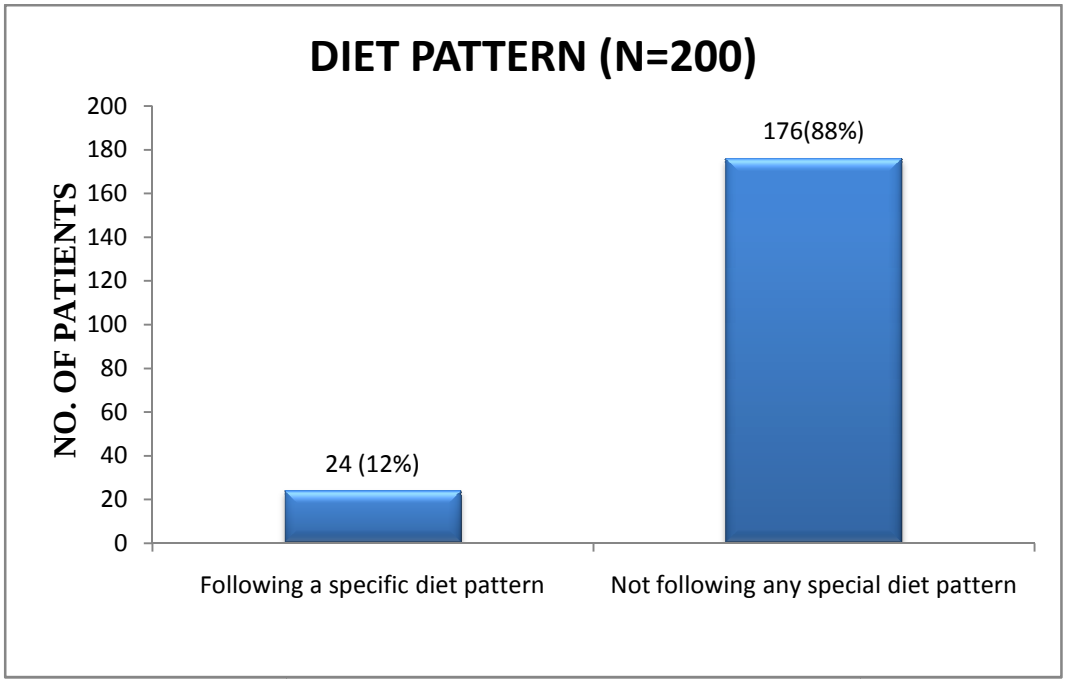


Figure 16 shows that a majority of the study population (88%) doesn't follow any special diet pattern and 12% of the study population follows specific diet pattern which would benefit their health and the health of the foetus.

EXERCISE PATTERN

The American College of Obstetrics and Gynaecologists recommends women should perform 30 minutes or more of moderate-intensity exercise most of the days of the week, if not all, during pregnancy.

Figure 17: Exercise Pattern (N=200)

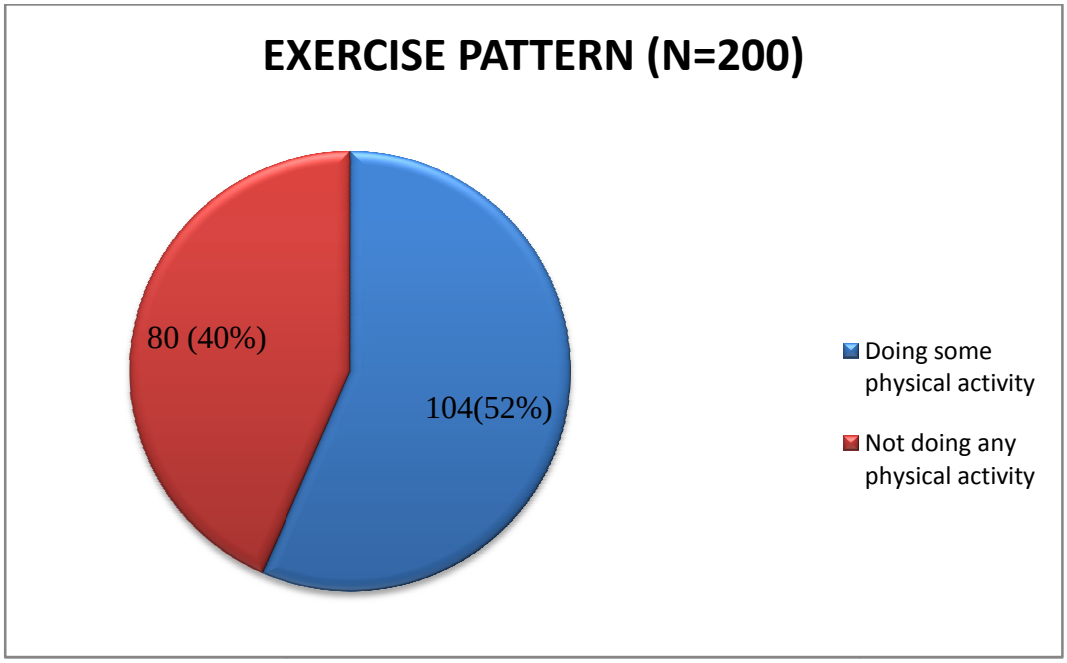


Figure 17 shows that a majority of the study population (52%) does some kind of physical activity and 40% of the study population doesn't do any kind of exercise.

TYPES OF PHYSICAL ACTIVITY

Figure 18: Types of Physical Activity

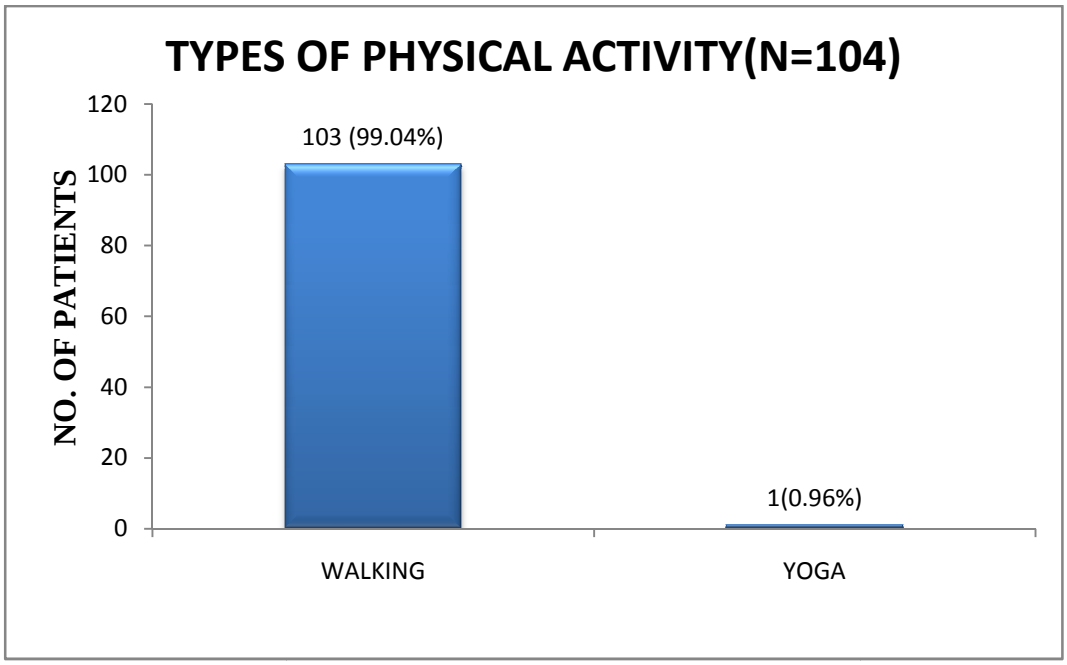


Figure 18 shows that 99.04 % (103) of the study population did walking as a physical activity and 0.96 %(1) did yoga.

SLEEP PATTERN

Figure 19: Sleep Pattern (N=200)

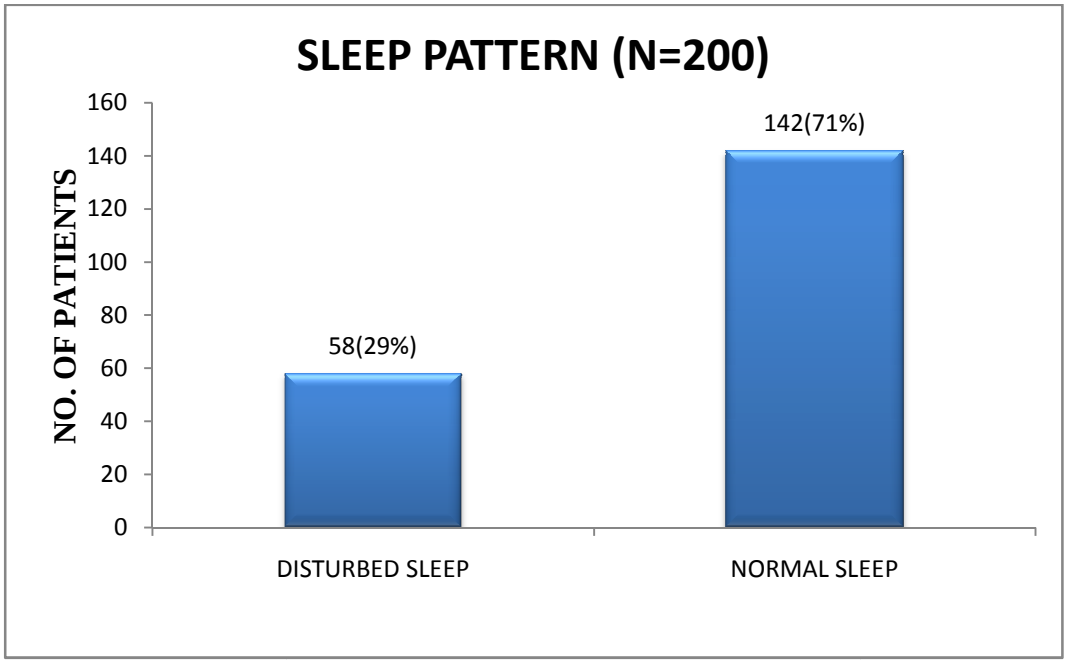


Figure 19 shows that majority of the study population 71% didn't have any sleep problem and about 29% of the study population had slightly disturbed sleep.

INCIDENCE OF VARIOUS COMPLICATIONS IN PREGNANCY

Presence of any complications or co morbidities can increase the risk of pregnancy which itself is associated with a slight percentage of risk.

Figure 20: Condition of Pregnancy

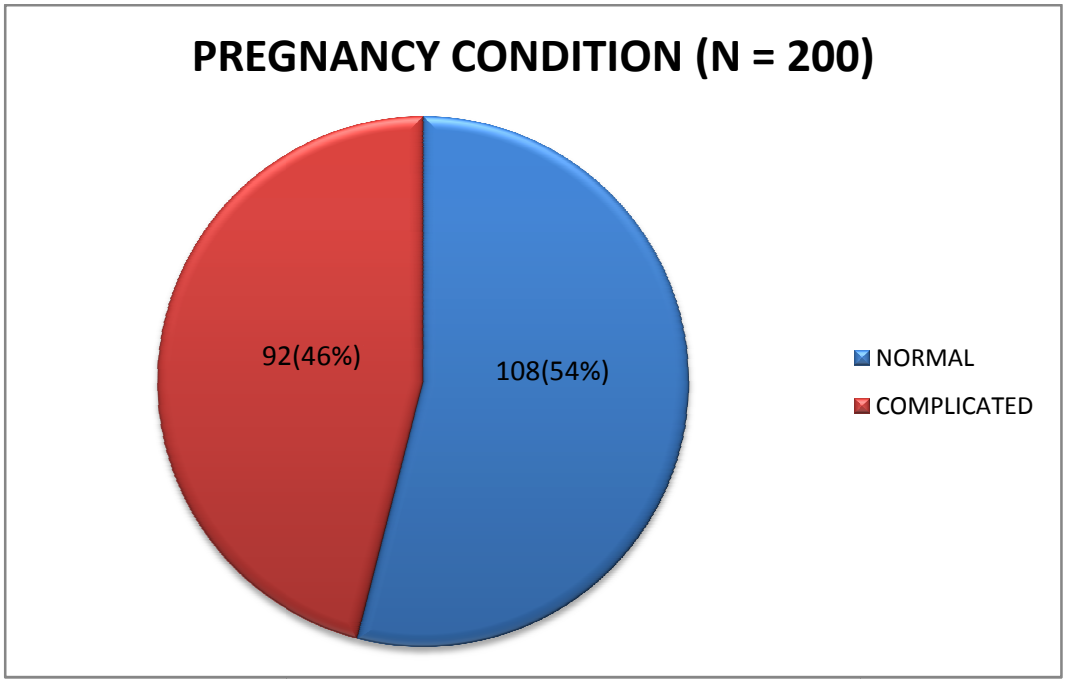


Figure 20 shows 46% of the study population had some kind of complication during pregnancy.

Figure 21: Various Complications

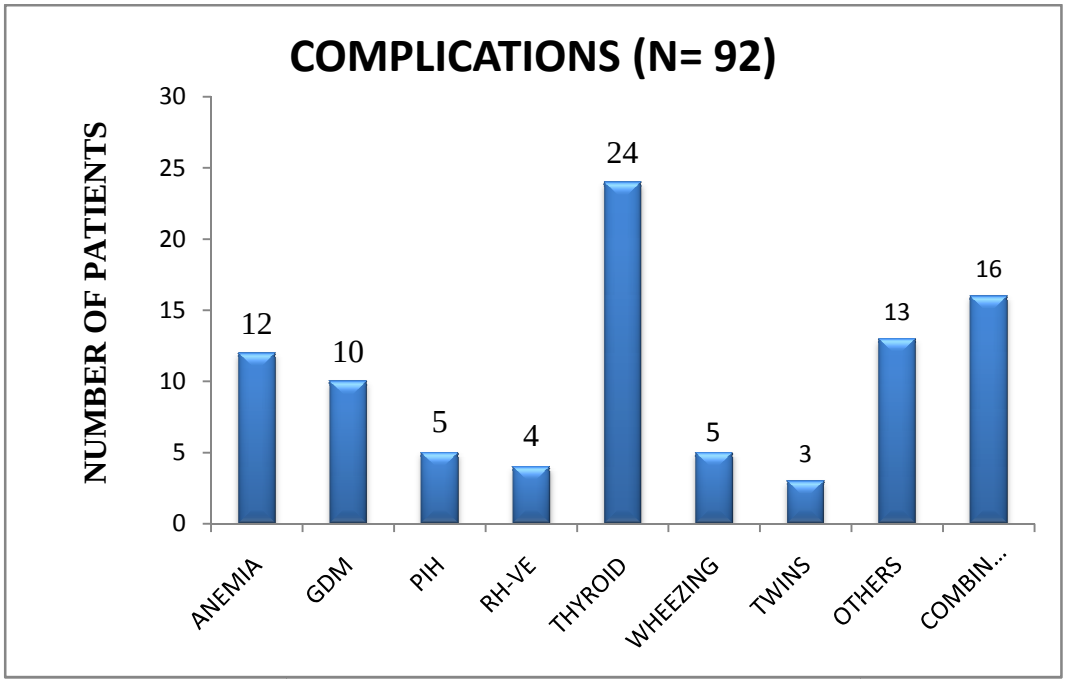


Figure 21 shows the list of various complications present in the given study population. Majority of the study population (26.10%) had thyroid problem along with their present pregnancy. About 17.40% of the study population had a combination of more than one complication along with their present pregnancy.

PREGANANCY RELATED ANXIETY

Pregnancy related anxiety was measured for pregnant women with and without any complications using PRAQ-R2 and their mean and standard deviation was calculated

Anxiety Measurement

Total Anxiety Score

- Equal to 10 – No Anxiety
- 10 – 20 = Mild
- 20 – 30 = Moderate
- 30 – 40 = Severe
- 40 – 50 = Very Severe

Subscale 1 Fear of Giving Birth

- Equal to 3 – No Anxiety
- 3 – 6 = Mild
- 6 – 9 = Moderate
- 9 – 12 = Severe
- 12 – 15 = Very Severe

Subscale 2 Worries of bearing a handicapped child

- Equal to 4 – No Anxiety
- 4 – 8 = Mild

- 8 – 12 = Moderate
- 12 – 16 = Severe
- 16 – 20 = Very Severe

Subscale 3 Concern of own appearance

- Equal to 3= No anxiety
- 3 – 6 = Mild
- 6 – 9 = Moderate
- 9 – 12 = Severe
- 12 – 15 = Very Severe

Table 10: Measurement of Pregnancy related Anxiety according to Age of Pregnant women.

S. No	Age of pregnant women	n	Pregnancy Related Anxiety	Mean (Std. Deviation)
1	15 - 19 yrs	12	TOTAL ANXIETY	23.833 ± 11.5
			SUBSCALE 1	8.917± 3.7
			SUBSCALE 2	9.250 ± 6.5
			SUBSCALE 3	5.667 ± 4.0
2	20 - 24 yrs	70	TOTAL ANXIETY	21.000 ± 8.3
			SUBSCALE 1	8.857 ± 3.3
			SUBSCALE 2	7.400 ± 5.0
			SUBSCALE 3	4.729 ± 2.7
3	25 - 29 yrs	84	TOTAL ANXIETY	20.107 ± 7.5
			SUBSCALE 1	8.250 ± 2.8
			SUBSCALE 2	6.643 ± 3.8
			SUBSCALE 3	5.214 ± 3.1

4	30 - 34 yrs	29	TOTAL ANXIETY	16.966 ± 6.0
			SUBSCALE 1	7.276 ± 2.8
			SUBSCALE 2	5.689 ± 3.3
			SUBSCALE 3	4.000 ± 1.7
5	35 - 39 yrs	5	TOTAL ANXIETY	16.400 ± 7.2
			SUBSCALE 1	7.200 ± 3.5
			SUBSCALE 2	5.800 ± 4.0
			SUBSCALE 3	3.400 ± 1.0

Table 10 shows that pregnant women of younger age have moderate level of anxiety and older women showed mild level of anxiety.

Table 11: Measurement of Pregnancy related Anxiety according to Trimester of Pregnancy

S. No	Trimester of Pregnancy	n	Pregnancy Related Anxiety	Mean (Std. Deviation)
1	First	12	TOTAL ANXIETY	19.750 ± 5.8
			SUBSCALE 1	8.250± 3.6
			SUBSCALE 2	7.333 ± 4.3
			SUBSCALE 3	4.167± 1.3
2	Second	40	TOTAL ANXIETY	21.425 ± 8.0
			SUBSCALE 1	8.775 ± 3.1
			SUBSCALE 2	7.250± 4.1
			SUBSCALE 3	5.400± 3.0
3	Third	148	TOTAL ANXIETY	21.777 ± 7.5
			SUBSCALE 1	8.372 ± 3.1
			SUBSCALE 2	6.777 ± 4.5
			SUBSCALE 3	4.757 ± 2.8

Table 11 shows that pregnant women in the second trimester and third trimester had moderate level of anxiety and those in the first trimester had mild level of anxiety.

Table 12: Measurement of Pregnancy related Anxiety according to Parity of Pregnancy

S. No	Parity of Pregnancy	n	Pregnancy Related Anxiety	Mean (Std. Deviation)
1	First	117	TOTAL ANXIETY	21.256 ± 8.2
			SUBSCALE 1	9.111± 3.2
			SUBSCALE 2	6.726± 4.5
			SUBSCALE 3	4.897± 3.0
2	Second	74	TOTAL ANXIETY	19.378± 7.7
			SUBSCALE 1	7.446± 3.2
			SUBSCALE 2	7.014± 4.2
			SUBSCALE 3	4.919± 2.7
3	Third	9	TOTAL ANXIETY	19.889± 7.3
			SUBSCALE 1	7.889± 4.0
			SUBSCALE 2	8.333± 4.0
			SUBSCALE 3	3.667± 1.4

Table 12 shows that pregnant women who conceived for the first time showed moderate level of anxiety when compared to those who conceived for more than once. Pregnant women who have conceived more than once showed only mild level of anxiety. H Rouhe et al., in their study of Fear of childbirth according to parity, gestational age, and obstetric history states that nulliparous pregnant women showed severe fear of childbirth.

Table 13: Measurement of Pregnancy related Anxiety according to presence of some kind of complication in Pregnancy

S. No	Complication in pregnancy	n	Pregnancy Related Anxiety	Mean (Std. Deviation)
1	ABSENT	108	TOTAL ANXIETY	19.315 ± 7.8
			SUBSCALE 1	8.250 ± 3.0
			SUBSCALE 2	7.463 ± 4.8
			SUBSCALE 3	5.092 ± 3.0
2	PRESENT	92	TOTAL ANXIETY	21.740 ± 6.6
			SUBSCALE 1	9.100 ± 3.0
			SUBSCALE 2	6.337 ± 3.7
			SUBSCALE 3	4.565 ± 2.6

Table 13 shows that pregnant women who had some kind of complication showed a moderate level of anxiety when compared to pregnant women who didn't have any complication.

Table 14: Measurement of Pregnancy related Anxiety and various complications

S. No	Complication of Pregnancy	n	Pregnancy Related Anxiety	Mean (Std. Deviation)
1	ANEMIA	12	TOTAL ANXIETY	20.083± 3.8
			SUBSCALE 1	10.167± 2.7
			SUBSCALE 2	6.000± 2.3
			SUBSCALE 3	3.917 ± 1.6

2	GDM	10	TOTAL ANXIETY	18.100 ± 4.8
			SUBSCALE 1	9.000± 3.8
			SUBSCALE 2	4.500 ± 0.8
			SUBSCALE 3	4.600 ± 2.1
3	PIH	5	TOTAL ANXIETY	25.400± 12.0
			SUBSCALE 1	10.600± 2.5
			SUBSCALE 2	8.200± 5.7
			SUBSCALE 3	6.600 ± 5.4
4	RH-VE	4	TOTAL ANXIETY	20.000 ± 10.0
			SUBSCALE 1	7.500± 1.3
			SUBSCALE 2	7.750 ± 7.5
			SUBSCALE 3	4.750 ± 1.7
5	THYROID PROBLEM	24	TOTAL ANXIETY	21.167 ± 7.6
			SUBSCALE 1	9.417± 3.5
			SUBSCALE 2	6.583 ± 3.8
			SUBSCALE 3	5.167 ± 2.8
6	WHEEZING	5	TOTAL ANXIETY	26.400± 8.8
			SUBSCALE 1	12.000± 2.8
			SUBSCALE 2	9.600± 6.0
			SUBSCALE 3	4.800 ± 3.0
7	TWINS	3	TOTAL ANXIETY	22.333 ± 4.7
			SUBSCALE 1	8.333 ± 3.0
			SUBSCALE 2	5.667 ± 3.0
			SUBSCALE 3	8.333 ± 4.7

8	COMBINATION	16	TOTAL ANXIETY	18.563± 4.5
			SUBSCALE 1	8.563± 1.7
			SUBSCALE 2	6.188± 3.3
			SUBSCALE 3	3.813 ± 1.4
9	OTHERS	13	TOTAL ANXIETY	16.308 ± 3.4
			SUBSCALE 1	7.462± 2.0
			SUBSCALE 2	5.692 ± 2.7
			SUBSCALE 3	3.154 ± 0.5

Table 14 shows that pregnant women with various complications have mild to moderate levels of anxiety. Pregnant women with wheezing problem, thyroid problem and PIH showed moderate levels of anxiety while pregnant women with other complications showed mild anxiety level. Pregnant women having twins showed moderate level of anxiety.

IMPACT OF VARIOUS PARAMETERS ON TOTAL ANXIETY:

Table 15: Relationship between maternal related variables with total anxiety.

Anxiety	Maternal variable	"r"	Significance	r^2	% of r^2	Determined anxiety
Total anxiety	Age	-0.270	P<0.001	0.073	7.2	Age determined 7.2%
	Parity	-0.199	P<0.001	0.039	3.9	Parity determined 3.9%
	Trimester	-0.078	P>0.05	-	-	-
	HB	0.022	P>0.05	-	-	-
	TSH	0.026	P>0.05	-	-	-
	SBP	0.273	P<0.001	0.075	7.5	SBP determined 7.5%
	DBP	0.244	P<0.001	0.060	6.0	DBP determined 6.0%
	GCT	0.064	P>0.05	-	-	

In the above table 15 correlates the maternal related variables such as age, parity, trimester, HB, TSH, SBP, DBP and GCT with total anxiety. The following

variables such as age, parity, SBP and DBP were significantly determined the anxiety as 7.2%. 3.9%, 7.5% and 6.0% respectively (P<0.001). The other variables such as trimester, HB, TSH and GCT were not statistically significantly correlated (P>0.05). QingzhiHou et al in their study "The associations between maternal lifestyles and antenatal stress and anxiety in Chinese pregnant women: A cross-sectional study." revealed that maternal age, pre-pregnancy BMI and gravidity history had significant statistical difference in sub-stress level groups. Madhavi K Thombre et al. in their study on Association between Pre-Pregnancy Depression/Anxiety Symptoms and Hypertensive Disorders of Pregnancy suggest that the link between maternal chronic hypertension and depression/anxiety symptoms precedes pregnancy.

Table 16: Relationship between maternal related variables with Subscale 1 Fear of giving birth.

Anxiety	Maternal variable	"r"	Significance	r^2	% of r^2	Determined anxiety
Fear of giving birth	Age	-0.124	P>0.05	-	-	-
	Parity	-0.078	P>0.05	-	-	-
	Trimester	-0.129	P>0.05	0.016	1.6	-
	HB	0.017	P>0.05	-	-	-
	TSH	0.099	P>0.05	-	-	-
	SBP	0.249	P<0.001	0.058	5.8	SBP determined 5.8%
	DBP	0.271	P<0.001	0.073	7.3	DBP determined 7.3%
	GCT	0.070	P>0.05	-	-	

The above table 16 correlates the maternal related variables such as age, HB, TSH, SBP, DBP and GCT with fear of giving birth. The following variables such as SBP and DBP were significantly determined the fear of giving birth as 5.8% and 7.3% (P<0.001). The other variables such as age, parity, trimester, HB, TSH and GCT were not statistically significantly correlated with fear of giving birth (P>0.05).

Table 17: Relationship between maternal related variables with Subscale 2 Worries about bearing a handicapped child.

Anxiety	Maternal variable	"r"	Significance	r^2	% of r^2	Determined anxiety
Worries about bearing a handicapped child.	Age	-0.199	P<0.001	0.040	4.0	Age determined 4.0%
	Parity	0.035	P>0.05	-	-	-
	Trimester	-0.061	P>0.05	-	-	-
	HB	0.019	P>0.05	-	-	-
	TSH	0.019	P>0.05	-	-	-
	SBP	0.245	P<0.001	0.060	6.0	SBP determined 6.0%
	DBP	0.241	P<0.001	0.058	5.8	DBP determined 5.8%
	GCT	-0.050	P>0.05	-	-	

In the above table 17 correlates the maternal related variables such as age, HB, TSH, SBP, DBP and GCT with total anxiety. The following variables such as age, SBP and DBP were significantly determined the worries about bearing a handicapped child as 4.0%. 6.0% and 5.8% respectively (P<0.001). The other

variables such as parity, trimester, HB, TSH and GCT were not statistically significantly correlated (P>0.05).

Table 18: Relationship between maternal related variables with concern about own appearance.

Anxiety	Maternal variable	"r"	Significance	r^2	% of r^2	Determined anxiety
Concern about own appearance.	Age	-0.199	P>0.05	-	-	-
	Parity	-0.068	P>0.05	-	-	-
	Trimester	-0.042	P>0.05	-	-	-
	HB	0.060	P>0.05	-	-	-
	TSH	0.052	P>0.05	-	-	-
	SBP	0.089	P<0.001	-	-	-
	DBP	0.061	P<0.001	-	-	-
	GCT	0.108	P>0.05	-	-	-

The above table 18 states the relationships between maternal related variables with concern about own appearance. All the variables such as age, parity, trimester, HB, TSH, SBP, DBP and GCT were not statistically significantly correlated with concern about own appearance (P>0.05).

MODE OF DELIVERY

The mode of delivery for all the pregnant women included in the study was studied and compared with various parameters.

Figure 22: Mode of Delivery

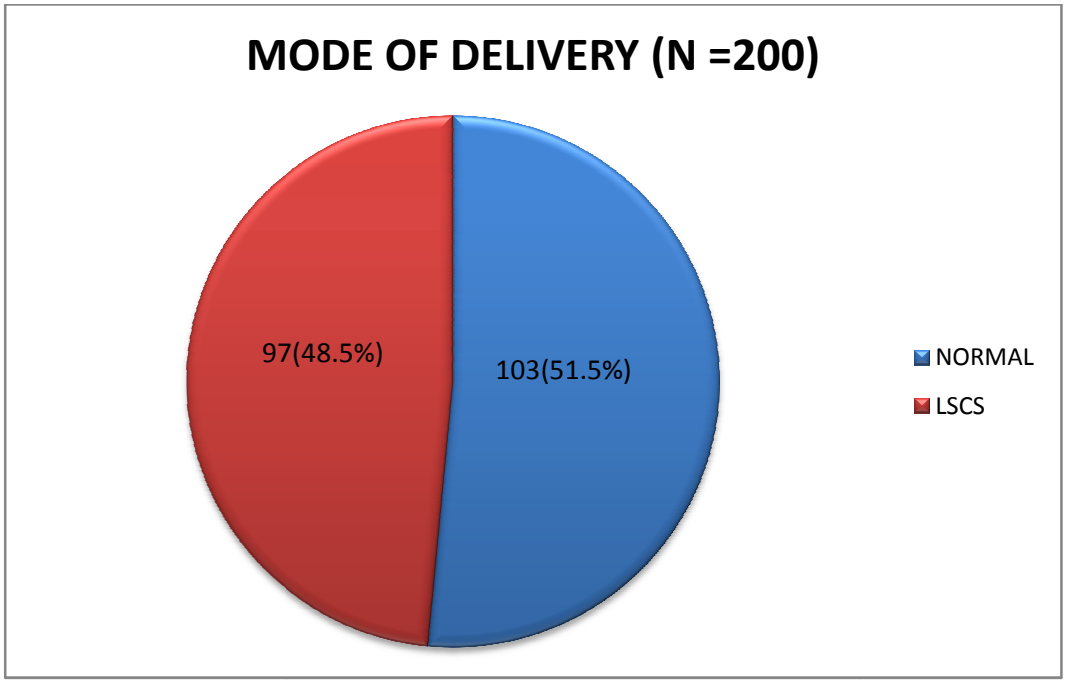


Table 19: Maternal complications during labor and mode of delivery:

Maternal Complications	Normal		LSCS		Total	
	No	%	No	%	No	%
No complications	97	48.5	0	0.0	97	48.5
Breech	0	0.0	4	2.0	4	2.0
Cervical Dystocia	0	0.0	8	4.0	8	4.0
CPD	0	0.0	28	14.0	28	14.0
PIH	0	0.0	6	3.0	6	3.0
Placenta previa	0	0.0	3	1.5	3	1.5
Previous LSCS	0	0.0	33	16.5	33	16.5
Twins	0	0.0	3	1.5	3	1.5
Emergency LSCS	0	0.0	10	5.0	10	5.0
Others	0	0.0	8	4.0	8	4.0
Total	97	48.5	103	51.5	200	100.0

The above table 19 shows the maternal complications during labor and the mode of delivery. No complications were encovered among the normal deliveries. Previous LSCS and CPD was common complication for undergoing LSCS.

RELATIONSHIP BETWEEN VARIOUS COMPLICATIONS AND MODE OF DELIVERY

The lab values in case of various complications are compared to mode of delivery to check for any associated relation.

Table 20: Anaemia with mode of delivery

Anaemia	Haemoglobin Level(mg)	Normal		LSCS		Total	
		No	%	No	%	No	%
Very Severe	<6.5	1	0.5	1	0.5	2	1.0
Severe	6.5-8	1	0.5	1	0.5	2	1.0
Moderate	8-10	14	7.0	13	6.5	27	13.5
Mild	10-12.5	75	37.5	69	34.5	144	72.0
Normal	12.5+	12	6.0	13	6.5	25	12.5
Total		103	51.5	97	48.5	200	100.0
Significance		χ^2 =0.147 df 4, P=0..997					

The table 20 shows the haemoglobin level with the mode of delivery. The haemoglobin level had no association with mode of delivery (P>0.05).

Table 21: **TSH level with mode of delivery**

TSH level	Normal		LSCS		Total		Significance
	No	%	No	%	No	%	
<1	33	16.5	37	18.5	70	35.0	χ^2 =0.098 df 2, P=0..952
1-3	52	26.0	53	26.5	105	52.5	
3+	12	6.0	13	6.5	25	12.5	
Total	97	48.5	103	51.5	200	100.0	

The above table 21 states the association between TSH levels with mode of delivery. There was no statistically significant association with thyroid and mode of deliveries (P>0.05).

Table 22: SBP level with mode of delivery

SBP level	Normal		LSCS		Total		Significance
	No	%	No	%	No	%	
Normal	68	34.0	68	34.0	136	68.0	χ^2 =0.420 df 2, P=0..810
Pre HT	27	13.5	33	16.5	60	30.0	
Stage-1	2	1.0	2	1.0	4	2.0	
Total	97	48.5	103	51.5	200	100.0	

The above table 22 states SBP according to delivery. There was no statistically significant relationship between SBP level with mode of delivery (P>0.05).

Table 23: DBP level with mode of delivery

DBP level	Normal		LSCS		Total		Significance
	No	%	No	%	No	%	
Normal	64	32.0	68	34.0	132	66.0	χ^2 =2.010 df 2, P=0..366
Pre HT	31	15.5	29	14.5	60	30.0	
Stage-1	2	1.0	6	3.0	8	4.0	
Total	97	48.5	103	51.5	200	100.0	

The above table 23 states DBP according to the delivery. There was no statistically significant relationship between DBP level with mode of delivery (P>0.05).

Table 24: BGL (GCT) level with mode of delivery

BGL (GCT)	Normal		LSCS		Total		Significance
	No	%	No	%	No	%	
<90	28	14.0	20	10.0	48	24.0	χ^2 =2.814 df 2, P=0..245
90-120	56	28.0	64	32.0	120	60.0	
>120	13	6.5	19	9.5	32	16.0	
Total	97	48.5	103	51.5	200	100.0	

The above table 24 states BGL (GCT) according to the mode of delivery. There was no statistically significant relationship between BGL (GCT) level with mode of delivery (P>0.05).

CONCLUSION

- The various complications which came across in the study were varied. The majority being thyroid problem and least being Rh-ve mothers. 17.40% of the study population had more than one complication along with present pregnancy.
- Age and parity of pregnancy had significant effect on anxiety which was also proved statistically. Pregnant women of younger age were more anxious about pregnancy than those who got pregnant at an older age. Likewise women who were conceiving for the first time were more anxious about pregnancy than those who already had conceived earlier.
- Pregnant women in the second and third trimester showed slightly higher levels of anxiety when compared to pregnant women in the first trimester.
- The incidence of various complications in pregnancy does have significant effect on the anxiety of the pregnant women. Pregnant women having some kind of complication have slightly more level of anxiety when compared to pregnant women who didn't have any complication along with present pregnancy. Patients with wheezing problem, thyroid problem and pregnancy induced hypertension showed the moderate level of anxiety whereas patients with other complication showed mild level of anxiety
- Pregnant women having twins showed moderate level of anxiety
- The outcomes of delivery of the study population were almost same with about 48.5% of patients went through a normal vaginal delivery whereas 51.5% underwent a LSCS.
- The major reason for a LSCS was CPD and previous LSCS and had not much significance on the condition of present pregnancy and their anxiety.

LIMITATIONS

- The cultural background from which the study population comes from doesn't have an open mind to accept their mental state.
- The study period was nine months which was comparatively less for understanding the impact of the study.
- The sample size was too small to come to an actual conclusion of the study.

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INCIDENCE AND IMPACT OF VARIOUS COMPLICATIONS ON PREGNANCY RELATED ANXIETY IN WOMEN ATTENDING A OBG CLINIC IN A TERTIARY CARE HOSPITAL - ERODE

DATA COLLECTION FORM

NAME				**AGE**	
EDUCATION			**OCCUPATION**		
PLACE			**PH.NO.**		
STAGE OF PREGNANCY		**LMP**		**EDD**	
PREGNANCY SEQUENCE			**DOD**		
MODE OF DELIVERY	**NORMAL**			**LSCS**	
IF LSCS, Reason					
FAMILY HISTORY	**MOTHER**				
	FATHER				
GENERAL HEALTH STATUS		**ALLERGIES IF ANY**			
PAST MEDICATION HISTORY		**SURGICAL HISTORY**			
Specify if there was any complication during the previous pregnancy					

LABORATORY INVESTIGATION					
PARAMETERS					
HAEMOGLOBIN			**BP**		
TSH			**ESR**		
BLOOD GROUP			**GCT**		
BLOOD GLUCOSE					
RBS		**FBS**		**PPBS**	
Others if any					
STATUS OF PREGNANCY – NORMAL/COMPLICATED **REMARKS -**					

SPECIALISED INVESTIGATION	
SCAN	**FINDINGS**
CONFIRMATORY SCAN	
NT SCAN	
ANOMALY SCAN	

1. Do you have a habit of taking self-medication?

   If yes, what…….
2. Do you have a habit of taking herbal medicines?

3. Do you follow any specific diet pattern?

4. Do you exercise? Yes/No

   If yes, specify……

5. Do you have problems with sleeping?

COMPLICATIONS IN PREGNANCY

PREGNANCY INDUCED PRESSURE	
GESTATIONAL DIABETES	
IRON DEFICIENCY ANAEMIA	
HYPEREMESIS	
URINARY TRACT INFECTION	
THYROID PROBLEM	
OTHERS	

PREGNANCY ANXIETY QUESTIONNAIRE – PRAQ R/R2

Please circle each answer that applies most accurately to your situation.

Answer categories:

1. Absolutely not relevant
2. Hardly ever relevant
3. Sometimes relevant
4. Reasonably relevant
5. Very relevant

S.NO	QUESTIONS	1	2	3	4	5
1	I am anxious about the delivery.					
2	I am worried about the pain of contractions and the pain during delivery					
3	I am worried about the fact that I shall not regain my figure after delivery.					
4	I sometimes think that our child will be in poor health or will be prone to illnesses					
5	I am concerned about my unattractive appearance.					
6	I am worried about not being able to control myself during labour and fear that I will scream.					
7	I am worried about my enormous weight gain.					
8	I am anxious about the delivery because I have never experienced one before.					
9	I am afraid the baby will be mentally handicapped or will suffer from brain damage.					
10	I am afraid our baby will be stillborn, or will die during or immediately after delivery.					
11	I am afraid that our baby will suffer from a physical defect or worry that something will be physically wrong with the baby.					

HERE I CERTIFY THAT ALL THE ABOVE GIVEN DATA ARE SINCERE AND I GIVE MY CONSENT TO THE MEMBER OF THE STUDY TO DOCUMENT AND PUBLISH THE RESULT, PROVIDED MY IDENTITY IS NOT REVEALED.

DATE:

SIGNATURE

PLACE:

INCIDENCE AND IMPACT OF VARIOUS COMPLICATIONS ON PREGNANCY RELATED ANXIETY IN WOMEN ATTENDING A OBG CLINIC IN A TERTIARY CARE HOSPITAL - ERODE

DATA COLLECTION FORM

NAME				**AGE**	
EDUCATION			**OCCUPATION**		
PLACE			**PH.NO.**		
STAGE OF PREGNANCY		**LMP**		**EDD**	
PREGNANCY SEQUENCE			**DOD**		
MODE OF DELIVERY	**NORMAL**			**LSCS**	
IF LSCS, Reason					
FAMILY HISTORY	**MOTHER**				
	FATHER				
GENERAL HEALTH STATUS		**ALLERGIES IF ANY**			
PAST MEDICATION HISTORY		**SURGICAL HISTORY**			
Specify if there was any complication during the previous pregnancy					

LABORATORY INVESTIGATION					
PARAMETERS					
HAEMOGLOBIN				**BP**	
TSH				**ESR**	
BLOOD GROUP				**GCT**	
BLOOD GLUCOSE					
RBS		**FBS**		**PPBS**	
Others if any					
STATUS OF PREGNANCY – NORMAL/COMPLICATED **REMARKS -**					

SPECIALISED INVESTIGATION	
SCAN	**FINDINGS**
CONFIRMATORY SCAN	
NT SCAN	
ANOMALY SCAN	

6. Do you have a habit of taking self-medication?

   If yes, what…….
7. Do you have a habit of taking herbal medicines?

8. Do you follow any specific diet pattern?

9. Do you exercise? Yes/No

   If yes, specify……

10. Do you have problems with sleeping?

COMPLICATIONIN PREGNANCY

PREGNANCY INDUCED PRESSURE	
GESTATIONAL DIABETES	
IRON DEFICIENCY ANAEMIA	
HYPEREMESIS	
URINARY TRACT INFECTION	
THYROID PROBLEM	
OTHERS	

PREGNANCY ANXIETY QUESTIONNAIRE – PRAQ R/R2

உங்கள் சூழ்நிலையில் மிகவும் துல்லியமாக பொருந்தும் ஒவ்வொரு பதிவையும் தயவுசெய்து குறிப்பிடவும்.

பதில் பிரிவுகள்:

6. முற்றிலும் பொருத்தமானதல்ல
7. எப்போதுமே பொருத்தமானது
8. சில நேரங்களில் பொருத்தமானது
9. நியாயமாக தொடர்புடையவை
10. மிகவும் பொருத்தமானது

வ.எண்	கேள்விகள்	1	2	3	4	5
1	நான் பிரசவத்தை நினைத்து பதட்டமாக உள்ளேன்.					
2	நான் பிரசவத்தின் போது ஏற்படும் சுருக்கங்கள் மற்றும்வலி பற்றி கவலைப்படுகிறேன்.					
3	பிரசவத்திற்குப் பின் என் உருவத்தை நான் திரும்பப் பெற மாட்டேன் என்ற உண்மையைப் பற்றி கவலைப்படுகிறேன்.					
4	நான் சில நேரங்களில் எங்கள் குழந்தை ஆரோக்கியமற்றதாக இருக்கும் அல்லது நோயாளியாக வாய்ப்பு இருப்பதாக நினைக்கிறேன்.					
5	நான் என்னுடைய கவர்ச்சியற்ற தோற்றத்தை பற்றி கவலைப்படுகிறேன்.					
6	பிரசவத்தின் போது ஏற்படும் வலி மற்றும் பயத்தினால் அலறலை என்னால் கட்டுப்படுத்த முடியாது என்பதைப்பற்றி கவலைப்படுகிறேன்.					
7	என் அதிகப்படியான எடை கூடுதலைப் பற்றி கவலைப்படுகிறேன்.					
8	எனக்கு பிறக்கபோகும் குழந்தை மனநோய் அல்லது மூளை பாதிப்பால் பாதிப்படையகூடும் என்று நான் பயப்படுகிறேன்.					
9	நான் என் குழந்தை இறந்தோ / பிரசவத்தின் போது இறந்துவிடுமோ / பிறந்து இறந்துவிடுமோ என்று பயப்படுகிறேன்.					
10	நான் எங்களுடைய குழந்தை உடல் ரீதியாக பாதிக்கபட்டிருப்பதாக அல்லது பாதிக்கப்படும் உணர்கிறேன்.					

இங்கே மேலே கொடுக்கப்பட்ட எல்லா தகவல்களும் உண்மையானவை என்று நான் சான்றளிகிறேன். என் அடையாளத்தை வெளிபடுத்தாததால், முடிவுகளை ஆவணப்படுத்தி , வெளியுடுவதற்க்கு உறுப்பினரின் ஒப்புதலுக்கு நான் ஒப்புக்கொள்கிறேன்.

நாள்:

இடம்: கையொப்பம்

PREGNANCY ANXIETY QUESTIONNAIRE – PRAQ – R2

Please circle each answer that applies most accurately to your situation.

Answer categories:

1. Absolutely not relevant
2. Hardly ever relevant
3. Sometimes relevant
4. Reasonably relevant
5. Very relevant

S.NO	QUESTIONS	1	2	3	4	5
1	I am anxious about the delivery.					
2	I am worried about the pain of contractions and the pain during delivery					
3	I am worried about the fact that I shall not regain my figure after delivery.					
4	I sometimes think that our child will be in poor health or will be prone to illnesses					
5	I am concerned about my unattractive appearance.					
6	I am worried about not being able to control myself during labor and fear that I will scream.					
7	I am worried about my enormous weight gain.					
8	I am afraid the baby will be mentally handicapped or will suffer from brain damage.					
9	I am afraid our baby will be stillborn, or will die during or immediately after delivery.					
10	I am afraid that our baby will suffer from a physical defect or worry that something will be physically wrong with the baby.					

Total sum scores PRAQ-R2:	Items 1 – 10
Subscale PRAQ-R2 Fear of giving birth:	Items 1, 2, 6
Subscale Worries about bearing a handicapped child:	Items 4, 8 – 10
Subscale Concern about own appearance:	Items 3, 5, 7

Anxiety Measurement

Total Anxiety Score

- Equal to 10 – No Anxiety
- 10 – 20 = Mild
- 20 – 30 = Moderate
- 30 – 40 = Severe
- 40 – 50 = Very Severe

Subscale 1 Fear of Giving Birth

- Equal to 3 – No Anxiety
- 3 – 6 = Mild
- 6 – 9 = Moderate
- 9 – 12 = Severe
- 12 – 15 = Very Severe

Subscale 2 Worries of bearing a handicapped child

- Equal to 4 – No Anxiety
- 4 – 8 = Mild
- 8 – 12 = Moderate
- 12 – 16 = Severe
- 16 – 20 = Very Severe

Subscale 3 Concern of own appearance

- Equal to 3= No anxiety
- 3 – 6 = Mild
- 6 – 9 = Moderate
- 9 – 12 = Severe
- 12 – 15 = Very Severe

PREGNANCY ANXIETY QUESTIONNAIRE – PRAQ – R2

உங்கள் சூழ்நிலையில் மிகவும் துல்லியமாக பொருந்தும் ஒவ்வொரு பதிவையும் தயவுசெய்து குறிப்பிடவும்.

பதில் பிரிவுகள்:

11. முற்றிலும் பொருத்தமானதல்ல
12. எப்போதுமே பொருத்தமானது
13. சில நேரங்களில் பொருத்தமானது
14. நியாயமாக தொடர்புடையவை
15. மிகவும் பொருத்தமானது

வ.எண்	கேள்விகள்	1	2	3	4	5
1	நான் பிரசவத்தை நினைத்து பதட்டமாக உள்ளேன்.					
2	நான் பிரசவத்தின் போது ஏற்படும் சுருக்கங்கள் மற்றும்வலி பற்றி கவலைப்படுகிறேன்.					
3	பிரசவத்திற்குப் பின் என் உருவத்தை நான் திரும்பப் பெற மாட்டேன் என்ற உண்மையைப் பற்றி கவலைப்படுகிறேன்.					
4	நான் சில நேரங்களில் எங்கள் குழந்தை ஆரோக்கியமற்றதாக இருக்கும் அல்லது நோயாளியாக வாய்ப்பு இருப்பதாக நினைக்கிறேன்.					
5	நான் என்னுடைய கவர்ச்சியற்ற தோற்றத்தை பற்றி கவலைப்படுகிறேன்.					
6	பிரசவத்தின் போது ஏற்படும் வலி மற்றும் பயத்தினால் அலறலை என்னால் கட்டுப்படுத்த முடியாது என்பதைப்பற்றி கவலைப்படுகிறேன்.					
7	என் அதிகப்படியான எடை கூடுதலைப் பற்றி கவலைப்படுகிறேன்.					
8	எனக்கு பிறக்கபோகும் குழந்தை மனநோய் அல்லது மூளை பாதிப்பால் பாதிப்படையகூடும் என்று நான் பயப்படுகிறேன்.					
9	நான் என் குழந்தை இறந்தோ / பிரசவத்தின் போது இறந்துவிடுமோ / பிறந்து இறந்துவிடுமோ என்று பயப்படுகிறேன்.					
10	நான் எங்களுடைய குழந்தை உடல் ரீதியாக பாதிக்கபட்டிருப்பதாக அல்லது பாதிக்கப்படும் உணர்கிறேன்.					

INFORMED CONSENT

HERE I CERTIFY THAT ALL THE ABOVE GIVEN DATA ARE SINCERE AND I GIVE MY CONSENT TO THE MEMBER OF THE STUDY TO DOCUMENT AND PUBLISH THE RESULT, PROVIDED MY IDENTITY IS NOT REVEALED.

DATE: *SIGNATURE:*

PLACE:

INFORMED CONSENT IN TAMIL

இங்கே மேலே கொடுக்கப்பட்ட எல்லா தகவல்களும் உண்மையானவை என்று நான் சான்றளிகிறேன். என் அடையாளத்தை வெளிபடுத்தாததால், முடிவுகளை ஆவணப்படுத்தி , வெளியுடுவதற்க்கு உறுப்பினரின் ஒப்புதலுக்கு நான் ஒப்புக்கொள்கிறேன்.

நாள்:

இடம்: கையொப்பம்