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### From the Editors Desk...

“The sole advantage of power is that you can do more good”

– Baltasar Gracian

Dear readers,

Greetings!

Welcome to third issue of IJOGR ...and world of academics... Volume 11, Issue 2,  
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Indian journal of obstetrics and gynecological research is an attempt to give pen to researchers, academicians, and residents to give words to their thoughts....

We have tried to accommodate from research article to case study- a whole bunch of bouquet.

Here in this issue, we have ...

Review and Original Research Article from all over India as well as international....

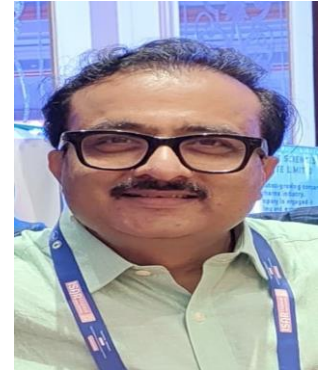
### Review Article.....

Iron deficiency anaemia (IDA) is a major global health concern that can lead to difficulties for both the mother and the foetus, especially in pregnant women. The physiological demand of iron during pregnancy increases threefold to support fetoplacental development and maternal adaptation to pregnancy. This study aimed to identify gaps in current IDA management, limitations of conventional oral iron therapy, and the need for effective and well-tolerated treatments.

Management of iron deficiency anemia in pregnancy in India: A review of current practices and challenges Shreya Ghanshyambhai Zinzuwadiya et al from Corona Remedies Pvt. Ltd, Solan, Himachal Pradesh, India.

Cardiac diseases pose a significant non-obstetrical threat to maternal well-being during pregnancy, contributing to nearly 10% of maternal mortality. The intersection of pregnancy and cardiac disease presents a complex scenario, affecting approximately 1-3% of pregnancies. Rheumatic heart disease (RHD) remains a prevalent issue in developing countries, while advancements in pediatric cardiology have increased survival rates for congenital heart disease. This exploration aims to comprehensively understand the impact of cardiac diseases on maternal and fetal outcomes during pregnancy.

Unveiling the spectrum of cardiac disease complicating pregnancy: A comprehensive exploration of maternal and fetal outcomes by Manju Mathesan et al from Dept. of Obstetrics and Gynaecology, Saveetha Medical College, Chennai, Tamil Nadu, India.



## Original Research Article...

Nutritional status of women has been given due importance in the health of mother and foetus. Women who conceive in the under-weight (UW) category have been noted to have earlier births and babies were of low birth weight, whereas gestational diabetes mellitus (GDM), gestational hypertension (GHTN), and preeclampsia were more frequent in the overweight/obese category of mothers.

Pre-pregnancy BMI is known to have an impact on infant weight at birth. Weight gain during pregnancy also is said to have a role in determining the pregnancy outcome. Gaining desirable gestational weight has been known to be effective in supporting the foetal growth and development. Excessive GWG has been associated with a higher fat mass in childhood and continued add-on of fat reserves.

Is there any materno- foetal risks in mothers with gestational weight gain (WHO & IOM) based on their pre-pregnancy body mass indices? Our experience in a tertiary care teaching institution in North Kerala by Heera Shenoy Shenoy et al from Dept. of Obstetrics and Gynaecology, KMCT Medical College, Manassery, Kerala, India and Indian Institute of Public Health, Hyderabad, Telangana, India.

Pregnancy can be considered as the most beautiful period of a woman's life. The recent medical advances are helpful in taking very good care of the female throughout her pregnancy. The pregnancy is constantly observed by clinical examination, laboratory investigations, and radiographic examinations at specific intervals throughout its course.

The role of color doppler in high risk pregnancies: A prospective comparative Study by Pooja Shivaji Wadekar et al from Dept. of Obstetrics and Gynaecology, Government Medical College, Nagpur, Maharashtra, India.

A retrospective randomised observational study was conducted to compare Dinoprostone controlled release pessary and Dinoprostone gel for induction of labor at term in women with unfavourable cervix at Apollo Hospitals BGS, Mysuru during August 2018 – May 2020. Among study participants 50 expectant mothers received Dinoprostone pessary while 50 women received Dinoprostone gel for induction of labour. Both groups were compared and the outcomes were analysed. The primary outcomes of the study were induction to delivery interval, successful vaginal delivery, need for operative vaginal delivery and need for caesarean section. Secondary outcomes were observed for neonatal morbidity and uterine hyperstimulation.

A comparative study between dinoprostone pessary and dinoprostone gel for induction of labor and neonatal outcome by Rashmi M D et al from Dept. of Obstetrics and Gynecology, Apollo BGS Hospitals, Mysuru, Karnataka, India.

During pregnancy anemia is a common health issue with various factors influencing its occurrence. It is a major public health problem in India. It is believed that 2.36 billion individuals are affected globally, and it is also an endemic problem in India. Iron deficiency often leads to iron deficiency anemia (IDA), significantly influencing maternal and fetal health.

Behind the veil of anemia: Assessment of iron, folic acid, and vitamin B12 deficiencies and their association with red cell indices in anemic and non-anemic women by Mimoh Sharma et al from Dept. of Biochemistry, Autonomous State Medical College, Shahjahanpur, Uttar Pradesh, India.

Pregnancy might lead to various physiological changes that may end up in a diversity of symptoms and frequently to gastrointestinal complaints, such as heartburn, nausea, vomiting, or constipation. With adequate information and timely care, the majority of mild problems that arise during pregnancy can be reduced.

Effectiveness of video-assisted teaching programme and mobile application on knowledge, attitude, and practices regarding management of common minor discomforts of pregnancy among primigravida mothers– A pilot study from South India by M

Punitha et al from Dept. of Obstetrics and Gynecological Nursing, Dept. of Medical Surgical Nursing, Sri Devraj Urs College of Nursing, Kolar, Karnataka, India And Dept. of Psychiatric Nursing, All India Institute of Medical Sciences, Mangalagiri, Andhra Pradesh, India.

The endometrium constitutes a dynamic organ in female reproductive years, as it is subjected to hormonal variations in every cycle. Present study was conducted with the aim to correlate the endometrial thickness with the histopathology in the perimenopausal females presenting with abnormal uterine bleeding (AUB) and to identify cut off value of endometrial thickness in order to reach at some consensus regarding when to intervene so that not a single endometrial pathology will be missed.

Endometrial thickness by ultrasonography and its correlation with histopathology in abnormal uterine bleeding among peri and post menopausal women by Priti Mishra et al from Dept. of Obstetrics and Gynecology & Dept. of Research & Development, Kalinga institute of Medical Sciences, KIIT deemed to be University, Bhubaneswar, Odisha, India.

In developing countries like India, a lack of awareness about contraceptive methods often leads to misconceptions, limited choices, and improper family planning. This knowledge gap not only disrupts maternal and child health complications but also disrupts the economy of society and the nation. Therefore, the purpose of this study was to investigate the knowledge, awareness and perception of contraception among the rural and urban population in Punjab.

A comparative study on knowledge, awareness and perception of contraception among rural and urban population in Punjab by Srishti Thakur et al from Dept. of Obstetrics and Gynaecology, GIAN Sagar Medical College and Hospital, Jansla, Punjab, India.

Gestational Diabetes Mellitus (GDM) is one of the most prevalent conditions associated with pregnancy, and if untreated it can have a major negative impact on both the mother's and the child's health.

It affects 3-8% of pregnancies and is defined by glucose intolerance identified during pregnancy due to obesity risk. Around thirteen to fourteen (13-14%) of pregnant women are getting converted to GDM and it is characterized insulin resistance and b-cell dysfunction. The etiology of GDM remains poorly understood. The most widely accepted explanation states that human placental lactogen, prolactin, glucocorticoids, and progesterone all of which are released by the placenta during pregnancy cause GDM by lowering insulin sensitivity and boosting anti-insulin hormones. Adipocytes produce adipocytokines like leptin that contribute to energy balance, metabolism of glucose and insulin. According to certain research, leptin may also play a major role in controlling the body's overall glucose homeostasis. Leptin may therefore play a significant role in the onset and prognosis of GDM. According to certain research, there is a favorable relationship between plasma leptin concentrations and both direct and indirect markers of obesity. Leptin levels rise in expectant mothers who have altered maternal fat reserves and glucose metabolism. The concentration of leptin in mothers rises two to three times higher than in non-pregnant women, peaking at 28 weeks of gestation.

The serum leptin can be a predictable marker for gestational diabetes mellitus by Swathy Thilak et al from Dept. of Obstetrics and Gynecology, Haveri Institute of Medical Sciences, Haveri, Karnataka, India & Dept. of Biochemistry, Saveetha Medical College & Hospital, Chennai, Tamil Nadu, India

Gestational Diabetes Mellitus (GDM) is one of the pregnancy complications characterized by carbohydrate intolerance that develops or is discovered during pregnancy. Physical inactivity and excessive gestational weight gain have been identified as independent risk factors for maternal obesity and pregnancy-related disorders, such as gestational diabetes. Awareness of the significance of physical activity for bodily and psychological health is vitally essential. The woman and her family members need to be swayed to change with time and let go of their myths and false cultural perceptions that exercise can harm the baby.

Physical activity levels of pregnant women at the time of diagnosis with gestational diabetes attending a tertiary care hospital in Lucknow City, Uttar Pradesh by Mallicka Gupta et al from Dept. of Community Medicine, and Public Health & Dept. of Obstetrics and Gynaecology, King George's Medical University, Lucknow, Uttar Pradesh, India.

Obesity has complications in relation to health as well as pregnancy. Bariatric surgeries gain interest among obese women to reduce the adverse obstetric outcomes. However, pregnancy post bariatric surgeries have benefits as well as risks. The study analyzed the effects of bariatric surgery on pregnancy, delivery, and postpartum period.

Obstetric outcome following bariatric surgery in kingdom of Bahrain by Amala Sunder et al from Bahrain Defense Force Hospital, Riffa, Bahrain and assisted Reproductive and Gynecology Center, London, England.

Dysmenorrhea is defined as difficulty in menstrual flow and refers to painful cramps during menstruation. There are 2 types of dysmenorrhea, primary and secondary dysmenorrhea respectively. Early diagnosis of these conditions which may be responsible for dysmenorrhea is necessary to curb the rising prevalence of infertility. There are no adequate screening questionnaires available for Indian population which can screen dysmenorrhea and differentiate primary and secondary dysmenorrhea.

Construction and validation of self-reporting menstrual disorder screening questionnaire for Indian population by Shilpa Umarji et al from College of Physiotherapy, School of Health Sciences, Dayananda Sagar University, Bangalore, Karnataka, India.

There are so many concerns and worries about menstruation. With the use of advance method of contraception, women are experiencing more menstrual related problems. Now a days, menstrual related complaints are more common in gynaec clinic. So, we had conducted this study to document the sociodemographic and clinical profile among the attendees of gynaec clinic with menstrual related problem.

To study the socio-demographic profile and clinical profile of abnormal uterine bleeding cases attending new civil hospital, Surat, Western India by Atul J Kaneria et al from GMERS Medical College, Navsari, and GMERS Medical College, Vadodara, Gujarat, India.

Polycystic Ovary Syndrome (PCOS) is an endocrine disorder prevalent in women of reproductive age group. The intricate nature of PCOS development is highlighted by fluctuations in various sex hormones, such as luteinizing hormone(LH), follicle-stimulating hormone and prolactin.

Uncovering ovarian reserve: Insights into hormones, lipids, and essential metals by Shefali Singh et al from Dept. of Obstetrics and Gynecology, Dr. Ram Manohar Lohia Institute of Medical Sciences, Lucknow, Uttar Pradesh, India.

CS (CS) is defined as the delivery of the infant, alive or dead, after the period of viability, through an abdominal uterine incision. CS can be potentially lifesaving for the mother and fetus. Modern obstetrics practice, for medical, social, economic reasons has witnessed an increase in primary CS rates everywhere. The CS rate in India has increased from 17.2% to 21.5% from 2015-16 to 2019-20.

Increasing rate of CS worldwide is concerning for public health and obstetricians as they can increase financial burden and can affect the maternal health when compared to vaginal delivery. CS have multiple complications like adhesions, abdominal pain, bladder damage, prolonged duration of surgery, postoperative bleeding, bowel obstruction, wound dehiscence, rupture, placenta accreta. These complications make the procedure and foetal extraction more challenging, increasing the time to delivery, and increases the chances of bowel or bladder injury.

Prevalence of intra-abdominal adhesions in patients undergoing repeat cesarean section: An observational retrospective study by T Kiruthika et al from Dept. of Obstetrics and Gynecology, Kempegowda Institute of Medical Sciences, Bangalore, Karnataka, India.

Worldwide 75 million women need post abortion care (PAC) services each year following safe or unsafe induced abortions and miscarriages. Majority of them do not wish to conceive in near future and are receptive towards using contraception. Contraceptive counselling and basket of choices should be made available to all women undergoing abortion and her right to decline or postpone this care should be respected while recognizing that each woman has a unique unmet need of contraception.

Post abortion contraception: A follow up study in women undergoing first and second trimester abortion at a tertiary care centre by Mohit Singh Mann et al from Dept. of Obstetric & Gynaecology, Vardhman Mahavir Medical College & Safdarjung Hospital, New Delhi, India.

Cervical cancer (CC) is the leading cause of morbidity and mortality due to cancer among women in Indian. This study was conducted to determine the prevalence and distribution of HPV16/ 18 and epidemiological profile of CC patients from, Gujarat Western India.

Prevalence and distribution of HPV 16 and 18 with its epidemiological profile among cervical cancer patients: A prospective study from regional cancer centre of Gujarat, Western India by Chetana Deepal Parekh et al from Dept. of Gynaecologic Oncology, Gujarat Cancer and Research Institute, Ahmedabad, Gujarat, India.

Induction of labor entails the deliberate initiation of uterine contractions before the spontaneous onset of labor, irrespective of whether the amniotic membranes have ruptured or not. The Modified Bishop's score of six or higher indicates that the cervix is ripe, or "favorable" – when there is a high likelihood of spontaneous labor or responsiveness to interventions designed to induce labor.

Misoprostol being cost-effective, easily available and stable at room temperature makes itself a promising agent in future for induction of labour if the fetomaternal safety concerns are proved with evidence. The aim of our study was to compare the efficacy of titrated versus fixed dose oral misoprostol solution regimen as inducing agents and the effects on fetomaternal outcome.

A comparative interventional study on fixed-dose versus titrated- dose oral misoprostol solution for induction of labour at term gestation in a tertiary care centre of Eastern Uttar Pradesh' by Swati Kumari et al from Baba Raghav Das Medical College, Gorakhpur, Uttar Pradesh, India.

Estimation of fetal weight is necessary to decide on the time and route of delivery. Different clinical and ultrasound methods for estimating fetal weight are followed by different institutions. Antenatal assessment of fetal weight is necessary to achieve better fetomaternal outcomes. The objectives of this study were: (a) fetal weight estimation by ultrasound (Hadlock's formula) and clinical methods (Johnson's formula and Dare's formula) and (b) to compare them with the actual weight of the baby after birth.

Estimation of fetal weight at term by clinical and sonographic assessment and its correlation with the birth weight – A prospective cohort study in a tertiary care hospital by Ravichandran Kandasamy et al from Department of Biostatistics, PIMS, Pondicherry, Dept. of Obstetrics and Gynaecology, Meelmaruvathur Adiparasakthi Institute of Medical Sciences, Chennai, Tamil Nadu, I, Pondicherry Institute of Medical Sciences and Dept. of Biostatistics, Pondicherry Institute of Medical Sciences, Kalapet, Puducherry, India.

Teenage pregnancy and motherhood are a vital medical and social concerns worldwide since many years. Teenage pregnancies are also associated with greater chances of pregnancy related complications especially pregnancy induced hypertension, systemic infections, endometritis and so is the associated mortality. Complications among babies born to teen mothers are also found to be at a greater rate.

Understanding the burden of teenage pregnancy: A five-year analysis at a tertiary care center of northern Karnataka in India by Saraswathi Karelal et al from Dept. of Obstetrics and Gynecology, Karnataka Institute of Medical Sciences, Hubballi, and Dept. of Community Medicine, KS Hegde Medical Academy (Nitte University), Mangalore, Karnataka, India

Pelvic organ prolapse is a common condition among parous women, badly affecting their life. They need a safe and consistent procedure that does anatomical correction and also improves their overall quality of life. Abdominal sacrocolpopexy and sacrohysteropexy are promising procedures for apical prolapse repair. Aim was to determine the effectiveness of the abdominal sacrocolpopexy /sacrohysteropexy with synthetic mesh for repair of vault and nulliparous prolapse respectively. The objectives were to describe the outcomes in the form of anatomical correction, symptomatic improvement and the complications in peri-operative and in follow up periods.

The effectiveness of the abdominal sacrocolpopexy / sacrohysteropexy with synthetic mesh for repair of apical prolapse by Ruby Kumari et al from Dept. of Obstetrics and Gynecology, Anugrah Narayan Magadh Medical College, Gaya, Bihar and Jawaharlal Nehru Medical College, Aligarh, Uttar Pradesh, India.

Induction of labor for medical or obstetric indications is a common practice in modern obstetrics. Evaluation of the cervix by Bishop's score is universally used to predict the success of induction of labor. But it is a subjective method and many studies have shown that it is not a good indicator of success of induction.

Comparison of Bishop's score with transvaginal sonographic cervical assessment to predict success of induction of labor by Subhi Srivastava et al from Dept. of Obstetrics and Gynecology, Mahatma Gandhi Medical College and Research Institute Puducherry & The Federation of Obstetric and Gynecological Societies of India, Mumbai, Maharashtra, India.

The number of young women of childbearing age diagnosed with Type II diabetes mellitus has increased globally, and many more women will present with hyperglycemia first identified in pregnancy. There is a global rise in the prevalence of gestational diabetes mellitus (GDM). Over 80% of women with hyperglycemia in pregnancy have GDM. 1 Hyperglycemia first identified in pregnancy can be classified as either GDM or diabetes mellitus in pregnancy. Gestational diabetes mellitus is defined as different levels of glucose intolerance first identified in pregnancy. The diagnosis of GDM is made when hyperglycemia first detected in pregnancy does not meet the criteria for the diagnosis of diabetes mellitus in the non-pregnant state.

Test characteristics of glycated albumin in the diagnosis of gestational diabetes Mellitus by Atochi Prince Woruka et al from Dept. of Obstetrics and Gynaecology, University of Port Harcourt Teaching Hospital, Dept. of Obstetrics and Gynaecology, University of Port Harcourt and Dept. of Endocrinology, University of Port Harcourt, Rivers State, Nigeria.

Placenta previa (PP) is condition where the placenta is inserted completely or partially into the lower uterine segment, at or after 28 weeks of gestation. Maternal and fetal risks are antepartum haemorrhage (APH), postpartum haemorrhage (PPH), abnormal adherence of placenta, low birth weight (LBW), intra uterine growth restriction (IUGR), preterm births and congenital malformations. The purpose of this study was to determine the proportion of placenta previa, the demographics of patients, types- severity, complications and the fetomaternal outcome in patients of placenta previa.

Complications of placenta previa: A retrospective observational study at tertiary care hospital by Gautam Chandubhai Gavaniya et al from Dept. of Obstetrics and Gynecology, Smt N H L Municipal Medical College, Ahmedabad, Gujarat, India.

AUB makes a perimenopausal woman to seek medical care. This study evaluated and correlated the endometrial thickness obtained by ultrasonography and histopathological findings of endometrium in perimenopausal women with AUB.

Sonographic and histopathological findings endometrium among perimenopausal women with abnormal uterine bleeding- A cross sectional study in north Kerala by Heera Trivikrama Shenoy et al from Dept. of Obstetrics and Gynaecology, Malabar Medical College Hospital and Research Centre, Dept. of Pathology, Baby Memorial Hospital & Dept. of Obstetrics and Gynaecology, Baby Memorial Hospital, Kozhikode, Kerala, India.

**We have case reports are.....**

1. A case of Mayer-Rokitansky-Kuster-Hauser syndrome type 1 by Akanksha Sanjay Chandekar et al from Dept. of Obstetrics and Gynecology, Smt. NHL Municipal Medical College & SVP Institute of Medical Sciences and Research, Ahmedabad, Gujarat, India.
2. The sequence of acrania-exencephaly-anencephaly (AEAS)- An infrequent case report by Heera Trivikrama Shenoy et al from Dept. of Obstetrics and Gynecology, Malabar Medical College Hospital and Research Center, Dept. of Radiodiagnosis, KMCT Medical College, Manassery, Kerala and Dept of Obstetrics and Gynecology, KMCT Medical College, Kozhikode.
3. Reactive leuco-thrombocytosis in a post splenectomized pregnant woman in labour: A case report by Sree Supriya Muthaiyan et al from Institute of Reproductive Medicine, Madras Medical Mission, Chennai, Tamil Nadu, India.

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Individually we achieve, together we excel...

Regards

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