



Content available at: <https://www.ipinnovative.com/open-access-journals>

## Indian Journal of Obstetrics and Gynecology Research

Journal homepage: [www.ijogr.org](http://www.ijogr.org)



### From the Editor's Desk...

*"Honesty is the best policy"*

Dear readers,

Greetings!

Welcome to the Fourth issue of IJOGR ...and world of academics... Volume 12, Issue 4, October–December 2025.

Indian Journal of Obstetrics and Gynecology 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.

In this issue, we present Review Articles and Original Research Articles from across India as well as contributions from international experts.



### Review Articles

Pregnancy is a transformative phase in a woman's life, marked by significant physiological, hormonal, and emotional changes. These changes also influence oral health, making pregnant women more vulnerable to conditions such as gingivitis, periodontitis, and dental caries. Dental care during pregnancy is crucial for maintaining both maternal and fetal health, as poor oral health can be associated with adverse pregnancy outcomes, including preterm birth and low birth weight. However, dental treatment for pregnant women requires special considerations, including the timing of interventions, the use of medications, and the management of common oral conditions. This review explores the essential aspects of providing dental care to pregnant women, with a focus on best practices for safe and effective treatment, the importance of collaboration between dentists and obstetricians, and preventive strategies to improve oral health during pregnancy. The article also reviews the evidence-based guidelines for the use of medications, dental radiography, and treatment protocols across the three trimesters of pregnancy. Numerous references have been included to provide a comprehensive understanding of the topic.

Pregnancy and oral health: Safe practices for managing dental conditions Ravi Gupta et al from Dept. of Conservative Dentistry and Endodontics, Faculty of Dentistry, Manipal University College Malaysia (MUCM) Melaka, Malaysia.

Dept. of Conservative Dentistry and Endodontics, Dayanand Sagar University, Bangalore, Karnataka, India, Faculty of Dentistry, Sharad Pawar Dental College and Hospital, Datta Meghe University of Higher Education and Research (Deemed to be University), Wardha, Maharashtra, India  
Dept. of Conservative Dentistry and Endodontics, Faculty of Dentistry, Manipal University College Malaysia (MUCM), Melaka, Malaysia  
faculty of Dentistry, NSVK Dental College, The Oxford Dental College and Hospital, Bangalore, Karnataka, India.

Polycystic ovary syndrome (PCOS) is a prevalent endocrine heterogeneous disorder. The complex etiology of PCOS involves hormonal imbalances, genetics, lifestyle, and environmental factors. Insulin resistance is one of the most significant pathophysiological traits in both obese and lean females with PCOS. Both obese and lean women with PCOS are vulnerable to the problem of insulin resistance. The Indian phenotype has been shown to have a predominance of PCOS associated with insulin resistance. Insulin sensitizers improve insulin sensitivity, thereby lowering insulin levels and managing the hormonal and metabolic abnormalities associated with PCOS. Insulin sensitizers like metformin, inositols, and chromium are commonly used in the treatment of PCOS. Metformin and Myoinositol in combination have been found to be synergistically beneficial for alleviating the symptoms of PCOS by enhancing insulin sensitivity at the different targets in the cascade of insulin resistance. Recent data from clinical trials and meta-analysis has highlighted the potential benefits of combining metformin and myoinositol in managing PCOS symptoms such as menstrual irregularity, hyperandrogenism, insulin resistance, and infertility. The aim of this review is to summarize currently available data on the metformin and myoinositol combination therapy in PCOS patients.

Metformin and myoinositol for polycystic ovary syndrome: A review of their combined effectiveness by Ameet Patki et al. from Dept. of Obstetrics and Gynecology, Fertility Associates, Mumbai, Maharashtra, India, Advance Fertility and Gynecology Centre, New Delhi, India, Dept. of Obstetrics and Gynecology, Medical College and Hospital, Kolkata, West Bengal, India, Dept. of Medical Affairs, Eris Lifesciences, Ahmedabad, Gujarat, India.

**Original Articles are:**

Intrahepatic cholestasis of pregnancy (IHCP) is a liver disorder that is unique to pregnancy. The important characteristic features of this disease are pruritus and elevated bile acid levels that result in adverse consequences. Despite the complexity of its etiology, recent research suggested that environmental, seasonal, and hormonal factors play a vital role in the onset and severity of the disease.

A multifactorial prospective study investigating temperature and sex steroids as seasonal and hormonal triggers of intrahepatic cholestasis of pregnancy by Nidhi Sharma et al from Dept. of Pharmacy, GD Goenka University, Dept. of Gynecology and Obstetrics, SGT University, Gurugram, Haryana, India.

The global rise of caesarean rate is an issue of public health concern as it is associated with the complications and increase risk of maternal morbidity and mortality. To address this issue caesarean audit at various health facilities is needed. This study aimed to analyse the Caesarean section according to Robson's Ten Groups Classification System (TGCS) at tertiary care hospital.

Caesarean audit using Robson's ten group classification system at a tertiary care centre UP by Shivani Singh et al from Dept. of Obstetrics and Gynaecology, Hind Institute of Medical Sciences, Heerpur, Dept. of obstetrics and gynaecology, Sarojini Naidu Medical College, Agra, Uttar Pradesh, India.

Untreated hypertension, especially preeclampsia, causes adverse maternal outcomes such as pulmonary edema, renal impairment, and posterior reversible encephalopathy syndrome, while uncontrolled gestational hypertension compromises fetal outcomes by increasing the odds of preterm delivery and low birth weight. Despite our enhanced healthcare infrastructure, HDP remains a significant contributor to maternal mortality in India and the rest of Southeast Asia.

Outcomes of pregnancy complicated by hypertension: A study of maternal and fetal Health Divyabharathi Muthulingam et al from Dept. of Obstetrics and Gynecology, SRM Medical College Hospital and Research Centre, SRM Institute of Science and Technology Chengalpattu, Tamil Nadu, India, Dept. of Community Medicine, Sri Muthukumaran Medical College Hospital and Research Centre, Chennai, Tamil Nadu, India.

An essential but transient organ develops in the uterine lining during pregnancy; this is the placenta. Nutrition, respiration, endocrine, immunological, and excretion are the main functions of the placenta for the foetus. Amniotic fluid plays an important role in musculoskeletal and pulmonary development of foetus. For normal amniotic fluid amount, a normally developed placenta is required. Thus the present study was conducted to assess the correlation between placental thickness and amniotic fluid index in third trimester in single uncomplicated pregnancies.

Relationship between placental thickness and amniotic fluid index in single uncomplicated pregnancy Deepti Aggarwal et al from Dept. of Obstetrics and Gynecology, Dr. KKBM Subharti Hospital, Dehradun, Uttarakhand, India, Dept. of Obstetrics and Gynecology, Amandeep BR Medicity, Srinagar, Jammu & Kashmir, India, Dept. of Radiology, Dr. KKBM Subharti Hospital, Dehradun, Uttarakhand, India.

One million calories per year on an average consumed by humans and imbalance of only 1% is enough to cause an annual weight change of 1-2 kg. Even minor changes in intake of calories and energy expenditure may lead to weight change, if the regulation is not interacting optimally with environmental conditions. Incidence of obesity is increasing over time due to our unlimited access to food along with a sedentary life style. Obesity during pregnancy has an increased risk of preterm birth, hypertensive disorders of pregnancy, gestational diabetes mellitus, and induction of labour, caesarean section, wound infection, post-partum hemorrhage, and prolonged hospital stay. This study was done to evaluate the risks to mother and the baby when pregnancy is associated with obesity.

A study on the effect of obesity on pregnancy outcome by Dhanireddy Salini Sakuntala et al from Dept. of Obstetrics and Gynecology, Government Medical College, Kadapa, Dept. of Obstetrics and Gynecology, Government Medical College, Nandyala, Dept. of Obstetrics and Gynecology, Fathima Medical College, Kadapa, Andhra Pradesh, India.

Induction of labor (IOL) is a critical intervention aimed at facilitating childbirth for various reasons. When it fails, there is an increased likelihood of delivery by cesarean section. Any tool that can accurately predict the success of IOL can improve maternal and fetal outcomes. This can be achieved by incorporating transvaginal sonographic parameters namely posterior cervical angle (PCA) and cervical length to predict the mode of delivery along with Bishop score.

Transvaginal sonographic assessment of cervical length and posterior cervical angle in predicting the success of labor induction by Rama Majji et al from Dept. of Obstetrics and Gynecology, Kasturba Medical College, Manipal, Manipal Academy of Higher Education, Manipal, Karnataka, India.

If varicella is contracted during pregnancy, it has adverse implications for both fetal & maternal health. We wanted to understand the association between past history of chickenpox and varicella immunity demonstrated by specific immunoglobulin (IgG), so that patients can be made aware about the need for vaccination & can make an informed choice. It is particularly important in resource restricted settings to determine whom to screen, where both testing for varicella immunity and the vaccines are costly.

Association between past history of chickenpox and varicella immunity in women attending infertility clinic by Geeta Shripad Wadadekar et al from dept. of Obstetrics and Gynecology, Bharati Vidyapeeth Deemed University Medical College, Pune, Maharashtra, India.

To evaluate the predictive value of anti-Mullerian hormone (AMH) and Antral follicle count (AFC) for clinical pregnancy rates and achieving embryo transfer in women with diminished ovarian reserve (DOR) undergoing in vitro fertilization (IVF) treatment.

Predictive value of ovarian reserve markers for clinical pregnancy in women with diminished ovarian reserve by Gorkem Arica1 et al from Dept. of Obstetrics and Gynecology, Istanbul University Cerrahpasa Medical Faculty, Dept. of Obstetrics and Gynecology, Basaksehir Cam and Sakura City Hospital, Istanbul, Turkey.

The main objective of this study is to assess the obstetricians and gynaecologists point of view on dental emergency in antenatal women.

Perception of obstetricians and gynaecologists on managing dental emergencies during pregnancy gynecologists point of view on dental emergency in antenatal women. By Geetha Rajendran et al from Dept. of Dentistry, Sri Manakula Vinayagar Medical College & Hospital, Kalitheerthalkuppam, Puducherry, India.

Pregnancy-induced hypertension (PIH) is among the serious obstetric concerns worldwide with stillbirths being one of the potential consequences. Placentas in pregnancies affected by PIH exhibit an increase in anti-angiogenic proteins that could serve as markers of adverse birth outcomes.

Use of relevant biomarkers could aid in effective diagnosis, therefore preventing fatal consequences. Our study aimed to explore the association between maternal serum levels of soluble endoglin (sEng) and stillbirths in pregnancies complicated by PIH.

Soluble endoglin as a biomarker for risk of stillbirth in pregnancies with pregnancy induced hypertension: A case-control study by Sanyukta A. Patil et al from Dept. of Biochemistry, Jawaharlal Nehru Medical College (KAHER), Belgaum, Karnataka, India, JNMC Women's & Children's Health Research Unit (KAHER), Belgaum, Karnataka, India, Dept. of Epidemiology, Research Triangle Institute, North Carolina, USA Dept. of Physiology, Jawaharlal Nehru Medical College (KAHER), Belgaum, Karnataka, India, Dept. of Obstetrics and Gynecology, Columbia University, New York, USA.

This retrospective observational study was conducted in the Obstetrics and Gynecology department from 1st January 2022 to 31st December 2023 to assess the impact of preventive low-dose aspirin on the incidence of pre-eclampsia (PE) and intrauterine growth restriction (IUGR) before 16 weeks of gestation. Aspirin's potential to lower the incidence of IUGR was the main goal; assessing its effect on PE was the secondary goal.

Is there a significant reduction of intrauterine growth restriction in patients with aspirin prophylaxis before 16 weeks?: A retrospective study by Jijisha Ali et al from Dept. of Obstetrics and Gynecology, Mediclinic Welcare Hospital, Dept. of General Practice, Mohammed Bin Rashid University, Dubai, United Arab Emirates.

Labor induction is a common obstetric intervention, with mechanical methods like the Foley catheter gaining popularity due to their safety profile and effectiveness. This study aimed to compare the efficacy and safety of traction versus non-traction methods in Foley catheter-induced labor induction.

Comparative effectiveness of traction versus non-traction methods in foley catheter-induced labor induction by Nachiketha S.V et al from Dept. of Obstetrics and Gynecology, Karnataka Institute of Medical Sciences, Hubli, Karnataka, India

Prevention of cervical cancer with vaccination is a novel concept and awareness and education regarding it among medical students of today will significantly impact the cervical cancer burden of the society in future.

Awareness and attitude towards HPV vaccine among medical students by Nisha Bhatia et al from Dept. of Obstetrics and Gynecology, Apollo Institute of Medical Sciences and Research, Hyderabad, Telangana, India.

Gestational diabetes mellitus (GDM) is a major public health concern, associated with higher maternal and perinatal morbidity. This study is undertaken to evaluate the effect of GDM on perinatal and maternal outcomes among pregnant women reporting to a tertiary care hospital in Tamil Nadu.

Impact of gestational diabetes mellitus on maternal and perinatal outcomes: A prospective observational study in a tertiary hospital in south India by Vijaya Nandhini Rengarajan et al from Dept. of Obstetrics and Gynecology, Dhanalakshmi Srinivasan Medical College and Hospital, Perambalur, Tamil Nadu, India.

Maternal characteristics such as socio-demography, socioeconomic status and lifestyle have been reported severally to be associated with infant birth weight.

Association between maternal socio-demography, socio-economic status, lifestyle and neonatal birth weight: A hospital-based cross-sectional study in South East, Nigeria by Chijioko Stanley Anyigor-Ogah et al from Dept. of Family Medicine, Alex Ekwueme Federal University Teaching Hospital, Dept. of Obstetrics and Gynecology, Alex Ekwueme Federal University Teaching Hospital, Dept. of Family Medicine, David Umahi Federal University Teaching Hospital, Uburu, Ebonyi State, Dept. of Family Medicine, National Obstetrics Fistula Centre, Dept. of Human Anatomy, Alex Ekwueme Federal University Teaching Hospital, Dept. of Radiology, Alex Ekwueme Federal University Teaching Hospital, Abakaliki, Ebonyi State, Nigeria.

Pregnancy-induced hypertension (PIH) is characterized by widespread systemic, hematological, and coagulation abnormalities.

Hematological and coagulation parameters in pregnancy-induced hypertension: A case-control study by Deepa Gopinath et al from Dept. of Pathology, Pondicherry Institute of Medical Sciences, Pondicherry, India, Dept. of Radiation Oncology, Government Medical College, Thiruvananthapuram, Kerala, India.

Pre eclampsia (PE) is defined as a clinical syndrome which involves multi-organ system and is one of the major cause of maternal and perinatal morbidity and mortality. Doppler assessment of feto-placental circulation is one of the method for evaluation of pre eclampsia, which is a non-invasive screening tool without affecting the pregnancy. In the current study, uterine artery doppler waveform is assessed. A high pulsatility index and persistent diastolic notch helps in prediction of pre eclampsia and IUGR.

Study of uterine artery Doppler at 11 to 14 weeks of gestation and maternofetal Outcome by Deepthi Priya Kammara et al from Dept. of Obstetrics and Gynecology, Sri Dharmasthala Medical College, Dharwad, Dept. of Obstetrics and Gynecology, Ramaiah Medical College, Bangalore, Karnataka, India.

Obstetrics and Gynaecology (OG) is an essential specialty within the medical profession that combines both surgical and medical care, focusing primarily on women's reproductive health. Despite its fulfilling nature and importance to public health, OG often struggles to attract interest from medical graduates, particularly males, due to its challenging demands and concerns about lifestyle.

Perception of obstetrics and gynaecology as a future career specialty among medical graduates: A cross-sectional study by Aishwarya Veeraragavan et al from Dept. of Obstetrics and Gynecology, SRM Medical College Hospital and Research Center, Kanchipuram, Tamil Nadu, India.

Preterm labor is still one of important cause of neonatal morbidity and mortality, many researches done to find the relationship with biochemical marker for early detection to promote the management plan to reduce the complication simple, cheap, available blood test applicable and acceptable by patients for that we choose complete blood test for this purpose.

Determinants of preterm labor among mothers admitted to the obstetrics ward in a tertiary care hospital in Iraq 2023: case control study by Shatha Sami Hussein et al from Dept. of Obstetrics and Gynecology, Al-Mustansiriya University, Baghdad, Iraq.

Preterm labor (PTL), defined as labor occurring between 20 to 37 weeks of gestation, is one of the primary etiological factors for neonatal disease burden and fatality. This study assessed the effectiveness and safety of isoxsuprine, a tocolytic agent, in women experiencing PTL.

Effectiveness and safety of isoxsuprine hydrochloride as tocolytic agent in women with preterm labor in India: A prospective, observational study by Shrinivas N Gadappa et al from Dept. of Obstetrics and Gynecology, Government Medical College, Aurangabad, Maharashtra, Dept. of Obstetrics and Gynecology, AC Subba Reddy, Government Medical College and Hospital, Nellore, Andhra Pradesh, Dept. of Obstetrics and Gynecology, Lokmanya Tilak Municipal Medical College, Mumbai, Maharashtra, Dept. of Obstetrics and Gynecology, Shubham Sadbhavna Hospital, Varanasi, Uttar Pradesh, India.

Background: Gestational Diabetes Mellitus (GDM) is a significant public health concern, particularly in developing countries like India, where its prevalence is rising. This study aimed to identify the modifiable and non-modifiable risk factors associated with GDM among pregnant women attending a tertiary care hospital in Kolkata, West Bengal.

Factors associated with gestational diabetes mellitus: A case control study in a tertiary care by Sukanya Ghosh et al from Dept. of Community Medicine, College of Medicine and Sagore Dutta Hospital, Dept. of Obstetrics and Gynecology, College of Medicine and Sagore Dutta Hospital, Kolkata, West Bengal, India in Kolkata, West Bengal.

This study aimed to determine whether antenatal women with Gestational diabetes mellitus (GDM) have a higher prevalence of symptoms of depression compared to antenatal women without GDM. The secondary aim was to compares sociodemographic and other common factors associated with depression during the antenatal period.

Prevalence of depression in gestational diabetes mellitus in public hospital by Aparajitha Rajkumar et al from Dept. of Medicine, Government Kilpauk Medical College & Hospital, Chennai, Tamil Nadu, Dept. of Medicine, The Tamil Nadu Dr. M.G.R. Medical University, Chennai, Tamil Nadu, Dept. of Obstetrics & Gynecology, Government Kilpauk Medical College & Hospital, Chennai, Tamil Nadu, Dept. of Medicine, Jain Hospital & Research Centre Pvt. Ltd, Kanpur, Uttar Pradesh, India.

Gestational diabetes mellitus (GDM) is a common pregnancy complication linked to various maternal and neonatal risks. Early diagnosis is crucial for timely intervention and reducing complications. This study evaluates the efficacy of HbA1c as an early diagnostic adjunct for GDM, combined with fasting blood sugar (FBS) levels, to establish a cost-effective first-trimester screening method.

Early diagnosis of gestational diabetes mellitus by HbA1c as a predictor- Prospective observational study by Paleti Leela Lavanya et al from Dept. of Obstetrics and Gynecology, Shri BM Patil Medical College Hospital and Research Centre, Vijayapura, Karnataka, India

Polycystic ovary syndrome (PCOS) is a prevalent endocrine disorder affecting women of reproductive age, characterized by oligo-menorrhea, hyperandrogenism, and metabolic disturbances. Vitamin D deficiency is common in PCOS patients and may exacerbate symptoms. This study aims to investigate the relationship between body mass index (BMI) and vitamin D levels in PCOS patients in a North Indian population.

Hypo-vitaminosis D and its role in PCOS: A prospective observational study at tertiary care centre in north Indian population by Shalini Mishra et al from Dept. of Obstetrics and Gynecology, T.S.M. Medical College and Hospital, Lucknow, Uttar Pradesh, India.

The number of caesarean section deliveries is progressively increasing all around world including India and is a cause of concern. It is important to identify and categorise the women into different groupings as per Robson ten group classification system and the CS rate among them to try to decrease the C-section rate.

Analysis of caesarean deliveries using modified Robson classification, a retrospective observational study in a tertiary care teaching hospital in southern India by Anitha S et al from Dept. of Obstetrics and Gynecology, A.J. Institute of Medical Sciences and Research Centre, Mangalore, Karnataka, India.

To evaluate the efficiency of discontinuous double density gradient sperm preparation over swim up preparation in concentrating normomorph spermatozoa in the yield Discontinuous density gradient sperm processing concentrates normal morphological spermatozoa better in the yield: An observational study by Manish R Pandya, Vijayakumar C N, Parul Shah, Ph. D. Scholar, Embryologist free-lancer, Professor, Dept. of Obstetrics and Gynecology, NHL School SVP hospital & Advanced Life Sciences, Gujarat University, Ahmedabad, Gujarat, India.

**Case series are...**

1. Restoring fertility through open tubal recanalization: A case study of success after Sterilization by Sohana Pulakeshi Budiha et al from Dept. of Obstetrics and Gynecology, Dr. D. Y. Patil Medical College, Hospital & Research Centre, Pune, Maharashtra, India.
2. Case series of genital melanosis and a rare scenario of malignant melanoma arising in the vulval melanosis by Vijayashree Raghavan et al. from Dept. of Pathology, Chettinad Hospital and Research Institute, Chettinad Academy of Research and Education, Kelambakkam, Tamil Nadu, India.
3. Confronting renal calculi in pregnancy: A case series of clinical outcomes and Approaches by Kavya Paul Udayasuriyan et al from Dept. of Obstetrics and Gynecology, Saveetha Medical College and Hospital, Saveetha University, Kanchipuram, Tamil Nadu, India.
4. A case series of fetal ovarian cysts: A common occurrence in the modern era Vidhyalakshmi Ramadoss Kabila et al from Dept. of Obstetrics and Gynecology, SR M Medical College Hospital and Research Centre, SRM Institute of Science and Technology, Chengalpet, Tamil Nadu, India.
5. Neural tube defects in prenatal diagnosis: A case series By Roselin Sheela et al from Dept. of Obstetrics and Gynecology, Saveetha Medical College and Hospital, Chennai, Tamil Nadu, India.
6. A case series of platelet rich plasma in genitourinary syndrome of menopause By Manjula N V et al from Dept. of Obstetric and Gynecology, Ramaiah Medical College, Bangalore, Karnataka, India.

**Case reports are:**

1. Acute fatty liver of pregnancy: A case report on deranged liver function and the critical role of timely intervention Jayshree Kulkarni et al from Dept. of Obstetrics and Gynecology, Dr. D.Y. Patil Medical College Hospital and Research Centre, Pune, Maharashtra, India.
2. Spontaneous fundal uterine rupture in a scarred uterus sparing caesarean scar by Yugantika Tomar et al from Dept. of Obstetrics and Gynecology, Manipal Academy of Higher Education, Manipal, Karnataka, India.
3. A rare encounter: Neurofibromatosis and pregnancy—Case insights by Kaviya Vengatesan et al from Dept. of Obstetrics and Gynecology, SRM Institute of Science and Technology, Chengalpattu, Tamil Nadu, India.
4. Gestational trophoblastic neoplasia in a perimenopausal woman: A rare case report and literature review by Sachin Khanduri et al from Dept. of Radiodiagnosis, Era's Lucknow Medical College and Hospital, Lucknow, Uttar Pradesh, India.
5. Fatal postpartum heart failure in a woman with undiagnosed mitral stenosis: A call for enhanced antenatal cardiac screening by Apoorva Dhankhar et al from Dept. of Obstetrics and Gynecology, Dr. D. Y. Patil Medical College, Hospital & Research Centre, Pune, Maharashtra, India.

We try to sieve all articles by expert, peer reviewers to get best of best and new article for readers IJOGR is a one of the best open access journals that publish the most complete and reliable source of information on new development in field of obstetrics and gynecology and provide access online without any restrictions worldwide.

Individually we achieve, together we excel...

Regards

**Manish R Pandya**

(MD FICOG FICMCH)

Professor and HOD

Scientific Research Institute Mahavir Hospital

Surendranagar, Gujarat, India

Email: drmanish.pandya@gmail.com

Website: [www.manishivf.co.in](http://www.manishivf.co.in), [www.manishivf.in](http://www.manishivf.in)