



From the editors desk

“We can't solve our problem with the same thinking we used when we created them” – Albert Einstein

Dear Readers,

Greetings!

Welcome to second issue of IJOGR ...and world of academics... Volume 8, Issue 2 April – June 2021



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

Pregnancy and Labour are very overwhelming times for women. They go through various bodily and mental changes over a very short period of time. Most women are able to accept these changes and cope. However, a small percentage are unable to quickly adapt to these changes especially the ones with pre existing mental illnesses. Generally one in ten persons suffers from anxiety and depression in India.

Perinatal depression – An update by Sendhil Coumary A et al from Dept. of Obstetrics and Gynecology, and Dept. of Psychiatry, Mahatma Gandhi Medical College and RI, Pondicherry, India.

Original Research Article are

Medical abortion (MA) is the mechanism by which the administration of one or more drugs willingly interrupts a pregnancy. Around 46 million induced abortions occur annually worldwide. About half of these are unsafe abortions and they occur in developing countries. With the goal of decreasing the number of maternal deaths due to unsafe abortions, the Medical Termination of Pregnancy (MTP) Act of India (1971) was adopted to legalise abortions. Medical method involving ingestion of oral drugs is an accepted mode of MTP. However, self-administration of MTP pill carries number of risks. This study was carried out on women who presented with complaints following self-administration of abortion pills.

Unsafe abortion: Combating the silent menace Shilpa Mishra et al from Dept. of Obstetrics and Gynecology, Kalinga Institute of Medical Sciences and PBN Hospital, Bhubaneswar, Odisha, India

Cervical cancer has been controlled to an appreciable extent in the urban population of India, but in the rural regions, the rise in incidence of the disease and the associated mortality has been cause of great concern.

This study was undertaken with aim to create awareness among rural women regarding hazards and risk factors of carcinoma cervix and offering single life time cytological screening for early detection of the disease. This was essential as majority of the rural women were illiterate and have poor personal genital hygiene.

Our seven years experience of rural cervical cancer screening in Lucknow, India by Jata Shanker Misra et al from Dept. of Pathology, Era's Lucknow Medical College and Hospital, Era University, Lucknow, Uttar Pradesh, India

In India 20-30% pregnancies belong to high risk category which is responsible for 75% of perinatal morbidity and mortality. To prevent this we needed a tool which lead to the introduction of Admission CTG.

It is a non-invasive, brief fetal heart rate recording procedure immediately after admission to the labor ward that forecasts hypoxia encountered in intrapartum period. Hypoxial injuries caused by stress and contractions during childbirth are endured by the fetus.

The Admission test (AT) in high risk pregnancy for continuous monitoring of FHR (fetal heart rate) has become crucial in the modern day obstetric practice. As it senses the presence of fetal intrapartum hypoxia and assist the obstetrician in making decision on the mode of delivery to improve perinatal outcome in high risk pregnancy.

Admission cardiotocography: Forecasting perinatal outcome by Nity et al from Dept. of Obstetrics & Gynecology, Kalinga Institute of Medical Sciences and PBN Hospital, Bhubaneswar, Odisha, India

Preeclampsia is best characterized as a condition unique to pregnancy that can affect almost any organ system. Appropriate treatment can be given and its effects can be closely monitored. The only widely recognized procedure remains the 24hour urine collection. However, the protracted time involved in sample collection to final reporting in this method, renders it impractical. The current research was therefore aimed at determining the accuracy of the spot urine ratio of albumin-creatinine in asymptomatic pregnant women. Appropriate treatment if started at early stage of the disease helps in closely monitoring of the disease process.

Role of spot urine albumin-creatinine ratio in predicting pre-eclampsia between 20-28 weeks of gestation by Pallavi Mahajan el al from Dept. of Obstetrics and Gynecology, Kalinga Institute of Medical Sciences, Hospital Bhubaneswar, Bhubaneswar, Odisha, India

Cervical cancer is ranked as the second most common cancer amongst women worldwide and in many low-income countries, it is the most common female cancer. ZedScan, enables us to have a first hand estimation of the accuracy of the system and thereby settling and verifying the claims of the manufacturer.

At the turn of the millennium, cervical cancer ranked as one of the most common cancer amongst women worldwide. Its prevalence is much more in developing countries where it is the most common rampant female cancer. Mortality due to cervical cancer is also an indicator of health inequities, as 86% of all deaths due to cervical cancer are in developing, low- and middle-income countries.

Collosum to estimate the accuracy of detection of cervical intraepithelial neoplasia using electrical impedance spectroscopy with colposcopy- A one year study by Shalini Vasudeva and Ragini Thapa from Dept. of Gynecology and Obstetrics, Military Hospital Mhow, Indore, Madhya Pradesh, India.

Hypertensive disorders are common medical problems encountered during pregnancy with reported incidence between 5-10%. They form one of deadly triad along with haemorrhage and infection that contribute to maternal and fetal morbidity and mortality.

Demographic factors affecting fetomaternal outcome in preeclamptic patients with and without transaminitis: A prospective analytical study by Aarushi Chaudhary, Puneeta Mahajan and Vikas Dhillon from Dept. of Obstetrics and Gynecology,

Kalpana Chawala Government Medical College, Karnal, Haryana, India, Dept. of Obstetrics and Gynecology, Dr Baba Saheb Ambedkar Medical College, New Delhi, India and Dept. of ENT, Kalpana Chawla Government Medical College, Karnal, Haryana, India.

Pregnancy is a period where there will be considerable modifications in the maternal metabolism to adapt for the physical, structural, hormonal and psychological adjustments in the process of welcoming a new guest. As there is a continuous rise in post-prandial blood sugars during the whole pregnancy and in late pregnancy there will be increased insulin response, normal pregnancy is observed as a diabetogenic state.

Pregnancy is a diabetogenic state which places the mother as well as the foetus at high risk for certain complications even though the woman is neither GDM nor overt diabetic. This study aims at estimation of HbA1c value after 24 weeks of pregnancy and its correlation with the pregnancy outcome.

A prospective study on HbA1c levels in patients without GDM and its correlation with pregnancy outcome by Rinda Naidu Kanukolanu, Ushadevi Gopalan and Balaji Rajagopalan from Dept. of Obstetrics and Gynaecology, and Dept. of Biochemistry, Shri Sathya Sai Medical College and Research Institute, Ammapettai, Tamil Nadu, India.

Pentalogy of Cantrell is a rare structural disorder. It is a combination of congenital defects in the midline comprising of supraumbilical abdominal wall defect, defect in the lower sternum, deficient anterior diaphragm, defect in diaphragmatic pericardium and intracardiac defects. It is proposed to result from an insult occurring as early as 14th to 17th day of embryonic life. It involves the ventral midline due to disruption of midline mesenchyme. Etio-pathogenesis is still largely unknown. The insult could be environmental or disruption of a single gene, either autosomal or X linked. Very rarely Cantrell's syndrome is associated with neural tube disorders. Here, we report one such rare case of Pentalogy of Cantrell.

Pentalogy of Cantrell with encephalocele – A case report with review of literature Suriya Desikan et al from Dept. of Obstetrics and Gynecology, Mahatma Gandhi Medical College and Research Institute, Pondicherry, India.

Hypothyroidism during pregnancy has an adverse effect on both mother and child. The maternal and foetal risk is higher in TPOAb (Thyroid peroxidase antibody) positive women compared to women with negative TPO Ab. The recent ATA (American Thyroid Association) guidelines recommend that pregnant women with TSH (Thyroid Stimulating Hormone) concentration above 2.5mU/L should be evaluated for TPOAb status and LT4(levothyroxine) treatment should be considered with TSH values between 2.5mU/L and 4.0mU/L only when TPOAb status is positive.

Prevalence of anti-thyroid peroxidase antibodies in the first trimester pregnancy and its impact on maternal and fetal outcomes in a tertiary care centre in Bangalore by Shruthi H S et al from Dept. of Obstetrics and Gynaecology, Bangalore Baptist Hospital, Bengaluru, Karnataka, India.

To determine the efficacy of metformin on clinical profile and metabolic disorders in women with polycystic ovarian syndrome. Polycystic ovarian syndrome, is a heterogeneous endocrinological disorder affecting women of reproductive age and metformin was introduced to influence the pathogenesis.

Effect of metformin in treating polycystic ovarian syndrome among women attending a tertiary care setting -A prospective observational study by Suresh Chandra Mondal and Pinaki Sarkar from Dept. of Obstetrics & Gynaecology, Malda Medical College & Hospital, Malda, West Bengal, India and Balurghat Nursing Home, Balurghat, West Bengal, India

In 2015–19, there were 121 million unintended pregnancies annually, corresponding to a global rate of 64 unintended pregnancies per 1000 women aged 15–49 years. This is majorly due to the documented continued gaps in contraceptive services and family planning, including those related to knowledge and care delivery.

A cross-sectional study on knowledge, attitude and practice towards contraception among medical students in a tertiary care center of coastal Karnataka, India by Divya Solipuram et al from Dept. of Obstetrics and Gynecology, Kasturba Medical College, MAHE, Manipal, Karnataka, India and University of Louisville, Kentucky, United States

There has been an increased awareness among girls and women in India, especially from middle and higher income group on menstrual cup, due to health or environmental reasons. Use of various sanitary products during menstruation can impact menstrual health with incidence of urogenital infection like rashes, irritation etc. being common among women.

Prevalence of common urogenital infections among menstrual cup users by Lata Ghanshamnani et al from Rnisarg Foundation, Thane, Maharashtra, India and Private Practitioner, Thane, Maharashtra, India.

PCOS is one of the common endocrine disorders in women leading to various complications like infertility, menstrual, psychological disturbances and metabolic syndrome. The objectives of this study were to study the clinical and biochemical parameters of metabolic syndrome in women of reproductive age group with PCOS.

Study of metabolic syndrome in south Indian PCOS women by V Kalaivani et al from Dept. of Obstetrics and Gynecology, and Dept. of Biochemistry, Shri Sathya Sai Medical College and Research Institute, Chengalpattu, Tamil Nadu, India.

Everyday 13 women die in India due to causes related to unsafe abortion. Each year almost 6.4 million pregnancies are terminated. Unsafe abortion, the country's third leading cause of maternal death, accounts for 8% of all such deaths each year. Even though unsafe abortion is very dangerous and expensive, for several different reasons, women have an abortion. Abortion in women is correlated with unintended pregnancy, economic status, low education and living in deprived neighborhoods.

In order to improve maternal health and mitigate maternal mortality, health experts need knowledge about induced abortions, which are goals of the MDGs.

Medical abortion (MA) is the mechanism by which the administration of one or more drugs willingly interrupts a pregnancy. Around 46 million induced abortions occur annually worldwide. About half of these are unsafe abortions and they occur in developing countries. With the goal of decreasing the number of maternal deaths due to unsafe abortions, the MTP Act of India (1971) was adopted to legalise abortions. This study was carried out on women who presented with complaints following self-administration of abortion pills and thereby focussing on the demographic profiles, grounds for having an abortion, abortion providers and the various unfavourable outcomes with management.

Unsafe abortion: Combating the silent menace by Roshnibala Sahu et al from Dept. of Obstetrics and Gynaecology, Kalinga Institute of Medical Sciences and PBM Hospital, Bhubaneswar, Odisha, India

Thrombocytopenia is the second most common haematological finding in pregnancy after anaemia. Thrombocytopenia is defined as decrease in platelet count $<1,50,000/\mu\text{L}$. The physiological thrombocytopenia of pregnancy is mild and has no adverse effects on mother and foetus whereas thrombocytopenia associated with medical conditions can have serious maternal-foetal consequences and needs specific monitoring and appropriate management.

Thrombocytopenia during pregnancy and its outcome- A prospective study by Hargun Sahiwal et al from Dept. of Obstetrics and Gynaecology and Dept. of Pathology, GMC and Rajendra Hospital, Patiala, Punjab, India

A healthy placenta is crucial for foetal well-being, growth and development and neonatal survival. Foetal sonographic biometric parameters are crucial in obstetric decision making.

The placenta is a multifunctional organ which ensures anchorage and vascular connection of the foetus to the mother. It transports nutrients and gases as well as hormones that are required for the successful progression of pregnancy. 1 The placenta plays a major role in regulating foetal growth and development during pregnancy.

Ultrasonography is commonly used to estimate gestational age (GA) in pregnancy by measuring foetal biometric parameters such as biparietal diameter (BPD), femur length (FL), head circumference (HC), and abdominal circumference (AC). 2 Foetal biometry, a relevant and integral part of obstetric radiology, is necessary for the assessment of foetal growth throughout pregnancy.

Placenta thickness: A sonographic index for foetal gestational age estimation by Faosat O Jinadu et al from Dept. of Radiology And Dept. of Obstetrics & Gynaecology, Lagos State University College of Medicine/Lagos State University Teaching Hospital, Lagos, Nigeria

Preeclampsia is a multi-system disorder manifested primarily by hypertension and proteinuria during second half of pregnancy. It is a major cause of maternal morbidity and mortality worldwide. Despite decades of research into the condition, the ability of clinicians to predict preeclampsia prior to the onset of symptoms has not improved significantly. In this review we will look at potential biomarkers for early prediction and diagnosis of preeclampsia.

Preeclampsia prediction –First trimester screening markers by Kaliki Hymavathi et al from Dept. of Obstetrics and Gynecology, Narayana Medical College and Hospital, Nellore, Andhra Pradesh, India

Carcinoma cervix is the most common gynaecological malignancy in the developing countries and the third most frequently diagnosed cancer in the Indian women.

While evidence of effective screening programs can be seen throughout the developed world, the burden and impact of the disease remains high in developing countries, where 85% of disease related deaths occur. India, which accounts for one sixth of the world's population also bears one fifth of the world's burden of Cervical cancer.

India's Cervical cancer age-standardized incidence rate (30.7 per 100,000) and age-standardized mortality rate (17.4 per 100,000) are highest in South Central Asia.

To study the prevalence and variety of cervical squamous intra-epithelial lesions (SIL) by Pap smear screening as an indicator of suspected HPV infection among HIV-infected women in Surat, Gujarat, India.

Prevalence of cervical abnormalities amongst HIV-positive women by Amisha Gheewala et al from Dept. of Obstetrics and Gynecology, Shalby Hospital, Dept. of Obstetrics and Gynecology, First Cure Hospital and Dept. of Obstetrics and Gynecology, Government Medical College, Surat, Gujarat, India.

IUGR is one of the most common pregnancy complications which substantially increase risk of adverse neonatal outcome. The sequelae of IUGR include stillbirth, neuro-developmental delay in childhood and high risk of diseases like hypertension, diabetes in adulthood. Therefore, IUGR in pregnancy warrants intensive antepartum fetal surveillance to ensure optimal perinatal outcome.

Intrauterine growth restriction (IUGR) is one of the most common pregnancy complications and it substantially increases the risk of adverse neonatal outcome. IUGR represents pathological inhibition of fetal growth and failure of the fetus to attain its growth potential.

It has been estimated that in developing countries, approximately 30 million newborns are affected with intrauterine growth restriction per year.

This rate is six times higher than that in developed countries.

There is a strong association between stillbirth and fetal growth restriction. 3 Among all stillbirths, 20% are found to be due to IUGR. The sequelae of IUGR include stillbirth, detrimental effects on neuro-developmental progress in childhood and higher risks of diseases like hypertension, vascular disease and diabetes in adulthood. Therefore these pregnancies need to be monitored closely to identify at risk fetus and initiate delivery before this critical event.

IUGR is one of the most common pregnancy complications which substantially increase risk of adverse neonatal outcome. The sequelae of IUGR include stillbirth, neuro-developmental delay in childhood and high risk of diseases like hypertension, diabetes in adulthood. Therefore, IUGR in pregnancy warrants intensive antepartum fetal surveillance to ensure optimal perinatal outcome.

To evaluate the tests of antepartum fetal surveillance for predicting adverse perinatal outcome in pregnancy with IUGR by Bhavya H U et al from Dept. of Obstetrics & Gynecology, Dept. of Ophthalmology, And Dept. of Pediatrics, KVG Medical College & Hospital, Sullia, Karnataka, India

Immediate induction of labour in cases of pregnancy with PROM used to be a standard practice to avoid potential complications but induced labour is likely to be associated with increased risks of fetal and maternal complications due to oligohydramnios like cord compression and high rate of operative delivery.

Purpose of this study is to determine in case the practice of actively inducing labour in women with PROM at term is preferable than expectant management for 12 hours and also to study the maternal and neonatal outcome.

Randomized clinical trial of active induction versus expectant management in premature rupture of the membranes at term by Shobha Bembalgi, Tejashree M and Preetha F Naykar From Dept. of Obstetrics and Gynecology, Karnataka Institute of Medical Sciences, Hubli, Dept. of Obstetrics and Gynecology, Bowring and Lady Curzon Medical College and RI, Bangalore, and Dept. of Obstetrics and Gynecology, Shivmoga Institute of Medical Science, Shivmoga, Karnataka, India.

One of the most striking change in the current scenario is the increasing occurrence of non- albicans vulvovaginal candidiasis (VVC), which is considered as the major cause of recurrence, relapse and chronic VVC in India. In the present study we evaluated the effectiveness of three different regimens of itraconazole in the treatment of acute VVC.

Vaginitis is a common complaint of adult female patients attending gynecological practice and vulvovaginal candidiasis (VVC) is the most common presenting infection. Approximately 75% of all adult women experience at least one episode of VVC in their lifetime. Vulvovaginitis is defined as the inflammation of the vagina and vulva and includes symptoms like itching, burning, soreness, discharge, dyspareunia and signs like vaginal and vulvar erythema, edema and vaginal discharge.

Comparison of various regimens of itraconazole in treatment of acute vulvovaginal Candidiasis by Piyush Prabhat, Lalita Mayadeo and Harshal Mahajan, Dhiraj Dhoot from Dept. of Obstetrics and Gynecology, Jeevak Hospital, Fortis Raheja Hospital, Dept. of Obstetrics and Gynecology, Desai Hospital, And Dept. of Global Medical Affairs, Glenmark Pharmaceuticals Ltd, Mumbai, Maharashtra, India.

The prevalence of menstrual problems is high during adolescence according to published literature. It is essential to determine the menstrual hygiene practices among the adolescent girls and their predictors so as to ascertain the modalities for prevention of menstrual problems. The present study was conducted to evaluate the menstrual problems, menstrual hygiene and their risk factors.

Menstrual hygiene and their predictors among school going adolescent girls in Tamil Nadu by Lakshmi Subburaj et al from Dept. of Obstetrics and Gynecology, NTC Hospitals, Tamil Nadu, India.

One of the most frequent causes of neonatal mortality or NICU admission of neonates especially in premature infants is Neonatal Respiratory Distress Syndrome (NRDS). Antenatal steroids are the most important and widely utilized interventions for improvement of neonatal outcomes like reducing incidence of respiratory distress syndrome (RDS), reducing neonatal NICU (neonatal intensive care unit) admission rates and also improve outcomes of pre-term infants. Antenatal steroids (ANS) like betamethasone 12 mg are given at 24 hourly IM at 28-34 weeks of gestation to mother. For administration of corticosteroids at less than 24 weeks of gestational age decision should be made at a senior level by taking all clinical aspects into consideration.

Antenatal injection betamethasone- a fetal lung warrior

(Reducing NICU admission rate by administering betamethasone injection IM 12 mg 24 hourly in antenatal women) by Manish R Pandya et al from Scientific research institute, Surendranagar, Gujarat.

They have tried in 18 antenatal women came to hospital with complain of labour pain in which injection-delivery time interval was less than 24 hours, result shows that 10 neonates which did not need any NICU admission (Antenatal injection betamethasone- a fetal lung warrior).

We have case reports are.....

1. An incidental rare finding of a TRAP sequence during a caesarean section: A case report by Shivangi Sharma et al from Dept. of Obstetrics and Gynecology, Rukshamaniben General Hospital, Ahmedabad, Gujarat.
2. The right timing for surgical exploration is the key to saving lives: An analysis of near- miss mortality cases in a tertiary care hospital in North East India by Manika Agarwal et al from Dept. of Obstetrics and Gynecology, North Eastern Indira Gandhi Regional Institute of Health & Medical Sciences, Shillong, Meghalaya, India.
3. The consequences of fetal reduction for quintuplets after ICSI-ET by Paapa Dasari et al from Dept. of Obstetrics and Gynecology, Jawaharlal Institute of Postgraduate Medical Education and Research, Pondicherry, India.
4. Management considerations in Addison's disease complicating pregnancy by Srimathy Raman et al from Dept. of Obstetrics and Gynaecology, Rangadore Memorial Hospital, Bangalore, Karnataka, India.
5. Laparoscopic metroplasty for bicornuate uterus – A case report by Lakshmi Lakshmi et al from Dept. of Obstetrics and Gynecology, NTC Hospitals, Madurai, Tamil Nadu, India.
6. Symptomatic fibroids in a perimenopausal woman with previous two caesarean sections and incisional hernia repair. Can surgery be avoided? By Anjana Annal et al from Dept. of Obstetrics and Gynecology, Jawaharlal Institute of Postgraduate Medical Education and Research, Pondicherry, India.
7. Uterine torsion of term pregnant uterus due to anterior fibroid by Anjali Somani et al from Dept. of Obstetrics and Gynaecology, Sahara Hospital, Lucknow, and Dept. of Lab-Medicine, Sahara Hospital, Sahara Hospital, Uttar Pradesh, India.

Every time we have short communication on

COVID-19 pandemic has posed distinct challenges in women's health care globally. The surge of pandemic amongst pregnant women calls for immediate attention and creation of righteous policies for safe guarding this vulnerable set of population.

Ever since the pandemic began, there was dearth of policies, guidelines, and treatment protocols for pregnant woman. The American college of obstetricians and Gynecology (ACOG) recommended deferral of elective, non urgent surgeries to limit infectious exposures in view of high number of COVID-19 cases, which were apt in initial phases but at the same time had apparent a unfavorable outcome in the form of increase in the numbers of undesired & unplanned pregnancies. The surgeries for termination and surgical sterilizations took a back seat as they lack prioritization during the pandemic.

The lockdown saw a steep rise in the fertility rate with a significant rise in the number of pregnant women now testing positive for COVID -19.

The need of COVID -19 vaccination in pregnant women by Brinderjeet Kaur from Dept. of Obstetrics & Gynaecology, Santokhba Durlabhji Memorial Hospital, Jaipur, Rajasthan, 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 obs and gynaec and provide access online without any restrictions worldwide.

Individually we achieve, together we excel...

Regards

Manish Pandya MD FICOG FICMCH

Professor and HOD

Scientific research institute

Mahavir hospital

Surendranagar 363001

GUJARAT INDIA

Email: drmanish.pandya@gmail.com