Global Summit on Reproductive Medicine & Health

12 - 14 March, 2018
Sunway Putra Hotel
Kuala Lumpur, Malaysia
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Day 1
Keynote Forum
Menopause is a significant life event affecting all women. Consequences of the menopause include early onset symptoms which can have a significant effect on home, work, social and sex lives, but also long term health risk, including increased cardiovascular risk. Many women are unaware of these consequences or of diet and lifestyle changes which can reduce symptoms and improve later health. An online survey have been used to assess knowledge of cardiovascular disease in women, and to determine if the completion of the survey can empower women to take action to improve later health. The findings and implications will be presented.

Menopause education for women: Do we need to do more?

Biography

Heather Currie. Associate Specialist Gynaecologist at Dumfries and Galloway Royal Infirmary, Scotland. specialising in Menopause, Pre Menstrual syndrome, Sub-fertility and Cervical screening and Colposcopy. Associate Medical Director Women, Children and Sexual Health. Co-Editor of Post Reproductive Health, the Journal of the British Menopause Society (BMS), Immediate past Chair of the British Menopause Society and Founder and Managing Director of Menopause Matters Ltd which runs the award winning website www.menopausematters.co.uk, and publishes the award winning Menopause Matters magazine. Author of the award winning book, Menopause, answers at your fingertips and of many original papers and review articles in scientific journals.

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B12 deficiency and Pregnancy

B12 deficiency is extremely common in India, as is Vitamin D deficiency, folic acid, or iron deficiency, even among the rich in India. It is one of the important causes for infertility and poor pregnancy outcomes as well. The reasons for the deficiency are too many and are related to diet, lifestyle social and cultural issues. In spite of being a common disorder, its recognition is delayed or missed because the manifestations are varied, multisystem, and subclinical often. To add to the confusion laboratory estimations are notoriously unreliable even from the best of centers. Any one of its varied manifestations can occur in isolation and can be coexisting with other comorbidities. In this scenario the clinician has to sharpen his/her clinical skill to make a clinical judgment and initiate a therapeutic and diet plan to give the benefit to the patient. The ways and means of picking up those with clinical or subclinical B12 deficiency and the reasons and solutions to the problem will be discussed. One of the rare major hematological manifestations of B12 deficiency is pancytopenia. It is seen that increasing number of patients present now a days with pancytopenia due to B12 deficiency and due to other causes. It is important to have a clinical diagnosis at presentation itself, in order to identify and treat the potentially correctable causes of pancytopenia like vitamin B12 deficiency. Their study was to look into the correlation between clinical diagnosis and final diagnosis, to study the clinical profile, etiological factors, and treatment response in the subgroup of patients diagnosed to have B12 deficiency. There was a statistically significant correlation between clinical & final diagnosis. Sensitivity of clinical diagnosis was highest (93%) for pancytopenia due to B12 deficiency. Diet history, knuckle pigmentation, glossitis and MCV>100fl had a statistically significant association with B12 deficiency. Sensitivity of clinical and pathological diagnoses of B12 deficiency was 93% and 73% respectively. Hence the study has established that high clinical suspicion is mandatory for diagnosis of vitamin B12 deficiency. In cases of pancytopenia, the diagnosis of vitamin B12 deficiency can thus be predicted using the dietary history, knuckle pigmentation, glossitis and MCV>100fl.

Biography

Mohammad Babadoost completed his Ph.D. in plant pathology at North Carolina State University. In 1999, he joined the faculty of the University of Illinois at Urbana-Champaign, where he is now a Professor of Plant Pathology and Extension Specialist. Mohammad conducts research and extension programs on the biology and management of vegetable and fruit crops diseases, and teaches “Plant Disease Diagnosis and Management.” He has served as an editor of several peer-reviewed journal in the United States and worldwide. He has 53 peer-reviewed and more 300 extension articles. He has developed a profound commitment for establishing food security in the world.

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PCOS is the most common cause of anovulatory infertility. Up to 64% of women with mild HP fulfill the modified Rotterdam diagnostic criteria for PCOS. HP affects the hypothalamic-pituitary-ovarian axis causing anovulation. CE, a dopamine receptor agonist, inhibits prolactin secretion and can lead to better ovulatory response in those patients. LE, an aromatase inhibitor, without adverse effects on endometrium & induces fewer mature follicles with less risk of OHSS. Their study aim was to investigate the effects of combined LE and CE in comparison to LE alone on ovulation & clinical pregnancy rates in PCOS patients with HP.

METHODS: A total of one eighty women with PCOS were enrolled in a hospital-based clinical trial and randomly allocated into two groups (A&B). Participants of 22-38 years old and all were with a serum prolactin > 32 ng/ml. Patients in A group (92) were given LE, 5mg from day cycle 3-7/3 cycles in addition to CE, 0.5mg weekly for 12 weeks. Those in group B(88) received only LE, same dose & duration. All patients were matched for their age and body mass index. Exclusion criteria: other causes of HP. Main outcome measure was rate of ovulation and detection of both chemical & clinical pregnancies by estimation of βhCG and ultrasound detection of fetal cardiac activity, 2-4 weeks after missed period. Follow-up period was for 6 months. Statistical analysis of data performed using SPSS version for windows. P-value considered significant if < 0.05.

RESULTS: Three patients from group A and five from group B had drug side effects and were excluded from the study. None of the patients in either group were lost during the follow-up period. In group A, difference between mean serum level of prolactin before & after treatment was statistically significant (P<0.001): 48±3ng/ml and 9.7±4.5ng/ml respectively. No significant decrease in prolactin level in group B. Ovulation rate was higher in group A (64.8%) in comparison to group B (41.2%), (P<0.001). Clinical pregnancy rate in group A (40.8%) and (27.3%) in group B (P<0.001). Neither twin pregnancy, nor OHSS were recorded in both groups.

Biography

Aisha Elbareg working as an Associate Clinical Professor and Senior Consultant Obstetrician & Gynecologist with Sub-Specialty in Endoscopic Surgery & Reproductive Medicine at Misurata University/Al-Amal Hospital for Obstetrics & Gynecology, Infertility Treatments and Genetic Research, also as a Head of the Academic dept. of Al-Nuballia Centre for Medical Education & Scientific Research, Misurata, Libya.
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Day 1
Technical Sessions
Demographic aspects of reproductive health in Europe: Costs of childbearing postponements and increasing use of assisted reproductive technology

Jirina Kocourkova
Charles University in Prague, Czech Republic

Over the past decades, the gradual transition towards childbearing at a later age has been one of the most characteristic features of demographic change in Europe. This ongoing postponement of procreation has narrowed the time period during which reproduction occurs, and, at the same time, prolonged the period before first childbearing, when effective contraception is necessary. Delayed childbearing has been facilitated by both the increasing prevalence and greater effectiveness of contraception. On the other hand, postponement of childbearing has been contributing to the increasing risk of age-related subfertility. The aim is to overview the backgrounds and the pros and cons of the rising age at first birth. Related aspects of reproductive health will be highlighted, in particular increasing costs of childbearing including increasing use of assisted reproductive technology.

Biography

Jirina Kocourkova is currently working at Department of Demography and Geodemography, Faculty of Science, Charles University in Prague, Prague, Czech Republic, Europe

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Antenatal depression and how social support influences it?

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Depression, a type of mental disorder which is portrayed by marked alterations in mood, is associated with distress and/or impaired functioning. Despite the association with many health related events to both the mother and child, antenatal depression is less studied compared to post-natal depression. Poor social support is an important risk factor for depression in pregnancy. Malaysia is undergoing extensive rural to urban migration with most young people moving to cities for better employment opportunities. As a result of this migration, there is a transformation from extended to nuclear family household system resulting in most expecting mothers to lose the traditional social support system which usually comes from family members and inadvertently lose the proven mechanism in easing, obtaining and maintaining psychological changes during pregnancy and preventing depression in pregnant women. The presenter will talk about the findings of a cross sectional study conducted among 3,000 pregnant women attending antenatal clinics in Penang, Malaysia using the Edinburgh Postnatal Depression Scale (EPDS) to screen for antenatal depression and the Oslo-3 Social Support Scale (OSS-3) to measure social support. Considering that an expecting mother's psychological factors are important in the wellbeing of the mother and child, antenatal depression must be quickly identified. Screening pregnant women for social support can help identify women with higher risk of depression. Early identification of antenatal depression provides the opportunity for the provision of best health care possible for both the mother and fetus in the primary health care setting.

Biography

Abdul Rashid is currently working as the head of department and the deputy dean at Penang Medical College, a wholly owned medical school of the Royal College of Surgeons in Ireland and University College Dublin. He is a medical doctor and received his PhD in Community Health from the National University of Malaysia. He has authored almost 70 publications in various journals and has written 5 books. His publications reflect his research interests in Family Health and the health of the rural and indigenous people. He is a member of the editorial teams of several local and international Journals. He has been awarded the Penang State’s highest award which carries the title Dato’ for his contribution to the state and country for his work in the community.

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Intrauterine Adhesion: Risk Factors in a Black African Population - Nigeria

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Main outcome measures: Performance of different uterine surgeries, type and number of different uterine surgeries performed, and presence or absence of intrauterine adhesions. Results: The 264 (29.2%) positive for IUA were significantly older (t=5.34, P-value=0.00001) than those without IUA. The overall mean [± sd] number of myomectomy (0.58 [0.66]) and of dilatation and curettage (D&C) (1.68 [1.82]) were significantly higher in IUA-positive women than in IUA-negative women (t=10.66, P-value=0.000001; t=4.52, P-value=0.00001). The ratio of D&C per woman was 1.70 in IUA-positive women compared to 1.1 in IUA negative women. Women with IUA were about 2½ times more likely to have had open myomectomy than those without IUA (Crude odds ratio=2.36, 95% CI:1.75, 3.16). When the number of uterine surgeries performed was considered, IUA significantly (P-value<0.05) correlated with age (r=0.097, t=12.42), Body Mass Index (r=0.162, t=15.45), and the number of D&C performed (r=0.014, t=2.16).Conclusion: Uterine procedures like open myomectomy, Dilatation and Curettage and Caesarean section and the number of times these procedures are carried out are important risk factors for uterine adhesions in infertile black African women. Mitigating these risk factors can help reduce the incidence of IUA in these women and improve their fertility.

Biography

Abayomi B. Ajayi is currently the Lead Consultant Gynecologist and Assisted Reproduction Technology expert at Nordica Fertility Center, a leading fertility clinic with four centers in Nigeria. He received his Doctoral degree in May 1984 from the College of Medicine, University of Lagos, Nigeria. He completed his Residency training from the University College Hospital, Ibadan, Nigeria. He then worked at the Lagoon hospital Lagos, between 1995 and 2002 before starting Nordica Fertility Centre in 2003. He has authored several publications in various journals and books. His publications reflects his research interests in Reproductive Medicine

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Reproductive medicine and maternal health in Pakistan and South East Asian region

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Reproductive medicine deals with prevention, diagnosis and management of reproductive problems; goals include improving or maintaining reproductive health of both women & men. Maternal health is also an important aspect of reproductive medicine. The health of mothers and newborns is a reflection of the current status of health of a large segment of world’s population and as a predictor of the health of next generation. Women’s health issue have gained higher international attention & importance with increased global visibility and renewed political commitment in recent decades. Reproductive health programs have led to some improvement, but significant gender biased health disparities remain in many countries with limited access to education employment high parity and illiteracy rates making health improvement difficult. The “right to health” is not fulfilled even twenty two years after countries signed pledges in 1995, in Beijing declaration & platform of action. The poor state of health in Pakistan and other Asian, South East Asian Countries leads to high maternal morbidity and mortality. I like to present maternal morbidity and mortality related to haemorrhage as the commonest cause of mortality in this region of the world and how researches like recent “Women Trial” of London School of Hygiene & Tropical Medicine have given a new hope for reducing postpartum haemorrhage by the early use of Tranexamic Acid. Rising Cesarean Section rates leading to morbidly adherent placenta with associated maternal mortality and acute severe morbidities is also rising in this region. I will share the data of my institution. Domestic violence and other social issues of this region is a big barrier for improving efforts on maternal health.

Biography

Prof. Haleema A. Hashmi presently working as academic head of department since 2007. She completed MRCOG from RCOG, UK in 1980 and awarded FRMOG in 1993 from RCOG, UK. Awarded Fellowship of College of Physicians & Surgeons of Pakistan in 2004. Worked as Assistant Professor, Associate Professor and Professor at Dow University of Health Sciences, Karachi, Pakistan from 1982 to 2004. Worked as Professor & Head of Department in Baqai Medical University, Karachi, Pakistan from 2004 to 2007. Fellow Member of Representative Committee of RCOG in Pakistan for last 6 years. Member of FIGO, AOFOG, IUGA and SOGP etc.

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Secondary Subfertility among the Couple Attending Selected Fertility Centre of Dhaka City

Sumia Bari
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Couple suffering from secondary subfertility is a major health concern. Pattern involved both the male and female factors and sometimes unknown aetiology. This cross sectional study was carried out to see the pattern of secondary subfertility among the couples attended selected fertility centers of Dhaka city to ascertain the risk factors. Methods: A cross sectional study was carried out among the couples attended from September 2011 through March 2012. There was 190 couples were interviewed with questionnaire using the purposive sampling method and analyzed by SPSS 20. Results: Among the 190 couples suffering from secondary subfertility, 52% cases female factors, 13% male factors, unexplained 27% and both male and female factors lies behind 8% of cases. Among the female causes 31% were tubal factors, 26% cases PCOD, ovulatory disorders and endometriosis 21% and 22% respectively. Result revealed that the mean age of the female were 32 and 54% were obese. The women who had tubal factors had H/O MR or D&C in significant number. Female age, weight menstrual irregularity, medical disorders and number of previous abortion were significantly correlated with secondary subfertility. Among the male factors 76% cases shows abnormal semen parameters, 12% cases coital problem, 12% cases ejaculatory problem due to chronic disease like chronic HTN, DM. Conclusions: This study concluded that proper evaluation with details personal, medical and gynecological history of female and also male factors need to evaluate the cause and formulate a management plan to treat the secondary sub fertile couple.

Biography

Sumia Bari is currently working as an Associate Professor in the department of Obstetrics and Gynecology at Enam Medical College Hospital. She received her fellowship from the Bangladesh College of Physicians and Surgeons (BCPS). She completed her Masters of Public Health with major in Reproductive and Child health from the State University of Bangladesh. She then worked at EMCH, served as an Assistant Professor and currently working as an Associate Professor at the same tertiary teaching hospital. She has authored several publications in various journals and books. Her publications reflect her research interests in Feto-maternal Medicine, Infertility, Female health awareness issues.

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Day 2
Keynote Forum
Is cultural value, inequality and exclusion is a bane to a better reproductive health?

Reproductive health is a complete wholesome state of well-being which extends beyond the years of reproduction, reproductive events or reproductive organs, toward a broader perspective on reproduction and is closely associated with socio-cultural factors, gender roles and protection of human rights in regard to sexuality and personal relationships. Much of human life has changed radically over the past few centuries and so also human rights! The human rights of women include their right to have control over and decide freely and responsibly on matters related to their sexuality, including sexual and reproductive health, free of coercion, discrimination and violence! It is doubtful about how concepts that had emerged in the context of the western world would be transmuted into the societies that had not gone through similar social and cultural developments. In this context, in some parts of the world, where sex is only permissible between married couple, extramarital relations may appear in the public debate at best as absurd and at worst as an unjustifiable interference in private affair! Another challenge is ‘religion’ which cannot be separated from sexuality and reproductive health. There is increased diversity in health care due to inadequate awareness about religious and cultural particularities, as it may in varying ways affect the morality and contraceptive use and therefore unintended pregnancy and abortion. In general women’s ability to recognize medical conditions and their potential complications and to seek the appropriate services is limited. The different ways women in different countries think about their reproductive experiences and rights, demonstrate that it is not possible to carry out an uniform and sensitive reform in reproductive health! The reform has to develop a vision of gender equality that can liberate both sexes from the constraints of traditional unequal arrangements in education and employment in order to achieve better socioeconomic conditions for themselves and their families. The healthcare provider continuously strives to achieve and use culture-specific knowledge and tailoring it to the client's needs, values, and desires. It is apt to state that the number of evidenced-based best practices in reproductive and sexual healthcare has grown substantially, and the scope of clinical and behavioral research and of internationally recognized standard, norms and guidelines has broadened.

Biography

Abdul Kareem Meera Mohaideen is a specialist and senior consultant in Radiology and Imaging in Malaysia with a passion for academic and research works, enjoyed often in public/professional invited Keynote speeches on Medical and social themes. After completing basic degree in Medicine in 1973 and post-graduation in Radiology and Imaging in 1978 and special training at Japan for cross sectional imaging, until to date he all worked in medical Institutions with teaching hospitals since forty four (44) years. He did receive his fellowships in 1980. He has more than 300 scientific papers on his credit, authored many publications in various journals. His publications reflects his interest in many fields. He is an editor, associate editor and reviewer in many journals. His leadership and academic scholarship is being recognized in more than 75 fields. He has many national and University awards including VC award for his social and community service.

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Diagnosis of unexplained infertility is one of exclusion and no consensus on which tests should be performed before making this diagnosis. Evaluation of the uterine cavity is one of the standard diagnostic tests. HS can detect lesions which can't be identified by TVS, HSG, or SIS in addition it enables treatment of such pathology at the same setting, therefore, our study aimed to assess the value of HS in evaluating women with unexplained infertility in whom standard investigations failed to reveal any pathology and to assess the effect of treating subtle uterine abnormalities on pregnancy rate.

Role of hysteroscopy (HS) in management of unexplained infertility

Aisha M Elbareg currently working as an Associate Clinical Professor and Senior Consultant Obstetrician & Gynecologist with Sub-Specialty in Endoscopic Surgery & Reproductive Medicine at Misurata University/Al-Amal Hospital for Obstetrics & Gynecology, Infertility Treatments and Genetic Research, also as a Head of the Academic dept. of Al-Nuballa Centre for Medical Education & Scientific Research, Misurata, Libya.

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IUI is one of the most frequently used first line of fertility treatment for couples with unexplained infertility or male sub fertility. The prevalence of infertility in general public is 10-15 %. It is one of the safest & least expensive method of treatment of infertility. IUI is often used in combination with ovarian stimulation to increase the number of available oocytes, to correct subtle cycle disorders and improve the detection of ovulation which allow for optimal timing of insemination. There are numerous studies on various factors affecting the outcome of IUI. An attempt has been made to analyze all such studies and compare the results. The most common indication of IUI with husband’s sperms are mild male factor, cervical factor and unexplained infertility while other indications include mild endometriosis without significant anatomic distortion of the pelvic organs, immunological factor infertility and ovulatory dysfunction that has failed with ovulation induction alone. IUI has a major role as a first line of treatment of infertility provided there are sufficient sperms and no tubal disease. The success rates at majority of centers averaged between 8- 14 % per cycle. Critical factors for success being patient selection, ovarian stimulation and accurate timing of insemination.

Biography

Chandrika Muralidhar is currently working as Consultant Obstetrician & Gynecologist and Head of the Department of OBG at Jupiter Hospital & Institute of Vascular Surgery. She received her Master’s Degree in OBG (Doctor of Medicine) in 1994 from Bangalore University. She then worked at the Institute as a Consultant. She has been very active in professional organizations like Federation of Gynecological Societies of India – FOGSI, Bangalore Society of Obstetrics & Gynecology (BSOG) – Bangalore City Chapter; India.She has organized several conferences at various levels like State and National. She has conducted several Continuing Medical Education Programs as well as Workshops for Post Graduate students in OBG and also Consultants. She is involved in many Social and community activities like organizing Free Camps – Anemia Detection Camp, Cervical & Breast Cancer Screening Camps& Diabetes Detection Camp. She has given Educative Lectures at various Fora and in electronic media. She is a regular participant in the Health Programs in various Television Channels in India. She is involved in educating the general public regarding several diseases and women’s health. Has conducted certification & Training programs for Nurses and consultants regarding Counseling, Testing and Management of Gestational Diabetic patients.

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Day 2

Technical Sessions
This study was conducted to compare the perinatal outcome of IUGR fetuses having normal and abnormal umbilical artery Doppler study. A total of 172 pregnant women with diagnosed IUGR between 28 and 40 weeks of gestation were included. 94 pregnant women with IUGR had normal Doppler ultrasound and 78 women with diagnosed IUGR had abnormal Doppler ultrasound findings in umbilical arteries. The IUGR was diagnosed by ultrasonography having estimated fetal weight less than 10th percentile for gestational age. All the patients were followed till delivery and maternal and fetal outcome was noted in both groups. The study concluded that there is a strong relationship between perinatal outcome and umbilical artery Doppler velocimetry. With abnormal umbilical artery Doppler there are significantly greater chances of adverse perinatal outcome.

**Biography**

Zonia Tanveer Nizami is working as a Professor of Gynecology and Obstetrics in Aziz Fatima Medical College and hospital. She completed her MB, BS from Fatima Jinnah Medical University, Lahore, Pakistan. She did FCPS in Gynecology and Obstetrics from CPSP (College of Physicians and Surgeons), Pakistan. She is life member of Society of Obstetricians and Gynecologists of Pakistan and is serving as Secretary of Faisalabad chapter of the Society.
Women and sexually transmitted infection in Saudi Arabia Are They Immune

Wafa Fageeh
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The true prevalence of STIs remains unknown especially in the Middle East. Limiting testing to only advanced STIs cases or those presenting with a clear picture is the real flaw resulting in many missed cases. The aim of this presentation is to describe the peculiar and varied presentation of patients in Saudi Arabia as well as to characterize the demographic, clinical manifestations and outcome of HIV-infected patients. Spotlight was focused on the outcome of pregnant patients. Awareness and attitudes toward sexually transmitted infection is another area which was explored by analyzing awareness of and attitudes towards AIDS and sexually transmitted infections (STIs) among high risk population. It is wishful thinking to presume immunity from STIs in conservative countries which unfortunately is far from reality.

Biography

Wafa Fageeh is currently working in Obstetrics and Gynaecology Consultant, KAUH Jeddah K.S.A, Saudi Arabia

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Collaborative drug discovery programme in identifying potential anticancer compounds for endometrial cancers

Chun-Wai Mai
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Future drug discovery relies on finding solutions for complex unmet medical needs. The Collaborative Drug Discovery (CDD) program connects researchers to find compounds that may become medicines. The CDD screening panel is comprised of a series of screening modules which are relevant to therapeutic area of long-term strategic interest in the medicine, including oncology, neurological disorders, infectious diseases, and metabolic diseases. The composition of the panel is expected to change over time to reflect research interests and scientific evolution. Each individual assay module is comprised of a primary screening assay, followed by relevant secondary biochemical and cellular follow-up assays that further define the compound’s activity profile and early potential for additional optimization. We will be discussing our recent success in identifying several potential molecules, targeting endometrial cancer in this Programme.

Biography

Chun-Wai Mai graduated with First Class Honors and Dean’s List from the International Medical University Bachelor of Pharmacy (BPharm). He was the recipient of Sanofi-Aventis Award and Kotra Pharma Award for excellence in research and pharmaceutical technology, respectively, in the graduating class. He was also awarded the IMU Young Alumnus Award 2012. He was the recipient of the Southeast Asia-European Union-NET II (SEA-EU-NET II) Fellowship 2016 (the only Malaysian, and one of the 6 Asians), United Kingdom Royal Society of Chemistry Research Mobility Award 2016 (the only Malaysian), United Kingdom Researcher Mobility in Drug Discovery 2015 (the only Malaysian), and Sultan Mizan Antarctic Research Foundation (YPASM) Research Fellowship 2015 (one of the two selected Malaysians). Currently he is appointed as the Head, Centre of Cancer and Stem Cells Research in International Medical University. He is actively participating in several projects with national research grants.

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Polycystic ovarian syndrome (PCOS) this mysterious disease

Moustafa Kamal Eissa
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PCOS is more than a reproductive pathology. It is a systemic syndrome. This syndrome affects 5-10% of females at reproductive age. It does not only disfigure the woman by trunk obesity and hirsutism but induces infertility with oligo/amenorrhea. The diagnosis of PCOS depends on the consensus of ESHRE/ASRM meeting in Rotredam (2003). It affects women at various stages of their life. Genetic and environmental factors in PCOS are important. Although PCOS appear more common in Asian and middeteranian women, other observations suggest the existence of different environmental factors, such as diet, physical activity and lifestyle in general. Many factors affect the folliculogenesis. Deficiency of FSH, excessive LH, hyperandrogenemia and excessive insulin level and insulin resistance. Follicular fluid plays a role in the development of PCOS. Vitamin D is implicated in the pathogenesis of PCOS. Deficiency of Vitamin D is noticed in obese patients with PCOS. Hypovitaminosis D may play a role in the development of insulin resistance and impaired glucose tolerance. Gonadotropin-releasing hormone (GnRH), LH and FSH play an important role in the pathogenesis of PCOS. Hyperandrogenaemia is characteristic to PCOS. In PCOS there is increased level of total T, free T, SHBG, androstenedione (A), 17-hydroxy progesterone (17-OHP) and dehydoepianderostendeone sulfate. There is a hyperinsulinemia status while glucose level remains normal. PCOS women have a high concentration of AMH in serum and follicular fluid. This results in increased number of antral follicles and failure of further growth. This high AMH level in follicular fluid is associated with the development of immature follicles and low fertilization rate. Vascular endothelial growth factor (VEGF) is low in PCOS which means oocyte immaturity, low fertilization rate and bad quality of embryos, which may lead to a high incidence of miscarriages. PCOS patients have a high incidence of certain diseases as Diabetes mellitus, metabolic syndrome, cardiovascular accidents, endometrial carcinoma and others. In conclusion, the pathophysiology of PCOS is not completely understood. PCOS is not a reproductive pathology but a systemic disease that starts early in intrauterine life. There is a great advancement in diagnosis and prevention of PCOS including hormonal contraceptives, antiandrogen drugs, metformin and inositols. Hyperinsulinaemia and insulin resistance are as important as obesity and hirsutism. Research in this field may shed more light on this condition.

Biography

Moustafa Kamal Eissa is a graduate of Cairo University in December 1975. He has got his Master degree from Cairo University in 1980. He travelled to the UK for post graduate training. He got an MD from Birmingham University in 1986, MSc in 1987, MRCPG in 1988 and FRCOG in year 2000. He worked in Birmingham University Hospitals between 1981 and 1988 and in Minia University Hospital, Egypt from 1989 to 2013. Currently he is working CUCMS since 2014. He has more than 50 published papers and presentations in International Conferences. His main stream is Assisted Reproduction and Infertility.

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Applications of nanotechnology in reproductive medicine

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Nanomedicine as a modern interdisciplinary science was first launched in the 19th century. In recent years, nanotechnology has been expansively utilized for biomedical applications, including diagnosis, drug delivery especially in the field of cancer diagnostics and therapy. Nanoparticles (NPs) are characterized as particles with sizes between 1 to 100 nm. NPs can help to overcome limitations associated with conventional delivery methods used in biological research such as insolubility and instability of hydrophobic compounds under aqueous conditions and non-specific targeting. NPs possess unique properties that enhance or confer advantages over conventional delivery methods in biological and biomedical research. NPs can be targeted to specific organs via active or passive targeting mechanism under various biological conditions. A healthy reproductive system is essential for optimal fertility and overall health. Both male and female are prone to affect by many reproductive diseases including prostate cancer, cervical cancer, ovarian cancer, endometriosis, gonorrhea and syphilis, and the impact of these diseases could have on not only their health, but their partner's as well. The conventional chemotherapeutic agent(s) could not be able to target the cancer cell on the basis of cell specific drug delivery. The present evidences suggest that the potential applications of nanotechnology for the treatment of various reproductive diseases to achieve better therapeutic effect with minimal toxicity.

Biography

Satheesh Babu Natarajan is currently working as Head of Pharmaceutics department at Lincoln University College, Malaysia. He received his Doctoral degree or PhD on Pharmacy from Karpagam University, India. He completed his Masters in Pharmaceutics from the University of Dr. MGR Medical University, Chennai, India. He then worked at Karpagam College of Pharmacy, served as Assistant Professor and Associate Professor at the Lincoln University in Malaysia. He received many research grants for his research projects and filed patent as well. He has authored several publications in various journals and books. His publications reflect his research interests in Nano drug delivery design. He is currently in charge of various ongoing scholarly projects “Targeted Drug Delivery”.

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Cervical malignancy is a sexually transmitted illness caused by the human papillomavirus (HPV), particularly HPV-16 and HPV-18. The incident rates are increasing particularly in less developed countries because of the lack of treatment facilities, no awareness on cervical cancer and inadequate diagnosis equipment. Therefore, finding a cure for cancer remains the most challenging part in medical field. Natural products play a vital role in drug discovery. It can be a potential approach for cancer. In this study, three dimensional (3-D) models of cervical cancer cell line proteins (cellular tumor antigen (p53), mucosal addressin cell adhesion molecule 1 and caspase 3) were created and their binding affinities with azadirachtin plant compound were determined through docking method. The proteins were generated using Swiss model and their physiochemical characterization evaluated by Expasy's ProtParam tool. Then, they were assessed by protein validation tools such as PROCHECK, ERRAT and Verify 3D programs. Finally, the proteins were docked successfully with azadirachtin using BSP-Slim server. The binding energy between azadirachtin and cellular tumor antigen (p53), mucosal addressin cell adhesion molecule 1, caspase 3 were -2.634, -4.357 and -2.883 kcal/mol respectively. The mucosal addressin cell adhesion molecule 1 had the strongest bond with azadirachtin due to its most negative value of the binding energy. Azadirachtin can be potential drug candidate for cancer treatment. Thus, this protein structure can further be assessed in wet laboratory for study its mode of action on cancer cells.
Management of infertility in low AMH with Ayurvedic treatment- A clinical study

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Age, physiological abnormalities, improper daily schedule, improper food habits, unhealthy lifestyle, stressful life, pollution. Aim: The aim of this study on infertility is to improve vitality, purify beej (ovum), develop healthy ovum, prepare for fertilization, balance hormone, delay Menopause, normalize reproductive organs, conceive naturally, bless healthy child to infertile couple & to make our society healthy. Low AMH suggests: Low fertility, poor quality of ovum, fetus may abort; child may be weak along with deformities. According to Ayurveda: Vata Pitta Kappa Imbalance of this three dosha make deformities in reproductive system & is responsible for infertility. Treatment: Shachyartham churna (herbal powder) Tablets. Capsule are useful to increase AMH level with lifestyle modification, proper food habits, Yoga, Meditation (Garbhadhan Sanskar & Garbhansaskar) Results: Have received positive results. Natural conceive-more than 50% success in below 1 AMH and in multiple ART failure cases as well.

Biography


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E-Posters
Peculiarities of reproductive system and neutering possibilities in domestic ferret (*Mustela putorius furo*)

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Ferrets are small mammals of family Mustelidae, as are weasels, minks, stoats, martens, otters and badgers. Ferret body characteristics are similar as in other carnivores. There are some differences in reproductive system. In male ferret (hob) skeleton os penis has J shape curve at the tip of it. It must be taken in to account when catheterization is performed (Carpenter 2012, Fox 2014, and Keeble 2009). The prostate gland is the single accessory reproductive gland in male ferret. Each ductus deferens opens into urethra at the level of the prostate. Male ferrets reach puberty at 9 months of age and are capable of reproduction throughout life. Female ferret (jill) is seasonally monstrous. They come in oestrus as the length of day increases, and they stay in oestrus until they are mated or until the day length shortens. Jill is an induced ovulator. During oestrus the vulva can swell considerably. Female ferrets reach puberty at 8 – 12 months of age and their reproductive lifespan is 2 – 5 years. Gestation is 39 – 42 days and litter size is 1 – 18 kits. Many unmated jills die from estrogen induced anemia, because of the prolonged high level of estrogen suppress production of blood cells in bone marrow (Keeble 2009). Neutering is considered to prevent anemia. Surgical neutering can lead to development of hyperadrenocorticism (Schoemaker 2000, Schoemaker 2002, and Carpenter 2012). There are different ways of neutering – subcutaneously inserted GnRH analogue implants containing deslorelin, proligestone injection, buserelin injection, using of vasectomized hob to induce ovulation.

Bioaccumulation of pesticides and cancer in Mexico

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The water pollution by organochlorine pesticides (OCP) and their bioaccumulation in the human being is actually of high concern for the public health and the environment. OCP are endocrine disruptor's chemicals interfering with the synthesis, transport, storage, binding, and activity of natural hormones, those may be associated with the diverse cancer risk, affecting the female reproductive system. The combination of natural factors of vulnerability in the landscape such as karst system, the social conditions such as poverty, and a lack of the official regulation in the use of banned organochlorine pesticides, are of high impact to the groundwater pollution and the public health. Qualitative and quantitative studies was realized in Yucatan, 30% of the Maya rural population drinking water polluted directly from sinkholes and wells due to low education levels and lack of official programs for sustainable agriculture. The chronic exposure to organochlorine pesticides applied in their field crops and backyard production have a high impact in the reproduction system of women. Recent studies are showed high levels of OCP in water, 13.61 ppm of heptachlore, 10.86 ppm of δ-lindane, 6.53 ppm of α-lindane, 3.26 ppm of endrin; high bioaccumulation in blood of Maya women with cervicouterine cancer, 7.352 ppm of endosulfan I, 3.695 ppm of aldrin, 2.336 ppm of 4, 4’DDE, 1.434 ppm; high levels of OCP in breast milk, 18.43 mg/kg of heptachlor epoxide, 1.92 mg/kg of endrin, 2.10 mg/kg of dieldrin, 0.103 mg/kg of heptachlor, 0.178 mg/kg of endrin, and 0.127 mg/kg of endrin.
Reducing inappropriate testing and improving quality of care when diagnosing the menopause

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As women complete the menopausal transition, 85% report symptoms resulting in 10% of women consulting their health care provider(1). The menopause should be diagnosed based on age, menstrual history and clinical symptoms, and as such, FSH testing may be considered inappropriate when diagnosing the menopause or peri-menopause in women aged 45 and over(2). As part of a demand optimisation programme, the number of FSH tests requested to diagnose the menopause in this age group was quantified and educational interventions were implemented to reduce inappropriate testing. Educational interventions were implemented to discourage FSH testing and to promote the clinical diagnosis of the menopause. Clinicians were sent an educational message by e-mail and inappropriate FSH tests were returned with educational messages providing guidance on the diagnosis of the menopause. Data was collected and analysed before and after the educational interventions were implemented. In the month of May 2015, the lab received 83 inappropriate FSH test requests. Following our educational interventions, only 38 inappropriate FSH tests were requested during July 2015, a 54% reduction from May. The educational interventions implemented have also shown a sustainable decrease. Analysis of data from October showed a 70% reduction in inappropriate testing in comparison to May (Figure 1). This study has demonstrated the success of simple educational interventions in reducing inappropriate laboratory test requests. In addition to saving laboratory costs, this has also improved the quality of care for menopausal patients by eliminating additional consultations and allowing immediate diagnosis and management.

Assessment of sexual pleasure in Tunisian patients with Schizophrenia

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Sexuality in patients with schizophrenia is often overlooked. Very few studies examined sexual dysfunctions in such patients, especially in our socio-cultural context. The objective of this work was to assess sexual pleasure in Tunisian patients with schizophrenia. A survey was conducted between August 8, 2011 and September 5, 2011 among consultants at Al Razi Mental Health Hospital in Mannouba, Tunisia. All consultants with schizophrenia, aged between 18 and 60, who were sexually active during the period of the study, were interviewed. Sexual dysfunctions were assessed using the Changes in Sexual Functioning Questionnaire (CSFQ) in dialectal Arabic. Thirty-eight patients were included. Total sexual dysfunctions prevalence was 71% (n=27) with no difference by sex. These results are higher than those of the general population and are consistent with previous studies using the CSFQ: e average number was 3.8 per patient. There was no between-gender difference. The most frequent dysfunction was sexual pleasure dysfunction (50%; n=19). The presence of sexual dysfunctions was significantly associated with early onset of schizophrenia and with high scores on the PANSS. Sexual desire dysfunction was associated with early onset of schizophrenia and severe negative symptoms and long acting antipsychotics. Sexual pleasure dysfunction was associated with an early onset of schizophrenia and with a good insight.
Vaginismus and Fertility

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Vaginismus is a rare condition, which may affect up to 1% of the female population and which is characterized by involuntary contraction of perineal muscles resulting in an impossibility of penetration during sexual intercourse. Vaginismus may result in infertility and may affect a woman's perception about her femininity and her potential of motherhood. Only 19% of women with sexual disorders would consult their gynecologist for this reason. Despite their condition, women with Vaginismus show an increasing desire for having children and despite the difficulties they have to encounter due to their condition, they aim to become pregnant (assisted or spontaneous). The literature has described the desire to become pregnant as the primary reason to seek medical care. For these women, having a child sometimes results from a real obstacle course with many psychological consequences. Vaginismus, a sexual dysfunction preventing any vaginal penetration, a priori, a symptom incompatible with a pregnancy. However, there are virgin vaginal women and pregnant, in great physical and mental suffering.
Global Summit on
Reproductive Medicine & Health
12 - 14 March, 2018 | Sunway Putra Hotel | Kuala Lumpur, Malaysia

Day 2
Virtual Presentations
Knowledge on HIV/AIDS among the adolescents

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Acquired Immunodeficiency Syndrome (AIDS), caused by Human Immune Deficiency Virus (HIV), is posing itself to be one of the most serious challenges to the global public health. As we enter the fourth decade of AIDS epidemic, the evidence of its impact is undeniable. According to WHO global HIV statistics, an estimated 36.9 million people were living with HIV, with a global HIV prevalence of 0.8%, towards the end of 2014. To assess the level of knowledge on HIV/AIDS among the adolescents Methodology: A descriptive cross-sectional survey was adopted, among the adolescents. A total of 1000 college students those were studying in the selected colleges in Pondicherry, were selected by convenient sampling technique. The tool for data collection was constructed by the researcher and it was pretested and validated by the several experts. Result and findings: The result shows the in relation to the socio-demographic variables of the adolescents most (54.9%) of the college students were in the age group of 19 to 20 years, most (56.2%) of the college students were females, majority (96.3%) of the college students were single, half (50.2%) of the college students were from the rural area, majority (83.4%) of them were Hindus. overall level of knowledge regarding HIV/AIDS among the adolescents. Out of 1000 students, 511 (51.1%) had poor level of knowledge, 466 (46.6%) had average knowledge and only 23 (2.3%) had adequate knowledge. There was statistically significant association between the knowledge regarding HIV/AIDS with the gender shows that the male students had higher knowledge than the female students. Conclusion- The investigator concluded that the knowledge regarding HIV/AIDS among the adolescents is not adequate

Medical management of leiomyomas

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Leiomyomas are the common benign tumours of uterus. Surgery is the most common form of treatment of symptomatic fibroids. With the advent of minimally invasive interventional procedures, like uterine artery embolization (UAE), and focused ultrasound on MRI, we get lesser invasive techniques, although they have drawbacks regarding ovarian reserve etc. for patients desiring fertility. Initially GnRH agonists like leuprolide acetate were the most effective medical agents introduced, but their drawback was bone mineral density demineralization, hot flushes on long term use, besides cost. Selective progesterone receptor modulators (SPRM) gradually got introduced with initial trials with mifepristone (RU486), followed by asoprisnil, ulipristal acetate. Since mifepristone had ant glucocorticoid and androgen receptor activity it was not approved by FDA for license, while 4 PEARL trials have got completed for UPA acetate and 5mg got approval in Europe and Canada before surgery. Further trial s indicated it maybe the future drug of choice for patients desiring fertility for long term intermittent therapy and possibly avoiding surgery and its complications like adhesions, uterine scar and risk of rupture during pregnancy. However the Canadian group gave a list of reasons why they may not be the drugs of choice for fertility desiring patients. In countries like India where ulipristal is not available, still one is forced to use mifepristone. Detailed mechanism of these drugs is discussed. Also increasing role of use of Vitamin D in preventing fibroid proliferation and growth has been shown in animal models but its use in humans has not had many trials but seems to be a promising method of tying to treat these benign neoplasms medically.
Current trends in management of fetal growth restriction  
Manju Bala Dash  
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Fetal growth restriction (FGR) or intrauterine growth restriction (IUGR) are the terms used for a fetus which has not attained its full growth potential. FGR fetus is associated with high perinatal and neonatal morbidity and mortality.

Three decades of research has indicated that almost all treatment strategies are ineffective in treating FGR. First step in the management is correct dating, for which known last menstrual period (LMP), regular cycles, clinical examination in early pregnancy, and most importantly, ultrasound dating in first or early second trimester, are the tools. Second step is to establish the presence of FGR by using fetal weight or a 10th centile, cutoff is the usual practice in establishing FGR. Third step is to differentiate between true growth restriction (FGR and abnormal Doppler flows) and constitutionally small fetus—small for gestation age (SGA) (FGR and normal Doppler flows). Fourth step FGR is established; viable gestation less than 34 weeks, careful search for fetal anomalies (ultrasonography and fetal echocardiography), and selective investigations for maternal and fetal causes should be done. Fifth step is the most important step of management, which is, monitoring for fetal hypoxia. An integrated surveillance approach using multivessel Doppler—arterial and venous, BPS, and fetal growth assessment is the recommended practice. On conclusion Optimal management of suspected FGR involves identifying women at risk, correct dating, distinguishing between constitutionally small and true FGRs, monitoring for fetal well-being, growth, and a timely intervention.

Perception of pregnant women about caesarean section at the university of abuja teaching hospital, Gwagwalada, Nigeria  
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Scunthorpe General Hospital, UK  

Background: Caesarean section (CS) remains an important option of delivery for many pregnant women due to maternal or foetal indications. Despite being relatively safe, it however has been associated with aversions in developing countries due to several socio-economic and cultural factors. Objectives To determine the perception of pregnant women about CS by assessing the proportion of patients who find CS acceptable, as well as the influence of socio-demographic factors and history of previous CS on its acceptability. Methods this was a cross sectional study involving pregnant women presenting at the antenatal clinic of the University of Abuja Teaching Hospital Gwagwalada. Interviewer administered questionnaire was used to collect information on socio-demographic variables as well as information relating to acceptability of Caesarean section as a mode of delivery. The data collected during scheduled antenatal visits between 17th -20th May, 2016 was analysed by simple proportion and percentages. Results: A total of 131 women participated in the study and questionnaires of 131 women were analysed. The average age of participants was 30.3 years, ranging from 14-45 years old. Of these women, (126) 96.2% were married. The highest level of education achieved by these women were: tertiary education (82) 62.6%, secondary education (44) 33.6%, primary education (4) 3.1% and no education (1) 0.8%. The parity of these women were: nulliparous = (39) 29.8%, parity of 1 = (27) 20.6%, parity of 2-4 = (61) 46.6% and grand multiparous = (4) 3.1%. Employed women were (71) 54.2% while unemployed women made up (60) 45.8% of the study population. If recommended by their doctor, (92) 70.2% of women agreed to a CS while (39) 29.8% disagreed. Reasons for disagreement included: pain associated with CS (11) 28.2%, expensive cost of the CS (7) 17.9%, abdominal aesthetics (7) 17.9% and fear of CS complications (7) 17.9%. In all, (37) 28.2% had a previous CS Older women were more likely to accept CS than their younger counterparts, 20-24 = (5) 45.5%, 25-29 = (29) 60.4%, 30-34 = (26) 61.9%, ≥35 years = (25) 89.3%. Married women were also inclined to accepting CS compared to single women, (91) 72.2% vs (1) 20.0% respectively. The higher the educational level the more likely the client is to accept CS. This trend was similar for multipara compared to primipara. Women who have had a previous CS were also more likely to accept CS when compared to those who have not had a CS in the past. Conclusion a high acceptance rate is seen amongst pregnant women who are older, married, multiparous, educated and have had a previous CS. Acceptance of CS can be increased with adequate antenatal care and counselling.
Accepted Abstracts
The role of antioxidant systems in prediction of resistance to Clomiphene Citrate Treatment in Polycystic Over Syndrome patients

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Oxidative stress has been known to play a negative role on fertility by affecting oocyte quality, fertilization, implantation and early embryo development negatively. The role of oxidative stress in fertility has been demonstrated, and fertility rates can be increased with antioxidant treatments. Physiologic quantities of reactive oxygen species are required for healthy oocyte development in follicular fluid, reduction of antioxidants in granulosa cells indicates poor oocyte quality, increase in free radical in follicular fluid correlates with degenerated oocyte count and antioxidant addition decreases follicular oxidative damage, Increased pregnancy rates. High reactive oxygen species levels in granulosa cells have been shown to correlate with low oocyte fertilization ability, low embryo quality and reduced implantation rates. In the light of these data, we aimed to investigate total antioxidant levels in patients who are clomiphene citrate-resistant and has been diagnosed as infertile Polycystic Ovary Syndrome. In infertil Polycystic Ovary Syndrome patients who are resistant to Clomiphene citrate treatment would have lower total antioxidant levels, thus determining the ovulation induction protocol so we aimed to show that total antioxidant levels could be used as a useful marker in establishing clomiphene citrate resistant polycystic ovary syndrome patients.

Knowledge and preference of contraceptive advice to peers among first year medical students at AIMST University, Kedah, Malaysia

Swe Swe Latt

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The unprotected sexual relationships, limited knowledge and incorrect usage of contraceptive methods increase the risk of teenage pregnancy, unintended pregnancy and sexually transmitted infections. This study measured the prevalence of knowledge on different contraceptive methods and preferred methods for friends among first year medical students at AIMST University. A cross-sectional study with universal sampling was conducted using self-administered questionnaire on six contraceptive methods in April 2017. The chi-square test was used to analyze the association between socio-demographic characteristics and knowledge of different methods. Out of 157 respondents, female (68.8%) and male (31.2%) were involved. Most students obtained their first source of information on contraceptive methods from secondary schools (74.5%) and from teachers (68.8%). The percentages of correct answers on knowledge about different contraceptive methods were: condom (92.4%), followed by abstinence (82.8%), oral contraceptive pills (80.3%), hormonal injection (73.9%), withdrawal (73.2%) and emergency OCP (46.5%) respectively. The knowledge on withdrawal method among male students (83.7%) was significantly higher than female students (68.5%) (p= 0.04). Respondents’ choice on most suitable method for friends who came for their advice were condom (51.5%) then OC pill (21.9%), periodic abstinence (10.3%), withdrawal and emergency pill (6.4%) each, hormonal injection (2.1%) and others (1.3%). Respondents’ sufficient knowledge on various contraceptive methods reflects the effectiveness of sexual health education in their secondary schools. Therefore, early reproductive health education should be encouraged in institutions to prevent unwanted consequences.
OHSS - Still an Acceptable Risk

Adrian Ellenbogen M.D

Ovarian hyper stimulation syndrome (OHSS) is an iatrogenic complication of ovarian stimulation. In its acute form the disorder has an incidence of 0.25-0.5%. The incidence of the cases requiring hospitalization is up to 2%. Given its relatively low incidence among the patient population undergoing ovarian stimulation, one could speculate that the impact of the syndrome may not be so important. Nonetheless, a more detailed analysis of the current literature demonstrates that the situation is actually very different. Taking into consideration that 370000 IVF procedures were performed in Europe during the year 2012 (Assisted reproductive technology in Europe, 2012: results generated from European registers by ESHRE) and 208604 IVF cycles were performed during 2014 in USA (Center for Disease Control and prevention, national summary 2014). It could be hypothesize that 920-1040 and 525-100 cases of severe OHSS developed respectively. However, the most devastating consequence of OHSS is that it may be a serious threat to the patients’ life. Results from reports regarding maternal mortality rates due to OHSS in the Netherlands and the UK reveal an incidence of 3 deaths per 100 000 IVF cycles performed. Taking into account these figures and the rapid global increase in the number of IVF/ICSI cycles it must be considered that the loss of a substantial number of women yearly is unacceptable and indeed, remarkable measures are undertaken in order to predict, prevent and even eliminate OHSS from IVF clinics. In this lecture we will present current data on OHSS incidence in different countries. Identification of patients vulnerable to developing OHSS will be discussed (young age, polycystic ovaries on baseline ultrasound examination, high serum estradiol at hCG trigger or rapidly rising serum estradiol, previous episodes of OHSS, large number of oocytes retrieved, high levels of anti-müllerian hormone). Different procedures proposed in order to prevent development of severe OHSS (withholding hCG – cancelation of cycle, coasting method, dopamine agonist or of volume expanders administration, triggering oocytes maturation with kisspeptin and the role in vitro maturation of oocytes and GnRH antagonist protocol + GnRH agonist trigger (with or without cryopreservation of all embryos) in reducing the incidence of severe OHSS will be discussed and the results will be compared. Several cases of acute OHSS with this protocol were published; addition of dopamine agonist in selected cases will be suggested. Finally, the model of IVF cycle segmentation with cryopreservation of all embryos (freeze-all protocol) will be presented, taking into consideration the dramatically decrease of OHSS incidence together.

Chhaupadi: A Menstrual Taboo in Far Western Nepal

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Chhaupadi is a practice where girls/women are not allowed to enter inside the house, touch water and milk for 4 to 7 days during their menstruation period. They must stay in a hut outside, identified as a Chhaupadi house. A mixed method study (QUAN+qual), was conducted to find out the practice of school going female adolescents regarding Chhaupadi practice in Doti District of Far western region of Nepal. It was found that Practice of chhaupadi ritual was significantly associated with ethnicity (OR: 54.667 95% CI, 5.990-498.909), education of father (OR: 8.743 95% CI, 1.140-67.076), education of mother (OR: 8.069 95% CI, 1.814-35.892), occupation of father (OR: 3.337 95% CI, 1.262-8.823) and family Income (OR: 4.085 95%CI, 1.576-10.589). The findings also revealed that chhaupadi ritual has been practiced by in spite of the fact that it has serious effect in the health of the female. Also, it has threatened the security of the women, sometimes resulting brutal consequences like rape and death of the women. The study concluded that beside all other factors responsible for continuation of chhaupadi ritual, there is a strong superstitious belief that various miss happenings will occur due to violation of chhaupadi ritual. Therefore, it is necessary to increase awareness by lunching awareness programs and should be emphasized in school curriculum as well.
Innovative approaches in metabolomics for understanding drug resistance in breast cancer

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Breast cancer is one of the leading causes of death worldwide. In Pakistan, prevalence of this ailment is highest amongst all types of cancer i.e. 38.5%. Among various treatments available to overcome cancer, chemotherapy is the one used most widely. Most oftenly a combination of two or more medicines will be used as chemotherapy treatment for breast cancer. But in Chemotherapy, major clinical setback is drug resistance. Metabolomics is an emerging field that utilizes information of cellular biochemistry for the early detection, diagnosis and establishment of predictive biomarkers of breast cancer. Currently metabolomics is used to evaluate a much comprehensive picture of tumor development and growth. This review highlights potential metabolomics applications towards developing a more personalized and tailored chemotherapy treatment. The methodology is based on inclusion exclusion criteria. Literature survey, and questionnaire were included while clinical trials was excluded. This report provides a review of 12 articles out which few were excluded. The objective was to explore i) Early breast cancer detection ii) Increasing life expectancy of cancer patients iii) Mechanisms for breast cancer drug resistance iv) Chemotherapy in breast cancer and its success rate v) Side effects of chemotherapy in breast cancer. According to the survey the average response rate of a cancer drug is the lowest at 21%, suggesting that 79% of patients with cancer are over-dosed. While according to an international study, 40%–50% of breast tumors will display acquired resistance. When specific therapies are chosen on the basis of a patient’s metabolomics profile, it will give rise to customized medicine and personalized tailored treatment. Using high throughput information using metabolomics to clinical diagnosis and treatment can help accelerate the patient safety, quality of life and survival rate by identifying pathways involved in drug resistance. Metabolomics is future of anti-cancer pharmacology, following “the right drug for the right patient at the right time” can offer safety, quality and effectiveness of anti-cancer treatment.

Evaluation of the efficiency of combined and separated antioxidant supplementation of vitamin C and E on semen parameters in streptozotocin-induced diabetic male Wistar rats

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Male reproductive functions could be affected at multiple levels due to diabetes mellitus. Antioxidants vitamins have direct impact on improving male reproductive capacity. Our objective was to assess the efficiency of treatment with vitamin C and E in the case of whether diabetes mellitus is the cause of infertility or if infertile men suffer from diabetes by inducing diabetes on male Wistar rats. Methods: Adult male Wistar rats were divided into 5 groups of 6 animals each: a normoglycemic control. Other four groups were given a single dose of streptozotocin, and divided into: diabetic control, diabetic + 250 mg/kg/day of vitamin C, diabetic + 250 mg/kg/day of vitamin E, diabetic + 250 mg/kg/day of vitamin C + 250 mg/kg/day of vitamin E by gavage during 30 consecutive days. Animals were anesthetized, sacrificed to evaluate body and reproductive organ weights, plasma hormone levels, and semen quality. Results: Compared to normoglycemic animals, diabetic rats showed reduced body weight (211.33 ± 8.70gr) and epididymis (1.35 ± 0.10 gr). The testis weight (3.10 ± 0.14 gr) and sperm count (2.72 ± 4.61 x 10⁶) were maintained. A reduction of LH and testosterone levels (0.10 ± 0.00, and 0.25 ± 0.12) respectively. There was a significant increase (p<0.05) in the final body and epididymis weights, hormonal levels, and sperm count among diabetes vitamins treated groups as compared to the normoglycemic and hyperglycemic groups. Conclusion: Diabetes mellitus induces adverse effects on reproductive capacity. Antioxidant vitamins C and E improves sperm quality and increases hormonal levels.
Towards a sustainable population in 2050: The disconnect between the reproductive health policy and culture in Nigeria

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Population dynamics and its consequences have continued to be a fundamental component of strategic planning for national development. With a focus on 2050, reproductive health and population studies are central to any strategic plan to further advance the well being of Nigerians. With a population growth rate of 3.2% and a projected population of 500 million by 2050, Nigeria is expected to become the world’s third most populous nation. While efforts are been made to improve indicators such as fertility rate, enrolment of the girl child into education, utilisation of modern contraceptives and delay of early initiation of sex among others, cultural and religious practices seems to act in the contrary. This study critiques the reproductive health and population policies of Nigeria and its contributions to the current population trend. It also focuses on the role of cultures and religion and its role towards achieving a controlled and manageable population growth in 2050. This study reviews literatures using search engine such as google, pubmed, google scholar for relevant articles and other unpublished research materials. It is of utmost importance that the forth coming population policy should provide achievable strategies taking into cognizance the role of culture in population control. Efforts should be made at increasing the acceptance and utilisation of modern contraceptive method in the northern region. Religious and traditional leaders should be involved in the formulation and implementation of the population policy and the domestication and implementation of The Child Right Act should be encouraged in the northern region.

Molecular correlates of early placental disorders

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Placental growth, differentiation and function during the first trimester is highly vulnerable. External and internal insults during this phase may result in unexplained miscarriage, intrauterine growth restriction (IUGR), low birth weight and pre-eclampsia. In my deliberation, I shall present a representative catalogue of molecular correlates of some of the early placental disorders, especially early pregnancy loss, pre-eclampsia and intrauterine growth restriction based on studies from different centres including ours. Further, I shall discuss how this kind of novel understanding of placental physiology shall open up newer possibilities in clinical medicine of various pathophysiology of the human placenta.
Egg donation and financial compensation: The moral debate

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The recent scientific achievements in the field of Medically Assisted Reproduction hold the alluring promise that our species will soon be able to dodge most of the limitations nature poses to reproduction. At the same time, however, they allow for brand new moral issues to emerge. In this short essay I will discuss the moral issue of financially compensating egg donors. I will do this from the point of view of the argument from potential, according to which gametes are potential human beings; therefore they should be morally treated as such, to wit as price-less bearers of dignity. To the purpose of challenging this argument I will make use of an ad absurdum similar one, in an effort to show that this particular approach is inadequate to provide support to any moral condemnation of financially compensating egg donors.

Reproductive Medicine

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The use of traditional remedies in pregnancy has been associated with bad obstetric outcomes including uterine rupture and foetal distress. Few studies have been done to measure the effects of various herbs in pregnant women or a developing fetus. This study aimed at investigating the effects of the commonly used labor inducing plant, Cissampelos mucronata on pregnancy outcomes using a rat model. Pregnant female rats were divided into three groups of ten each. The first group was the control. The second group was treated with the aqueous extract of *Cissampelos mucronata* at mid-pregnancy. The third group was treated with *Cissampelos mucronata* close to full term. All the groups were left to give birth and outcomes recorded. Rats treated at mid-term had significantly low number of pups when compared to the control as well as the close to term treated group (4.1 ± 0.54 vs. 6.4 ± 0.60; 6.2 ± 0.56). The mid-term treated rats had pups with significantly lower body weight when compared to the control and the close to term treated group (3.73 ± 0.36 vs. 5.37 ± 0.16; 4.27 ± 0.1). The average gestation period was significantly short in the mid-term treated group when compared to the control and the close to term treated group (18.16 ± 0.50 vs. 20.40 ± 0.44; 20.12 ± 0.37). There were no uterus ruptures observed in all study groups 3 days after delivery.
Socio-cultural Construction of Mother and Child Malnutrition

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The reasons for maternal and child malnutrition are apparently medical but there are underlying socio-cultural determinants which construct health inequities for the mothers and their children. Overall objective of the study was to determine socio-cultural construction of health and malnutrition in Rajanpur district of Punjab through water insecurity, social capital and intra-household politics about reproduction. Both qualitative and quantitative techniques were used for data collection and analysis including participant observation, FGDs, Semi Structured Interviews and reflexivity. Explanation and ethnographic work tell the stories of sold women and their reproduction related malnourishment. Results show that gender inequity plays as a key socio-cultural determinant. This study explores how linkages between various development goals (MDGs and SDGs) and recommends that a holistic and integrated strategy need to incorporate culture and gender inequalities as most essential to solve the issue of malnutrition.

Biotechnology in Health Care in Somalia: Proposed intervention rational and Intervention logic 2017-2021

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This present research provides a synthesis of the main findings of the population’s life expectancy stands at 55 years, with an under 5 year mortality ratio of 137 per 1000 live births and a maternal mortality ratio of about 732 per 100,000 which is amongst the highest in the world despite progress (down from 1,210 in 1990) and the current rate for infant mortality is 82/1,000 live births. In Somalia, one out of every 12 women dies due to pregnancy related causes. These indicators point to a situation that is in dire need of attention by all stakeholders and which could be improved through an increase and an improvement of quality health services and awareness campaigns to increase people’s consciousness in Puntland state of Somalia, access to maternal health services is low with 33 per cent of births being attended by skilled birth attendants ANC1 and ANC4 rate are up to 26% and 4%. Over the past decade, new dynamics have emerged in each of the key domains of higher education, research and innovation (HERI), which are the integrated base for the Forum’s activities. In higher education, these include: (i) demand; (ii) diversification of provision; (iii) changing lifelong learning needs; and (iv) growing Communication and Information Technology (CIT) usage and enhanced networking and social engagement, both with the economic sector and with the community at large. In scientific research, the tension between basic and applied research is the core issue, thus linking to the think global, act local challenge.
Micro environmental stress in peritoneum and endometriosis

All India Institute of Medical Sciences, India

Endometriosis is a complex disorder with obscure pathogenesis. The objective of my deliberation is to evaluate the complex role of peritoneal environment in the etiopathogenesis of endometriosis. Several studies suggest that peritoneal microenvironment involving several cytokines and other factors suggestive of stress parameters plays a key role in the process of development of endometriosis. Inflammatory mediators peritoneal milieu are involved in the endometriosis associated infertility and pain. Furthermore, these local mediators may represent a non-surgical method for diagnosing endometriosis. It is anticipated that better understanding of the actions of these factors in endometriosis and further investigation of their effects on the peritoneal environment may give new insight into this disease and eventually develop novel diagnostic and therapeutic remedies.

Mentorship project for clinical midwives in Malawi

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The goal of mentorship project was to improve midwifery education in Malawi by equipping clinical midwives with knowledge, skills and appropriate attitudes in teaching students. This is because clinical midwives have the knowledge, skills and appropriate attitudes in patient care, but they do not have knowledge, skills and appropriate attitudes in teaching of students like the midwives educators who specialise in teaching, yet 70% of the teaching is done by them because their job requires them to be in the clinical areas 24 hours. When students are well guided and supported in the clinical practice, learning is facilitated, mistakes and haphazard working is also minimised. Furthermore, patients receive quality midwifery care and shortage of midwives in the clinical practice is also minimised. Mentorship project has improved midwifery education and patient care in health facilities where Ekwendeni College of Health Sciences students practice midwifery. A practice-based method was used in mentoring clinical midwives. The midwives were mentored as they performed their normal duties. The midwives were then assessed and the impact of the project on students learning and patient care was evaluated. Evaluation of Mentorship project revealed improved teaching and learning in the clinical practice. Most students (75%) indicated that midwives were now more willing to assist them than before and that they were now more close to the students than before. More challenging assignments in the form of tasks were being given to them under close observation and guidance than before.
Use the Nanoparticles to improve the quality of Human semen for capacitation and Acrosome reaction

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Reproductive problems such as poor quality or quantity of sperm, sexual dysfunction, hormone disorders are of great concern and cause considerable distress, anxiety and a decrease in sexual confidence especially in males. Studies have shown that the male factor contributes approximately 30-50% to fertility-related cases and that almost 50% of male infertility cases are classified as idiopathic. Human spermatozoa from a total of 25 semen samples were washed with human tubular fluid medium supplemented with bovine serum albumin (HTF-BSA) and incubated for 2 hours followed by incubation with different concentrations of Nanoparticles and control for 1.5 hours at 37°C. Samples were analysed for calcium homeostasis, capacitation, sperm motility, reactive oxygen species (ROS) modulation, DNA-fragmentation as well as acrosome reaction. For Ca^{2+} flux studies, a high-throughput fluorescence Ca^{2+} flux assay was used. However, the technology targets 3 to 4 surface markers on sperm with Nano magnetic particles. These targets are apoptotic sperm, acrosome reacted sperm, DNA fragmentation and membrane damaged sperm. After incubation at room temp the mixture of particles and sperm are placed against a laboratory magnet for removal of the targeted deficient sperm, the supernatant contains the viable sperm. In so doing, we enrich for viable non DNA damaged sperm for use in IVF.

Health promotion and quality of life after the reproductive years

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Clinical da Menopause (CFH), Portugal

Following the Reproductive Years midaged women enter in the Climacterium, a phase of their lives that is centered in a Menopause, the last spontaneous menstruation. This is preceded by a Premenopausal (vasomotor symptoms and menstrual irregularities) and a Post menopause (vaginal atrophy, osteopenia). Much later in their lives they enter in what I call a Grenache (the beginning of old age). Although some women go symptom-free through this initial phase, the fact is that the majority of them complain of distressing vasomotor symptoms, night sweats, mental instability, etc that require treatment to preserve their quality of life. During the Post menopause the prevention of osteopenia, cardiovascular diseases and cancer is essential for Health promotion. In the absence of contraindications (breast, liver, venous diseases) the best treatment is the chemically-identical estradiol (with progesterone if there is a uterus) preferably by a parenteral route (transcutaneal or subcutaneal) of paramount importance is a Mediterranean diet, physical exercise and mental health. Women deserve to live well during the 2/3 of their lives. Since the number of centennials is increasing every year, due to the progresses of Medicine, sociologists and anthropologists must start NOW planning strategies to accommodate them with dignity (retirement pensions, health care) in a new Society of the year 2030.
Sexuality of adolescents

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Adolescence is a period of upheaval linked to the emergence of the secondary sexual characteristics that sign puberty, genetic sexual maturity and the development of an adult identity pushing the teenager to an early sexuality. This precocity of sexual intercourse and the unsatisfactory use of family planning methods are observed in schools and universities. I-Realities: In sub-Saharan Africa, adolescents tend to engage in sex at an earlier age, on average at 17 for boys and 16 for girls. This first encounter with sexuality occurs in a context of lack of information and knowledge about reproductive health and contraception. By the age of 20, more than 75% of women and more than 60% of men have had unprotected sex. Adolescents are a population at risk for STIs / HIV and unwanted pregnancies. Since parents do not talk to their children about sex, they are informed by their friends, the mass-media, in cyber-cafes or mobile phones (internet). In all sub-Saharan African countries, among sexually active 15-19-year-olds, about one in five are married, nearly half of whom have unmet needs for FP; - the prevalence of HIV is much higher among women than men. - 35% of pregnancies are unwanted or unscheduled, including 22% birth and 13% abortions. These abortions are often risky in a context of legal restriction in most African countries. In some communities, the girl must only see her menarche in home. II-Challenges to be met: The sexual and reproductive health of young people in sub-Saharan Africa remains a public health priority for preventing and eradicating complications related to early sexuality, particularly in schools. There is a problem of the quality of information in schools / universities and mass media, and the motivation of adolescents. It is vital to organize the adolescent-friendly health system for family planning. Conclusion: The intensification of information structuring, sexual education and communication on FP methods, the management of adolescent sexual and reproductive health problems, and the increased and voluntary fight against poverty would enable young people to be healthy and become productive adults for the demographic dividend in Africa.

Corticosterone In ovo Programs Behavior and Ovary Function through downregulation of Glucocorticoid Metabolic Enzyme Gene Expression

Abdelkareem A. Ahmed
University of Nyala, Sudan

Early life experience or exposure to excess Glucocorticoids (GCs) during embryonic development influences offspring phenotype and reproductive function in mammals. Yet, whether prenatal corticosterone (CORT) exposure may cause similar effects in avian species is unknown. In this study, we injected low (0.2 µg) and high (1 µg) doses of CORT in ovo before the incubation and tested the changes in of aggressive behavior and GCs metabolic enzymes genes in ovarian follicles 1 (F1), F2 and F3 on posthatch chickens of different ages. In ovo administration of high dose CORT significantly (P<0.0) suppressed growth rate from 3 weeks of age and increased the frequency of aggressive behavior, associated with elevated plasma CORT concentrations. High dose CORT treatment significantly (P<0.0) decreased ovary weight and oviduct weight. CORT administration significantly (P<0.0) downregulated 11β-hydroxysteroid dehydrogenase type 1 (11β-HSD1) mRNA expression in ovarian in theca cells of ovarian follicle 1 (F1), F2, F3 and ovary compared to control. In contrast, CORT treatment significantly (P<0.0) upregulated 11β-hydroxysteroid dehydrogenase type 2 (11β-HSD2) mRNA expressions in ovarian F1, F2, F3 and ovary compared to control. In addition, in ovo injection of high dose CORT decreased 20-hydroxysteroid dehydrogenase mRNA expression in F2, F3 and ovary but not F1. Likewise, CORT treatment reduced glucocorticoid receptor (GR) mRNA abundance in F2 and F3 compared to F1 and ovary. However, CORT treatment decreased mineralocorticoid receptor (MR) in F2 but not others follicles. Our findings suggest that prenatal stress programs the aggressive behaviors and reproductive function in the chicken through alterations of GCs metabolic enzymes genes expression.
Modern tool and multidisciplinary approach for combating new emerging communicable sexually transmitted infectious disease: View and new insight

Viroj Wiwanitkit

The new emerging communicable sexually transmitted disease is usually a big problem in medicine and public health. Within the past 2 decades, there are several new emerging sexually transmitted infections that become the big health issues around the world. The good examples Zika virus infection and drug resistant gonorrhea. Several new communicable diseases can high morbidity and mortality. Fighting with the new emerging sexually transmitted infection seems to be an extremely difficult work but it requires much attempt to manage and pass the situation. The main difficulties in management of the new emerging sexually transmitted infections are the lack of knowledge and fund to combat with disease. During the first period of the outbreak, the disease is usually unknown and rapidly progress. It usually takes time to gather the knowledge and more time to find the diagnostic and therapeutic means to correspond to the outbreak. With the advance progress in biomedical technology, the new tools become the hope for disease management. The important tools are informatics tools including bioinformatics, chemo informatics and Nano medical tools. The bioinformatics tools can help clarify and predict the genome, protein as well as expression regarding to the disease. The chemo informatics tool can be useful for drug and vaccine searching. For the Nano medical tool, it can be useful for development of new diagnostic and therapeutic approaches. Also, there are many new computational tool that help simulate and predict the epidemiological situation of the outbreak. The well-known system is the GIS application. In additional to the informatics tool, the advanced biomedical engineering also creates several new apparatus that can be useful for fighting of the disease outbreak. The good examples are the new communication devices and preventive apparatus against the new pathogen. With implementation of those mentioned new advanced tools, fighting for the new emerging disease become more effective but it is a real challenge situation. An important concern is the collaboration among multidisciplinary members of the team work. Not only the medical and paramedical personnel but also non - medical personnel have to work together in order to correspond to the new emerging infectious sexually transmitted diseases. Without a good collaboration and multidisciplinary team work, the success cannot be achieved.

The abortion and psychological sequelae

Milouda Chebabe

This study aims to describe the causes and circumstances occurring during abortions. The study, which took place in the maternity Rabat, is based on the description of the causes and circumstances occurring during abortions, on the impact and the psychological impact of abortions on the health of women and the desire and sexual functioning. The exploitation of abortions records, interview patients and analysis of 100 cases distributed questionnaires the following results: 98% of spontaneous abortions and 2% of abortions therapeutiques. Le risk of abortion during the first quarter is 71.6%. 18% of women presented with hemorrhage of great abundance and anemia rates from 68.5% of women miscarried suites like menstruation is heavy bleeding or bleeding that leads women to consult. The results show the existence of three psychological states in patients: anger, guilt and hope. The first state is established in women who previously suffered a high number of pregnancies, abortions or deliveries. While the other two feelings are not depend on the number of abortions and childbirth undergone by the patient nor the age of the pregnancy. We concluded that any intervention on the erogenous zones of women, causes sexual dysfunction may be transient couple, qui when followed in psychological or chronic load otherwise. Thus, a very rapid response specialists in abortion, support and monitoring, and an awareness of women of childbearing age is crucial to reduce the rate of abortions in Morocco.
xenoestrogens exposure affects early-onset puberty among young girls in western Saudi Arabia

Abdulmoein Eid Al-Agha
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To investigate the correlation between Xenoestrogens and the impact on early pubertal development among young girls in Western Saudi Arabia. Methods: This was a cross-sectional study of 794 young girls from the Pediatric Endocrine Clinic at King Abdulaziz University Hospital, Jeddah, Saudi Arabia. The clinical characteristics of the participants were recorded. Results: The mean age of the participants was 10.87 years. The most common Xenoestrogens products used daily included plastic packaging materials (n=353; 44.5%), pesticides (n=351; 44.2%), and plastic water bottles (n=311; 39.2%); the least common product used daily was food preservatives (n=101; 12.7%). There was a significant inverse relationship between the use of plastic packaging materials and age of breast (p=0.027) and pubic hair (p=0.005) development. Furthermore, there was a significant association between the increased use of pesticides and early development of pubic hair (p=0.044). A total of 516 participants were yet to experience menarche, which represented 65% of the total sample size for this study. Conclusion: There was a direct relationship between the frequent usage of various Xenoestrogens products and early development of breasts, pubic hair, and age of menarche among young girls living in Western Saudi Arabia.

Abstract of “Endometrium in Infertility”

Rajendra Kumar, India

For successful implantation, it is the healthy seed (quality embryo) and the healthy soil (receptive endometrium), both are equally important. Endometrial function and the receptivity are the two major endometrial features which decide the establishment of successful pregnancy. Endometrial receptivity is a state during which the embryo is received into the endometrium, attach, penetrate and induce decidual changes which results in implantation and pregnancy. In this short presentation, I explain about “Window of Implantation”, its duration, and various methods of endometrial evaluation, brief introduction of thin endometrium and its treatment. The future of thin endometrium is also touched upon.
Update on unexplained recurrent miscarriage

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Benha University, Egypt

Recurrent (2 or 3 or consecutive) miscarriage (spontaneous loss of pregnancy before the fetal viability) is unexplained when the possible causes are excluded by basic investigations. This is encountered in 50% of cases. Possible causes are anatomic (congenital uterine malformation, submucous fibroid, cervical incompetence, severe IU synechiae), endocrine (uncontrolled DM, uncontrolled thyroid disease, subclinical hypothyroidism), atipophospholipid antibody syndrome, thrombophilia and genetic. Investigations are: Pelvic US (or HSG or sonohysterography), antiphospholipid antibodies, TSH, Thrompophelia screen, and if the above examinations are normal: karyotype of the abortus and if unbalanced structural chromosomal abnormality: parental karyotype. UnRM is classified into Type I (suffered their pregnancy losses by chance alone) and Type II (genuine abnormality). This classification helps to select women who are most appropriate for further investigation and potential future treatment. Past studies have investigated systemic endocrine and immunologic mechanisms as potential causes for pregnancy loss in unRM, while recent studies has focused on spermatozoal, embryonic, and endometrial factors. No evidence-based treatment. Trials of treatments are: TLC, Lifestyle modification, decreases SDF, progesterone, aspirin with or without heparin, combination therapy, HCG, HMG, immunotherapy, ICSI and PGD.

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Abdelkareem A. Ahmed
University of Nyala, Sudan

Early life experience or exposure to excess Glucocorticoids (GCs) during embryonic development influences offspring phenotype and reproductive function in mammals. Yet, whether prenatal corticosterone (CORT) exposure may cause similar effects in avian species is unknown. In this study, they injected low (0.2 µg) and high (1 µg) doses of CORT in ovo before the incubation and tested the changes in of aggressive behavior and GCs metabolic enzymes genes in ovarian follicles 1 (F1), F2 and F3 on posthatch chickens of different ages. In ovo administration of high dose CORT significantly (P<0.0) suppressed growth rate from 3 weeks of age and increased the frequency of aggressive behavior, associated with elevated plasma CORT concentrations. High dose CORT treatment significantly (P<0.0) decreased ovary weight and oviduct weight. CORT administration significantly (P<0.0) downregulated 11β-hydroxysteroid dehydrogenase type 1 (11β-HSD1) mRNA expression in ovarian in theca cells of ovarian follicle 1 (F1), F2, F3 and ovary compared to control. In contrast, CORT treatment significantly (P<0.0) upregulated 11β-hydroxysteroid dehydrogenase type 2 (11β-HSD2) mRNA expressions in ovarian F1, F2, F3 and ovary compared to control. In addition, in ovo injection of high dose CORT decreased 20-hydroxysteroid dehydrogenase mRNA expression in F2, F3 and ovary but not F1. Likewise, CORT treatment reduced glucocorticoid receptor (GR) mRNA abundance in F2 and F3 compared to F1 and ovary. However, CORT treatment decreased mineralocorticoid receptor (MR) in F2 but not others follicles. Their findings suggest that prenatal stress programs the aggressive behaviors and reproductive function in the chicken through alterations of GCs metabolic enzymes genes expression.
Family Planning practices Among Married Nurses of Liaquat University of Medical and Health Sciences Hyderabad, Sindh

Ramesh Kumar
Pakistan

The development of population policy can be mentioned as in 2010 when MDGs were not achieved and still far behind if compared with other regional countries. The vision of which states that "the policy will promote a prosperous and skilled society, where pregnancy must be planned and where there must be space in child birth so that the child care and stability can be possible every citizen is provided with choice to improve the quality of his or her life. Methods: Descriptive Cross sectional conducted at Liaquat University of Medical Health Sciences (LUMHS) Jamshoro, Sindh among the Staff Nurses of Liaquat University Hospital Jamshoro/ Hyderabad, CJJP Hospital Hyderabad Sindh. Data were collected from personal record/ pay roll record available to hospital administration through the simple random sampling. 88 nurses were included in this study after calculating the proper Sample size. Married Staff nurses of reproductive age, who were in the state of good physical and mental health, were included whereas Trainee Nurses, Student Nurses and those nurses who were not present at the time of data collection were excluded. Ethical clearance was obtained from HSA Pakistan. Results: 42(47.7%) respondents lies in the age group of 24-34 years, whereas 46(52.3%) were in between the age of 35-45 years. Experienced to their job among them having experience of 6-10 years were the highest 40(45.5) and the most senior respondents were the least in number 12(13.6). Most of the respondents 55(62.5%) were of that opinion that they should have 3 or less than 3 children while 33(37.5%) responded that they should have 4 or more than 4 children. When asked from 55(62.5%) respondents about the reason of having children not more than three, among them 24(27.3%) responded due to financial crisis, 10(11.4%) due to rearing issues, 21(23.9%) due to health issue and 1(1.1%) were due to anonymous reason. 38(43.2%) were using method of family planning currently among them 11(12.5%) were using withdrawal method, 10(11.4%) were using pills, 8(9.1%) were using injection method, 6(6.8%) were tube ligation / vasectomy and 5(5.7%) were using IUCD method of family planning currently. "Job Experience" and "Number of children" have statistically significant association with knowledge, having p-value 0.009 and 0.002 respectively, while all the other variables does not show statistically significant association as the p-Value of all other variables is more than 0.05. Conclusion: This study reveals that all the study population have knowledge about Family Planning but low contraceptive prevalence rate 43.2% in study population, showing big gap between knowledge and practices, needs swift attention for achieving the desired and expected change in contraceptive prevalence rate.

Update on Infertility above 40

Aboubakr Mohamed Elnashar
Benha university, Egypt

Number of women above 40 y seeking IVF is increasing. 25% of ICSI cycles in Europe are done for women above 40 y. Outcome of ART is adversely affected by advancing maternal age. Decreased fecundity is particularly noticeable above 30 y, accelerating between 35 and 40 y and reducing to almost zero at 45 y. Women above 35 years of age should be referred for infertility work-up after 6 months of trying to conceive. Ovarian reserve tests have poor predictive value for non-pregnancy and should be used to exclude women from treatment, only if levels are significantly abnormal. IVF is a woman's best chance of a successful ongoing pregnancy in this age group, and that opting for ovulation induction and IUI with either CC or FSH can waste much precious time and thus reduce her chances of success with IVF. Women above 40 should consider IVF if they do not conceive within 1 to 2 cycles of COH. Recent studies have reported a reasonable success rate up to 44 y. Above 45 y, no benefit from ART procedures using their own oocytes. The only effective treatment for ovarian aging is oocyte donation.
Preimplantation genetic screening and Time-Lapse monitoring as new technologies in ART

Romualdo Sciorio
University Hospital, Uk

In the 1990s Pre-implantation genetic diagnosis (PGD) with fluorescence in situ hybridization (FISH) on polar bodies or cleavage-stage embryos, has been promoted to improve IVF outcomes. After the publication of several retrospective studies, the technique spread in popularity (1,2,3,4). However, results from several controlled trials (RCTs) produced controversial results. Most of them demonstrated that FISH screening not only did not improve (increase) delivery rates, but in selected patients population, (particularly) such as older women and women with diminished ovarian reserve, actually reduced pregnancy chances (5). Several factors were responsible for this outcome, including the inefficiency of the FISH procedure, the limited number of chromosomes analyzed, problems with the reported levels of chromosomal mosaicism at the cleavage stage, and the fact that most studies involved patients with poor prognosis who produced few, and poor-quality embryos (6). In the last decade, new technology based on whole genome amplification from single cells, allowing for 24-chromosome screening, has invigorated the field, initiating the transition to PGD-A version 2.0 (7). Platforms using whole genome amplification include comparative genomic hybridization arrays (aCGH), single nucleotide polymorphism microarrays, and recently, next generation sequencing (NGS). Quantitative polymerase chain reaction (PCR) has also been applied to aneuploidy screening (8). These technologies have been routinely used since 2008 and aim to improve not only clinical results but also time to pregnancy and, most important, “healthy baby at home” rates. Using these new technologies in trophectoderm biopsies, three RCTs have been published involving patients with good prognosis (9, 10, and 11). One of these RCTs showed an increase in ongoing implantation from 27% to 66% compared with controls, along with a reduction in miscarriage rates, although most were unable to claim statistical confidence. In this lecture will be also discuss the use of time-lapse imaging system (TLIS) in Embryology Laboratory. TLIS is considered an important research tool for learning about embryo morphokinetics. Furthermore, TLIS is considered to be a unique incubator making undisturbed embryo development. Although a recent study (12) showed a significant difference in live birth between TLIS and SI, there is still debate on whether the undisturbed development of the TLIS could be beneficial for embryo quality and be useful for the selection of single embryo for transfer (eSET).

Abdomino-pelvic Tuberculosis: A continuing threat to women’s health

Stella Marie L. Jose

At the University of the Philippines-Philippine General Hospital, from 2013-2017, a total of 40 obstetric and gynaecologic patients with Abdomino-pelvic tuberculosis was admitted. The signs and symptoms of the patients varied, from abdominal pain to massive ascites. The clinical manifestations, ancillary procedures and management of Abdomino-pelvic tuberculosis will be discussed. Prevention of the disease and its sequelae will also be discussed.
Effects of AMH on Sertoli cells in male mice and its molecular mechanism

Zia Ur Rehman
Pakistan

Sertoli cells produce AMH, a glycoprotein belonging to the transforming growth factor-beta family. AMH mediates the regression of Müllerian ducts in the developing male fetus. However, the role of AMH in the regulation of primary Sertoli cells remains unclear. The present study was designed to investigate the effect of AMH on the viability and proliferation of Sertoli cells, with an additional focus on stem cell factor (SCF). Sertoli cells were treated with increasing concentrations of rh-AMH (0, 10, 50, 100, and 800 ng/mL) for two days. The results revealed that AMH increased apoptosis, which were confirmed by a significant increase in Caspase-3 and Bax and a decrease in Bcl-2 protein and mRNA expression (P<0.01), at high concentration (800 ng/mL), and promoted proliferation, which was verified by an increase in PCNA mRNA (P<0.05), at low concentration (10 ng/mL). Furthermore, rh-AMH activated the non-canonical ERK signaling pathway, the phosphorylation of which can be inhibited by ERK-inhibitor (U0126) only at low concentrations. In addition, a minimum of 500 ng/mL of rh-AMH activated SMAD phosphorylation in SCs in vitro. Similarly, low concentrations of rh-AMH (10-50 ng/mL) significantly increased (P<0.05) SCF mRNA and SCF protein levels. These findings indicate that AMH differentially regulates the fate of Sertoli cells in vitro by promoting proliferation at low concentrations and apoptosis at high concentrations. In addition, AMH increased the expression of SCF, an important regulator of Sertoli cell development. Therefore, AMH may play a role in Sertoli cell development.

Factors affecting modern contraceptive use among fecund young women in Bangladesh: Does couples’ consensus in household decision making matter?

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University of Rajshahi, Bangladesh

Objectives the purpose of the study was to explore the effects of couples’ consensus in household decision making matter on using modern contraceptives among fecund young women in Bangladesh. Methods this study utilized a cross-sectional data (n=3,744) extracted from the Bangladesh Demographic and Health Survey 2011. Differences in the utilization of modern contraceptives by socio-demographic characteristics were assessed by χ2 analyses. Binary logistic regression was used to identify the determinants of modern contraceptive use of women. Results Husband-wife joint participation in decision making on women's health care, child's health care and visiting family members or relatives significantly influenced modern contraceptive use. Desire for a child after two years go by and want no child at all contributed the most to increasing modern contraceptive use followed by receiving FP methods from FP workers. Conclusion Government should focus on developing negotiation skills in young women by creating educational and employment opportunities since husband-wife joint participation in decision making increases contraceptive use.
Myat Thu Thu Win  
AIMST University, Malaysia

Obesity is rising in the United State population and more than one third of the populations are obese. In Malaysia, 17.7 per cent of the population is obese, 30 per cent of the population is overweight out of 30 million populations according to the National Health and Morbidity Survey of 2015. It is suggested that obesity contribute to male infertility. 15% of reproductive age human couples have impaired fertility and half of the cases are due to male infertility. Hypogonadotropic, hyperestrogenic hypogonadism occurs in obesity because of alteration in the hypothalamic-pituitary-gonadal axis both centrally and peripherally. One of the reasons is that adipose tissue-derived factors like leptin and adipokines regulates testosterone production and inflammation. That will lead to systemic inflammation as an increased in reactive oxygen species and sperm DNA fragmentation. In one study, computer-aided sperm analysis (CASA) was done and showed that lower volume and sperm count, concentration, reduce motility and higher percent head defects as well as oligospermia and asthenospermia occurred more in obese men. Obesity induced mice study showed that decline in sperm motility and fertilization capacity was due to epididymal CRISP4 expression disrupted and inadequate secretion. So, sperm of high fat diet fed mice were treated with CRISP4 before in vitro fertilization and found that fertilization rate improved. Other animal study revealed that wuziyanzong pills can improve sperm quality and reduce the apoptosis of spermatogenic cells in oligoasthenospermia model rat. Moreover, Yishen Shengjing capsules, kidney tonifying capsules, can improve DBP-induced productive function injury, increase sperm motility and concentration, decrease sperm abnormality. In conclusion, reduction of infertility in obese men, CRISP4 may play a critical role as well as wuziyanzong pills and Yishen Shengjing capsules will also be useful in man but human clinical trials should be done for further studies.