

## **Journal of Psychosomatic Obstetrics & Gynecology**



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## Abstracts of XVI International Congress of ISPOG, Venezia, Italy, October 28 – 30, 2010

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# Journal of Psychosomatic Obstetrics & Gynecology

The Official Journal of the International Society of Psychosomatic Obstetrics and Gynecology

## **ABSTRACTS OF**

XVI International Congress of ISPOG

Venezia, Italy

October 28-30, 2010



# Journal of Psychosomatic Obstetrics & Gynecology

The Official Journal of the International Society of Psychosomatic Obstetrics and Gynecology

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#### **ABSTRACTS**

#### OL<sub>1</sub>

## The Mastcells: the bridging factor between psyche and soma in chronic inflammation and pelvic pain Alessandra Graziottin

Center of Gynecology and Medical Sexology, H.San Raffaele Resnati, Milan, Italy

Background: How can the psyche work on the body well-being? And how can it modulate the process of chronic inflammation, where biological factors seem to be prominent? Mast cells (MCs) are the protagonist of the dialogue between body and mind when inflammation is concerned. They are distributed in all organs and vascularized tissue, where they work as immune sentinels. They are recruited to the sites of inflammation, where they orchestrate the inflammatory response. MCs contain different angioactive, pro-inflammatory and neurotrophic factors, packed in vesicles which differentially release their content outside the cell into the tissue, according to the type and timing of damaging factors ("agonists" of the degranulation process), among which "psychogenic" factors play a role not yet fully appreciated.

Aim of the presentation: to update the knowledge and understanding of mastcell's role in chronic pelvic pain (CPP), focusing on endometriosis, vulvar vestibulitis, irritable bowel syndrome and interstitial cystitis and their psychosexual correlates. Method: review of the literature.

Results: Increasing evidence supports the prominent role of upregulated mastcells in the maintenance of chronic inflammation and in the shifting from nociceptive to neuropathic pain in the affected tissues, contributing to CPP. Depression and anxiety are proven to worsen pain perception: either with a central mechanism, and the activation of the corticotropin-releasing pathway, and/or possibly through a peripheral neurogenic pathway mediated by the mastcell release of inflammatory molecules. Increasing evidence suggests that antidepressant work (also) via an anti-inflammatory mechanisms, directly reducing the mastcell's release of inflammatory molecules. Conclusions: MCs are the real conductor of the inflammatory process. In CPP, MCs are the maintaining contributor of chronic inflammation, leading to the shift between nociceptive and neuropathic pain. New therapeutic lines should consider reduction of agonists (inclusive of psychogenic stimuli) and/or using drugs ("antagonists") that can down-regulated the release of pro-inflammatory, angiogenic and neurotrophic factors from the mastcells.

#### PS<sub>1</sub>

#### PTSD: Where does it come from? Origin and development

Wijma Klaas

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An important part in the development of human functioning is emotion s with its various functions. The emotion anxiety involves the warning system for potential dangers, which means an appraisal of what might happen. For natural reasons, such appraisal is a guess, i.e. in advance the final result that is appraised, is not certain. Progenitors of humankind developed by interaction of their biological, psychological and social capacities. In this development, at first, anxiety reflexes were sufficient for survival. Later on language developed, which in its turn included the development of reasoning and thinking. While reasoning and thinking increased, misjudgements were possible, which became

significant for anxieties and its aberrations. Amongst the anxiety disorders Post-traumatic Stress Disorder (PTSD) is the most complex anxiety disorder, comprising both over reactive reflexes and erroneous reasoning. When certain criteria are met, women can develop postpartum PTSD. Central for such development is that, during birth, they label the event as trying, offending and threatening, experiencing intense fear, helplessness or horror. Postpartum, this labelling (made during birth) is cognitively repeated, which involves involuntary re-experiences of the event, active avoidance of everything that can remind the m of the event, numbing of feelings, and a high state of arousal.

#### PS<sub>2</sub>

## **How can we understand it? Theoretical models** *Ayers S.*

Evidence that a proportion of women have PTSD after childbirth is increasing. This talk considers conceptual issues and that arise with PTSD after birth, as well as theoretical models of PTSD and how these contribute to our understanding of postnatal symptoms.

Conceptually, childbirth differs to other traumatic events in many ways. For example, it is predictable, involves large physiological changes, includes positive aspects, such as the birth of a baby, and is viewed positively by society. It is therefore important to consider whether PTSD after childbirth is comparable to PTSD after other events. The validity of current diagnostic criteria for PTSD has also been questioned.

Evidence suggests a traumatic event is neither necessary nor sufficient for PTSD; and factor analytic studies find inconsistent clustering of symptoms. Postnatal women appear to show two clusters of symptoms: re-experiencing and avoidance; and numbing and arousal.

Theoretical explanations of PTSD include stress response (e.g. Horowitz, 1986) and cognitive theories (e.g. Ehlers & Clark, 2000). There is also increasing recognition of the social context of trauma and the contribution of interpersonal factors such as support and attachment style (e.g. Charuvastra & Cloitre, 2008). The application of these theories to PTSD after childbirth is considered.

#### PS<sub>3</sub>

#### How and where do we meet it? Clinical appearance and prevalence

Ryding Elsa Lena

Post-traumatic stress disorder (PTSD) following childbirth should not be overlooked when obstetricians, midwives, psychiatrists and general practitioners see women with mental symptoms in pregnancy, and in the postnatal period.

The prevalence of PTSD following birth is about 2% in the Western world, and may be higher in other countries (i.e. 6% in Nigeria). Many more women suffer from symptoms of post-traumatic stress, although not the full disorder. The comorbidity with depression is high, and PTSD is an important differential diagnosis when assessing for postnatal depression.

We meet PTSD in multiparous pregnant women with an intense fear of childbirth following a previous traumatic birth experience. These women often want to avoid dealing with the trauma and request a caesarean section. At least until a caesarean is granted they may suffer intensely from unpleasant memories, flashbacks and nightmares. Bonding with the fetus may be delayed or absent. We also meet PTSD in new mothers who continue to relive their traumatic delivery, who struggle to avoid the memories and images, and who display all the symptoms of depression. Case stories will be presented.

#### PS4

## What can professionals do? Clinical care and treatment Slade Pauline

Professionals can organise systems of care firstly to prevent the triggering of post traumatic stress following childbirth whenever possible; secondly to identify of those potentially at risk and thirdly to provide psychological intervention where women do experience these responses. Each of these areas will be considered in turn. This paper will in particular outline the current state of knowl-

edge concerning interventions for post traumatic stress symptoms following childbirth. It will focus firstly on interventions for post traumatic stress in generic contexts and how these relate to existing models. It will then consider the pros and cons of extrapolation to the specific childbirth context and review the limited available specific literature.

#### PS5

#### Introduction: The role of concealment in various forms of violence

Wijma Barbro

When violence is discussed in daily speaking, it is usually the direct, abusive events that are implicit. More seldom do we reflect on the reinforcing forces operating behind the scene, as e.g. culture and structures. The concept "the vicious violent triangle" by Galtung points out that no direct violent events occur if not nurtured and legitimized by the structures (e.g. hierarchies) and the culture (e.g. language, moral codes, religion) in which they take place. In concealing violence these parts play a very important, correspond-

ing role, why interventions against violence only can succeed when all the three parts of the "violent triangle" are taken into account. This symposium will deal with different facets of direct events of violence and for each facet focus on both how the aspect of concealment supports and legitimizes that violence continues to take place, and how such silence may be broken.

By doing so, former victims can become active and empowered agents and thus overcoming the worst aftermaths of violence.

#### PS<sub>6</sub>

#### Sexual abuse in childhood - the aftermath and concealment

Leeners Brigitte

Childhood sexual abuse (CSA) can have a variety of negative consequences on gynecological consultations, pregnancy, birth and the early neonatal period. Correlations have been described for gynae-cological and obstetrical complications as well as with risk factors for such complications. However, most obstetricians are not aware if their patients have a history of CSA. One the one hand medical health care providers do not ask for sexual abuse experiences when taking a patients history on the other hand patients do not dare to mention such experiences as they often failed to receive adequate support when trying to do so.

The lecture will present the current stage of knowledge regarding consequences of CSA on gynecological and obstetrical care based on actual literature as well as results from own studies performed in cooperation with the German Frauennotruf (a nationwide society providing care for sexually abused women). It will further give an overview about specific needs in gyneco-obstetrical care of women after CSA. Also the common practice in dealing with sexual abuse experiences will be commented in order to facilitate the development of adequate support models for women with such experiences.

#### Abstracts

#### PS7

8

#### Abuse in health care - theories of concealment and intervention

Wijma Barbro

Our earlier studies have shown that every 5th Nordic gynecology patient has ever felt abused in health care (AHC); experiences which often created long lasting suffering. Among staff at a Dept Ob/Gyn we found an unwillingness to recognize such suffering. To explore options for intervention, we scrutinized theories of Glover, Galtung, Zimbardo, and Boal. Based on Boal's work, we performed 20 Forum Theatre workshops with the staff mentioned above. Which mechanisms of concealment were at hand?

Direct events of violence were individualized, as were guilt and shame. This helped hiding the cultural and structural components of the violence; i.e. how staff as witnesses felt silenced and not in a posi-

tion to intervene. Therefore abuse could continue and new direct events again became legitimized by staff's silence. Concealing also eroded staff's moral resources and made them feel disempowered - as there seemed to be no way out - and thus even more prone to conceal.

During the workshops staff recognized that shame and guilt were shared experiences and that their silence promoted violence. They practiced intervening in concrete situation which took away fear and was empowering. Staff discovered the supporting potential of the group.

Intervention strategies will be further explored.

#### PS8

## Abuse in health care – results of an intervention model with Forum Theatre $Swahnberg\ K$

Epidemiological studies have shown that abuse in health care (AHC) is common among men and women in Sweden, who report long-lasting suffering from these experiences. The patients' suffering urged us to design interventions against AHC. The aim in the present study was to evaluate such an intervention based on Forum Theatre.

In 20 workshops different staff categories at a women's clinic used own examples of AHC to create scenes, which were role-played and stopped at the moment when the moral dilemma was evident. Staff then took turns in enacting different trials of finding a way out, until all agreed that the best possible solution had been found.

For evaluation we interviewed staff; before (N=21) and after the intervention (N=10). All staff at the clinic was asked to fill in questionnaires before, during and after the intervention period.

Results from both interviews and questionnaires showed that the resistance towards AHC had decreased, there was a willingness to talk about AHC, and staff had learned to act differently against AHC; which was also exemplified by the informants.

Our conclusion is that Forum Theatre was an efficient tool for breaking silence and provided staff with alternatives to handle AHC.

#### PS9

## Abuse in health care – results of an intervention to reduce routine episiotomy in Brazil $Bastos\ Maria\ H$

Background: Around the world selective episiotomy policy and practice has shown benefits for maternal health outcomes and women's experiences of childbirth (Carroli and Mignini, 2009). However, most hospitals providing obstetric care in Brazil have not reviewed clinical policies or encouraged clinicians to revise routine practice to reflect this evidence and little is known of women's views of episiotomy.

Methods: This exploratory study sought to identify behavioural factors associated with performance of routine episiotomy for normal birth. A survey of knowledge and attitudes toward episiotomy was conducted with 52 obstetricians, nurse-midwives and midwives and 217 postnatal women in 3 hospitals sites from the Public Health System of São Paulo, Brazil. Semi-structured interviews and focus groups with key stake-holders and opinion leaders further explored the context in which routine episiotomy practice

is embedded.

Results: The analysis explored congruence between knowledge, attitudes and clinician's professed practice regarding episiotomy. Findings are presented in the context of inter-professional, institutional and popular culture and suggest that knowledge of the benefits of restricting the use of episiotomy is lacking among clinicians and women.

Discussion: This study explored the context in which routine episiotomy for normal birth is practiced. We will use our experience to reflect on some pertinent issues in the design and implementation of complex interventions to change episiotomy practice.

Conclusion: This study shows clearly that unless the beliefs and attitudes of all relevant stake-holders are addressed, revisions to clinical practice to implement evidence based care may not succeed.

#### Violence against women in war - a concealed and gendered weapon

Di Palma Sara Valentina

In the Nineties wars in Bosnia and Rwanda women are intentionally humiliated, violated, raped as a weapon of war. Gendered violence is carried out during the fights and thinking of the future, hitting women to break the links with their belonging communities through compulsory births of sons born from violence (Bosnia) or through HIV/AIDS infections (Rwanda). The purpose is to spread which I call the seed of hatred: a psychological, physical and symbolic violence, carried out for an aftermath in which the women are rejected by their communities and forced to leave and live in shame and silence.

But their silence is deafening, since it leads to investigate the reasons why the international and public attention are focused on justice and reconstruction of post-war societies in the aftermath, with still scarce attention to the women's suffering and memory. Due to the high impact and consequences of violence, a reparative justice (compensation, restitution, conciliation) is still not achieved. Yet, it could be reached through a new feminist perspective: to recognize and deconstruct the mechanisms of violence in and after conflicts, to focus on the political and feminist engagement, is necessary to empower women and help them to reconstruct their lives.

#### **PS11**

#### Complementary approach in evidence-based medicine

Neri Isabella, Battista Allais Giovanni\*, Facchinetti Fabio Mother-Infant Department University of Modena and Turin-S.Anna\*, Italy

Traditional Chinese Medicine was applied also in western countries for breech presentation, hyperemesis gravidarum and also to favourite labour onset and manage labour pain. However good scientific evidences were reached just for some of the above indications.

Breech presentation represents in western countries an absolute indication for elective caesarean section. External cephalic version is purposed but the doubt about the safety and the low compliance of the women limited its diffusion. Following the indications of Traditional Chinese Medicine, acupuncture and moxibustion were investigated as a alternative methods to resolve breach presentation. A recent literature revision concluded that acupuncture and moxibustion are able to significantly obtain cephalic version in respect to observation. Further studies are requested in order to clarify the more effective mode and timing of application.

The effectiveness of acupuncture in reducing nausea and vomiting during pregnancy were demonstrated by several reports. Further studies are claimed to verify the duration of the symptoms relief. Acupuncture was also purposed to manage labour pain. The studies are scarce and conflicting.

The management of prolonged pregnancy and expectant versus elective induction of labour remains a controversial issue among obstetricians. However, pharmacological labour induction is correlated to fetal and maternal side effects. Recently the attention was focused on the possible use of acupuncture to favourite the labour onset, as a "pre-birth treatment" described also in the ancient Chinese texts. The studies until now published suggested a weak effect of acupuncture when applied daily 3/5 days before planned induction. Instead positive results were obtained by a earlier acupuncture application starting from the 35a-36a week.

#### PS12

#### Kampo Medicine and female psychosomatics

Takamatsu Kiyoshi

Department of Obstetrics and Gynecology, Tokyo Dental College Ichikawa General Hospital, Ichikawa, Japan

Kampo therapy is a traditional treatment used in Japan. Based on classical Chinese herbal medicine, this therapy was practiced for centuries and has been refined and improved over time. It is used commonly in clinics today with more than a hundred types of granulated Kampo extracts covered by medical insurance.

Kampo medicine rests on the underlying philosophy that the mind and body are one and always connected, and require a mind-body balance. Kampo therapy is more effective with functional rather than organic diseases, and with chronic more than acute diseases. Accordingly, Kampo therapy is suitable for psychosomatic disease, especially female psychosomatic disease. There is little stigma against and patient resistance to Kampo formulas as their preparations are derived from natural substances and are relatively safe.

Due to its long history and a medical philosophy dissimilar to that of western biomedicine, Kampo medicine is narrative-based and lacks the science of pharmacological mechanisms. However, an increasing number of studies have been published in recent years on the efficacy of Kampo therapy in the treatment of functional dysmenorrhea headache PMS, and climacteric disorders.

Although further evidence is needed, Kampo medicine is a therapeutic modality that should be considered in the treatment of female psychomasomatic disease.

#### Psychoanalysis and Psychosomatic Gynaecology

Damonte Khoury Carlos

In the 50's the Hungarian psychiatrist Michael Balint created psychoanalytically oriented groups in order to help Doctors to deal with subjective difficulties. The French psychiatrist and psychoanalyst Jacques Lacan updated Freud theories and emphasized the agency of Language in the human subjective constitution.

He described three orders entangled in a borromean knot, The Real, The Imaginary and The Symbolic, and clinical specific characteristics of the Psychosomatic Phenomenon.

Clinical examples will be discussed.

Gynaecology and Psychoanalysis are today neither complementary, nor antagonistic. Objectives, methods and diagnoses of Clinical Structures are different. It is not the matter to perform Psychoanary

nalysis in the Medical act.

However Obstetricians and Gynaecologists deal with women, and women suppose we have the knowledge of everything that happens in their life stages and their body, in order to give meaning to their suffering and symptoms.

If we want to have a more useful and satisfying clinical relationship with our patients we must recover the management of words and be warned about the potential of not answering immediately to all questions as if we had all the answers. If we are acquainted with psychoanalytical findings, we may decide the best opportunity for medical intervention, regardless of whether it is pharmacological, surgical or verbal.

#### **PS14**

#### The Mine of Kryptonitis: adolescent's sexual counselling and abuse hints

Turchetto Antonella Debora

Superman becomes weak and wicked if coping with Kryptonitis, the alien green rock.

The best gynecologist may be overwhelmed if, during his normal counselling on adolescent's sexual life, has to cope with hints or explicit items dealing with past or present violence or abuse.

The worse management of this event is to act any form of denial or reject, because this behaviour will add pain on pain and damage on damage. This kind of reaction is not so rare because even the best professional may be deep touched and blocked being aware of the wound in the patient's psyche.

So we have to be prepared and possibly trained to listen to these scaring and distressing disclosures and accept the fact that there's not an immediate and easy kind of cure, but only the duty to stay aside and call for help.

#### **PS15**

## "Designer vagina": Consensual declaration in reference to intimate surgery and its psychosomatic aspects Wimmer-Puchinger Beate

The basis of healthy psychological development to accept oneself and one's own body is formed in early childhood. Girls are generally more exposed to competition for the "perfect look", and this starts as early as pre-school and school age. The message of what we should look like, of the ideal body image, is everywhere. It has been proven that girls as young as 11 and 13 years are already increasingly unhappy with their own bodies or even dislike what they look like. It has also been shown that media images of the "perfect body" in a globalised media and information society have a negative influence on the self-esteem of women and girls. The body increasingly becomes a status symbol and a consumer item on the beauty market.

The number of scientific articles on the perception and image of the body has increased enormously over the past 10 years. The ideal body images have come to include the male and female genitals. Feelings, sensations and sexual drive are reduced to the genitals and their looks from a psychosomatic point of view. Studies have shown that the main motives why women decide to have intimate surgery are feelings of dislike for the appearance of their external genitals, sexual reasons and impairment in sports activities. Intimate surgery is marketed to women as a way to enhance sexual gratification and genital appearance.

The American College of Obstetricians and Gynaecologists already drew attention to this problematic development in 2007. The Dutch Society of Plastic Surgeons and the Dutch Society for Obstetrics and Gynaecology have approved a guideline to deal with this development. In Vienna, we have developed guidelines under the Vienna Women's Health Programme and prepared a consensus paper on female intimate surgery. The consensus paper was drawn up under the auspices of the Austrian Federal Ministry for Women, the Austrian Federal Ministry of Health and the Executive City Councillor for Public Health and Social Affairs of the City of Vienna.

The guidelines were formulated in cooperation with the Austrian Medical Chamber, Municipal Department 57 – Promotion and Coordination of Women's Issues of the City of Vienna, the Austrian Society for Plastic, Aesthetic and Reconstructive Surgery, the Austrian Society for Gynaecology and Obstetrics, the Austrian Society of Psychosomatics in Gynaecology and Obstetrics, the Academy for Sexual Health and the Professional Association of Austrian Psychologists.

The guidelines include chapters on ethics, legal regulations, contraindications, sexual-medical risks, motives, anamnesis, quality criteria and recommendations.

## Why do we have a trend to female genital surgery? Borkenhagen Ada

The alteration of the female body, especially female genital has a long history and can be found in many cultures. Moreover, female genital cosmetic surgery (fgcs) seems to be become more popular. Rejuvenated, minified, and otherwise beautified female genital has become a cultural norm. What purpose does fgcs serve for today? Why today female genital has to be decorative? Two interpretations can be found regarding this new trend. The first one refers to fgcs as a sign of liberation and emancipation of women. Using fgcs is

interpreted a way of enhancing the sex appeal of a women - to

make them able to enjoy sex. The second discourse centres around the fact that alteration of female genital by surgery is a way of regulation and normalization of women. Adherents of this view stress that for example labia minora, when being long and not covering labia majora, are be seen as ugly and not normal.

The fact that female genitals are now more visible in mass media than ever is a clear indication that for the first time a beauty norm of female genitals has been established. The current fashion of fgcs is only a result of this new beauty norm.

#### **PS17**

#### Guideline for gynaecologists and surgeons

Paarlberg Marieke K, Weijenborg M., Karim R.B., Hage J.J.

Gynaecologists and plastic surgeons are more and more frequently consulted with complaints of perceived large labia minora. Until recently, no guidelines were published on this issue.

In June 2008, the Dutch Society of Obstetrics and Gynaecology and the Dutch Society of Plastic Surgery have issued a multidisciplinary guideline on 'Counselling and treatment of women with a request for reduction of the labia minora'.

In this guideline, the request for labia minora reduction is put in a bio-psycho-socio-cultural perspective and the medical ethical principles are considered. Based on the available scientific evidence, the guideline aims to make recommendations on the way gynaecologists and plastic surgeons should deal with the request for labia reduction surgery. An individualized protocol has to be carried out when this practical guideline is being followed.

Attention is paid to the background of the request for labia minora reduction, for example body dismorphic disorder must not be missed. Cooperation with a psychologist and/ or sexologist is frequently necessary for the assessment of anxiety and depressive symptoms and/or body dismorphic disorder. Physical examination is carried out together with the patient while looking at her genitals via a mirror, The wide age dependent variation of the normal anatomy of the labia minora is explained. The patient should be informed about the details of the operation, the indications, contraindications, the potential complications and long term effects. It is advisable to show the normal wide variety of the vulvar anatomy using booklets and CD-ROMs manufactured for this purpose.

#### PS18

#### Pros and Cons of cesarean section on demand

Tranquilli Andrea L.

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The practice of elective cesarean section (CS) on maternal demand is increasing worldwide. The request to avoid labor and every potential risk that women believe related to labor and vaginal delivery, poses new challenges to medical practice.

From a legal point of view, the maternal demand has to be considered an informed request and should be considered as a reversed informed consent.

From a clinical viewpoint the request possibly antedates the need for a section that may emerge during any labor. This is particulary true under conditions of previous infertility, advanced maternal age, assisted reproduction.

The issues to consider are both maternal (hemorrhage, lacera-

tions, infections, anesthetic complications, subsequent placenta previa and accrete, subsequent fertility, urinary incontinence, pelvic organ prolapse) and fetal-neonatal (fetal mortality, intracranial hemorrhage, neonatal asphyxia, and encephalopathy, birth injury, respiratory morbidity, iatrogenic prematurity, neonatal infections, lenght of neonatal hospital stay).

Apart from any possible ethical or clinical conflict between the patient's and the ohysician's right to autonomy, special consideration should be given to individualize the treatment, planning delivery after 39 completed weeks to warrant neonatal lung maturity and rejecting solely motivated by the fear of pain, where pain management should be warranted for all women.

#### Should we follow patients' autonomy?

Maier Barbara

University clinic of Obstetrics and Gynaecology SALK, PMU Salzburg

Introduction: Autonomy is one of the most often used value terms in medicine of the 21st century. It is nevertheless an open context term having to be reduced from the abstract to the concrete: the person, the context and the consequences.

Methods: In 2000 a study was performed at the Ob/Gyn Salzburg to investigate how often a wish for a Caesarean section without a medical indication occurs. Ethical analysis on the basis of the figures concerning Caesarean on demand.

Results: 1000 women were screened for it in half-structured interviews. Only 5% of the women (exactly 50 out of 1000) raised a desire for a Caesarean section. Finally 2.5% delivered vaginally, 1.8% were delivered with a Caesarean section. Concerning satisfaction with the mode of delivery all except two were satisfied - guaranteed

none of the children was severely affected. We checked the data 10 years later and looked at Caesarean section on demand from April 1st 2007 until April 15th 2010.In 6666 births we performed 79 caesarean sections on demand (1.2%).

Discussion: Ethical critical analysis of medical indications and patients' demands - the terms are open-context themselves - involves:

- Autonomy is an open context term and depends upon care in pregnancy and previous experiences.
- Autonomy and responsibility are dialectically interwoven and have to be analyzed in terms of consequences There are possibly severe implications on future pregnancies and deliveries for mothers and children.

#### **PS20**

#### Women choise of mode of delivery: a matter of information and professional attitudes

Facchinetti Fabio

Mother-Infant Department, University of Modena and Reggio Emilia

The social attitude toward delivery is changing. Increasing demands toward a choice of the mode of delivery are expressed by women. It is therefore of paramount importance that the information on Caesarean Section (CS), Vaginal delivery, peridural analgesia and so on are correctly conveyed to and appropriately interpreted by women.

The issue of Vaginal Birth after CS (VBAC) is paradigmatic in this respect since it is an health issue that should be evaluated considering both health system organization and socio-cultural context, local resources and expectancies.

A review valued the balance of risks and benefits of trial of labour versus elective repeated CS (ERCS). Among women with a predicted CS risk of less than 20%, the incidence of uterine rupture was 2.0/1.000 while among women with CS risk of greater than 40%, the incidence of uterine rupture was 9.1/1.000, relative risk 4.5 (95% CI 2.6 to 8.1). Therefore, women who were at low risk

of emergency CS were also at low risk of uterine rupture, including catastrophic rupture leading to perinatal death. However, the communication of such data and hence women choice is function of "physician factor", meaning that in the presence of comparable obstetrical risk factors, a woman's risk of receiving another CS is influenced by the practitioner's attitude and by the institution's routine.

Professionals' attitudes and convenience, in addition to cultural issues, have important roles in influencing maternal preferences, requests and outcomes. Women should be accurately informed on the risks and benefits of the different interventions associated to giving birth. Timing and mode of information are crucial. If adequately counselled, women who are oriented to CS in absence of clinical indications or those preferring a ERCS instead of a trial of labour change their opinion in a large proportion of cases, even if doctors do not acknowledge it.

#### PS21 Practical steps in counseling Kentenich H, Rosemeyer M

Anxiety during pregnancy is a normal finding. The hierarchy of fears finds malformation of the baby, complications during the delivery, prolonged delivery, loss of self-control and pain at the top of the list.

In our clinic, we counsel patients regarding caesarean section on demand during pregnancy. A psychologist or psychotherapist carries out counselling in order that both medical and psychological fears are taken into account.

In a survey on counselling we had 40% primimpara, 42% after caesarean section, 9% after spontaneous delivery and 9% after vacuum – extraction, who requested caesarean section for psychological reasons. Of the multipara, 93% had previously experienced traumatic child-birth (post-traumatic-stress-disorder).

In counselling we have different opportunities. First choice is to start with a normal onset of delivery and "see what happens". If the medical and psychological situation is normal, spontaneous delivery can be aimed for.

All patients are assured that a caesarean section will be carried out on demand at any time during delivery.

As a result, 46% of the patients wanted a caesarean section on demand after counselling. 54% decided to attempt a spontaneous delivery. Of those, 26% achieved a normal delivery, 23% had a secondary caesarean section and 5% a vacuum extraction.

In conclusion, all patients demanding a caesarean section need counselling. The aims are avoidance of traumatic childbirth experience and, if possible, normal vaginal delivery.

## Gender-identity, sexual orientation and brain structure structural en functional sex differences in the brain $Swaab\ R$

Netherlands Institute for Neuroscience, Amsterdam, The Netherlands

Sex differences are expressed e.g. in playing behaviour and drawings, reproduction, gender-identity and sexual orientation, and the incidence of neurological and psychiatric disorders. They are based upon structural and functional sex differences in the brain that arise during development by an interaction of sex hormones and the developing neurons, while direct genetic effects are probably also involved. Factors influencing this process are mutations or polymorphisms in the sex hormone receptors, abnormal prenatal hormone levels and chemicals that interact with the action of sex hormones on the brain during early development. An influence of postnatal social factors on gender identity or sexual orientation has

so far not been established. Sexual differentiation of the human brain takes place by direct effects of testosterone as is clear from people with mutations in the androgen receptor, estrogen receptor or in the aromatase gen.

In transsexual people we observed a reversal of the sex difference in the Bed Nucleus of the Stria terminalis and in the Interstitial Nucleus of the Anterior Hypothalamus-3. Various brain differences related to sexual orientation have now also been reported. In addition, there are sex differences present in the brain in depression and in Alzheimer's disease.

#### **PS23**

#### Hormones and sexuality

Weijmar-Schultz Willibrord

A recent view is that sexual desire originates as the result of interplay between a sexual response system and stimuli that activate this system. It follows from this that wanting to have sex does not precede sexual arousal, but is concomitant or resultant. Consequently, sexual motivation is no longer seen as something that comes from within, but as an emotional state that manifests itself when certain conditions are met. Important conditions are an intact system that enables sexual response, stimuli with positive sexual meaning that can activate the system and a context in which people can give access to these stimuli. Biological, psychological and relational fac-

tors can stop or disrupt the activation of the sexual system and therefore be the cause of reduced sexual desire and arousal problems. However, research into the exact roles of the different factors is still scarce. At present, relatively too much attention is being focused on pharmacological treatment options for reduced desire and arousal problems. As it is widely acknowledged that sexual desire and arousal in women seem to be strongly associated with psychological and relational factors, further research into the influence of these factors would be very worthwhile.

#### PS24

#### Oestrogens in the treatment of premenstrual depression, post natal depression and climateric depression Studd John

Depression is more common in women than men with the excess beginning at puberty and being no longer apparent five years after the menopause. It is significant that depression occurs at times of hormonal flux such as adolescence, the post-natal period, the premenstrual days and the years around the time of the menopause. This climacteric depression is usually at its worst in the two or three years before the periods stop and is also affected by the cyclical depression of severe PMS.

This combination of post-natal depression, PMS and climacteric depression is as a triad of hormone related mood disorders best called "reproductive depression" and often occur in the same vulnerable women. There is good evidence from randomised placebocontrolled trials that this depression is improved using moderately high dose oestrogens transdermally either by patches, gels or hor-

mone implant. This improvement occurs even in women who are not responsive to anti-depressants and in my view should be first-line therapy.

These patients respond well to oestrogens but are often progestogen-intolerant responding badly to the necessary cyclical oral progestogens needed if they still have a uterus. Such patients benefit from the insertion of a progestogen releasing (Mirena) intra-uterine system. Thus long-term therapy may be continuous transdermal oestradiol plus a Mirena coil producing the mental tonic effect of moderately high dose oestrogens without the bleeding or the cyclical changes that occur with progestogen tablets. Occasionally women with severe progestogen intolerance are best treated with hysterectomy, bilateral salpingo-oophorectomy and long term oestrogen and testosterone replacement by implants, gels or patches.

#### 14 Abstracts

#### **PS25**

#### PMS/PMDD and autonomic function

Matsumoto Tamaki

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Up to 90% of reproductive-age women report experiencing one or more symptoms premenstrually that can alter behavior and well-being and affect family, friends, and working relationships. Not-withstanding its prevalence, however, research has not yet demystified this enigmatic condition, commonly known as premenstrual syndrome (PMS) or more severe PMS, premenstrual dysphoric disorder (PMDD). Despite inconclusive etiopathogenesis, altered function or even slight disorder of the autonomic nervous system (ANS)—which plays a vital role in reflecting mind-body interaction and in maintaining homeostasis in the human internal environment—could induce physical and mental changes leading to complaints and ultimately undermining a woman's overall health.

We have measured heart-rate variability as a reliable, non-invasive index of sympatho-vagal activity in women from 20 to 40 years of age with different degrees of PMS during the menstrual cycle. In this session, I will discuss: the extent to which and the manner in which the menstrual cyclicity of ANS activity is associated with PMS. The presentation also covers the following topics: vulnerability to stress, personality traits, social-environmental situations, and cultural backgrounds as possible agents affecting susceptibility to PMS; and, finally, the potential interrelationship between ANS activity and the complex web of bio-psycho-socio-ethical factors relating to PMS.

#### **PS26**

#### Menopause and HRT: effects on brain, mood and behaviour

Genazzani AR, Pluchino N

Department of Reproductive Medicine and Child Development, Division of Obstetrics and Gynecology, University of Pisa

Sex steroids play pivotal neuroactive and brain region specific roles on the Central Nervous System (CNS) through genomic and non-genomic mechanisms. Therefore, their protective effects are multifaceted and brain regions dependent. They encompass system that range from chemical to biochemical and genomic mechanisms, protecting against a wide range of neurotoxic insults. Consequently, gonadal steroid withdrawal, during the reproductive senescence, dramatically impacts brain function, affecting negatively mood, anxiety behavior and cognitive vitality. HRT radically affects brain biology, improving climacteric brain symptoms, but there are important differences between HRT preparations with regard to type and dose of estrogen, type of progestin combination

and route of administration.

Evidences from randomized controlled trials and from cross-sectional and longitudinal studies show that estrogen-replacement therapy preferentially protects against the age-related cognitive impairment in healthy postmenopausal women and decreases the risk of dementia. Although results are not constant across studies, they indicate that treatment with estrogens during the early postmenopausal years might attenuate cognitive aging in women during the latter part of their life. A critical window of time may exist for HRT administration that may delay or decrease cognitive and behavioural changes.

#### **PS27**

#### Psychogenic sterility: A myth?!?

Wischmann Tewes

Initially, psychosomatic research on involuntary childlessness concentrated more on the potential psychic causes of fertility disorders than on their psychic consequences. Beginning in the 1950s, a number of authors inquired into unconscious conflicts as a possible factor affecting or preventing pregnancy ("psychogenic infertility model", i. e. infertility caused solely by psychological factors like stress), notably in women with unexplained infertility. The assumption of a "psychological blockade" in connection with infertility is still widely spread in lay press and even in special handbooks on infertility.

Systematic studies show that there is definitively no scientific evi-

dence for a "psychological blockade" or a specific relationship pattern of the infertile couple being responsible for infertility, nor is there any such evidence that giving up the desire for a child helps to increase the rate of conception. In a small number of cases psychological factors are indeed the sole cause for fertility disorders. Animal studies on the linkage between psychological stress and physiological mechanisms have indicated correlations between distress and reproductive restraints. However, there are as yet no convincing systematic studies covering a substantial number of cases that provide evidence of distress as the sole cause of infertility in humans.

#### PS28 Fertility and Subjectivity

Léon Ruiz Rosario

The contemporary culture produces new family structures, increasing the dissociation between sexual encounter and reproduction and raising the demand of assisted fertility.

The fertility medical assistance has had an impressive and successful progress, besides of the treatment of pathologies that cause sterility, it is already part of the gynaecological offer in the health services. At he same time it has created the illusion that any desire can become real.

Every man and woman has subjective reasons for looking for a child: a gift of love, the desire of transcending, to mitigate loneliness, etc. etc. Every child will ask itself about its filiation, about its origin, about its

place in the world.

The possibility of surrogated maternity, frozen embryos, donation and reception of oocytes, semen or anonymous embryos, need more than a strictly scientific, moral or legal approach, that ignores hopes, fears and anguishes present in every fertility demand and treatment. The Psychoanalysis proposes a setting to doctors and patients in order to lodge these vicissitudes and help to construct the symbolic building necessary.

It is about accompanying them, in success or failure, preserving each one's subjectivity from idealism, prejudice and homogenization.

#### **PS29**

#### Impact of infertility on couple sexuality: the psychosomatic burden

Valentino Valeria, Nanini Chiara, Conversano Ciro, Genazzani Andrea Riccardo

OBJECTIVE: We studied the impact of infertility and all the more Assisted Reproductive Techniques on marital relations and sexuality. MATERIAL AND METHOD: Our study is based on a questionnaire distributed in our centre and on a review of literature. RESULTS: Our inquest shows that both partners keep a good relationship in their couple and support each other. But, whereas pleasure during intercourse is little affected, many couples feel a reduction of their desires.

DISCUSSION AND CONCLUSION: This diminution of sexual desires, also noted in literature, can be explained by medical requirements intrusive for intimacy and also by strategies settled by the couples themselves during intercourse in order to optimise the chance of pregnancy. Medical staffs should take into consideration eventual sexual difficulties of the couples. Making them aware that their intimate life must remain or become again an end in itself, and not only a way of procreation, often permits a beneficial change of behaviour.

#### **PS30**

#### Eating disorders and child wish, fertility and pregnancy from a couple's perspective

Norré 7an

Master Clinical Psychology, Master Sexology, Psychotherapist

Reviewing the scientific literature on this topic, the general message is clear: pregnancy is for medical and psychological reasons not preferable, even not advisable when the woman has the core symptoms of an eating disorder. The challenge of clinical practice is how to psychologically translate this scientific evidence to the emotional reality of these couples. Couples were the women have an active or not recognized eating disorder have specific charac-

teristics dynamics of there intimate relationships. The therapeutic way to deal with depends on the complaint of admission. Or they are consulting a fertility clinic with an active child wish, while ignoring the eating disorder reality. Or they are consulting a psychotherapist for eating disorder treatment, but are also struggling with a silent or active childwish. The workshop/lecture presents a way of therapeutically dealing with these issues.

#### **PS**31

#### Psychooncological Interventions and Their Impact On Survival: An Update

Tschuschke Volker

Most controversal in psychooncology is the issue regarding survival due to coping with the illness and the threat. Powerful promoters of the contra party argue permanently and heavily against the option that psychological factors might substantially contribute to survival. At the same time we find as many pro as contra stud-

ies suggesting that this issue is not being resolved scientifically so far. The paper deals with methodological issues of the 18 available studies and poses some questions regarding the role of psychology in cancer.

#### An integrated psycho-clinical model in the management of gynecologic cancers

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Multiple variables concur in determining the quality of the life and they can change during the progress of disease. Identifying them allows accurate and focussed action.

At the stage of surgical therapy, related to treatment that is carried out in hospital, the quality of the life is determined by the sense and value that each patient subjectively attributes to her life experiences, it is therefore centred on the concept that every individual has about herself.

In our experience, in progress since 1985, a great importance has been given both to studying psychological features connected to gynaecological cancer, and to quality of life during hospital recovery with particular reference to the surgical area.

This has brought to determining integrated models and clinical protocols, which the psychologist and the gynaecologist carry on through a bio-psychical modality: the operating assessment conceives the individual in her psycho-physical wholeness. Psychological assessment, during the surgical phase of the treatment, implies taking care of the patient immediately after the diagnostic definition of the disease. This is done by means of a reception visit, discrimination of non- functional areas, analysis of discrepancies, administration of specific tests and determination of the psycho-

physiological profile, until defining target and goal behaviours. Therefore by means of an integrated mode the pre-surgery, surgery, post-surgery stages are activated and all unit staff co-operate: doctors, nurses and operating room staff.

The target is preserving the patient's quality life by means of the quality of the sanitary performance (medical and psychological) and the quality of the organisation. The targeted psychological treatment helps to prevent depressive aspects, avoid obsessive neurosis reactions to the diagnosis, motivate to the chemotherapy and/or radiotherapy that will follow after the patient has left hospital. Beyond the clinic data, a very important life quality index is the satisfaction about the treatment received and the perception of herself that the patient has at the moment of leaving the hospital. Monitoring the quality is part of our protocol: quality that is rendered into indexes which prove remarkably relevant for improving the surgery standard.

In our lecture we will present data referring to the subject. We will submit some follow up studies -six and twelve months after surgery -, referred to our department. These have been carried on with Psychology Department of the University of Padua.

#### **PS33**

#### Cancer and beyond: fertility issues and fertility preservation

Tschudin Sibil

University Women's Hospital Basel, Switzerland

With advances in cancer therapy, the number of young cancer survivors that may benefit from fertility preservation (FP) is growing. All patients concerned, their families and the medical staff involved are confronted with a psychologically challenging situation. The literature investigating psychological aspects of fertility issues and FP in young patients undergoing fertility compromising therapy will be discussed. Further more the results of an online survey conducted by the author in collaboration with School of Psychology / Cardiff University will be presented. The survey assessed attitudes and knowledge about FP techniques, evaluated patients' anxiety and

decisional conflict and the helpfulness of various sources of support in decision making. While health professionals as well as patients and parents consider FP as an important option for young cancer patients, counselling is far from being offered globally to all patients at risk, and providing information seems to be selective. According to the survey knowledge about FP was limited even in a highly educated sample. Besides partner and family, the physician plays an important role as source of information and support. To reduce decisional conflict in this ethically complex context the development of adapted decision and counselling aids would be crucial.

#### **PS**34

#### Coping after breast cancer diagnosis

Geyer Siegfried and Neises Mechthild

In our study it was examined whether different types of coping behavior may affect the course of breast cancer. Based on the earlier and rather inconsistent literature we assumed that passive coping patterns may lead to worse outcomes in terms of higher rates of recurrences and increased risk of premature death.

The data of the study were collected during a prospective 10-years project. Initially 246 patients (age: 30-70 years) with primary breast cancer (tumour stages 1-3) were included in the study, and 201 women were participating in the third interview wave 8 years after diagnosis. Data were collected by means of semi-structured

interviews that were rated according to standardized criteria in order to obtain high inter-rater reliability. Standardized instruments were used for assessing psychological measures and for collecting easily accessible information. Histological and endpoint data and information on the disease course were obtained from patient records, from tumour centers and from the local cancer registry. Coping behavior over time turned out to be highly variable with individual patterns being dependent on the requirements of situations. Endpoint data will be complete by the end of June, thus it remains to be examined whether coping affects prognosis.

#### Psychosomatic Obstetrics and Gynecology - is there a future?

Bitzer 7

Dep Obstetrics and Gynecology University Hospital Basel

Several lines of development can be observed in the past decades with respect to Obstetrics and Gynecology:

- a) Rapid increase in various imaging and interventional technologies with concomitant augmentation of the "instrumentalisation" of the patient-physician encounter
- b) Super and hyperspecialisation due to the increased knowledge and therapeutic options with a necessary " (sub)division and departmentalisation" of the patient among different specialists each one focusing on his(her) part. (department)
- c) Increased impact of genetic and molecular biological research with the underlying belief that the etiology of most diseases can (only) be understood and the diseases treated if the underlying bi-

ochemical mechanisms are discovered thus defining "science" as an exercise which excludes the psychosocial and subjective dimension. These lines lead almost inevitably into the "lost patient" syndrome of modern OB/GYN. This means that the biomedical reductionist methodology is in danger to loose the "person" of the patient as the point of reference. The conceptual framework and the epistemology of Psychosomatic Obstetrics and Gynecology is the necessary counterpart and complementary element to the above described developments. By looking into the subjective, biographical, dynamic interaction between health and disease in the person POG gives insight into pathogenetic and salutogenetic factors which escape to the biomedical microscope.

#### **PS36**

#### Progesterone and progestins: differential impact on CNS

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The increased use of hormonal therapies over the last years has led to improve the knowledge of pharmacological, biochemical and metabolic properties of several progestins and their effects in target tissues, such as the Central Nervous System. Progesterone and synthetic progestational agents are able to modulate the synthesis and release of several neurotransmitters and neuropeptides in response to specific physiological and pathological stimuli. While these actions may relay on differential activation of progesterone receptor or recruitment of intracellular pathways, some of the differences found between progesterone and synthetic progestins may depend on the specific conversion to neuroactive steroids, such as the 3-a, 5-a reduced metabolite, allopregnanolone. This is a potent endogenous steroid that rapidly affects the excitability of neurons and glia cells through direct modulation of the GABA-A recep-

tors activity exerting hypnotic/sedative, anxiolytic, anaesthetic and anticonvulsive properties. Estrogens increase the CNS and serum levels of allopregnanolone and the addition of certain but not all synthetic progestins determines a further increase in allopregnanolone levels, suggesting that the metabolism into this reduced product is related to the chemical structure of progestin molecule used. In addition, depending on specific progestin molecule used, different interaction are found with the estradiol-induced betaendorphin synthesis and release, showing that diverse progestins have specific and divergent actions on the opiatergic system. These results highlight the concept that natural and synthetic progesterone receptor agonists may systematically induce different biological actions in CNS supporting the idea that the progestin has to be clinically selected.

#### **PS37**

#### Menstrual psychosis

Brockington Ian

Menstrual psychosis is periodic psychosis with the following characteristics:

- Acute onset against a background of normality.
- Brief duration, with full recovery.
- Psychotic features, such as confusion, stupor & mutism, delusions, hallucinations or a manic syndrome. (Premenstrual tension or depression does not qualify).
- -An approximately monthly periodicity, in rhythm with the menstrual cycle. The first descriptions appeared about 1850. About 250 cases have now been described, of which 80 have substantial evidence. Its prevalence (at the threshold of hospital admission) is about 1/10,000 women. The great majority of these patients have evidence of bipolar disorder; thus it is another example of bipolar episodes triggered by biological events, such as seasonal changes or childbirth. There is evidence of two menstrual triggers at the mid-cycle and in the late luteal necrotic phase just before menstrual bleeding. Many cases develop early in reproductive life, and it is of great interest that some girls have developed monthly psychoses before the menarche. This is a phenomenon that has also been seen in migraine, epilepsy, diabetes and hypersomnia. Some cease to cycle at the first menstrual bleed,

and others continue in rhythm with menstrual bleeding. Other women develop the disorder after childbirth. An established pattern of episodes linked to the menses may continue during periods of amenorrhoea, and occasional cases have been reported that occur only during these phases. The clinician must establish the diagnosis by precise (usually prospective) dating of episodes. The pattern of monthly relapses offers an opportunity for single patient sequential trials. Many unconventional treatments have been tried, and claimed to be effective, but, in the absence of controlled trials, the most promising appear to be thyroid and clomiphene. Since there is a strong association with abnormal menstruation – amenorrhoea, anovulatory cycles or luteal phase defects - it is recommended that all suspected cases have a gynaecological examination, because correction of menstrual anomalies may be important in treatment.

As for the cause, the occurrence of episodes before the menarche, during amenorrhoea, and after destruction of the ovaries and pituitary all point to the gonadorelin neuronal system in the hypothalamus as the site of the pathological interaction with the bipolar diathesis.

#### Depression, Estrogens and Menopause

Birkhäuser Martin H.

Div. of Gynaecological Endocrinology, Dept. of Obst/Gynaecol., University of Berne, Switzerland

It is well known that the incidence of depression is significantly greater in women than in men. Estrogens modulate mood, mental function and cognition. It has been shown repeatedly that, from birth to menopause, periods characterised by endocrine instability are marked by an increase of the incidence of depressive mood. The dramatic fall of sexual steroids after delivery including estrogens is followed in some women by a postpartal depression. Similarly, in women having a particular vulnerability, the menopausal transition might trigger a depressive disorder. These findings suggest a causal relation between estrogens and depression in women having a personal predisposition. In addition to these epidemiological data, there is suggestive evidence from clinical trials that estrogen therapy improves mood in the menopausal transition, particularly in women suffering from vasomotor symptoms.

In women with climacteric symptoms, estrogens might therefore be considered as a treatment for mild depressive symptoms. There are additional data suggesting that estrogens given as an adjuvant therapy increase the effect of antidepressants in depressive disorders during the peri- and early postmenopause, and, in special situations, in severe depression in the late postmenopause. However, estrogens do not improve even milder forms of depression in the late postmenopause, and estrogens have not been shown to improve severe depression. Furthermore, estrogen therapy might improve cognition, a still controversial issue. In conclusion, there is a causal relation between estrogens deficiency and menopause in women presenting a particular vulnerability. In these women, estrogen administration is the treatment of first choice.

#### **PS39**

#### DHEA administration and its neuroendocrine impact on menopausal symptoms

Genazzani Alessandro D., Chierchia Elisa, Veltri Francesca, Santagni Susanna, Rattighieri Erika, Campedelli Annalisa, Ricchieri Federica, Lanzoni Chiara

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Menopausal transition is a very peculiar moment of women's life during which ovarian failure and aging determine great changes and abnormal function of several organs and systems. Central Nervous System (CNS) is probably the one most interested by such. It is well known that the menoapusal hypoestrogenic condition is characterized by specific symptoms such as hot flashes, insomnia, anxia, changes of mood, depression, dizziness and more. Such symptoms may occur with a great variability, from a weak to a very strong and invalidating intensity so that to ruin the quality of everydays life. More or less in the same time of menopause, an other important change takes place, that is adrenal aging, characterized by a slow progressive hypercortisolemia and by the progressive reduction of DHA and of its sulfate DHEA-S.

It is important to remember that all along human life DHEA is a fundamental precursor for the synthesis of several steroids, especially inside the brain, named neurosteroids. Among this, the most important is allopregnanolone, probably the most effective endog-

enous anxiolitic and antidepressant neurosteroid.

HRT has been offered as effective solution of such disturbed situation but in recent times also DHEA has been introduced as putative replacement treatment in postmenopausal women. This steroid has been demonstrated to be the precursor of all kind of androgens and estrogens, as well as of progesterone. When administered DHEA is able to induce positive changes of all the neuropeptides and neurotransmitters synthesis/secretion, similarly to HRT. Various studies have reported that DHEA administration mimics through its metabolites (i.e androgens, estrogens and progesterone) the efficacy of HRT on all climateric symptom, avoiding some negative effects on adrenal gland. Indeed, though beneficial, HRT is able to further decrease the aging-induced reduced DHA secretion from the adrenal gland while DHEA administration resulted effective in improving adrenal function, thus supporting the possible use of DHEA as replacement treatment in postmenopausal women.

#### **PS40**

#### How to cope with uncertainty during pregnancy

Luchi Carlo

Pregnancy is an extraordinary event which has a great impact on family life and demands a process of adaptation for the future parents. The experience of pregnancy is often accompanied by uncertainties with which mothers somehow have to cope. Uncertainty may be related to the health of the mother or baby, or how labor will be experienced, as well as longer-range issues, such as financial concerns and worries about being a good parent. In any case, the role that practitioners play in these dilemmas is critical. Diagnostic as well as therapeutic developments of prenatal diagnosis have resulted in great technical advances in the medical attendance

of pregnant women; beside the medical aspects, the psychological impact on a pregnant woman and the father-to-be has to be taken into meticulous consideration. The expectations of pregnant women and their partners concerning prenatal diagnosis focus on reducing uncertainty in regard to the normality of the pregnancy. Most pregnant women who decide to undergo prenatal diagnosis wish to confirm their vision of a healthy child or to exclude the fear that it could be unhealthy. By identifying and pointing out an unhindered foetal development, the pregnant women hope to gain security, clarity and conciliation for the course of their pregnancy.

#### Prenatal counselling: pregnant women's experiences and needs

Tschudin Sibil

University Women's Hospital Basel, Switzerland

Informed decision making and informed consent prior to any intervention is crucial in the ethically and psychologically complex field of prenatal diagnosis (PND). Considering the complexity of the contents in the context of PND (i.e. risk estimations, meaning and consequences of a positive finding etc.), it is questionable, however, whether and how extensive pregnant women understand the information provided by their physicians and whether their needs are met by the routinely offered procedures; especially in case of languages and / or cultural barriers. These aspects will be discussed based on literature findings and the results of a study conducted at the University Women's Hospital Basel.

This prospective longitudinal study, including 90 pregnant women in total, aimed at comparing pregnant women from Switzerland and surrounding European countries with Turkish immigrants. It showed that knowledge of all women was limited, but that Turkish women's level of knowledge was significantly lower. Turkish immigrants had higher anxiety levels as measured by the Hospital Anxiety and Depression Scale (HADS), but their overall experiences and satisfaction with PND was even better. To optimise counselling strategies in the context of PND psychosocially and culturally differing needs have to be taken into account.

#### **PS42**

#### Parental reactions after the unexpected finding of a sex chromosomal abnormality in prenatal diagnostic testing

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Objectives . Routine prenatal testing by karyotyping may result in unexpected findings of sex chromosomal aneuploidies (SCAs). In this study we establish the parental perspective of being confronted with the prenatal detection of SCAs and factors concerning their decision in pregnancy follow-up.

Methods . We performed 20 interviews with parents who were confronted with an unexpected diagnosis of SCA after invasive prenatal testing: mosaic as well as full blown Turner syndrome, Klinefelter syndrome and Triple X syndrome were included. Parents who had continued pregnancy as well as parents who opted for pregnancy termination were included. Both parents were interviewed separately 1-10 years after the diagnosis of SCA. The interviews

were analysed with the Atlas t.i. program for qualitative research. Results . Parental feelings of doubt and distress predominate after being told the diagnosis of fetal SCAs. Mothers show more emotional problems than fathers. Parents who had continued the pregnancy were mostly concerned about general quality of life, small stature and future fertility and expressed a general need for medical guidance of their child.

Conclusions. Prior to their consent to the invasive procedure, parents should always be counselled about the possibility of an unexpected finding of SCAs and should be informed about the potential advantages and disadvantages of pre-symptomatic diagnosis of SCAs.

#### **PS43**

#### Sex in later life: physical and psychological conditions Lachowsky Michèle

Age and quality of life is an important issue in our ageing world, with age and sexuality as a main component. But have the paradigms of age and ageing changed in our XXIst century? Is sexuality in later life an acceptable topic, a "normal" current topic of gynecological consultation?

As all health care practitioners are well aware, post menopausal women may experience dyspareunia mostly due to vaginal dryness, or shame because of the changes in their bodies, older men may fear and/or experience erection difficulties. Getting older, their physical, economical and sociological conditions may also have

changed: meaning sometimes disastrous consequences on their self-esteem as well as their approach to sexuality.

If our aim is easy to put into words, it is less easy to put in action: how a "good" gynecologist should be of assistance not only with effective drugs but also with an attentive ear, tactful indiscreet questions and empathic counseling, how a psychosomatic approach (maybe needing Balint's "teaching cum training") can be of great help to both doctor and patient, this is what this presentation hopes to open to discussion.

#### Chronic vulvodynia: psychosomatic aspects

Mimoun Sylvain

Chronic vulvodynia has such an impact on the psychological and sexological behavior of patients that I think it's very important to integrate those elements into the therapeutic plan.

The vulvar region of the body is extremely sensitive whether pleasure, discomfort or pain is involved.

When pain has become obsessive and/or unresponsive to treatment, its influence on psychological attitudes is unavoidable even if organic causes exist. It is often not sufficient to offer a symptomatic treatment. Most of the time it requires several consultations offering both drug treatment and a medical, psychological and sexological approach (which we call psychosomatic approach).

The psychosomatic approach takes into account the psycho-physiological information given by the chronic vulvodynia phenomenon and leans on the treatment plan which is offered to the patient in addition to the prescription of neuro-active drugs (loratadine).

This progressive plan, which aims at reeducation helps the woman to be patient and to become active against her pain.

We have proposed this psychosomatic treatment plan along with a prescription of small amounts of loratadine (10 mg) to a group of 131 women, out of the 113 remaining women (64 group I, 49 group II) 83 have assessed a sedation or diminution of pain (50 group I - 78% and 33 group II - 67%).

#### **PS45**

#### Small penis syndrome - is it a dysmorphophobic state or a psychosomatic condition?

Wylie Kevan

Porterbrook Clinic & Urology, Royal Hallamshire Hospital, Sheffield

The 'small penis syndrome' (SPS) is traditionally recognised as an anxiety or phobia over the size, shape or appearance of a man's own penis. For some, this may become an overvalued idea or even become a delusional state. A man with this syndrome believes that his penis is not large enough but on examination by a clinician, the penis is normal in size (compared with true micropenis). Fears and anxieties concerning the size of his penis may be attributed to narcissism or vanity or in response to derisory remarks by others. What could be the role of psychic distress in creation of the illu-

sion and experience that the penis is shorter or narrower than that observed by the partner or physician?

This presentation will explore an alternative position that SPS is of psychosomatic origin, and is not invariably a state of dysmorphophobia. An appreciation of the male way of thinking about his penis which may be influenced by his personality, sexual orientation and cognitive schemata, his relationships with others, and the role of society will be some of the themes discussed as the psychopathology of the condition is explored.

#### **PS**46

#### Medical diagnostic and therapy

Korell Matthias

Dept. OB/GYN Johanna Etienne Krankenhaus Neuss/Germany

Chronic pelvic pain is defined as intermittent or constant pain in the lower abdomen of at least 6 months duration. It is a symptom, not a diagnosis! It is important to use all available sources to identify the problem and its background including patient's history, characteristics of symptoms, results of examination and also patient's theory about the origin of pain.

Diagnostic laparoscopy is a very helpful tool to further investigate the different causes of pain and is often necessary to exclude relevant disease. It can also provide minimal invasive therapy of e.g. endometriosis or adhesions. The surgical therapy leads to a significant reduction of the symptoms in certain cases. Nevertheless, not seldom the cause of the pain is not detectable and repeated operative interventions should be avoided. There is no direct correlation between the intraoperative findings e.g. extent of adhesions or endometriosis and the patient's symptoms. Additional treatment with drugs could be necessary. Irrespective of the etiology, the patient with chronic pelvic pain should be treated not only surgically and/or with pain "killers" – and integral approach is mandatory.

#### Endometriosis from a psychosomatic view

Maas Jacques

Maastricht University Medical Center, the Netherlands

Endometriosis is defined as the presence of endometrial-like tissue outside the uterus. It's is predominantly found in women of reproductive age. The estimated prevalence of endometriosis is 10% among women of reproductive age, rising up to 30-50% in patients with subfertility and/or pain. Endometriosis is associated with dysmenorrhoea, dyspareunia, chronic pelvic pain and subfertility. To diagnose most forms of endometriosis inspection of the pelvis at laparoscopy is required. However, endometriosis is a complicated disease that often goes undiagnosed for years. There is a significant delay in diagnosis that averages about 8 years. Current treatment options are hormonal therapy and/or surgery. Both are effective,

but there is no real cure for endometriosis and recurrence of endometriosis occurs regularly. The delay in diagnosis, symptoms as pain and fatigue, intensive and repeated therapies as well as a concentration on the disease lead to a variety of consequences concerning education and profession, body perception, self-esteem, partnership and social contacts, sexuality and physic well-being. Difficulties in becoming pregnant represent a further central problem in dealing with endometriosis. Endometriosis should therefore be viewed as a chronic disease and needs a multidisciplinary approach. Biopsychosocial aspects should be integrated into current somatically oriented models of medical support.

#### **PS48**

#### Psychological diagnostic and therapy

Siedentopf Friederike

60-80% of the patients with chronic pelvic pain are diagnosed with a somatoform pain disorder.

In patients with chronic pelvic pain we may find psychopathology as a cause of and a reaction to the pain. A comorbodity to psychosomatic factors like anxiety, substance abuse or depression is common. There is no strong correlation to social factors. The role of physical or sexual abuse remains uncertain. Psychological diagnostic starts with the thoroughy taking of the case history. Specific questionnaires are not recommended.

The doctor patient relationship is of highly importance in diagnostics

and therapy, basically it is part of the basic psychosomatic care in a bio-psycho-social model. There is only scarce data available concerning psychotherapeutical approaches. But there is evidence that a multidisciplinary approach is helpful. The therapeutic strategies have to be individualistic. Simply somatic approaches support the patient's concept that the causes of the pain are of somatic origin. Antidepressant medication may contribute to a better quality of life, their use should be symptom-orientated. Patients with chronic pelvic pain are difficult patients, continued supervision is recommended and helps to avoid negative effects of counter transference.

#### PS49

#### Control of pelvic pain and quality of life following treatment of symptomatic endometriosis

Piccione Emilio

Chronic pelvic pain is a peripheral neuropathic pain in which peritoneal chronic inflammation, pelvic nerve injury and central neural processes of peripheral nerve impulse patterns intraperitoneal oxidative stress-related are involved.

Conservative laparoscopic surgical treatment of endometriosis significantly reduces all parameters of pain and improves quality of life for up to 5 years. Return of pain following laparoscopic excision is not always associated with clinical evidence of recurrence. The rAFS classification of endometriosis was not even predictive of moderate or severe dysmenorrhoea recurrence after conservative surgical treatment for symptomatic endometriosis.

Following surgical excision of endometriosis, non-menstrual pelvic

pain and dysmenorrhea were significantly more likely to persist with increasing junctional zone thickness, suggesting adenomyosis.

Our randomized comparative trial showed that hormonal and dietary therapies post conservative surgery in patients with endometriosis stage III–IV were the most effective treatment, when compared with postoperative placebo administration.

Nutritional intake additioned to antioxidants and polyunsaturated fatty acids appears to be an effective treatment, not only in terms of painful symptoms control, but also in terms of general health perception of women with developing symptomatic endometriosis acting on the cascade of events involving inflammatory mast cell-derived cytokines and algogenic mediators.

#### Predictors of outcome in a cohort of women with chronic pelvic pain - a follow up study

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Chronic pelvic pain is a common condition in women. Of those who consult a general practitioner, only a minority is referred to secondary/tertiary care. Gynaecologists and other medical specialists are hampered in adequate diagnostics and treatments because the aetiology of CPP is poorly understood, pathologies identified may be coincidental rather than causal and the range of effective interventions remains limited. The aim of the present study was to explore changes in pain intensity, adjustment to pain, pain appraisal and coping strategies as well as to evaluate whether baseline pain appraisals and coping strategies and their changes were associated with outcome in the long term. Methods: A follow-up study was conducted on all consecutive women who had visited a CPP-team of a university hospital. After an average period of 3.2 years 64% of them (N = 84) completed questionnaires at baseline and

follow-up. Results: Significant changes were observed: a reduction in pain intensity, an improvement in adjustment to pain as well as a reduction in catastrophizing pain and an increase in perceived pain control. Neither biographic nor clinical variables were related with these changes. Pain appraisal and coping strategies at baseline did not predict changes from baseline in pain intensity. However, baseline levels of perceived pain control correlated with a significant change in depressive symptoms also after adjustment for pain intensity at baseline. Changes from baseline in levels of catastrophizing pain were associated with changes in pain intensity and adjustment to pain. Conclusion: At a 3 year follow-up, improvement in pain intensity in women with CPP was not associated with baseline pain appraisals and coping strategies. A reduction in catastrophizing pain was related to better outcome in the long term.

#### **PS51**

#### Principles of communicating poor intrapartum events to parents

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Poor intrapartum events are one of the worst situations to cope with both for the family and the obstetric team, however poor intrapartum events do happen and they are not always necessarily the consequences of obstetric errors. Communicating bad news means to face a critical difficult situation: the main goal is to create and to safeguard an effective relationship between the physician and the family. The physician should not only provide a technical and honest answer to the simple question but he should also look at the existential dimension of the subjects involved, that's why there is a specific need to receive proper and correct training.

To this regard the "SPIKES" strategy for breaking bad news may be of help. This strategy provides six steps: S stands for setting; P for perception; I for invitation; K for knowledge; E for empathy; S stands for summary and strategy for follow-up. Regarding the setting up of the interview the physician should decide upon the

timing of the interview and the setting.

The perception of the situation helps to determine what the parents know to allow the physician to reconsider the information he/she had planned on giving. he invitation step helps to assess how much truth the parents are able to withstand at that moment.

The fourth step deals with the knowledge and the information conveyed; before breaking the bad news the parents should be given a warning that bad news is coming.

The empathy step suggests acknowledging the parents' emotions as they arise and addressing them.

The last step, summary and strategy for follow up, means to briefly summarize the discussion, to assess level of understanding and the impact of the diagnosis on the parents; in case a follow up is required, it is useful to plan together the next step.

#### **PS52**

## Motherhood and psychiatry, the risks and strategies to improve attachment between mother and baby Petilon Nel

When a mother has a mental illness it may negatively affect the infant—mother attachment security. Children with an insecure attachment relation are at risk to develop social and emotional problems when they grow up. Furthermore children of mentally ill mothers in general are at risk to develop psychopathology.

The mother herself also will experience a sense of loss: she lacks the unique experience of bonding with her baby and won't receive positive confirmation in her role as a parent. In this presentation I focus on depressed mothers. Eight till fifteen % of the mothers may experience a postpartum depression. It is important to support mothers with a mental disorder in developing a positive and healthy interaction with her baby. The Mother Baby Intervention, developed in the Netherlands by dr. Karin van Doesum is an effective intervention focussed on improvement of the quality of the mother-child interaction and the infant-mother attachment security to prevent social and emotional problems in the children. The results of the effect study will be presented.

#### Premature delivery and stress

Maggioni Cristina

Clinica Ostetrico-Ginecologica Università di Milano

Animal experiments have convincingly demonstrated that prenatal maternal stress affects pregnancy outcome and results in early programming of brain functions with permanent changes in neuroendocrine regulation and behaviour in offspring. In human stress research in pregnant women are often confined to only one aspect of stress or anxiety, such as the effects of life events, work load, or general stress but we know that the degree of stress response depends on genetic factors, personality characteristics, previous experiences, support from the social environment, and the way of coping with stress. This applies to pregnant women as well. However, they are also confronted with other possible stress factors, such as physical alterations, hormonal changes (often associated with rapid changes in mood), and pregnancy-specific anxiety, The interaction between all these factors requires a multidimensional concept of stress involving psychologic, social, and physiologic components. While experimental studies in animals show that maternal undernutrition during pregnancy, synthetic glucocorticoid administration to the mother, or postnatal factors (handling or maternal deprivation) are all associated with long-term changes in the HPA axis, the nature of these changes differs according to the species involved, the timing and the nature of the stimulus, since the placenta represents a barrier to the maternal cortisol by inactivation to corticosterone. We will discuss the concept that only in presence of dysfunctional placentas or in particular time windows there is a maternal glucocorticoids transplacental effect.

Preterm birth (defined as delivery prior to 37 weeks' gestation) complicates 5-10% of all births. It is a major cause of perinatal mortality and morbidity. Approximately 20% of all preterm births are iatrogenic resulting from obstetric intervention for maternal and/or fetal indications. Chronic maternal stress is reported a significant and independent risk factor for preterm birth.

The effects of maternal stress on preterm birth may be mediated through biological and/or behavioural mechanisms. Maternal stress may act via a neuroendocrine pathway, by the activation of the maternal-placental-fetal endocrine systems that promote parturition; psychological stress has been reported to affect also the immune response and increase susceptibility to intrauterine and fetal infectious-inflammatory processes and thereby promote parturition through pro-inflammatory mechanisms. The final common pathway appears to be activation of the inflammatory cascade.

The interaction between the circadian system and immune cell function will result in a novel paradigm that can be exploited to better study the communication between the hypothalamus and the immune system suggesting a a common underlying factor of chronic stress and infectious pathogens in terms of combined risk for preterm birth.

## PS54 Common Mental Disorders: prevalence and association with Domestic Violence Faisal-Cury Alexandre

Aim: to estimate the prevalence of Common Mental Disorders (CMD) and Domestic Violence (DV) during postpartum, and the role of social support in this relationship. Methods: a cross-sectional study conducted between January 2006 and March 2007 with 702 women receiving postpartum care in primary health care units of the public sector in the Western part of Sao Paulo, Brazil. The Self Report Questionnaire (SRQ-20) was used to assess presence of CMD. Three structured questionnaires were used for assessment of all types of DV (psychological, physical and sexual), social support and obstetric, socio-demographic data. The prevalence of CMD was estimated with its 95% confidence interval. Crude and adjusted prevalence ratios were calculated using proportional hazard regression with robust variation to examine the association between CMD and exposure variables. Multivariable analysis was performed. A p-value was defined as

<0.05. Results: The prevalence of CMD was 27.9%. Prevalence of all types of DV was: psychological (38.6%), physical (23.4%) and sexual (7.1%). In the univariate analysis CMD was associated with not being the head of the house; familiar income lower than R\$ 1.000, being smoker, having used alcohol anytime during pregnancy and breastfeeding less than 5 months. CMD was also associated with psychological (OR: 3.8; p<0.001), physical (OR:2.7; p< 0.001) and sexual violence (OR: 1.9; p= 0.02). In the multivariate analysis CMD remains strongly associated with psychological (OR:2.9;2.0:4.3;p<0.001) and physical (OR:2.1;1.8:3.9;p<0.001) violence, but not with sexual violence, even after controlling for counfounding factors such as familiar income and total score of social support. Conclusion: CMD is highly prevalent in this group of women and it is associated with domestic violence. Public health measures should address both issues.</p>

#### **PS**55

## When and how emotional support helps the parturient Morese Angelo

When and how depend also much on: who is the woman (emotional features), who provides emotional support, what happens during the labor and the birth, in which part of labor the woman is.

The primary emotional support, always in the first stage of labor, arrive from the people that the woman has near, at home often (husband, mother, friend); intense sensations and emotions start in that time, and people must support with conversation, but with many serenity and without anxiety or fear. If the woman decides to go to the hospital, she must be accompanied by the same person that was at the start of labor,

if positive. The active phase of the first stage and the phase of transition are very hard for the woman, and she want many emotional support, also from different people: in these moments she prefers professional support because she thinks that the more clinical knowledge of them can help her. Professionals must understand if the better way to give emotional support is to protect the emotional state of the woman or to give support: often, in this second way, professional becomes directive (information, advices, order) and make woman passive.

#### Fear of childbirth: evidence-based interventions in pregnancy

Basevi Vittorio

CeVEAS - Centro per la valutazione dell'efficacia dell'assistenza sanitaria, Regional Health Service Emilia-Romagna, Modena

Background: Studies report that 10%-78% of women experience a variety of fears in association with pregnancy and childbirth. The women's fear is – among other things - relate to birth pain, self-confidence, their or baby's diseases and life-threat. In multiparas, previous negative pregnancy experiences also are causes of fears. Antenatal fear of childbirth was associated with subsequent caesarean section. Methods: hierarchical systematic review for evaluating the effectiveness of interventions for the containment of fear of childbirth. Results: We found no systematic reviews, four randomised controlled trials and no controlled clinical trials (search date April 28, 2010).

Two randomised controlled trials assessed the efficacy of intervention after a traumatic childbirth (n =103) or an operational delivery (n =390), one after an emergency caesarean section (n =162), and one in pregnancy at 26 weeks of gestational age (n =176). Only one study suggests the efficacy of a counselling intervention after a traumatic childbirth in reduction of depression, stress, and feelings of self-blame in women who report a distressing birth experience. Conclusions: Despite the frequency of fear of childbirth, very few studies are available that rigorously evaluate the effectiveness of interventions in pregnancy can reduce adverse outcomes, as caesarean section, associated with fear.

#### **PS57**

#### The use of anaesthetics during labour: ideals and real facts

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AIM: to know the perception of pain during labour in relation to frustrated expectations about epidural analgesia.

METHODS: A qualitative study was conducted using semi-structured interviews which took place at three different moments of the postnatal period: at hospital (1-3 days postpartum); a month after the delivery, and 2-4 months after childbirth. Participants were chosen among those women attending two different hospitals from Alicante.

Patients had to meet the two following criteria for inclusion in the study: women who had not been administered the epidural analgesia (for varied reasons) despite having previously signed the informed consent, having a normal vaginal delivery with no complications for either the mother or the baby. A Visual Analogue Scale (VAS) was used for the measurement of pain.

Findings: women consider very important the support received by the professionals who accompanied them during labour (midwives). This support helped them in the decision making process regarding the use or not of epidural analgesia. Women who did not have any choice regarding the use of the epidural analgesia stated that they would have enjoyed choosing it. The highest perception of pain took place during the beginning of labour and during delivery. Women related an increased need for privacy during the prodromic stage.

#### **PS**58

#### Before and after delivery: the echoes of our words and attitudes

Marié-Scemama Lydia

Let us start with a case report: A young pregnant woman, primipara, had no problem during her pregnancy. Talking about her delivery, she remembers confiously that the staff's attitude changes suddenly. A few words, she heard, reflected some anguish. The faces looked grim. No explanations were given to her. When she woke up after the caesarean section, this attitude kept on until she left the clinic. There was a contradiction between her gynaecologist's report and the rest of the staff. The doctor said everything went fine, the others people talked about dangers she and the baby went through. she was lucky! Two weeks after her return home, she was hospitalized for puerperal psychosis. Fortunately, she is

fine now after a second delivery..! How the staff's attitude could influence this difficult period? Pregnancy and specially delivery are well known as psychological risk period. Body image and hormonal changes, aggression on her body, fear of being a mother, baby's idealisation, and specially sense of culpability of not being able to achieve a normal delivery. What should be done? Listening, avoiding ambiguous words and attitude. We have to be carefull: they look at us even in the spot light during the surgery, and the ultra sound report is also a really difficult time. Is there a prevention for these women we fill at risk? Group therapy or individual treatment? The problem is also not to ignore a real psychiatric episode.

## **Depressive symptoms in Pregnancy and Puerperium**Florido Navio 7

Postpartum depression is currently considered as the most common complication in reproductive process. However today, many authors underline the importance of pregnancy in the genesis of this disease. This is the reason why we have studied the evolution of depressive symptomsmeasured with the scale of Edinburgh Postnatal Depression Scale (EPDS), Beck's questionnaire and counting Brugha stress-

ful life events in 108 low risk pregnant women (52 were nulliparous

and 56 had children previously) at weeks 12,20,30 and 38 of gestation and two days, 1 month and 3 months postpartum. In addition we have carried out the structured interview (SCID) at the beginning and end of the study.

Our results show the strong relationship between postpartum depressive symptoms with those existing in the first weeks of pregnancy and the importance of family history in the development of these symptoms.

#### **PS60**

#### Pregnant women and mental illnesses

Alder Judith

Mental health disorders during pregnancy show a point-prevalence of 13-20%, most often fulfilling the criteria of minor and major depression and anxiety disorders. The conditions may be pre-existing or develop during pregnancy. While detection rates are generally low, the findings of several prospective studies with large cohorts relate mental health problems during pregnancy to adverse obstetric outcome and long-lasting consequences for the offspring: for example, elevated relative risk ratios for low birth weight or preterm birth have been reported in women with antenatal depression while among other consequences, anxiety during pregnancy has

been associated to behavioural problems and a higher prevalence of ADHD in the offspring. Several contributing mechanisms have been hypothesized and studied to link mental illness to outcome. Besides the impact of (self-) medication, stress associated adverse health behaviour and altered stress associated endocrine activity with their impact on the intrauterine environment and the immune system as well as prenatal programming of foetal systems play an important role for the transmission of prenatal mental health problems. At last, an overview shall be given on the efficacy of psychological treatments during pregnancy for improving outcome.

#### **PS61**

#### Convergence between psychoanalytic and neurofunctional model of postpartum depression

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Oxytocin is a hypothalamic neuropeptide implicated in the regulation of a variety of social, reproductive and stress-related functions in the mammalian brain (both of females and males). A burgeoning animal literature shows that oxytocin plays a key role in the regulation of social attachments and stress responses (Lim & Young, 2006). Carter (1998) in particular suggests that oxytocin is crucial in humans in the creation of intimate attachments such as marital relationships and early interactions with offspring. In studies with non-pathological individuals, intranasal oxytocin administration increased feelings of interpersonal trust (Kosfeld et al., 2005) and plasma oxytocin levels were significantly correlated with relational affects, in particular in the tendency to express and share emotions and feelings with partners or close friends (Tops et al., 2007).

Given the twofold effect of this neuropeptide (i.e., to strengthen attachment system and decrease stress responses) our research is aimed to test the synergetic effect of oxytocin and psychotherapy on Post Partum Depression (PDD). PDD is a common pathological event, the epidemiology is estimate between 10-15%, that affect mother-child relation and mother feelings. On the psychological level, we infer following a particular psychological perspective (Bibring, 1953; Joffe & Sandler, 1965) that focuses on depression being a defense mechanism against psychic pain. In this strain of psychoanalytic thinking, depression aims at attenuating, decreasing mental pain arising in the individual woman from a discrepancy between her new actual status of mother of a newborn child and the expected ideal status lost after delivery. This pain-

ful descrepancy may generate among others anxiety and/or depressive reactions. On the neurofunctional level, we postulate that women that show postnatal depressed may be at risk to display central oxytocin dysregulation. Mayberg et al. (2005) found that electrical stimulation of the subgenual cingulate white matter (Cg25), disrupting focal pathological activity in limbic-cortical circuits, can effectively reverse symptoms in deep and treatment-resistant depression. Cg25 and the anterior cingulate area is part of the basic emotion command systems of the brain implicated in the CARE circuits in human (Panksepp, 1998). Among others, oxytocin seems to be one of the main regularatory neuropeptides of this circuit. Taking into account the main effects of this peptide in the brain, the present study was designed to compare the synergetic effect of oxytocin and a short psychoanalytic oriented psychotherapy on a group of women with PDD. The eligible depressed subjects are referred by the obstetrics and paediatricians who see the mothers few times after birth. All the participants are randomly distributed in one of the three groups: (1) mothers who undertake psychotherapy and take oxytocin, (2) mothers under placebo and psychotherapy and (3) mothers subjected only to placebo and home visiting. We expect that intranasal oxytocin will affect positively the psychotherapy, allowing mothers to restore a sense of trust in the help given, and thus prompting feeling of greater confidence, that might alleviate depressive symptoms. We discuss in the present study the compatibility of the underlying neuroscientific and psychoanalytic models. Moreover, preliminary results are presented with the mothers recruited.

#### Attachment needs and disruptors in pregnancy and puerperium

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Prenatal attachment can be defined as the range of behaviours, interactions and affective involvement that the mother feels and expresses towards her baby during pregnancy. The process begins even before conception, when the "child of dreams" is fantasized and loved. Pre-conception disruptors of attachment include: unwanted pregnancy, substance abuse, young age (adolescent mothers have the highest vulnerability), being single mother, depression, conflicting couple relationships, poor economic conditions, poor family support. Prenatal diagnosis has a still underevaluated role among the post-conception disruptors. Women undergoing prenatal diagnosis are more vulnerable to emotional withdrawal from the child until results are reassuring; their attachment is signifi-

cantly lower in comparison to women who did not do the prenatal testing; they have lower relation with the child and lower capacity of attributing desired characteristics to the child himself. Other disruptors include sleep disorders in the first trimester (significantly associated with depression in pregnancy and puerperium), and medical and obstetric disorders that may impair the child' outcome. Disruptors may impair the postnatal attachment and be associated with an increase of postnatal depression and child' psychosomatic problems. After delivery, maternal depression and/ or child's admission and prolonged stay in intensive care unit may further affect the quality of bonding.

#### **PS63**

#### Early detection of psychopathology in pregnant women; a new strategy to prevent worse

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Research from all over the world consistently shows that about 5 to 10% of pregnant women suffer from psychiatric disorders, like depression and anxiety. It is also known that psychiatric disorders negatively influence delivery and child outcome. However, up till now routine screening for psychopathology by midwifes and gynecologists during pregnancy is not routine. Therefore, we developed a simple screening instrument by using handheld computers programmed with questions that select for existing treatment and counseling programs. During a pilot study all pregnant women

are asked to complete the handheld computer in the waiting room before their first prenatal visit. Immediately after completing the questionnaire, the handheld computer generates an advise whether and which psychiatric treatment or psycho-social counseling is recommended.

In this presentation the development of the questionnaire is explained. Also preliminary results are presented about characteristics of women with and without psychopathology and raisons for rejecting additional treatment or counseling.

#### SPS<sub>1</sub>

#### Body image, quality of life and genital cancer

Bitzer 7., Alder 7.

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Genital cancers including breast cancer and their treatment present an a very severe distress to the quality of life of the patients due to fear of death, loss of capacities and life opportunities, pain, fatigue, disruption of plans, dependence on others but also with challenges to the body image due to interventions. This aspect of impaired quality of life is sometimes neglected when psychooncological interventions focus on anxiety, depression, marital and familial conflicts etc. We therefore propose a program including interventions targeting body image.

Body image and sexuality group work:

With 6-8 participants in 10 weekly sessions:

Session 1-2: Group cohesion exercises. Information (Body image and sexuality, impact of breast cancer treatment on body image

and sexuality); development of multifactorial understanding of body image and sexual problems; relaxation exercises; Homework: collection of critical situations

Session 3-4: Group exchange on body image and experience of body after breast cancer; Session 5-7: Group exchange on sexuality after breast cancer: Information (basic principles of communication, modification of sexuality); Exercises (guided imagery, letter writing,)

Session 8-9: Group exchange on experiences with health professionals concerning body image and sexuality

Session 10: Information on emergence of difficulties and problem solving steps; Individual plan for maintenance of new behavior and further improvement; Group feedback and farewell.

#### Body image after a "certain age", a gender question?

Wijma Barbro, Sandberg Linn, Swahnberg Katarina

Much attention has lately been paid to young women's and men's body ideals and how those are influenced by gender stereotypes. Although women and men in Western societies have a longer life expectancy than earlier, only little research has focused on how the extended period of living in an ageing body is experienced, which bodily ideals are dominating, and how possible conflicts between these two poles are handled. The aim of the present paper is therefore to analyze body ideals, experiences of the ageing body and how a possible tension between them is handled.

Qualitative interviews with 23 men, born 1922-1942 and their diaries were analyzed. For ageing women the data collection takes place at a public baths and is not yet completed; but will reach a similar age group and use the same methodology.

For the ageing men, bodily function and activity were emphasized rather than appearance. Body seemed to function like a capital in shaping masculinity in late life. Preliminary analyses of interviews with women have so far been dominated by their experienced pressure not to grow fat and keep being physically active.

#### SPS3

### Doctor/patient relationship: the neglected power of placebo & nocebo effect Graziottin A.

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Background: In the early '50s, the pioniering work of Michael Balint focused on the doctor-patient relationship as a critical modulating factor in the process of healing. Specifically, his aim was to transform uncertainty and difficulty in the doctor-patient relationship into a greater understanding and meaning that nurtures a more therapeutic alliance between clinician and patient. Further research indicate that the quality of doctor-patient relationship is central in: establishing a trusting relationship, a secure basis where a solid therapeutic alliance can be built-up and maintained; predicting compliance, adherence and consistence of use of different therapeutic regimens; enhancing hope as a powerful modulator of the healing process, the physician therefore working as a positive drug him/herself. Two key words are central in this reading: placebo and nocebo. Placebo, future of the latin verb placeo, means "I will please you, I'll do you well", thus indicating the pro-healing effects of positive expectations, that can certainly be up-regulated by a positive doctor patient-relationship. Opposite to that, nocebo, future of the latin verb noceo, means "I will harm you" (involuntarily or intentionally), encompassing all the damaging effects of negative expectations. The latter can be triggered by a negative doctor-patient relationship, when distrust, neglect, negative verbal and non-verbal language, and/or aggressive behavior trigger anxiety, fear, anguish, panic, concerns, thus impairing or killing the hope of healing. However, the first understanding of this process was mainly psychological. Only recently the underlying psychobiological process has began to undergo neurobiological and instrumental scrutiny.

Aim of the presentation: to focus on the new reading of the placebo and nocebo effects in the doctor-patient relationship.

Method: review of the literature and clinical re-thinking

Results: Recent data from brain imaging studies indicate that the placebo effect increases: 1. the dopaminergic pathway, thus increasing the sense of well-being, assertiveness and trust in the future, sense of empowerment and positive interactions with others; 2. the serotoninergic pathway, this increasing mood; 3. the opiatergic pathway, with higher endogenous analgesia and sense of well being, joy and satisfaction, involving the same brain areas involved in the reward system and motivated behavior; and decreases the adrenergic pathway, thus reducing anxiety and fear and the overall activity of the sympathetic system. Key areas involved are the anterior cyngulate gyrus, the prefrontal cortex, the gray periacqueductal substance. At the opposite end of the relationship spectrum, the nocebo effect causes decrease of the dopaminergic, serotoninergic and opiatergic pathways, while increasing the corticotroping releasing pathway. This negative neurobiological effect will clinically translate into increasing anxiety and depression, that potentiate pain perception, sleep disruption, increase of fatigue and restlessness. The presentation will discuss the neurobiological correlates of placebo and nocebo effects and their clinical implications in the doctor-patient relationship.

Conclusion: Increasing evidence suggests that placebo and nocebo effect have powerful neurobiological correlates that may modulate the illness behavior and healing process. Physicians should increase their awareness on this effects, control the nocebo effect through a constant self-monitoring, and master with a higher competence the extraordinary healing potential implicit in a more human, understanding and caring doctor-patient relationship.

## The doctor is a woman: woman doctor, woman's doctor? Lachowsky Michèle

Born a woman without being given any choice, only later on did I choose to be a doctor. Doctor or gynaecologist, a doctor but a gynaecologist? Anyway, let us consider the practitioner as a person, meaning a man or a woman, whose trademark is the care and the cure of the female body, maybe even of the female soul. Not a function even less a title, not an expertise or a technique, but human beings and the way they relate to each other. For without the patient there is no doctor. Our story is about a woman's doctor who

happens to be a woman-doctor. So what is a female gynaecologist? Simply a person with a certain amount of medical knowledge, sexless as far as her job, her practice, is concerned, or rather rendered sexless by that relatively recent intrusion into the masculine world? Or is a female gynaecologist a doctor who is a woman, a woman who is a doctor? And what is much more of interest, does it make any difference for the "other woman", the one who comes as a patient to this individual we are trying to pin down?

#### SPS5

#### History of Assault - Harm Reduction in Clinical practice and research

Lal Mira

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Assault is an attack on one's physical, sexual and emotional wellbeing and is a violation of human rights. Limited studies show the preponderance of women victims with varying prevalence rates world-wide. The extent of negative health consequences is unknown as the woman is reticent with psychosociocultural factors propagating this behaviour. As an Obstetrician & Gynaecologist, who patients feel they can trust, I have routinely encountered a history of physical and/or sexual assault with consequential presenting symptoms. Presentations are variegated. History of assault in clinical practice - Many were emergency admissions with complaints of pain and vaginal discharge or reduced fetal movements and physical signs. Others were outpatient referrals complaining of dyspareunia or menstrual disorders or those attending for routine antenatal care. Some were identified intrapartum. Vignettes reveal

the continuing morbidity and disability. Identification by research/ audit - In a sample of 286 investigated for a different primary aim three victims were identified. An audit revealed a high percentage in the sample studied. The impact - A negative impact on the woman and affected children can occur. Overuse of health services to deal with symptoms and the woman's perception of these symptoms, occurs. A negative impact on some health professionals dealing with the history and presenting symptoms remains largely unrecognised. Harm reduction - Health care providers are constrained in their attempts to reduce harm. Support services for victims are fragmented and sparse. Conclusion - The impact of assault continues on victims and women's health services. It deserves wider medical, political and psychosociocultural attention for harm reduction.

#### SPS<sub>6</sub>

#### Management of Premenstrual Disorders

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Treatment of Premenstrual Disorders (PMD) is hampered by a lack of understanding of diagnostic categories of patients presenting to PMD clinics. This frequently results in (i) unnecessarily invasive treatment for some (ii) inappropriate treatment of noncyclical psychiatric conditions (with hormones) for others. Two aetiological components of PMDs exist (a) ovulatory progesterone (b) "CNS sensitivity" to that progesterone. Effective treatment is thus achieved by (a) ovulation suppression (b) modulation of CNS function by non-drug or psychotropic interventions. Oophorectomy is the only "cure" for PMDs but this is rarely justifiable. All other approaches relieve symptoms for as long as treatment is continued. CNS Interventions:- For complementary techniques there is little evidence. Exercise, cognitive behavioural therapy,

Agnus Castus and St John's Wort may be effective. Psychotropics (especially SSRIs) are effective. Ovulation Suppression:- Stopping ovulation is effective but has side effects. These can be avoided through a basic knowledge/understanding of hormonal therapy. Drospirenone-containing OCs may avoid progestogenic restimulation of symptoms. Add-back therapy avoids hypo-estrogenic effects of GnRH analogues. Oestrogenic suppression of ovulation requires progestogens to prevent endometrial hyperplasia - the resulting PMD symptoms are avoided by intra-uterine administration. Such knowledge combined with understanding of PMD classification will enable virtually all PMD patients to receive effective treatment.

#### Prevalence and manifestation of psychiatric disorders in pregnancy

Upmeijer 7. G.

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Background. About 10% of pregnant women and women in child-birth have a psychiatric disorder such as depression, anxiety disorder or postpartum psychopathology. Suicide is one of the most important causes of death during pregnancy and in the year following delivery. Development of the POP treatment. Pregnancy and psychofarmaca. In June 2007 a transmural work agreement has been set up between specialists involved (psychiatrist, obstetrician, paediatrician) and general practitioners, midwives, pharmacists responsible for the counselling of women who are planning to become pregnant and for those who are pregnant and suffering from a psychiatric disorder and using psychofarmaca. Afterwards the POP treatment (medicated and psychotherapeutic) was set up

and started on the 1st of April 2009. At the start of the treatment three important questions will be asked. 1. Are you or have you been treated for psychiatric problems. 2. Are you or have you been taking psychiatric medication or other medication 3. Are family members being treated or have they been treated for psychiatric problems. Several psychiatric disorders will be discussed with regard to prevalence and chance of recurrence during pregnancy and postpartum.. Depression, anxiety disorder, bipolar disorder, post-traumatic stress disorder, abuse of alcolhol and drugs, psychosis, and complex social problems will be discussed. Finally, the goals of the POP treatment will be outlined.

#### SPS8

## Development and structure of Psychiatric-Obstetric-Pediatric consultation in a general Teaching Hospital Paarlberg Marieke K, Upmeijer J.G., Pot D.J.

Gelre Teaching Hospitals Apeldoorn

Twenty percent of pregnant and puerperial women are suffering from a psychiatric disorder. In women with psychiatric disorders complications in pregnancy and delivery are more prevalent than in healthy women and attachment disorders in offspring are frequently observed.

In 2009, we started a multidisciplinary approach for women who consider to become pregnant and for pregnant women with the following features: 1. having a psychiatric disorder, 2. using psychopharmaca, 3. having a first-degree relative with a psychiatric disorder, 4. being addicted to alcohol, drugs and/or medication, 5. living in complex social circumstances.

These women and, if possible, their partners are consecutively seen by a gynaecologist and a psychiatrist. A prenatal pediatric consultation may take place on indication. After informed consent is given, their case is discussed in a multidisciplinary panel consisting of a gynaecologist, a psychiatrist, a paediatrician, a psychologist, a social worker, a mother-infant interaction expert, and, if necessary, a physician of the centre for prevention of child abuse. The result of the discussion is sent in writing to all healthcare providers of the given patient.

In this way, during pregnancy and puerperium, the psychiatric conduction is in one hand and all professionals use the same chosen strategy. The focus is on prevention of relapse of the psychiatric disorder, uniform prescription of medication and prevention of mother infant interaction problems in order to prevent attachment disturbances. Such a multidisciplinary approach appears to be a successful way for optimal conduction of pregnancy, delivery and puerperium in this vulnerable group.

#### SPS9

## Development of a novel tool to streamline perinatal care in psychiatric and/or socially challenged women Pot D.F., Nijhof S.L.

Departments of Paediatrics, Gelre Hospital, Apeldoorn, The Netherlands

Proper preparation is an advantage in many situations. Debatable remains to what extent and by what means one can be prepared for a given situation. In paediatrics however, time to anticipate serious events is often not at hand. This is e.g. the reason why dedicated paediatric life support courses offer a standardised routine in assessing potentially life threatened children.

In pregnancy however, time is at hand. Time that can be used to anticipate on the development of the remaining pregnancy, the expected birth, and the postnatal period for both mother and child. This is even more important for pregnant women with a psychiatric history or a socially challenged situation.

We developed a tool to assess psychiatric, somatic, and psychoso-

cial risk factors in pregnant woman with a known psychiatric history or complicated social circumstances. The aim is to formulate a treatment plan, wherein a responsible care taker is appointed as central actor in the assistance of these women through pregnancy and thereafter. Three-weekly, cases are discussed in a multidisciplinary board consisting of a paediatrician, a gynaecologist, a psychiatrist, social workers, psychiatric nurses and a medical representative from the child protection service. A system was designed to structure and categorize every caretakers unique expertise and to create a tailor-made treatment plan for both mother and child. We hope to reduce short- and long term morbidity for these new families.

#### Mother-baby unit: treating mothers with their babies to prevent attachment disorders

Petilon Nel

Approximately one out of ten mothers will experience a postpartum depression and six till eight percent can encounter another mental illness after giving birth. Sometimes the illness is serious to such a degree that hospitalization is necessary.

The mother–baby unit provides the opportunity that mother and child till the age of seven months are admitted together while she receives treatment for her psychiatric problems.

In my presentation I focus on the interventions in the special pro-

gram which mother and child receive in order to establish a sound and healthy mother child interaction. When a child is securely attached to his mother the risk of developing psycho-social problems diminishes

Further on it has been observed that the possibility to experience motherhood during hospitalisation has a positive influence on the recovery.

#### SPS11

#### Aromatherapy in Japan

Imanishi 7iro

Department of Integrative Medicine, Meiji University of Integrative Medicine

Aromatherapy is a complementary and alternative medicine for the purpose of the prevention and treatment of diseases and clinical symptoms using essential oils. There are two modalities of aromatherapy. One is esthetic aromatherapy, and the other, medical aromatherapy. Esthetic aromatherapy is used for the purpose of estheticism and relaxation, while medical aromatherapy is aimed to prevent and treat diseases or to relieve symptoms.

In Japan, the Japanese Society of Aromatherapy (JSA) was established in 1998 as an academic organization of aromatherapy, and at present, it consists of about 2000 members (about 1/3 are mediators).

cal doctors, over 1/2 nurses and midwives, and others including acupucturists, massagers, etc.). The JSA published their Journal 4 times a year.

Aromatherapy is used in all medical fields, including respiratory diseases, allergic diseases, psychosomatic diseases, stress reduction, pain, insomnia, gastrointestinal conditions, etc. in addition to various gynecological diseases, and pregnancy and delivery. Aromatherapy is used not only in clinics and hospitals, but also in hospices, and elderly people's nursing homes. Thus, the area that medical aromatherapy covers is wide and its roles are diverse.

#### SPS<sub>12</sub>

#### Various Progestogens and Female Psychosomatic

Honjo Hideo<sup>1,2</sup>, Murakami Yasushi <sup>1</sup>, Okamoto Toyohiro<sup>2</sup> Kyoto Gakusai Institute<sup>1</sup>, Okamoto General Hospitals<sup>2</sup>

Hormone Replacement Therapy (HRT) is useful also for depressive status in climacterium. It should include some progestogen to protect endometrial cancer for women with uterus. Various progestogens have different effect on "Mood" and "Depressive status". Endogenous progesterone (P4) has been though to have ameliorative effects via its metabolite-allopregnanolone =agonist on GABA A receptor ---mood up! But recently, some reports doubt its effect in human in vivo.

Medroxyprogesterone acetate (MPA) is metabolized to 17, 21-dihydroxy-20-ketone like corticoid. Certainly, it shows euphoric effect in high dosage (over several hundreds mg for endometrial cancer), but dose it have some effect in low dosage (2.5-5 mg/day) in HRT?

Norethindrone, Levonorgestrol, Desogestrel, and Gestoden could not have 17, 21-dihydroxy-20-ketone. Dienogest (DNG) may have better effect?

In our recent study about effects of various progestogens given during late 10 days in cyclical HRT, MPA showed no remarkable effect. DNG might have worse effect, especially in the HRT using E2-patch. Further studies are interesting and necessary including Drospirenone (DRSP) which has diuretic effect like aldosterone, and approved for Premenstrual Dyshoric Disorder, recently.

#### Comparison of Various Therapies for Menopausal Psychosomatic Disorders in Japan

Takamatsu Kiyoshi, Ogawa Mariko, Iioka Yukiko, Makita Kazuya

Tokyo Dental College Ichikawa General Hospital, Chiba, Japan, St. Luke's College of Nursing, Tokyo, Japan, Makita Clinic, Saitama, Japan

During menopausal transition, a significant number of women report general malaise due to psychosocial factors in addition to hormonal changes. These disorders disturb a quality of life of middle aged women, and effective therapies are requested. Medical therapies for these menopausal psychosomatic disorders include pharmacological therapies involving psychotropic drugs such as HRT (hormone replacement therapy) and SSRI (selective serotonin reuptake inhibitors), as well as non-pharmacological therapies such as counseling and various psychotherapies, same in Western countries. In addition to these, there is Kampo medicine, based on the use of Kampo formulas in Japan.

Each of these has its advantages and disadvantages. HRT and SSRIs are relatively effective, but it is also well known that there is some unsolved problems with withdrawal issues and adverse effects. Kampo medicine is widely known in Japan and used frequently, yet mechanistic evidence for its efficacy remains insufficient. While counseling is certainly effective, practicalities in scheduling and finding a location can be problematic for the practitioner.

Accordingly, in this symposium, along with compiling the characteristics of each therapy, we hope to evaluate and compare the various options and their efficacies in Japanese women in order to find the most suitable treatment, particularly for psychological symptoms.

#### SPS14

#### Biofeedback treatment for migraine female patients

Hashizume Masahiro, Odawara Miyuki, Amano Yuichi, Yoshiuchi Kazuhiro, Tsuboi Koji

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Objective: Biofeedback therapy and relaxation each appeared modestly effective in migraine but data were lacking in Asian countries. The purpose of this study was to investigate the effectiveness for the patients with migraine by biofeedback-assisted relaxation training. We examined not only biological factors but also psychosocial factors by ecological momentary assessment.

Subjects and methods: A total of 22 patients with migraine were randomly assigned to biofeedback-assisted relaxation training group (BR; n=12) and a waiting-list control group (WC; n=12). BR consisted of eight 30-min sessions in 10 weeks. Main outcome

variables related to changes in headache index (intensity × duration), nausea, analgesic medication use as assessed with a mobile diary(five times per day).

Results: BR had yielded 44% reduction in headache index, and this reduction rate was larger than the rate in WC. The effectiveness of training was continued after 10 weeks follow up.

Conclusions: Biofeedback therapy produced larger reductions in headache activities. These effects of biofeedback and relaxation continued to improve at a 10 weeks follow-up in the biological factors.

#### SPS15

#### The Relationship between Eating Disorder's Risk Factor and Mass Media

Nomura Shinobu

In recent years, the eating disorders (ED) and subclinical syndrome are increasing in Japan, too. With regard to the onset of ED, a multidimensional model includes socio-cultural, psychological and biological factors. In this study, we focused the media literacy and its influence to the socio-cultural factors of ED.

The subjects of this study were 299 undergraduate female students (mean age: 20 years). The questionnaire included the eating attitude test (EAT-20), the desirability of slenderness scale, MODEL scale, the mass media scale, MAGINFO scale, and others. As a result, it was indicated that "the advertisement factor", "the TV

contents factor" and "the attention to magazine contents factor" were related to the ED tendency. Also, as a result of a covariance structure analysis, it was suggested that MAGINFO (importance of beauty and fitness information) factor influenced the thin-ideal body image, the desirability of slenderness and the ED tendency, and that the media literacy might be effective in reduction of the thin&#8211ideal body image. This study is a preliminary study that examined a relationship between eating disorder's risk factor and mass media. As the subject was only a student sample, the future study should include a clinical sample.

#### Premature baby "a painful start"

Acquarone Stella

"This baby seems numb, doesn't look at me, and doesn't seem to want to be with me...". That's what many mothers say when they arrive to our consulting rooms.

They arrive to consultations not knowing what to think, whether to worry or not, bringing their baby as a package that is frightening to them and they are deeply annoyed about. They are annoyed because their pregnancy stopped suddenly. They are annoyed because their plans have been disrupted....annoyed that things went wrong and events didn't happen as expected. And they are worried...

...their babies are showing early autistic behaviours. They are not conscious of their annoyance. They feel persecuted, and guilty. We must begin our work by putting words to their sorrows, disillusions and pain. Premature birth is a "painful start" to life and relationships.

In this presentation you will learn about our work with parents and

In this presentation you will learn about our work with parents and infants. What happens when the maternal and paternal reverie is disrupted abruptly and they fall into a frightening world where par-

ents and baby are not prepared physically and mentally to take in the external world? What must be done when painful experiences cannot be registered at an emotional level? The disruption feels too traumatic and is accompanied with a pain that is not shared and remains at a physical level and therefore is not integrated in the personality, forming a wall that impedes the emotional relationship between mother and child. The painful procedures in the neonatal care unit together with the realities of the incubator and the fact that the mother or father cannot offer a nest within their bodies makes the integration difficult and all usually becomes split off and emotionally numb. This avalanche of events may deteriorate in delay in emotional and cognitive development with the increase in self comforting mechanisms and extreme behaviours of protection and dissociation in regards to their attachment. I will make references to the neuroscience behind these coping mechanisms and I will present a case.

#### **SPS17**

## The danger of premature delivery: a danger for who? Blazy Micheline

We will differentiate the Premature Delivery Threat (PMT), which is not an established concept in UK ,and the premature delivery risk through definition and illustration . Then we will mention the prematurity risks from a physical and psychological standpoint , for the newborn , the parents, the brothers and sisters ; in this respect the positive aspect of prevention will be emphasized.

Eventhough the preventive treatment of premature delivery should be considered as mandatory, due to financial reasons it's becoming controversial in France at least for the midterm treatment after the first 48 hours.

Considering the hypothesis of a continuum from the uterine contractions, the established PMT and the premature delivery, we

think that this prevention of prematurity should start as soon as clinical and/or echographic symptoms appear. The appropriate preventive treatment , so called "take care" in English includes health care providers attention (such as psychological support, home visits, rest, bodycare technics, haptonomy, …) , tocolysis if necessary, and finally uterine cerclage . By this personalized treatment, case by case and adapted to the risk level , not systematically medicinal , we may avoid somatic increase from ignored simple uterine contractions to premature delivery.

The patients satisfaction level would significantly improve, and from an economic view point this could have a positive impact considering premature delivery cost and its consequences.

#### SPS18

## Premature babies, their parents, and the medical staff Szeier Myriam

The notion of traumatism at birth will be questioned. We argue that what can be traumatic is not birth itself but the traumatic conditions in which birth takes place and its relationship with the history of the subject and his family. We defend that it is essential that professionals working with preterms and their families pursue their effort in limiting traumas through an increasingly enlightened

assistance, for example, by requesting the parents to talk to their babies, to tell them their first and last names, and about their families and the reasons of the separation. The objective of this procedure being for the parents to reconstitute with words the langage environment in which these babies are seeping.

#### Prematurity's consequences

Bolot Pascal

Considerable progress has been occured since the 15-20 last years in the field of Perinatology. These progress can take care of premature babies at terms of lower and lower reaches of the limits of viability with all that implies ethical reservations about the risks of motor, sensory and cognitive sequelae .

Having specified the various categories of premature babies, technical progress in perinatology will be listed and the evolution of ethical reflection which was the consequence .We will insist on the concept of "interdiction d'obstination déraisonnable" dictated by law Leonetti (2005) which requires then the establishment of palliative care in neonatology.

The answer to the question of prognosis requires broach the con-

cept of limits of viability which determine the degree of care obstetric-pediatric of a little premature since the delivery –room .We will approach the physiological ,legal and administrative limits , and ones surveys from population : Epicure , Epipage and Mosaic will be summarized.

If the mortality of premature babies greatly regressed, the prognosis remains important ,particulary in lowest terms ,also with the cognitive- behavioural deficits which are superadded to the disability of these children .Their prevention requires that the risk of prematurity ,the ethic of perinatology ant the screening-support whose resources are too inadequate.

#### SPS20

#### The follow-up of preterm babies

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The preterm baby and their families quality of life have received increased attention in a medium and long term span. Our neonatal intensive care unit (NICU) participate to a 7 years follow up multicentre study involving 27 neonatal hospital units.

Preliminary results clearly confirm that prenatal obstetrical factors and the early exposition to the extrauterine milieu negatively affect the development of preterm infant. Obstetrical complications are highly correlated to increased infants hyperexcitability. Muscle tone, neonate reflexes, attention and control care at the opposite appear to be influenced by the length of stay in the NICU. The feeling of incompetence in assuming the parental role has been identified as the main maternal stress source by questionnaires ad-

ministered before discharge from the hospital. Emotional attitude may interfere with the mother and child tuning and their final relation.

"Neonatal follow up" means a follow up of families and their babies in a global way open.

Besides specific medical competences, we need to focus on the emotional aspects inside the couple of parents and between parents and child at birth. Moreover, we need to continue to monitor this emotional aspects since the recent data available in the literature suggest that an emotional distress arised in the fist period of life will be a compromising factor for the compartmental development of the premature baby up to the 2nd year of life.

#### SPS21

#### Dealing with the premature delivery difficulties

Markman Nora

Dans cette présentation, je vais essayer de transmettre la manière dont un psychanalyste intervient sur les difficultés qu'un être humain, bébé fille ou garçon, rencontre dans les premiers moments de sa vie.

Comment les interventions de «sens» peuvent contribuer à fournir un cadre de langage, de sorte que la liaison initiale entre la mère et le bébé, malgré un démarrage lent, "boiteux", soit susceptible d'ouvrir la voie pour que le perceptions initiales se cimentent dans un contexte de dynamique des langages qu'inclut, bien sûr, la construction d'un corps.

In this presentation, I will try to transmit how a psychonalyst intervenes on the difficulties that a human being, baby girl or boy, meets in the first moments of his life.

How the "meaning interventions" can help to provide a framework of language so that the initial link between mother and baby, despite a difficult start, "lame", might pave the way for the early perceptions cement themselves in a context of dynamic languages including, of course, the construction of a own body.

#### How fetal sensoriality influences its being

Busnel Marie-Claire

Since the years 1970 an enormous amount of researchs have proven that fetus, despite a still immature sensory systems, have quite adequate sensory capabilities.

Not only can they feel movements, hear, taste, smell etc, but they also remember after birth the sensory stimuli perceived in utero. If these prenatal sensory stimuli have been pleasant and/or perceived as associated with pleasant situations, they will be preferred to other stimuli later in life. If, on the contrary, they are associated to stressful, harmful or simply unpleasant events they will be rejected.

Thus, knowing that the fetus can both discriminate different sounds, syllables and sentences, knowing also that it can differentiate between two texts, or two musical parts, (one that he has heard before and the other not), one can postulate that the gestational period is, a time of learning about it future environment.

We have also demonstrated that fetus as well as newborns prefer to hear speech addressed to them and that the effect of verbal communication with foetuses and babies are as effective as silent communication.

This needs to be fully investigated as well as to reconsider the way we deal with birth from the mother's point of view, the fetus-baby's side and their relationship.

The knowledge one now has about the sensory performances before birth, should influence our dealing with birth practices and newborn babies.

#### SPS23

## The relationship between the neonatal transitional physiology and the newborn sensoriality. New paradigm of the newborn care

Chaves Ricardo

O atual modelo de atenção ao parto e ao recém nascido privilegia intervenções que em sua grande maioria são desnecessárias e muitas vezes potencialmente danosas às mães e aos bebês. As crescentes taxas de cesarianas no cenário mundial de atenção à gestação associadas às intervenções no atendimento aos recém nascidos sejam elas medicamentosas ou não, nos indicam a necessidade de propor um novo modelo de atendimento como também a necessidade de pensar o futuro biológico e psíquico das crianças nascidas sob esse modelo. Um novo paradigma deve ser pensado, centrado na atenção à mulher e ao feto. O reconhecimento dos mecanismos fisiológicos de adaptação dos bebês ao parto normal, no período imediatamente antes do nascimento, durante o trabalho de parto,

nos coloca na posição de atendimento ao recém nascido de modo menos intervencionista, mais seguro, propiciando uma adaptação do feto à vida extra uterina, mais saudável. Repercussões psíquicas, na direção de uma melhor estrutura mental das crianças e do fortalecimento do vínculo mãe—bebê, se relacionam com medidas técnicas como a ligadura tardia do cordão umbilical, o atendimento do recém nascido junto ao corpo de sua mãe e o estabelecimento do aleitamento materno o mais precoce possível. O respeito a essa transição fisiológica, feto—recém nascido, e o reconhecimento das habilidades orgânicas e sensoriais dos bebês pode representar um modelo mais humanizado, fisiológico e preventivo na direção de uma boa saúde mental de crianças e suas mães.

#### SPS24

#### Effect of haptonomy on pregnancy and pre natal affective relashionship

Dolto Catherine

L'haptonomie est une science humaine phénoménologique, post freudienne qui utilise l'Affectif comme principal outil thérapeutique. Toute approche affective sollicite les voies sous corticales et l'innervation gamma. Elle modifie ainsi les tonus musculaires ce qui transforme immédiatement la perception que le sujet a de lui même en lui permettant de développer un sentiment de sécurité de base et un sentiment de complétude. L'haptonomie s'applique à la psychothérapie, à la psychagogie, au travail avec les enfants et les adultes handicapés ainsi qu'a l'accompagnement des malades en fin de vie. Dans cette communication c'est son application à la grossesse et à la première année de la vie qui seront abordés.

L'enfant in utero se développe entre le diaphragme pelvien et le diaphragme thoracique dans lesquels les moindres variations du sentiment maternel se traduisent par des changements de tonus auxquels le fœtus se montre très sensible.

On découvre qu'il guette tout signe venu de l'extérieur, qu'il cherche le contact et le jeu, mais aussi qu'il mémorise et propose. Tout cela a des effets sur la relation parents enfant, et au long cours sur le développement psycho affectif de l'enfant.

Ainsi l'accompagnement haptonomique de la grossesse est il à la fois préventif et thérapeutique selon les situations cliniques.

#### The vanished twin

Wilheim Joanna

This paper deals with the psychological sequels of survivors of twin or multiple conceptions . In spite of this being a quite frequent biological event it has hardly been considered by psychoanalytical litterature nor has it been studied by traditional psychology. It is a situation in which one or more concepts – resulted from a multiple conception – die during the first weeks of the first trimester, remaining just one who will be the survivor.

The author first refers the research of Heline Landy et al, "The Vanishing Twin" (1982)\* – which focuses on the incidence of this event. She tells about the clinical circumstances that led her to the discovery of this issue (1983), displaying before her the vastness and extreme importance of the psychical repercussions of the prenatal traumatic experiences. She then mentions the recent psychoanalytical litterature which refers to the psychological sequels in survivors of twin pregnancies in which the loss of the twin hap-

pened in a later stage of pregnancy [Aray,Piontelli,Szejer]. Then she does a scanning in the psychoanalytical and non psychoanalytical literature on this very specific issue, title of this very paper – "Syndrome of the Survivor of a Twin Conception".

In the sequence, the author refers some clinical situations from her clinical practice, pointing out the psychopathological configurations presented by this phenomenum. Then she describes how she was able to grasp this configuration through counter-transference and how they were worked through pychoanalytically and the clinical evolution observed.

In the final considerations the author emphathizes the importance – for the conduction of the psychoanalytical therapeutic process – of the acknowledgment and recognition of the vestiges left on the mind by prenatal traumatic experiences.

#### SPS26

#### Case report: consequences of triplets who become twins in utero

Prian Martine

Peu après leur deuxième mois, des petits jumeaux développent un eczéma généralisé, lequel n'étonne pas les parents. L'un est plus atteint, visage et bras sont principalement touchés ; et, malgré les traitements appropriés, l'eczéma s'étend, devient suintant, saignotant. - Sur l'échec de la Médecine, s'élève alors un doute accusateur quant à la qualité des soins maternels. - Les entretiens du praticien-pédiatre avec la maman - et les petits -, révèlent alors l'étrange présence, dans la configuration psychique de chacun, d'un bébé mort in utero - alors presque oublié - et, toute l'importance de ce qui, au sein de cette absence, reste encor.

Soon after their second month, some twins develop an extended eczema, which don't surprise the parents. One of them is more invaded, the face and arms are mostly affected; and, despite the right treatments, the eczema spreads, turns exuding and bleeding... Upon the failure of Medicine, rises then a doubt accusing the quality of the mother's care. - Talks between the paediatrician and the mother - and the small ones - reveal then the odd presence, in everybody's psychological layout, of an in utero dead baby - most forgotten by then -, and all the importance of what still remains at the heart of that absence.

#### SPS27

#### Case report: how releasing mother's history induce baby's growth

Barbier Locquard Catherine

Non-symbolized early separating keep for ever engraved in one's conscience and may reappear at times of mental fragility.

Pregnancy and delivery are precisely times when young mothers feel particularly helpless if they are sent back to an archaic past they can't cope with.

Therefore it's all the more important to be present in NICU care units where separating and mental suffering affect mother and baby

#### Rediscovering the fetus and infant's experiences inscribed in the adult's body

Marie Dominique Linder

Devenir, parent pour une femme et un homme, est un véritable voyage dans le temps, retour au passé, à son propre passé de bébé. Celui-ci est inscrit dans la mémoire du corps qui va souvent se mettre à dire en maux ce que des mots n'ont jamais pu se dire. Cette période de porosité comme de remaniements psychiques est riche d'enseignement pour comprendre ce qui se joue parfois pour un patient adulte qui cache dans la profondeur de sa psyché un nouveau-né douloureux. Elle offre aussi l'oportunité de traiter des remontées inconscientes restées dans les oubliettes. C'est en tenant compte de la compréhension des grands fondements de la construction du « Moi » à ces tout débuts que je vous présenterai mon approche du traitement des patients qui attendent un enfant mais aussi ceux qui revisitent le bébé en eux lors du processus

analytique.

Becoming, mother and father for a woman as well as a man, is a real journey through time, back to past, one's own past as a baby. It is inscribed in body's memory and often begins to say in ache what could never be said by words. This period of great psychic porosity and reshaping is instructive to help understanding what is offen going on for an adult patient who hides a newborn pain. It is also a good opportunity to lift unconscious process that would have remained in oblivion. Understanding the foundations of construction of the ego in these early days, I will present my approach to the treatment of patients who are accueillir a child but also those who revisit the baby during the analytical process.

#### SPS29

#### Preparing the couples for delivery diminishes their trauma

Petroff Evelyne

Pregnancy and childbirth, whether normal, instrumental or by cesarean, can produce intenses psychogenic and physiological changes. Thus the accompaniment at birth can no longer remain within the classical frame of simple informations and breathing exercises. Additional psychological support must be provided leading to an active exchanges with the parents inside the maternity:preparation to differents postures of childbirth,preparation before the ultrasound cessions; a home of the migrants, for cesarean, groups of parents

with babies and many consultations postpartum.

The Bluets maternity and Lamaze health Center . are working to create a culture of listening to patients.

Continuous trainings of caregivers are based on those attitudes that should always be adopted: role-playing, analysis of professional practices, multidisciplinary oversight. The time the couples spend in the institution is designed as" a journey of meaningful meetings."

#### SPS30 Birth in Shamanic Cultures

Freedman Françoise

Surprisingly, childbirth is a topic that is mostly ignored both in ethnographies and in theoretical discussions of shamanism. Given the importance of birth symbols in shamanic cultures, from North West Canada to Amazonia and inner Asia, this paradox warrants examination. I first explore commonalities among hunting peoples: gender complementarity linked with earth/sky/water cosmic domains; analogies between human births and cosmogonies; dialectics of birth, death, rebirth and transmutations; a powerful symbolism of body substances: menstrual blood, birth blood, semen and breastmilk. The relation between bodies and the spirit world prevails over the placating of ancestors: the reproductive process, from early pregnancy to early childhood, is a highly sensitive time

when shamans have to uphold the cosmic order, journeying to the spirit world whenever this order is perceived to be under threat. I then argue that at least some of these shamanic features are relevant to couples having babies in post-industrial urban environments in which the religious and other rituals characteristic of agrarian and early industrial societies have lost social significance. The greater participation of fathers in childbirth post world war two, with the associated rising incidence of 'couvade' or sympathetic male pregnancy symptoms, calls for an analysis of postmodern shamanic initiatory experiences of childbirth in both women and men's life cycles, particularly for unmarried couples.

#### Emotions and maternity: How can caregivers and psychotherapists best collaborate?

Molénat Françoise

Association de Formation et de Recherche sur l'Enfant et son Environnement

Emotions lie at the interface of the body and thought, biology and the activity of representation. They are of major concern to maternity ward caregivers, who are in a position to protect and provide a sense of security. The availability of these caregivers signals to new mothers that "I can trust these people" and "they understand me".

The feeling that one can trust others without fear of judgment and that what one has to say has an impact on the professionals around one provides a unique opportunity for parents in need to recover a sense of mastery over the world around them—and those with this need are often the most vulnerable.

This type of availability, however, requires that the caregivers themselves feel secure enough to listen, look for responses, and

call upon other professionals if need be. As a midwife with 15 years of experience expressed it, "In the past, I would hear what they were saying but I wasn't truly listening... because I didn't know how to respond."

The psychotherapist is thus much in demand on the maternity ward to help clarify and validate the commitment of these caregivers. The bonds of trust that develop with a professional who takes care of one's body reach the deepest emotions, in the sense of the "holding environment". This experience provides the basis for the future mother's decision to consult regarding a complicated past that threatens to invade the present. Interprofessional coordination in these complex cases can help to build a veritable "human nest" that is able to generate a new "experience of relationships,"

#### SPS32

#### The institution role in PTSD after delivery

Maggioni Cristina

Obtetrician -Gynecologist and Psychologist, Obstetrics and Gynecology Departement, University of Milan (Italy)

Posttraumatic stress disorder exist as a consequence of the experience of childbirth. Although pre-existing risk factors have been demonstrated such as depression, child sexual abuse, previous traumatic deliveries, what's specifically traumatic of the childbirth experience remains unexplained. Women who reported high levels of negative emotions shortly after childbirth in a written story of their deliveries we asked were not more likely to develop PTSD symptoms than women who did not.

We investigate a possible institutional role of the maternity unit in the PTSD insurgence after natural and medically uncomplicated delivery in 843 women without a psychiatric history at the Buzzi hospital Milan, Italy and we found that staff denial of women feelings such as pain, staff refuse to acknowledge women feelings or fears, staff rejection of women needs of forecasting, or women needs of planning the delivery time and steps, create a very distressful condition where coherence and meaningful of the world are destroyed; in fact, factors as predicibility and controllability of the event are essential for the Self stability and destruction of such factors according to Foa PTSD theory leads to PTSD. Also coherence and meaningful of the word where we live are essential to organize our actions: if they are 'scrambled' (Janoff –Bulman PTSD theory ) by an event introducing unpredictable un-explicable or in-coherent factors in a hazardous relationship, they could lead to PTSD.

#### SPS33

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Petroff Evelyne

Pregnancy and childbirth, whether normal, instrumental or by cesarean, can produce intenses psychogenic and physiological changes.

Thus the accompaniment at birth can no longer remain within the classical frame of simple informations and breathing exercises.

Additional psychological support must be provided leading to an active exchanges with the parents inside the maternity:preparation to differents postures of childbirth,preparation before the ultrasound cessions; a home of the migrants, for cesarean, groups of

parents with babies and many consultations postpartum.

The Bluets maternity and Lamaze health Center . are working to create a culture of listening to patients.

Continuous trainings of caregivers are based on those attitudes that should always be adopted: role-playing, analysis of professional practices, multidisciplinary oversight. The time the couples spend in the institution is designed as" a journey of meaningful meetings."

#### Childhood abuse and fear of childbirth in Norway

Lukasse Mirjam, Vangen Siri, Øian Pål, Kumle Merethe, Ryding Elsa Lena, Schei Berit

Aim To study the association between a self-reported history of childhood abuse and severe fear of childbirth.

Method This cross-sectional study is based on the Norwegian data of a European cohort study conducted in 6 countries (Belgium, Iceland, Denmark, Estonia, Norway and Sweden). Two thousand three hundred sixty five (2365) pregnant women at 5 obstetrical departments in Norway filled out a questionnaire including validated instruments to measure abuse, Norvold Abuse questionnaire (NorAQ) and fear of childbirth, Wijma Delivery Expectancy Questionnaire (W-DEQ).

Results Of all women 23.8% had experienced some kind of child-

hood abuse, 257 (10.9%) had experienced emotional abuse, 260 (11%) had experienced physical abuse, and 290 (12.3%) reported sexual abuse. A history of any childhood abuse was a significant predictor of a W-DEQ score of  $\geq$  85 for nulliparous women also after adjusting for confounding factors, OR 2.00 (95% CI 1.30–3.08). For multiparous women there was no significant association between a history of any childhood abuse and a W-DEQ score of  $\geq$  85 after adjusting for confounding factors, OR 1.17 (95% CI 0.76–1.80). Conclusion A history of childhood abuse is a strong predictor for severe fear of childbirth for nulliparous women but not for multiparous women.

#### SPS35

#### Mental health in pregnant women in Sweden

Wangel Anne-Marie for the BIDENS group

Aim To describe self-reported mental health indicators and to develop a score for mental health status in pregnant women.

Method Cross-sectional data was used from the Swedish population of a European cohort study conducted in 6 countries (Belgium, Iceland, Denmark, Estonia, Norway and Sweden). A total of 1 025 pregnant women in Malmoe, Sweden, filled in a questionnaire including background information and validated instruments to measure signs of depression during previous week by Edinburgh Depression Scale (EDS-5) and present health status. History of psychosocial care, medication, abuse, post traumatic stress symptoms (PTSS) and life events was reported for the past twelve months. EDS score was calculated by cut off >7 and >8. Ethnicity was defined by mother tongue.

Results Most women had Swedish as their mother tongue but 215 women (21.4%) had another language than Swedish. EDS at >7 (14.1%) and >8 (9.1%) was more common in foreign than in Swedish women (p<0.0001). Signs of PTSS as having physical ailments, feelings of numbness, avoidance, intrusion and anxiety in the past 12 months were also more common in this group (p<0.0001).

Conclusion Pregnant women with another mother tongue than Swedish may have a less favourable mental health status than Swedish women. The algorithm for mental health score is under development using PTSS and other relevant indicators for the Swedish data. As such it will be analysed for associations with delivery outcomes in the whole BIDENS dataset.

### SPS36

Fear of childbirth, preference for caesarean section and history of abuse in pregnant Swedish women Ryding Elsa Lena on behalf of the BIDENS group

Aim To study the prevalence of severe fear of childbirth, preference for caesarean section and a self-reported history of abuse.

Method This cross-sectional study is based on the Swedish data of a European cohort study conducted in 6 countries (Belgium, Iceland, Denmark, Estonia, Norway and Sweden. In all, 982 pregnant women in Malmoe, Sweden, filled in a questionnaire including validated instruments to measure abuse, Norvold Abuse questionnaire (NorAQ) and fear of childbirth, Wijma Delivery Expectancy Questionnaire (W-DEQ).

Results A severe fear of childbirth (W-DEQ>100) was reported by

5.6% of the women, and 4.9% would prefer a caesarean section. In all, 8.8% of the women had a history of childhood sexual abuse, 10.1% a history of emotional abuse, and 5.5% a history of physical abuse during childhood. After the age of 18 years, 7.2% of the women had a history of sexual abuse, 10.0% a history of emotional abuse, and 8.9% a history of physical abuse. Women with severe fear of giving birth more frequently reported physical abuse as an adult ( p=0.002), and sexual abuse as an adult ( p=0.01).

Conclusion A history of abuse is important to investigate when a woman suffers from fear of childbirth.

## Desiderio o bisogno? La sessualità umana tra natura e cultura

Baldaro Verde Jole

Cultura e psicologia hanno, soprattutto in questi ultimi cinquant'anni, "sganciato" la sessualità umana dalla sua componente biologica. La medicina ha stabilito quale debba essere il livello "normale" di androgeni ed estrogeni ed ha stabilito che tutti i comportamenti sessuali violenti, o quelli come la frequentazione di prostitute (culturalmente accettati) siano legati a problemi psicologici. Le notizie che appaiono sempre più frequentemente su quotidiani, relative al numero di aborti o di uso della pillola del giorno dopo tra le giovanissime, mi porta invece a voler discutere sull'importanza degli ormoni. Questi produrrebbero una spinta istintuale e quindi un "bisogno", non eliminabile né da poter sublimare. Un bisogno che chiede di agire un rapporto sessuale. Vorrei affrontarlo con i colleghi in questa sede soprattutto per quanto riguarda la sessualità femminile. Ancora oggi per la donna si parla di "istinto materno", non come capacità di accudire i figli, ma, come negli animali, momento di grande influenza estrogenica che spinge la femmina a chiamare il maschio per essere fecondata. Dal tempo che ha seguito la scoperta scientifica della paternità il maschio umano si è arrogato il diritto di chiedere

o di pretendere il rapporto sessuale alla donna scelta come degna di essere la madre dei propri figli ed alla donna pagata per soddisfarne i desideri. La donna, solo molto recentemente ha ottenuto il diritto s chiedere un rapporto sessuale eroticamente soddisfacente anche per lei. Tuttavia, la mancanza assoluta di una corretta educazione sessuale che dovrebbe partire da una conoscenza del proprio corpo, non ha mai permesso soprattutto alle adolescenti di saper valutare quel momento, (un tempo lontano chiamato estro) che la può indurre ad accettare o a chiedere un rapporto sessuale senza alcuna protezione. La proibizione, da parte della chiesa cattolica, dell'uso di contraccettivi, e il giudizio culturale che li considera ancora legati alla prostituzione (preservavano l'uomo da malattie sessualmente trasmesse) contribuiscono, assieme all'onnipotenza narcisistica adolescenziale a rendere troppe fanciulle "imprudenti". Sessuologia, ginecologia, andrologia dovrebbero insieme caldeggiare l'introduzione della educazione "relazionale" d cui la componente sessuale risulta molto importante. Come obbligatoria, almeno nelle scuole superiori.

#### SPS38

## Couple and voluntary interruption of pregnancy

Rossi Roberta

Istituto di Sessuologia Clinica, Roma

The decision to terminate pregnancy is often a difficult time in the life of a couple with important psychological implications. Recent studies have observed that the decision in most cases (70%) is not a choice, but the result of the inability to regulate fertility with other methods. There are categories in which abortion is higher: women with children, women with lower educational qualifications and

housewives. In general the number of abortions increases with age and children. An important protective factor is given by the high level of education and the availability of a job. This decision in a stable couple may result in pursuit of a new equilibrium, related to the consequence on relational and sexual life.

#### SPS39

## Il punto G tra psiche e soma

Bernorio Roberto

Nel corso della relazione verranno analizzati gli studi più recenti relativi a quello che viene definito punto G e al fenomeno dell'eiaculazione femminile.

Entrambe le tematiche sono state recentemente dibattute nella letteratura scientifica. In particolare Jannini et al. sostengono di avere individuato il residuo prostatico femminile attraverso la misurazione dello spazio uretrovaginale mediante esame ecografico trans vaginale con una correlazione con la capacità orgasmica coitale delle donne. Altri autori dissentono l'interpretazione di tali dati. Verranno riportati i risultati di uno studio/indagine recente esegui-

ta su un campione di circa 500 donne italiane intervistate attraverso questionari anonimi sulla conoscenza della posizione anatomica del punto G nonché sulla loro capacità di stimolare tale zona con la descrizione del tipo di piacere sperimentato. Tale indagine valuta inoltre la percentuale di donne che riferiscono emissione di liquido dall'uretra in corrispondenza al riflesso orgasmico. Verrà discussa l'importanza degli aspetti congeniti e cognitivi comportamentali correlati alla capacità orgasmica coitale delle donne.

Tutti i dati comparati saranno rapportati alla realtà clinica dei disturbi disfunzionali dell'orgasmo femminile.

## Importanza della sessuologia per i ginecologi

Baldaro Verde Jole

La rivoluzione culturale avvenuta alla fine degli anni 60 del secolo scorso, ha modificato profondamente l'identità sessuale femminile, prima di quel momento basate esclusivamente sulla maternità. Di conseguenza il ginecologo si trova oggi a dover affrontare problemi nuovi per cui gli è indispensabili conoscere, non solo superficialmente nozioni che solo la sessuologia, scienza che integra il biologico con lo psicologico ed il culturale, gli può offrire. Il ginecologo dovrebbe prima di tutto saper aiutare ogni madre a "erotizzare", attraverso tutti gli organi di senso, il corpo del bambino, sia maschio che femmina perché solo uno sviluppo armonioso della sessualità infantile permetterà ai figli di godere di un buon rapporto sessuale nell'età adulta. L'abbattimento del tabù che impediva i rapporti prematrimoniali richiede che il ginecologo sappia informare l'adolescente sull'uso indispensabile di una contraccezione sicura per evitare gravidanze indesiderate ed aborti. Senza dimenticare le malattie sessualmente trasmesse. Il diritto della donna di godere di una eroticità piena e soddisfacente comporta inoltre che il ginecologo conosca a fondo le caratteristiche del desiderio sessuale e dell'orgasmo femminile e sia in grado di non rivolgersi alla sola donna, ma alla coppia. Anche la maternità richiede nuove acquisizioni relative alla fecondazione assistita. Un figlio non dovrebbe mai rappresentare lo specchio di una identità sessuale fragile e confusa ed il ginecologo dovrebbe saper aiutare una donna che lo desidera "ad ogni costo", non solo ad ottenerlo, ma anche, in alcuni casi, a sapervi rinunziare. L'allungamento della vita ed il desiderio di non perdere il partner, ha infine comportato l'uso di una terapia ormonale sostitutiva che permetta alla donna di conservare il più a lungo possibile una eroticità soddisfacente. Anche in questo caso il ginecologo dovrebbe essere in grado di aiutare la coppia. e non solo la, donna, a mantenere sessualmente vivo il loro rapporto.

#### **SPS40**

## Metodologia della formazione in Sessuologia

Boncinelli Vieri

Dept Obstetrics and Gynecology. University of Pisa Italy

La metodologia della formazione sessuologica non può prescindere dall'analisi dei bisogni del contesto nel quale va avviata la formazione. Un primo strumento didattico è la trasmissiome di informazioni con il metodo della scoperta, per casi e per problemi. La trasmissione culturale deve essere scentificamente corretta e non tendenziosa.

Un secondo strumento consiste nell'apprendimento attivo con lavoro ai tavoli. Indispensabile è poi la dinamica di gruppo per un lavoro su le proprie emozioni. Molto utili sono anche le simulate per migliorare l'accoglienza della domanda sessuologica e la decodifica delle metadomande.

#### SPS41

### Quali metadomande sessuali nella pratica del ginecologo e dell'ostetrica

Nappi Rossella E

Sezione di Clinica Ostetrica e Ginecologica, Dipartimento di Scienze Morfologiche, Eidologiche e Cliniche, Endocrinologia Ginecologica & della Menopausa, Unità Operativa di Medicina Interna e Endocrinologia, IRCCS Fondazione Maugeri, Università degli Studi di Pavia

La salute sessuale è sempre più considerata un aspetto importante del benessere e della qualità di vita personale e di coppia. Si calcola che circa 1 donna su 10 nell'arco della vita possa manifestare un sintomo sessuale capace di indurre disagio personale e/o di coppia. Nella pratica clinica è ancora piuttosto difficile far emergere il tema della sessualità sia per difficoltà metodologiche sia per la persistenza di taboos da parte del medico e della paziente. Il setting ostetrico-ginecologico è il luogo privilegiato per discutere argomenti considerati privati e dunque "sensibili" e certamente le tappe critiche della vita riproduttiva, dall'adolescenza alla gravidanza e fino alla menopausa, segnano in modo significativo l'espressione clinica dei sintomi sessuali.Il ginecologo, ma anche l'ostetrica che ha nei suoi obbiettivi primari il counselling centrato sulla donna, ha il compito primario di decodificare la presenza di un sintomo sessuale, di individuare ogni eventuale causa correlabile agli eventi della vita riproduttiva e/o all'uso di terapie endocrine e non, di instaurare un percorso diagnostico-terapeutico ove indicato, e di saper inviare ad uno specialista differente nel caso egli ritenga che il sintomo sessuale abbia radici differenti da quelle di propria competenza. Le donne possono anche non iniziare una conversazione sul tema in modo spontaneo, ma apprezzano quasi sempre di essere interrogate sulla loro vita sessuale. Alcune semplici domande possono aiutare il ginecologo a stabilire una relazione tra l'insorgenza di un sintomo sessuale ed un evento riproduttivo, mentre può essere richiesta una formazione specifica per determinare in che modo altri molteplici fattori possano condizionare il quadro complessivo della salute sessuale. Esistono numerose meta-domande sessuali nella nostra pratica quotidiana, dal dolore pelvico cronico, alle perdite vaginali ricorrenti, dalle cistiti postcoitali alla mastodinia, che quando non trovano un correlato organico devono essere accuratamente inquadrate in un'ottica psicosomatica. Ascolto attento e restituzione del sintomo decodificato correttamente rappresentano un vero e proprio caposaldo del couselling psicosessuale, un elemento oggi irrinunciabile nella pratica ostetrico-ginecologica.

### Strumenti di screening ed algoritmi diagnostici delle DSF

Valentino Valeria, Nanini Chiara, Genazzani Andrea Riccardo

I criteri classificativi delle DSF sono relativamente recenti e nell'arco di pochi anni sono stati revisionati due volte a testimonianza del crescente interesse in questo settore. La classificazione attualmente in uso si basa sul modello di risposta sessuale che comprende desiderio, eccitazione, orgasmo e soddisfazione e si è arricchita di numerosi indicatori e descrittori indispensabili per contestualizzare i sintomi sessuali e per comprenderne l'evoluzione temporale. Le motivazioni alla sessualità e il vissuto individuale del sintomo in relazione all'età, al ciclo vitale, alla qualità della relazione con il partner devono essere sempre considerati per porre una diagnosi adeguata e assumono una notevole importanza per la scelta terapeutica. Nell'approccio diagnostico alle DSF occorre sempre tenere in considerazione tre piani di lavoro, quello biologico, quello psicosociale e quello più propriamente sessuale. Tale atteggiamento è indispensabile per sviscerare il sintomo ed evitare semplificazioni cui conseguono, inevitabilmente, fallimenti terapeutici negativi per la donna e per la coppia. Le domande devono essere aperte, chiare, non giudicanti e la "scaletta" deve essere personalizzata tenendo, però, sempre in considerazione i vari piani di azione e la necessità di inquadrare in un tempo relativamente breve sintomo, contesto, esordio, quadro generale, ruolo del partner, distress. Ad un colloquio anamnestico che, come vedremo, deve mirare a contestualizzare il sintomo sessuale riferito dalla donna e a porlo in una prospettiva di coppia, si possono associare degli strumenti validati quali questionari di autosomministrazione (indice della funzione sessuale femminile e maschile) e interviste semistrutturate (disegnate ad hoc sulla base dei più recenti criteri diagnostici) al fine di quantificare l'entità del disturbo anche e soprattutto in termini di distress per la donna e per il partner. In questa ottica, il coinvolgimento del partner, almeno in un secondo tempo, potrebbe rivelarsi di grande utilità per identificare le eventuali problematiche della salute che possono influenzare la qualità della vita sessuale dell'uomo. Per un corretto approccio terapeutico in ambito sessuologico, esiste la necessità di personalizzare i trattamenti. A tal fine, sono richiesti non soltanto una maggior conoscenza dei meccanismi biologici che sottendono la risposta sessuale femminile, ma anche e, soprattutto, un inquadramento preciso del contesto psicologico e relazionale. Lo sviluppo di criteri diagnostici ancora più precisi per identificare la popolazione di donne che presentano DSF clinicamente rilevanti permetterà di utilizzare terapie ormonali sempre più adeguate e di sviluppare nuove molecole specificatamente per la funzione sessuale femminile e non prese a prestito dall'ormai ricco armamentario terapeutico maschile.

### SPS43

### **Breast Cancer and Sexuality**

Fermín Criado Enciso, Cristina Criado Santaella

Approximately, 50% of women who suffered breast cancer present a sexual long dysfunction, as well as, a similar proportion in gynaecologist cancer.

In the Psychosomatic Gynaecology Unit from de the Gynaecology and Obstetric Department at Carlos Haya Regional University Hospital of Malaga (Spain), a study is taking place on breast oncologic pathology patience and their sexuality effects.

The number of patience is 203; it is an opened prospective study. CONCLUSIONS:

- 1. 60% of women keep Sexual Relations, while the other 40% does not.
- 2. Sexual Response does change when Breast Cancer Diagnosis

appear, shows, that 71,6% of women have changed their sexuality when breast cancer diagnosis appeared, while the other 28,4% have not

- 3. BPFS Questionnaire shows that 79,2% have a Low punctuation on Sexual Desire, while the other 20,8% have a Normal Desire.
- 4. Sexual Dissatisfaction/Concerned Questionnaire shows that 92,8% does not have sexual concerned, while the other 7,2% does.
- 5. Age is the most representative variable related to Sexual Response having a high statistical significance.
- 6. Adverse Events, during the previous year, behave of statistically significant form being correlated by the sexual response.

#### SPS44

#### Revisión y adaptación cultural del cuestionario de Salvatierra y Cuenca, 1987

Quesada Lupiáñez Paula, Florido Navio Jesús, Jimenez Bautista Francisco, Luna del Castillo Juan de Dios, Maroto Navarro Gracia, Gómez Quintana Maria Ángeles

OBJETIVOS: El cuestionario de Salvatierra y Cuenca, explora los síntomas, actitudes y trastorno emocional en mujeres que acuden a clínica obstétrico-ginecológica. El objetivo de este estudio es revisar y validar su contenido adaptándolo a los cambios socioculturales de las últimas décadas.

METODOLOGIA: Fases del proceso de revisión y validación del cuestionario: 1) Revisión exhaustiva de la información que la literatura científica destaca al respecto, 2) Consulta a expertos/as del área de la ginecología, 3) Entrevistas semiestructuradas a mujeres, 4) Consulta a profesionales expertas en género. Se realiza análisis: a) del contenido del instrumento disponible a la luz de los cambios socioculturales acahecidos en las últimas décadas, b) de los resultados de la revisión y la información cualitativa obtenida y c) se valida el contenido.

RESULTADOS: La actualización científica de todas las áreas que componen el cuestionario y las aportaciones de los/as expertas, generan un cuestionario preliminar formado por el mantenimiento de unas dimensiones, la eliminación de otras y la incorporación de nuevas.

Los resultados de las entrevistas semiestructuradas orientan el cuestionario a las necesidades de las mujeres tanto en el tipo de dimensiones y las preguntas que las conforman así como en la compresión del lenguaje. Los resultados se completa con la adaptación del contenido a una visión de género a partir de la elaboración de preguntas específicas y la redacción de las mismas.

CONCLUSIONES: El cuestionario revisado se ha traducido a ocho dimensiones que permitirán valorar a la mujer en su globalidad, cuando acude a clínica obstétrico- ginecológica.

#### Psychological impact of HPV infection

Delgado Rafael Comino

Some HPV types can induce precancerous lesions and finally cancer. On the other hand, we know that , the word "Cancer" is probably the one that causes the most negative impact on patients. As the majority of women and the general population believe on the relationship between HPV and cervical cancer, it's seems to be logical that, the knowledge of being infected has an important negative psychological effects

We have reviewed the current bibliography on this subject, about of which there are more publications everyday. In general, most of the publications find the following conclusions:

-General population knowledge about HPV, its relationship with ab-

normal cervical smear test and cervical cancer, as well as, the knowledge about HPV vaccination (mostly those women at high risk).

-An abnormal cervical smear test and/or a positive HPV test has an important negative psychological impact which causes an increased anxiety, emotional stress and health worries and finally , diminished quality of life.

-In order to diminish this negative impact, the doctor mission is to provide wide and truthful information avoiding to cause fears and worries on patients, on the contrary, he or she must be reassuring, making clear that, despite of the fact that it is an important problem it will have a favourable solution.

#### SPS46

#### Fibromialgia y Dolor Crónico

Castellanos Santiago

El dolor crónico y la fibromialgia constituyen uno de los problemas de salud de más prevalencia en las mujeres y produce al mismo tiempo una gran severidad y diversidad de síntomas corporales, entre ellos los ginecológicos. La medicina no ha encontrado hasta la fecha ninguna teoría sobre la causalidad ni tampoco tratamiento farmacológico eficaz.

En la ponencia se dará cuenta de una experiencia de investigación y tratamiento de la fibromialgia, que parte de considerar este padecimiento dentro de la órbita de los problemas psicosomáticos, en el que la subjetividad está directamente implicada.

Desde esta perspectiva un tratamiento desde la palabra es posible. El trabajo de investigación y tratamiento se prolongó durante cinco años en un centro de atención primaria de Madrid. El autor de este trabajo, médico y psicoanalista, atendió a algo más de 40 mujeres durante este tiempo. En la ponencia se ilustrará con viñetas clínicas la posibilidad de un tratamiento eficaz de la fibromialgia en la lógica de la alianza de la medicina y el psicoanálisis. Este trabajo ha sido publicado recientemente en el libro cuyo título es "El dolor y los lenguajes del cuerpo", editado por Grama ediciones.

#### SPS47

## Metrorrragia y Psicosomática

Lubian Lopez Daniel, Thomson ML, Gick L, O'Flynn N, Britten N. Jenkinson C, Peto V, Lete I, Obispo C, Coulter A, Peto V

La menorragia es un sangrado menstrual que ocurre a intervalos regulares pero que es excesivo (1). Su causa fundamental es la idiopática (HUD). Es la causa más frecuente de anemia. la presentan el 20% de las mujeres en edad fértil, representan el 18% de las consultas ginecológicas y el 25% de la cirugía ginecológica (HTS). Su diagnóstico es subjetivo y el tratamiento puede ser médico o quirúrgico. La menstruación normal significa para la mujer, la confirmación del buen funcionamiento de su aparato genital. La menorragia es una entidad paradigma de la medicina psicosomática desde su propio diagnóstico subjetivo. La vivencia del exceso menstrual puede ser diferente según la cultura de la mujer y la mayoría de las pacientes desarrollarán mecanismos de afrontamiento con lo que no se sentirán enfermas. Sólo el 6% de las pacientes buscan consejo médico, aunque todas han buscado ayuda no médica (2). La menorragia puede ser un síntoma de un trastorno por somatización o neurótico que debemos intentar reconocer. La paciente se queja de que el médico está preocupado en cuantificar la pérdida sanguínea y ella en que se le mejore su calidad de vida (3). Los resultados de sus tratamientos deberíamos medirlo en CV ganada (SF-36) más que en disminución de la pérdida sanguínea (4). El DIU-LNG presenta un alto grado de satisfacción y aumento de la CV (5). Los tratamiento quirúrgicos aumentan más la CV que los médicos, y la HTS es el tratamiento aislado que parece proporcionar la mayor mejoría (6).

## Formación clínica del psicólogo en el Equipo de Fertilidad

Zito-Carro Juan Pablo

El avance científico ha producido una separación entre sexualidad y procreación lo que tiene como consecuencia importantes cambios en la subjetividad de hombres y mujeres.

El ritmo del cambio siempre es más veloz que la capacidad de asimilación del ser humano por ello aparecen nuevos síntomas, nuevos malestares propios de nuestra época. En la especialidad de la reproducción asistida estamos en el terreno del avance de la biotecnología que en muchas ocasiones pierde de vista al paciente como persona, en su esfera psico-social.

Cómo integrantes de un equipo interdisciplinario, debemos orientarnos por la subjetividad del paciente para poder comprender otros aspectos que influyen en el estado anímico de la persona y que interfieren de forma negativa en los resultados médicos. Palabras clave: Psicología, sexualidad, infertilidad, ciencia.

#### SPS49

#### Premenstrual Syndrome and Women's Sexuality

Berenstein Eliezer

Science watches two big changes in the feminine universe with attentive eyes. Menstrual cycle and feminine sexual cycle, for being both influenced by what we title QH (Hormonal Coefficient) and OE (Emotional Coefficient), are susceptible to sexual inadequacies. Menstrual dysfunctions such as PMS (Pre-Menstrual Syndrome) and PMDD (Pre-Menstrual Dysphoric Disorder), can be comorbid

(or comorbidities??) with the sexual dysfunctions.

The approach of this dynamic can be obtained within the concept of "Feminology", what the author proposes as pistemological evolution of psychosomatic obstetrics and the search for a new clinical approach of these problems".

#### SPS50

# Post-Traumatic Stress Disorder after Childbirth: Prevalence and Associated Factors in Puerperals of Public and Private Health Service in a region of São Paulo, Brazil

De Almeida Andretto Daniela

People develop Post-Traumatic Stress Disorder (PTSD) after exposure to an event with strong emotional impact, experienced as horrifying and in which their physical and/or emotional integrity is threaten. Women who experienced sensations during childbirth such as pain; feeling of impotence; the perception that they lost control; the sensation that health-care providers did not care about them; that their or their babies' lives were threaten can develop 'PTSD following Childbirth'. Among the symptoms commonly experienced by those women are: isolation, recurring frightening thoughts and memories of their ordeal, flashbacks, constant feeling of danger, fear of an upcoming delivery, irritability, depression, shame, self-recrimination, guilty and problems with kids, husband and family. The main objective of this research is to estimate the prevalence and factors associated with 'PTSD following Childbirth' among 329 puerperals in the public and private health sector in a district of Sao Paulo. A transversal study was developed using four instruments - the first was a questionnaire consisting of sociodemographic data and previous obstetric experience, the second was about their childbirth experience, the third was a PCL-C

Scale, and the fourth was a EDPS Scale. The first instrument was applied in the immediate postpartum and the other three after at list six (6) weeks post partum. Considering the first 135 interviewees, the 'PTSD following Childbirth' in accordance with the PCL-C Scale, was found in 14 (10,4%); and Post-partum Depression, in accordance with the Edinburgh Scale (EPDS), with higher score than 12, resulted in 23 (17%).

Among the variables that seem to be associated with 'PTSD following Childbirth' are "the need for the health-care provider to introduce him/herself", "the woman having experienced a shameful situation before the childbirth", "worry about her baby's health", and "someone having said something that "disappointed her" during childbirth, Someone "having said something that disappointed her" also has an association with post-partum depression, evidencing therefore that the relationship established between the woman and health-care providers during childbirth is directly associated with the development of 'PTSD following Childbirth' and 'Post-partum Depression'.

#### Birth experience: providers and women's perception

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Brazil is a middle-income country with universal access to health care. Birth experience is a social, cultural construct, as are expectations and satisfaction with experience. This study aims to explore providers' and women's perceptions of what makes a good or a poor birth experience for healthy women and babies. We conducted semi-structured interviews with providers (obstetricians, paediatricians, nurse-midwives) and postpartum women, in public and private services. Most providers believe normal birth is harmful for women's physical, emotional and sexual health; women were less pessimistic. Perceptions of what constitutes a good birth care are different in private and public settings. In private sector, typically labour and delivery are "prevented" by c-section; while in the public sector typically they are "treated" with interventions such as augmentation with oxytocin and episiotomy, often with

inappropriate pain relief. Providers believe most women prefer c-sections. In both public and private sectors, women tend to prefer vaginal birth, and have little or no access to informed decision. A recent consumer's movement stimulates informed choice. For most providers, the good patient trusts and follows recommendations; for most women, the good provider listens and respects their needs and doubts. Women who declared satisfaction with care paradoxally listed several items when asked what they would "change" in their birth experiences. Providers tend to underestimate the adverse effects of routines that women rate negatively, such a augmentation, repeated vaginal examinations and lack of privacy; for women, beyond safety issues, friendly and respectful interactions are most valued.

#### SPS52

#### Body Satisfaction in Women - Results of a Survey on a Non-Clinical Sample

Fliegner M, Hoffman S, Huber K, Richter-Appelt H

The aim of this study is to gain insight into women's satisfaction with their physical appearance. The results were obtained on the basis of a large non-clinical sample and can be used as control data in studies with psychosomatic patients.

A sample of 932 women were asked via an online survey to rate their body satisfaction in general as well as with regard to certain parts of their bodies. Furthermore, subjects were asked to give ratings of their own perceived femininity. To this end, a specially developed standardized questionnaire was used: it comprises two drawn body silhouettes which are each subdivided into single components that relate to body parts (e.g. hands, feet, ears etc.). In the first drawing, the subjects are asked to rate their satisfaction with these body parts. The second drawing asks for their estimates of their own perceived femininity. At the end of each drawing the women give an overall

rating for their body satisfaction and femininity.

Results concerning the general level of body satisfaction in women will be presented. Furthermore, a closer look is taken at their satisfaction with single parts of their bodies.

We find that in general, women seem to be fairly satisfied with their physical appearance. This is true for their general impression as well as for measures that concern specific parts of the body.

Results concerning the correlation between satisfaction and perceived femininity will be presented. Furthermore, analyses looking at the impact of the evaluation of certain body parts on the overall satisfaction measures will be discussed.

The results show a relatively high level of body satisfaction in women compared with previous results. Possible reasons for the presented findings will be discussed.

#### SPS53

#### **Altered Stress Response of Patients with PCOS**

Janssen Onno, Tan Susanne, Hahn Susanne, Benson Sven, Arck Petra Clara, Elsenbruch Sigrid

Women with polycystic ovary syndrome (PCOS) suffer from hyperandrogenism, infertility and obesity, severely reducing their quality of life (QoL). The reduction in QoL far exceeds the correlation of PCOS with its somatic manifestations.

An Internet-based survey of 448 German PCOS women was used to assess coping, anxiety, depression and QoL in these patients. Standardized questionnaires were used to assess the impact of infertility in 115 PCOS patients. A public speaking stress test was used to examine 32 PCOS patients and 32 BMI-matched controls.

In women with PCOS, passive coping was associated with greater anxiety, depression, and reduced psychological QoL. In stepwise multiple regression analyses, passive coping, together with depression, anxiety and BMI, explained 50% of the SF-12 psychological sum score, while active coping did not enter any regression model. Unexpectedly, comparisons of PCOS patients with a current unfulfilled desire to conceive to those

without revealed no discernable impact on depressive symptoms, QoL or emotional distress. Reduced sexual satisfaction and self-worth were largely determined by partnership status and not infertility. In response to public speaking stress, PCOS patients and controls showed comparable increases in anxiety and blood pressure. The ACTH and cortisol stress responses were enhanced, heart rate was higher and interleukin-6 levels displayed a reduced upregulation in PCOS.

Thus, in PCOS women, passive coping may constitute a maladaptive strategy associated with anxiety, depression and compromised QoL. However, infertility does not appear to constitute a primary determinant of psychological problems. PCOS patients showed enhanced HPA-axis and heart rate reactivity as well as a reduced

upregulation of IL-6 in response to stress. The altered stress reactivity in PCOS patients may constitute a link between depression, overweight, and the cardiovascular and diabetes risks associated with PCOS.

#### Gender Identity in Individuals with Complete Androgen Insensitivity Syndrome

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Complete Androgen Insensitivity Syndrome (CAIS) is one of many phenomena summarized under the umbrella term Disorders/ Divergences of Sexual Development (DSD): congenital conditions with an atypical development of the chromosomal, gonadal, or anatomic sex. People with CAIS have XY-chromosomes, but due to an insensitivity of the androgen receptor the body can not respond to the androgens that are produced. Hence the external genitalia appear female at birth and these children are raised as girls. The condition often stays undetected until puberty. Because of undeveloped internal genitalia, the menarche does not occur. The gender identity of these people – that is, their experience of themselves as women, men or in-between – has nearly always been described as unremarkably female.

In the Hamburg Intersex Study, 13 persons with CAIS were questioned concerning their gender identity and their body experience.

They answered a Gender Identity Questionnaire which contains scales measuring female and male gender identity, transgender identity and security of gender identity. The results of the clinical sample were compared with a control sample of women.

In contrast to the results often described in the literature, we find in our sample a tendency of people with CAIS to differ in their gender identity from other women. Some reported lower female gender identity scores, higher male gender identity scores and less gender identity security.

The results reported show that gender identity in people with CAIS might not be as unremarkable as often assumed. This should be taken into consideration when dealing with this group as health care professionals, but also raises questions concerning the impact of karyotype and hormones in women and men in general.

#### **SPS55**

#### Laparoscopic assisted creation of neovagina in case of vaginal agenesis

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Background: The most common condition associated with vaginal agenesis is the MRKH-syndrome, but it is also seen in AIS. Occuring in 1:5000 live female births the MRKH-syndrome should be known by gynecologists and adequate diagnostics and therapy should be chosen. A new or well modified surgical method with new and improved instruments for the creation of a neovagina, also in the presence of renal malformations including surgical and technical complications, duration of surgery, traction and hospital stay and the achieved functional results as well as long-term results have been evaluated. Unfortunately we also found that misdiagnoses are common in the initial stages and that no standardized diagnostic and therapeutic approach was available. Methods: From 2000-2009 data from 214 patients which presented to our hospital suffering from vaginal aplasia were included. We than compared in a prospective, interventional study the laparoscopic modification of the Vecchietti operation using the conventional instruments with our new Vecchietti-based method using our newly developed set in 180 patients. Results: None of the previous technical complications seen with the conventional instruments occurred with the new instruments. Without surgical tunneling and with the use of our new, optimized instruments, the mean duration of surgery was more than halved from 113.0 to 47.5 min (p < 0.0001). No rectal lesion occured. Using our new developed traction device the mean duration of traction was reduced from 11.7 days (p=0,0010) to 4.8 days, despite not performing tunneling, but resulting even in significantly better fuctional results. The postopeative length was 1.8 cm longer (p < 0,0001). The mean hospital stay was also 3.2 days shorter (p=0.0105) thanks to the shorter duration of traction. After 6 months, the longer neovagina achieved with the new method was still 2.5 cm longer (p <0.0001). None of the sexually active patient needed lubricants or had sustained pain during sexual intercourse regardless of the method or instruments. 40,9% of the 241 MRKH patients had suffered prior misdiagnoses and malpractice. Therefore we developed a mnemonic (the 3 A's) and a state-of-the-art diagnostic procedure to avoid malpractice in the future. Patients were treated surgically by the new developed and standardized method. Conclusion: Whilst vaginal aplasia is not a life-threatening disorder, it dramatically detracts from the quality of life of the affected women. By utilizing a standardized diagnostic procedure, differential diagnoses should be excluded at the earliest stage possible. Using our new method for the laparoscopic-assisted creation of a neovagina with the optimized, FDA approved set of instruments, shorter operation and traction times with fewer surgical and no technical complications, but better functional results could be achieved. It is therefore a safe, simple, short, effective and less traumatic procedure.

#### Psychological strains in patients with MRKHS and psychosomatic support

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Background: The main characteristics of the Mayer-Rokitansky-Kuester-Hauser-Syndrome (MRKHS) are vaginal agenesis and an incompletely developed uterus. This results in infertility. Because of a regular female genome and functioning ovaries, their hormone production is normal though. Because of that they develop regular secondary sexual characteristics. Most common cause for diagnosis is amenorrhea at the age of 14-17 years which puts additional strain on this already difficult adolescent phase of life.By creating a "neovagina" patients are enabled to have vaginal sexual intercourse including orgasm. Methods: Since 2005 all patients (n=166) who are about to get a "neovagina" were asked to complete the Patient Health Questionnaire (PHQ) to screen psychological strains, the Female Sexual Functioning Index (FSFI) and a body image questionnaire (FKB-20) before and after surgery. At the same time, we started offering psychological support to improve coping during

hospitalisation. Additionally, we conducted an anonymous online-survey using the same questionnaires (n=116). Results: As expected, patients showed significantly better scores in FSFI after surgery as well as improvements in the body image questionnaire FKB-20. The frequency of patients with psychological disorders was comparable to normal population. Participants in the online-survey reported similar scores in FSFI and body image questionnaire but showed higher psychological strains. Conclusion: Our data suggest that patients with MRKHS do not report higher psychological strains before surgery than normal population. Primarily they seem to benefit from surgery and psychological support regarding psychological strains as well as body image and sexual functioning. Some patients develop problems later on though, especially associated with infertility and female identity. Psychological support seems to facilitate coping during hospitalisation.

#### SPS57

## Trauma experience and impact on coping with labour

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Objective: We had two hypotheses:

-Women with no or little pain experience are not biased about pain and will be coping well during labour.

There is a correlation between the trauma experience, physical violence, sexual abuse/violence and the way of coping with pain. Study design: The population consisted of 598 women having been interviewed by half-standardized questionnaires during pregnancy, labour, immediately after, three and six months after delivery and were observed during labour by midwives. We used half-standardized interview series, SSG, self-rating by VAS scale (Visual Analogue Scale), half-standardised descriptions by midwifes during delivery. Results: 284 women had trauma experience, this is 47.5% and 62 had been exposed to physical violence, this is 10.5%. Special experience of sexual violence or abuse had 15 women, 2.5%. The expectation of pain (and information about pain and labour)

was measured in the 42th and 43th question of our questionnaire as well as by VAS scale in the 83th und 84th question and showed that the correlation of expected and experienced pain is especially good in women with previous physical pain experience and especially bad in women without any pain experience and influences mode, duration and medical intervention in delivery. Discussion: The hypothesis that women with no or little pain experience are not biased about pain in labour and will be coping well during labour turned out to be wrong. Is a correlation between experience of trauma, physical violence, sexual abuse and coping with pain during labour. These women have coping strategies and are coping well. Our focus has to be on those women for whom pain in labour was their first pain experience. They are overwhelmed and need our special consideration during pregnancy, labour and the postpartum period.

#### Expectation of pain and influence on pain management in delivery

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Introduction: In modern medicine we focus on patient comfort and patient desires and no longer accept "you shall give birth in pain". But can we keep such promise?

Methods: In interdisciplinary cooperation 620 patients were asked about "pain". The answers were collected by a standardized questionnaire in four parts performed at: 36th gestational week, peripartal, the second day after delivery and three months after delivery. Pain was evaluated by VAS scale.

Results: Out of our 620 patients we were able to evaluate 478. Out of these 41,6% were multiparous, 52,3% primiparous. 67,6% expected the most unbearable pain, 18,9% expected heavy pain and only 13,4% expected mild and medium pain. Before delivery only 1,7%

of pregnant women wanted a peridural catheter (PDK), only 1,3% a caesarean section. 97,0% wanted a vaginal delivery.

In spite of the high expectation of pain 57,4% of the women experienced pain even stronger than expected and only 31,1% as expected.

18,2% of the women in labour got a PDK. Out of these only 3,4% had wished for a PDK before delivery. Finally, 6,7% had a caesarean section. Discussion: The pregnant women wish a natural vaginal delivery without any obstetrical interventions before delivery for themselves as well as for their children. There is a remarkable discrepancy in spite of thorough information between expected and experienced pain during labour. During labour the possibilities of a peridural catheter or a caesarean section are welcome.

#### SPS59

## Investigation of 478 pregnant women in regard to pain experience: quality and body area

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Introduction: Pregnancy is a special time in which bonding between mother and child gets established. In spite of such a physiological phenomenon like pregnancy, pain in pregnancy is often described. Should pain in pregnancy be treated, how and when?

Methods: In an interdisciplinary cooperation 620 patients were asked about pain and 478 women were evaluated in regard to this question. The answers collected in standardized questionnaires were given at four measurement points: 36th gestational week, peripartal, the second day after delivery and 3 months postpartum. Pain was evaluated through the VAS scale.

Results: 47,5% of the women reported pain in pregnancy. Out of these 1,2% had taken pain killers. 13,6% reported to suffer from pain

often and 43,9% reported severe pain which should be treated showing VAS >3. Somatic (71,6%) and psychological (31,1%) burdens increase pain experience.

Discussion: In pregnancy there is a low level for experience of pain because of psychological and physiological changes. This time is one of extreme life strain, a so called "life event". For the pregnant woman there is the challenge of getting pain stricken themselves or taking pain killers and the safety of the child. Of major importance is a regular evaluation of pain during pregnancy to find out about necessary pain reducing interventions. A longer lasting pain experience can lead to complications in pregnancy and prolonged labour. The attitude towards pain, medication and pregnancy needs intensified awareness!

#### SPS60

#### Long term ailments and complaints in the postpartum period (3 - 6 months after delivery)

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Introduction: The first months after delivery are a special time for mother and child. Changes of the mother's body, the family structure, the relationship and the social environment influence the psychological balance of the woman.

Methods: In interdisciplinary cooperation 620 patients were asked about pain, pregnancy and delivery. The data of the 3-6 months postpartal interviews on the telephone were collected by a standardized questionnaire, 92 were evaluated. The pain was determined by the pain score of the visual analogue scale.

Results: 23% of the mothers felt extremely exhausted after a 3-6 months postpartum. 38% could not think of any further delivery. These statements were influenced by the following factors: 23%

of the mothers didn't see themselves anymore as attractive, 8% felt themselves at least less attractive than before pregnancy. 2% felt themselves left alone by their partner. 14% had pain which was related directly with pregnancy, delivery or breast feeding. For 15% the experience of their social environment had changed. 23% of these mothers don't go out anymore.

Discussion: Having a child is for many women very fulfilling. But exhaustion and lack of sleep in combination with changes in the social network may lead to negative emotions. From that, serious postpartum depressions can emerge. If this is a case, tensions also in mother-child-bonding can be observed.

#### Quality of life related to signs and symptoms of hyperandrogenization in women

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Hyperandrogenization results in such clinical sings and symptoms as acne, hirsutism, hair loss or oily skin, which are related to aesthetic image of women. Causes of hyperandrogenization are different and can be reffered to ovarian, adrenal gland, pituitary dysfunction and also to unknown mechanisms. PCOS is most common endocrine disorder affecting women of reproductive age and it is regarded as the main cause of hyperandrogenism. The objective evaluation of the degree of clinical effects of hyperandrogenization is quite often different from the subjective opinion of a patient. Therefore precise scale of evaluation of hirsutism and acne helps in objective evaluation of hyperandrogenization symptoms. The discrepancy of judgement (doctor's objective and patient's subjective) presents a important problem. Sometimes patient does not notice the clinical symptoms of hyperandrogenization and therefore the process of diagnosis and treatment is delayed.

However the above-mentioned symptoms of hyperandrogeniza-

tion can be important source of social and emotional stress and psychological morbidity and also can negatively affect quality of life (QoL). According to conducted studies patients with severe hirsutism and /or acne present lack of self-acceptance, depression tendencies, lower motivation. The consequence of these disorders can be giving up work, avoiding contacts with people, withdrawing into oneself or even deep depression.

Number of studies related to measurement quality of life related to hyperandrogenization is limited. This number has risen dramatically after 2002, which express how important is this problem. Systematic review indicate that overall PCOS has a significant negative impact on a woman's health related quality of life (HRQoL). Further studies are required to explore the impact of hyperandrogenization on the quality of life in different cultures and ethnicities. It can be important for better diagnosis and management of this endocrinological problem.

#### SPS62

#### Mood changes in hyperprolactinaemic women

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The principal function of prolactin is the growth and development of the breast and initiation of the lactation in postpartum women. Hyperprolactinaemia is a common endocrinological problem with varied ethiology. High prolactin levels inhibit GnRH pulsatility at the hypothalamus level and in turn cause menstrual disorders related to hypoestrogenism.

Most studies on diagnosis and treatment of hyperprolactinaemia have focused on clinical and biochemical outcome rather than on functional and mental well-being. Some studies have suggested an increase incidence of mood changes in hyperprolatinaemic women. These mood changes include depression, anxiety, hostility, reduced motivation and also reduced emotional reaction. Patients with antipsychotic and antidepressive drug-induced hyperproalctinaemia are excluded from this description.

The best tool to evaluate mood changes in hyperprolactinaemic

women is to use different questionnaires such as SF-36 questionnaire, Nottingham Health Profile (NHP), Hospital Anxiety and Depression Scale (HADS)

There are no identified precise mechanisms responsible for mood changes in hyperprolactinaemic women. One of the possible cause of mood changes in this group of patients can be profound hypoestrogenism which results from hyperprolactinaemia. On the other hand the increased anxious and depressive feelings might be due to possible effects of high prolactin levels on the central nervous system. Hyperprolacinaemia has been documented to induce neural changes that may, ultimately, translate into changes in behavior, emotions and feelings.

Therefore hyperprolactinaemia treatment should not only focus on the biochemical and hormonal response but also on mood changes relieving in these patients.

## Emotions driven by estrogens. From regular estrous cycle to Turner syndrome patients

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Fluctuations of estrogens over the women lifespan have long been known to play a major role in the development and homeostasis of female. However recently we are gaining knowledge how fluctuations of sex hormones affect brain function, including psychological development, emotional processing, interpretation and sensory processing and more. The interplay between estrogens and psychological functions will be reviewed, on the basis of literature and own studies. The ability of sex hormones to impact psychoneurological processes will be discussed with focus on healthy women in different physiological states (menstrual cycle, pregnancy, postpartum period) and in pathological conditions in Turner syndrome patients.

The link between menstrual cycle and women's mood and ability to interpret others emotion have been recognized for long time, but only recently systematically studied. Self recognized well-being and increased self esteem was proven to be characteristic for midcycle period, whereas about 95% of women experience negative emotions (inter alia: anxiety, irritability and depression) premenstrually. Those data are reflected by epidemiology of suicide incidences, which revealed that in women, the likelihood of committing suicide is dependent on the menstrual cycle phase. The effect of estrogens on emotions are also seen during pregnancy and postpartum.

In gonadal dysgenesis – Turner syndrome many factors, especially short stature, physical abnormalities and specific medical problems are likely to affect psychosexual functioning including emotional processes. The hormonal therapy can significantly influence psychological variables in those patients, including self-esteem, sexual functioning and mood. Moreover, it is known that Turner syndrome patients are dysfunctional concerning recognition of other emotion and lack of ovarian function during neurodevelopment may be to some extent causative factor.

#### SPS64

#### Psychosomatic aspects of anorexia nervosa and hypothalamic amenorrhea

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Anorexia nervosa (AN) is an eating disorder characterized by refusal to maintain normal body weight, and distorted self image with concomitant obsessive fear of gaining weight. AN is serious medical problem, with high morbidity and mortality. AN incidence is estimated to be 0.3%. The important issue in AN is disturbed hypothalamo-pituitary-ovarian axis function, which results in the development of hypothalamic amenorrhea (HA). Additionally, HA may be caused also by other factors such as emotional or physical stressors. The AN has been linked to psychosomatic disorders fro the very beginning. Gull W. described it for the first time in 1873. Psychosomatic background of HA is still not fully recognized. The psychosomatic aspects of AN and HA refer to their pathogenesis, clinical picture and treatment, and those will be discussed on base of authors' and other investigators' data. Recent data showed that pathology of starvation and eating disorders is often related to psychological processes especially those used to regulate painful emotions, with anger and sadness thought to be most relevant. From this point of view, development of AN is a coping strategy for the feeling of shame, and the maintenance cycle is driven by the shame-pride antagonism. Those patients are known to have lower perception of control and a low self-esteem. They were also proved to have difficulties with meta-emotional skills and poverty of emotional environments while growing up. On the other hand eating disorders itself acts as inhibitor of emotions. In hypothalamic amenorrhea (HA) susceptibility to common life events, restrictive disordered eating, depressive traits, and psychosomatic disorders have been observed and similarly to AN, defective coping strategies are typical. The combination of psychosocial stressors and neuroendocrinological disturbances are believed to play a key role in pathology of this disease. The therapeutic strategies in AN are in large part based on psychological approach, from which the most important are cognitive-behavioral, cognitive-analytic, psychoanalytic and family therapy. Similarly, in HA psychological support is needed to achieve therapeutical success.

### Current Status of Psychosomatic Ob/Gyn in Eastern Europe

Pramataroff-Hamburger Vivian

Twenty years after the fall of communism, Eastern Europe still bears the scars of the former authoritarian regimes, including in health care, of which mental care is in particular disarray. The system change has promoted class restructuring, and the majority of mental care providers appear unprepared to cope with the social misbalances. Psychosomatic care hardly exists--with the exception of Hungary, for example, there are no official societies for psychosomatic obstetrics and gynecology in any country. Patients who suffer from psychosomatic diseases are directly referred to biologi-

cal psychiatrists or left on their own devices. To fill the gap between general and psychosomatic gynecology, gynecologists in Eastern Europe need urgent access to new techniques for the treatment of these cases. The author provides an overview of the psychosomatic care in some Eastern European countries and makes concrete suggestions for the development of psychosomatic care in obstetrics and gynecology through universities and university hospitals, using medical training and postgraduate education. The time window for such a fundamental shift is only now and is quickly closing.

#### SPS66

#### First steps in Czech Republic

Ziss Marian

In the Czech Republic there is an old-new balance and a status quo between the health care professionals and their patients. This includes the relation between the professions (physicians and psychologists), between the professional and the patient, the expectations, the insurance system and other motivational factors.

All parties, the physicians, the psychologists and the patients are participating in maintaining and changing this balance:

The physicians don't have the interest to turn towards psychosomatics, and also, the evidence based results from the field of psychosomatics rarely arrive to the medical faculties of universities.

The psychologists in somatic departments of hospitals are mostly

obeying to fill up the place that is meant for them in the health care system: dealing with patients that suffer without an organic background.

The patients are not motivated to turn towards psychosomatics as the health insurance does not cover the psychotherapy or psychosomatic prevention, intervention. The level of common knowledge in the field of psychosomatics is low. Also, as selling psychosomatic interventions is less profitable than other medical interventions, less is invested into their marketing communication.

In order to develop the psychosomatic attitude all 3 parties will have to participate in the process of change.

#### SPS67

#### Status of sexual dysfunction in Korean women

Tak Kim, Ahn Ki Hoon

Objectives In Korea, studies on female sexual dysfunction were relatively rare compared with male sexual problems. We investigated the literatures on the prevalence and features of sexual dysfunction in Korean women.

Materials and Methods Online search was performed through Pubmed. There were some published English literatures about the prevalence of female sexual dysfunction in Korea.

Results & Conclusions In the literature on 600 women aged 40-80 years, the sexual problems most frequently reported by women in Korea were lack of sexual pleasure (37%) and inability to reach

orgasm (31%). Only 2% had talked to a medical doctor about their sexual problems. Middle-aged and older adults in Korea regard sex as an important part of life and report continued sexual activity. Several sexual problems are highly prevalent in this population, but very few individuals seek medical help for these disorders. This is largely due to believing that the problem is not serious, not being bothered by the problem, difficulties regarding access to or affordability of medical care, and/or a lack awareness of available treatments.

#### Psychological impacts of high-risk human papillomavirus infection in women

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Introduction: Genital Human Papillomavirus (HPV) infection is the most commonly occuring sexually transmitted viral infection in human. Worldwide, cervical cancer is the second most common female cancer, which is mainly caused by high-risk HPV. For this reason, nowadays high-risk HPV tests are applied as an adjuvant tools in cervical cancer screening. These tests provide increased sensitivity for the detection of high-grade precancerous diseases. Some patients experience anxiety, general distress and concern for positive HPV-DNA test results. This review analyses the psychological impacts of positive high-risk HPV test results. Methods: A PubMed search was carried out. Search terms were HPV test, intraepithelial neoplasia, cervical cancer, psychological problem,

depression, distress, anxiety and sexual dysfunction. Results: Testing positive for high-risk HPV was associated with adverse social and psychological consequences. Depression, anxiety and anger are the emotions most frequently reported. In several reports, the affected women tend to feel stigmatized, anxious and stressed, to be worried about their sexual relationships, and to disclose their result to others. However, there is no conclusive evidence of a correlation between HPV infection and a specific female sexual disorder. Conclusion: Women with positive high-risk HPV could experience psychological difficulties. Physicians had better try to minimize this psychological burden.

#### SPS69

#### Depression and Anxiety in patients with gynecologic disease

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Prevalence of psychological stress is considerably high in patients with gynecologic disease. Among various psychological symptoms, depression and anxiety are most common. Management of depression and anxiety is clinically very important, because they could appear various forms of clinical features during the disease progression and have influence on the whole process of treatment. We performed a cross-sectional study in our out-patient clinic by using Beck's Depression Inventory and State-Trait Anxiety Inventory. According to this study, depression and anxiety were very prevalent in patients with benign gynecologic disease (11.8-14.1% and 5.0-10.0%, respectively), as well as in patients with gynecologic malignancies (19.3% and 6.1%, respectively), which were

significantly more frequent than normal population. Moreover, some gynecologic symptoms such as pelvic pain were significantly related to the symptom development of depression and anxiety. In view of the interaction between somatic and psychological symptom, gynecologic disorders could provoke depression and anxiety, while psychological stress could aggravate the gynecologic somatic symptoms. Therefore, deep understanding of psychosomatic obstetrics and gynecology could help to relieve the psychological high burden of gynecologic patients, to improve the doctor-patients relationships, to facilitate the management process, and finally to elevate the quality of life of patients suffering from gynecologic diseases.

### SPS70

# New Findings On the role of Serotonin in PMDD: Genetics and Pharmacology $Eriksson\ E$

The support for the hypothesis that serotonin plays a key role in premenstrual dysphoria is strong. First: Serotonin reuptake inhibitors cause a dramatic reduction in premenstrual irritability that (unlike the antidepressant effects of these drugs) coincide in time with the effect of these drugs on extracellular serotonin concentrations (i.e. it appears shortly after drug administration, enabling intermittent, luteal administration of these substances). Second: Also other drugs enhancing serotonergic output have been shown to reduce premenstrual complaints (mCPP, fenfluramine, tryptophan, buspirone). Third: Treatment causing an impaired serotonergic transmission may elicit or aggravate premenstrual

dysphoria. Fourth: Numerous studies have reported premenstrual dysphoria to be associated with various biological markers tentatively reflecting brain serotonergic activity. Fifth: Recent studies suggest premenstrual dysphoria to be associated with certain variants in serotonin-related genes. Sixth: A role for serotonin in premenstrual dysphoria is in perfect consonance with data from animal experiments suggesting that a key role of this transmitter is to dampen sex steroid-driven behaviour, including aggression/irritability. In this presentation, these findings will be reviewed and discussed.

# First Consensus of the International Society for Premenstrual Disorders (ISPMD): Definition, Diagnosis and Classification Consensus

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Definition, classification and diagnosis of premenstrual disorders (PMD) are confounded by the range of opinions published by differing authoritative bodies. A consensus meeting of ISPMD (2008) agreed the concept of a Core PMD related to ovulation with specific Variants. Core PMD - Symptoms are non-specific, must be prospectively rated, must recur in the luteal phase, must disappear by the end of menstruation, there is a symptom-free week between menstruation and ovulation, they are not an exacerbation of an underlying psychological or physical disorder. Physical and Psychological symptoms are important, the number of symptoms is not proscribed. Symptoms must cause significant impairment or

distress. Ovulation underlies Core PMD. Variant PMDs include - Premenstrual exacerbation of underlying physical or psychological disorders, PMD with absent menstruation, PMD with non-ovulatory ovarian activity, Progestogen-induced PMD The key symptom elements are Cyclicity - Symptom-free week - Impairment. It is hoped that this consensus will influence the deliberations of WHO (ICD11), APA (DSM V), ESHRE and other professional bodies many of whom are currently reviewing their definitions of PMT, PMD, PMS and PMDD. Clarity of understanding will lead to improvements in research and treatment for individual women.

#### SPS72

### New treatment options for premenstrual disorders: hormones vs antidepressants Pearlstein Teri

Treatment options for premenstrual syndrome (PMS) and premenstrual dysphoric disorder (PMDD) include antidepressant medications, hormonal treatments that suppress ovulation, benzo-diazepines, dietary modifications, nutritional supplements, herbal treatments, and cognitive-behavior therapy (CBT). Specific treatments that will be discussed are selective serotonin reuptake inhibitors (SSRIs), gonadotropin-releasing hormone (GnRH) agonists, oral contraceptives containing drospirenone, calcium, Vitex agnus castus and CBT. Advantages of the SSRIs include their tolerability and efficacy with administration during the luteal phase of the

menstrual cycle only. Although a GnRH agonist can be helpful, long-term use may necessitate add-back hormones to decrease risks associated with prolonged low estrogen such as bone loss. An oral contraceptive containing drospirenone administered in a 24/4 regimen may be an optimal treatment choice for a woman with PMDD who also desires contraception. Several treatment options exist for the woman with problematic premenstrual symptoms, and the treatment choice is best individually tailored to the woman's symptoms and preferences.

#### **SPS73**

### Tools for Diagnosing Premenstrual Disorders

Steiner M and Eriksson E.

At least 65 instruments have been identified that were developed specifically to measure premenstrual symptoms. The ones that are most commonly used are: the PRISM, the COPE, the DPS, the VAS and the DRSP.

DSM-III-R and DSM-IV criteria have been used as inclusion/exclusion criteria in well over 50 open-label and randomized placebo-controlled trials using a variety of psychotropic as well as hormonal therapies. Most of these studies have used prospective daily rating scales both as part of the inclusion criteria and as an outcome measure.

However the requirement to prospectively chart symptoms daily for a minimum of two symptomatic cycles is impractical and unrealistic in a busy primary care practice.

Based on our own clinical experience of the reluctance of patients as well as feedback from primary health care providers to initiate treatment only after completion of daily charting for two symptomatic cycles, we developed a simple, user-friendly screening tool, the Premenstrual Symptoms Screening Tool (PSST), in line with the DSM-IV diagnostic criteria for PMDD.

Both the PSST and the DRSP can be used to assess not only DSM-IV criteria for PMDD but also lesser degrees of severity of premenstrual symptoms.

#### Screening for fear of childbirth in Swedish Antenatal clinics

Katri Nieminen, Olof Stephansson, Elsa-Lena Ryding

Background: Fear of childbirth (FOC) is an important reason to morbidity during childbirth.

Many Antenatal clinics in Sweden have started to screen for FOC with a single question numeric rating scale (NRS). Wijma Delivery Expectancy Questionnaire (W-DEQ A) with 33 items is used in many studies as golden standard in measuring FOC. W-DEQ A was compared with VAS rating of the fear in one study where correlation between the two methods was 0.7 and VAS was found a possible way of screening for FOC.

Aim of the study: To measure the appraisal of the coming delivery reported by means of a single question NRS and the W-DEQ A. Design and setting: Cross-sectional; at antenatal clinics in four geographic areas – capital, towns and countryside in Sweden, September-October 2006.

Method: 1635 pregnant women (98% participation) in various gestational ages completed a questionnaire with a single question NRS asking the grade of FOC, demographic data, the preferred mode of delivery and a W-DEQ A scale.

Results: Prevalence of significant fear of childbirth was 15.8%. Nulliparous had higher mean in W-DEQ but less prevalence of intense fear.

Correlation between the two methods in this study was 0.61. The specificity for NRS  $\geq$  6 was 94% and sensitivity 75%. The positive predictive value was 62%

Conclusion: A single question NRS score could be used to find a group where further investigation with W-DEQ could help to identify women with severe FOC.

## **SPS**75

#### Swedish midwives perceptions of fear of childbirth

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In Sweden 6-10 % of pregnant women suffer from severe fear of childbirth (FOC). As dealing with women with FOC is a reality in midwives' daily work, midwives' perceptions and opinions about FOC were investigated in two studies: 1) a qualitative study with a phenomenographic approach, using four focus-groups interviews with midwives (n= 21); 2) a cross-sectional study with a representative sample of Swedish midwives, using a questionnaire (n= 726). The midwives stated the following. Study 1. FOC is seen as a continuum from realistic to irrational fear. Origins may be related to the pregnant women's past and future circumstances. Consequences regard woman's life before and after delivery, the labour event, the midwife's work and community costs. Midwifery care was focused on evaluation, preparation for childbirth, presence of

a companion, practical interventions, and postpartum follow-up. Study 2. Two- thirds of the midwives thought that the prevalence of S-FOC has increased during the last 10 years, women nowadays being more frank talking about their S-FOC. S-FOC is perceived as different from other phobias. More midwives working at labour wards judged that they had enough knowledge and considered that they sense when a woman suffers from S-FOC, as compared with colleagues working at antenatal care clinics. A planned vaginal delivery with continuous support of a midwife is preferable to a caesarean section. In summary the midwives distinguish FOC as a specific domain and opinions vary depending of the midwives' working place.

## SPS76

Women's Fear of Childbirth in a High Maternal Mortality Setting: perspectives from the Arab world Kempe Annica

The aim of the study was to examine individual and socio-cultural factors that influence women's fear of childbirth in Yemen on the Arab peninsula. Interviews were made with 220 women with childbirth experience in five governorates of urban and rural Yemen. Bivariate chi-square tests and multiple logistic regression analysis were used in conjunction with a qualitative research approach. Culture and tradition was found to play a big part in women's fear of childbirth. Women who belonged to ethnic groups in Yemen where women have a different status and by tradition deliver unattended were three times less likely to experience fear (95 % confi-

dence interval (CI) .47 - 1.72). Young women were almost twice as likely to experience fear (95 % CI .095 - 1.05). Fear of the hospital and modern delivery practices, unsupported childbirth and the husband's and in-laws' disappointment in a girl infant were important qualitative findings. The numerous maternal and infant deaths in the community had a strong impact on women's fear. In the effort to reach the Millennium Development Goals, it is essential to integrate traditions of resilience in professional care during childbirth.

## Abuse in Swedish health care: Do ethical guidelines contribute theoretically to its prevention?

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Background: Studies in the Nordic countries Sweden, Iceland, Finland, Denmark and Norway have shown a lifetime prevalence of Abuse in Health Care (AHC) of 13-28% in female patients. Up till 20% continued to suffer from the experience. Ethical documents in health care reflect the professionals' belief system. If ethical guidelines are the theoretical framework for ethical conduct in health care they should contain aspects that are important for the prevention of AHC. Aim: This study aimed to analyze how ethical documents in Swedish health care contribute to the prevention of AHC. Methods: Six international and national ethical guidelines for four professions in gynecological health care were analyzed using content analysis. The results from earlier research on AHC served as reference points for developing codes. Results:

The international guidelines for midwives and gynecologists had a holistic view of the patient, discussed power-imbalances, used active language and showed explicit attention to the patients' story. These elements all are of critical importance to prevent and deal with AHC. These elements were missing in the codes for nurses and physicians. Conclusion: The gynecologists' and midwives' ethical guidelines contained important elements for the prevention of AHC. These where lacking in the physicians' and nurses' guidelines. The results question the comprehensiveness of some ethical codes concerning ethical conduct. The results contribute to a critical discussion about the actual significance and the limits of ethical guidelines and about ways of realizing ethics in health care in order to prevent AHC.

#### SPS78

#### Home abortion implies radical changes for women

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Objective To gain knowledge about women's experiences, views and reactions regarding having a home abortion (medical abortion with the use of misoprostol at home). Methods One hundred women were interviewed one week post-abortion; this yielded both quantitative and qualitative data. Results The overwhelming majority of the women experienced wellbeing and were satisfied with their choice of abortion method. They appreciated the privacy and the comfort of being at home which also allowed the presence of a partner. The intake of mifepristone at the clinic was described by many in existential terms as an emotionally charged act, experienced by some as more difficult than expulsion at home. However,

relief was the predominant emotional feeling during the expulsion day. Most women did not find it especially dramatic to see and handle the products of conception although some felt uncomfortable at the sight. Conclusion Given that they choose this method themselves and are well informed, women are able to handle the abortion process by themselves outside a clinical setting. The option to choose home abortion implies a radical change in empowerment for women. Also allowing them the possibility to take mifepristone at home would increase their privacy and personal integrity even more.

#### SPS79

Education and training in Psychosomatic Obstetrics and Gynecology – a proposal for a European Curriculum Bitzer J., Benedetto C. Kentenich H., Mimoun S., Paarlberg Marieke K.

Introduction: In the past decade several subspecialties have developed in Obstetrics and Gynecology like Gynecologic Oncology, Perinatal Medicine, Reproductive Medicine. At the same time the need for the integration of the psychosocial and psychosomatic perspective in the care for women became more and more evident. Until now there is however not a defined and agreed upon curriculum regarding contents and skills of Psychosomatic Obstetrics and Gynecology.

Methods: Various European countries have developed and established training programs based on different psychosomatic approaches, theories and practices. These programs are derived from different practices and theories of POG. We have tried to condensate the main contents and skills to synthesize a core curriculum and basic and specialized skills of POG.

Results: The core curriculum contains two major chapters:

- 1) Theory of communication and counselling in Ob/Gyn.
- 2) The application of the biopsychosocial model of health and disease in OB/GYN.

The skills comprise three domains:

- a) Basic communication skills (Active listening, professional information giving, patient centered communication)
- b) Specialized skills: Giving bad news, shared decision making, motivational interviewing, supportive counselling.
- c) Practice of integrated psychosomatic diagnosis and therapy.
- This proposal will be discussed with representatives of psychosomatic education and training of different countries. A possible outcome would be the creation of a European Faculty of Psychosomatic Obstetrics and Gynecology.

### La consultation de gynécologie médicale

Fohet Catherine, Borten Irène

La Gynécologie médicale, spécialité unique en Europe est née en France en 1957, alors qu'apparaissent deux formes de prévention: les frottis de dépistage et la contraception. Spécialité unique en Europe elle a participé à l'émancipation des femmes en s'intéressant à elles en dehors de la maternité. La formation à cette spécialité a pris fin en 1985 pour nécessité de conformité avec l'Europe.

La Gynécologie a connu des évolutions spectaculaires: longtemps l'urgence, c'était le retard de règles, aujourd'hui c'est le désir d'enfant. Longtemps, l'hystérectomie entraînait une hospitalisation prolongée suivie d'un long repos. Aujourd'hui une femme quitte l'hôpital au troisième jour, sans cicatrice. La multiplication des techniques thérapeutiques donne une place beaucoup plus grande à ce qu'une loi de 2003 appelle le consentement libre et

éclairé. Il faut compter avec la présence d'Internet de plus en plus utilisée par les patientes. Même s'il est illusoire d'arriver à une relation égalitaire , le médecin doit s'efforcer de donner le maximum de connaissance s et d'espace pour exprimer leurs interrogations. Comment cela modifie-t-il la relation médecin- patiente ?

Dans le registre du consentement, les gynécologues ont beaucoup appris grâce à la contraception. L'écoute des patientes a mis à jour des décalages entre la demande et le désir, des ambivalences, tous mécanismes puissamment à l'œuvre dans toute pathologie.

Quelle que soit la pathologie pour laquelle la patiente consulte, le médecin essaiera de prendre simultanément en compte celle-ci et la souffrance psychique qui l'accompagne.

#### SPS81

#### Le Psychodrame Balint en Gynécologie

Laveissière Marie-Noelle

Dans le diplôme post universitaire de Gynécologie Obstétrique psychosomatique sont proposées des séances de groupe de Psychodrame Balint animées par un ou deux leaders, pour former les soignants dans leurs compétences relationnelles. Cette méthode de travail développée par Anne Cain est basée sur le concept du psychodrame psychanalytique et du travail Balint, insistant sur la place importante du corps dans la relation médecin patient tout particulièrement en gynécologie. A la compréhension de la rela-

tion, de l'identité professionnelle du soignant, des enjeux conscients et inconscients, va s'ajouter, par la réintroduction du corps et l'implication de l'expérience corporelle à travers le jeu psychodramatique, la recherche des traces d'une mémoire non verbalisée. «Le corps ne ment pas... ». Ce travail peut aider les soignants à comprendre et aborder leur contre transfert dans la relation avec leur patient.

#### SS1

#### Chronic Pelvic Pain Syndrome

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Sensory/Painful disorders of the Lower Urinary Tract, as well Female Sexual Dysfunction, far from being rare conditions, are very often described in the everyday practice of Gynecologists and Urologists worldwide, although their true prevalence is still unknown. Pain perceived within the pelvis may arise from a range of different mechanisms, many of which remain poorly understood. Chronic (also known as persistent) pain occurs for at least 3 months. However, the mechanisms involved are more important than the duration of the pain. Chronic pain is associated with changes in the Central Nervous System (CNS), referred to as "neural-axial central sensitization", which may maintain the perception of pain in the absence of an acute injury. These changes may also magnify perception so that non-painful stimuli are perceived as painful (allodynia), while painful stimuli are perceived as more painful than expected (hyperalgesia), and can produce states of visceral and/or muscle hypersensitivity with long-term pain, sensory dysaesthesia and functional abnormalities.

The bladder provides a good example of how changes in the CNS affect sensory perception. An acute pain insult to the bladder (i.e. a bacterial cystitis) can produce functional changes within the CNS, so that pain persists even after removal of the stimulus. Due to these central functional changes, a dysaesthetic (unpleasant sensation) response can arise also in physiologic conditions; for instance, mild distension or stimulation of the bladder by urine, normally not perceived, may produce the urge to urinate. Deterioration of the bladder coating, hyper-activation of peripheral mast cells, neurogenic inflammation, activation of central microglial cells, central neuroplasticity changes are all possible steps leading to conditions such as the Bladder Pain Syndrome (BPS), and the Interstitial Cystitis (IC). Furthermore, core muscles, including pelvic muscles, may become hyperalgesic with multiple trigger points, while other organs may also become sensitive.

The phenomenon of the "transmission of pain" from the primarily affected pelvic organ (i.e. bladder) to other structures and organs within the pelvis (i.e. vulvar mucosa, bowel, muscles) is referred to as "Pelvic Cross-Organ" Sensitisation".

The spread of abnormal sensory responses among the organs and the musculoskeletal system is a crucial phase in the onset of complex chronic pelvic pain syndromes. Functional abnormalities follow the diffusion of pain, thus explaining the significant comorbidity, with simultaneous presence of Urinary, Genital, Sexual, Bowel, Muscular disorders.

According to the EAU (European Association of Urology) 2008 Guidelines on CPPS, all the following conditions should be regarded as possible different manifestations of the Chronic Pelvic Pain Syndrome – CPPS: Bladder Pain Syndrome (BPS), Painful Bladder Syndrome (PBS), Interstitial Cystitis (IC), Urethral Pain Syndrome, Penile Pain Syndrome, Prostate Pain Syndrome (PPS), CPPS cat III type A/B NIH (Former "Chronic Abacterial Prostatitis), Scrotal Pain Syndrome, Testicular Pain Syndrome, Post-Vasectomy Pain Syndrome, Epididymal Pain Syndrome, Endometriosis-associated Pain Syndrome, Vaginal Pain Syndrome, Vulvar Pain Syndrome, Generalized Vulvar Pain Syndrome, Dysaesthetic Vulvodynia, Localized Vulvar Pain Syndrome, Vestibular Pain Syndrome, Vulvar Vestibulitis, Clitoral Pain Syndrome, Anorectal Pain Syndrome, Pudendal Pain Syndrome, Perineal Pain Syndrome, Pelvic Floor Muscle Pain Syndrome.

Other conditions, although not yet included in this list, are also regarded as possibly arising from etiological mechanisms similar to those of CPPS: Irritable Bowel Syndrome (IBS), Fibromyalgia, Multiple Chemical Sensitivity Syndrome (MCSS), Chronic Fatigue Syndrome (CFS), some forms of Migraine, Systemic Lupus Erithematosus (SLE), Sjogren's Syndrome, Endometriosis-associated Pain Syndromes.

Chronic pain is associated with various psychological responses, partly due to the long duration of the pain and partly due to neuroplasticity of the CNS. Chronic pain inhibits feelings, emotions, thinking and reactions, while reduced mobility and inhibited physiological functions restrict social interactions and work. When appropriate, management of CPPS patients should be both holistic and multidisciplinary.

#### SS<sub>2</sub>

## $\label{thm:memory:equation:memory:equation} \mbox{Menopausal Symptoms and Brain Vulnerability: Role of HRT}$

Berga Sarah L.

Multiple mechanisms mediate the impact of hormones upon brain. Brain functions putatively impacted by hormones fall into categories such as motor, mood, and cognition. Hormones also have been implicated as hastening, protecting, or having nil effect upon molecular processes subserving neurodegeneration. Due to insufficient and contradictory findings, the debate over the importance of hormones for brain health continues unabated and clinicians and patients alike are left with few solid guidelines. Indeed, awareness that the brain is an important target tissue of steroids is still emerging. To complicate matters, drugs that modify or alter hormone levels have been added to the clinical armamentarium, but the impact of hormonal mediators upon the brain rarely has been studied at molecular and clinical levels. Hence, drugs which modify or interdict hormone action are now in relatively widespread use, while belatedly we are trying to understand the neurological, psychological, behavioral, and psychiatric implications.

Recently, we have focused on the impact of hormones upon brain neurotransmission using state-of-the-art neuroimaging approaches. In parallel, we have explored the impact of SERM's and AI's upon cognitive measures in women being treated for breast cancer. Both approaches confirm that hormones play a significant role in modifying neural substrates subserving cognition and emotion. In particular, it appears that aromatase inhibitors impart a more deleterious impact upon cognition than does tamoxifen in women being treated for early stage breast cancer. Further, serotonergic neurotransmission, which subserves cognition, mood, metabolism, and vegetative activities such as sleep, is modulated by physiological concentrations of estradiol and progesterone in recently postmenopausal women. When considered in the context of epidemiological studies and other information about the molecular, cellular, and physiological functions of hormones, one must conclude that future studies that intend to delineate the pros and cons of hormonal modifiers should include the brain as one of the important target tissues. In particular, comparative neuroimaging studies are suggested as a means of determining which estrogenic substances might best support the postmenopausal brain.

#### SS<sub>3</sub>

### Drospirenone effects on central opioids: a rationale for use in COC

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Many women are exposed to synthetic progestagens as components of oral contraceptives (OCs), non-oral hormonal contraceptives, or hormone therapy (HT).

The various natural and synthetic progestagens differ in their chemical and pharmacologic properties and can exert profound effects on mood and behavior. They interact with estrogens as well as with many neurotransmitters and neuromodulators. Endogenous opioid peptides such as  $\beta$ -endorphin have well documented analgesic, thermoregulatory and neuroendocrine properties and may be involved in regulation of ovulation, mood and sexual functioning. Women affected by PMS have low pain threshold and low level of

 $\beta$ -endorphin during the luteal phase of the menstrual cycle.

RCTs successfully evaluated the OC containing 20 mcg EE/3mg Drospirenone (DRSP) with 24 active pills followed by 4 placebo pills for PMS and PMDD.

Oral administration of DRSP reversed  $\beta$ -endorphin reduction following ovariectomy in different brain areas, showing a marked effect on opiatergic system that may be due not only to DRSP affinity to the PR but also to its anti-mineralcorticoid and anti-androgenic activity. This data support an additional and specific brain effect of an OC containing DRSP, sustaining its beneficial role in PMS.

### SS4

## Cronic Pelvic Pain: positive impact of continuous oral contraception

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Chronic pelvic pain is a common gynecological problem with an elevated estimated prevalence and it is the single most common indication for referral to gynecology and fertility clinics. The existence of a relationship between chronic pelvic pain symptoms and endometriosis is widely accepted by gynecologists. Dysmenorrhoea is known as the most frequent and most severe complaint in women with endometriosis. However, a precise semiological analysis of the chronic pelvic pain symptoms characteristics is useful for the diagnosis of non-gynecological causes of pain and also for therapeutic management of endometriosis in a context of pain. Management options include medical and surgical treat-

ment. Pharmacologic therapies currently in use include combination oral contraceptives as first choice (OCs). OCs are used widely as therapy for women with chronic pelvic pain, whose suspected cause is endometriosis. These agents are generally well tolerated with less metabolic impact than danazol or GnRH analogues and may be used on a long-term basis. However, the type of estro-progetin association and the dose of hormones are critical to reduce pain and to reduced potential long-term side effects. Long term treatment with low-dose and ultra low dose OC is efficacy and safe in the reduction of endometriosis associated dysmenorrhoea with a satisfactory complaint for patients.

#### OP<sub>1</sub>

#### Maternal and neonatal outcomes in women referring stress during pregnancy

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Objectives. Over classical maternal risk factors for pregnancy-related hypertensive disorders (PRHDs), also psychosomatic factors play an important role. Our study investigates the influence of different stress sources on PRHDs and other maternal and neonatal outcomes. Materials and methods. We selected 350 women with PRHDs and a random control cohort with no pregnancy complications. We asked them about stress experienced during the first gestational trimester, due to couple or familiar discomfort, work fatigue, personal health problems, and anxiety due to pregnancy itself. Statistical analysis was performed by R, considering significant p<0.05. Also multivariate analysis was performed. Results.

Stress during pregnancy results correlated with PRHDs, small for gestational age, and pre-term birth, but it has no significant correlation with Apgar score or gestational diabetes mellitus. By multivariate logistic regression, physical stress results a risk factor for PRHDs and small for gestational age babies, while it does not influence pre-term births. Conclusions. Stress during initial pregnancy results to be an important risk factor for PRHDs and small for gestational age babies. Physical stress seems to be the most important one, including work-related fatigue, which represents a common reality for young mothers living in the most Developed Countries.

#### OP<sub>2</sub>

### Pregnancy outcome of women with severe mental illness

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Trust Pregnancy outcome of women with severe mental illness Background: Psychiatric disorders were identified as the leading cause of indirect maternal death in the 5th and 6th CEMACH reports. Concerns have been expressed about possible adverse effects of the use of anti depressant and anti psychotic medication during pregnancy, including neonatal pathology and the presence of congenital malformations. Methods: This is a retrospective audit of 102 patients who were either on antipsychotic or antidepressant medications or were commenced on these medications after review in a dedicated perinatal mental health clinic at BHR University Hospitals NHS Trust, Essex, UK. Maternal and neonatal outcome including the presence of congenital malformations were recorded. We collected the data from online record of maternity notes and case notes review. Results: Patients were identified either

at booking or during the antenatal period and were referred to this clinic. The commonest indication for referral was past history of depression (65.9%) including postnatal depression (12%). The other disorders included Schizophrenia, bipolar disorders, Psychosis, adjustment disorders, anxiety disorders, personality disorders, ACHD and OCD. During pregnancy about 16% of women needed medications which included SSRI's, tricyclic anti-depressants and anti psychotics. 65.6% delivered vaginally (which includes the instrumental delivery) and 18% were delivered by LSCS. Majority of the babies had good Apgar scores. For the available data, however, 2 babies had Apgars0 at 1 minute, 0 at 5 minutes, 0 at 10 minutes. Conclusions: The audit is still ongoing and the final result would be presented at the meeting.

#### OP<sub>3</sub>

The impact of maternal psychological distress on the feto-placental circulation: Does gestational age matter? *Helbig Anne*<sup>1</sup>, *Anne Kaasen*<sup>1</sup>, *Ulrik Fredrik Malt*<sup>2</sup>, *Guttorm Haugen*<sup>1</sup>

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Background: Maternal distress has been linked to higher resistance indices in the uterine and possibly umbilical arteries (UA), but only in third trimester. The effect of stress may depend on gestational age. However, reduced placental blood flow in second trimester may be easier to detect in the umbilical vein (UV). Objective: To examine the influence of gestational age (GA) on the correlation between maternal distress and feto-placental circulation. Methods: Shortly after diagnosis of a fetal malformation, 73 pregnant women from 19 to 38 weeks completed the Edinburgh Postnatal Depression Scale (EPDS) and Impact of Event Scale with subscales Intrusion, Avoidance, and Arousal. UV maximum velocity (Vm) (n = 62) and UA Pulsatility Index (PI) (n = 72) were

obtained by ultrasound, and their GA-specific Z-scores calculated (Z). Results: >50% of women had distress scores above normal range. Distress scores did not correlate with GA. Before 23 weeks (n = 44), there was no correlation between distress and either UV VmZ or UA PIZ. After 23 weeks (n = 29), negative correlations between all distress measures and UVVmZ (r = -.38 to -.63, p = .045 to .001), and a positive correlation between Intrusion and UA PIZ (r = .39, p = .035) were found. After controlling for potential confounders findings were unchanged, with r-square values between .23 and .44 after 23 weeks. Conclusion: a) Severe maternal distress appears to reduce UV Vm, but only after 23 weeks GA. b) UV Vm seems to be more sensitive to stress-induced changes than UA PI.

#### Depression and anxiety in pregnant women and birthweight: data from the EDEN cohort

Gladys Ibanez, Kaminski Monique, Charles Marie-Aline, Saurel-Cubizolles Marie-Josèphe and the Eden study group INSERM Unit 953

The aim is to assess the relationship between the mental health of pregnant mothers - depression, anxiety and their combination - and the baby's growth. The Eden study is a mother-child cohort in which 2002 women have been recruited during the pregnancy, in two maternity units, in France in 2005. Depression was measured using the CES-D scale (threshold of 16) and anxiety by the STAI-Y-1 form (threshold of 17) between 24 to 28 weeks of amenorrhea (WA). The baby's growth was measured by the birthweight as a continuous variable, then in 3 classes (< 2500g, 2500-4000, > 4000g), and in 3 groups expressed as percentiles of the 2008 French AUDIPOG neonatal curves. The preterm birth was defined as a birth occurring before 37 WA. Demographic, social, morphologic characteristics of mothers, as their consumption of tobacco, have been considered by

multivariate analyses, from a sample of 1735 mothers. The percentage of women classified as "depressed" was 25% and 22% were classified as "anxious". The depressed, non-anxious women gave birth to heavier babies with an average weight of 3330g [3258 - 3402], versus 3242g for non-depressed, non-anxious women. The OR (Odds Ratio) measuring the association between "depressed" mothers and weight at birth exceeding 4000g, and exceeding the 90th percentile, were respectively 1.85 [1.03 - 3.31] and 1.57 [0.92 - 2.68]. The OR measuring the relationship between "depressed and anxious" mothers and preterm birth was 1.71 [0.96 - 3.03]. Depressed, but non-anxious women gave birth to heavier babies, with an excess risk of macrosomia, whereas both depression and anxiety appear to have favoured preterm births.

#### OP5

# The parent-baby relationship and postnatal mental health. A qualitative study of first time mothers' and fathers' experiences of early parenthood

Parfitt Ylva, Ayers Susan University of Sussex

Background: Parents' subjective perceptions of their baby are likely to influence the quality of their relationship with their baby, which in turn may effect child development. To date, this has largely been examined in mothers and there is a relative lack research that explores both parents' perceptions of their relationship with their baby. The present study therefore examined first-time mothers' and fathers' verbal accounts of their relationship with their baby and looked at the influence of postpartum mental health and anger on this relationship. Methods: The Birmingham Interview for Maternal Mental Health was carried out separately with 46 mothers and 40 fathers, four to eight months postpartum. Interviews were transcribed and analysed using thematic analysis. Results: Analysis identified the following themes and sub themes: (1) Baby; charac-

teristics, needs and development (2) Parent; emotions, responses, coping strategies and general parenthood (3) Parent & Baby; relationship and everyday activities. Although most parents referred to their relationship with their baby and parenthood experiences mainly in positive terms, many parents also commented on negative emotions and that it took time for full love to develop. Results indicated that both the presence of parental mental health problems and more notably anger issues were associated with more negative accounts of the self, the baby and parenthood. Conclusion: This qualitative study provides in-depth insight into first time parents' perceptions of early parenthood. The results especially highlight the need to consider parental experiences of anger in more detail for assessment and interventions in the early postpartum period.

### OP<sub>6</sub>

# Cases of Nursing Care for Schizophrenic Mothers during their Pregnancy, Delivery and Parenting Provided by Health Care Facilities in one of Japanese Prefectures

Izumi Sawada, Miyajima Naoko, Konno Miki, Yoshino Juinch, Hiratsuka Shiho, Nomura Miki, Maruyama Sapporo Tomoko Medical University School of Health Sciences Purpose

The purpose of this study is to investigate the number of cases and issues of nursing care for schizophrenic mothers during their pregnancy, delivery and parenting. Method The descriptive method was used. Questionnaires were mailed in April 2008 to 128 nursing managers of 24 Public Health Centers, obstetrics or psychiatry of 24 general hospitals and 50 visiting nursing stations in Hokkaido, asking the number of cases, consequences and issues of schizophrenic mothers who had been cared for by them between April 2007 and March 2008. The study was approved by the Sapporo Medical University Ethical Committee. Results and Discussion There were 74 responses (57.4%). 30 facilities (40.5%) provided care to schizophrenic mothers, during pregnancy (18 cases), delivery (15) and parenting (23). No complications

were experienced in 11 cases (61.1%) during pregnancy, 8 (53.3%) during childbirth and 10 (43.8%) during parenting. 2 cases (11.8%) ended in termination, 3 mothers (20.0%) had a cesarean, and 2 babies (13.3%) were born with low birth weight. Symptoms aggravated in 7 cases (38.9%) during pregnancy and 16 cases (69.6%) in parenting, with 3 (13.0%) being hospitalized after birth. 32 facilities (43.5%) expressed concerns about the current care system, with training of staff to improve their competence and understaffing being named as the key issue by 18 facilities (56.2%) and 11 facilities (34.4%), respectively. 22 facilities (30.1%) had too little experience to comment on the care system. The authors suggest that nursing care to promote the resilience of schizophrenic mothers should be developed.

## Psychological distress and early lactation performance in mothers of late preterm infants

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BACKGROUND: Late preterm infants are a vulnerable population susceptible to early breastfeeding failure and lactation-associated morbidities. Puerperal psychological distress may be a risk factor for the establishment of successful lactation in late preterm births. The purpose of the study was to compare psychological distress and early lactation outcomes between mothers of late preterm and term infants in the general maternity setting in Italy. METHODS: Psychological distress was measured using the State Trait Anxiety Inventory (STAI-Y), Edinburgh Postnatal Depression Scale (EPDS), and Psychological Stress Measure (PSM) at 3 days postpartum in 84 consecutive mothers, 42 delivered late preterm and 42 at term, matched for parity and delivery route. RE-SULTS: State anxiety, depression, and stress levels were all signifi-

cantly higher in mothers of late preterm infants in comparison to mothers of term infants (State Anxiety (T), 49.5+9 vs. 42.6+5.3, p<0.002; EPDS, 9.5+4.5 vs. 6.3+3.9, p<0.0008; PSM, 46.5+5.9 vs. 38.9, p<0.001, respectively). Exclusive at-breast feeding prevalence was significantly lower at discharge in the late preterm group (21.4 0.001). Univariate analysis showed that higher levels of anxietyvs. 80.9%, p (State, p=0.004 and Trait, p=0.02; Depression. p=0.017; and psychological stress, p=0.02) were significant independent risk factors for early breastfeeding failure in late preterms. CONCLUSION: Psychological distress of mothers of healthy late preterm infants had a negative effect upon early lactation. Awareness of this association will help in identifying women at risk for lactation failure and targeting efforts to promote breastfeeding.

#### OP8

# Marital relationship is a major contributory factor for antepartum depression and anxiety: evidence from rural Bangladesh

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Background and objective: Antepartum depression (APD) and anxiety (AA) are reported in developing countries but the underlying mechanism is not clearly recognized. This study aimed to estimate the prevalence and identify contributory factors of APD and AA among rural Bangladeshi women. Methods: Data was originated from a community based prospective cohort of 720 randomly selected women in their third trimester of pregnancy from a rural district of Bangladesh. The validated Bangla version of Edinburg Postpartum Depression Scale was used to measure APD, Trait Anxiety Inventory to assess general anxiety and Pregnancy Related Anxiety Questionnaire to determine pregnancy related anxiety. Data were collected using a structured questionnaire. Results: Prevalence of APD was 18% and general and pregnancy related anxiety were 26%

and 29% at the last trimester of pregnancy. APD was predicted by illiteracy (OR 1.7, 95% CI 1.1-2.7), practical help during pregnancy (OR 0.6, 95% CI 0.4-0.9), poor partner relationship (OR 9.4, 95% CI 3.4-26.3), forced sex (OR 2.1, 95% CI 1.1-3.9), physical violence (OR 1.7, 95% CI 1.1-2.7), and general anxiety (OR 2.0 95% CI 1.3-3.1). Family support and partner violence were important predictors of AA. Limitation: The sample was from a rural district only. Anxiety scales were not validated. Conclusion: The high prevalence of APD and AA draws attention to the need for screening of depression and anxiety during antenatal care. Policies aimed at encouraging practical support during pregnancy, reducing gender based violence, and supporting mothers with bad partner relationship may ameliorate harmful consequences of APD and AA.

#### OP9

## Gendered patterns in current suffering after violence exposure among Swedish youth Blom Helena

Ulf Högberg Ingela Danielsson Department of Clinical Science Obstetrics and Gynecology

Background: WHO has stated that violence is a global public health problem. Violence exposure among youth is very common. Few studies have examined the person's own view on the current negative effects of the abuse. Objectives: To study the current suffering as reported by youth exposed to emotional, physical and/or sexual violence during the past 12 months. Methods: 2250 young women and 920 young men, attending nine youth health centres in Sweden, answered a validated questionnaire (NorAQ) with detailed questions on emotional, physical and sexual violence, ranging from mild to severe. After each question about violence during the past 12 months the youth were asked to estimate the current suffering from the event on a visual analogue scale (VAS) from

0-10, with 0 meaning no and 10 the most severe suffering. Results: The 1-year prevalence of mild to severe emotional abuse was 33% (CI 31-35) in the young women and 18% (CI 16-21) in the young men. The median VAS for current suffering from severe emotional violence was 6.3 (IQR 3.6-8.2) in the young women and 2.6 (IQR 0.6-6.6) in the young men. The prevalence of mild to severe physical violence was 18% for the women and 27% for the men, with median VAS for current suffering from severe physical violence 4.8 (IQR 1.5-8.6) and 0.7 (IQR 0.2-2.8) respectively. Conclusion: The young women generally expressed higher levels of current suffering for the same level and type of abuse than the young men. Different possible reasons for that will be discussed.

#### Change in Brain-derived neurotrophic factor (BDNF) levels in rats treated with DHEA

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BDNF is a neurotrophin-related polypeptide member of growth factors, involved in the development and preservation of the central and peripheral nervous system. The decline of this neurotrophin is associated with age-related neuronal atrophy and death occurring for instance with aging or during some neurological disorders. Studies on rats showed that BDNF in plasma and in central nervous system is largely dependent to gender, age and hormonal milieu. We aim to investigate the effects of Estradiol Valerate (E2V) and different doses of DHEA on central and peripheral BDNF levels in ovariectomized (OVX) rats. A total of 60 healthy female Wistar rats were used and subdivided in 6 groups each one of 10 animals. One group of 10 fertile and one group of 10 OVX rats were used

as controls. OVX rats were treated with E2V (0.05 mg/kg/day) and different doses of DHEA (1, 2, 5 mg/kg/day) for 2 weeks. Ovariectomy considerably reduced BDNF levels in all examined tissues and in plasma. E2V significantly improves BDNF in all analyzed areas, and in plasma, reaching levels similar to fertile controls in frontal and parietal lobes. DHEA enhanced central BDNF content at the dose of 2 mg. DHEA 5 mg increased central and peripheral BDNF, reaching levels similar to fertile group in frontal and in parietal lobe. Therefore, DHEA is effective to restore central and peripheral BDNF in OVX rats in a dose-dependent manner, thus, DHEA seems to enhance neurobiological female system which is altered during aging and after hormonal withdrawal.

#### **OP11**

#### Dyspareunia and infertility:psycho-social effects

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Dyspareunia, a sexual pain disorder in which genital pain is associated with sexual intercourse, affects approximately 4-40% of women of all ages, especially of childbearing age. Research has found that women with dyspareunia have more depression, more anxiety, and lower levels of relationship satisfaction than women without it. Many women do not recognize this problem. Often presented as episodic and mild, it leads to reduction of frequency of sexual intercourse and anorgasmia. These women turn to the centers for medically assisted conception after years of absence of sexual intercourse without coitus, aimed at pregnancy. In our experience,

this problem was found during the execution of top-level diagnostic tests, such as histerosonography and histerosalpingography. It appeared impossible for the conduct of intense vaginismus, which would prevent the placement of speculum and the failure of the exam consequently. They look for those invasive diagnostic tests without addressing the underlying problem: the lack of intercourse with their partner. Therefore we have to include among the primary objectives of the study of infertility in our facilities dedicated: assessment of coital comfort, pleasure and facilitation of intimacy.

## **OP12**

# Sexual agression - what gynaecologists should know Remesova Tereza

Sexual agression in the first line belongs to the field of forensic medicine, criminology and marginally gynaecology. The gynaecologists shall have basic knowledge about rape psychology and keep personal approach which prevents further damages to victims. Posttraumatic disorders and risk of revictimisation are common in those patients and in long term meaning gynaecologists can

play important role in prevention of further damages. According to some authors revictimisation is the main outcome of agression as it makes victim prone to new attack or abuse. Our aim is to find victimogenic factors useful in general clinical practice, specify risk of revictimisation and behavioural signs of a victim.

#### Hymen reconstruction in Switzerland: Women's demand and health care provider's response

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Frequently, hymen reconstruction becomes a nexus for debates about gender, cultural and patient autonomy. Through transnational migration, health institutions are faced with a growing demand of women for 'restoration' of virginity. The practice of hymen reconstruction forms a challenge for health care providers in a medical, ethical, judicial, social and cultural dimension for which they are hardly prepared. The aim of the presented nationwide survey was to investigate the experience of Swiss gynecologists with women requesting hymen reconstruction. A questionnaire specifically designed for this purpose was sent to 100 public hospitals. The response rate was 68%. 90.5% of these hospitals claimed to see up to five patients per year requesting hymen reconstruction, most frequently originating from Turkey or North Africa. Surgery had been performed after counselling in 44.2% and im-

mediately on request in 32.7%. More than half of the hospitals performed hymen reconstruction on demand always or most of the time. These quantitative data are supplemented by case studies of women consulting the investigating University Women's Hospital. In contrast to the survey results women's request for hymenal repair was advocated only after an interdisciplinary decision-making process. In conclusion, hymen reconstruction is rarely performed in Switzerland but two third of the responding hospitals are confronted with this issue several times per year. No guidelines exist on how health care providers should deal with these requests for hymen reconstruction. Research across disciplines is needed on how to meet the needs of health care providers and women in such transcultural encounters

#### **OP14**

#### The aspect of sexual life and partners relationship in overweight and obese women

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It is known that obesity increases the risk of some diseases, such as cardio-vascular disease and type II diabetes. It is still not known how weight impact sexual life and partners relationship. Objective. The purpose of this study was to assess the sexual life and partners relationship in overweight and obese women. Material and Methods. 51 women were included in this study. The research was based on self-prepared questionnaire and standardized tests such as Female Sexual

Function Index (FSFI), Index of Marital Satisfaction (IMS) and Rosenberg Self-Esteem Scale. Results: Obesity is a serious problem among women with big impact on their sexual life and self-esteem. What goes with that, sexological help seems to be essential in that cases. Conclusions. Overweight and obesity are serious problem among women with impact on their sexual life and self-esteem. What goes with that, sexological help seems to be essential in that cases.

#### **OP15**

### Comorbidity between female sexual dysfunction and gastrointestinal disease

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Gastrointestinal and sexual dysfunctions are often co-present in the same woman and often their comorbidity is under diagnosed and under treated. Vagina and rectum have in common vasculation, innervation, hormonal receptors and neurotransmitters. Pelvic organs have important anatomical and functional interactions. Rectum-vaginal septum can be considered an anatomical barrier but it'is implicated in sexual disease. The diagnosis of sexual pain disease should consider predisposing, precipitating and maintaining factors. Coital pain is caused by biological factors like hormonal, inflammatories, muscular, iatrogenic, neurologic, vascular, connective and immunological causes. We consider the muscular system with the hyperactivity of the levator ani and the immune system with the involvement of mast-cells. Chronic constipation is the most frequent disease which may overlap with sexual dysfunc-

tion like dyspareunia or chronic pelvic pain. Chronic constipation can be secondary to colonic dysfunction, to anorectal dysfunction and behavioural factors. The hyperactivity of the pelvic floor is the common factor which may contribute both to obstructive constipation and to dyspareunia. The rehabilitation of pelvic floor may contribute to improve both constipation and sexual dysfunction. Mast-cell is becoming always more important in sexual dysfunctions because it directs both the inflammatory process and the shift to chronic pain, mediating the production of neurotrophic factors. We put our attention on those factors because impact on women wellness, on their body imaging and on their sexuality. We evaluate any diagnostic and therapeutic approach in order to resolve coital pain and to make women able to live joyfully their life and their sexuality.

#### Impact of Obesity on Quality of Life in Patients with Urinary Incontinence

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Objective: To evaluate the impact of obesity on quality of life in patients with urinary incontinence. Materials & Methods: From October 2008 to May 2010, a cross-sectional study was performed including patients who visited urogynecology clinic of Seoul National University Hospital. We performed history taking, biometry including body weight and height, pelvic examination using Pelvic Organ Prolapse Quantification System (POP-Q), and King's Health Questionnaire (KHQ). Patient's characteristics and KHQ were compared among underweight/normal (BMI <23 kg/m2), overweight (BMI 23.0-24.9 kg/m2) and obese (BMI ≥ 25 kg/m2; WHO Asia-Pacific Classification) women. Results: Total 307 patients were enrolled. Among normal (N=119), overweight (N=94) and obese (N=94) patients, Hormonal status, occupation, and frequency of co-morbidities such as hypertension, diabetes, and prior

hysterectomy were significantly different (p<0.05). After adjustment of POP-Q stage and clinical risk factors for urinary by AN-COVA analyses, obese group had higher scores than those of other groups in 'KHQ-Emotion problem' domain (46.07 vs. 31.92 vs. 34.55, p=0.01). Overweight and obese groups showed also higher scores than underweight/normal group in 'KHQ-Severity measure' domain (35.76 vs. 40.40 vs. 26.44, p=0.001). In addition, obesity was proved as an independent risk factor for the 'KHQ-Emotion problem & –Severity' in multiple linear regression (standardized  $\beta$ =0.136, p=0.032; standardized  $\beta$ =0.179, p=0.004). Conclusion: Obesity is a risk factor for impaired quality of life in women with urinary incontinence, especially on severity and emotional problem. Weight-control may restore the quality of life in patients suffering from urinary incontinence.

#### **OP17**

#### Women's sexual desire and sexual activity during pregnancy

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Background. Pregnancy and the neonatal period constitute particular circumstances for sex life. The interaction between the partners is stressed due to physical and psychological factors. The desire of the mother is to be regarded a "woman" and not only as a mother and not to be regarded "untouchable" by the father. The couple may believe that sex can hurt the fetus. On the other hand, abstinence means a sexual stress to both partners. Study design. In 1000 women attending for contraceptive asdvice a drop out rate of only a 4%, we performed a standardised, structured interview concerning sex experiences during previous pregnancies. We also interviewed 400 pregnant women during gestational week 18th, half of whom were primipara. Results. Desire to have sex was most pronounced during 2nd trimester. The sexual desire was then greater than before they concieved and after delivery. During the first part of the gestation, nausea and vomiting often interacted

with being "disposable" for sex activities. Of the pregnant women, 61% were not satisfied with their sex life so far during the pregnancy and 90% had had fewer coitus than before gettting pregnant During the third trimester, physical difficulties explained decreased frequency of penetrating sex. They then felt physically "unattactive". In the 1st and 3rd trimesters, anxiety to hurt the fetus and to start the delivery preterm was most commonly reported obstacles for excercising sex with vaginal penetration. The couple's adaption to pregnancy restrictions meant making use of non-penetrating sex performances. To continue to have sex was considered important for reducing infidility and risks for contracting STIs. Conclusions. Counselling on sexual-related issues should be incorporated in prenatal health care programmes. The profession should be informed in post graduate education courses on issues of concern.

## Management of psychological and emotional support in pregnancies complicated by congenital heart disease of the fetus

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Prenatal diagnosis of congenital heart disesase of a fetus is a problem that afflicts more and more couples, given the technical and professional development of this sector. Furthermore this is a big importance for the women, both in terms of emotional and clinical. We propose the model of care and the data of our Center that has standardized the multidisciplinary management that accompanies the couple from diagnosis to childbirth and after to therapy. The main purpose of management that we held is primarily not to leave the couple alone; it's also crucial to provide a safe and continuous reference: the team that is a point of reference for the patient, it is also in coordinating the multidisciplinary management. We have planned a psychological and emotional support that is parallel to the clinical management of the pregnancies complicated

by congenital heart disease of the fetus. At "diagnosis step" we formalize taking care of the patient and all her problems, explaining how and who will follow her in the path, with a complete planning. At "follow-up steps" we face the awareness of the couple and the doubts that arise, always with the help of the multidisciplinary team. At "delivery step" we must control the anxiety of separation and remoteness, fueled by the knowledge that from that moment you play the decisive procedures for the best possible outcome. We standardized this type of assistance since January 2009, involving 68 patients, and we achieved a significant improvement in the awareness and trust of the couple, who showed more strength in tackling the disease, a goal which had a positive effect also in the subsequent cardiological management of the newborn.

#### **OP19**

## Network for professional and psycho-social support of pregnant womens with drog abuse in Hungary

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In Europe, up to a quarter of people who have developed serious problems related to illegal drug use are women. Approximately one in four drug users entering drug treatment are female. Each year there may be as many as 30 000 pregnant opioid-using women in Europe, and the number of pregnant women with other drug problems may be equally high. Many of these women are reluctant to seek care for fear of negative judgement or hostile reaction from service staff. In addition, it is important to recognise that pregnancy and motherhood can be strong motivating forces to help women face up to and overcome their drug problems. In hungarian population 20,9% percent of 18-34 aged population used drog during its life, 6,4% percent in last year and 3% in last

three months. The management of this patients and especially the pregnant womens rises many social and professional dificulties. In this study we present our efforts and results regarding to a network formed by different specialist co working in management of pregnant womens with drog abuse. The network is formed by addictologist, psychologist, obsetrician, clinical geneticist and social workers. Patients referred to each of this specialists are invited (not forced) to work together with specialists of this network. Our initial experience shows that this support, and integration of management skills makes more effective control, follow up of this patients and helps them even in giving up or reducing the drug use.

#### **OP20**

#### Questionnaire on sexual Attitude and Function 2009: A novel tool to evaluate patients with sexual problems

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To evaluate persons with sexual problems, a paper and pen test has been designed both to standardize diagnosis and to prevent face to face interview in a religious society. The test passed three generations of refinement since 2002 and the forth variant QSAF-2009 has been used in more than 1700 cases. The test has 240 questions extracted from a reservoir of more than 1400 phrases which were developed to target 64 diagnoses in 4 broad categories i.e. general characteristics of sexual attitude and function, sexual deviation syndromes, sexual dysfunction syndromes and psychodynamic syndromes with 16 diagnoses in each (64 items in total). Five validity scales namely, honesty, guilt feeling, desirability, debasement and overall validity were also incorporated into the skeleton of the test for increasing re-

liability. All the items were completely in accordance with definitions of DSM-IVR and ICD-11. Answering the questions is completed within 38minutes and computer evaluation within 3 minutes. A manual for interpretation is designed for less experienced clinicians. The test showed high test re-test reliability. Specificity and sensitivity of all items were more than 85 and 92% respectively evaluated by the scheduled interview. The test had both clinical and epidemiological value and provided us much information about the general behavior of the population and patients' diagnoses and disease course with nice data on follow up. It can prevent face to face contact, is time saving and reduces shyness and guilt feeling of the patients. It is at present being evaluated for forensic medicine.

Women's attitude towards ultrasound scanning in the first trimester of pregnancy: two-dimensional versus two-plus four-dimensional ultrasound effects on maternal emotional status

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Objective: To assess whether the addition of four dimensional (4D) ultrasound to a routine two-dimensional (2D) scan in the first trimester of pregnancy improves women's perception of antenatal investigations and causes effects on maternal emotional status. Methods: Among the pregnant women booked for first trimester scan at our Fetal Medicine Unit, 40 were randomly assigned to 2D ultrasound only (Group 1), while 30 underwent 2D plus 4D ultrasound (Group 2). Women in both groups subsequently completed two questionnaires: in the first were listed the fetal structures and movements that patients had recognized during the scan; in the other one, women were supposed to score on a scale whether they had seen all fetal parts and movements they wished to see, whether

they were satisfied with the scan and if it had changed for their perception of the fetus. Results: Women in both groups showed a similar ability in recognizing fetal structures and movements, but those belonging to Group 2 were twice able to visualize fetal head extension and hand-to-mouth movements, although we did not report a statistical significant difference. With regard to the second questionnaire, most women reported positive feelings toward scanning, with similar percentages in the two groups. Conclusion: This randomized study indicates that the addition of 4D scans in the first trimester of pregnancy does not change significantly women's attitudes towards prenatal ultrasound examinations and the perception they have of their baby, compared with routine 2D scans.

#### OP22

Prenatal screening for Down's syndrome; low uptake rates are based on informed decision making Schoonen Marlen, H.M.H.J.D., Wildschut, H.I.J., Essink-Bot, M.L., Peters, I.A., Steegers, E.A.P., de Koning, H.J. Erasmus University Medical Centre, Rotterdam, the Netherlands

Objective: To evaluate if the low uptake rates in prenatal screening for Down's syndrome in the Netherlands are based on informed decision making. Design: Questionnaire survey. Setting: New national screening programme. All women (now irrespective of age) are offered information on prenatal screening at booking prenatal care visit. Participants: Unselected group of pregnant women (n=510) in the Southwest region of the Netherlands completed informed decision questionnaires. Midwives, associated with 59 midwifery practices in the same region, registered process measures for 6435 pregnancies. Main outcome measures: Informed decision making (knowledge, attitude and intention to participate), and the information process (information offer and acceptance). Results: Almost all pregnant women (97.5%; n=4988) had been asked whether they wanted to receive information. Of these wom-

en, 62.6% (n=3213) wished to receive information and 81.9% (n=2558) were actually given this information. Median knowledge score was 8.3, median attitude score was 6.1 (both on a 1-10 scale). 335 out of 444 women (75.5%) made an informed decision about (non-) participation in screening. The majority of the informed decisions (55.2%; n=185) was a decision not to participate. One in three pregnant women (35.8%; n=159) intended to participate. Of these women, 3.1% had inadequate knowledge. Religious activity was associated with low levels of knowledge, attitude and uptake. In multivariate analysis, educational level was the only significant determinant of informed decision making. Conclusion: The limited uptake of the new national screening programme for Down's syndrome in the Netherlands is based on high levels of informed decision making, both in participants and non-participants.

#### **OP23**

Written information for women with genital and sexual problems

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Background: in clinical practice, treatment for vaginismus, dyspareunia and provoked vestibulodynia often is a challenge for the sexologist. Each patient is unique, confronting the sexologist with personal fears, ambivalences and avoidance reactions. Handling these resistances and keeping up motivation for change are important tasks for the clinician, especially where previous therapists have failed. Rationale: earlier attempts (behavioral exercises, pelvic floor training) are often experienced as "homework" in the negative sense of the word: unpleasant but unavoidable to un-learn faulty habits concerning an body part that the patient is highly ambivalent about. It is quite understandable why some patients get discouraged. A "fresh" therapist should empower her to set individual, liberating goals that will enhance her sexual self worth. The pivoting challenge is to come to a better relationship with her vagina. Our hand-outs: two educational texts we consider to be helpful in changing the patients focus for change. In pursuit of vaginal pleasure is targeted especially at vaginismus suf-ferers whose phobic avoidance is much more pronounced than their pelvic hypertonia. Sensitive care for your vaginal membranes targets vestibulodynia-patients who have lost faith in the healing potential of their damaged introital membranes. English versions will be available at this presentation. We are look¬ing forward to a fruitful discussion with the international audience of the 2010 ISPOG meeting. Literature: JJ Drenth (2005), The origin of the world. Reaktion books, London.

#### The Father: from Symbol to Reality

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Beginning with the assumption that the father does not exist in nature and that natural selection prevails as only the strongest males can pass their genes on to future generations. From studies on the Father it emerges that from the advent of writing and literature the Father appears like he is today, faultless with a mixture of tenderness, wisdom, justice, courage and strength. The slaying of the symbol is given by the Enlightenment and is brought about by the fallen head of the King of France. The real Father slowly and discontinuously appears during the whole Industrial Revolution, hidden from his children's view by the entrapment of the large factory warehouses. Then the definitive strike, violent traumatic and quick, occurs with the First World War: a useless, ruthless and, for the first time, technological war. The unworthiness of the Father seems to be the last clod of earth that eventually buries him. Due to this point of view the student rebellion of 1968 cannot be seen as a rebellion of the sons against their Fathers but as a protest against the absence of the Father and his symbols of justice, coherence, loyalty and presence. Customs have changed since then, however the return of the Father does not occur. Maybe if the eyes of the woman will meet again those of the man the century old juxtaposition of the sexes will end, only together will they be able to confront the enemies of the Father: violence, oppression, individualism and profiteering.

#### **OP25**

#### Premenstrual syndrome - from fiction to facts: new population-based data

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Objectives: According to the existing literature prevalence of premenstrual syndrome (PMS) and of premenstrual dysphoric disorder (PMDD) is about 30% and 3-8%, respectively. Most populationbased studies, however, originate from the United States, while epidemiological data from Europe is scarce. The study aimed at assessing the prevalence of premenstrual symptoms, PMS and PMDD in Swiss women of the entire reproductive age range, and to analyse the relationship with socio-demographic characteristics, health status and health behavioural factors. Methods: PMS and PMDD was assessed with the Premenstrual Symptom Screening Tool (PSST). The slightly shortened PSST was translated into German, piloted and integrated into the written questionnaire of the 2007 Swiss Health Survey. Weighted prevalence rates and multivariable regression analysis for the outcome variables PMS and PMDD were calculated. Results: A total of 3913 women aged 15 to 54 years answered the questions on PMS symptoms, and 3522 additionally rated interference of PMS with life. 91% of the participants reported at least one symptom, 10.3% had PMS and 3.1% fulfilled the criteria for PMDD. The prevalence of PMS was higher in non-married women, in women aged 35-44 years and in women of the Italian-speaking region of Switzerland. Both PMS and PMDD were strongly associated with poor physical health and psychological distress. Conclusions: Socio-cultural factors seem to determine the prevalence, perception and handling of PMS. Considering the association with poor physical health and high psychological distress, a broader underlying vulnerability in women qualifying for PMDD must be assumed.

#### **OP26**

#### Counseling For Prenatal Diagnosis Of Lysosomal Storage Diseases In Egypt

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Objectives: Counseling for prenatal diagnosis (PD) of lysosomal storage diseases (LSD). Aspects relevant to Egypt are discussed. Subjects & Methods: we counseled 194 pregnancies during last 10 years,190 (97.94%) have affected sibling and 4 (2.06%) have family history. 141(72.68%) were subjected to PD,114 chorionic villus sampling (CVS) at 11-12 weeks and 29 (including 2 previous CVS) amniocentesis at 14 weeks. Results: 174 (89.69%) are consanguinous.92(47.4%) have no normal child but 159 (81.95%) have no normal boy.137 counseled in one pregnancy with 94(68.6%) PD.24 counseled in 57 successive pregnancies with 47(82.4%) PD.53 were not subjected to PD because 26(49.06%) did not show-up,11 (20.75%) came late,9(16.98%) aborted,4(7.54%) refused,2(3.77%) Niemann-Pick C and 1(1.89%) vesicular mole.140 were diagnosed,110(78.57%) normal and 30(21.43%) affected.

CVS failed in one GD. Conclusions: 90% consanguinity is due to high rate in Egypt and LSD autosomal recessive inheritance. Motivation was to have not only normal child but also normal boy. Increased PD in successive pregnancies denotes more trust in doctor and procedure. Coming late and no show-up for PD are attributed to hesitation, fear, negative influence from family and doctors, lack of knowledge in coming late and spontaneous abortion in no show-up. Counseling should be comprehensive, nondirective and non-judgmental with enough time for listening to couple's fears, explaining options and offering PD. CVS early result is advantageous ethically, medically and psychologically. Recounseling is needed after PD. Counseling is dynamic and nondogmatic process helping couple's decision making and not doctor's decision imposing.

#### Healthy BRCA Mutation Carriers Design a Model of Care

Mor Pnina, U. Beller, M. Carmon, R. Michaelson-Cohen, R. Rabinowitz, Y. Grinshpun, S. Edna, E Gdansky, E. Levy-Lahad Shaare Zedek Medical Center

Objectives: To identify the unmet medical and psychological needs of healthy women testing positive for BRCA gene mutations and define programs to meet these needs in the context of the Israeli healthcare system. Methods: The study was conducted using Participatory Action Research (PAR) techniques. PAR involves a spiral of steps, each encompassing a circle of planning-action-fact finding. Using PAR techniques involving a series of focus group interviews, we worked closely with one group of eleven health professionals from diverse disciplines and three focus groups of 23 healthy female BRCA carriers recruited from a genetics clinic. Focus groups were led by a trained moderator and the researcher. Results: Through their narratives, carriers described dilemmas and ongoing stress associated with the constant threat of illness, mixed messages from caregivers, practical barriers to care, and a

lack of psychosocial support that affect and sometimes radically change life perspectives. Participants suggested a "one-stop" center to provide medical and psychological care. Their ideas were presented to the health care professionals group who manage care for healthy carriers. A multidisciplinary clinic for healthy carriers was opened. Conclusions: The primary study outcome was inception of a one-stop multidisciplinary clinic incorporated into an existing healthcare setting. The clinic provides medical and psychosocial services, including improved access to imaging surveillance, as well as expert medical consultation and counselling. In addition to providing a response to the healthcare issues presented by the healthy BRCA mutation carriers, the study findings strengthened interdisciplinary connections among participating nurses, genetic counsellors, and physicians, and psycho-oncologists.

#### **OP28**

#### Green or purple? Art therapy as an aid in medical decision making

Czamanski Cohen Johanna, Ben Gurion

#### University of the Negev

The introduction of written informed consent in the 1970's created a culture of shared decision making between doctors and patients. This responsibility can lead to decisional conflict, in which an individual is emotionally distraught and preoccupied with the decision making process. This can occur frequently in gyno-oncological patients when the potential benefits and risks of a certain treatment are not precisely distinct from other treatments offered. Art therapy is often utilized as a part of psycho-social support of the psycho-oncology team. There has been some anecdotal evidence that points to the reduction of anxiety and pain related to cancer in individuals participating in art therapy. Art therapy also assists individuals in

expressing parts of themselves less accessible or difficult to express in words. This research utilizes a case study approach to take an in depth look at the decision making process of a group of oncological patients through art making. The art therapy group presented took place once a week at a support center for cancer patients. The majority of participants were diagnosed with breast or ovarian cancer at the time. Some of the participants chose to reflect on past decisions made using art. Others, used art to assist them in the active process of decision making. Art Therapy is offered as a psycho-oncological modality to assist in the decision making process often encountered by the gyno-oncological patient.

#### **OP29**

#### After mastectomy, usefullness of psychotherapy

Dautry Rose-Marie SFGOP / Gynecology

MASTECTOMY I would like to discuss how mastectomy use to take place in a personal breast story, always specific. Breast is hormonally dependant, from chidhood to oldness. Women are awards about it, between sexuality and maternity, sometimes living with

conflicts. As a Psychotherapist I try to listen and to understand this particular grave, psychologic scars after a breast loss, even with reconstruction and to help as possible in every case.

## Therapeutic group psychoeducation and relaxation in treating fear of childbirth

Toivanen Riikka, Tokola Maiju

Backround: Increasing number of women fearing childbirth challenges us to develop new ways of antenatal treatment. Successful results in treating patients with various psychological problems using therapeutic groups has given us courage to develop a method of using therapeutic group approach with nulliparous women with fear of childbirth. Methods: Since 1998, more than 400 women have been treated by a method, which consists 7 group sessions with psychologist (once together with midwife at maternity ward): six during pregnancy and one after the delivery. Each group consists max 6 nulliparous women, the becoming fathers take part once. Small group enhances the psychological safety and confidentiality to deal with the often shameful and contradictory feelings towards the delivery. The meetings consist discussion of imbending birth,

parenthood and the related feelings in psychotherapeutic atmospere and a relaxationexercise focusing on an imaginary childbirth. Results: Our results have been promising: the participants chose the vaginal delivery more often than women with fear of childbirht in general. Further, they felt that their fear was dimished and their labour was even shorter and safer than in the control group. Conclusion: Treating fear of childbirth in a group gives possibility to the participants to share their unique situation and often difficult feelings with those in same situation. In addition, the participants often bonded with each other and utilized the peersupport also after the delivery in early parenthood. The method is economical and more patiens can be treated efficiently. We would like to introduce this method in ISPOG conference.

#### **OP31**

# No effect of fear of childbirth on pregnancy and delivery outcome in a Dutch low risk pregnancy home - and hospital - delivery cohort

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Background/Aim Many studies show a correlation of fear of child-birth (FOC) and delivery mode, however in mixed samples with low and high risk for complications. In the Dutch obstetrical care system, the midwife classifies most women having a high or low risk for complications. Low risk women have free choice of home or hospital delivery. In a low risk sample we investigated the relationship between fear of childbirth (FOC) before and after delivery, preference for home or hospital delivery and delivery complications. Method A representative sample of 105 low-risk pregnant women completed prospectively questionnaires at 30 weeks of

gestation, and six weeks postpartum. Results/Conclusion Unlike other studies, we did not find a correlation between FOC in gestation week 30 and delivery complications. In general, postpartum, FOC had decreased pre- to postpartum. However, women with delivery complications showed an increase of FOC from pre- to postpartum. No correlation was found between FOC and preference for home or hospital delivery. According to our study, FOC seems not to influence mode and progress of delivery. FOC ante partum and the mode and progress of delivery both influence the women's experience and appraisal of the delivery.

#### **OP32**

#### Do recent miscarriages affect maternal mental representations of the unborn and pre-natal attachment?

Bergner Annekathrin, Martina Rauchfuß, Reinhard Beyer

Charitè Universitätsmedizin Berlin, Medical Department, Devision of Psychosomatic Medicine

Only few studies analyse an association between psychological symptoms such as depres-sion or anxiety of pregnant women and lower levels of maternal-fetal attachment. Women who experienced early miscarriages often suffer from intense fears of losing their child again in a new pregnancy. The study investigates the role of risk factors such as recent pregnancy losses for the quality of maternal representations of the unborn child and attachment. 80 pregnant women who recently suffered one or more early miscarriages completed question-naires in each trimester of the new pregnancy. Data were compared to the results of control groups of

69 gravidae in the first, 82 gravidae in the second and 97 gravidae in the third tri-mester of pregnancy. Neither the experience of early pregnancy losses nor the level of depression and anxiety symptoms in pregnancy are related to the quality of maternal representations of the unborn and prenatal attachment. But women with symptoms of chronic grief or depressive coping after miscarriage show higher levels of worries about a healthy development of the child even during the third trimester. The results are discussed on view of treat-ment implications on women who presumably are under higher risk for further mother-child-attachment.

# Cesarean section on demand - attitudes of South-East Hungarian midwives and obstetricians and gynecologists Dweik Diana, Gyula Meszaros

Background: Hungarian cesarean section rate has shown a steep rise since the early nineties. One contributing factor to this trend might be the phenomenon of maternal request cesarean sections (MRCS), although there has not been such indication for performing C-section in Hungary, i.e. officially pregnant women do not have the choice to deliver by C-section in the absence of a firm medical indication. Objective: To assess the personal opinion of South-East Hungarian midwives and obstetricians and gynecologists about MRCS and women who prefer MRCS as mode of delivery. Secondary aim was to reveal caregivers' attitudes towards cesarean section compared to vaginal delivery. Method: In early 2010 anonymous questionnaires were distributed to 164 midwives and 137 obstetri-

cians and gynecologists with a response rate of 75,6% and 74,5%, respectively. Results: It would be important to have an explicit indication for performing MRCS according to 26,6% of midwives and 30,4% of obstetricians and gynecologists. Moreover, in case the legislation was more permissive and there was an official indication for performing MRCS, 79,4% of obstetricians would feel ready to perform this operation, 14,8% of whom would even recommend this form of delivery to patients. Conclusion: A shift towards free maternal choice can be seen in the attitude of Hungarian midwives and obstetricians and gynecologists that is in contrast with the official position of the Hungarian College of Obstetrics and Gynecology and also with the present Hungarian legislation.

#### **OP34**

#### A Qualitative Research On Psychological Impacts of Abortion

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There has been a great deal of discussion regarding the legal and ethical ramifications of abortion, and studies have been carried out on the basis of the relevant statistical date and social background. However, relatively little attention has been given to the psychological impact of abortion in Japan. This field is difficult to research, because women who had an abortion are not willing to talk about their experience. They would rather want someone listening to them, but, on the other hand, they are afraid of being criticized or making a person wonder what to response. Talking about abortion is considered a taboo. They feel that there are no opportunity to share their sorrows and suffering. An abortion has an impact on both women's body and psyche. Since the women may suffer negative mental conditions in short or long term after the abortion, providing support to their emotional life is essential.

To this end, we have to recognize the women's emotions, feelings and thoughts. The present research is aimed at describing the psychological impacts of abortion by means of questionnaires and semi-structured interviews. The research includes questionnaires and semi-structured interviews with women who have aborted on medical grounds in the second trimester. The results reveal that the women have frequently felt guilty, sad and angry since. In addition to these emotions, they have experienced an attachment to their lost baby. Unless the woman herself seeks help, the experience of abortion remains a secret, making it difficult to face for the woman herself. To a certain extent, it may keep a woman safe to maintain the secrecy, but we must prepare a system of services and express our explicit willingness to provide counseling.

#### **OP35**

# Postpartum Depression: Related Factors, in clients, whom had visited in Iran University of Medical Sciences Clinics, 2009- 2010

Taavoni Simin, Parvin Zarea Hamid Haghani Iran University of Medical Sciences

Postpartum depression is the most common mood disorder of postpartum period of women's life and seems multivariate are associated with it. Aims: To identify correlation between personal characteristics and scale of Edinburgh postnatal depression. Materials and Methods: In this cross-sectional study, 597 volunteer postnatal women, whom had been visited in 6 primary health clinics of Iran University of Medical Sciences in Tehran during fourth months after delivery, by consecutive sampling selected. After they filled in informed consent, were interviewed by valid and reliable questioner. (Year 2009) Questioner had two main parts of personal characteristics and self-reporting scale of Edinburgh postnatal depression (EPDS). All ethical points were considered. Results: Average of age was 27.01±4.94 There were significant correlation between scores of Edinburgh postnatal depression scale and Planned pregnancy of women and their couples, the history of Intra

Uterine Fetal Death, women's occupation and their couple's too, family economical status, women's' educational status and their couples' too, and smoking habits. Regarding to the cutoff point of EPDS for 13) there were significantscreening of depression, which 22.65 had it (correlation just between two characteristics of unplanned pregnancy and unwanted pregnancy by Spouse. Conclusion: Since there were significantly associated between postpartum depression and spouse unwanted pregnancy, it is better to have more guiding and counseling for the high risk group during pregnancy and postpartum time. It is better to screen all women during postpartum period by Edinburgh postnatal depression scale in health centers for prevention of postpartum morbidity. Acknowledgment: Received grants from Research Department of Iran University of Medical Sciences and received acceptance of Research Ethics Committee IUMS (2009-2010).

# What's Gender got to do with it? Swedish Teenagers Attitudes and Values towards Sexual Risk-taking, a reanalysis from a Gender Perspective

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This study is a secondary analysis, based on data from four focus group with a total of 25 participants, ranging from 18 to 19 years of age. The aim of the study was to reanalyse attitudes and values towards sexual risk-taking among teenagers in Swedish present-date society by using a gender perspective. Qualitative content analysis was performed. According to the findings, neither men nor women dare suggest using a condom when having casual sexual contacts. The reasons behind this fear appear to be supported by gender constructions that are based

on misunderstandings, which in turn derive from prejudice and lack of communication. A common underlying issue among these young men and women is their aspiration to increase their self- esteem by abiding to the social norms of peer groups. This might result in an act of balance where both men and women have to participate while shaping their sexual identity and at the same time having to maintain their self-esteem without getting a bad reputation. In this act of balance it is difficult to discuss how to protect one's sexual health.

#### **OP37**

#### Cesarean section on maternal request

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OBJECTIVE: In last years there is an increase rate of elective Cesarean section. In our country 4% of women choose C-section nevertheless a medical negative counseling on maternal and fetal risk. We hypothesize delivery as a risk situation, according to the Beck's theory, and we analyze the resources in women who choose to afford or not, a spontaneous delivery. METHODS: We enrolled 38 healthy subject attending the term consultation at the Buzzi Children's Hospital and we divided them in 2 groups after the counseling: A) 11 women who chose elective Cesarean section (CS) B) 27 women who chose spontaneous delivery (controls). RESULTS: The population did not differ for mean age and parity (nulliparous in majority of cases). The main and statically significant differences

between the two group were 1) reasons for parenthood: in CS was justified by age (54%), in controls represented an accomplishment of a couple (47%); 2) the imaginary delivery crucial time: for CS was the fetus expulsion and for controls was holding the baby; 3) the delivery representation: "terrible" for CS, "the best experience in life" for controls; 4) experiences of pleasant feelings: sex for CS and none for controls; 5)the need for control: for CS is mediated by brain and by hearth for controls. CONCLUSIONS: During pregnancy CS group refuse to experience the pregnant body. CS group's choice may result from the absence of any bodily emotions and pregnancy related feelings, so that avoidance it's the only way to afford the delivery risk

#### OP38

#### Repeat abortion: a follow-up study

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Objective: Abortion rate in Switzerland is low, a considerable percentage of women, however, repeatedly present with unwanted pregnancy. Targeting these women might be a strategy to further reduce abortion rate. Our objective was to define situations and women at risk for repeat abortion over a distinct time period. Methods: We retrospectively analysed all abortions on demand performed at University of Basel, Women's Hospital in 2004 and during a follow-up period of 4 years with regard to socio-demographic characteristics, history of previous abortion and contraception, as well as proposed future contraceptive method. In addition to descriptive statistics, chi-square tests were performed and odds ratios were computed comparing women with and without previous abortion(s). Results: 362 abortions were performed in 2004. Half

of the women (53.3%) were immigrants. 30.1% of the women had between 1 and 4 previous abortion(s). 47% did not practise any method of contraception. The percentage of repeat abortion was higher in immigrants than in Swiss (36.3% and 23.1%, resp. / OR 1.9 (95% CI 1.16-3.10) and in parae than in nulliparae (42.2% vs. 57.8%, resp. OR 1.87 (95% CI 1.16-3.02). Women with previous abortion(s) were less frequently using any contraceptive (55.2% and 44.8% resp. / OR 1.42 (95% CI 0.87-2.31). 30 (18.8%) of the women requested repeat abortion within the follow-up time. Conclusions: A third of the women presenting themselves with unwanted pregnancy had at least one previous abortion. Immigrants are overrepresented with regard to first and repeated abortion.

#### The perinatal science: a new medicine

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The evolution of knowledge of fetal well-being relaunched fetal medicine seen as a patient. Faced with many conditions of doubt anomalies and malformations of the fetus, often a true prenatal euthanasia carry out, that speaks of terminal fetus. Prenatal diagnosis of conditions incompatible with life is the problem of how to use scientific knowledge, but it does not prepare the reception of disability and suffering that follows. Prenatal diagnosis can make prevention, diagnosis scientifically rigorous, in utero and after birth therapy, and it can accompany the family and the fetus. Prenatal counselling should reduce uncontrolled Diabetes Mellitus type1, change antiepileptic therapy, remove smoke and alcool abuse. Diagnosis of infections in pregnancy and malformation should show real risks of consequences in the baby. A good bioethics counsel-

ling could prepare families faced to the problem of great prematurity. In many places, the ability to diagnose has raced ahead of the ability to take care of families with fetus incompatible with life and their babies. But in a practical response, some pioneering hospitals are starting perinatal hospice or perinatal palliative care programs for families who wish to continue their pregnancies with babies who likely will die before or shortly after birth. In our experience in perinatal medicine, it's important a good preconceptional counseling and a prenatal diagnosis aimed at containment of the diagnostic doubt and that avoids the amplification of risk. This way of make counseling and avoid interruption of pregnancy caused an important reduction of postnatal depression and devorces rates.

#### **OP**40

#### Alexithymia and Sterility: a comparison between men and women

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Alexithymia construct refers to a difficulty in identifying and expressing emotions, in understanding bodily sensations and to a poor fantasmatic life (Sifneos, 1973). This study examines alexithymia levels with the SAR (Scala Alessitimica Romana, Baiocco et al., 2005), in 21 couples (9 with a diagnosis of male infertility and 12 without a clear diagnosis of sterility), recruited in a public hospital structure for the sterility treatment in Campania. MANO-VA on the five factors of the SAR scale (dependent variables), reveals that the absence of a diagnosis is associated with higher general scores of alexithymia, in particular, with a clear difficulty in understanding own and others' emotions, as if the absence of a definition of own condition would lead to confusion and to clos-

ing. Furthermore, women express their emotions somatically more than men, and this is true even when there is a diagnosis of male infertility: these women describe themselves as sharing their partners' difficulty of sterility. Finally, more than men without diagnosis, sterile men express their emotions somatically and they have a clear difficulty in telling their condition. This difficulty, however, has been evident during the clinical interview and it has concerned both members of the couples. It wants to conclude, in fact, underlying that this test has been included in a psychological interview to the couples, interview that has never been followed by other meetings (the couples have been disappeared) and during which women were (almost) always the only speaker.

#### **OP41**

#### Well being perception and psychological adjustment after perinatal loss: the role of self-help groups

Ravaldi Claudia, Giovannini Francesca, Lucenteforte Ersilia, Torrini Dianora, Rimediotti Leonardo, Tossani Eliana, Fava Giovanni Andrea, Mello Giorgio, Vannacci Alfredo

CiaoLapo charity for grief support after perinatal death; University of Florence; Careggi General Hospital Florence; University of Bologna

Introduction After a perinatal loss parents frequently perceive a lack of support and a deep sense of loneliness and extraneity from social and familiar context. Grief usually lasts from 6 months up to 3 years and in this long time parents and siblings are usually left on their own, often due to a cultural taboo on perinatal death and to the absence of specific structured support. As a consequence, parents' mourning process could be hampered and they might develop a complicated grief syndrome. Aim Aim of this survey was to collect data on general psychopathological symptoms related to perinatal loss and daily life routine, as well as personal perception of wellbeing in a sample of parents who experienced a perinatal loss in Italy. Method Sixty one parents affected by perinatal loss were recruited by CiaoLapo charity

organization and filled in the Symtom Questionnaire (SQ) and the Psychological Well Being Scale (PWB), as well as a structured socioanamnestic schedule specifically developed for this study. Results Compared to a historical sample from general population, parents affected by perinatal grief showed higher levels of somatization, hostility, anxiety and depression. Anxiety, somatization, depression and hostility were significantly correlated with older age and recent loss (p<0.01) Participation to on line or vis-à-vis self help groups coordinated by trained facilitators was associated to lower levels of hostility, anxiety, depression and somatization (p<0.01). Conclusion Self help groups (both online and vis-à-vis) seem to reduce symptoms of grief and loneliness in parents affected by perinatal loss.

## Reproductive needs of couples when a partner had suffered of an eating disorder in adolescence: some clinical illustration

Castellano Rosetta, Nicoletta Grimaldi, Annamaria Malzoni, Michelina Pagliarulo, Rita Sarno University of Rome

Introduction: Eating disorders (EDs) are serious psychological and medical illnesses that negatively affect the reproductive health of women. Various studies have described the somatic complications of eating disorders, of which gynecologic complications are particularly relevant (Steward et al., 1990; Lamas, 2008). Several data have been produced on the prevalence of EDs in women seeking an in vitro fertilization treatment. However, more frequent are the cases of women consulting for infertility, having suffered in their adolescence of anorexia or other eating disorders. Material & Methods: Through some clinical illustrations, our purpose is to focus the attention on what happens when an eating disorder in the adolescent history of a patient, and specifically clinical and subclinical anorexia nervosa, go to interact with the decision to attend an assisted reproduction

program. Results: Based on our clinical work, we discuss in which ways EDs might influence the perception and the approach of these patients to the assisted reproductive techniques. The attention is on: the perception of the body changes due to the hormonal stimulations and to the other procedures of IVF acting on the women's body; the significance given to the desire of a child in these patients and in the couple; the sense of guilt that often arise in line with the fantasy to be the responsible of the infertility condition or to be the "pathological" partner. In conclusion, psychological interventions might represent often the only one way to capture this experience of infertile women. Consequently an effective psychological support to these women need to deeply analyze this "past" experience that return and is reactivated in the life of these women.

#### **OP43**

#### Psychosomatic approach to gynecological disorders of adolescence

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Introduction: According to the psychosomatic approach, psychological and social factors defining a patient's personality are comparable to biologic factors in predisposing, facilitating and conserving the progress of a disease. These factors should always be considered during the evaluation of an adolescent presenting with gynecological disorders. Results: Chronic pelvic pain, dysmenorrhea and dyspareunia are common gynecological problems in adolescent which are caused by a combination of interactions between the nervous, skeletal, and endocrine systems, additionally affected by behavioral and psychological factors. Eating disorders like anorexia and bulimia nervosa are severe psychiatric conditions more often seen in adolescence, related with complications like delayed puberty and amenorrhea. Depression and post traumatic stress disorder (PTSD) can also have a negative impact in adolescent's

health. Besides the high possibility to hypothalamic amenorrhea, patients with depression or PTSD are also in higher risk to sexually transmitted infections, cervical dysplasia and dysmenorrhea than their healthy peers. Identification and understanding of the physical, gnostic and environmental factors involved and affecting, together with organic causes, the sexual and psychological health of adolescents is crucial for the treatment but also for the prevention of recurrences and possible adverse effects on their reproductive, psychological and sexual health. Conclusion: A high index of suspicion is required when evaluating an adolescent presenting with gynecological disorders, in order to reveal any psychological contributing factors. Management should always include the treatment of any underlying psychological condition that can further deteriorate the initial problem.

#### Psychobiological consequences of prenatal stress in 10 years old children

Ehlert Ulrike, Erni Katja Shaqiri Luljeta University of Zurich

A large body of animal and human studies shows that different types of prenatal stress (PNS) are associated with physical complaints, anxiety and emotional problems. Up to now, human studies on the effects of PNS under experimental stress provocation procedures are scarce. The goal of this study was to examine the influence of PNS on the emotional and biological reactivity to the standardized psychosocial stress test in 10-year old children. PNS was defined as glucocorticoid application during pregnancy as a consequence of preterm delivery risk. A total of 132 ten-year-old children was examined on to consecutive days. The experimental group (n=50) was characterized by a glucocorticoid treatment of the mothers as a consequence of their high risk of preterm delivery. The first control group (n=35) was defined by anamnesis of risk of preterm delivery during the pregnancy and tocolysis but no glucocorticoid treatment. The second control group (n=47)

was built of matched children born after an uncomplicated pregnancy. Social behavior was assessed with different psychometric instruments, anamnestic questions and the diagnostic interview for psychopathological disorders for children. Emotional behavior prior to and following the stress test was assessed by questionnaires and visual analogue scales (VAS). Biological stress reactivity was estimated prior, during, and after the stress test by salivary cortisol levels, salivary alpha-amylase levels, and heart rate. The children who were prenatally exposed to glucocorticoids showed (a) significantly higher stress reactivity and (b) significantly higher self-report anxiety compared to both control groups. The findings suggest an influence of PNS on the psychobiological stress reactivity in 10-year-old-children. This may have predictive value for the development of psychosocial disorders in adolescence and later adulthood

#### **OP45**

## Maternal stress and discomfort during pregnancy and its impact on the fetus

Remesova Tereza, Kavasogullari C

Large body of evidence suggest that the maternal stress and psychological discomfort results in changes in fetal HPA axis due to higher maternal stress hormons which predicts the child to be more likely to have disorders in stress response, lower birth weight and preterm birth. In long-term view this can lead to psychiatric and neuroendocrine diseases such as depression and stres related bodily disorders, increased risk of cardiovascular and metabolic

disorders in adulthood. It seems also that in fetal development there are sensitive periods of higher response to glucocorticoids due to different expression of glucocorticoid receptors in various tissues. Understanding the genesis and neurobiological basis is the way to develop more effective intervention strategies to prevent or treat those disorders.

#### **OP46**

### Psychosomatic approach to gynecological disorders of adolescence

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Introduction: According to the psychosomatic approach, psychological and social factors defining a patient's personality are comparable to biologic factors in predisposing, facilitating and conserving the progress of a disease. These factors should always be considered during the evaluation of an adolescent presenting with gynecological disorders. Results: Chronic pelvic pain, dysmenorrhea and dyspareunia are common gynecological problems in adolescent which are caused by a combination of interactions between the nervous, skeletal, and endocrine systems, additionally affected by behavioral and psychological factors. Eating disorders like anorexia and bulimia nervosa are severe psychiatric conditions more often seen in adolescence, related with complications like delayed puberty and amenorrhea. Depression and post traumatic stress disorder (PTSD) can also have a negative impact in adolescent's

health. Besides the high possibility to hypothalamic amenorrhea, patients with depression or PTSD are also in higher risk to sexually transmitted infections, cervical dysplasia and dysmenorrhea than their healthy peers. Identification and understanding of the physical, gnostic and environmental factors involved and affecting, together with organic causes, the sexual and psychological health of adolescents is crucial for the treatment but also for the prevention of recurrences and possible adverse effects on their reproductive, psychological and sexual health. Conclusion: A high index of suspicion is required when evaluating an adolescent presenting with gynecological disorders, in order to reveal any psychological contributing factors. Management should always include the treatment of any underlying psychological condition that can further deteriorate the initial problem.

#### 74 Abstracts

#### **OP47**

#### Hot flashes and salivary cortisol

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The menopause is an important period of the women life caused by losing of the reproductive capacity and evidenced by amenorrhea and other specific clinical manifestation; in particular vessel active symptom like hot flushes and night sweats represents the most common reason for requiring medical consultation. The hot flushes are experienced by the woman as a hard hot sensation, especially on the half top of the body:the head, cervical region and thorax accompany by swallow, anxiety, palpitations and skin redness. The frequency, duration and intensity undergo individual variations but, in general, the duration is few minutes. Several studies have investigated about the correlations between hormonal levels and vessel active modifications. In particular some studies demonstrate a rise in serum cortisol coinciding with hot flashes

measured with sternal skin conductance and temperature. In addition, the increased cortisol levels are associated with more severe hot flashes. The aim of our study is to see how salivary cortisol levels change during occurence of hot flash. Method: we collect from menopausal women four salivary samples in thirthy minutes since the onset of the hot flash (T 0',T 10',T 20',T 30'). Salivary cortisol levels were determinated by RIA method. The results show that salivary cortisol levels raise reaching pathological values in the second phase of the sampling (T 20',T 30'). In conclusion salivary cortisol levels change during hot flashes, as in serum, enhancing the demostration of integrative functioning of the hypothalamic-pituitary-adrenal (HPA) and the hypothalamic-pituitary-ovarian (HPO) axes.

#### **OP48**

#### Psychological impact of amenorrhea in adolescence

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Introduction: Menarche is unquestionably the milestone of pubertal development, which marks the transition from childhood to adulthood. It represents the entrance to the reproductive age and is considered to be a "badge of femininity". The complete absence or cessation of menses, which is defined as amenorrhea, and in some cases the absence of secondary sexual characteristics development, have a major impact in the adolescent patient's psychology, sexuality and self esteem. Results: Conditions associated with amenorrhea, such as the Mayer-Rokitansky-Kuster-Hauser (MRKH) Syndrome (otherwise known as vaginal aplasia), Swyer syndrome, Turner syndrome, hypothalamic amenorrhea, Polycystic Ovarian Syndrome (PCOS) and Premature Ovarian Failure (POF) mainly affect the adolescent age group. The concerns of the patients and their parents are not only related to their future fertility, but

also to the acceptance from the young girl's peers, her possible inferiority feelings and the ability to a healthy sexual life in cases where this is affected (like in the MRKH syndrome). Feelings of denial, anger, despair and depression may follow the diagnosis and in some cases even deteriorate the initial condition and affect patient's compliance. Conclusions: Management of adolescent patients with amenorrhea should not only focus in the relief of the initial symptoms and the treatment of the underlying disease. The psychological effects that every condition has on a patient should always be considered. A multidisciplinary approach, with referral to psychologist or psychiatrist is essential in order to ensure the necessary psychological support to both the patient and her parents as well as to guarantee the best possible compliance with the physician.

# The relation between the acceptance of infertility and infertility stress, marital relationships and personality development

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It is very hard to accept infertility for many people. The aim of this study is to examine the relation between an acceptance of infertility and infertility stress, marital relationships and personality development. Methods. The investigation participants were recruited by the Recruitment poster (for investigation participation) put up in the hospitals of fertility treatment in Japan. 200 couples participated. All participants were couples who had fertility treatment. Questionnaires and interview were conducted. The questionnaires included the acceptance of infertility scale, the infertility stress scale, the marital relationships scale, the personality development scale and the Japanese version of General Health Questionnaire. Results Factor analyses of the acceptance of infertility scale yielded five components; 1) Relief, 2) Denial, 3) Anger, 4) Bargaining and depression, 5) Acceptance).

Correlation analyses of infertility stress, marital relationships, personality development and acceptance of infertility showed that the more Denial that they had, the more healthy mental health and the less infertility stress they had, so as the more anger, the more infertility stress and the less personality development, and the more Bargaining and depression, the more infertility stress and mental illness along with the less personality development. We also found that the more acceptance that they had, the better marital relationships and personality development they had. Conclusions. The acceptance of infertility was related to infertility stress, marital relationships and personality development. For women with fertility treatment, acceptance of infertility may decrease their infertility stress and mental illness and promote good marital relationships and personality

#### **OP50**

#### Altered Autonomic Nervous System Activity in Female Schizophrenia

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The schizophrenic patients have been reported to experience cardiovascular disease more likely than general population. However, the underlying bio-pathological mechanisms remain unknown. The present study was proposed to evaluate whether the activity of the autonomic nervous system (ANS) is altered on female schizophrenic patients. In addition, we examined the influence of psychiatric severity and/or antipsychotic administration. In 49 female schizophrenic patients (aged 58.3±2.1 years, mean ± SE) and 21 healthy controls (53.1±1.9 years) participated in this study. Resting ANS activity was assessed by heart rate variability power spectral analysis. The global assessment of functioning (GAF) scale by DSM-IV-TR was used to evaluate their psychiatric severity. Additionally, chlorpromazine equivalent dose was calculated from injected antipsychotic quantity of the schizophrenic patients.

A multiple regression analysis was used to evaluate the age, antip-sychotic dose, and psychiatric severity on the ANS activity. All the spectral powers were markedly lower in the schizophrenia group than in the control group. Moreover, a multiple regression analysis revealed that the antipsychotic dose and GAF were a significant variable contributing to the ANS activity in schizophrenic patients. Although causes and consequences were not clear, the present study provides intriguing findings that the altered functioning of autonomic nervous system in female schizophrenic patients could be associated with diverse psychiatric symptoms. Besides, the present data further imply that female schizophrenia patients with more depressed overall ANS and PNS activity might encounter increasing risks for metabolic and cardiovascular complications and, ultimately, higher mortality rates.

#### **OP51**

### Obstetric and psychological factors as predictors of early postpartum anxiety

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Even though previous studies have shown that maternal prenatal anxiety was associated with obstetrical problems, foetal development, behavioural problems of the newborn, and postpartum depression, not much attention was given to the postpartum anxiety. The aim of this study was to assess anxiety symptoms in new mothers and to establish which obstetrical and psychological factors contribute to state anxiety. Participants were 334 postpartum women. Inclusion was limited to mothers without any psychiatric disorder in the anamnesis, and to those who gave birth to a child with Apgar score higher than 7. Croatian version of Spielberger State-Trait Anxiety Inventory (STAI), adapted version of Social

Support Appraisals Scale (SS-A), Rosenberg Self-Esteem Scale (RSES) and the demographic information form were administered 2 days postpartum. Other relevant data were collected from medical documentation. Results have shown that 18% of women had anxiety score above cut-off. Women who were primiparas, who had caesarean section, had epidural anesthesia, and gave birth to a preterm baby, had higher anxiety scores. The hierarchical regression analysis has shown that trait anxiety was the strongest predictor of the state anxiety. Obstetric factors explained the additional variance, but other psychological variables did not contribute significantly to the state anxiety.

### Brain-derived Neurotrophic Factor and Cortisol: different daily variation between normal cycling women and women with endometriosis

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Endometriosis is a benign gynecological disease affecting women in reproductive age caracterized by chronic pelvic pain and infertility. Previous study demonstrated the neurotrophins role, in particular brain-derived neurotrophic factor, in pain pathway and in inflammation processes that are two caracteristics of endometriosis. Alredy our previous study demonstrated higher BDNF levels in patients suffering from endometriosis than healthy women in follicular phase suggest a neuroprotective role of this neurotrophin in response a neuroinflammatory reaction. Now the purpose of this study is to evaluate if diurnal variation of BDNF and the circadian rithm of cortisol in this kind of patients are preserved. We enrolled eleven healthy women (age range 20-37, BMI range 20-30), and eleven women suffering from endometriosis (age range

21-37, BMI range 20-31), the blood samples were withdrawn from each subject in follicular phase at 8:00, 12:00, 16:00, 20:00, 24:00 and 8:00 of successive day in order to evaluate BDNF and cortisol plasma levels during the day. We found a preserved cortisol circadian rhythm in endometriosis patients but cortisol levels are quantitatively lower than controls. Instead BDNF daily variation are lack respect healthy women. Then biological rhythm in endometriosis is preserved, it is demonstrated by cortisol rhythm and the lack of BDNF variation is probably only blunted by peripheral increased production due to physiopathology mechanisms of this disease. Indeed lower levels of cortisol than controls are probably correlated with an altered response and an adaptation to the aversive symptoms of the endometriosis.

#### **OP53**

# Psychological stress causes relative infertility through direct change in the frequency pattern of GnRH release from the hypothalamus

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Mehr Medical Group

Objectives: Evaluation of oscillation pattern of GnRH release by the hypothalamus in different mental states Materials and Methods: Twenty two patients were evaluated on four different sessions (day 6 and 14) within two consecutive cycles in addition to the MCMI-III and the Hamilton's depression scale. Results: The pattern of oscillation was indirectly correlated with Hamilton scale and the anxiety state and showed statistically significant lowering of frequency during anxiety and depression states. Besides, the slope of GnRH between two consecutive sessions (d0GnRH0/Gn-RH1dt) showed also a prominent reduction and even flattening. In addition the time to ovulation was also postponed in cycles with prominent anxiety. Conclusions: 1. Psychological stress exerts its effect through a reduction of pulsation frequency in GnRH release.

2. The pattern of GnRH pulsation does change in the range of ½ to 1/15 of the baseline and external stimuli have strength of changing hormonal milieu in this range. 3. MCMI-III is an excellent tool for evaluating psychological state of the patient. 4. Patients with borderline, schizoid, dependent, depressed and passive aggressive personality suffer most from irregularity of menstruation cycles. 5. Patients with chronic major depression are subject to menstrual irregularity highest during stabilization of disease and in the early phases of recovery due to drug treatment with mostly SSRI. 6. Treatment of depression of anxiety causes a reduction of menstrual cycles even to very short ranges. 7. Measurement of GnRH, FSH, LH and Estradiol on two sessions one week apart is a nice marker for regularity and ovulation.

### Variability in neuroendocrine-regulated decidual/placental proliferative mechanisms in response to neurogenic stimulation

Spencer Fitzgerald, Megann L. Thompson, Limen Qi Health Research Center, Southern University

Mechanical vagino-cervical stimulation (vcs) or mating stimulates hypothalamic neurons that regulate pulsatile secretions of gonadotropin-releasing hormone and the gonadotropins which affect deciduoma formation of decidualization, an essential for successful mammalian pregnancy that is induced via ovarian steroidogenesis. Progesterone-regulated deciduomal growth is promoted by numerous paracrine factors including uterine stores of pituitary adenylate cyclase-activating polypeptide (PACAP), decidual prolactin-related protein (dPRP), plus the matrix metalloproteinases (MMPs). The purpose of the study was to temporally evaluate the effects of neurogenic stimulation on decidual/placental proliferative responses triggered by copulation and blastocyst implantation during normal pregnancy, and by copulomimetic vcs followed by deciduogenic stimulation under artificially-induced pseudopregnancy (PPG). Female rats were subjected to vcs (proestrus/estrus)

and surgical uterine trauma (day 4 PPG) for PPG/decidualization initiation, or to cohabitation with fertile males for pregnancy induction. The RT-PCR determined mRNAs of the progesterone receptor (PR), PACAP and dPRP, derived on PPG days 3, 6, 9, 12 and 15 (from the decidual endometrium), or during gestation (from the gravid uterus or placenta), increased from days 3 to 9 (p < 0.05) and then declined. Zymography-detected decidual MMP-2 and -9 levels rose sharply from PPG days 3 to 15 (p < 0.05). During gestation, gravid endometrial mRNA expressions rose from days 3 to 9 (p < 0.05) and remained elevated. Placental mRNA was consistently high from days 9 to 15. By way of the hypothalamic-hypophyseal-ovarian neuroendocrine axis, decidual/placental endocrine and molecular proliferative mechanisms responded in comparable profiles to artificial or normal neurogenic signals that respectively induce pseudopregnancy or pregnancy.

#### OP55

Evaluation of personality of patients with dysmenorrhea with the help of the Millon's Clinical Multiaxial Inventory III Zahra Talaee Rad, Kiumars K. Pirkalani, Gita Shareghi Ghahraman, Bahman Khodabakhsh, Mohammad Nazari, Hadi Haddadmanesh, Majid Mehdizadeh, Mohammadali Khodabakhsh, Isar Khodadad, Hossein Bigdeli, Reza Esmaeelzadeh Mehr Medical Group

For systematic evaluation of patients with dysmenorrhea, we studied 120 consecutive patients with the Millon's Clinical Multiaxial inventory MSMI-III. Half of the patients reported dysmenorrhea of some concern while the other half of no or minor concern. The former group used routinely drugs for dysmenorrhea in a PRN basis and some used medications as prophylaxis. The former group was free to use psychoactive medication but people using psychoactive medications were excluded from the latter group. Dysmenorrhea was not graded according to severity and stress was laid on personal view about the matter. Both groups had good compliance for accomplishing the tests. The two groups were completely different in regard to many scales of both tests. Axis I disorders (personality) could not be attributed to chronic pain and because of this only axis I disorders were regarded for correlation. Patients

with dysmenorrhea had higher scores in passive aggressive, borderline, avoidant, dependent, histrionic and obsessive personality scales (p<0.04). On the other hand patients without dysmenorrhea showed higher scores in narcissistic, schizoid, schizotypal, paranoid personality scales (p<0.07). Most patients with dysmenorrhea showed a lower pain threshold, increased preoccupation about disease and higher rates of menstrual irregularity. These patients are more regularly visited by their gynecologist, ask more questions about cancer risk and are more prone to early adjustment with depressed and anxious mood. We conclude that although the pathophysiological basis of dysmenorrhea can purely be attributed to organic and molecular landmarks the expression of pain and reaction to it is personality dependent.

### Metabolic effects of of 3 mg drospirenone plus 20 mg ethinyl estradiol alone or combined with metformin or cyproterone acetate

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The objective of our study was to evaluate the effects of a pill with drospirenone (3 mg) plus ethinyl E2 (20 mg) (DRP/20EE) alone or associated with metformin or cyproterone acetate (CPA) on some metabolic cardiovascular risk factors in women with polycystic ovary syndrome (PCOS). Forty-eight hirsute women with PCOS were enrolled and were. were randomized to treatment with DRP/20EE or with DRP/20EE plus metformin (1,500 mg/d) or with DRP/20EE plus CPA (12.5 mg/d, 10 days per cycle) for 6 months. Blood pressure, lipid profile, and indexes of glucose tolerance and insulin sensitivity were assessed before and after 6 months of treatment. Our results showed that the body mass index and blood pressure were not modified by any treatment. Treatment with DRP/EE20 did not change the lipid profile; DRP/EE20 plus metformin significantly in-

creased high-density lipoprotein cholesterol concentrations; DRP/EE20 plus CPA significantly increased triglycerides and total cholesterol. The area under the curve for insulin was significantly decreased by DRP/EE20 and DRP/EE20 plus metformin, but it was significantly increased by DRP/EE20 plus CPA. Treatment with DRP/EE20 plus CPA significantly increased the homeostasis model assessment of insulin resistance index and significantly reduced the glucose to insulin ratio index. Treatment with DRP/EE20 significantly increased the glucose to insulin ratio index. In conclusion the treatment with DRP/EE20 improved insulin sensitivity in hirsute women with PCOS, with no deterioration of lipid profile. This effect was not ameliorated by the addition of metformin. The positive metabolic effects of DRP are abolished by the concomitant use of CPA.

#### **OP57**

#### Estimation of quality of life in patients with PCOS

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Polycystic Ovary Syndrome (PCOS) refers from 3 to 6% population of women being in reproductive age. PCOS is related to oligo or anovulation. PCOS is diagnosed by number of symptoms: lack or disturbances of ovulation, hiperandrogenism and typical picture of polycystic ovaries in ultrasound examination (USG) when other causes of hyperandrogenism are excluded. PCOS symptoms include: menstrual disturbances, hirsutism, acne, obesity. Obesity occurs in 30 to 60% PCOS women and often is related to more pronounced symptoms of hyperandrogenism. Severity of symptoms not always correlates directly with levels of androgen concentrations in blood. It can be explained by different individual sensitivity of skin, activity of liver, conversion of androgens to es-

trogens. In our work we evaluated the quality of life in patients diagnosed as PCOS. Patients were diagnosed as PCOS with the use of Rottedram 2003 criteria. Control group included young, agematched women, regularly menstruating with normal body mass index (BMI). Patients for whom such symptoms as hirsutism, acne, obesity are real problem may present development of disturbances related to psychical sphere such as lack of acceptance oneself, inclinations to depression, lowering of justification to activities. Consequence of these disturbances can be problems in work, avoidance of contact with other people. The results of our study indicate that psychological aspect occurring in PCOS patients is very important. This problem is very often underestimated.

#### Psychic well being and quality of life of women conceiving through in vitro fertilization

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Objective. To determine whether pregnant women conceiving through IVF differ from those conceiving spontaneously in terms of sociodemographic characteristics, psychological well-being, quality of life, and of the course and outcome of pregnancy and the neonate's condition. Methods. In a prospective study we included 112 pregnant women: 49 conceived after conventional in vitro fertilization (IVF group) and 63 conceived spontaneously in the same time period (control group). All the women were sent a questionnaire containing Beck Depression Inventory, Subjective Quality of Life Scale, PANAS, and the Psychological Well-Being Scale for psychological well-being assessment, obstetric information was obtained from delivery records and that on the newborn from neonatal records. Results. The mean women's age was 33.8 years in the IVF and 32.5 years in the control group

(NS). In pregnancy, IVF mothers were significantly less interested in meeting friends (P=0.033), their psychic condition was significantly improved (P=0.031), significantly more had sex problems (P=0.034), the incidence of complications in pregnancy was significantly higher (P=0.084), hospitalizations were significantly more frequent (P=0.024), the incidence of spasmolytics and gestagen use and the preterm delivery rate were higher (P=0.020 and P=0.009, respectively). Conclusions. Women conceiving through IVF do not differ from those conceiving spontaneously in the levels of depression and anxiety; IVF women have a tendency to social isolation, sexual problems and consequently to a lower quality of life. In IVF women and neonates the frequency of hospitalization, preterm delivery rate and use of spasmolytics and gestagens are significantly higher.

#### **OP59**

The psychological profile of voluntary anonymous egg donors who participated at a clinical procedure: a pilot study Norré Jan, Marion Valkenburg², Rudi Campo², Stephan Gordts², Laurence Claes³

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The aim of this study was to describe the psychological picture of women (N=34) who voluntarily participated as an egg donor in a fertility treatment. Material and method: Based on criteria for consulting and screening egg donors (Applegarth & Kingsberg, 2006) we evaluated their psychological well being by means of the Brief Symptom Inventory (BSI), their personality by means of the Neuroticism, Extraversion, Openness-Five Factor Inventory (NEO-FFI), their coping by means of the Utrecht Coping List (UCL) and their satisfaction by a self made motivation questionnaire. Results: Of the 34 donors 26 (76.5%) participated in the study. On the BSI they showed symptom scores above average compared to normal female controls. On the NEO-FFI they scored average on

the five personality traits. On the UCL they scored high on the subscales Social Support, Passive Reaction, Reassuring Thoughts and Expressing Emotions. The motivational factors like dealing with secrecy, having complaints or not, altruism versus financial compensation, openness did not lead to significant variance in the symptoms, personality traits or coping styles. Finally, the result of the fertility treatment (pregnancy of the acceptor) did not differentiate the answer profile on the questionnaires. Conclusion: This group of voluntary (non-patient) egg donors has a specific coping style, but can not be differentiated by their motivation (altruism versus financial compensation), neither can their psychological profile predict the outcome of the fertility treatment.

Exploring parental representations of infertile patients undergoing an assisted reproduction program: Some preliminary observations

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Introduction: A wide body of studies attests the importance to assess parental representations as linked to the parent-child interaction and with individual adaptation to the parental role (Stern, 2006; Tambelli et al., 2008). Recently, it was suggested the necessity to investigate mental representations of infertile patients during the assisted reproduction treatment, concerning their own vision of the infertility diagnosis, their individual and couple's adjustment to treatment and their perception of themselves as parents (Klonoff-Cohen, Natarajan, 2004; Redshaw et al., 2007). Materials and methods: In this work, we present a clinical semi-structured interview evaluating representation of infertile patients undergoing IVF treatment about their own fertility condition, their personal adaptation to treatment, and their own fantasies about themselves as parents and about the child. This interview was adapted from

an interview assessing maternal and paternal representations during pregnancy (IRMAG; Ammaniti et al., 1995). Results: We describe the contents and topics of the interview; furthermore, some case exemplifications are reported, attesting the usefulness and the implications of this interview in the clinical work in this field. In conclusion, this interview might represent a helpful instrument for the clinical and research progress in the field of "psychology of infertility", with rich information about the representations underlying a decision to undergo a IVF treatment in a specific moment of the life, and/or the kind of representations about the emotional context of the individual, and/or the kind of support perceived in the couple's relationship, and/or the main emotions linked to the different steps of an IVF treatment, and /or the fantasies about a pregnancy etc.

#### **OP61**

Why do women choose not to have an elective single embryo transfer in an assisted conception programme? Thong Kok Joo, N Dayoub, MA Raja, C King, S Pickering
Edinburgh Assisted Conception Programme

Objective: To analyse the effectiveness and uptake of an elective single embryo transfer (eSET) in an assisted conception unit). Method: A retrospective analysis was carried out of IVF treatment cycle outcome in 150 women <38 years old suitable for elective single embryo transfer (eSET) criteria between Jan 2009 and Dec 2009. The main outcome was the clinical pregnancy rate (CPR) per cycle started and multiple pregnancy rate (MPR). Results: 54 patients who initially fulfilled the criteria for eSET were recommended to have a double embryo transfer (DET) on the basis of poor embryo quality with a CPR of 35.2%. Out of the remaining 96 patients, 43% (41) accepted an eSET on day three with the majority of patients 57% (55) opting for a DET, against medical recommendation. The CPR was 72.7% (40/55) in patients who opted

for DET, compared to 36.6% (15/41) in the group who accepted the recommendation for eSET. The difference in CPR between these two groups was highly significant (P=0.0004) but there was no significant difference in patient characteristics. In the group of patients who accepted eSET, MPR was 6.7% (1/15) compared to 42.5% (17/40) in the group who opted for DET (P=0.01). The MPR in the group who had DET due to poor embryo quality was 10.5% (2/19). Conclusion: Elective single embryo transfer in appropriate patients can significantly reduce the MPR. Despite being informed of the risk of multiple pregnancy, the majority choose to take the risk. Psychological studies should be conducted on women undergoing IVF treatment to gain further insight of their decision making process.

### A longitudinal study of perceived causes of infertility, psychological adjustment, and treatment success

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Background and Objective: Patients' beliefs about the causes of their medical conditions have been found to be related to physical and psychological outcomes. The current study aimed to investigate women's perceived causes of their infertility and their association with psychological adjustment over time and with treatment success. Methods: 208 women filled in questionnaires at their first visit to an infertility specialist clinic; 63% of those eligible filled in questionnaires 5 months later, after about two failed treatments. Questionnaires assessed perceptions of infertility, coping strategies, distress and well-being. Self-reports of pregnancy were collected 1 yearr post-baseline. Results: Attributions to the self (stress, behavior, personality, etc.) were associated with perceived severe consequences of infertility and with greater distress and maladaptive coping strategies (e.g., self-blame, self-neglect)

but were unrelated to changes over time in psychological adjustment or to pregnancy rates. Attributions to biological/hereditary causes were related to the preservation of well-being over time, in contrast with women low in these attributions, who reported worsened psychological status over time. Biological attributions were unrelated to coping strategies but were related to the perception of a longer timeline to the solution of the infertility problem and to lower pregnancy rates. Conclusions: Attributions of the infertility problem to the self are related to worse coping and adjustment; attributions to biological causes are related to better psychological adjustment over time, despite clearer understanding that achieving a pregnancy may take time. Medical and psychosocial counseling to infertile women should take into account their perceptions of infertility and its causes.

#### **OP63**

#### Three Essentials For Stress Reduction In Infertile Couples

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The focus of the presentation will be on couples being under actual IVF/ICSI-treatment in a centre for reproductive medicine in Austria viz. Switzerland, during the years 2004 to 2010. Long term evaluations of the couples' psychological needs under IVF/ICSI treatment have repeatedly yielded three major requirements for psychological counselling: . Guidance for being more composed after the embryo transfer . Suggestions how to direct their mind in a conducive way. Guidance for self-hypnosis and relaxation rituals. In my clinical work in Reproductive Medicine the focus has been on creating a variety of intervention formats designed to meet the couples' specific

psychological needs. They are labelled . Self-hypnosis ritual . Positioning the desire for parenthood on the "life-stage" . Creative ways of handling the "baby-urge". These counselling formats have been applied for the past six years and the couples' feedback has been throughout positive. A brief case vignette will illustrate the structure of the intervention process. Despite these counselling options and their results, we observe a continual tendency of avoidance towards psychological counselling. An explanatory hypothesis could be feelings of shame or else that concealed aspects of overcoming infertility should be kept from disclosure.

#### **OP64**

#### Gender differences in quality of life of infertile couples and in the intensity of disfunctional attitudes

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Background and Objectives: Quality of life assessment is becoming increasingly important in reproductive medicine. The aim of this study was to assess the gender differences in quality of life and Dysfunctional Attitude Scale (DAS) score on patients (men and women) suffering from couple infertility. Method The Dysfunctional Attitude Scale (DAS), designed to measure the intensity of dysfunctional attitudes, a hallmark feature of depression, and the FertyQoL - the first internationally validated instrument to measure quality of life in individuals experiencing fertility problems (FertiQoL was developed by Jacky Boivin, Janet Takefman and Andrea Braverman with sponsorship from the European Society of Human Reproduction & Embryology (ESHRE), American Society for Reproductive Medicine (ASRM) and Merck-Serono

S.A. ESHRE and ASRM jointly hold the rights to FertiQoL), were administered to 60 couples (60 men and 60 women) upon first presentation to an infertility clinic. Results: There are significant gender differences in QoL level and in different FertiQoL scales score, there aren't significant gender differences in DAS scores and there is (as expected) a negative correlation between DAS score and QoL level for both genders. Conclusions Infertile couples, especially women, are at risk of a decreased quality of life when diagnosed and undergoing fertility treatment (or women are more open to express their frustration) and the couples should be provided help and psychological support, in order to improve their health-related quality of life. Quality of life is one of the most important issues to be addressed in infertility counseling.

#### Solving infertility and third-party reproduction from point of view of Czech men

Konecna Hana, Adela Kubickova, Alena Binova Supported by Czech Science Foundation No. 407/10/0822

Objective: Solving of fertility disorders is significantly dependent on couple negotiation. That is particularly difficult in case of need of use of third party reproduction. One of the goals of the three-year study is to map the situation from man's point of view. Design and method: Method of data acquisition: narrative interviews on the topics of reproduction health and family planning with 86 men (age 20-50 years, married and single, childless and fathers; 12 of them have experienced infertility treatment). Method of data processing: contents analysis, technique of Grounded theory. Results: Men reflect little upon this topic; they take for granted being healthy. Problems with fertility disorders seem to them primarily as women's problem. The key situation of sperm taking, even in thought, is accompanied by unpleasant feelings. Men associate it with humiliation of their manhood, based

on potency and fertilizing ability. Assisted reproduction is perceived as welcomed possibility of treatment. Men without experience with infertility treatment take negative attitude to third-party reproduction. However men who have experienced assisted reproduction say that unsuccessful treatment leads to acceptance of a broader spectrum of treatment possibilities, including gamete donation, both for reasons of own longing for a child or under partner's pressure. Conclusions: The pilot study indicates increasing level of information of men about infertility and gradual detabooizing of this topic in the society. Sperm taking or use of donor's genetic material becomes critical to men. Personal experience with solving of fertility disorders has significant impact on the change in perception of the situation, including change of attitudes to third-party reproduction.

#### **OP66**

### Evaluation of anxiety and depression in infertile Japanese women undergoing treatment for infertility Ogawa Mariko, Fumi Horiguchi, Kivoshi Takamatsu Tokyo

Dental College Ichikawa General Hospital

Objective: This study was performed in a Japanese reproductive center to investigate the relationship between anxiety/depression and the causes of infertility. Methods: The participants in this study were 30 infertile female women (average age 37.1 years) who visited the Reproduction center in a hospital and underwent examinations for identifying the causes of infertility. After obtaining the consents of these patients and their reports of the examinations, we conducted the hospital anxiety and depression scale (HADS) test. We then statistically examined the association of the test results with the causes of infertility and with the treatment courses. Results: The mean HADS score was 9.8 (4.0) points, with a mean anxiety score of 5.5 (2.4) points and a mean de-

pression score of 4.3 (2.5) points. These scores suggest that the patients showed a stronger trend toward anxiety than toward depression. The HADS total score, anxiety scores and depression scores of these patients were not significantly different regardless of whether a female or male infertility factor was present. Moreover, the HADS test results showed no significant difference, regardless of whether the patient underwent natural observation, artificial insemination, or in vitro fertilization. Conclusions: The causes of infertility or the strategies of treatment did not lead to any significant differences in the HADS test results. Therefore, our findings suggest that the psychological state of infertile women is not potentially influenced by causes of infertility.

#### **OP67**

### A psychotic episode after the administration of gonadotrophin-relasing hormone agonist (GnRHa) before a homolog intrauterine insemination. A case report

Raggi Anna Nüssli

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Introduction: Schizophrenic disorders can affect women in different ages, with a first peak in the late twenties and a second one after the age of 45 in the perimenopause. Psychoses associated with oestrogen withdrawal are found in different situation for example in the puerperium and premenstrually. In the treatment of infertility with assisted reproductive technology (ART) the administration of Gn-RHa to achieve suppression of ovarian activity before starting gonadotrophin administration induces also a marked decrease in the endogenous secretion of oestrogen. Case report: A 26-year-old woman with primary infertility due to polycystic ovaries syndrome was administrated a single dose of Gn-RHa before a homolog intrauterine insemination (IUI). At the beginning of the ovarian stimulation the concentration of estradiol was very low as expected. After one week of daily injection

of recombinant follicle-stimulating hormone (rFSH) she was hospitalised because of an acute psychotic and affective symptomatology. Shortly after demission without antipsychotic medication she had to be readmitted for severe symptoms. A treatment with neuroleptics and hormonal contraception were started. Discussion: Oestrogens clearly modulate different neurotransmitter pathways. When the protective effect of estradiol is reduced due to a medically induced oestrogen withdrawal there may be a risk of developing a psychotic disorder in susceptible women. Therefore it is important to disclose any previous psychiatric disorder in women with infertility, especially before starting a therapy with Gn-RHa. A patient with a newly diagnosed schizophrenic disorder and infertility needs to be treated from an interdisciplinary team of psychiatrists, fertility specialists and obstetricians.

### Methodological justifications for the use of psychological techniques in reproductive medicine

Tsyrlin David, Saburov, J. Rakina, S. Gaidukov Human reproduction clinic

At the early stage of the develop ment of reproductive medicine, the main principles of ART have led to the prevalence of biophysical, biochemical, and embryological aspects of the infertility, thereby ignoring the human body as an integrated functional system. Over time, these views have formed only one theoretical model, which provided the justification of the basis for all the methods of assisting reproduction. This embryo- and organocentrism methodologically limited both the effectiveness of these techniques and their application in the framework of the other possible theoretical models. Thus, the limit of the effectiveness of the entire reproductive medicine as a part of medical knowledge was artificially created. Further development of reproductive medicine and improving the efficiency of its methods can only be based on fundamentally different theoretical model. The theory

of functional systems of P. K. Anokhin could form the basis of this theoretical model. One of the fundamental postulates of this theory is to consider the human body as a single dynamic psycho-physiological self-regulatory structure. In regards to the implementation by the body of its reproductive tasks, the theory of functional systems allows one to re-estimate the idea of infertility, describing it as a physiological state of the organism which is being useful adaptive result for the implementation mechanism for preserving the stability of gene pool. In the framework of classical medical ideas we have to consider that this functional state is a dynamic disorder. In particular, the psychological methods intended to solve psycho-physiological problems may become one of the integral parts of therapy and, consequently, the correction of the disorder.

#### **OP69**

### Practice-Knowledge Acquisition by Working with Obstetricians on Labor and Delivery Care -Comparison of Independent Midwives with Hospital Midwives

Masaoka Keiko, Tomoko Maruyama Sapporo Medical University

Purpose: To identify and examine midwives' practice-based knowledge acquisition via experience working with obstetricians on labor and delivery care in Japan Methods: Narrative research was conducted with 19 midwives who had more than 10 years experience in midwifery. Eight midwives were working at maternity wards in hospitals and 11 were working at maternity homes in Japan. Using episodic interviews, the subjects were asked to speak about significant incidents concerning labor and delivery care they had experienced. Transcripts of the interviews were analyzed by narrative analysis. Results: Their mean age was 45.1 years (hospital midwives: 40.1 years, independent midwives: 48.7 years), and the mean period of midwifery experience was 19 years and 4 months (hospital midwives: 15 years and 9 months, independent midwives: 22 years). The results of the analysis indicated practice-based knowledge in midwifery regarding physicians. Hospital

midwives developed negotiation skills through struggles with obstetricians, close contact with women in labor and relationships with senior midwives. On the other hand, independent midwives built trusting relationships with obstetricians through disagreements and understanding, communication maintaining an equal relationship and feeling a strong sense of responsibility to support women. Conclusion: These findings suggest that hospital midwives acquire negotiation skills through working with obstetricians to implement midwifery care and assist in natural childbirth without unnecessary medical intervention. Independent midwives build trusting relationships with obstetricians to make appropriate decisions for necessary transfer to hospital smoothly. Midwives have strong beliefs that sometimes differ from those of obstetricians based on their experiences and differences from medical treatment.

#### **OP**70

# Changes in Primigravidas' Relationship with Their Mothers during Pregnancy -A Comparison by High and Low Group of "Support by Mother"

Okayama Hisayo, Mari Takahashi Shiga University of Medical Science

Objectives: In order to prove the effect and importance of supports by the mother for primigravidas during pregnancy, changes in primigravidas' relationship with their mothers have been investigated at their middle and last stage of pregnancy. Methods: Longitudinal study was conducted for 188 primigravidas at their middle and last stage of pregnancy. The self-reported questionnaire is Primigravida-Mother Relationship Scale (PMRS, Okayama et al. 2007), which consists of 7 subscales; "Support by Mother (Support)," "Closeness to Mother (Closeness)," "Affirmative Feeling toward Mother (Affirmative)," "Independence from Mother (Independence)," "Exploration of Mother Image Model via Mother (Image Model)," "Preparations for Pregnancy, Delivery, and Childcare Using Mother as a Model (Preparation)," and "Adapta-

tion to Pregnancy Period (Adaptation)." Scores and its changes were analyzed by comparing high group for "Support" in their middle stage of pregnancy with low group. Results: The average score of "Support" at the middle stage was 18.2 (±4.4), and high group was defined as 23 and more (M+SD, n=38) and low group as 13 and less (M-SD, n=27). As a result of comparing scores of subscales for the high and low groups, the high group shows significantly (p<0.001-0.05) higher scores in all subscales except "Adaptation" at both middle and last stage. In addition, as for the changes during pregnancy, significant increasing of scores in some subscales between the middle and last stage was observed; "Closeness (p<0.01)," "Exploration (p<0.01)," "Preparation (p<0.05)." On the other hand, no change was shown in the low group.

### Consideration about midwifery care for pregnant woman having complications in Tokyo Medical and Dental University Hospital

Suzuki Miwa, Yuka Ozasa Tokyo Medical and Dental University

Midwifery cares for pregnant woman without obstetrics' risks usually are independent in Japan. But nowadays, we have serious shortage of obstetricians and pregnant women with obstetrics' risks are getting increasing, Midwifery cares have to consider about such situation. Our university hospital; Tokyo Medical and Dental University (TMDU) Hospital, have settled in the center of Tokyo, but NICU has not yet established so that we have often cared pregnant women having complications rather than high-risk patients peculiar to obstetrics, for example, a multiple pregnancy. If our patients with any complications have a first baby, they feel much more anxious about their pregnancy. So we try to support their uneasiness during pregnancy carefully. Now we had planned to research with ten pregnant women having complications to con-

sider about midwifery care for them. We met them every health checkup during pregnancy, consulted major or minor troubles and listened to their positive or negative feelings continuously from two months to ten months of gestation .Before their childbirth at ten months in pregnant, we tried to have evaluated about our all midwifery care by interviewing with some key questions. Now we are going to share our findings with you about new midwifery care in such situation as a person not instead of obstetricians but new independent role that have necessary in current Japan. That will be useful not only to show you new working role of midwife in our country, but also to improve how careful midwifery care in pregnancy helps pregnant women's gentle feelings. In advance, TMDU ethical committee had approved of this research in 2010.

#### **OP72**

#### Physiologic Labor Pain Management by Using

Abdolahian Somayeh, Simin Taavoni, Hamid Haghani Iran University of Medical Sciences

With respect to women's reproductive rights it is necessary to deliver safe labor pain management. One of the safe non-pharmacologic/noninvasive interventions could be heat therapy by using warm moisture towel on perinea- sacrum. Aim: To evaluate the effectiveness of perinea- sacrum heat therapy on labor pain, contraction and duration of active phase of physiologic labor/ delivery process. Material and Methods: In this randomized control trial study 60 volunteer 18-35 years old healthy primiparous women during their active phase of physiologic labor process after feeling in informed consent, were randomly divided in two groups (Heat therapy and control groups). Tools have three main parts (Personal characteristics, Labor process chart, and Pain Visual Analogue Scale (VAS). Results: There were no significant differences between age, educational level, having job, planned pregnancy and duration of pregnancy in two

groups. There weren't significant difference on average of pain score during first 30 minutes of intervention, but after 60, 90 and 120 minutes average of pain score in heat therapy group were significantly less than control group. (P< 0.05) There were no significant differences between uterine contraction and duration of active phase in two groups. Conclusion: Perinea- Sacrum Heat Therapy during first 30 minutes did not have significant effect on labor pain, duration of active phase., but this safe noninvasive intervention significantly reduced the intensity of pain during active phase of Physiologic labor/delivery after one hour intervention. It is recommended to study the effects of combining of this method, with other complementary and comparing results. Acknowledgement: Received grants from Research Department of Iran University of Medical Sciences and approved by its Medical Ethics Committee. (Year 2009-2010)

#### **OP73**

#### Survival rates and mode of delivery for preterm neonates

Ahmeti Fehmi, Sejdullah Hoxha, Hajriz Derguti

OBJECTIVE: The purpose of our study was to analyze the frequency of preterm deliveries and to assess the mortality and survival rate of low birth weight infants in relation to delivery mode. MATERIAL AND METHODS: A cohort of 12,466 deliveries was studied retrospectively and preterm deliveries were analyzed. Survival advantage associated with caesarean and vaginal delivery was assessed in children with the following birth weights: 500-999g, 1000-1499g, 1500-1999g, and 2000-2499g. The mortality rate of preterm babies and the survival rate were calculated to compare vaginal versus cesarean deliveries in each weight group. Furthermore, relative risk was calculated to show whether preterm neonates delivered vaginally are at higher risk compared with preterm neonates delivered by cesarean section. RESULTS: There were 1,135 preterm deliveries which resulted in

1,189 preterm infants. The overall cesarean delivery rate in this group was 32.2%. Among preterm newborns with birth weight 500-999 g, 5.7% children were delivered vaginally and 0.4% by caesarean section. The percentage of children from cesarean deliveries in the other groups was higher: for preterm infants with birth weight 1000-1499 g–3.2%, 1500-1999 g–8.8% and 2000-2499 g–19.8%. A survival advantage associated with cesarean section was observed in neonates with birth weight 1000-1499 g (p < 0.01). CONCLUSIONS: On the basis of our study it is safe to conclude that cesarean delivery is associated with a decreased neonatal mortality risk in preterm neonates with birth weight of 1000 to 1499g. Thus, it can be assumed that mode of delivery is of less importance among infants weighting more than 1500g than proper neonatal care immediately after delivery.

### Changes in Primigravidas' Relationship with Their Mothers during Pregnancy - A Comparison by High and Low Group of "Support by Mother"

Okayama Hisayo, Mari Takahashi Shiga University of Medical Science

Objectives: In order to prove the effect and importance of supports by the mother for primigravidas during pregnancy, changes in primigravidas' relationship with their mothers have been investigated at their middle and last stage of pregnancy. Methods: Longitudinal study was conducted for 188 primigravidas at their middle and last stage of pregnancy. The self-reported questionnaire is Primigravida-Mother Relationship Scale (PMRS, Okayama et al. 2007), which consists of 7 subscales; "Support by Mother (Support)," "Closeness to Mother (Closeness)," "Affirmative Feeling toward Mother (Affirmative)," "Independence from Mother (Independence)," "Exploration of Mother Image Model via Mother (Image Model)," "Preparations for Pregnancy, Delivery, and Childcare Using Mother as a Model (Preparation)," and "Adapta-

tion to Pregnancy Period (Adaptation)." Scores and its changes were analyzed by comparing high group for "Support" in their middle stage of pregnancy with low group. Results: The average score of "Support" at the middle stage was 18.2 (±4.4), and high group was defined as 23 and more (M+SD, n=38) and low group as 13 and less (M-SD, n=27). As a result of comparing scores of subscales for the high and low groups, the high group shows significantly (p<0.001-0.05) higher scores in all subscales except "Adaptation" at both middle and last stage. In addition, as for the changes during pregnancy, significant increasing of scores in some subscales between the middle and last stage was observed; "Closeness (p<0.01)," "Exploration (p<0.01)," "Preparation (p<0.05)." On the other hand, no change was shown in the low group.

#### **OP75**

#### Expert Midwives' Practical Knowledge to Assist the Power to Deliver

Masaoka Keiko, Maruyama Tomoko Sapporo Medical University

Purpose: To identify and examine expert midwives' practice-based knowledge and experience in labor and delivery care. Methods: Narrative research was conducted with 19 midwives who had more than 10 years experience of midwifery in Japan. Using episodic interviews, the subjects were asked to speak about significant incidents concerning labor and delivery care they had experienced. Transcripts of the interviews were analyzed by narrative analysis. Results: Their average age was 45.1 years (35 to 59 years). The average experience was 19 years and 4 months (12 to 33 years). Interviews took on average 1.45 hours per person. The results of the analysis indicated practice-based knowledge for assisting the power to give birth in midwifery care. Midwives believe that women have an inner strength that helps them overcome the stress of delivery and em-

phasize where exactly childbirth takes place depends on the mother and baby regardless of the women's posture. They also concentrate on how to address women and adjust illumination of the delivery room to promote natural childbirth and women's commitment to birth. This practical knowledge came from 8 types of experience, including continuous care throughout pregnancy, close contact during childbirth and support from obstetricians or struggles against obstetricians. Conclusion: Expert midwives acquire practical knowledge to assist the natural healing process, i.e., the power to deliver and recover. Midwives see and feel women's inner strength with their own eyes continuously throughout pregnancy. Expert midwives' assistance in natural childbirth indicates the special capability of the midwife, who has responsibility for normal childbirth.

#### **OP**76

Nitric oxide pathway adaptive changes related to intrauterine growth, gestational age at birth and mode of delivery *Pisaneschi Silvia*, *A. Sanchez*, *S. Begliuomini*, *F.A.L. Strigini*, *P. Ghirri*, *A. Boldrini*, *A.R. Genazzani*, *F. Coceani*, *T. Simoncini* Molecular and Cellular Gynecological Endocrinology Laboratory (MCGEL), Department of Reproductive Medicine and Child Development, University of Pisa, Italy, Scuola Superiore di Studi Universitari e Perfezionamento S. Anna, Pisa, Italy

The endothelium plays a crucial role in the maintenance of vascular tone. The higher risk or respiratory problem in infants delivered by elective caesarean section versus vaginally born babies may be related with higher oxidative stress in these babies. The complex mechanisms that control the onset and maintenance of labor remains unrevealed. We evaluate the role of the system nitric oxide (NO) in relation to degree of fetal growth, gestational age at birth and delivery mechanism, by combining the molecular analysis of endothelial cells, extracted from umbilical vessels, with umbilical blood levels of NO, asymmetric dimethylarginine (ADMA) and S-nitroemoglobina (S-NOHb). We analyze babies appropriate for gestational age and restricted for intrauterine growth, born at term or prior to term by caesarean section, in the presence or absence of labor. The preterm delivery is associated

with a decreased HUVEC NO release and an increased venous NO, related to a lower concentration of S-NOHb. The umbilical vein NO and S-NOHb levels were significantly higher at birth in infants delivered vaginally or by caesarean section after labor, as compared those born through programmed section. Opposite results were observed in arterial NO concentration and in HUVEC NO release. We propose that S-NOHb may be consumed under fetal hypoxic conditions in preterm babies and [NO\_] equivalents are transferred to the umbilical vessel wall, as a compensatory response to preterm respiratory distress. Furthermore, we hypothesize that oxidative stress during child-birth could protect infants from respiratory problems in peri-natal period, through the NO system.

#### Changes in Body Image During Pregnancy and After Birth

Trutnovsky Gerda, Haas Josef, Greimel Elfriede

Department of Obstetrics and Gynecology, Medical University of Graz, Austria

Objective: To examine the changes of body image over the course of pregnancy and postpartum. Associations between body image and pregnancy related body symptoms were explored. Study Design: 26 women completed a series of three semi-structured interviews about body symptoms and a questionnaire on body image (FKB-20) during pregnancy and 6 months postpartum. Results: Statistical analysis of the body image scale for "Disapproving Body Assessment" revealed a slight statistically not significant increase from early to late pregnancy and further to postpartum. The second body image scale, called "Vital Body Dynamics", showed a

pronounced, but not significant, decrease from early to late pregnancy, which reapproached the initial value at 6 months postpartum. There were no significant associations between pregnancy symptoms and the rating of "Disapproving Body Assessment" or "Vital Body Dynamics". Conclusions: Pregnancy and birth influence women's perception of their bodies. Body image could be a valuable indicator of maternal health and functioning. Further studies with bigger sample sizes are necessary to evaluate the effect of pregnancy specific treatments, obstetrics interventions or breastfeeding on body image.

#### **OP**78

### The effect of stress and anxiety associated with maternal prenatal diagnosis on feto-maternal attachment Allison Sara Jane, Stafford, J. Anumba

D.O.C. Academic Unit of Reproductive and Developmental Medicine, The University of Sheffield

BACKGROUND: Prenatal screening for chromosomal abnormalities provides the mother-to-be and her partner with an estimation of the risk that their child may have an abnormality. The decision to undergo further, more invasive, tests based on this probability then rests with the couple. The aim of this study was to determine whether anxiety, stress and prenatal attachment were affected by undergoing an invasive test compared to women in early pregnancy and women who have had an anomaly scan that has demonstrated normal fetal structure. METHODS: 200 women were recruited at their booking visit, 14 women and 20 partners were recruited after an invasive test and 81 women were recruited following a normal anomaly scan. One questionnaire was completed using the Beck Anxiety Inventory and the Maternal or Paternal Antenatal Attachment Scale. RESULTS:

Women who have had an invasive test have higher levels of anxiety compared to women at booking (P = 0.003) and women who have had a reassuring anomaly scan (P = 0.002). Anxiety falls from booking to a woman's anomaly scan (P = 0.025) and attachment increases (P=<0.001). There is a positive correlation between anxiety and prenatal attachment in women who have had an invasive test (r = 0.479). Partners of women undergoing an invasive test experience lower levels of anxiety (P = 0.015). DISCUSSION: Women undergoing prenatal diagnostic procedures experience more psychological distress, which may be currently underestimated by workers in prenatal care. Establishment of interdisciplinary treatment settings, in which access to psychological support is facilitated, may be extremely beneficial for these women.

#### **OP**79

#### Selecting obstetrician and gynecologist among Israeli Arabs women: Does gender matter?

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Objectives: To investigate the preference of Muslim Iseraeli Arabs regarding obstetrian and gynecologist gender, and characterize additional features that affect women in choosing gynecologist. Methods: The study included 167 responders, who were asked to answer an anonymous questionnaire. Results: Most of the rsponders (50.9%) had no preference regarding physician gender. However, regarding gynecologist preference, most (76.6%) of the women preferred a female gynecologist. These findings demonstrate a significant and specific gender preference for women gynecologist. 85.6% of the responders preferred pelvic examination and pregnancy follow up by women gynecologist. Additionaly, 61.7% of the responders had gender bias regarding getting advice for major OB/GYN problem. These findings demonstrate a significant gender preference for female gynecologist for intrusive procedures and getting advice for major OB/GYN problem. The reasons for

female selection by the responders were embarrassment from men gynecologists (67.7%), convenience feeling with women gynecologists (80.8%) and the notion that women gynecologists are more gentle (68.3%). These findings demonstrate gender preference for female gynecologist based on feeling during pelvic examination. Interestingly, the 3 most important factors which affected selecting gynecologist among our patients were experience (83.8%), knowledge (70.1%) and ability (50.3%), rather than physician gender (29.3%). Multivariate analysis revealed that other qualities and importance of background variables of the gynecologist were independent predictors of gender preference. Conclusions: Taken together Muslim Israeli Arabs posses gender bias regarding gynecologist gender. Nonetheless, personal and professional skills rather than gender, are considered to be more important factors when choosing gynecologist.

### Psychosomatic Aspects in Obstetrics and Gynecology and Cultural Determinants. The Multi-Ethnic Unit Experience in Padua

Drago Donatella <sup>1</sup>, Zulian Ornella <sup>1</sup>, Magnolo Elisa <sup>1</sup>, Torrisi Angelina <sup>1</sup>, Campagnola Nadia <sup>2</sup>, Cremonese Carla <sup>2</sup>, D'Aquino Mariagrazia <sup>1</sup>Local Health Unit 16, Padua, <sup>2</sup>Department of Psychiatry, Pad

In 2004 a High Professional Immigration Body was implemented in Padua to foster a high level of integration of health and social services addressed to immigrants and a Multi-Ethnic Unit for Obstetrics and Gynecology was designed for illegal female immigrants in order to meet their well-known difficulties to access health services. This achievement is the result of a successful partnership of the Veneto Region, the Municipality of Padua, the Province of Padua, the Local Health Authority. From 2004 to 2009 – opening five hours per week on average – 650 women attended the clinic; 1950 consultations were provided. Actually, the Multi-Ethnic Unit for O&G is giving us the opportunity to observe 'in the field' how Psychosomatics and Culture intersect on paradigms such as Body, Health, Illness, Environ-

ment. The following issues are of peculiar interest and give evidence of cultural differences: sexual and reproductive behaviours, attitudes towards pregnancy, social and partner's support to pregnancy, first access to obstetrics consultation, choice and behaviours in contraception, emotional needs in childbirth preparation, self image and life style in young trade victims, attitudes towards preventive medicine. Cultural bias speak through body language and behaviour of people; when a group opens to cohabitation, communication is an essential tool for maintaining both individual and social health. This can be read from many points of view: (i) cultural/language mediation, (ii) network among local actors (municipalities, local health authorities, non-profit-making, (iii) cross disciplinary consideration and governance.

#### **OP81**

#### Reproductive health in lesbian and bisexual women in Sweden

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OBJECTIVE: Previous international studies have elucidated signs of poor physical and mental health in women who have sex with women (WSW) and an avoidance of preventive healthcare. When the first Nordic gynecological clinic for WSW was started in Stockholm in 1999, an opportunity to compile information about their physical and psychological health and social situation arose. DE-SIGN: Retrospective descriptive. SETTING AND SAMPLE: A total of 706 women: 264 patients attending a WSW clinic and 442 women attending the regular gynecological clinic. METHODS: Questionnaires. Response rate: WSW 77%, comparison group 40%. MAIN OUTCOME MEASURES: Possible differences in mental and reproductive health and attendance of preventive healthcare by WSW and heterosexual women. RESULTS: Having had a male sexual partner was reported by 82.3% of the WSW, 39.5% in the

last five years and 4.9% in the last year. One-fifth of WSW had been pregnant, and one in ten had given birth. Equally, many had experience of induced abortion. WSW had less experience of gynecological examination and Papanicolaou smear screening. More than one-fifth of WSW had at some time had sexually transmitted infections (STI) and 12.6% reported a history of cervical atypia. WSW remembered dissatisfaction with their sexual lives during their youth and had more frequently sought professional help for their sexuality. CONCLUSION: WSW attend gynecological examinations to a lesser extent than heterosexual women. The fact that WSW reported having been affected by STI and cervical cell atypia underlines the opinion that they should be advised to attend the same gynecological check-ups and cervical screening programs as heterosexual women

#### **OP82**

#### Sexual education in Hungary

Erös Erika

Sexual education is the effective protection of future generations from unintended pregnancies and sexually transmitted infections. In Hungary sex education at secondary schools is mandatory from 1975. Official age at initial sex education is 10 years. Teenage pregnancy rate is 20.5 per 1000 women 15-19 years old, HIV prevalence rate 15-49 (UNAIDS Estimates /MDG) is 0,1 % (2005). Age of onset of sexual activity in Hungary 49.7% of sexually active 9th graders was 14 yrs or younger when starting sexual life. 18.6% of 11th graders reported to initiate sexual life at the age of 14 or before. From all contraception methods condom is the most popular, 55.4% of sexually active youth used condom as a protection, 20.2% chose other methods. The rate of those that are sexually ac-

tive but use no protection is 7.3%. Formal sex and relationship education is effective in reducing the rate of unwanted pregnancies, but the satisfaction with the highlight and quality of sex education of the youth is low. Wider access, better training for the providers and multi-disciplinary collaborations may help address this discrepancy. Multi-disciplinary outpatient clinic for adolescents gives a possible optimal solution and new perspective for the sexual education. The most basic needs of adolescents are for accurate and complete information about their body functions, sex, safer sex, reproduction, and sexual negotiation and refusal skills. Without information, adolescents are forced to make poorly informed decisions that may have profound negative effects on their lives.

### The Effects of a six-week Aerobic Exercise on Premenstrual Syndrome Senimili Dilek

Aim: The aim of this study is to investigate whether aerobic exercise would be in the treatment of Premenstrual syndrome. Methods: Forty-nine female patients whose ages ranged between 18-32 (22.45±2.81) with premenstrual syndrome were randomized into two groups: Exercise Group=(EG, n:23) and control group=(CG, n:26). Those in the EG were supervised progressive aerobic exercises two times per week. The training period lasted 6 weeks consisted of two stages the first of which was in the first three weeks lasted 40 minutes and the other was in the second half lasted 50 minutes. The effects was assessed at baseline and after 6 weeks. The participants in the CG were not exposed to any treatment. In the study, patients were evaluated by "Visual Analog Scale" (VAS) and "Scale of Premenstrual Syndrome Questionnaire" (PMSQ). A Two-Way ANAVO for mixed measures and Reliability and Valid-

ity of the test was tested and test retest techniques were utilized in analyzing the data. Results: Baseline scores were similar in two groups. PMSQ total scores of those in the EG after the exercise programme were lower than those of CG. This revealed a statistically significant difference between the the pre and post tests of EG and between EG and CG. In addition, a statistically significant difference (p=0.037) was observed between pre-post test, VAS of EG and CG. On the other hand, when anxiety scores were compared. no statistically significant improvements were found between group EG and CG(p=0.805). Conclusions: Aerobic exercise had positive effects on PMSQ scores and VAS score parameters in patients with PMS. The results suggest that these types of exercises be used in the management of PMS patients.

#### **OP84**

#### The service providers' opinion about the legal abortion in Iran

Daemi Nafiseh, Vasegh S. Fatemeh Faezeh Daemi Tehran university

Introduction: The new law approved by the Guardian Council on June 15, 2005 in Iran, permits termination of pregnancy during the first four months if the foetus is mentally or physically handicapped or if the mother's life is in danger. However, three specialists must confirm that the foetus is disabled or the mother has a life-threatening condition. In this study the service providers' opinion about the last legal abortion in Iran has been determined. Material and Methods: This is a cross-sectional study. Eight hospitals that have abortion services were selected from four parts of Tehran. The samples were 75 service providers of these hospitals (physicians, midwives and nurses) who were working in abortion services. The questionnaires included questions about demographic characteristics of samples and their opinion about the legal abortion in Iran

(such as the status of legal abortion services that have been recently legalized as compared with past, barriers to implementing of legal abortion, impact of legalization of abortion on physical, social, and psychological aspects of women's life). Results: According to opinion of the health providers, approving law of abortion caused decrease on mothers' death rate, infectious abortion, mothers' stress, disabilities in society, and increase on women's physical, mental and social health, and women's satisfaction. Also according to their opinion, current facilities for legal abortion operation are better than before. Conclusion: it seems that legalization of abortion in Iran has had positive reaction to women health (according to the health providers' opinion).

#### **OP85**

# Reproduction and offspring status 18 years after teenage-onset anorexia nervosa - A controlled community-based study

Wentz Elisabet, I. Carina Gillberg Henrik Anckarsäter Christopher Gillberg Maria Råstam Institute of Neuroscience and Physiology, Child and Adolescent Psychiatry, University of Gothenburg, Sweden

Objective: To study reproduction in a representative group of anorexia nervosa (AN) cases. Method: Fifty-one adolescent-onset AN cases (48 women; 3 men), originally recruited after community screening, and 51 matched comparison cases (COMP) were interviewed 18 years after AN onset at a mean age of 32 years, regarding pregnancies and early development of the children. Results: The results of the 48 AN and 48 COMP group women are reported in the present study. There were no deaths at 18-year follow-up. Six women still had an eating disorder (ED), none of whom had become a mother. Twenty-seven women in the AN group and 31

women in the COMP group had children. Three women had an ED during pregnan cy. Mean age at birth of the first child was lower in the AN group. Five AN women reported postpartum depression. Children in the AN group had significantly lower birth weight than the children in the COMP group. No other complications during pregnancy and the neonatal period differed across groups. Feeding difficulties were not overrepresented among the children of the AN group. Conclusion: Adults who had recovered from teenage onset AN did not differ in most aspects from matched controls with respect to pregnancies and development of their offspring.

# Dietary habits and other health-related behaviors of working mothers with allergic disease in Hokkaido Katakura Yoko, Keiko Yamada, Manami Yoshida, Tomoko Maruyama Japanese society

Objective and methods: On a matter of common knowledge, breastfeeding during the first 4 months of life, generally reduces of allergic diseases in the child, but does not in cases when the mother herself is allergic. Reports about maternal dietary allergens in breast milk and their influence on children allergy have been questioned as well. Thus, we analyzed among the study relationship between children and their mothers with regard to dietary habits and other health -related behaviors. To investigate the actual situation, we conducted an questionnaire survey about family structure, mother's age, their work, diet and health-related behaviors and mother's concerns regarding dietary behaviors for 866 working mothers at nursery of the east, south and center area in Hokkaido. Results: Children with allergic disease (mean ages of children were 3.8±1.5)

were not associated with whether the breastfeeding, bottled feeding or mixed feeding. Allergic mothers associated with children with allergic diseases (p<0.001, ). Job situation (full-time jobs, part-time jobs .or non job) was not related with allergy. As to food intake, allergic mothers were concerned about their dietary habits such as, "eating many green and yellow vegetables "(p<0.001) and "other vegetables" (p<0.026), "dairy products" (p<0.05), "soy products" (p<0.05) and "supplement" (p<0.001), they are more frequency significantly compared to healthy non allergic mothers. Other health- related behaviors were not concerned significant difference. Working Mother with allergy took to notice their children's health, and quantity of sleep. At present, there are insufficient data to support for mothers with allergy.

#### **OP87**

### Relationship between emotional intelligence and Socio emotional adjustment in preuniversity girl students, Tehran, 2009

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Background and Aim: with regarding to importance of emotional intelligence in stress modification and adjusting behaviors, this study was carried out to investigate the relationship between emotional intelligence and socio emotional adjustment in pre university girl students in Tehran city during 2009. Material and methods: In this descriptive and correlation study, 300 pre university students of Tehran city, were selected via multi stage stratified random sampling. The instruments for gathering data were demographic information's, bar-on emotional intelligence questionnaire and adjustment inventory for high school students. Data were analyzed by means of chi-square test and Pearson correlation coefficient. Results: the results of the study show that %51.3 of students un-

der study had high emotional intelligence and %48.7 of them had low emotional intelligence. Also the majority of students had good level of emotional adjustment (%59) and moderate level of social adjustment (%39.7).more over there was significant correlation between emotional intelligence and socio emotional adjustment (p<0.0001). Conclusion: Regarding meaningful association between emotional intelligence and the above mentioned variables, Training on the emotional intelligence factors, in order to promote capable of facing the problems and effective adjustment is mandatory for students. Key words: Emotional intelligence, emotional adjustment, social adjustment, pre university girl students.

#### Women's sexual pain disorders; a clinical sexological profile

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The aim of this study was to compare a group of 50 women suffering from sexual pain disorder with 50 women in sexual health (control group). Each woman was asked to complete anonymous questionnaire referring to three different assessment areas. To assess the pleasure related to erotic imagery and sexual experience, women were asked to indicate the level of pleasure perceived fantasyzing or experiencing ten sample randomized situations with three possible answers (no pleasure - little pleasure - a lot of pleasure). To assess the fit of women's own sexual experience with current models of female sexual response (Master & Johnson - Kap-

lan - Basson ), women were asked to indicate which one, if any, of these models best described their own pattern of sexual response. To assess female sexual function, the fsfi was included in the survey instruments. The sexual pain disorder group presented a lower pleasure related to erotic imagery and sexual experience and was more likely to endorse Basson model despite M&J and Kaplan models. The fsfi scores differed in the two groups, apart from the obvious pain domain, also for desire scores. In conclusion, a sexual pain disorder strongly affects women's exuality at multidimensional levels; the consequences in the therapy are discussed.

#### **OP89**

### Wellbeing, sexual function, satisfaction and absence from work after short term HRT for menopausal complaints: highlight of benefits

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Background: The 3rd European Menopause Survey in 2005 showed that 22% of women with severe menopausal complaints used HRT, compared to only 5 % of Dutch women. Severe symptoms can disrupt women's lives and result in absence from work. HRT for 5 years or less has not been shown to increase cancer risks, yet the benefits remain largely underestimated. Objective: to demonstrate after 3 months HRT only, control of menopausal complaints and impact on wellbeing, sexual function, satisfaction and work participation in Dutch women referred to our treatment center. Methods: data from medical records, CES-D and Greene Climacteric Scale, and Questionnaire for Screening Sexual Dysfunctions were prospectively followed up in 300 women with men-

opausal complaints. Pre-treatment data and results after 3 months of sequential or continuous HRT were compared. Results: Mean age at presentation was 53 years. CES-D and Greene Climacteric Scale scores decreased by 20% and 40% respectively. Sexual function measured by arousal, lubrication, frequency of intercourse and satisfaction improved and less genital pain occurred. Absence from work was reduced by 35%. Conclusion: within 3 months HRT effectively reduced menopausal complaints and improved wellbeing, sexual function and satisfaction while absence from work declined. A more positive attitude towards HRT emphasizing the wide range of benefits might allow more menopausal women to actively participate in society.

#### **OP90**

#### Primary Dysmenoreah in young reproductive age female and quality of life

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BACKGROUND: Primary dysmenoreah ,leading gynecological problem in adolescentm,has impacts self-esteem and quality of life in adolescents. Pain is a major cause of physical, psycho-social, emotional and professional or work related impairment among women with Dysmenoreah. Objective The aim of this study was to describe the prevalence of primary dismenoreah in and its associated symptoms amongst a number of adolescent female students in Tbilisi Georgia and to investigate the possible association between eating frequency and sleeping behavior and dysmenorrhea METHOD: This was a prospective questionnaire-based study. Cluster sampling technique was used. Selected girls cooperated in answering the questionnaire in their classrooms under the supervision of the research team The survey data were analysed using spss version 13.0 PARTICIPANTS: A total of 2596 single female adolescents, aged 15 to 21 years, were selected for this study. Partici-

pants gave information that included the nature, type, and severity of pain associated with menstruation if any, associated hirsutism, and a general assessment of meal intake and sleeping behavior .Results: The prevalence of primary dysmenorrhea in the population studied was 51.4% with the majority of the participants' pain symptoms beginning a few days before and continuing through the first two days of menstruation. Associated hirsutism was observed in 33.0%. Dysmenorrhea was found in students with low food intake in 79.4%. Women consuming sweet , and soft drinks daily Dysmenoreah was observed in 55.5%. Late sleeping habit was observed in 71.9% patients suffering dysmenoreah. Conclusion The high proportion of women not seeking help for dysmenorrhoea in this study may reflect the attitude of the larger society to the condition. Nutritional support and sleep management should be an integral part of the management Dysmnenoreah.

### Management of pain in delivery at the department of obstetrics at the medical university Graz

Kolovetsiou Vassiliki, Lang U., Ballon M., Pein C., Pacher M., Walcher W. Medical university

Pain in human life is usually associated with negative (pathological) events whereby birth pain is connected, as an only exception, with a positive (physiological) event, even though it is not always recognized so positively. Many factors (age, parity, cultural background,) influence pain feeling, pain processing and pain expression in the context of birth. The complexity of birth pain can be described by the fear-tension-pain-cycle (G. Dick-Read) Fear increases both the vegetative and muscular tension which leads to hypersensitivity, premature exhaustion and physical cramping. This results in pain, which aggravates again the fear. Within an initiative of the Medical University Graz to evaluate pain therapy for the entire clinical centre an evaluation of pain management at the Department for Obstetrics and Gynaecology was established, especially covering labour and delivery. A folder developed for this

project is presented at the hospitals outpatient wards and contains information about labour-pain and its therapy. During labour, women are requested several times to indicate, on a scale from one to ten, the degrees of the pain they feel, whereby "one" is the most moderate, and "ten" the strongest pain conceivable for the women. The numerous value is registered into a pain table modified for it. Following the pain scale, a legend contains a modified therapy pattern for labour pain. An optimized, individualized therapy, whether medicamentous or non-medicamentous can be provided. Likewise the ward charts were adapted both for pre- and the postpartum patients. Goal of this project is the optimization of pain therapy for women under labour and post-partum women. The project starts July 2010 and runs over a trial period of three months. First results will be available for presentation at the end of September.

#### **OP92**

#### Dyspareunia as part of low back pain and possibilities of physiotherapy treatment

Konecna Hana, Ludmila Bruhova, Alena Binova

Objective: Dyspareunia is, according to studies, a frequent, but rarely diagnosed problem. The reason consists probably in the patients' shame, traditional seeking of causes in psychic disharmony and poor offer of therapy (usually psychotherapy). The position of pelvic floor has essential influence not only on the progress of postural, locomotory and breathing, but also reproductive and sexual functions. The goal of the study was to verify the possibilities of physiotherapy for dyspareunia. Design and method: 49 patients, age 29-45 years, arriving to physiotherapeutic clinic because of low back pain. Associated diagnosis: dyspareunia (found out upon physiotherapist's direct question). Complex therapy of the whole postural system with focus on pelvic floor muscles, deep stabilization system and breathing mechanics during 6-12 2009. Results: 26 women state improved pains in the area of lumbar backbone

and improved comfort during sex after 3 months of therapy already; 11 women state only partially improved pain in the area of lumbar backbone, but not in the area of sexual dysfunction after 3 months of therapy; 9 women state partially improved both areas after 6 months of therapy; 3 women do not state any improvement in any area after 6 months of therapy. Conclusions: The offer of the possibility to explain the origination of dyspareunia by muscle disbalance improves markedly the patients' readiness to confess and solve the problem. Although the use of physiotherapy in sexual dysfunctions has still not been clearly scientifically defined, the influence of physiotherapy on the development of clinical signs is indisputable. A lot of diseases, including dyspareunia, have multifactorial character and a team of professionals must take part in their diagnostics and treatment.

#### Brain-derived neurotrophic factor in plasma of women with endometriosis

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Purpose: Endometriosis is one of the most common benign gynaecological diseases affecting women of reproductive age characterized the presence and growth of ectopic endometrial tissue outside the uterine cavity. This complex disease is frequently associated with infertility and pelvic pain. Given the relationship and the apparent importance of the role that the neurotrophins play in reproductive system and in particular brain-derived neurotrophic factor (BDNF) that is involved in pain pathways not only at central level but also in periphery, we were interested in determining whether the presence of endometriosis is associated and correlated with plasma and follicular fluid variation of BDNF. Methods: We determined BDNF level in plasma and in follicular fluid from infertile women with endometriosis and fertile women without the disease. Results: BDNF plasma levels were significantly higher in

endometriosic patients than in control women (p<0,001). After surgery this level decreased significantly (p<0,001) ranging the values of control women in follicular phase. In follicular fluid BDNF values were significantly lower in infertile women for endometriosis than in infertile women for male factors (p<0,001). Conclusion: These data raise the possibility that neuroinflammatory reactions in endometriosis could have a neuroprotective effect and support the hypothesis that BDNF represents an important link in the networks of human homeostasis and might represent a precocious marker for patients affected by endometriosis. Moreover low BDNF levels in follicular fluid may reflect an altered ovary production and may be a marker of poor oocyte quality and poor fertility in women suffering from endometriosis.

#### **OP94**

#### Long-term results of an individualized, multifaceted and multidisciplinary

Spoelstra S.K., J. Dijkstra, M.F. van Driel, W.C.M. Weijmar Schultz University Medical Center Groningen Introduction

Although it is highly recommended to use a multifaceted approach to treat provoked vestibulodynia (PVD), the large majority of treatment studies on PVD used a one-dimensional approach. Aim. To evaluate the long-term treatment outcome of a multifaceted approach to vulvar pain, sexual functioning, sexually-related personal distress and relational sexual satisfaction in women with PVD. Methods. Retrospective questionnaire survey 3-7 years after treatment. Results. The questionnaires were completed by 64 out of the 70 women (91%). Mean follow-up was 5 years, (range 3-7). Comparison of the mean pre-treatment and post-treatment VAS scores showed a significant reduction in vulvar pain. Pain reduction was reported by 52 women (81%), whereas no change and pain increase were reported by 7 women (11%) and 5 women (8%), respectively.

Post-treatment, 80% of the women had resumed intercourse. Only 5 women (8%) reported completely pain-free intercourse. Comparisons with age-related Female Sexual Function Index (FSFI) and Female Sexual Distress Scale (FSDS) Dutch norm data showed that scores for sexual functioning in the study group were significantly lower, while scores for sexually-related personal distress were significantly higher. There were no significant differences in relational sexual satisfaction ratings between the study group and the NRV Dutch norm data. Conclusion. These retrospective data on long-term treatment outcome support the hypothesis that a multifaceted approach to PVD can lead to substantial improvements in vulvar pain and the resumption of intercourse.

#### **OP95**

Evaluation of personality of patients with dysmenorrhea with the help of the Millon's Clinical Multiaxial Inventory III

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Mehr Medical Group

For systematic evaluation of patients with dysmenorrhea, we studied 120 consecutive patients with the Millon's Clinical Multiaxial inventory MSMI-III. Half of the patients reported dysmenorrhea of some concern while the other half of no or minor concern. The former group used routinely drugs for dysmenorrhea in a PRN basis and some used medications as prophylaxis. The former group was free to use psychoactive medication but people using psychoactive medications were excluded from the latter group. Dysmenorrhea was not graded according to severity and stress was laid on personal view about the matter. Both groups had good compliance for accomplishing the tests. The two groups were completely different in regard to many scales of both tests. Axis I disorders (personality) could not be attributed to chronic pain and because of this only axis

I disorders were regarded for correlation. Patients with dysmenorrhea had higher scores in passive aggressive, borderline, avoidant, dependent, histrionic and obsessive personality scales (p<0.04). On the other hand patients without dysmenorrhea showed higher scores in narcissistic, schizoid, schizotypal, paranoid personality scales (p<0.07). Most patients with dysmenorrhea showed a lower pain threshold, increased preoccupation about disease and higher rates of menstrual irregularity. These patients are more regularly visited by their gynecologist, ask more questions about cancer risk and are more prone to early adjustment with depressed and anxious mood. We conclude that although the pathophysiological basis of dysmenorrhea can purely be attributed to organic and molecular landmarks the expression of pain and reaction to it is personality dependent.

#### Alexithymic trait in endometriosis patients. A case control study

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Introduction: Alexithymia appears to affect the subject's ability to deal with the diversity of subjective pain factors although the mechanism through which it influences the perception of pain remains to be clarified. Aim of the study was to evaluate the presence of the alexithymic trait in a group of patients with endometriosis and chronic pelvic pain. Methods: 41 patients with pain and surgical diagnosis of endometriosis and 40 healthy controls were recruited in the study. All subjects taking part in the study underwent a semi-structured interview by a psychologist and the Italian version of the Toronto Alexithymia Scale (Tas-20), used to assess the presence of alexithymia was administered. Intensity of chronic pelvic pain was evaluated by means of a modified version of the Biberoglu pain scale. Results: A positive score for alexithymia was achieved by 14.6% (n. 6) of patients with, whilst this condition

was absent in the control group; alexithymia was indeterminate in 29.3% (n. 12) and 12.5% (n. 5) of patients and controls, respectively, and absent in 56.1% (n. 2) and 87.5% (n. 35). Inter-group differences were significant for three factors evaluated by TAS-20: difficulty in identifying feelings and distinguishing from bodily sensations (Fact. 1), difficulty in describing feelings (Fact. 2), and externally-oriented, or operative thinking (Fact. 3). Discussion: The present study underlined how women with endometriosis were significantly more alexithymic compared to controls. Effective treatment of chronic pelvic pain should therefore be based also on a knowledge of the emotional management of the disease and its psychological consequences. (Founding: Regione Autonoma della Sardegna, Programma Master and Back. Beneficiaria: Dott. ssa Irene Melis, Psicologa)

#### **OP97**

#### What factors affect the mental health of women during pregnancy and after childbirth?

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To investigate the mental health status and its change between mid-term pregnancy and after childbirth, we analyzed their backgrounds and self- writing questionnaires including HADS; Hospital Anxiety and Depression Scale. We classified 1010 women into four groups according to their HADS scores. Forty-three percent of all women belonged to the first group in which HADS score was below the cut-off during and after pregnancy. They were rather young, had enough support from husband and family, felt little difficulty in childcare and the baby was healthy. Twenty-two percent belonged to the second group in which HADS score was low during pregnancy and high after pregnancy. They were in good condition mentally and socially while being pregnant, but had trouble in

breast-feeding and little support after childbirth. Nine percent of the women scored high during pregnancy and low after childbirth. They did not have a closely united family during pregnancy, had child malformation but felt less difficulty in childcare. The feature of twenty-six percent of the women who marked a high score both during and after pregnancy had already more than one child before this time's pregnancy. They were not in good condition during pregnancy, had child malformation and difficulty in childcare, and did not have enough support from husband and family. Not only health conditions and psychosocial background but also trouble with child health and development and breastfeeding, seemed to affect the mental health of childbearing women.

#### **OP98**

Low mood at childbirth influences women's relationship with the baby and the partner during the first year Lilja Gunilla, Maigun Edhborg Eva Nissen

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The aim was to describe first-time mothers' feelings for their infant and partner during the first postpartum year in relation to maternal depressive symptoms. Research questions were addressed about: What is the prevalence of maternal depressive symptoms ten days postpartum? How does maternal depressive symptoms day 10 relate to her mood, feelings for the infant and partner days 3 and 10, 6 and 12 months postpartum? Methods: A longitudinal study with first-time mothers, normal pregnancies, giving birth to healthy babies participated in the study; altogether, n= 419. Depressive symptoms were measured by Edinburgh Postnatal Depression Scale (EPDS) at 3 and 10 days. Additional questionnaires assessing the women's feelings for their infant and partner as well as their assessment of mood were filled out day 3 and 10, 6 and 12

months postpartum. Results: Twenty-two percent of the women scored high on EPDS day 10 postpartum. In addition, low mood seemed to remain prevalent over the baby's first year, as confirmed by the mood scale 6 and 12 months postpartum. Women with depressive symptoms showed less closeness, warmth and confidence as measured by the infant- and partner relationship scales over the first year. Mothers with a high EPDS score day 3 scored less optimal on the relationship scale to the infant at days 3 and 10, but not 6 or 12 months postpartum. Conclusions: To screen women for depressive symptoms, ten days postpartum seem to be predictive of maternal assessment of maternal-infant relationship throughout the first year and enables early intervention.

#### Gender difference in recognition for parenthood from pregnancy to 5-ysar after childbirth

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Objective: Though it has already been pointed out that gender difference in development of parenthood, we haven't had enough information from a longitudinal perspective. The purpose of this study was to investigate whether and how gender difference in recognition for parenthood. This study is longitudinal design from pregnancy to 5-year after childbirth. Methods: Participants were recruited while they were in their pregnant period through the public health center in the 5 cities of metropolitan area in Japan. Three hundred and twelve mothers and 200 fathers were partici-

pated in this study. The change of recognition for parenthood and mental health in mother and father were investigated 6 times (from pregnancy to 5-year after childbirth). Results: The average age of mother and father at 5-year after childbirth were 35.6 and 37.7. The mental health of mother was indicated a significant change F=4.051, p<.01). There was not significantly change in mental health of fathers. In the parenthood, "attachment for their child" and "restriction and burden" were significantly changed in mothers (p<.001). And fathers were recognized significant changes on

#### **OP100**

# Low birth weight in offspring of women with depressive and anxiety symptoms during pregnancy: a population based study in Bangladesh

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Background: There are high prevalence of antepartum depression and low birth weight (LBW) in Bangladesh. In developed and developing countries, prior evidence linking maternal depressive and anxiety symptoms with infant's LBW is conflicting. There is no research on maternal mental disorders and LBW in Bangladesh. This aims to investigate the independent effect of maternal antepartum depressive and anxiety symptoms on LBW of infant among women in a rural district of Bangladesh. Method: A populationbased sample of 720 pregnant women from two rural subdistricts was assessed for symptoms of antepartum depression (Edinburg Postpartum Depression Scale) and antepartum anxiety (Trait Anxiety Inventory), and followed till 6-8 months postpartum. Infant birth weight was measured on 583 (81%) singleton live babies within 48 hours of delivery. Baseline data provided

socio-economic, anthropometric, reproductive, obstetric and social support information. Trained female interviewers carried out structured interviews. Results: After adjusting for potential confounders, depressive (OR = 2.24; 95% CI 1.37-3.68) and anxiety (OR = 2.08; 95% CI 1.30-3.25) symptoms were significantly associated with LBW (≤2.5 kg). Poverty, maternal malnutrition and support during pregnancy were also associated with LBW. Conclusion: This study provides evidence of maternal depressive and anxiety symptoms during pregnancy predict LBW and replicates results found in other South Asian countries. Policies aimed at the detection and effective management of depressive and anxiety symptoms during pregnancy may reduce the burden on mothers and also act as important preventive measure for LBW of offspring in Bangladesh.

#### **OP101**

#### Childbirth and wellbeing: could we work with the fathers?

Pomicino Laura

University of Trieste, Department of Psychology

The aim was to describe first-time mothers' feelings for their infant and partner during the first postpartum year in relation to maternal depressive symptoms. Research questions were addressed about: What is the prevalence of maternal depressive symptoms ten days postpartum? How does maternal depressive symptoms day 10 relate to her mood, feelings for the infant and partner days 3 and 10, 6 and 12 months postpartum? Methods: A longitudinal study with first-time mothers, normal pregnancies, giving birth to healthy babies participated in the study; altogether, n= 419. Depressive symptoms were measured by Edinburgh Postnatal Depression Scale (EPDS) at 3 and 10 days. Additional questionnaires assessing the women's feelings for their infant and partner as well as their assessment of mood were filled out day 3 and 10, 6 and 12

months postpartum. Results: Twenty-two percent of the women scored high on EPDS day 10 postpartum. In addition, low mood seemed to remain prevalent over the baby's first year, as confirmed by the mood scale 6 and 12 months postpartum. Women with depressive symptoms showed less closeness, warmth and confidence as measured by the infant- and partner relationship scales over the first year. Mothers with a high EPDS score day 3 scored less optimal on the relationship scale to the infant at days 3 and 10, but not 6 or 12 months postpartum. Conclusions: To screen women for depressive symptoms, ten days postpartum seem to be predictive of maternal assessment of maternal-infant relationship throughout the first year and enables early intervention.

### "What were we thinking!" An Innovative Psycho-educational Program to Prevent Common Postpartum Mental Disorders in Women

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Background: Universal postnatal interventions for prevention of mental health problems have had limited success. The aim of this study was to determine whether a gender-informed psycho-educational program for mothers, fathers and first newborns prevents postpartum depression, anxiety and adjustment disorders in women. Methods: A controlled before-and-after design was implemented in primary care in Victoria, Australia. Consecutively-recruited English-speaking couples with one-week old infants completed telephone interviews at infant age 1 and 6 months. Control and intervention groups both received standard care; intervention group participants were also offered a half-day program in groups of up to 5 couples and their 4-week old first babies which addressed unsettled infant behaviour and modifications to the partner relationship. The main outcome was any CIDI diagnosis of de-

pression, anxiety or adjustment disorder at 6 months postpartum. A logistic regression model was fitted controlling for potential confounders; analysis was by intention to treat. Results: 399/646 (62%) women were recruited; 210 received standard care only and 189 also attended the intervention. At infant age 6 months, in women without a psychiatric history (232/364; 64%), there were 36/125 (29%) diagnoses of mental disorders in the control compared with 16/107 (15%) in the intervention group; the odds of a diagnosis were significantly reduced for those in the intervention group (adjusted OR 0.43; 95% CI 0.21, 0.89) compared with the control. Conclusions: Results provide promising evidence that this brief psycho-educational intervention reduces new onset of mental disorders and suggest that additional assistance is required for women with a psychiatric history.

#### **OP103**

# An experimental study of attentional bias in women who report symptoms consistent with Post Traumatic Stress Disorder following childbirth

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Although the majority of women experience no adverse effects following childbirth, a small proportion develop symptoms consistent with Post Traumatic Stress Disorder (PTSD). To investigate the mechanisms underpinning these psychological disturbances, a cognitive paradigm was applied to investigate whether there was a relationship between attentional bias and Post Traumatic Stress (PTS) symptoms and the self rated experienced negativity of the event. This study utilised a cross sectional within subjects design with fifty women participants. All women had given birth in the last six months and reported to have experienced their labour and delivery as stressful and responded with fear, helplessness and/or horror. Women were subjected to an adaptation of the original Stroop task using labour and control words. In addition, women completed questionnaires regarding positive and negative aspects of their childbirth experience and symptoms of PTS.

The results implied that symptoms of PTS and negativity of the birth experience were both significantly associated with an attentional bias away from labour words. Correlation analyses revealed that positive and negative aspects of the labour experience were not related to each other. A more negative experience of labour and delivery was associated with more severe symptoms of PTS, and women who rated their experience as more positive were less likely to avoid reminders of the event. In conclusion, the findings provide evidence of attentional bias in relation to symptoms of posttraumatic stress after childbirth and may therefore impact on the way the childbirth experience is processed. It appears that a woman's experience of childbirth as positive may protect against the development of PTS symptoms as she does not avoid reminders of the event. This may thereby facilitate processing and cognitive integration of the memories of the event.

#### **OP**104

#### Fear of childbirth and psychological vulnerability during the transition to motherhood

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Fear of childbirth is a natural phenomenon in pregnant women, mainly during the third trimester of gestation. It has a positive role, because it helps women to prepare themselves for the childbirth. Nevertheless, when fear reaches high levels it could become disabling for a mother-to-be (Zar, Wijma & Wijma, 2001; Wijma, 1998). In its worst forms it could assume the shape of an actual phobia, or Tokophobia (Hofberg & Brockington, 2000). Up to now, little is known about the background of fear of delivery. The main goal of this research is to study if dread about delivery is linked to demographic data (age, qualifications, profession), biological factors (e.g. pregnancy trend, problems for the mother-to-be or for fetus, etc.), individual variables (depression symptoms, anxiety, personality characteristics) or

relational variables (perceived social support, couple adjustment). In particular, the research aims at exploring whether severe fear of child-birth can be a signal of psychological vulnerability in women during the transition to parenthood. 450 primiparous italian women completed: the Wijma Delivery Expectancy Questionnaire (Wijma, 1998), the Dyadic Adjustment Scale (Spanier, 1976; Gentili, 2002), the Norbeck Social Support Questionnaire (Norbeck, 984), the State-Trait Anxiety Inventory (Spielberger et al., 1983), the Edinburgh Postnatal Depression Scale (Cox et al., 1987; Benvenuti, 1999); the Eysenck Personality Questionnaire Revised (Eysenck & Eysenck; Dazzi et al., 2004). Quantitative data analyses will be performed using SPSS. Results will be discussed during the congress session.

#### Postnatal debriefing - have we thrown the baby out with the bath water?

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Background: In the UK, up to 78% of maternity services offer some form of postnatal debriefing for women.

The majority of evidence from randomized controlled trials (RCTs) suggests postnatal debriefing is not effective at reducing symptoms of depression. However, RCTs apply debriefing as a prophylactic to randomized samples, rather than as a treatment for women who request it. This study therefore evaluated the effectiveness of postnatal debriefing when used as a treatment for women who request or are referred for debriefing. Methods: 60 women who were offered, requested and received debriefing 1.5 to 72 months postpartum completed measures of depression, posttraumatic stress (PTSD), support and negative appraisals of the birth before and one month after the debriefing session. To check

that any changes in symptoms were not due to natural resolution over time, these women were compared with a group of women (n=56) who had not requested debriefing, who completed measures 6 weeks postpartum and 1 month later to enable comparison of changes over time. Results: All symptoms reduced over time in both groups but greater decreases in PTSD symptoms were observed in women who attended debriefing. Debriefing was not associated with a decrease in symptoms of depression. A high rate of comorbidity of depression and PTSD was found. Conclusions: Contrary to evidence from clinical trials, this study suggests that postnatal debriefing for women who request or are referred to it may reduce symptoms of PTSD but does not affect depression.

#### **OP106**

A psycho-educational program for women with abuse-related posttraumatic stress symptoms during the perinatal period: Phase One/Two Trial of the "Survivor Moms' Companion"

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Background: Childhood maltreatment and previous traumatic reproductive experience are risk factors for active PTSD in pregnancy. Up to 8% of nulliparous women meet full diagnostic criteria. Maternity care and labor anxiety are triggers. There are no published PTSD-specific interventions for pregnant women. The "Survivor Moms' Companion" (SMC) is a fully manualised, 10-module, self-study and structured listening psycho-educational program for PTSD implemented by non-psychiatric health professional "tutors". A Phase One/Two trial was conducted to assess safety, acceptability, feasibility, and PTSD outcomes of the SMC. This presentation reports Phase One findings. Methods: Participants were women aged 18 years or older, less than 27 weeks pregnant, with a history of child abuse or sexual assault and not engaged in longterm psychotherapy. They completed the intervention, pre- and post-test self-report

measures, 3 structured research telephone interviews, and an openended evaluation interview. Tutor-assessed Subjective Units of Distress (SUD) were collected and a standardised self-report measure of PTSD symptoms (MPSS-SR) was completed. Changes in mean scores over time were calculated. Results: Complete data are available for 13 women. Mean MPSS-SR scores decreased significantly over time (mean change=17, p = .001) and improvement was greater in women with higher baseline scores (p=.05) and more emotional engagement as indicated by SUD scores (p=.02). Distress was not associated with regret at participating. Evaluation data confirmed its salience and acceptability. Conclusion: The SMC psychoeducational intervention for pregnant women with PTSD appears safe, is acceptable and associated with symptom improvement. These results will inform the protocol for a CONSORT compliant RCT.

#### **OP107**

Posttraumatic stress disorder following pre-eclampsia and PPROM; A prospective study with 15 months follow-up Stramrood Claire, Ineke Wessel, Bennard Doornbos, Jan Aarnoudse, Paul van den Berg, Willibrord Weijmar Schultz, Mariëlle van Pampus University Medical Center Groningen, Department of Obstetrics & Gynecology, Groningen, The Netherlands

OBJECTIVE: A prospective longitudinal evaluation of the prevalence of and risk factors for post traumatic stress disorder (PTSD) in women suffering from pre-eclampsia (PE) or preterm premature rupture of membranes (PPROM) compared to uncomplicated pregnancies. METHODS: Participating women completed PTSD and depression during pregnancy, six weeks and 15 months postpartum. PTSD is defined as meeting DSM-IV criteria BCDF on the PSS-SR, depression as BDI-II sumscore >15. Data regarding psychiatric history and indices of obstetric care were collected from patient charts. RESULTS: We included 57 PE, 53 PPROM and 65 healthy pregnant women, of whom 137 also participated in the 15 months follow-up (PE 70%, PPROM 48%, controls 95%; p<.001). At 6 weeks postpartum, the prevalence of PTSD, but not depression, following childbirth was significantly higher in women

with PE (11%) and PPROM (17%) than in uneventful pregnancies (3%). A history of depression, depressive symptoms during pregnancy and infant death were significantly associated with symptoms of postpartum PTSD. The maternal condition seems to be of less decisive value, as there was no difference between the prevalence of PTSD after PE and PPROM. At 15 months postpartum, 11% of women with PE had PTSD, some of which did not have PTSD 6 weeks postpartum. The low response rate in the PPROM group at 15 months postpartum does not allow for definite conclusions. CONCLUSION: Pregnancies complicated by PE or PPROM are associated with PTSD in a substantial number of women. Especially women with proven vulnerability for psychological problems are at risk for developing PTSD postpartum, as are women whose child died in the perinatal period.

#### The old age itself is not an independent poor prognostic factor in epithelial ovarian cancer (EOC)

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Background: The speed of aging of Korea is the highest in the world. Previous studies about the relationship between age and EOC have shown inconsistent results and almost all of them have been from western countries. The aims of this study were to demonstrate the effect of old age (age ≥65) on the clinic-pathologic factors and survivals in Korean patients with EOC. Methods: After a retrospective chart review of 486 EOC patients including 70 elderly patients who underwent surgery for EOC between January 2000 and February 2010, we compared the demographics, surgical outcomes, clinic-pathologic factors, chemotherapy administered and survivals of younger versus older patients. Results: Mean age of younger (n=416) and older (n=70) groups were 47 (range, 14-64) and 70 (range, 65-84), respectively. The characteristics which were different between two groups were as follows: body mass index (kg/m2), 22.8±3.4 vs. 24.1±3.6, p=0.002; cardiovascular diseases, 46 (11.1%) vs. 44 (62.9%), p=0.000; diabetes

mellitus, 18 (4.3%) vs. 15 (21.4%), p=0.000; stage, p=0.012; Clear cell carcinoma histologic type, 55 (13.2%) vs. 3 (4.3%), p=0.029; Omentum involvement, 169 (48.1%) vs. 43 (66.2%), p=0.000; Ascites cytology, 216 (53.5%) vs. 42 (62.7%), p=0.012. On the contrary, optimal debulking rate, recur rate, lines of chemotherapy, total courses of chemotherapy, 1-year progression free survival (51.6% vs. 58.8%, p=0.450) and 5-year overall survival (83.5% vs. 76.0%, p=0.525) were all similar between two groups. Cox regression analyses failed to show any of the characteristics which were shown to be different between groups but stage might have confounding effects on the age and survival relationship. Conclusions: If optimal debulking and chemotherapy statuses are the same, old age itself is not an independent poor prognostic factor despite the higher stage of older patients. Therefore, maximal effort should be directed towards optimal debulking surgery and chemotherapy for elderly EOC patients.

#### OP109

#### Psychiatric disorders twice as common in women with fear of childbirth

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Objective: To investigate whether women with fear of childbirth have more psychiatric disorders than pregnant women in general. Design and Setting: Register-based retrospective study Participants: Altogether 2405 patients referred for consultation because of fear of vaginal childbirth in the years 1996-2002 and 4676 comparable controls were analyzed and linked to the Medical Birth Register, the Hospital Discharge Register and the Drug Reimbursement Register before and after the initial childbirth (during the years 1990-2008). Main outcome measures: Prevalence of psychiatric care as evidenced by the use of psychotropic medication or episodes of either psychiatric inpatient or outpatient care in women with fear of childbirth compared to non-fearful controls. Results: Women with fear of childbirth had significantly more often had some psychiatric care (54.0% vs. 33.6%,

p<0.001) during the study period. Fearful and nonfearful women differed from each other (p<0.001) regarding psychiatric inpatient care (7.2% vs. 3.6%), outpatient visits (19.0% vs. 9.8%) and the use of psychotropic medication (51.3% vs. 31.3%). Mood and anxiety disorders were the most common diagnoses in both groups. The major predictors for a need for psychiatric care after childbirth were previous psychiatric care (adjusted OR 4.5 (95% CI 4.0-5.1)) and fear of childbirth (OR 1.9 (CI 1.7-2.1)). Conclusions: A remarkable psychiatric morbidity was seen among women of child-bearing age. Psychiatric disorders were twice as common among women with a fear of childbirth as in non-fearful controls. Clinical practice on how to treat women fearing childbirth or demanding a caesarean section because of their fear should be developed.

### The effect of PTSD treatments after stillbirth: Eye Movement Desensitization and Reprocessing (EMDR) combined with hypnotherapy

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Objective: Despite advances in obstetric and neonatal care, many women will experience the birth of stillborn infant or the death of a newborn. Stillbirth is a devastating experience for women, sometimes leads to depression, anxiety, traumatic grief and post-traumatic stress disorder (PTSD). There has been very little research examining effective psychotherapy for post-traumatic stress after stillbirth. This study explores the possibility the use of EMDR combined with hypnotherapy in the treatment for post-traumatic stress after stillbirth. Methods: the study consisted of a 'before and after' treatment design combined with follow-up measurements 1-3 years after EMDR treatment. Quantitative data from questionnaires (The impact of Event Scale-Revised (IES-R) and Self-rating Depression Scale (SDS) were collected. In addition, qualitative data from individual interviews with the participants were collected as well. Participants: four out-patient women with

post-traumatic stress after stillbirth (three of the four experienced fatal state and emergency caesarean section). Results: Three of the four participants reported reduction of post-traumatic stress after treatment (ranging from two to three sessions) and the beneficial effects remained after 1-3 years. One only took assessment session. Symptoms of intrusive thoughts seemed most sensitive for treatment. Nevertheless, all of the participants have not finished EMDR treatment completely. They were happy at the possibility at working through their stillbirth experience, but not prepared to work with other disturbing memories (feeder memories) in the past. All of the participants were afraid of the influence upon next pregnancy. Conclusion: EMDR combined with hypnotherapy might be a useful tool in the treatment for post-traumatic stress after stillbirth, but we have to take great consideration about the timing of EMDR treatment. Further research is required.

#### **OP111**

#### Mens's experiences of intense fear related to childbirth investigated in a Swedish qualitative study

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Delegate at the Board of the Swedish Association of Psychosocial Obstetrics and Gynaecology

Background: There has been an increasing scientific interest concerning childbirth-related fear among women. Few studies have paid attention to men's fear and its implications. This study investigates the experience of intense childbirth-related fear from the perspective of the fathers themselves. Method: Twenty Swedish men, who in a previous survey had assessed their fear related to childbirth as intense, were interviewed about what this experience had meant to them. The interviews were analyzed using an approach based on the similarity-difference method in grounded theory. Results: The fear was primarily related to 'the health and life of their partner and child', and the main worry concerned the woman. The presence of fear was often described as a 'mental occupation', but also as 'increased vigilance' or 'bodily sensations'.

The men's ways of dealing with the fear could be characterized as attempts to 'increase the sense of control of the situation' and to 'diminish the very emotion of fear'. Most men had not expressed or spoken about their fear explicitly. The reasons for this were 'thoughtfulness for one's partner', the feeling that there was 'no point in talking about the fear', and difficulties related to 'gender constructions'. Despite their fear, all the men had attended the birth of their children; their motives were 'responsibility', 'involvement', and 'requirement'. Conclusions: The experience of intense childbirth-related fear constitutes a heavy burden for expectant fathers. This calls for antenatal strategies for identifying and supporting fearful fathers in their own right, without violating the autonomy of the pregnant woman.

### The Effect of Cognitive Behavioral Interventions on stress, pregnancy rates and cell free DNA among women undergoing in vitro fertilization

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This study is a multi-disciplinary randomized clinical trial looking at the effect of cognitive behavioral interventions on stress, pregnancy rates, and cell free DNA (CFD) concentration in women undergoing In Vitro Fertilization (IVF). Women undergoing IVF treatments are exposed to a variety of stress situations related to the stigma of infertility, the treatment itself and their continuing inability to conceive. Twenty eight women undergoing IVF at Soroka University Medical Center were randomly divided into a treatment group receiving Cognitive Behavioral Interventions (CBI) and a control group that was offered the interventions at the end of the current treatment cycle. Women in the intervention group received 5-6 sessions of CBI that included relaxation and breathing exercises, guided imagery, and cognitive reframing. Standardized psychological questionnaires measured stress, depression, coping

and specific fertility stress at two time points. Blood was drawn at three time points during treatment (baseline, ovum pick up and pregnancy test) and CFD levels were analyzed and recorded. Preliminary results point to increased pregnancy rates in the CBI group (55%) compared to the control group (16%). A correlation was found between active-avoidance coping and CFD levels at the time of pregnancy test (p= 0.006). Mean CFD in the pregnant women was 452 ng/ml compared to 702 ng/ml in the women who did not conceive. This research points to the benefit of using cognitive behavioral interventions during IVF treatments for increasing pregnancy rates. In addition, there is a correlation between CFD and active-avoidance coping. Mean CFD was lower in pregnant women

#### **OP113**

### Pregnant-at-last & anxious - the role of the midwife Warmelink J. Catja, M. Sc

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In 2006, 2.9% of the 173,459 infants born in The Netherlands were the result of fertility treatments. The number of women treated with and babies born after these fertility treatments is increasing. The potential burden of infertility and infertility treatment can make the transition from infertility to pregnancy a complex and emotional time. Worldwide, couples view infertility as a tragedy which carries social, economic and psychological consequences. Several studies reported high levels of distress, anxiety and depressive symptoms in women undergoing fertility treatment. Women who became pregnant as a result of IVF were more anxious during early pregnancy than those who conceived naturally. These differences were no longer reported in the second and third trimester, suggesting that distress disappears when IVF-treatment results

in continuing pregnancy. Our quantitative study wants to investigate the influence of sub fertility and/or the fertility treatment on the wants of the pregnant-at-last women in prenatal care, their (un)spoken demands towards the midwife and the final interventions done. Furthermore, it will focus on the role of the midwife in eventually diminishing the feelings of anxiety or distress. Six focus groups of six to eight women will be formed. All participants are pregnant-at-last, after a period of sub fertility and/or had conceived by fertility treatment. The women are monitored by a midwife in the so called first echelon in the Netherlands. With the results recommendations for midwifes and sub fertile women will be formulated.

#### **OP114**

#### The aspect of sexual and psychical life in woman with premature ovarian failure

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Objective: The purpose of this study was to assess the sexual and psychical life in woman with Premature Ovarian Failure (POF). Material and Methods: 93 women were included in this study. The research was based on self-prepared questionnaire and psychological tests such as Female Sexual Function Index (FSFI), General Health Questionnaire (GHQ28), Kupperman Index. Results:

Quality of life in women with POF was significantly reduced. POF was associated with decreased parametres of sexual functioning. Conclusions. POF is a serious problem among women with big impact on their sexual and psychical life. It is very important to treat every woman individual. What goes with that, sexuological and psychological help is essential in that cases.

#### 'This should be my turn': Views of Couples Encountering Difficulties to Conceive

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This paper presents some findings of ongoing empirical research undertaken at an IVF Unit with couples of childbearing age investigating their perceptions of reproduction within the context of assisted reproductive technologies. The objective was to explore how they think of their reproductive options and how these may be affected by the significance of living with infertility in their lives. The sample comprises women and men who have been diagnosed with infertility due to female and male factors or of unexplained cause and who have received prior infertility treatment. An Infertility Inventory Questionnaire was used to evaluate different streams in their lives including their 'social' and 'interpersonal' relations, 'living without children', 'love life', 'need to parent' and to 'receive psychological support by specialist'. Social relations for couples living long-term without children are worsened while their desire

to parent in time gets more strengthened. During counselling sessions with an Infertility counselor-Psychologist women and men undertook the Newcastle Personality Assessor (Big-5), which estimates that a high percentage of them are medium-high in dimension of 'neuroticism' while low in dimension of 'openness'. The theoretical framework of social constructionism is adopted to examine the techniques and strategies women and men employ in building accounts and managing interactions, and to analyse their interpretations of the notions of 'reproduction', 'rights' and 'infertility'. Their use of language reveals that there is a hierarchy of acceptance to parenting among people depending on timing knowing of infertility status, gender, and whether either of partners having previously children or being nulliparous.

#### **OP116**

### Weght loss impact on hormonal active female sexual life

Kavasogullari C, Remesova T

Aesthetic surgery is developing fast with large number of indications. Modern image of a female beauty gives unreachable model of very slim figure and maintained female signs. There is evidence that beauty or nice face does help in every day life - to get better mark at school, to get a job. Many women are therefore not satisfied with their body image and search for plastic surgery. Surprisingly according to some studies the satisfaction outcome is not very high. It was also shown that small irregularity in face

makes the physical uniqueness of a person leading to perception of a person as beautiful. In oncological patients and those needing reconstructive surgery from medical indication the achievement of normal image has a key meaning in the further life. Most of the oncogynaecologic patients in remission use long-term antidepresants and aesthetic medicine may help them to incorporate easier in general society. Key words: aesthetic medicine, beauty, reconstructive operations.

#### **OP117**

### Attention -deficit hyperactivity disorders in menopause

Bazarra-Fernandez Antonio

Introduction: In midlife, a woman with attention-deficit hyperactivity disorder (ADHD or AD/HD or ADD) makes major transitions. ADD may be seen as one or more continuous traits found normally throughout the general population. 60% of the children diagnosed with ADHD, continue having symptoms well into adult-hood. Biologically, woman goes through perimenopause and enters menopause. It is critical for a woman with ADD to be aware of the powerful interaction of ADD symptoms and declining oestrogen levels. Objectives: deepening in hormonal changes associated with menopause and ADD symptoms. Method: We have performed a review on state of the art problem in a worldwide basis and our own experience. Search strategies included online searching of the MEDLINE database and hand searching of relevant publications and reviews. Results: The effects of oestrogen on central

indices of dopaminergic function have been shown. Oestrogen exerts profound effects on mood, mental state and memory by acting on both classical monoamine and neuropeptide transmitter mechanisms in brain. Oestrogen regulation of gene expression in the brain: a possible mechanism altering the response to psychostimulants. It is hypothesized. Many women whose ADD symptoms have been successfully treated report that their treatments are less effective during perimenopause and menopause. Conclusions: Dialogue between physicians who treat adults with ADHD and those who treat women in menopause is needed, the interactions of ADD symptoms with oestrogen levels are not yet widely known. It is not unusual to have little information on the stimulant-hormone interaction. There is need to rethink diagnostic criteria.

### Personality and dispositional factors as related to menopausal symptoms

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Women's menopausal experiences vary considerably, however little is known of the role of personality and dispositional factors affecting symptom reporting. The objective of the study was to analyze in a population based sample, whether women's experience of menopausal symptoms is related to personality and dispositional factors such as optimism/pessimism, sense of coherence (SOC) and stress sensitivity. Two thousand women aged 47 to 53 were recruited through the Swedish Population Register and they received a letter of invitation to take part in a study on women's health. Among the 950 women who replied, a random representative sample of 150 perimenopausal women were invited to participate in a longitudinal follow up study comprising a baseline and two follow up sessions. The women completed a menopausal symptom rating scale (Sarrell) and the Sense of Coherence Scale (Antonowsky) as well as the Optimism/Pessimism Scale (Seligman) and Stress Sensitivity (SSP). The results showed that vasomotor symptoms, sexual problems and musculoskeletal symptoms were rated significantly higher by women who had lower SOC scores and who were lower in Optimism as well as those with high scores on Stress Sensitivity. Our study suggests that dispositional factors are associated with experience of symptoms at menopause. Furthermore, the implications are that we need to consider individual differences in the interpretation of menopausal symptom reporting and maybe help to enhance feelings of optimism and a sense of coherence in women at this transitional phase in their lives.

#### **OP119**

### Breast Cancer and Quality of Life: a study of the effects of hormonal treatment during concomitant tamoxifen Fahlén Mia, Birgitta Wallberg, Nils Wilking, Eva von Schoultz Karolinska Institute

Introduction: Most women with breast cancer are postmenopausal at the time of diagnosis. Some of these women are using hormonal therapy (HT) to alleviate menopausal symptoms and are subsequently advised to discontinue this treatment. Those are the same symptoms that may result from common adjuvant treatment in breast cancer (e.g. tamoxifen). HT is known to be effective for postmenopausal symptoms in healthy women. Does it have the same effect in women with breast cancer? Method: Quality of Life (QoL) was assessed in a prospective trial including 75 postmenopausal women who had undergone surgery for breast cancer. Half of the women received HT together with their ordinary adjuvant treatment and the other half did not receive HT. A total of 50 women were on concomitant tamoxifen. All women completed three questionnaires (EORTC QLQ C-30, EORTC QLQ-BR 23 and the Hospital Anxiety and Depression Scale (HADS)) during one year of treatment. Results: Insomnia was less frequent in the HT group and the only significant difference between the groups. However within the HT group there were significant improvements over time, in anxiety, depression, emotional, cognitive and social functions and global QoL. The increase in global QoL was significant also when HT was given with concomitant tamoxifen (p<0.01). Conclusion: Data suggest that the controversial treatment with HT may improve QoL after breast cancer also in women on anti-estrogen therapy. However, the potential benefits have to be carefully weighted against the risk of recurrence in the individual woman.

#### **OP120**

#### The Natural Duration of Menopausal Hot Flashes and Associations with Menopausal Stage

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Background: Hot flashes are experienced in varying degrees of severity by approximately 80% of perimenopausal women, and many seek treatment for their relief. However, little is known about the natural duration of hot flashes, which is particularly important for use of hormone therapy, where risks vary by duration of use. Objectives: Estimate the natural duration of menopausal hot flashes in a 14-year follow-up of a population-based cohort (N=436); identify associations of menopausal stage at onset with duration of hot flashes. Methods: Associations between hot flash duration and risk factors were estimated using Cox proportional hazards models. Women with first onset of moderate/severe hot flashes during the study interval were analyzed. Cessation of hot flashes was no observed report of moderate/severe hot flashes for >=1 year. Results: 259 women reported first onset of moderate/severe hot flashes during the study interval. Median duration was 10.2 years, with 53% still reporting hot flashes at the 14-year followup. Hot flash duration was associated with menopausal stage at onset (P<0.0001), with onset at earlier stages having longer duration. Onset of hot flashes in the early transition stage had a median duration of 7.4 years (CI: 4.9, 8.9); onset in the late transition/ postmenopausal stages had a median duration of 3.8 years (CI: 1.8, 5.5). Menopausal stage remained the strongest contributor to duration of hot flashes in multivariable models (P<0.0001) that included age, race, BMI and reproductive hormone levels. Conclusions: Moderate/severe hot flashes extend well beyond the 2-3 years of some clinical guidelines. Menopausal stage at onset of hot flashes is the strongest predictor of duration.

Wellbeing, sexual function, satisfaction and absence from work after short term HRT for menopausal complaints: highlight of benefits

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Background: The 3rd European Menopause Survey in 2005 showed that 22% of women with severe menopausal complaints used HRT, compared to only 5 % of Dutch women. Severe symptoms can disrupt women's lives and result in absence from work. HRT for 5 years or less has not been shown to increase cancer risks, yet the benefits remain largely underestimated. Objective: to demonstrate after 3 months HRT only, control of menopausal complaints and impact on wellbeing, sexual function, satisfaction and work participation in Dutch women referred to our treatment center. Methods: data from medical records, CES-D and Greene Climacteric Scale, and Questionnaire for Screening Sexual Dysfunctions were prospectively followed up in 300 women with men-

opausal complaints. Pre-treatment data and results after 3 months of sequential or continuous HRT were compared. Results: Mean age at presentation was 53 years. CES-D and Greene Climacteric Scale scores decreased by 20% and 40% respectively. Sexual function measured by arousal, lubrication, frequency of intercourse and satisfaction improved and less genital pain occurred. Absence from work was reduced by 35%. Conclusion: within 3 months HRT effectively reduced menopausal complaints and improved wellbeing, sexual function and satisfaction while absence from work declined. A more positive attitude towards HRT emphasizing the wide range of benefits might allow more menopausal women to actively participate in society.

#### **OP122**

#### Evaluation of Brain-Derived Neurotrophic Factor in menstrual blood and in human endometrium

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BDNF is a neurotrophin abundantly expressed in Central Nervous System and in non-neuronal cells infact recent study has shown that BDNF plasma levels are higher during the luteal phase of the menstrual cycle than in follicular phase and probably endometrial tissue might secrete this neurotrophin. The aim of this study is to estimate BDNF levels in menstrual blood and to identificate this neurotrophin in human endometrium through the immunoistochemical analysis of uterine tissue. BDNF levels were quantified in menstrual blood and in plasma of 11 women with a personal history of regular cycle length in the last six months  $(27\pm 2 \text{ days})$  and with ovulatory cycle  $(P \ge 10 \text{ ng/ml})$  in luteal phase); and 10 anovulatory women (and/or inadequate luteal phase)  $(P \le 4 \text{ ng/ml})$  in luteal phase) with a personal his-

tory of cycle length in the last six months of  $36\pm 2$  (aged 19-25 BMI 18-24). Both groups have menstrual blood BDNF levels significantly higher than peripheral plasma levels (679,3  $\pm$  92,2 vs 301,9  $\pm$  46,7 pg/ml p<0,001; 386,1  $\pm$  85,2 vs 166,8  $\pm$  24,1 pg/ml). Menstrual and plasma BDNF levels are significantly higher in women with ovulatory cycles than anovulatory women (menstrual blood: 679,3  $\pm$  92,2 vs 386,1  $\pm$  85,2 pg/ml p<0,001; plasma: 301,9  $\pm$  46,7 vs 166,8  $\pm$  24,1 pg/ml p<0,001). Endometrial immunohistochemestry shows BDNF in both phases of the menstrual cycle with high predominance in secretory phase. In conclusion BDNF detection in the human endometrium and in the menstrual blood supports the role of this neurotrophin in female reproductive function.

# Predictive relationships among symptom experience, self-care strategies and stage of disease on quality of life of women with breast cancer treated with neoadjuvant chemotherapy

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Introdution:The communication of the diagnosis of cancer has a devastating impact on QL of the patient worsens in stages during treatment, stage of disease and the prospect of life and this is evident in women with breast cancer(BC). Therefore, predict and understand these factors. is fundamental to the team in order to implement care interventions and targeted support. Methods: The Symptom Management Model(SMM) was applied as the conceptual framework of the study From May 2007-November 2009, after information and written informed consent, acceded to the study 82 women aged between 42-73 years (mean 55.7 years (±SD 8.09), median 55 years) with BC candidates for neoadjuvant chemotherapy (NCT) under the DH. To pts were delivered to the following evaluation questions: 4DSQ, FACIT, VAPS, HAM-D, BSDS and IBCSG-QL. All questionnaires were completed and delivered. The data were proc-

essed with StataVersion 9.0 and SPSSVersion 14.0.and were analyzed with statistical methods using Stepwise Regression Statistic(SRS). Results:The predictive power was 82% of the variance(p<.01) indicating that the SMM is a useful guide for Explaining and Predicting quality of life of BC undergoing NCT.The findings revealed that the mean scores of QL(X=66.43)was at the moderate level;significantly predictors were depression(p<.01),sleep disturbance(p<.01),fatigu e(p<.01)and stage of disease(p<.01). Conclusion:Pain,fatigue,and depression are complex affective,sensory,and cognitive phenomena and all of these symptoms,as well as sleep disturbances,are common in oncology pts who are receiving cancer treatment.Our results indicate that the questionnaires is a useful guide to explain and predict depression,sleep disturbance,fatigue and disease stage,parameters that would significantly QL

#### **OP124**

#### Patients' positive perspectives of cancer:a qualitative study

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Introduction: Given that the cancer is an important multi dimensional disease during which victims are more likely to participate in negative experiences, it is important to clarify and to interpret the positive aspects that impede their health. Psychological-Emotional-spiritual factors play a unique role in cancer patients and positive perspective significantly influences their health. Method: A content analysis was conducted and 9 cancer experienced were purposefully selected and interviewed. Subsequently, all interviews were recorded and transcribed. Results: The findings of this study

revealed five main themes including: positive spiritual aspects after cancer, cancer as a moral miracle, tending to health, a new life after cancer, & family and social communications. Understanding cancer patients' perspectives is not only important but is useful for maintaining a healthy care after disease. Therefore, patients, families, health workers and policy makers should develop effective positive role about the cancer. Key Words: cancer patients, Content Analysis, Positive aspect, Qualitative Approach

#### OP125w

#### Long-term follow up of female haematological cancer survivors

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Objectives The aim of the study was to describe clinical characteristics of haematological cancer survivors and their reproductive outcome when early fertility options are offered. Methods Fiftyone cancer survivors from the Stockholm region were included consecutively in the study between1998 and 2008; they were followed annually until 2010. Diagnoses were acute lymphoblast leukaemia (n=8), acute myeloid leukaemia (n=13), chronic myeloid leukaemia (n=12), Hodgkin's disease (n=15), non- Hodgkin's lymphoma (n=3). All women received hormone replacement therapy. Yearly assessments were made for ovarian, adrenal, thyroid functions and bone density. Results All survivors were menopausal after treatment but there was no suppression of adrenal or thyroid functions. The mean age at diagnoses was 27 and at final evalua-

tion 39. Eight women (4.1 %) had children before the diagnosis. Forty-three women (84.3 %) with a mean age of 34 (21-43) years had never been pregnant and two of these had acute lymphoblast leukaemia and died in relapse. Before cancer treatment, all women without children were offered fertility preservation options. To date, two women became pregnant spontaneously; four pregnancies were achieved with oocyte donation, surrogacy and/or adoption. Conclusions Haematological cancer is not uncommon in pre- and perimenopausal women who, until very recently, had no options for early preservation of fertility. Most patients appreciate discussing these options and a number have undertaken fertility procedures with some measure of success.

### Sitting position: a right way to reduce labour pain with shortening duration of labor

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Objectives: The aim of the study was to investigate the effect of sitting position on the following variables: duration of 2nd and 3rd stages of labour; bleeding volume of 3rd and 4th stages of labour; and neonatal apgar score. Materials and Methods:One hundred women including 50 subjects in Sitting position group(Case group)and 50 subjects in Lithotomy position group(Comparative group).were included in this Controlled-Randomized clinical trial. Results:The duration of 2nd and 3rd stages of labor was significantly lower in case versus comparative group(P=0.010 and P=0.015, respectively).The volume of blood loss during 3rd stage of labor was significantly greater in the

case group in comparison with the comparative group (P=0.004). However, the volume of blood loss during 4th stage of labor was not significantly different in 2 groups. The statistical significance wasn't found for the 1st and 5 minutes after birth appar score in comparison between 2 groups. Although, perineal and vulvar tears was not significantly different between 2 groups, but vulvar edema was found to be significantly greater in the sitting position group (P=0.01). Conclusions: : Although, sitting position was found shorten the 2nd and 3rd stages of labor in this study, it is suggested that mothers be given the chance to choose their own position of delivery.

#### P2

### Updated insights into German infertile couples' attitudes towards the fate of potential surplus cryopreserved embryos and their moral status

Armbrust Robert, Montag Ute, Siemann Annette, Sibold Claus, Tandler-Schneider Andreas, Borkenhagen Ada, Kentenich Heribert

Introduction: In Germany creating spare embryos is forbidden (German Embryo Protection Law), usually all created embryos must be transferred. Therefore cryopreservation of pronucleus stages is allowed. Little is known about German couples' attitudes towards legalization of cryopreservation of embryos and towards the moral status of the human embryos. Material and Method: 271 German infertile patients with cryopreserved pronuclear stages in storage returned completed standardized questionnaire. Several multivariate regression models were performed in order to assess influencing factors that contributed to infertile couples' decision and attitudes. Results: 92% argue for general legalization of cryopreservation of embryos in Germany routinely within a fertility treatment. There is high acceptance towards donation of surplus frozen embryos (69%). Couples would either donate their embryos to infertility research (65%),

stem-cell research (63%) or to other infertile couples (58%). A majority of respondents considered the pronuclear stage as well as the embryo as possessor of dignity (40%). Conclusions: German infertile couples argue, in contrast to the German Embryo Protection Law, for a legalization of cryopreservation of surplus embryos within a fertility treatment. A majority of couples support the view that embryo donation for research should be allowed. Regression analysis showed that individual measures (length, stage of treatment, desire for a child) and sociodemographical measures are significantly associated with couples' attitudes. The couples favour a gradual concept of the status of embryos, which is closer to a personal and emotional model than the rigid view by the German Embryo Protection Law. Nonetheless further investigation is necessary.

#### **P**3

#### Psychological and sexual symptoms associated with the menopause

Bazarra-Fernandez Antonio, Coruña A University Hospital Trust, SPAIN

Background: During menopause, there are certain physiological changes that can interfere with the enjoyment of sex. Statement of purpose: Deepening in the ethiopathogenesis of psychological and sexual symptoms associated with the menopause. Statement of method: A search of the literature on Medline have been performed in a worldwide basis of studies of psychological symptoms in women who were either naturally or surgically menopausal or who were receiving hormone replacement therapy for menopausal symptoms and of the own medical experience. Statement of results: Decreased libido is a common problem and an issue that can affect women of all ages. In addition, it is a complex issue with many contributing factors. Changes in a woman's sexual drive and satisfaction can have multiple

influencing factors, including physical aspects as well as mental and emotional factors. Approximately one-third of women over 50 report a decrease in sexual desire. This is matched, however, by an equal number of women who report improved sexual desire. The key factors influencing which women have sexual issues include individual attitudes towards sexuality and overall health, marital status and that oestrogen are not related to changes in sexual response in postmenopausal women. Discussion and conclusions: Menopause does not mean that sex is no longer an important or desired part of life. When a loss of sexual desire since menopause is experienced, a few other possible causes before deciding that menopause for decreasing of estrogens is alone responsible for the lowered libido must be considered.

#### Sex hormones and psychiatric disorders

Bazarra-Fernandez Antonio

Complejo Hospitalario Universitario A Coruña, Spain Issue: Reproductive axis hormone secretion is inhibited in women with depression, particularly luteinizing hormone.

Description: The menstrual cycle is produced by hormonal signals that start with the release of gonadotropin-releasing hormone (GnRH) from the hypothalamus. GnRH then acts on the pituitary gland and causes it to release FSH and LH. Lessons learned: Similar serotonin binding sites were found to exist on LHRH. It is suggested a dysregulation of the hypothalamic-pituitary-gonadal axis in peri and postmenopausal and panhysterectomized female endogenous depressives. The elucidation of serotonin binding sites has implications for understanding various aspects of neurological disease, and peptide hormone control. Serotonin and dopamine play, normally, opposite roles in the CNS. There is a balance of actions between dopamine and serotonin. This is called the Dopamine/serotonin balance. The balance of inhibition and activation of dopamine

by serotonin is called the Serotonin/Serotonin balance. Ovarian cyclicity was disrupted and the hypothalamic content of LHRH was significantly reduced injecting 6-hydroxydopamine. Depletion of hypothalamic noradrenalin causes subtle changes in the endogenous release of LHRH and may alter the negative feedback effects of steroids on the hypothalamic-pituitary axis which controls FSH and LH by GnRH. Conclusions: Gonadal steroids feedback at hypothalamic and pituitary levels to either inhibit or stimulate the release of LH and FSH. There is direct connection of serotonin with LHRH through serotonin binding sites and other connection with FSH, LH, gonadal steroids and DOPA which would alter a balance of actions between gonadotrophins and serotonin during puberty, pregnancy and menopause.

#### **P**5

# Neoadjuvant chemotherapy(NCT) on women with breast cancer (BC): predictive relationships among symptom experience, self-care strategies and stage of disease on quality of life

Buda Francesco<sup>1</sup>, Lugano Adriana <sup>1</sup>, Cicchetti Marina<sup>1</sup>, Basello Emerenziana<sup>1</sup>, Messina Giovanna<sup>2</sup>, Buda Concetta<sup>2</sup>
Dpt of Internal Medicine-Medical Oncology- City of Udine Hospital ,Udine,Italy; 2) Dpt of Gynecology and Obstetrics,University of Messina,School of Medicine, Messina,Italy

After diagnosis of cancer many psycho-physical factors involved in the patient that a lower quality of life and that is evident in women with BC. Therefore, predict and understand these factors. is fundamental to the team in order to implement care interventions and targeted support. Methods: The Symptom Management Model(SMM)was applied as the conceptual framework of the study from 2006-2009, after information and written informed consent, acceded to the study 82 women aged 42-73 years (mean 55.7 years, ±SD 8.09, median 55 years) with BC candidates for NCT under the D.H. To pts were delivered to the following evaluation questions: 4DSQ, FACIT, VAPS, HAM-D, BSDS and IBCSG-QL. All questionnaires were completed and delivered. The data were processed with statistical methods using Stepwise Regression Statistic (SRS).

Results:The predictive power was 82% of the variance(p<.01)indicating that the SMM is a useful guide for Explaining and Predicting QL of BC undergoing NCT. The findings revealed that the mean scores of QL(X=66.43)was at the moderate level; significantly predictors were depression(p<.01), sleep disturbance(p<.01), fatigu e(p<.01) and stage of diseas(p<.01). Conclusion: Pain, fatigue, and depression are complexaffective, sensory, and cognitive phenomena and all of these symptoms, as well as sleep disturbances, are common in oncology pts who are receiving cancer treatment. Our results indicate that the questionnaires is a useful guide to explain and predict depression, sleep disturbance, fatigue and disease stage, parameters that would significantly QL in this select group of patients with BC not treatable in the first instance with surgery.

#### **P**6

Observational study on the quality of life with special reference to sex life in premenopausal women with breast cancer Buda Francesco<sup>1</sup>, Buda Concetta<sup>2</sup>, Mazzeo Giuliana<sup>2</sup>, Pronetto Mariangela<sup>3</sup>, Moretti Marcella <sup>3</sup>

<sup>1</sup>Dpt of Internal Medicine-Medical Oncology- City of Udine Hospital ,Udine,Italy; <sup>2</sup>Dpt of Gynecology and Obstetrics,University of Messina, School of Medicine, Messina,Italy, <sup>3</sup>Service of Psychology and Psycho-Oncology City Hospital of Udine, Udine Italy Purpose

Purpose:In this study we evaluated the impact of therapeutic interventions, the quality of sexual life in premenopausal women with breast cancer METHODS: In 15 pts (mean age 45.9) came to our observation from February 2006-November 2009 al informed consent, have responded to an anonymous questionnaire administered before and after 3 months by conservative surgery. RE-SULTS:78% were satisfied with their sex life before surgery, both in terms of quality and frequency. Three months later, 63% were satisfied with the quality of their sex lives, but only 36% with frequency. Before surgery, only 27% had problems with their sex lives, whereas now the figure has risen to its 80% were caused by a decrease or lack of libido and 40%, the cause is a genital organ disorders. We

think it is important to note thatin 20%, there is a total absence of libido and dismay at the thought of sex. Moreover, 33% say they feel tired, anxious and depressed, and another 33% are too worried of health to them sex. Another think significant fact is that 80% of the points are satisfied with the way they are able to. At the end of the questionnaire, we asked for a comprehensive assessment of sexual life with the Likert scale. 78% were satisfied with their sex life before surgery compared to 47% of points that are contained member 3 months later. CONCLUSION: There was a deterioration of the sexuality of points assessed 3 months after surgery, while during therapy. We assume that the ratio remains a good quality, as initially indicated, with a case of good communication the partner.

#### Fitoestrogens and breast tightness in menopause women on hrt

Bulajic Emilija

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OBJECTIVES: The role of alternative or complementary medicines in treatment of menopause became more respectable in order to their effects in controlling mild vasomotor symptoms. In the present study we examined effect Fitoestrogens on breast tightness in the women on the HRT in the early menopause. METHOD: In our case we had 16 women in the early menopause with breast tightness which started HRT few mounths ago. We exchanged HRT by Fitoestrogens (trifolium pretense and soia isoflavoni) and followed their effects on the breast tightness, their efficacy in correction on wasomotor dis-

orders and psychological problems linked to the early menopause. RESULTS: We founded out that at 15 of 16 women(93,75 %) breast tigtness significantly decrease after mounths of fitoestrogen therapy. The other early menopausal disorders were under good controle. CONCLUSION: Fitoestrogens are effective in reducing vasomotor disorders and the other sympthomes of early menopause without problems of breast tightness. So, fitoestrogens are good choice as a first line of RT in early menopause.

#### **P8**

#### The incidence of alexithymia in women with Turner syndrome

Czyzyk Adam, Meczekalski Blazej

Department of Gynecological Endocrinology, Poznan University of Medical Science

Introduction: Alexithymia is a personality trait defined by the following characteristics: 1) a difficulty in identifying and describing feelings, b) a difficulty in distinguishing between feelings and sensations from body, c) a paucity of fantasies and d) a concern with external events. Alexithymia is a typical psychosomatic disorder, related to a risk of medical and psychiatric disorders. The incidence of alexithymia is estimated to be from 5-9% in general population. Patients with Turner syndrome (TS) are known to present difficulties in identifying, describing and recognizing emotions, but the incidence of alexithymia in those patients have not been studied so far. Aim: To assess the incidence and severity of alexithymia in women with

TS. Materials and methods: 14 women with TS, and 12 healthy, euovulatory patients in follicular phase were enrolled to this study. To recognize alexithymic individuals we used Toronto Alexithymia Scale (TAS), which is validated and widely used tool in identifying this personality trait. Results: 2 women (14.3%) with TS and 3 from control group (16.7%) were found to be alexithymic. The mean TAS score, related to alexithymia severity in TS and control group was not significantly different. Conclusions: Even though women with TS are known to exert some emotional difficulties, the incidence and severity of alexithymia in this group seems to be the same as in healthy controls.

#### Р9

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### The effects of massage therapy on anxiety and satisfaction of pregnant women during labour - A randomized clinical trial

Daemi Faezeh, Vasegh Fatemeh - Hooshyar Adel - Daemi Nafiseh Tehran university

Background: Relatively little studies are done to investigate the effects of massage on anxiety and satisfaction during labour. In this study we examined these effects to clarify some aspects of using an alternative complementary strategy during labour. Methods: 120 primiparous women with term pregnancy were divided into massage and control groups randomly. Massage was given 30 minutes firm and rhythmic to massage group during every 3 phases of labour, 1 (3-4 cm cervical dilation), 2 (5-7 cm cervical dilation) and 3 (8-10 cm cervical dilation). After massage at each stage anxiety and satisfaction levels were evaluated. Furthermore satisfaction was measured 30 minutes

after delivery (phase 4). Anxiety and satisfaction were measured with the standard visual analogue scale (VAS). Results: The massage group had lower anxiety state in 3 phases in comparison with control group (p<0.05). Data analysis of satisfaction level showed higher values in 4 phases in massage group comparing with control (p<0.000). Duration of active phase was lower in massage group (p<0.000). Conclusions: Findings suggest that massage is an effective alternative intervention, decreasing anxiety during labour and increasing the level of satisfaction.

#### P11

# Effect of education on attitude, knowledge and practice of pregnant women in Population Lab, Sari medical science of Mazandaran, IRAN

Danesh Mahmonir, Milani Forozan, Shaban\_Eazykian Sareh, Farahmand Mansour University of Medical Sciences ,Sari, IRAN

Objective: To measure effectiveness of education on attitude, knowledge and practice of pregnant women towards vaginal delivery. Rapid advancement and ease of availability in delivering healthcare, raises preferences of pregnant women in time of delivery towards Cesarean mode of delivery to point of alarming rate of over 50%. In developing countries tendencies for cesarean delivery raises the question "who is at fault, pregnant women or healthcare provider? "To reduce dangerous trend toward cesarean practice, family and pregnant women in cooperation with healthcare authority have to act accordingly which researchers are trying to understand this undesired practice! Method: Study based on experimental observation on 62 pregnant women under supervision of Population Lab in Sari medical science of Mazandaran in years 2007-2008. Validity and reliability from three parts of Attitude, Knowledge and practice in written questioner 79% was approved. Group discussion and education with pregnant women,

was conducted after Pretest. Attitude, knowledge and practice of each individual tested after two month up to delivering time and after. Gathered information processed with SPSS ver.14 software and analyzed with t.test. Results: From hypothesis has been approved. This means education has received information H influenced mothers' attitude, knowledge and practice. (CI = 95%, T = 10.9) meanwhile cesarean rate was 24% while 60% were indication by clinical factors and remaining without. Conclusions: From gathered information on effectiveness of education to reduce from 50% to half, preferences of cesarean in pregnant women under care of Population Lab, we conclude that: Education raises awareness of pregnant women the benefit of vaginal delivery to cesarean section. Therefore we recommend a national program to educate both mothers and healthcare personnel the benefits of vaginal delivery.

#### P12

# Children and adolescents of violence exposed mothers have more physical and psychological symptoms than those of non exposed mothers

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Department of Clincal Science Obstetrics and Gynecology, Umeå University

Objectives: To analyse the association between violence exposed mothers and the health in their children/adolescents as reported by the mothers. Methods: The data originates from a population based health-questionnaire survey, distributed to a representative sample of women in Sweden. Two short questions about physical and psychological violence were included in the questionnaire. The health of 283 children/adolescents (aged 0-18), as reported by women who had been exposed to violence, during the past 12 months, was compared with the health of 4,664 children/adolescents of non-exposed mothers. Results: Adjusted Odds ratios regarding most registered physical symptoms showed that children and adolescents of violence-exposed

mothers had a significant higher risk of ill-health than both young children and adolescents of non-exposed mothers. Regarding psychological symptoms and learning difficulties, the odds were raised for girls in all age-groups for most symptoms, but not for boys. A twofold increase in health-care utilisation and an overall general increase in the risk of pharmaceutical consumption were shown for both girls and boys in all age-groups of exposed mothers. Conclusions: This population-based study shows an increased risk of poorer health, among boys and girls aged 0-18 years, as reported by mothers exposed to violence. Clear gender differences are seen.

# Estimation of phenomenon of lassitude in patients with cancer of breast who are following chemotherapy and radiotherapy

Dimitrakopoulos Spyridon, Andriotis Antonios, Koliantzaki Sofia, Sorras Konstantinos, Sidiropoulou Anna, Bonas Apostolos, Papageorgiou Evagelos, Saltamavros Alexandros, Sidiropoulos Nikolaos

General Hospital of Pyrgos, Obstetric-Gynecology Department, Pyrgos, Greece

AIM: The emergence of phenomenon of lassitude in women suffering from cancer of breast and who are in chemotherapy (cytostatic medicines, tamoxifen, GNRH analogues) and radiotherapy. MATERIAL - METHOD: There were studied 26 women of age of 25 - 79 years, (15 after menopause women and 11 pro menopause women) stage I - II, who had been submitted in semi-annual chemotherapy with cytostatics and 6 - 8 weeks (30 sessions) 5000rad radiotherapy for cancer of breast. All of the participators had been submitted in chirurgical intervention (onco-excision, part excision or mastectomy, that was accompanied by cognate underarm lymph nodes cleaning), 5 until 10 years before and 7 that recently have finished their treatment. As research tool was used the completion of questionnaire and the reception of personal interview from the patients in three successive measurements (beginning, middle, finally). The study became with qualitative analysis of results of the previ-

ous questionnaire. The statistical analysis of results became with the method  $X^2$  - test (prices p < 0,001 were considered statistically important). RESULTS: The first team of the 11 pro menopause patients present because of the pharmaceutical gonadectomy with the Gn-Rh analogues from the second month menopause symptoms and more intense lassitude in the means of the treatment with augmentative tendency to the end. The second team of the 15 after menopause patient reports elements of lassitude to the end of the treatment. The analysis of results for the phenomenon of lassitude emerged statistically importance with the progress of chemotherapy and radiotherapy for all of the sufferers. CONCLUSIONS: From the evaluation of our results it comes up with clarity that the lassitude of women that suffers from cancer of breast is increasing with the progress of chemotherapy and rad.

#### **P14**

The psychosocial effect of change of bodily image in patients that were submitted in mastectomy – Advisory Dimitrakopoulos Spyridon, Andriotis Antonios, Koliantzaki Sofia, Sorras Konstantinos, Sidiropoulou Anna, Bonas Apostolos, Papageorgiou Evagelos, Saltamavros Alexandros, Sidiropoulos Nikolaos

AIM: The recording of emotions that were experienced by patients who were submitted in mastectomy. MATERIAL - METHOD: The sample of our analysis composed of 37 women, age of 30 - 65 years. The material included women that in the past had been submitted in mastectomy. The collection of data became according to anonymous questionnaire. The study became with qualitative analysis of results of questionnaire which was given in these women. RESULTS: From the elaboration of elements it emerges that the bodily change leaves psychosocial stain without regard to the age of patient. Almost all of them report that the loss of their breast initially caused them anger. The younger report that they accepted a backset of their femininity so that it affects for a big percentage adversely in their sexual relations. Some

of them at first couldn't speak for this change to their social environment, so that they avoid social activities even if they had the need to express their fears and their emotions. CONCLUSION: The patients who were submitted in mastectomy require support from the professionals of health but also from their environment. To achieve this it is needed to bring them in contact with the problem and to help them to accept their new bodily image, recommending them improvements with the use of cosmetic additions, the choice of proportional clothing and their beautification. There is required their encouragement so that they can verbally express their emotions as well as their prompt in attendance of various social activities. Finally with the carefully listening and support we have to improve the self respect of the patient.

#### P15

### Correlation of elderly nutritional status with cardio-vascular disease and diabetes

Ebrahimian.F, Hossein.D, Ahangar Pour A

The effects of population aging are becoming apparent throughout the world. Diseases, such as cardio-vascular disease (CVD) and diabetes, are among the most important factors affecting morbidity and mortality, especially in the elderly. These diseases not only result in huge economic costs for treatment and care, but also results in hardship and time lost for relatives of the afflicted individuals. The association between nutritional status and disease is well known. In the present study, the effects of both under-nutrition and over nutrition on the prevalence of disease are monitored in an urban Iranian elderly population. Methods: This cross- sectional study was conducted in Ahvaz , Iran, during late 2005 on 1650 elderly people (711 males, 939 females), aged 60 years and older. Subjects were randomly chosen from all urban elderly

people during a door- to-door and weight and height survey. They were selected using a cluster sampling method, each containing 30 mass index ( BMI) , the nutritional status was categorized as overweight (BMI > 25), underweight (BMI < 19) and normal (BMI  $\geq$  19 and BMI  $\leq$  25) . Results: Results showed that 4.3% of the subjects were underweight and 61.6% overweight. Long periods of watching television increased the risk of overweight in all subjects. Being overweight was associated with diabetes and coronary vascular diseases, and lean people were less likely to suffer from such disease. Conclusion: This study indicates a high prevalence of overweight among the Iranian elderly population, indicating the need for improvement in nutritional status in order to reduce the prevalence of diabetes and CVD.

#### P<sub>16</sub>

### A case of denied pregnancy, unassisted delivery and neonaticide - Obstetric, forensic and psychiatric aspects *Emmert Christine*

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Neonaticide is the killing of a newborn within the first 24 h of life and is closely associated with denial of pregnancy, poverty and low education level. Obstetric: A 22-year-old pale, depressed female (2 abortions at age of 16 and 18 years, 1 normal birth two years ago) presented with lower abdominal pain and vaginal bleeding. Reported last menstruation 6 weeks before. Two small oblique lacerations (each 1cm) at the inner side of both labia minora were noticed. The patient denied violent intercourse. The uterine orificium was open (2cm), with mild bleeding ex utero. Sonographically, the uterus was postpartal (13x9cm). The patient denied recent birth. No signs of lactation were found. Serum-\(\beta\)-HCG was 1913.0 U/l. The patient was suspected to be at first day post-partum. Police was involved to clarify the babies whereabouts. Forensic: The female had given birth after denied pregnancy in the toilet of her home. A fridge in the basement

contained the dead baby in plastic sacs without placenta. Autopsy confirmed that the baby was alive at birth (2557g, 47cm, male, 35th gestational week). Pre-/peripartal maternal intake of paracetamol, benzodiacepine, nicotine and coffein were proven toxicologically. Psychiatric: Forensic-psychiatric examination revealed severe psychiatric abnormality with combined personality disorder and dependent anxious instable behaviour disorder. Profound consciousness disturbance at birth was reported. The patient had no social support but economic difficulties, family and partner stress before and during denied pregnancy and seeked no prenatal care. Gynecologists should consider neonaticide in case of such differences between the patients anamnestic data and genital findings. Sophisticated inspection of the external genitals had the important consequence to think about an abnormal event in our patients actual situation.

#### **P17**

#### Autonomic Nervous System Activity and Psychological Influence on Female Elite Runner

Fujibayashi Mami, Yamada Yosuke, Ando Soichi, Nakai Seiichi, Kimura Misaka, Moritani Toshio The Graduate School of Human & Environmental Studies

It is not yet known exactly how the stress of hard training and competition leads to the observed bio-psychological symptoms. Stressful situations affect autonomic nervous system activity. This study aimed to evaluate whether sympathetic and/or parasympathetic nervous system activities were altered in elite female athletes. Seventeen female elite long-distance runners and twelve female sedentary students were participated in this study. The autonomic nervous system activity were assessed during a resting condition by means of heart rate variability power spectral analysis, which enables us to identify separate frequency components, i.e., total power (TP), low-frequency (LF) power, and high-frequency (HF) power. Subjects were assessed for the Profile of Mood States (POMS) that is a standardized test measuring mood disturbance with proven reliability. The elite runner

demonstrated a significantly lower heart rate (p<.001), higher TP (p=.010), LF power (p=.026), and HF power (p=.019) compared with sedentary students. There were no significant differences in any of the factors on the POMS. However, a linear regression analysis showed that the LF power (reflecting both sympathetic and parasympathetic nervous system activity) significantly correlated with Depression-Dejection (r=.593, p=.012), Anger-Hostility (r=.690, p=.002), Fatigue (r=.516, p=.034), and Vigor (r=-.685, p=.002) in elite athlete. The autonomic nervous system activity plays an important role in modulating the internal environment in the human body. The present findings suggest that the elevated sympathetic nervous system activity could be associated with psychological influence on long-distance runners in terms of depressed mood and vigor.

#### P18

#### The influence of biological factors and the way of delivery on thrombocyte serotonin level change

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Clinical Hospital

Various factors have been reported to be associated with the development of postpartum mood disorders, but the results are still inconclusive. One of the important factors is assumed to be serotonin level. We determined platelet serotonin levels before delivery and two days postpartum in 82 pregnant women. The results were investigated in corellation with biological factors wich include;maternal age, fetal and placental weight and the way of birth. Maternal thrombocyte serotonin level at term pregnancy correspond to level of serotonin in healthy nonpregnant women. The level of platelet serotonin significantly decreased after delivery but without correlation to investigated biological factors. Still

we found some differences among the groups divided according to age and the way of delivery. Conclusion: Decreased serotoninergic activity after delivery in all subjects supports the role of serotonin in the onset of maternity blues. Since this is physiologic change immanent to all pregnant women and is still not clear why only some of them develop clinical signs. We found significantly higher platelet serotonin level change in group under 28 years of age but without clear explanation. This fact is yet to be determined and if so maybe this group is in higher risk for developing postpartum mood disorders.

### Vincristine Toxicity Effect on Cerebellum Formation of Mice at during pregnancy

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Introduction: Vinc ristine is alkaloid that was administered for inhibition of division of malignant tumor cells. Occurring of malformation in embryos was proved in pregnant mothers. However, there was no adequate information about its toxic effect in newborns cerebellum structures. Will considering to Blood Brain Barrier passing and cytotoxic effect, rate of destructive effects to formation of cerebellum in newborns was demonstrated. Methods: In this study 20 female Mice were pregnant divided as two groups (control and experimental) accidentally. The experimental group received 3mg/kg in days 10 and 15 pregnancy (I.P). In end of pregnancy duration 48 newborns (control and experimental groups) were selected for histotechnique process and H&E staining then in continues considered under light microscope. It was used from T-test and SPSS software for analyzing data obtaining

from quantities parameters. Results: In base of morphologic observations performing, It was obtained significant decrease in weight, skull size and newborn growth (P<0.001). In base of microscopic observations, cerebellum is seen such as primary formation. White matter of cerebellum was seen with decreasing in compaction of neuralgia cells accompany with deficiency in dismyelination of nervous fibers. Occurring of apoptosis was seen in epithelial cells of choroid plexus and in white matter neuralgia cells. Conclusions: In base of obtaining resultants we can conclude that effects of anti-mitosis drugs can include inhibitive activity of drug to difference and proliferation of cortical cells of cerebellum and its formation ultimately and it causes to support of apoptosis induction in choroid plexus cells and cerebellum. Key word: Cerebellum, Mice, pregnancy, Vincristine.

#### P20

#### Impact of Metabolic Syndrome on Sexual function in Middle- to Old-Aged Korean Women

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Objective: To evaluate the impact of metabolic syndrome (MS) on sexual function in middle- to old-aged Korean women. Materials & Methods: From May 2009 to January 2010, a cross-sectional study was performed including middle- to old-aged, sexually active women (≥40) who visited comprehensive screening clinic of Seoul National University Hospital. We performed history taking, biometry, pelvic examination, laboratory test, and Female Sexual Function Index (FSFI). Results: Among 773 enrolled women, 94 (12.2%) were defined MS. There were significant differences in age, menopausal status, body mass index, educational status, household income and urinary incontinence symptom between MS and normal group (p<0.05). However, the frequency of SD was similar (52.1% vs.

55.1%), and scores of FSFI were not different between two groups, which was not changed after the adjustment of clinical risk factors for SD by ANCOVA analyses except the 'desire' sub-domain with a marginal significance (3.0 vs 3.2; p=0.034). In multivariate regression model, MS and MS components were not associated with SD; Age, menopausal status, smoking, depression and symptomatic urinary incontinence were only proved as independent risk factors for SD (p<0.05). Conclusion: MS may have little association with female sexual dysfunction of middle- to old-aged women. Population-based studies and longitudinal studies should be followed to find out whether present definition of MS has a predictive value on female sexual dysfunction in middle- to old-aged women.

#### P21

# Impact of Obesity on Quality of Life in Patients with Urinary Incontinence

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Objective: To evaluate the impact of obesity on quality of life in patients with urinary incontinence. Materials & Methods: From October 2008 to May 2010, a cross-sectional study was performed including patients who visited urogynecology clinic of Seoul National University Hospital. We performed history taking, biometry including body weight and height, pelvic examination using Pelvic Organ Prolapse Quantification System (POP-Q), and King's Health Questionnaire (KHQ). Patient's characteristics and KHQ were compared among underweight/normal (BMI <23 kg/m2), overweight (BMI 23.0-24.9 kg/m2) and obese (BMI  $\geq$  25 kg/m2; WHO Asia-Pacific Classification) women. Results: Total 307 patients were enrolled. Among normal (N=119), overweight (N=94) and obese (N=94) patients, Hormonal status, occupation, and frequency of co-morbidities such as hypertension, diabetes, and prior

hysterectomy were significantly different (p<0.05). After adjustment of POP-Q stage and clinical risk factors for urinary by ANCOVA analyses, obese group had higher scores than those of other groups in 'KHQ-Emotion problem' domain (46.07 vs. 31.92 vs. 34.55, p=0.01). Overweight and obese groups showed also higher scores than underweight/normal group in 'KHQ-Severity measure' domain (35.76 vs. 40.40 vs. 26.44, p=0.001). In addition, obesity was proved as an independent risk factor for the 'KHQ-Emotion problem & –Severity' in multiple linear regression (standardized =0.136, p=0.032; standardized =0.179, p=0.004). Conclusion: Obesity is a risk factor for impaired quality of life in women with urinary incontinence, especially on severity and emotional problem. Weight-control may restore the quality of life in patients suffering from urinary incontinence.

## Problems about information and acceptance at the diagnosis of disorders of sex development (DSD)

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Patients with Turner syndrome or androgen insensitivity syndrome complain amenorrhea at adolescence and have a checkup at the obstetrics and gynecology department. When we manage these patients, it is necessary to take into account not only of the diagnosis and treatment but also psychosocial development based on patient's character and the background. At the diagnosis of these disorder and treatment, we intend to clarify the problem concerning the information and acceptance of these disease. We treated ten patients with Turner syndrome (eight diagnosed by low height during their infant period and two diagnosed due to amenorrhea

at adolescence) and four patients with androgen insensitivity syndrome (three diagnosed by inguinal hernia at infant period and one diagnosed by amenorrhea at adolescence). We investigated the information, time, and acceptance of the patient and the family. Although all cases of Turner syndrome were informed about chromosome abnormality, only one case of androgen insensitivity syndrome was informed . When we inform the diagnosis, first we should tell the parents precisely about the disease. And then we should inform the patient according to their developmental stage. It is important to inform them with repetition.

#### P23

# Experience-based Views of Nurses Midwives and Public Health Nurses on Parenting by Schizophrenic Mothers in Japan

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Purpose This study was undertaken to understand the views of professionals who have cared schizophrenic women during their pregnancy, childbirth and parenting, as part of efforts to develop guidelines for this area of nursing care. Method Data were collected between August 2008 and March 2009 by the semi-structured interview method from ten nurses, six midwives and seven public health nurses who had cared schizophrenic mothers. The recording was literally transcribed, and statements relevant to parenting were qualitatively and inductively analyzed. The findings were peer-reviewed for validation. This study was approved by the Sapporo Medical University Ethical Committee. Results 51 codes/12 categories were extracted from nurses, 24 codes/6 categories from midwives and 67 codes/12 categories from public health nurses. Nurses found "family support essential", and

recognized "poor parenting skills of the mothers and their families and lack of social support" and "conflicts in parenting when support was prerequisite". Midwives took the mothers as "ordinary mothers" but could not "rid concerns about parenting by themselves, suggesting the need for "assessing parenting skills and taking measures". Public health nurses found "low interpersonal and parenting skills" of the mothers and suggested "organising a support system. Discussion Contradicting views on pregnancy, delivery and parenting of schizophrenic mothers were only found in categories extracted from nurses. The authors suggest that this results from the unsatisfactory state of social resources available to the schizophrenic mothers and the fact that nurses are more likely to care the mothers when their conditions have become complicated.

## P24

## The Validity and Reliability of Turkish Version of The W-DEQ

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The aims of the present study are to translate the Wijma Delivery Expectancy/Experience Questionnaire (W-DEQ) Version A into Turkish and to investigate its validity and reliability for Turkish population. A total of 660 healty women with normal pregnancies at gestational ages of between 28 and 40 weeks when attending the routine scan were used in this study. Two methods were used for determining the reliability of the W-DEQ: the internal consistency reliability (Cronbach's  $\alpha$ ), and split-half reliability. Both the split-half correlation coefficient (0.90) and the alpha coefficient (0.89) are well above the 0.70 criterion for the split-half reliability and internal consistency reliability. There was no difference in the reliability estimates between the nulliparous and parous groups. Construct validity was also determined utilizing the knowngroups method. In this study, independent sample t-tests were used

to compare the nulliparous and parous groups differing in known fear status. In order to test the construct of the W-DEQ, BAI, DASS and BMWS scales were chosen as these scales are expected to correlate with the W-DEQ. Analysis of the construct validity of the W-DEQ version A using Pearson's correlation coefficients was performed for both nulliparous and parous women separately. All the scales in both groups showed a statistically significant correlation with the W-DEQ. Consequently, Turkish form of Wijma Delivery Expectancy/Experience Questionnaire Version A was fixed as reliable and valid means to measure the level of fear of childbirth among Turkish pregnants. Also it is recommended to apply on different groups that carry out different socio-demographic features and analysis of the validity and reliability of the Turkish version of W-DEQ version A for the oncoming researches.

# Mood disorders assessment in women with diagnosed hyperprolactinaemia

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Hyperprolactinaemia is the presence of excessive serum prolactin levels. Prolactin is produced by the anterior pituitary gland and physiologically is responsible for lactation and breast development. The major effects of hyperprolactinaemia in women are mainly associated to hypogonadism. Hyperprolactinaemia can lead to menstrual disorders, galactorrhoea, hirsutism or infertility. In general population women are at significant higher risk that men of having mood disorders. Women with hyperprolactinaemia frequently experience significant mood changes in clinical practice. Number of studies assessing relationships between hyperprolactinaemia and mood changes is limited. A group of patients who attended the Department of Gynecological

Endocrinology Poznan University of Medical Science in Poznan, Poland are included into this study. All women were diagnosed of high serum prolactin serum concentrations. Patients suffered from different menstrual disorders (oligomenorrhea, amenorrhea). Patients with drug –induced hyperprolactinaemia (anti-psychotic drugs) were excluded from this study. We evaluated the serum prolactin levels and assessed mood changes by using the MDQ (Mood Disorder Questionnaire). This questionaire can be helpful to assess psychological disturbances in women with high serum prolactin concentration. This questionnaire has high rate of accuracy. We conclude a special attention to all women with hyperprolactinaemia and relationship with mood changes.

#### **P26**

## Violence and fertility control: results from the survey among 16-44-year old women in Estonia

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Introduction. Limited data at the national level indicate the high incidence of violence in Estonia: 20% of women aged 15 to74 had experienced violence during the previous year. Health care providers often underscore how important is to address violence and its consequences among their patients. Initimate partner violence has a clear negative impact on women's sexual health and fertility control. Objective. This paper was designed to evaluate the relationship between violence and contraceptive use. Material and methods. The data came from the population-based postal survey "Estonian Women's Health". We analyzed women aged 16-44 years who had experienced sexual intercourse. The association between experiencing violence within the previous 12 months and the use of contraceptive methods during the last sexual

intercourse was investigated using the  $\chi 2$  test. Results. Of the respondents (n=2310), 27% had experienced some type of violence. Specifically, 14% had been threathened with violence, 22% had been victims of physical and 6% of sexual violence. The most common perpetrator had been woman's partner or husband (60%). Younger, less educated and single women were more likely to have experienced violence. The proportion of women who did not use any contraception or used unreliable contraceptive methods (withdrawal, rhythm, spermicides) was significantly higher in the violence group compared to the women who had not experienced violence (30% vs 24%; p= 0.003). Conclusion. The experience of violence is associated with risky contraceptive behaviour and more attention from health care providers is needed.

## **P27**

Joint Commission International. A Method for Improving The Quality of Hospitalisation and Doctor/Patient Relations
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"Joint Commission International" (JCI) is an international organisation whose aim is to improve safety and quality for hospitalised patients undergoing treatment, prescribing international standards. Attaining these standards, is the basis by which the health facilities of the world are accredited. Our hospital was given this accreditation in 2006. Since then, the standards linked to the concession have become tighter and the Hospital Board has therefore decided to request a renewal. The retraceability of every medical act ( who, what, how, when, why it was done) was our main goal. In order to monitor our work, 10% of files have been analysed: some files were incomplete, and so the lack of informed consent was highlighted. The surveys carried out on 169 patients candidate

for surgery in 2008 showed that the time used by gynaecologists to collect the medical history, examine the patient, have the informed consent (privacy, surgery, transfusions) ranged between 12 and 50 minutes. In order to improve the quality of care were organised training courses for staff on patient health care interaction and working groups on how to perform/record/monitor medical acts (diagnostic, therapeutic, educative). Check lists (entry/educative/prior to surgery) and forms to analize the customer satisfaction were set up. This methodology reduced the critical situations and enabled us receive this accreditation up until 2013. In the obstetrics ward the percentage of adherence to the required standards increased from the 84.3% of 2006 to 94.3% in 2009.

# Assessment of the relationship between vitamin D with serum antioxidant vitamins E & A and their deficiencies in pregnant women

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Introduction: The relationship between antioxidant vitamins and prevention from diseases associated to antioxidants has recently become interested by investigators. For assessment of this relationship in Iran a study was conducted with aim assessment of the relationship vitamin D with serum antioxidant vitamins E and A and their deficiencies in pregnant women in Iran (Kashan city), 2009. Materials and methods: In a cross-sectional study among 147 Pregnant Women in Naghavi Polyclinic, Kashan Medical University, the serum concentration of Vitamin D, A and E was assessed in the mounths 5-9 of pregnancy. The prevalence of vitamins D, A and E deficiency were reported using defined cutoff values. Also the correlation between vitamin D and vitamin A and E was reported. Data were compared using Analysis of Varience (Anova) and coeffi-

cient correlation linear Pearson's.A difference with P<0.05 between groups was considered statistically significant. Calculations were performed using the SPSS statistical package (SPSS Inc., Chicago, Illinois, USA). Results: Serum vitamin A status (mean±SD) in three groups vitamin D sever low deficiency and normal values showed (0.06± 0.02, 0.06± 0.02 and 0.02± 0.03 µg/ml) and for vitamin E status they were (0.59±0.61, 0.59±0.61 and 1.9±0.9 µg/ml). The prevalence of deficiency for vitamin D, A and E, using defined cutoff values were 90.15, 7.03, and 58.63 %, respectively. Also coefficient correlation between vitamin D and vitamin E status showed an inverse relation. Conclusion: Findigs of this study showed that Vitamin D, A and E deficiency is a major public health problem in Khashan pregnant women.

#### P29

# Social capital and eating habits and behavior of Perimenopausal Japanese Women

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Background; Social capital is a trait that seems to affect health. The amount of evidence indicating the strong relationship between social capital and good health has been increasing. Objective; To investigate the association between social capital and health, menopausal syndrome (MS) or eating habits and behavior in perimenopausal Japanese women. Methods; In this study, we defined a woman with rich social capital as an individual with good economic conditions and society's trust and who would participate in a regular workshop or have a health adviser. A self-reported questionnaire that included questions on eating habits and behavior was administered to two groups; one participated in a regular workshop about health, the rich social capital

group (RSC; n=26) while the other did not, i.e. the poor social capital group (PSC; n=48). Results; The prevalence of menopausal syndrome among women that consulted a doctor was 0% among RSC and 8.3% among PSC, although there were no significant differences in menopausal syndrome levels between RSC and PSC. A greater proportion of the RSC group reported frequent enjoyment when eating meals (p<0.01), thought about nutritional balance (p<0.001), considered the nutritional balance with regard to their eating habits (p<0.01) and reviewed their dietary life (p<0.01). Conclusion; Social capital has a significant effect on the association between eating habits and behavior in perimenopausal Japanese women.

#### P30

# Comparison of the bladder neck position before and after the use of support underwear for 3 months in parous females

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Purpose: To investigate whether long-term use of support under wear increases the pelvic floor muscle strength in parous females. Methods: The position of the bladder neck was examined in 8 parous females (31-48 years of age) using an open MR system (GE SIGNA SP/2). Sagittal T1-weighted images of the pelvis before and after the 3-month use of support underwear (Style Science®, Wacoal corp., Japan) were acquired "At rest" and "During pelvic strain" in a sitting position without the support underwear. The distances from the pubococcygeal line to the bladder neck were compared before and after the use of it. Results: "At rest", the bladder neck position was significantly higher after

(median (Me), 13.0 mm; inter quartile range (IQR), 3.4~16.9 mm) than before (Me, 9.0; IQR, -0.40~12.4 mm) the use (p < 0.05). Similarly, "During pelvic strain", the position was significantly higher after (Me, 1.0; IQR, 6.1~6.2 mm) than before (Me, -0.5; IQR, -10.4~3.6 mm) the 3-month use (p < 0.05). The position was evaluated in the sitting position and the effect of the under ware was observed even in the condition without the use of it. Conclusion: Elevation of the bladder neck was observed without the support underwear in both conditions, "At rest" and "During pelvic strain", which suggested that the pelvic floor muscles were strengthened by its use for 3 months.

### Psychosomatic examination of foot bath with essencial oil

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OBJECTIVES: This study was designed to investigate the effect of foot bath with or without the essential oil of grapefruit on the mood states and leg edema. METHOD: The within-subjects design was used, and two conditions were set up. Young women sat with their feet soaked in hot water for 20 minutes with and without the grapefruit essential oil. Visual Analog Scale (VAS) was measured before and after foot

bath. RESULTS: The decrease relaxation and the decrease of warm sensation, swelling feeling were indicated in VAS during progress of time after foot bath (p<.05). The oil group was more comfortable and feeling of the legs was lighter than control group, but there was not significant. CONCLUSION: A foot bath produces measurable effects on relax moods, warm sensation and swelling.

#### P32

# A history of migration as possible risk factor for hyperemesis gravidarum - preliminary results of two combined studies in Berlin/Germany

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Objectives: How high is the rate of immigrants among gynaecological patients treated in a metropolitan women's hospital in Germany because of hyperemesis gravidarum (HG)? What is the influence of an experience of migration and the degree of acculturation? Therefore, two combined studies were performed. Methods: (1) All pregnant women with the diagnosis of HG were included in this 13-year period (1/1997-11/2009) retrospective study. Age, gestational age at the time of admission, length of hospital stay, parity, frequency of re-admission were compared between the groups native German and immigrant patients. (2) In the same way, patients with HG treated between 1/2008 and 11/2009 were asked a questionnaire on socio-demographic details, data on immigration/acculturation, psychic burden (SCL-90-R), and subjective illness and compared between the groups. Results: (1)

During the 155 months, 753 pregnant women were admitted to our hospital with the diagnosis of HG. For 545 women (72.4 %) an immigrant background was assumed. This immigrant rate was higher than the comparable immigrant population in the catchment area of our hospital (35.1 %) or the immigrant rate in patients at our delivery room (50.5 %). Median age, gestational age, length of hospital stay and re-admission rate did not differ significantly. (2). The SCL 90 scales "somatisation", "depression" and "anxiety" show strongly increased values in both groups. Among the immigrants, minor acculturated patients demonstrated no different results in the SCL 90 scales and subjective illness theory. Conclusions: The psychological impacts of HG are similar for all subgroups. Migration is probably an additional risk factor for the development of HG.

#### P33

## The Beck Depression Scale in patients with functional hypothalamic amenorrhea

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INTRODUCTION Functional hypothalamic amenorrhea (FHA) is a convertible and non-organic disorder related to aberration of the pulsatile release of gonadotropin-releasing hormone (GnRH). It is the most common cause of secondary amenorrhea and is mainly associated with metabolic, physical, or psychological stress. Women with FHA often experience depression, low mood and anxiety. The Beck Depression Inventory (BDI) is one of the most widely used instruments for measuring the severity of depression. AIM The aim of the study is to assess the severity of depression symptoms using Beck Depression Inventory in patients with the diagnosis of functional hypothalamic amenorrhea. MATERIAL To this study we enrolled 20 patients with functional hypothalamic amenorrhea and compared them with a control group consisted of 20 healthy women. Patients

meet the following requirements: - at least a 3 month history of amenorrhea not due to pregnancy, - at least one documented less then 5 U/ml serum LH concentration. METHODS We collected blood for measurement of serum LH, FSH and estradiol concentrations in both groups. The hormonal assessment was carried out by enzyme-linked immunosorbent method. The Beck Depression Inventory was used to assess the severity of depression symptoms. The scale contained 21 questions and each answer was scored on a scale value of 0 to 3. RESULTS Patients suffering from FHA experienced significantly higher level of depression symptoms in comparison to control group. CONCLUSION Psychiatric disorders related to depression are expressed strongly in women with the diagnosis of FHA in comparison to healthy women.

### Body image in patients with endometriosis

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Introduction: Endometriosis is a gynaecological disease affecting millions of women of reproductive age. The complexity of the disease is not represented solely by the symptoms manifested (chronic pelvic pain, dysmenorrhea, deep dyspareunia and infertility) but also by the means and extent to which symptoms interfere with numerous areas of the patient's life. Aim: To evaluate subject's attitude towards their body in patients with endometriosis in comparison to matched controls. Subjects: 41 patients with surgical diagnosis of endometriosis and 40 healthy controls were recruited in the study. Methods: All subjects taking part in the study underwent a semi-structured interview by a psychologist and a validated questionnaire was fulfilled by each enrolled woman to evaluate the body attitude (BAT: Body attitude test). It is a questionnaire comprising 20 items aimed at detecting cases of negative body perception even when not associated to eat-

ing disorders. The questionnaire was devised to evaluate three distinct aspects: negative appreciation of body size, lack of familiarity with one's own body and general body dissatisfaction. High scores correspond to a higher degree of body dissatisfaction. Results: Body attitude was statistically different in patients in comparison to controls. Women with endometriosis showed a "negative appreciation of body size" (F (1;79) = 7.871; p<.001) and "lack of familiarity with one's own body" (F (1;79) = 31.974; p<.001). Conclusion: In women with endometriosis their identifying with a sick body may lead to modifications in body image - intended as mental perception of body image - or interfere with positive construct. Body image may change as a consequence of an altered state of health or conditions of the body (Founding: Regione Autonoma della Sardegna, Programma Master and Back, Beneficiaria: Dott.ssa Irene Melis, Psicologa)

#### P35

# Spousal Abuse in Marital Relationships Among Women Referred to a Central Clinic Affiliated to Golestan University Sanagoo Akram, Jouybari Leila

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Introduction: The incidence of wife abuse and its impact on the psychological as well as physical health of the women and in its ultimate negative effects on the health of the family have been presented in many research studies. Aim: The purpose of the present study was

to investigate physical, psychological and sexual wife abuse among the married women living in Gorgan. Materials & Methods: In this analytical study the data gathering conducted by a.

## **P**36

# Screening for postnatal depression in Italy: self-exclusion by women who use the public health family service. Part I Muraro Martina<sup>1</sup>, Grussu Pietro<sup>1,2</sup>, Arcaro Vanda<sup>1</sup>, Quatraro Rosa Maria<sup>3</sup>

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A significant proportion of women who are at risk of postnatal depression (PND) refuse to engage in preventive programmes. In this retrospective study we have sought to identify the psycho-social characteristics of mothers attending ante-natal classes who exclude themselves from institutional screening for PND organized by the local family service unit - UOS Consultorio Familiare, Azienda ULSS 17 Este - of the National Health Service. Participation in the screening was entirely voluntary and free of charge. A sample of 525 Italian women at eight to nine months of pregnancy completed the Postpartum Depression Predictors Inventory - revised form (PDPI-Revised) and the Psychological Well-Being (PWB) questionnaire. Six to eight weeks after delivery, 179 mothers from the original sample refused to complete the Edinburgh Postnatal Depression Scale

(EPDS) and 12-item General Health Questionnaire (GHQ12) used to detect postnatal depressive symptomatology, and PWB questionnaire. We found that the women who excluded themselves from PND screening were less satisfied with their conjugal relationship and, during pregnancy, reported to have experienced greater change-related stress compared to the women who, after having given birth, participated in the screening for PND. These findings show that behind the refusal to participate in the PND screening programs there can be particular circumstances of family distress and specific personal difficulties. This knowledge can be very helpful to health professionals in the implementation of effective programs oriented towards the early identification of women at risk of PND. Further research should be carried out in this area.

### Body mass index and postsurgical adhesion formation

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1152 of cases were retrospectively analyzed in order to study an impact of body mass index on postsurgical adhesion formation rate. Patients were grouped into 5 groups depending on adhesion formation rate (0-to 4 adhesion degrees). Surgical procedures were classified as myomectomy, supravaginal/total hysterectomy, tubal/ovarian surgery as well as pelvic surgery for endometriosis. All surgical procedures were grouped into laparoscopy or laparotomy approach as well as single or combined surgery. Adhesion formation after Caesarean sections was also included. Statistical analysis was performed by ANOVA. 49 patients were undergone only diagnostic procedures, whereas 1103 patients - various gynecological procedures or Caesarean sections. Previous procedures in 831 patients were performed by laparotomy and in 204 patients - by laparoscopy. The total number of repeated surgical procedures estimat-

ed up to 14 and the fraction of single surgical procedures was 57.8% in patients without adhesions, whereas percent of the single procedures amounted to 50.0, 47.2, 44.2 and 39.0% in patients with postsurgical adhesions, respectively 1, 2, 3 and 4 degree. There was a direct positive correlation between weigh value and the adhesion score. An increased weigh amount was accompanied by elevated adhesion formation score. On the contrary, negative correlation was between of a man's height and the adhesion formation degree (score). Subsequently, an increased man's height was accompanied by reduced adhesion formation score. In conclusion, some body mass index parameters such as heavy weight and shorter height have a crucial impact on postsurgical adhesion formation degree in patients carried out gynecological surgical procedures and Caesarean sections.

#### P38

#### Activity of monooxygenas systems of a liver in women in childbirth with the postnatal endometritis

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The purpose - studying of functional activity monooxygenas fermental system (MFS) hepatocytes at women in childbirth with a postnatal endometritis (PE), and also search of new approaches in preventive maintenance of this complication. At women in childbirth with PE we judged functional activity MFS by data of antipirin samples . In our researches in women in childbirth PE the period of semideducing of antipyrinum (T1/2) composed 18,7+1,00h, it was accompanied by double reduaction of value of a constant elimination (S) and on 43,1 % of a metabolic clearance of a preparation (MCR and to e1), that has caused increasing of size of an integrated indicator of pharmacokinetics (PhK) antipyrinum - the areas under a pharmacokinetic curve on 88,6 %. Results of our researches have shown, that after carrying out of traditional therapy PE indicators PhK of antipyrinum tended only to

restoration as distinct disturbances in comparison with level of healthy women in childbirth became perceptible. So, value T 1/2 and S were raised on 77,5 and 96,1%, and value MCR and to e1 the decreased on 46,1 and 43,7 %. In women in childbirth with PE, treated along with traditional therapy «Phosphoglive», a number of parametres of pharmacokinetics of antipyrinum were distinctly restored and statistically significantly did not differ from corresponding value of healthy women in childbirth. So, value T1/2 and S at them decreased on 25 and 35,1 %, and value of MCR and to e1, on the contrary, raised on 67,3 and 28,5 % accordingly. Inclusion of hepatoprotector preparation «Phosphoglive», in a complex of treatment of women in childbirth with a postnatal endometritis promotes restoration of functional activity monooxygenas liver systems.

## Development bacterial vaginosis in women, applying varius kinds of contraception

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Concentration of cytokines IL-6 and TKFa in blood and vaginal washouts it was defined by a method hardphase immunenzyme analysis. All women with the established diagnosis of bacterial vaginosis have been divided into groups depending on their desire to use contraceptive agents: 1st group composed by 50 women, taking combined oral contraceptives; 2nd group 50 women with endometrial loop (EL) and 3rd group 30 women, using barer methods of contraceptions, in control group are included 10 women with a normal condition of a microflora of a vagina. So, against reception of oral contraceptives concentration LB-6 and TNFa in blood serum authentically changed from 138,04±56,7 and 115,98±28,1 to 58,19±9,0 and 47,95±9,9 pkg/ml, and in vag-

inal washouts from 167,3 $\pm$ 68,9 and 175,08 $\pm$ 21,3 to 61,44 $\pm$ 9,4 and 41,52 $\pm$ 4,0 accordingly (p <0,05). The difference in cytokine a profile at the women using EL in comparison with women I and III groups, that is shown by insufficient restoration of disturbances cytokine profile is observed. So levels LB-6 and TNFa in blood serum decreases with 168,9 $\pm$ 55,4 and 111,4 $\pm$ 35,9 to 82,24,  $\pm$ 8,4 and 66,66 $\pm$ 9,4, in vaginal washouts with 142,52 $\pm$ 68,8 and 169,64 $\pm$ 33,0 to 86,46 $\pm$ 12,1 and 75,94 $\pm$ 5,68 pkg/ml accordingly (p <0,05). At the same time at women of control group stability of a microbiocenosis of a vagina against contraception, that confirmed with insignificant fluctuations of cytokine profile becomes perceptible.

#### **P**40

# Effects of support underwear on the position and the shape of the bladder neck in parous females with stress urinary incontinence-A study in sitting position with an open MR system

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Purpose:To investigate the effectiveness of the use of support underwear in parous female with stress urinary incontinence (SUI). Methods: The position and shape of the bladder neck were examined in 46 women (27-64 years of age) with SUI. Sagittal T1-weighted images of the pelvis with and without wearing support underwear (Style Science®, Wacoal corp., Japan) were acquired "At rest", "During contraction of pelvic floor muscle", and "During pelvic strain" in a sitting position using an open MR system, GE SIGNA SP/2. The distances from the pubococcygeal line to the bladder neck were measured. Results: "At rest", the position of the bladder neck from pubococcygeal line was significantly higher with (12.0/7.2~17.9 mm: median/inter quartile range) than without (0.0/-4.7~7.2mm, p<0.001) the underwear. Similarly, the position

was significantly higher with than without the underwear in both conditions of "During contraction of pelvic floor muscle" (14.5/10.3~21.4 vs. 7.2/2.4~13.8 mm, p<0.001) and "During pelvic strain" (1.2/-9.2~8.9 vs. -9.6/-15.8~2.7mm, p<0.001). The elevation with the underwear was shown in all women, but did not correlate to the age or symptoms of SUI. The underwear kept the shape of the bladder neck flat "During pelvic strain". Moreover, the shape of the bladder neck with the underwear "At rest" was almost the same as that without underwear "During contraction of pelvic floor muscle". Conclusion: The support underwear was effective for the elevation of the bladder neck and its effect was compatible to "the contraction of pelvic floor muscle". The effects of the underwear on SUI might be expected.

## P41

Longitudinal study of correlated factors for emotional unrest in mothers experienced as a result of infant crying Okamoto Miwako, Matsuoka Megumi, Tokimoto Kumiko, Ishigami Hideaki, Kubo Kinuko, Naito Tomoko, Ikeda Haruka, Tango Ryoko JSPOG

Aims: Persistent infant crying of unknown origin appears at roughly 2-3 weeks of age, and peaks at around 6 weeks before gradually abating. Previous research has shown how the strong feelings of irritation and loss of self-confidence experienced by mothers as a result of persistent crying are linked to child abuse and maternal mental health. Our research will make clear certain correlated factors and time-dependent changes of emotional unrest experienced by mothers as a result of infant crying. Methodology: Our method took the form of longitudinal research by means of self-administered questionnaires (30 items in total) given to 110 new mothers at 2-3 weeks and again at 6 weeks. The research subjects are the 100 women who replied to all items in the questionnaire. We classified 'feelings of ir-

ritation' and 'shaken confidence in abilities as a mother' as emotional unrest, and took them to be our dependent variables. We carried out Structural Equation Modeling, based upon the hypothetical model in which anxiety and fatigue lead to emotional unrest. Results: For the results of both questionnaires the causal model revealed that anxiety and fatigue were direct causal factors relating to emotional unrest experienced in response to persistent crying. Anxiety and fatigue experienced 2-3 weeks continued to have a significant effect on anxiety and fatigue for one month, demonstrating a causal relationship with emotional unrest. Discussion: From the correlated factors demonstrated in the causal model we can see that intervention to support new mothers is vital in the period soon after birth.

### Midwifery care in decision making process on prenatal tests

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Since 2003, we had established of Genetic Counselling department in our university hospital at Tokyo Medical and Dental University. Our team had three members such as Genetic Specialist (Internist), Genetic Counsellor and Genetic Nurse (Midwife). Except Genetic counsellor, we had each specialty about individual major field like vascular biology and midwifery, but equal opportunity to talk in our session and it had useful for us to understand each other on team works. With past five year's steady results, we had hoped that our practice getting more specialized than team session. So we decided to separate our counselling session about prenatal tests who had not have genetic problems in their family but just worried about risk for Down's Syndrome and so

on. Until now, about seventy cases who were concerned about their risk had come from January 2008, and their choice were variable which prove that Midwife's counselling was fair about doing or not doing Amniocentesis, Maternal Serum integrated screening. In Japan, we do not have systematic screening of Down's syndrome with NT by Ultrasound and maternal serum tests, so they felt some guilty to do such tests, but about ten percents of pregnant women wanted to do, indeed. Because of current situation, they did not just consult about any more than doing such tests, but necessary about being sound in mind and body during pregnancy. That is why required to Genetic counselling operated by Midwife and it seems to be one part of regular maternity care.

#### P43

## Is the bed rest affective to preterm labour?

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Bed rest in hospital or at home is widely recommended for the prevention of preterm birth. This advice is based on the observation that hard work and hard physical activity during pregnancy could be associated with preterm birth and with the idea that bed rest could reduce uterine activity. However, bed rest may have some adverse effects on other outcomes. The aim of this study determine of the evidence of relationship between bed rest and preterm labour. Because, bed rest in hospital or at home is widely used as the first step of preterm labour treatment in Turkey. When we examine the literature, we found that a Cochrane review (bed rest in singleton pregnancies for preventing preterm birth). They evaluated the ef-

fect of prescription of bed rest in hospital or at home for preventing preterm birth in pregnant women at high risk of preterm birth. We found that there is no evidence that either supporting or refuting the use of bed rest at home or in hospital, to prevent preterm birth. Due to the potential adverse effects that bed rest could have on women and their families, and the increased costs for the healthcare system, clinicians should not routinely advise women to rest in bed to prevent preterm birth. We suggest that the effectiveness of bed rest to prevent preterm birth should be evaluated in Turkey. Although the health care providers must be aware of there is no evidence that the bed rest to prevention to the preterm labour.

## **P**44

Comparative evaluation of sexual Attitude and Function of normal and dysmenorrhea patients with the QSAF 2009
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We evaluated 60 normal and 60 dysmenorrhea patients with the questionnaire on sexual attitude and function QSAF-2009. The latter group used routinely drugs for dysmenorrhea in a PRN basis and some used medications as prophylaxis and was free to use psychoactive medication but people using psychoactive medications were excluded from the former group. Dysmenorrhea was not graded according to severity and stress was laid on personal view about the matter (major concern versus no concern). Both groups had good compliance for accomplishing the tests. Patients without dysmenorrhea were sexually more self conscious, became sexually active earlier in their life, had lower scores in almost all sexual dysfunction scales, had higher scores in experimentation, sensational, erotic, extramarital relationship, sex addiction and lower scales in couple problems while women with dysmenorrhea showed

higher scores in couple problems, sexual pain syndromes, vaginism and a series of psychodynamic syndromes (0.04>p>0.07). Curiously, these people showed higher scores in homo- bisexuality scales. They showed high rates of sexual guilt feeling and the overall validity of their test was questioned. Patients with dysmenorrhea showed increased reluctance to answer the questions, regarded their problems as personal secrets and reported fewer visits to gynecologists. They preferred female gynecologists, and had never been visited by midwives. Most of them preferred cesarean delivery under general anesthesia and had in fact convinced their physician to undergo CS. We conclude that dysmenor-rhea patients are categorically distinct from normal persons in regard to their sexual attitude and function.

### Role of endothelial cells nitric oxide system in intrauterine restricted growth

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Increasing evidence indicates that a dysfunction of feto-placental endothelial cells plays a prominent role in the restricted intrauterine growth (IUGR) pathophysiology. We evaluated the role of the nitric oxide (NO) system in the IUGR pathophysiology. We combine the data from prenatal Doppler velocimetry with molecular analysis of umbilical endothelial cells and of umbilical and neonatal NO, S-nitrosohemoglobin (S-NOHb) and asymmetric dimethylarginine (ADMA) levels, in babies with normal growth and with IUGR, and we determine the molecular phenotype of HUVEC with a gene array strategy, in the same categories. The hemodynamic alterations found in IUGR by Doppler velocimetry may be associated with a pattern of expression alteration of about one hundred genes relevant for the

endothelial function, with a decrease of endothelial nitric oxide synthetase expression and activity, with a decrease of hematic levels of NO and S-NOHb, and with an increase of hematic levels of ADMA. The umbilical NO increase mostly occurs in blood flow toward the fetus and it is not any longer satisfactory when the ponderal index dramatically falls down. We suggest that S-NOHb under fetal hypoxic conditions may be a source of [NO\_] equivalents for the umbilical vessels wall. Moreover, we speculate the role of endogenous NO-synthase inhibitors in the compensatory response in umbilical artery to feto-placental ischemia. The involvement of the NO system in the IUGR pathophysiology potentially explains the major occurrence of cardiovascular pathology of adult age in this population.

#### P46

# Working with fathers and mothers attending childbirth classes. Proposal for a model to enhance parenthood

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Social and cultural changes introduce the need to actively involve fathers in the birth path. When a child is born, there is a concentration of emotional expectations which also affect the father figure. To include the father in preparation for birth means to give him room for expressing himself within the interaction with the motherly figure. The space of reflection specifically activated in the group classes, with other couples involved, strengthens the parental couple to share assumption of responsibility in generating and educating through cooperation. The coexistence and the comparison between the af-

fective code connected with Maternity and the code for normativeethics related to Paternity stimulates, even before birth, the integration of mutual differences and cooperation thus aiming to achieve the welfare of the Family System as a whole. Presently, Society is searching a new balance between maternal and paternal codes in an attempt to conjugate authoritativeness with family intimacy. The authors present their experience in birth preparation sessions for parents-to-be at the Servizio di Psicoprofilassi Ostetrica, Department of Gynaecology and Human Reproduction, University of Padua.

### **P**47

## Descriptive study on factors modulating psychosocial condition of infertile couples

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Variability in the degree of adjustment to infertility is related to medical factors such as diagnosis, duration of the condition and number of cycles of in-vitro fertilization and socio-demographic characteristics. The main objective of this study is to identify socio-demographic, interpersonal and medical associates of psychosocial condition of infertile couples. The participants to the survey are 46 couples waiting for a second level treatment in the infertility center of ULSS-6 Vicenza. A brief ad hoc questionnaire, which collects socio-demographic and medical characteristics and Profile of Mood States, Beck Depression Inventory-II and Short Form-36 for psychological assessment were sent to each participant. Sex, causes of infertility and the type of performed treatments handed out as main modulating factors on social and psychological outcomes. Women have

worse social functioning, more limitations on activities due to emotional state and more depressive symptoms. Couples with unexplained infertility are more anxious (vs. all other causes), tired, have worse mental health (vs. female and couple's causes). Moreover, male infertility was associated with worse outcomes than female infertility, in both sex. Finally, couples that only have performed first level treatments report more anxiety and tiredness, less vigor and vitality, worse mental health and more vulnerability to depression, mainly to somatic and affective symptoms, than couples who have not performed anyone treatment or have just performed second level treatments. The findings of the study highlight the importance of understanding the role of medical and interpersonal factors for achieving better wellbeing outcomes and planning psychological interventions.

### Screening for postnatal in Italy: self exclusion by women who use the public hospital

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Women at risk of postnatal depression are inclined not to get involved in preventive programmes. This retrospective study highlights the psycho-social features of these women who refuse to fill the screening questionnaire sent them by Hospital Psychology Unit, ULSS n. 6 Vicenza. These primipara women (502 on 1262 participants) were entirely voluntary and free of charge. The screening project was structured in two parts: at 3 days after delivery every mother was visited by a psychologist and filled the Edinburgh Postnatal Depression Scale (EPDS), the 12-item General Health Questionnaire (GHQ12) and the Postpartum Depression Predictors Inventory-Revised form (PD-PI-Revised); at 6/8 weeks after delivery the EPDS and GHQ12, used

as follow-up, were sent to every woman. We found that the women who refuse to fill the second questionnaire were more frequently unemployed and not married, they experienced more financial and couple distress and a lack of emotional support and care from their partners. They also did not participate at the ante-natal classes or not find it to be worthwhile. Last but not least these women got the higher scores in the EPDS test, and especially in the anxious items (3rd and 5th of the EPDS and 2nd of GHQ12). The knowledge and awareness of these characteristics is a big step to provide new and more efficient programs to take care of these women not letting them slip in the solitude that the post partum period can take them.

#### P49

## Endometriosis, stressful life events and psychiatric comorbidity: correlation with the promoter polymorphism of serotonin transporter gene

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The serotonin transporter gene-linked polymorphic region seems involved into the physiopathology of the endometriosis. There are short "S" or long "L" forms of the promoter region. SL or SS patients tend to be more stressed than the LL ones, due to reduced serotonin transporter expression. It might be possible that psychological factors and a different response to the stress could be involved into the pathogenesis of the endometriosis. We assessed the tendency shown by the patients of appearing anxiety keeping it inside their own bodies; for this reason, the patients have had symptoms as dysmenorrhoea and chronic pelvic pain, both more painful as per response to stressful events. It was also analyzed the connection between a differently response to the stress (S/S and L/S genotype) and the presence of some psychiatric disorders. We studied 36 women (average age 32,1) referred to the department

of Gynaecology for endometriosis. All patients have been underwent to transvaginal ultrasound, blood test to evaluate the variations in the 5HTT gene-linked polymorphic region, pain measurement on the VAS scale, semi structural interview using the SCID-I scale to evaluate psychiatric disorders and the Paykel scale which analyzes the dependence/independence between stressful life events and endometriosis. Patients were also asked to fill out some psychometrics questionnaires. No significant results were found between the quantity of referred pain and the stressful life events. However, an association between a less expression of the promoter of the serotonin transporter gene and the tendency shown by the patients of keeping anxiety inside were found. In fact it was proved that in the S/S patients there was a significant relationship between psychiatric disorders and quantity of referred pain.

## **P**50

# Two cases of Kohnenki mother and school truancy daughter Saito Yasuko, Takehara Kumiko, Ito Eruka, Sano Takao, Satohisa Etsuji

Satto Yasuko, Iakehara Kumiko, Ito Eruka, Sano Iakao, Satohisa Etsuj Hoyukai Sapporo Obstetrics and Gynecology In Japan

Kohnenki means not only menopause but also change of life We report 2 cases of Kohnenki mother and school truancy daughter. Case 1. The daughter was referred to us due to severe dysmenorrhea without organic lesion. She refused to go to school because of the pain. Oral contraception treatment was not effective and frequent palliative anodyne was prescribed. Mother divorced 2 years ago and received a livelihood protection allowance. She suffered insomnia, headache and irritation. We applied counseling and Kampo prescription. After 6 months treat-

ment they moved out for the daughter's entrance to high school. Case 2. Mother was a client of menopause clinic with diabetes merits. First she prescribed HRT but later diagnosed depression as a complication. SSRI was not effective. We prescribed her tryciclic antidepressant for 12 years. During her treatment her daughter refused to go to school and diagnosed as adolescent crisis (r/o schizophrenia). Now she is a master course student for a curator. In Kohnenki clinic we should care patients from the viewpoint of change of life and family.

## Effects of a pelvic belt on the positions of pelvic organs -A study in sitting position using an open MR system

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Purpose: To investigate the effects of a pelvic belt (PB) on POP. Methods: Parous 11 women (38.27±5.02 years of age) was examined in the sitting position with an open MR system, GE SIGNA SP/2. Sagittal T1-weighted MR images were acquired using a spoiled gradient sequence without PB and with PB at the anterior superior iliac spine (posison 1) and at the pubic symphysis (posison-2). The vertical distance (VD) from the pubococcygeal line(P-C) to the bladder neck (BN), and to the internal orifice of the uterus(IO). Results: The VDs of BN from P-C were 13.02±8.10 mm (mean±S.D.) without PB, 13.39±10.34 mm with PB at posison 1, and 19.52±8.71 mm with PB at posison 2,

respectively. The VDs of IO from P-C were 26.08±10.07 mm without PB, 27.69±12.69mm with PB at posison 1 and 35.30±12.61mm with PB at posison 2 The Multiple comparisons among the 3groups were performed by Bonferroni test after repeated measure ANOVA. The VD of BN with PB at position 2 was significantly different from both that without PB and that with PB at the position 1. Similarly, the VD of IO with PB at position 2 was significantly different from both that without PB and that with PB at the position 1. Conclusion: PB at pubic symphysis significantly lifted the position of BN and IO in the sitting position. It might be effective to prevent POP.

#### P52

## Analysis of consultations requested to psychiatrics in obstetrics and gynecology

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Objectives: Psychiatric problem is not rare in obstetric and gynecologic patients. Request consultation to psychiatric specialist is important to manage these problems. This study aims to assess the psychiatric disorder among obstetrics and gynecologic patients by analyzing psychiatric consultation requested from obstetricians and gynecologists. Methods: We conducted retrospective study of analyzing requested consultations to psychiatric specialist from obstetricians and gynecologists. The consultation requested from October 2004 to June 2010. The evaluation includes underlying diseases, reasons for requested, psychiatric diagnosis, treatment and patient follow up. Results: Total 674 consultations of 267 patients were evaluated. From obstetricians, 58 patients requested. The reason for request was peri-partum evaluation and medication modification about underlying psychiatric problem with 39.7%, followed by de-

pressive mood (25.9%), Anxiety (12.1%). In gynecology, 209 patients requested. The reason for request consultation was peri-operative evaluation and medication modification about underlying psychiatric problem (23.9%), followed by depressive mood (18.7%), insomnia (14.8%), delirium (11.5%), anxiety (10.0%). Newly, 90 patients diagnosed as psychiatric disease(47 major depression disorder, 7 adjustment disorder, 7 insomnia, 6 bipolar disorder, 5 somatoform disorder, and other includes panic disorder, borderline personality disorder, schizophrenia, sleep apnea, obsessive disorder, mood disorder). Among these patients, 78 patients taken antidepressants or antipsychotics and 44 patients received follow up. Conclusion: Many obstetricians and gynecologists request psychiatric consultations in managing psychiatric problems. The treatment should not be transient and need more attention to patient follow up.

## P53

# Preserving uterus for the patient with submucosal myoma by hysteroscopic myomectomy is helpful to the psychosomatic health of woman

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Objective: To know the size of submucosal myomectomy to preserve uterus Methods: Between 2003 to 2009, the clinical data of patient with submucosal myomas removed by hysteroscopy at our institutions were reviewed retrospectively. The patients who were younger than 20 or older than 50 years old were excluded. Every hysteroscopy was done at lithotomy position under the general anesthesia at operation room with electric resectoscope. Results: There were

62 patients who contracted submucosal myomas. The mean age of the patients were 40.5 years old (23.0 to 50.0). The mean volume of the submucosal myoma resected successfully was 10.1 cc (SD: 18.4, median: 6.0, distribution: 0.1~138.1 cc). Conclusion: Even a little large submucosal myomas were resected successfully by hysteroscopic resectoscope. These will give emotional support to patients with big submucosal myoma through preserving uterus.

# Preserving fertility by conization, done frequently nowadays and among young women, is helpful to emotional support for patients with CIN3

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Objective: To know the ratio of hysterectomies and cones for the treatment of CIN 3 nowadays, and to know the trend of changes of treatments according to the year operated and age of patients. Methods: From Jan. of 1996 to Mar. of 2005, clinical information was reviewed for the patients with CIN3 at 5 hospitals. Results: Among 1428 patients with CIN 3, 808 patients underwent hysterectomies and 620 underwent cone (57% vs. 43%). Before 2000, almost 10-30% of patients selected cones for themselves. After 2003, however, 70% have selected cones. And younger patients prefer

cones and older patients prefer hysterectomies. 60% of patients of their 5th decades have selected hysterectomies and remainders have selected cones for their CIN3 treatments. Conclusion: Hysterectomies have been performed slightly more than conization of cervix for the patients with CIN3. After 2003, however, about 70% of patients with CIN3 have been treated by cone. As patients is young, they prefer Conization. Preserving fertility by conization, increasing nowadays and among young women, is helpful to emotional support for patients with CIN3.

#### P55

### Adolescence Health and Family: A Qualitative Study

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Introduction: Family is important to both health and adolescence. Adolescence is a time of peak health, but there are some important family-based risk factors. The aim of this study was to explore adolescent Iranian perspectives on issues of family and their health. Methods: We used descriptive qualitative methodology and purposeful sampling and interviews for collecting the data. Forty-one participants explained their perspectives on health and family, and the data was analyzed using

qualitative content analysis. Findings: The analysis revealed three categories of risk factors: a widening generation gap, effective parenting, and family financial situation. Conclusion: In order to have healthy adolescents, both children and parents need more knowledge and better skills about adolescent health and development, and about social trends. Understanding adolescents in a more realistic way, parents should develop healthy communications in order to avoid familial health problems.

#### **P56**

## The process of psychological changes during pregnancy for women having complications in Japan

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Background: In Japan, generally midwives treat the normal delivery, and obstetricians treat the abnormal labor. But now, there is in demand for midwife because the rate of high-risk pregnant woman has been increased, on the other hand the number of obstetrician does not have enough. There is our university hospital in the center of Tokyo in Japan, but we don't have NICU (Neonatal Intensive Care Unit). Therefore, we have often treated pregnant women having complications rather than high-risk patients peculiar to obstetrics,

for example, a multiple pregnancy. In the first place, any woman has uneasiness during pregnancy. Our patient's anxiety may increase more because they have any complications. So they need midwives to deal with their uneasiness during pregnancy. Objective:To clarify process of psychological changes during pregnancy for women having complications. Methods: Data were collected by interview after their childbirth. Ethical issues: This study was approved by the Institutional Review Board.

## Women's Exercise Belief during Pregnancy and Postpartum Period in West of Tehran

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Theory of planned behavior (TPB) has important role for recognizing belief. Aim: To determine women's exercise belief and related factors during pregnancy and post partum. Materials and Methods: This is a Retrospective Longitudinal study. (Year 2006-2007) 225 volunteer women, whom had been visited in Iran University of Medical Sciences health centers, after feeling informed concerned were interviewed by questioner, which had 2 main parts: personal characteristics (6 questions), and TPB of Ajzen (2001) & Simon Down (2002), which divided to Behavioral beliefs (23 items), Normative Beliefs (19 items), Control Beliefs (13 items). Descriptive and inferential statistics (T test, ANOVA, Pearson coefficient test) were used. All ethical points were considered. Results: Averages were for age 26.7± 4.9, Gravidity 1.57+- 0.75, and Pariety 1.48+-0.66. There were no illiterate samples. Finding revealed that the most important behavioral belief about doing exercise was a happy

feeling; the most important disadvantage of doing exercise was Fatigue. The participants points on the role of physicians, midwives, and husbands as motivators of doing so. According the barriers of exercising, mothers were afraid of harming their babies during pregnancy, and then mentioned that they did not have a good consulter to advice them how to do best. By using Pearson coefficient test we found significant correlation between doing exercise and behavioral beliefs (P=0.000), Normative Beliefs (P=0.003), and Control Beliefs (P=0.000) Conclusion: Health care providers must consider wrong beliefs about doing exercise during pregnancy and post partum time, and by providing professional consultation, help women in this issue. Acknowledgment: This study was supported by funding from research deputy department of Iran University of Medical Sciences. (Code: 283/P, Year 2007) (All ethical points were considered).

#### **P58**

#### The Expectations of the First-time Pregnant Women with Regard to Pregnancy

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The purpose of this study is to determine the expectations of the first-time pregnant women with regard to pregnancy. The sample of the study consists of 387 healthy pregnant women at gestational ages of between 20-28 weeks. The analyses of the data have been performed using SPSS 15.0 The dates were assested with descriptive statistical methods, Pearson Chi-square test (x²) and logistic regression analysis. At the end of the Perason Chi-square analysis, it has been determined that the pregnant women, who have had a pregnancy at an early age, who have a lower education level, who have no social coverage and whose monthly income is below 1000 TL, have negative expectations. On the other hand, the expectations of pregnancy are more positive

with a planned pregnancy, a willingness for the baby, wife's willingness for pregnancy and getting emotional and physical support during her pregnancy. Women with positive expectations of pregnancy get more prenatal care, done pregnancy-related tests, they are less afraid of the birth process and choose vaginal birth more often. It has been found out that the emotional state during pregnancy is affected by the cases of negative expectations of pregnancy. Also at the end of the logistic regression analysis it has been determined the positive and significant relationship between the pregnancy expectations with increasing the maternity age, planning pregnancy, not be affected the sexuality in pregnancy, not have the fear of childbirth.

## P59

# Role of Zinc in Pregnancy

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There is a Zn insufficiency in the serum during pregnancy. Supplementary needs for Zn are at least 15-20 mg per day and cannot be completed from the diet. The Zn insufficiency causes fetal hypotrophy of the baby and congenital anomaly. Zn insufficiency imperils pregnant mother of spontaneous abortion, gravid toxemia, premature or extended delivery, prolonged labor ammonites and postpartum infection. The purpose of this study is to point out the changes of xeric zinc in pregnant women in the third trimester. The pregnant women with Hb<10gr% HCT<30 % were considered to have anemia and were compared to the control group where Hb>10gr% and HTC>30%. Serum zinc level was determined by atomic absorption spectroscopy. The zinc serum measurement was performed

on 24 pregnant women in their third trimester, who suffered from anemia resulting in Zn=48mcg%  $\pm 15.4$ mcg%. Moreover, the same measurement was performed on 20 normal pregnant women, which resulted in Zn=112.5 mcg%  $\pm 30.2$ mcg%. From the data comparison, it resulted that the zinc serum is lower in the anemic pregnant women than in normal pregnant ones. The difference is significant P<0.001 T=6.6. Furthermore, the xeric zinc is lower in pregnant women suffering from drepanocytosis, where xeric zinc values are <40mcg%. The lower level of zinc in pregnant women suffering from drepanocytosis is linked to their hemolytic crises, which cause increased elimination of zinc through urinary tract.

# The mental health and psycho-social factors during pregnancy and their association with child maltreatment after birth

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What type of pregnant women may later cause child maltreatment? This study examined whether mental health and psychosocial factors during pregnancy could predict child maltreatment after birth. Methods. For the purpose of mental health care for pregnant women in a medical center, all pregnant women had a screening test of symptoms of anxiety and depression (HADS), marital relationships, social support, the tendency of pervasive developmental disorders (PDD-ASJ Rating Scales), and WHO Adult ADHD Scale during second trimester or third trimester. Out of 2239 women who were the subject to the childcare research after childbirth, 1057 women participated. Response rate was 47%. Results. One-third of the participants (35%) had the cut-off score or higher of HADS during their pregnancy (High risk group). T-

test showed that the high risk group had a significant effect on child maltreatment (p<0.001), but only half of them predicted. We tried exploratory data analyses. Hierarchical Regression Analysis showed HADS score had no significant effect through both direct and indirect path to child maltreatment. Direct paths to child maltreatment were child's age, PDD-ASJ score of the women, responsiveness to child, and anger to child. Thechildren's ages of 1 year old or older, women with tendency of PDD-ASJ, their low responsiveness and high anger to child led to child maltreatment after birth. Conclusions. The findings suggest that the tendency of pervasive developmental disorders rather than symptoms of anxiety and depression during pregnancy predicts child maltreatment after birth.

#### P61

### Gestational Diabetes: Patients reactions to diagnosis and treatment satisfaction

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Background: Gestational diabetes mellitus (GDM) is associated with substantial rates of maternal and perinatal complications. Diagnosis of GDM can lead to higher rates of anxiety or depression. Objective: To evaluate patients' reactions to the diagnosis of GDM. To examine the associations between initial reaction to diagnosis and treatment satisfaction. Differences between treatment regimens (diet only versus additional insulin therapy) were explored. Method: Women with newly diagnosed glucose intolerance, based on a 75-g oral glucose tolerance test, who were referred to our GDM specialist clinic for further evaluation and treatment, were recruited in the study. All patients received care from a team consisting of an obstetrician, diabetes nurse and dietician. A psychologist administered a semistructured interview to explore patients' reactions to diagnosis, emotional adjustment and

concerns. After qualitative analysis patients' responses were stratisfied into four different categories. To assess patients' treatment satisfaction the Diabetes Treatment Satisfaction Questionnaire (DTSQ) was administered after commencement of treatment and again in late pregnancy. Results: Fifty-two patients were initially recruited and completed the first interview. The diagnosis of GDM was confirmed in 46 patients, 40 patients completed the first, and 39 women the second DTSQ. Twenty eight women were treated with diet only, 18 women required insulin in addition to diet control. Treatment satisfaction was lower in patients with initial high concerns, less motivation for treatment and insulin therapy. Conclusion: Patients' initial reaction to diagnosis is associated with treatment satisfaction and can be an indicator of treatment compliance.

# Is the sexual orientation, a natural bottleneck effect on human population?

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A population bottleneck (or genetic bottleneck) is an evolutionary event in which a significant percentage of a population or species is killed or otherwise prevented from reproducing. The phenomenon of transsexualism, or gender identity disorder (GID), is present in all cultures. We do not know that this phenomenon is a disorder or not. The etiology is unknown, but it has been suggested that biological and environmental factors may contribute to gender identity variations. Long-term studies have revealed population declines in fishes, amphibians, reptiles, birds and mammalians The birth order and sex ratio phenomenon is a purely empirical observation, and is therefore open to a wide variety of biological and psychosocial theoretical interpretations. One theory can be natural reduction of heterosexual gender. Spatial disequilibrium in population occurs when male or female children in a family increases. It is therefore a natural selection. The reproduction of human race decreases

while homosexual female or male sexually orientation increases. Childbearing families will naturally decrease. This theory can be explained by late birth order. Studies show that the incidence of late birth order in both male to female and female to mlae transsexuals who are sexually attracted towards the same biological sex (homosexual group) was higher than in the general population or in the non-homosexual group. The homosexual MF transsexuals had significantly older brothers than the non-homosexual MF transsexuals. Another theory is that declining sperm count reports have caused enormous concern to both the scientific community and to society. It is also tempting to include global warming, a modern day issue. By decreasing the male predominance the population will be reduced. Evolutionary forces keeps in populations at spatial equilibrium to prevent range expansion in the life-history traits of a species.

#### P63

## Yoga Supports Physical and Mental Well-Being after Breast Cancer Surgery

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Background The diagnosis of breast cancer hits most women as a surprise, and is immediately followed by an extremely straining form of therapy. The presented study examines if yoga following surgery for breast cancer can help patients to recover physically and stabilize psychologically. In order to determine the effects of yoga, 93 women took part in yoga classes after their breast cancer surgeries (breast-sparing therapy or mastectomy). Yoga classes concentrated on strengthening and relaxing exercises. The participants were randomly selected and divided into two groups: an intervention group and a waiting group. The first group started practicing yoga two days after the surgery. The waiting group started five weeks later. After surgery, before and after the yoga course as well as three months after its completion, the participants were asked to complete standardized questionnaires about their quality of life (EORTC QLQ-C23), the physical function (FACT-B, Version 4), and the disabilities of their upper limbs (DASH). Furthermore, personal interviews were done with 15 participants of the study. Results and Conclusion Women after a breast cancer operation can improve their physical fitness through regular yoga practice after the surgery. With the help of yoga, they regain normal mobility and strength more rapidly. Yoga practice helps to correct compensatory postures that are unconsciously established following surgery. Furthermore, the yoga classes had a marked positive psychological effect. Yoga trained concentration and attentiveness and helped women to build up strength in their quest to overcome the disease.

## P64

## The effects of TENS applying on specific acupuncture points versus thoracic-lumbo sacral vertebras on active phase of labor

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Introduction: Transcutaneous Electrical Nerve Stimulation (TENS) is one of the non pharmacological methods of labor pain relief. Application of TENS on specific acupuncture points is a new method in labor that recently studied. But study for comparing of TENS applying with this new method to traditional method (thoraciclumbo sacral vertebras) not yet been reported. The aim of this study is to compare the efficacy of TENS on these two points. Material and methods: This is a randomized comparative trial study on 84 primiparous women (42 women in each group). Subjects randomly assigned into two groups of TENS applying on specific acupuncture points (HEGU and SANYINJIAO) and thoracic-lumbo sacral vertebras (T10-L1 and S2-S4). TENS was switched on-off each 20 minutes during active phase. A questionnaire was given at 3 hours post-partum to evaluate the satisfaction of intervention. Results: Active phase length of labor in acupuncture group was shorter (P=0.007) and oxytocin units administration were lower than traditional method group. There were no significant differences between second phase duration, TENS applying duration, mother's vital signs, type of delivery, fetal heart rate, Apgar score and satisfaction of intervention in two groups. Conclusion: We offered TENS application on specific acupuncture points (HEGU and SANYINJIAO) could be better than traditional points (thoracic-lumbo sacral vertebras (T10-L1 and S2-S4)) for shortening of active phase length in primiparous women in labor.

## Investigation quality life of women in postpartum period in Eskisehir according to the MAPP-QOL

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Aim: To investigate quality life of women in postpartum period who live in Eskisehir City Centrum, a city of Turkey, and gave birth in the Eskisehir Obstetrics and Pediatrics Hospital between 1 January-30 April 2009 according to the MAPP-QOL scale. Method: 500 women, who accepted to be included and who live in Eskisehir City Centrum who were met in their houses at the postpartum 7th day, were included in this study. Women filled our questionaire form which determines sociodemographic and obstetric characteristics; they performed Survey of Maternal Postpartum Quality of Life (MAPP-QOL) developed by Pamela Hill. For statistical analysis of data; one way variance analysis, Tukey Multi-Comparative Test and Student's t-test were used. Life Quality Index of Ferrans and Powers

Generic Version III was used for calculation of MAPP-QOL Scale. Results: 58.6% of women were between 25-34 years of age, 46.6% of women had their first pregnancies and 52.6% were having their first alive children. The last birth type was 41.4% of all deliveries were Cesarian/ Section. Women's quality of life mean values from sub-areas of MAPP-QOL were found to be as follows; minimum values 14.93±1.43 were seen in Health/ Functional field, maximum values 16.64±1.16 were seen in Psychology/ Baby fields. Quality life was determined low for women in study group. Discussion: Quality life should be improved and women should be educated in order to raise healthy generations; therefore essential support should be provided.

#### P66

# Using a Short Range of Neuropsychological Tests in the Assessment of Cognitive Function Among Breast Cancer Patients

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Objectives Assessment of cognitive function among breast cancer patients can be adversely affected when a broad range of neuropsychological tests is used, which may cause fatigue and increase the chances of a Type A error. In this fashion, the chance of finding significant differences between the control and cases increases. Thus, we wished to test the efficacy of a shorter battery to test for

cognitive function among breast cancer patients. Method Cognitive function of 20 women who were newly diagnosed with breast cancer, before the commencement of chemotherapy treatment were compared with 20 women survivors of breast cancer that had completed chemotherapy treatment 2 to 5 years earlier. The tests included: attention (simple reaction time), and the

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