

Abstracts from the 5<sup>th</sup> World Congress on Women's Mental Health  
March 5-8, 2013 – Lima, Peru

## SYMPOSIA

### MARCE SOCIETY SYMPOSIUM - PERINATAL MENTAL HEALTH: UPDATES

**Chair** - Katherine L. Wisner, MD, MS - Asher Professor of Psychiatry and Obstetrics and Gynecology, Northwestern University, Chicago, IL, USA - katherine.wisner@northwestern.edu

### THE LONG LASTING EFFECTS OF PRENATAL STRESS, ANXIETY AND DEPRESSION ON THE CHILD

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**PURPOSE.** There is evidence from several prospective studies that prenatal maternal stress, anxiety or depression are associated with long term adverse neurodevelopmental outcomes for the child. However, some doubts remain about whether these associations are causal, and the role that postnatal maternal mood plays in these outcomes. There are also questions about the role of anxiety as opposed to depression and the underlying mechanisms.

**METHODS.** We have used the large ALSPAC population cohort to study the effects of both pre- and postnatal anxiety and depression on the emotional and behavioural outcome for the child up to age 13 years, assessed with the Strengths and Difficulties Questionnaire (SDQ). In separate studies we have investigated the association between cortisol in the amniotic fluid and child cognitive development, and brain structures using MRI. We have also examined the association between maternal prenatal anxiety and the metabolism of cortisol in the placenta.

**RESULTS.** If the mother was in the top 15% for anxiety at 18 or 32 weeks gestation, her child had double the

risk for emotional /behavioural problems at age 13 years, after allowing for a range of covariates including postnatal anxiety, paternal anxiety or depression, and some parenting measures. The pattern obtained with prenatal depression was similar. The risk due to postnatal anxiety or depression at 33 months (without prenatal illness) was also similar, and that due to combined pre and postnatal anxiety or depression was greater still. Raised cortisol in the amniotic fluid was associated with reduced cognitive development in the child, and altered brain structures. Raised prenatal maternal anxiety was associated with less metabolism of cortisol in the placenta.

**CONCLUSIONS.** This provides new evidence that maternal mood in both the pre and postnatal period have independent clinically significant effects on child development which last at least until early adolescence. Exposure to raised cortisol in utero may be part of the underlying mechanisms.

**EDUCATIONAL OBJECTIVES.** At the end of this presentation the participants should be aware of the importance of maternal mood in pregnancy for the neurodevelopment of the fetus and the child, and some of the possible underlying mechanisms.

### PREDICTORS OF INFANT FOSTER CARE FOR CHILDREN OF WOMEN WITH MATERNAL PSYCHIATRIC DISORDERS

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**EDUCATIONAL OBJECTIVE:** The participant will understand the role of psychosocial factors (in addition to maternal mental illness) that are associated with separation of infant from mother at birth.

**Purpose:** To determine factors which increase the risk of foster care placement of infants born to women with severe mental illness.

**METHODS:** We investigated clinical and psychosocial factors associated with the foster placement of the child after discharge from joint hospitalization in psychiatric mother-baby units in France and Belgium.

**RESULTS:** We evaluated the outcome after mother-baby unit hospitalization in 1018 mother–infant pairs, and 151 (15%) of infants were placed into foster care. Independent risk factors for foster placement included: neonatal or infant medical problems, maternal psychiatric disorder, paternal psychiatric disorder, maternal lack of positive social relationships, mother receiving disability benefits and low social class.

**CONCLUSIONS:** Many psychosocial factors that complicate maternal mental illness contributed to the decision to separate mother and child after hospitalization. These factors can be potential targets for intervention development.

### **DOES EFFECTIVE TREATMENT FOR POSTNATAL DEPRESSION ALTER THE COURSE OF CHILD DEVELOPMENT?**

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**EDUCATIONAL OBJECTIVES:** At the conclusion of this presentation, the participants should be able to demonstrate knowledge of the importance of long term follow ups of treated postpartum depressed women and their children and to recognize the dimensions on which women and children are likely to improve and stay the same.

**PURPOSE:** To determine the long-term outcomes of women treated for postpartum depression and their children.

**METHODS:** Three groups of women participated in the study: postpartum depressed women who were treated with IPT, postpartum depressed women who declined treatment but agreed to be followed, and postpartum non-depressed women. Participants completed questionnaires about themselves (depression and social and marital adjustment) and about their children (born following the index pregnancy) (internalizing and externalizing behaviors, and temperament). Assessments were completed when the index child was 3 ½ and 5 ½ years of age.

**RESULTS:** At the 3 ½ year postpartum assessment, both postpartum depressed groups showed significantly higher levels of depression and lower levels of social adjustment than the non-depressed postpartum group. Similar findings were obtained at the 5 ½ year postpartum assessment. Children of treated postpartum depressed mothers showed significantly higher levels of externalizing problems and negative affectivity than children of non-depressed postpartum mothers (well group) at both 3 ½ and 5 ½ years postpartum. Children of the non-treated postpartum depressed mothers were intermediate on outcomes or similar to the children of treated postpartum depressed mothers. Even though children of depressed mothers (treated and non-treated) were significantly different on a number of outcomes than children of non-depressed mothers, they often fell within the normal range (based on population norms) on measures of internalizing and externalizing behaviors.

**CONCLUSIONS:** Even though children of depressed mothers (treated and non-treated) were significantly different on a number of outcomes than children of non-depressed.

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### **MOVING THE AGENDA FORWARD ON IPV: VOICES FROM PREVAIL**

**Chair** - Donna E Stewart, MD, FRCPC - Past President, IAWMH, University Professor, Chair of Women's Health, University Health Network and University of Toronto, Senior Scientist, Toronto General Research Institute, Toronto, Ontario, Canada - donna.stewart@uhn.ca

**Co-Chairs:** Harriet MacMillan MD, MSc, McMaster University; Helen Herrman MD, University of Melbourne; Marta Rondon MD, Cayetano Heredia University - macmilnh@mcmaster.ca

Intimate partner violence (IPV) is a global public health issue which disproportionately affects the health and mental health of girls and women. While epidemiologic surveys provide vital prevalence data, there is much less information on policies, position papers, best practices and interventions. The overall objectives of this symposium will be to update attendees on new evidence, policies, position papers, best practices and interventions from an international perspective.

## AN UPDATE ON GUIDELINES TO RESPOND TO INTIMATE PARTNER VIOLENCE AND WHO'S VPA RESEARCH PRIORITIES: WHAT'S KNOWN AND WHAT'S NEXT

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Beginning in 2011 with Institute of Medicine's Report on Clinical Preventive Services for Women: Closing the Gap, there have been updated recommendations and guidelines on the topic of responding to women exposed to intimate partner violence. Dr. Harriet MacMillan will provide an overview of these guidelines and recommendations, and review the evidence base for these guidelines. During the same time, PreVAiL (Preventing Violence across the Lifespan Network) has taken the lead on behalf of the WHO Violence Prevention Alliance (VPA) Research Agenda Priorities Group in conducting a Delphi survey to develop a consensus-based list of research priorities in interpersonal violence prevention among representatives from low-, middle- and high-income countries. Results from the first two rounds of the survey will be presented with a specific focus on the priorities in the area of intimate partner violence.

### INTIMATE PARTNER VIOLENCE (IPV): FROM EVIDENCE TO PRACTICE

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**OBJECTIVE:** To review three large international initiatives that have been undertaken, or are in progress, to prevent or ameliorate the effects of IPV against women.

**METHODS:** A narrative review of initiatives by WHO, PAHO, WPA and CPA against IPV.

**RESULTS:** The PAHO response in Central and South America and the Caribbean to the WHO initiative will be described. An assessment of the health care response is being undertaken by PreVAiL for PAHO and evaluated to identify strengths and weaknesses in implementing these programs. A working group at this IAWMH congress will convene to further work on this initiative. The World Psychiatric Association ratified in 2005 and posted a consensus paper on IPV and its

implementation will be described. The Canadian Psychiatric Association has requested PreVAiL Co-PI's to prepare a Position Paper on IPV and progress on this work will be discussed with a view to assisting other countries in developing a similar national paper if none exists.

**CONCLUSIONS:** Ongoing international work on IPV is in progress but further initiatives are required to move evidence into practice.

#### REFERENCES:

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2. MacMillan HL, Wathen CN, Jamieson E et al. Screening for intimate partner violence in health care settings: a randomized trial. *JAMA* 2009;302:493-501.

### INITIATIVES ON VIOLENCE AGAINST WOMEN IN PERU

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Peru has been shown in the WHO Multicountry study on Violence against women to have a very high prevalence of severe abuse, both in the rural and urban settings. This finding has been replicated in Household Surveys. The situation has prompted the creation of specific instances in the Ministry of Women in charge of leading the actions to diminish the magnitude of this problem. The health sector is a crucial player as it must respond to the needs of affected women and children. Some NGO's are implementing innovative services to provide services (legal counseling, counseling, shelters) to the affected populations. The current National Plan against Gender Based violence will be discussed and results from the ANAR hot line, the Centros de Emergencia Mujer and the screening for violence at Inppares will be described.

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## SEX & GENDER DIFFERENCES IN DRUG ADDICTION

**Chair** - Gabriele Fischer, MD, Medical University Vienna, Vienna, Austria,  
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In the past addiction research has neglected the scientific focus on women, and most studies have been conducted on male patients only, with concluding results generalised for the female population. The role of sex and gender differences in research - under special consideration of the susceptibility to the development of addictive disorders and its consequences for prevention and treatment strategies - are covered in this symposium.

Differences in women's health are described in regard to epidemiological and etiological factors, are explained by a variety of genetic and physiological factors and gender-specific substance responses as well as onset and course of disease, symptomatology and comorbidity. Furthermore the view of the symposium is focused on diagnosis and treatment especially in pregnant women with licit and illicit substance consumption and in mother/infant treatment for prenatal exposed children. Comorbidity shows different phenotypes in men and women and only specific diagnostics and treatment enables stabilization in substance dependence. The Dual Diagnosis Screening Instrument (DDSI), a new screening tool to detect psychiatric comorbidities among substance users will be introduced to the audience.

Treatment instead of punishment (like ordering imprisonment) in allegedly delinquent addicts, who committed - for instance - drug related crimes are also a focus of the symposium. Females suffering under addiction disorders are in most cases highly burdened with a high prevalence of psychiatric disorders, like serious symptoms of depression, anxiety as well as borderline personality disorder or post traumatic stress disorder, often caused by sexual violence or other forms of trauma, which especially shows their need of optimal treatment conditions.

Evidence-based science on differences between men and women in addictive disorders is still underrepresented, common methodological flaws in research and treatment on sex and gender differences

are represented and the need for the implementation of a sex- and gender-sensitive approach in research and in the health care system is emphasised.

### GENDER SENSITIVE TREATMENT IN ADDICTION UNDER SPECIAL CONSIDERATION OF PREGNANCY

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Addiction is the second most common psychiatric disorder among women after depression. Compared to men, they begin using substances later, are strongly influenced by spouses or boyfriends who also have addiction problems in many cases, report different reasons for maintaining the use of substances, and enter treatment earlier in the course of their illness.

Addicted women have a very high prevalence of comorbid psychiatric disorders, such as depression and anxiety, which typically predate the onset of substance abuse problems. They usually show typical personality traits; they direct their aggression against themselves, have an underdeveloped self-esteem and often display a borderline personality disorder. They frequently report a history of physical and sexual abuse in childhood. In general, women progress faster to dependence than men ("telescoping effect") and the effects of the illness are often stronger, e.g. smoking is associated with a greater disease risk and female drinkers have a higher somatic vulnerability for organ damage. They often display characteristic consumption patterns with shorter periods of abstinence compared to men. This finding can partly be explained by a variety of genetic and physiological factors. Changing societal roles and attitudes toward women may also influence consumption opportunities and behaviour. Addicted women also display specific behaviours regarding the treatment of their disorder. They are more likely to search help in mental health facilities than men, and have a preference for office-based treatment, but also have high dropout rates.

Psychiatric comorbidities as well as other gender-specific aspects, like pregnancies, frequently complicate their treatment process. During pregnancy specific multiprofessional treatment requirements are needed, evidence-based recommendations are available for opioid dependence. The application of standard of care improves the outcome for women and children, as the developmental outcome in

children benefits significantly in reducing preterm delivery and concomitant drug use during pregnancy. Not only reduction of substance use, but most importantly a reduction in nicotine use improves neonatal demographic measures as well as neonatal abstinence syndrome. In addition based on the high assortative mating, special treatment options for partners need to be offered in order to enable stabilization of pregnant women. Therefore, women's specific needs should be addressed not only in future medication research (were women are traditionally under-represented) but also in future health care planning.

### **CO-MORBIDITY IN SUBSTANCE DEPENDENT WOMEN APPLYING A DUAL DIAGNOSIS INSTRUMENT**

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**EDUCATIONAL OBJECTIVES:** At the conclusion of this presentation, the participants should be able to recognize the relevance of detecting the presence of psychiatric co-morbidity among female drug users.

**PURPOSE:** The co-occurrence of other psychiatric disorders among substance dependent subjects, also known as 'psychiatric comorbidity in drug abusers' or 'dual diagnosis' has been associated with poor outcome of subjects affected. Dually-diagnosed patients show a higher psychopathological severity, risk behaviors as well as psychosocial impairments and show a poor prognosis if they are not adequately diagnosed and treated. Epidemiological studies show that the prevalence of psychiatric co-morbidity is about 20-70% depending on studied samples. Interestingly, this prevalence is consistently higher among female drug users than male drug users. Then, the detection of psychiatric comorbidity among female drug users is an area of great concern. The objective of this presentation is to present the psychometric characteristics of the Dual Diagnosis Screening Instrument (DDSI), a new tool to screen psychiatric disorders in substance users in clinical and non-clinical samples.

**METHODS:** A total of 827 substance users recruited in drug abuse health care and university research settings were assessed by trained interviewers using the DDSI and the Psychiatric Research Interview for Substance and Mental Disorders (PRISM). Both instruments were administered blind to the results of the other. Disorders obtained with the DDSI were compared to lifetime diagnoses obtained with the PRISM. Sensitivity, specificity, negative, and positive predictive values were estimated. Also test-retest reliability was assessed.

**RESULTS:** The DDSI showed a high sensitivity ( $\geq 80\%$ ) for identifying lifetime depression, mania, psychosis, panic, social phobia, and specific phobia disorders. Specificity was  $\geq 82\%$  for all diagnoses. Tests retest Kappa showed excellent agreement. The mean duration of the DDSI administration was  $16.8 \pm 2.5$  minutes.

**CONCLUSIONS:** The DDSI is a valid and easy to administer screening tool to detect psychiatric comorbidity among substance users.

### **SEX DIFFERENCES IN OFFENDERS WITH OPIOID ADDICTION**

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**EDUCATIONAL OBJECTIVES:** The paper aims to provide a better understanding of sex differences in offenders with opioid addiction. Thereby it shall contribute to a gender sensitive and adequate reaction to criminal delinquency of opioid addicted offenders.

**PURPOSE:** In 2010 89.3% of all Austrian convicts trialed for violation of narcotic laws were male offenders. Furthermore, a survey amongst all Austrian prisoners convicted for narcotic law violations showed that nearly all of them (94%) were male offenders. These figures indicate that there are certain differences between male and female offenders with opioid addiction.

Aiming to analyze the gender related differences of opioid addicted offenders the paper evaluates statistical data on drug related criminality. Furthermore, it presents differences between male and female opioid addicted offenders based on an ASI and ASI crime evaluation of a population of opioid addicted offenders who are offered health related measures

instead of punishment. This survey covered three European countries - Austria, Poland, and Spain. The paper will provide a better understanding of differences between male and female offenders with opioid addiction.

**METHODS:** The paper is based on a desk-top evaluation of crime statistics as well as on a calculation of data gathered by an ASI/ASI Crime survey of opioid addicted offenders in Austria, Poland, and Spain.

**RESULTS:** The research proves significant sex differences in offenders with opioid addiction.

**CONCLUSION:** The research demonstrates that gender sensitive and reasonable/adequate reaction to criminal delinquency of opioid addicted offenders is needed.

### **TREATMENT MODEL FOR PREGNANT SUBSTANCE DEPENDENT WOMEN IN BRAZIL – PRELIMINARY DATA**

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**EDUCATIONAL OBJECTIVES:** This presentation main objective is to provide initial results of the first trial on treating prenatal cocaine/ crack exposure in Brazil.

**PURPOSE:** Health services in Brazil are experiencing an epidemic of illegal drug use, being crack cocaine the most devastating one. This situation is linked to newborn neurobehavioral disturbances, loss of custody and higher obstetric and pediatric morbidity. Few researches, in the country or abroad, have focused on therapeutic interventions, clinical outcome and mother-infant bonding among these vulnerable population.

**METHODS:** A double-blind randomized clinical trial including a total of 80 pregnant users of crack cocaine and their babies was developed. The study try to accomplish important factors in treating women like obstetric and pediatric care, transportation, food and home visits. The test group received extra interventions including psychiatric consultations, social assistance and mother infant treatment based on improving the quality of care and attachment. Outcomes were medical data, neurobehavioral development, infant rehospitalization rates, severity of

mother drug use, breastfeeding and the custody status of the infant at three months of life.

**RESULTS:** Up to this moment, 49 mothers and their infants have been included. From this population, 48% of women had four or more pregnancies, 45% had psychiatric comorbidities and 64% suffered some form of violence. Crack cocaine was used by 41 of these women, being cocaine used by 25. Data also included 65% of some alcohol consumption, 35% of binge drinking and 42% of cigarettes use. Congenital syphilis was diagnosed in 39% of the infants, being 25% and 6% exposed to HIV and Hepatitis B or C respectively. The need of resuscitation related to poor Apgar scores reached 26%, while 27% of the newborns needed some amount of oxygen and 10% required mechanical ventilation. Preliminary data about the main endpoints will be also presented.

**CONCLUSION:** This is a very vulnerable group of patients and treating their drug abuse should include an effective approach to the other medical e social risk conditions. The results should influence medical and public policies, thus affecting positively the development of a huge population of Brazilian children and their families.

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### **NASPOG SOCIETY SYMPOSIUM - PREMENSTRUAL DYSPHORIC DISORDER: FROM EPIDEMIOLOGY TO PATHOGENESIS AND TREATMENT**

**Chair** - C. Neill Epperson, M.D.; Associate Professor of Psychiatry and Obstetrics and Gynecology; Director, Penn Center for Women's Behavioral Wellness, Department of Psychiatry, Perelman School of Medicine at the University of Pennsylvania - [cepp@mail.med.upenn.edu](mailto:cepp@mail.med.upenn.edu)

**Co-Chair** - Kimberly A. Yonkers, M.D.; Professor of Psychiatry and Obstetrics and Gynecology and Reproductive Sciences, Yale University School of Medicine - [kimberly.yonkers@yale.edu](mailto:kimberly.yonkers@yale.edu)

Premenstrual dysphoria is common, with roughly 10% of women meeting criteria for premenstrual syndrome (PMS) and 2%-5% of women meeting full criteria for premenstrual dysphoric disorder (PMDD).<sup>1</sup> The burden of illness is significant and the prevalence of both PMS and PMDD is remarkably similar across epidemiologic samples from North and South America, Europe and

Asia.<sup>2</sup> The most commonly reported mood symptoms are mood lability, anger/irritability, anxiety/tension, and depressed mood/sadness.<sup>3</sup> The pathogenesis of premenstrual dysphoria is not known, but multiple lines of evidence point to dysregulation in serotonin and gamma-aminobutyric acid (GABA) neurotransmission and neural systems underlying affect regulation and reward. Indeed, the most effective treatments for PMDD, the selective serotonin reuptake inhibitors (SSRIs), not only target the serotonergic system but enhance neurosteroidogenesis, potentially altering GABAergic function.<sup>1</sup> The overarching goal of this symposium is to present new findings regarding the epidemiology, pathogenesis and treatment of PMDD.

Individuals attending the symposium will 1) demonstrate a more precise understanding of the temporal onset and severity of premenstrual symptoms in large epidemiologic and clinical samples, 2) improve their clinical care of patients by refining their knowledge of the timing of clinical response with SSRI treatment, and 3) become more confident in their understanding of the brain imaging findings supporting a role for dysregulation in the emotion circuitry and neurosteroid-GABA interface in the pathogenesis of PMDD.

### **THE PREVALENCE AND DEMOGRAPHIC CORRELATES OF PREMENSTRUAL DYSPHORIC DISORDER (PMDD) ACCORDING TO PROPOSED DSM-5 CRITERIA**

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**EDUCATIONAL OBJECTIVES:** At the conclusion of this presentation, participants should be able to state the prevalence and primary correlates of premenstrual dysphoric disorder (PMDD) according to proposed DSM-5 criteria, taking into account when women are most symptomatic.

**PURPOSE:** The purpose is to determine the prevalence and correlates of PMDD according to updated DSM-5 criteria, measuring symptoms when women are most symptomatic rather than only during only the premenstrual week.

**METHODS:** A stratified clustered-area probability sample of females 13-53 years old rated symptoms and functioning and gave a urine sample daily for two menstrual cycles. They completed SCID I and II

psychiatric diagnostic and health interviews. The operational definition of the most severe perimenstrual period included four days before and the first three days of menses

**RESULTS:** The point prevalence of PMDD in healthy women according to DSM-IV criteria was 2.8% (95% CI = 1.3-4.2), and greater (6.0%) according to DSM-5 criteria. The best model ( $P < .001$ ) for predicting PMDD contained age, urban environment, and unemployment. Rates declined after adolescence and rebounded for ovulatory women in their 50s.

**CONCLUSIONS:** The prevalence of PMDD is higher than previously believed when methods more accurately reflect women's experiences. Stress appears to be related to PMDD. Hormonal change(s) during reproductive transitions also may be involved.

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- Epperson, C.N, Steiner, M., Hartlage, S.A, Eriksson, E., Schmidt, P.J, Jones, I., & Yonkers, K.A (2012) Premenstrual dysphoric disorder: In defense of a new category for the DSM-5. *The American Journal of Psychiatry, 169*, 465-475.

### **SYMPTOM ONSET TREATMENT FOR PMDD: A RANDOMIZED CLINICAL TRIAL**

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**EDUCATIONAL OBJECTIVES:** To present results of a randomized clinical trial that compared the efficacy of sertraline and placebo, both initiated at premenstrual symptom onset, in amelioration of symptoms of premenstrual dysphoric disorder (PMDD). A second objective was to determine the tolerability of symptom onset dosing including possible withdrawal symptoms.

**PURPOSE:** The purpose of the study was to determine if a serotonin reuptake inhibitor would be an effective treatment for PMDD if the duration of treatment was limited to the symptomatic days of the menstrual cycle.

**METHODS:** This was a 3-center study that was performed between 2006 and 2012. Women were screened for PMDD by prospective symptom charts to confirm the diagnosis. Eligible women were blindly

allocated to either active treatment with sertraline, administered in a flexible dose that ranged from 50 mgs daily to 100 mgs daily, or similar appearing placebo tablets. Randomization was stratified by whether or not the subject was undergoing treatment with an hormonal contraceptive (HC). After randomization, study staff reviewed daily self-ratings with participants and recommended a treatment start date but the participant ultimately decided when to commence pill-taking for that cycle. After starting pills each cycle, women were asked to continue daily dosing at least until onset of menses. Subjects could continue dosing up to 3 days after menstrual bleeding. Subjects participated for 6 menstrual cycles. Efficacy was measured by monthly scores on the Premenstrual Tension Scale and Inventory of Depressive Symptomatology. Subjects and clinicians rated global clinical severity and improvement at each visit.

**RESULTS:** Across sites, 2737 women were phone screened, 696 performed daily ratings for screening and 252 were randomized. The non-HC strata included 211 women and the HC strata included 41 women. The race/ethnicity of participants was as follows: 197 (78%) of subjects were white, including 17 whom were Hispanic. 39 women were black including 4 who were Hispanic. Other participants included 2 native Americans, 3 of Asian descent and 11 "other". The average age of participants was 35. The treatment was well tolerated with minimal side effects or symptoms of withdrawal. Changes in symptoms scores for both groups will be available in September and will be presented at the meeting.

#### **CONCLUSIONS:**

- Treatment with a serotonin reuptake inhibitor initiated at symptom onset was feasible for women with PMDD.
- Tolerability of the treatment was excellent.
- If active treatment is effective, exposure to medication will be reduced and treatment will be less expensive.

#### **EMOTIONAL CIRCUITRY IN WOMEN WITH PMDD**

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**EDUCATIONAL OBJECTIVES:** At the conclusion of this presentation, the participants will be updated on some recent neuroimaging findings in women with PMDD.

**PURPOSE:** Premenstrual dysphoric disorder (PMDD) compromise quality of life in around 4 % of reproductive women. Similarly, while most women on combined oral contraceptives (COC) report very high levels of satisfaction, approximately 4 – 10 % of users complain of adverse mood. The purpose of these studies were to determine if women with PMDD and women with adverse mood experiences of COC treatment display similar changes in brain activity when exposed to emotional faces.

**METHODS:** Fourteen women with PMDD, 13 healthy controls, and 34 healthy women with previous experience of mood deterioration during COC (randomized to a combined oral contraceptive or placebo) were exposed to emotional faces while mean blood-oxygen-level dependence (BOLD) signal changes were determined with functional magnetic resonance imaging (fMRI).

**RESULTS:** Women with PMDD displayed enhanced bilateral amygdala reactivity in the follicular phase and enhanced left insula activity across both cycle phases in comparison with healthy controls. However, among women with PMDD follicular phase progesterone serum concentrations were positively correlated with bilateral amygdala reactivity while depression and anxiety scores were positively correlated with right amygdala reactivity in the luteal phase. COC-induced adverse mood, on the other hand was accompanied by lower reactivity in the left insula together with altered amygdala habituation rate.

**CONCLUSIONS:** Altered insular cortex and amygdala reactivity to emotional faces are implicated in mood disorders associated with ovarian steroids. However, the pattern of brain reactivity changes is different between women with PMDD and those experiencing COC-induced mood changes.

#### **SSRI TREATMENT FOR PMDD: EFFECTS ON CORTICAL GABA CONCENTRATION**

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**EDUCATIONAL OBJECTIVES:** At the conclusion of this presentation, the participants should be able to describe to their patients the effect of SSRI treatment on brain GABA concentrations and how this may relate to clinical improvement.

**PURPOSE:** The overarching purpose of this study is to examine the acute and long-term effects of SSRI treatment for PMDD on cortical GABA concentrations.

**METHODS:** Thirteen women have been recruited to participate in this on-going study of the impact of SSRI administration on cortical GABA concentration. All women are between the ages of 18 and 40 years of age, report regular menstrual cycles of 24-36 days in length and are without DSM-IV Axis I psychiatric or substance use disorder according to the Structured Clinical Interview for Diagnosis. The presence or absence of PMDD is determined prospectively using the Daily Record of Severity of Problems (DRSP). Women undergo measurement of occipital cortex GABA concentration using proton magnetic resonance spectroscopy (<sup>1</sup>H-MRS) in the early-mid follicular phase and mid-late luteal phase of the menstrual cycle. Women with PMDD undergo GABA measurements across the menstrual cycle both before and after 2 months of daily fluoxetine 20 mg administration. Healthy, age-matched, female controls are scanned before and 2.5 hours after acute administration of fluoxetine 20 mg. Scans conducted at Yale University utilized a Bruker 4 Tesla magnet, while those conducted at the University of Pennsylvania utilize a Siemens 7 Tesla whole body scanner.

**RESULTS:** Seven of eight women with PMDD experience a decline in GABA concentration in the follicular phase, pre-treatment to post-treatment (average decline 11.5%, range 4% to 21%), while pre- to post-treatment luteal phase changes were less pronounced and less consistent (average change 1.7%, range -7.8% to +11.2%). Healthy controls (n=5) undergoing acute fluoxetine challenge experienced a mean (SD) change in GABA concentration of 9.1 (14.7) in the follicular phase and 9.9 (11.5) in the luteal phase.

**CONCLUSIONS:**

- SSRI administration appears to reduce GABA concentrations in women with PMDD and healthy

controls, although inter-individual and phase variability exists.

- This project is on-going. With additional subjects, diagnosis by phase effects will be examined.
- SSRI administration affects on GABA concentration may be an important factor in this class of medication's mechanism of action in the treatment of PMDD.
- Whether acute administration such as that occurring with luteal phase or symptom-onset treatment has similar effects on GABA concentration in women with PMDD would be of interest.

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## NEUROBIOLOGICAL AND GENDER ROLE FACTORS ON EATING DISORDERS

**Chairs** - Marina Díaz Marsa, PhD - Psychiatry. Assistant Professor Of Psychiatry. San Carlos Clinic Hospital. Universidad Complutense. Madrid, Spain and Maria Dolores Crespo Hervas - Psychiatry. Eating Disorders Day Hospital, Santa Cristina Hospital. Madrid. Spain - mdiazm.hcsc@salud.madrid.org

**BACKGROUND INFORMATION:** A progressive increase in both prevalence and incidence of women's eating disorders throughout the world during the last decades has been reported. This is a severe mental disorder relates to a high risk of organic, psychological and social morbidity and mortality. Different hormonal and gender factors are involved in its pathogenesis and may have an important role in the treatment and outcome of these disorders.

**OBJECTIVES:** To analyze the specific implication of neurobiology according to gender in both the etiology and course of eating disorders along lifetime.

1. To discuss the socio-cultural issues of body image in the context of gender perspective.
2. To present the relationship between gender role and both the onset and treatment of Eating Disorders across different cultures
3. To propose new research directions in gender issues of eating disorders.

**IMPORTANCE:** It is estimated that 1 in 250 adolescents women of developed countries suffers anorexia nervosa. This rate is higher for bulimia nervosa or non-

specified eating disorders. The emerging countries are probably very close to this figures nowadays. The eating disorder pathoplasty is related to biological and sociocultural factors and rather to gender role issues. The knowledge about these aspects is necessary in order to design new prevention and treatment programmes which can change the prognosis and outcome of these diseases in the future.

### **NEUROBIOLOGY OF ED: IS IT DIFFERENT IN WOMEN?**

Eva Trujillo De Quezada. Psychiatry. Hispano Latino American Chapter. Academy Eating Disorders. Professor Of Pediatrics And Nutrition At Instituto Tecnologico Y De Estudios Superiores Medical School .Monterrey (Mexico)  
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During the 1980s, the etiological theories of Eating Disorders where highly focus on the sociocultural aspects, including a feminist perspective that sociologists and psychologists recognized. These theories were supported by the Western cultural obsession with thinness and fitness for women.

Because of the continuous growth of the neurosciences and new and more accurate and modern equipment developed, the study of the brain is more exhaustive and recent research of the etiology of eating disorders has been focus on its neurobiology, especially for Anorexia Nervosa.

Although we know that many of the brain abnormalities in AN are due to the effects of semistarvation, current neuroscience research has shown that there appear to be some trait-related characteristics that predispose an individual to develop AN.

### **IMPLICATIONS OF GENDER ROLE IN THE EATING DISORDERS TREATMENT ACROSS DIFFERENT CULTURE BACKGROUNDS**

Mae Lynn Reyes-Rodriguez .Phd Psychology. Clinical Assistant Professor At University Of North Carolina. Chapell Hill North Carolina (USA).  
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Eating disorders have been stereotyped with a specific gender. However, since the 17<sup>th</sup> century, cases of eating disorders were documented in both genders. Moreover, gender differences in the manifestation of

body dissatisfaction have been acknowledged. Females tend to engage in dieting behaviors to lose weight while males engage in behaviors to increase muscle mass to build a sculptured body. Throughout the literature review we will explore the relationship between gender role and the onset of eating disorders symptoms across different cultures. Special attention will be given to specific factors such as developmental process, internalization of dominant culture, biological/genetic differences in body shape and size, and any within race/ethnicity normative concepts of body image. Also, we will be discussing the impact of the gender role in the eating disorders treatment across different culture backgrounds. Recognizing gender differences in the development, manifestation and presentation of eating disorders, an evaluation of the existing treatments will be conducted to discuss adaptations that would enhance the effectiveness of interventions across cultures.

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## **VIOLENCE AGAINST WOMEN AND MENTAL HEALTH**

**Chair** - Prof. Anita Riecher-Rössler. University of Basel Psychiatric Clinics- Basel, Switzerland -  
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**Co-chair** - Ulrike Ehlert, University of Zurich, Institute of Psychology, Zurich, Switzerland -  
[u.ehlert@psychologie.uzh.ch](mailto:u.ehlert@psychologie.uzh.ch)

At the conclusion of this presentation the participants should be able to realize that gender-based violence is a global problem with serious health consequences, not only for the physical but also for the mental health of women, and has a detrimental impact on families and the society at large. In this symposium examples from South America and Europe will be presented, concerning many forms of violence from intimate partner violence to sexual violence and violence against women in form of cult of the body and cosmetic surgery. The consequences of these traumatic experiences will be shown to range from biological consequences, such as characteristic dysregulations of stress-related physiological systems, to psychological and social consequences. Possible consequences for mental health professionals will be discussed.

## **VIOLENCE AGAINST WOMEN IN SOUTH AMERICA**

Silvia Gaviria, Profesor of Psychiatry, Universidad Ces. Medellín, Medellín, Colombia, [sgaviria2@hotmail.com](mailto:sgaviria2@hotmail.com)

It is estimated that more than 50% of the women in Latin America and the Caribbean suffer some type family violence, and this does not include other forms of violence affecting women and children in other scenarios.

Being gender based violence a universal phenomena and a public health problem, the attention to such scourge has not been given sufficient attention in Latin America and the Caribbean. The health problems, the disabilities, the impact generated in the family, work, society and culture continue being alarming. Some of the factors influencing the lack of attention are the perception of the problem as a private matter; the existing inequity in couple's relations and the poor participation of women in power positions. Another relevant aspect is the ignorance women have of their rights contributing to the fact that they do not claim them, be permissive and even justify the abuse of which they are victims.

The Region has made very important advances regarding women's participation in power instances, but in the majority of the cases it is due to the assignment of quotas, which in itself is an advance, but it is still missing that said participation be assimilated in the collective conscious and be a product of popular election.

## **INTIMATE PARTNER VIOLENCE AND MENTAL HEALTH IN WOMEN**

Dr. Karin Helweg-Larsen, Senior Researcher, MD, MPH. National Institute Public Health. Copenhagen. Denmark. [khl@niph.dk](mailto:khl@niph.dk)

**EDUCATIONAL OBJECTIVES:** Prevention and early detection of mental disorders may effectively prevent intimate partner violence among women (IPV).

**PURPOSE:** To examine correlations between mental health problems and exposure to IPV, including physical violence and stalking, in order to identify modifiable risk factors at the individual level.

**METHODS:** The regular Danish national health interview surveys include questions on exposure to different forms of violence that enable identification of victims of IPV. Survey data are by the unique personal identification number linked to the national population

and health registers and are available in DANCOS (the Danish National Cohort Study), a database for research purpose. Data on self-reported mental health problems and register data on health care contacts due to psychiatric problems among women exposed to IPV were compared to non-exposed. Re-interview data, 2000, 2005 and 2010 were used to describe the prevalence of mental health problems before and after exposure to IPV. Stalking and mental health problems among the victims were illuminated through qualitative interviews.

**RESULTS:** Women exposed to IPV report more mental health problems, have significantly more contacts to health care and higher use of prescribed psychotropic drugs than non-exposed women. The presence of different mental problems increases the risk for exposure to violence. Among women exposed to stalking, anxiety, depression and powerlessness are prevalent.

**CONCLUSIONS:** A huge number of clinical and cross-sectional studies link IPV to mental health problems in women. Few studies have examined mental problems as risk factors for exposure to IPV. We found that associations between IPV and mental health are complex, both a causal factor and a consequence. The implication of these results is that primary prevention of IPV should include prevention of risk factors for mental health problems, early detection of psychiatric problems among women and proper treatment of such disorders as well as sufficient access to psychological counselling and support to women exposed to IPV, stalking and other gender based violence.

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## THE PSYCHOBIOLOGY OF SEXUAL ABUSE AND VIOLENCE

Prof Ulrike Ehlert, Full Professor of Clinical Psychology, University of Zurich. Zurich. Switzerland.

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**EDUCATIONAL OBJECTIVES:** Sexual and/or physical abuse may not only result in psychiatric disorders such as posttraumatic disorder (PTSD), depression or somatoform disorders but also in characteristic psychoendocrinological dysregulations. Physiological stress-systems include the central nervous system, the immune system and a number of endocrine glands. The most prominent hormonal stress-related system is the hypothalamic-pituitary-adrenal (HPA) axis. Under stress conditions, neurotransmitters induce the secretion of hypothalamic corticotropin releasing hormone (CRH) into the portal circulation. At the pituitary level, CRH stimulates the secretion of adrenocorticotropin (ACTH), which induces cortisol secretion from the adrenal cortex. Circulating cortisol controls HPA axis activity by negative feedback inhibition. This self-regulatory system is disturbed in the above named disorders, which may occur as the consequence of sexual abuse and violence. The presentation will demonstrate the psychobiological consequences of maladjustment to trauma and will increase knowledge about etiological concepts in abuse related psychiatric disorders.

**PURPOSE:** Abuse and violence often result in PTSD, which shows a high comorbidity with pain syndromes such as chronic pelvic pain (CPP). Interestingly, PTSD as well as CPP are associated with HPA axis dysregulation. The hypo-secretion of cortisol is associated with biological mechanisms underlying pain onset.

**METHODS:** We recruited 16 patients with CPP and 14 pain-free controls from a general hospital where diagnostic laparoscopy was performed. Psychological assessment included standardized interviews on clinical symptoms, abuse experiences and major life events as well as psychometric testing for PTSD-like symptoms and depression. Hormonal evaluation involved determinations of diurnal salivary cortisol levels and hormonal responses to a CRH stimulation test and a low-dose dexamethasone suppression test (0.5 mg).

**RESULTS:** We found increased prevalence rates of major life events, abuse and PTSD in women with CPP. Women with CPP demonstrated normal to low diurnal cortisol levels, normal ACTH, but reduced salivary

cortisol levels in the CRH stimulation test, and an enhanced suppression of cortisol by dexamethasone.

**CONCLUSIONS:** Women with CPP demonstrate HPA axis alterations that partly parallel endocrine correlates of PTSD and other stress-related bodily disorders. These findings suggest that a lack of protective properties of cortisol may be of relevance for the development of bodily disorders in chronically stressed or traumatized individuals. A psychobiological model will be presented for the explanation of the associations between trauma, pain, and HPA axis dysregulations.

## RISKS OF BEAUTY SURGERY FOR MENTAL HEALTH – THE FEMALE BODY AS A CONSUMER GOOD

Professor Beate Wimmer-Puchinger, PhD, Executive Director for Women's Health – Vienna  
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Beauty surgery is rapidly growing in popularity all over the world as well as in different ethnicities. There is almost no part of the body which will not be redesigned, rejuvenated, reduced, or enlarged. The spectrum includes breasts, hands, and intimate parts of the body such as the vulva.

Mental health problems such as traumas, anxiety disorders, eating disorders, depression, sexual disorders, and, in particular, body dysmorphic disorders are not identified, underestimated, or neglected.

In the past few years, medical treatment had to follow the results of evidence-based medicine.

The presentation will outline the scientific evidence of mental health consequences of different aesthetic surgery procedures

The Austrian government has recently passed a law that limits the possibilities of beauty surgery, and stipulates psychological counselling before any plastic surgery is performed.

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## BIOLOGICAL ASPECTS IN POSTPARTUM DEPRESSION

**Chair** - Alkistis Skalkidou, Dept. of Women's and Children's Health, Uppsala University, Sweden,  
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Postpartum depression is a common disorder, with important consequences for new mothers and their families. Despite this, it often goes undiagnosed and untreated, with devastating consequences for both the women and their families. The amount of research in this field, and dissemination of results are disproportionately limited, and should therefore be encouraged.

### **FROM LEPTIN TO VITAMIN D: THE PERPLEX BIOLOGICAL PATHWAYS BEHIND POSTPARTUM DEPRESSION**

Alkistis Skalkidou, Dept. of Women's and Children's Health, Uppsala University, Sweden – [alkistis.skalkidou@kbh.uu.se](mailto:alkistis.skalkidou@kbh.uu.se)

Although postpartum depression (PPD) is a common condition, it often goes undiagnosed and untreated, with devastating consequences for the woman's ability to perform daily activities, to bond with her infant and to relate to the infant's father. Studies have so far mostly focused on social risk factors, but evidence on biological mechanisms involved is now emerging. Studies from our group aim at investigating possible associations between leptin, interleukins, vitamin D, sunlight exposure, cortisol, allopregnanolone, sex steroids, hematokrit, and genetic polymorphisms with the development of PPD. Current results show that higher leptin levels at delivery are associated with lower risk for PPD, while women delivering during the last quartile of the year have a significantly higher risk for depressive symptoms 6 weeks and 6 months postpartum. Preliminary results from the rest of the studies are going to be presented at the congress.

### **EMOTIONAL STIMULATION AND BRAIN ACTIVATION IN POSTPARTUM WOMEN: A LONGITUDINAL FMRI-STUDY**

Inger Sundström Poromaa, Dept. of Women's and Children's Health, Uppsala University, Sweden – [inger.sundstrom@kbh.uu.se](mailto:inger.sundstrom@kbh.uu.se)

In normal pregnancy a woman undergoes profound anatomical, physiological and endocrine changes, which promote the growth and development of the foetus. After delivery, serum hormone levels of the ovarian steroids drop dramatically, while at the same time normal maternal behaviours are activated. However, during the postpartum period new mothers are also more susceptible to developing postpartum depression (PPD).

The aim of this study was to explore emotional aspects of the postpartum brain related to hormonal changes, by use of a longitudinal functional magnetic imaging (fMRI) design. Brain activity of fourteen healthy postpartum women was measured twice, within 48 hours after delivery and again at 4-7 weeks postpartum, using a negative emotional face matching paradigm. Brain activation patterns of the postpartum women were also compared with fifteen regularly cycling, healthy controls. Furthermore, correlations between average brain activations in regions of interest (ROI) and endocrine factors were tested.

Significantly greater magnitude of blood oxygenation level-dependent (BOLD) signals changes were found in brain areas of women 4-7 weeks postpartum compared with 48 hours after delivery. These areas included, among others, the right anterior cingulate cortex (ACC) and the right insula, regions implicated in emotional processing and empathy. No correlations between average BOLD-signal and ovarian steroid levels were found.

This is the first longitudinal study on emotion related brain activity among healthy postpartum women. Our explorative findings possibly relate to normal adaptations of the mother towards the newborn, and contribute to the understanding of mechanisms underlying the frequently occurring affective disorders of the postpartum period.

### **GENETIC ASPECTS IN POSTPARTUM DEPRESSION**

Erika Comasco, Dept. of Neuroscience, Uppsala University, Sweden – [Erika.comasco@neuro.uu.se](mailto:Erika.comasco@neuro.uu.se)

Literature on psychosocial and epidemiological factors of PPD is abundant; however the genetic factors underlying risk and resilience to PPD remain to be explored. Recent studies have shown that siblings of probands with PPD have higher risk to develop PPD, and that female twin pairs share genetic factors which explain 38% of variance in PPD.

The present symposium aims to illustrate genetic studies on PPD, including the only existing genome-wide linkage study and 12 genetic association studies, of which two have been conducted by the present research group. Furthermore, the symposium will introduce genetic association studies investigating gene-by-environment interaction effects on PPD. Finally, future prospective will be mentioned. The audience will have an updated view on the most recent findings in genetics of PPD.

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## ADDICTIONS, ALCOHOLISM AND SEXUAL ABUSE IN WOMEN NEUROBIOLOGICAL AND CLINICAL PERSPECTIVES

**Chair** - Elvia Velásquez, President ALAD. Latinamerican Association on Addictions, [Elvel10@yahoo.es](mailto:Elvel10@yahoo.es)

**EDUCATIONAL OBJECTIVES:** At the conclusion of presentations, the participants should be able to recognize and apply, general aspects of the gender approach, in the diagnoses and treatment in the management of problems related with addiction and alcoholism and to know its relation with the sexual abuse. Besides, to recognize gender biopsicosocial differences including the neurobiological.

**PURPOSE:** This symposium is intended that participants gain a general awareness and understanding of addiction, alcoholism, sexual abuse and its neurobiological aspects that are risk or protect women compared to men in order to improve the capacity to address the treatment and prevent these problems

**RESULTS:** Drug and alcohol abuse is increasing in women and the differences with the highest consumption in men are declining in both legal drugs like alcohol, tabac and illegal drugs as marijuana, stimulants, cocaine, opiates, etc. In 2010 in the U.S. and 18.2% of men and 12% of women used at least one time in the year an illegal drug. The before situation contribute to increase mental health problems of women alcoholism, drug addiction, sexual abuse, violence, family breakdown, sexual promiscuity, unwanted pregnancies, sickness, death etc. and general deterioration of the quality of life of women and families. This symposium through the four different presentations, examine psychosocial and neurobiological gender differences, influencing addiction and alcoholism having more severe consequences in women and its relations with sexual abuse. We will discuss the basic elements for the treatment and prevention from a gender perspective. It will be a space of time to share with the public and get suggestions and conclusions

**CONCLUSION:** Addiction is a problem that is increasing in women which have greater severity. They need special programs with a gender approach to prevent and treat these problems properly

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### ALCOHOL CONSUMPTION, GENDER AND HARMS IN THE AMERICAS

Maristela G. Monteiro, MD, Ph.D. Sênior Advisor on Alcohol and Substance Abuse Pan American Health Organization, Washington DC, USA - [monteirm@paho.org](mailto:monteirm@paho.org)

**EDUCATIONAL OBJECTIVES:** At the conclusion of this presentation, the participants should be able to recognize, differences between men and women in different aspects i.e. how much they drink, how they drink, and the related consequences, influenced by gender roles in every society and socio economic conditions and to discuss possible solutions in this area

**PURPOSE:** To discuss with the participants with the end to move to the prevention, the impact of the alcohol consumption in the health of population, gender differences and harms in the Americas

**METHODS:** Since 2004, the Pan American Health Organization (PAHO) has sponsored general population studies in 6 countries of Latin America and the Caribbean (Belize, Dominican Republic, Guyana, Nicaragua, Peru and Uruguay) using a standardized questionnaire developed by the International Research Group on Gender and Alcohol (IRGGA) and already used in over 40 countries around the world (under the umbrella of GENACIS: Gender, Alcohol and Culture: International Study). Argentina, Brazil, Costa Rica,

Mexico have also participated through the sponsorship of the WHO or their own funding sources.

**RESULTS:** Alcohol is the leading risk factor for morbidity and mortality in the Americas, according to estimates of the World Health Organization. Overall, per capita alcohol consumption in the Americas is higher than the global average, and the pattern of alcohol consumption is considered harmful to health. It is known that alcohol is also gender issue.

However, epidemiological data from Latin America and the Caribbean on alcohol consumption are still scarce, and very few studies have looked at comparisons between levels of alcohol consumption and related harms between countries and comparing men and women> This presentation will describe alcohol consumption patterns (rates of abstention and drinking levels) by sex and age in 10 countries in the Americas, alcohol related problems, in particular partner aggression, discussing differences and similarities and implications for alcohol policy in the Region.

**CONCLUSIONS:** The alcohol problems is a serious Public Health problems in the Americas this presentation contribute to study its characteristics using a standardized questionnaire developed by the International Research Group on Gender and Alcohol (IRGGA) and already used in over 40 countries around the world which contribute to problem comparison in different countries for prevention

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**ADDICTIONS, NEUROSCIENCES AND GENDER**

Elba B.Tornese, Medicine, Psychiatrist and Forensic Doctor Buenos Aires University, UBA

**EDUCATIONAL OBJECTIVES:** At the conclusion of this presentation, the participants should be able to recognize gender neurobiological differences and interactive correlation with the clinical consequens in addictions in each gender, with the end to apply this differences in the treatment to the patient in the clinical practice

**PURPOSE:** The purpose of this presentation is to relate brain anatomy by gender, describing how addiction affects depending of the gender

**METHODS:** There will be a literature review of recent publications in gender differences in addiction through neuroimaging, highlighting the main differences and their implications

**RESULTS:** There are evidence by morphological brain neuroimaging of the differences in women in relation to men in brain areas like the frontal and parietal lobes and in hippocampus and amygdaloid body. Also, were found neurohistological changes in language areas of the temporal lobe. Other findings were in connection with less amount of serotonin in women, which could explain most likely to be depressed in women and risk to use e addictive sustances

The presentation describes the neuroanatomical characteristics by gender, specifying that influence the type of addiction in women, taking into account the biopsychosocial interactions.

**CONCLUSIONS:** There are many factors that determine gender differences in clinical addiction among which are specific neurobiological brain differences which interact with the behavior and vulnerability to addiction important in the approach of treatment

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**BIOLOGICAL BASES OF SEX DIFFERENCES IN DRUG ADDICTION**

**Marta Torrens**<sup>1,2</sup>, Paola Rossi<sup>1</sup>-  
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<sup>1</sup>Addiction Program, Institute of Neuropsychiatry & Addictions-Parc de Salut Mar

<sup>2</sup>Department of Psychiatry, Universitat Autònoma de Barcelona

**EDUCATIONAL OBJECTIVES:** At the conclusion of this presentation, the participants should be able to recognize, gender differences which increase addiction vulnerability for women, observed at every phase of the addiction process: drug reinforcement

process, acquisition, maintenance, and outcome; and women other vulnerabilities with the end to increase knowlegments to adecuate clinic management of women compared to the men

**PURPOSE:** Review, study and discuss differents factors influencing gender differences in addiction, with the end develop protective factors and decrease vulnerability factors

**METHODS:** Review of recient and relevant bibliography on gender differences in addiction to differents drugs, epidemiology of drug abuse and dependence, clinical aspects, such as psychiatric comorbidity and medical consequences, biological, subjective factors implicated, social matters, and specific barriers to treatment access.

**RESULTS:** In the last years gender differences in substance use disorders (SUDs) have been a focus of research. Although rates of substance abuse are higher in men than women, global studies have indicated that recently women have become increasingly more abusive of drugs and alcohol. We know that distinct gender differences, which increase addiction vulnerability for women, are observed at every phase of the addiction process: drug reinforcement process, acquisition, maintenance, and outcome The main biological factors related to these differences are the role of neuroactive gonadal steroid hormones in craving and relapse, and sex differences in stress reactivity and relapse to substance abuse. Also the role of co-occurring mood and anxiety, eating, and posttraumatic stress disorders and co-occurring medical disorders (HIV, hepatitis C infection) are considered in the epidemiology, natural history, and treatment of women with SUDs.

**CONCLUSIONS:** Although addictios in general have less prevalence in women, they repret more severity in the biological aspect, faster addiction, comorbidity and social consequences in the family and descendency. Women need more accessibility, specific conditions for addiction treatment and prevention differents to the men, besides more research in the theme.

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## SEXUAL ABUSE ON WOMEN AND ADDICTIONS

Elvia Velásquez, President ALAD Latinamerican Association on Addictionology. Profesora Titular Univ de Antioquia, Medellín Colombia. - [elvel10@yahoo.es](mailto:elvel10@yahoo.es)

**EDUCATIONAL OBJECTIVES:** At the conclusion of this presentation, the participants should be able to recognize, differents forms of violences against women as exual abuse and the participation of the alcohol and drug abuse as causal agent or precipitant of sexual abuse, violation or others violences against women

**PURPOSE:** To study the sexual abuse and relations with alcohol and drugs use which increase risks of sexual abuse and violation, with the end to improve clinical skills for treatment and prevention. Sexual Abuse is a traumatic and psychopatogenic factor that affect the victim in your mental health and produce other biological and psychosocial disturbance or still can cause the death.

**METHODS:** Review disponible literature and studies on sexual abuse, to describe types of violences against women and epidemiological, social and psychological characteristics of the sexual abuse, its consequens and management.

**RESULTS:** The 20-50% of women report having been subjected to physical violence by an intimate male partner at least once in their lives (WHO, 1997). Rates change according to definitions of sexual abuse and rape. Some include any form of forced sexual approach, including attempt other consider sexual abuse only when is sexual penetration.

All women in any age could be victim with gender-based violence and sexual abuse from cero years old to old age women. This practice has great cultural component associated with “machismo” and power gender relations or other psychopathic context. It is considered that 15 to 20% is related to alcohol or drugs. Women using alcohol and drugs are more vulnerable to violence and sexual abuse. The stress associated with a history of rape or sexual abuse may be a precipitating factor for drug and alcohol abuse in women.

**CONCLUSIONS:** Sexual abuse is associated with violence and in many cases is related to drugs and alcohol these are inter-related problems that reinforce each other. Awareness programs should be conducted, to support abused women, legislation and policies, as well as clinical intervention, prevention and research.

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## ISPOG SYMPOSIUM - MULTIDISCIPLINARY TEAMWORK IN OB/GYN: OPPORTUNITIES, CHALLENGES AND PITFALLS

**Chair** - K.Marieke Paarlberg- Department of Obstetrics and Gynaecology, Gelre Teaching Hospitals, Apeldoorn, The Netherlands, [km.paarlberg@xs4all.nl](mailto:km.paarlberg@xs4all.nl)

ISPOG is a lively world-wide organization, where professionals working in the field of Obstetrics and Gynaecology meet each other. It is a platform for mutual understanding, science, and education. Therefore, ISPOG is happy to organize a session about multidisciplinary teamwork at the IAWMH congress. In this session, participants are able to take notice of different ways gynaecologists can deal with psychosocial and psychosomatic disorders. They should learn what kind of opportunities, challenges and pitfalls can be faced, when Ob/Gyns and mental health professionals are dealing with these complaints in a complementary way.

## DIFFICULT PATIENTS IN GYNAECOLOGY – PERSONALITY DISORDER

Johannes Bitzer Prof. MD ; Dep Obstetrics and Gynecology ; University Hospital Basel; Switzerland

**EDUCATIONAL OBJECTIVES:** Different studies show the high prevalence of gynecologic patients who suffer from a psychiatric comorbidity, which contributes to their gynecologic problem. The participants should be able to detect, understand and communicate with patients with whom they feel uncomfortable and where the interaction seems disruptive, bothersome and difficult .

**PURPOSE:** To elaborate and present an educational tool for gynecologists to help them to detect and handle the psychiatric comorbidity

**METHODS:** The development of the tool is based on clinical case discussions, literature review, gynecological and psychiatric classifications of disease and manuals and analysis of the outpatients of the Department of Obstetrics and Gynecology ; University Hospital Basel

**RESULTS:** An educational tool for gynecologists to diagnose and manage patients with chronic pelvic pain, vulvodynia, affective disorders with physical symptoms and patients with the most frequent personality disorders

**CONCLUSIONS:** Gynecologists should be trained in handling so called difficult patients by teaching them to diagnose typical psychiatric comorbidities in their patients.

## INTERDISCIPLINARY CARE FOR DRUG-ADDICTED WOMEN DURING PREGNANCY AND POSTPARTUM

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Pregnancies of drug-addicted women have in principal to be considered as risk pregnancies. These pregnant women do not only take drugs and thus harm themselves and their child. Due to their drug-addiction, they normally also live under difficult psychosocial conditions. Many of them suffer from additional mental health problems and psychiatric disorders. It is not uncommon that they do not regularly attend prenatal care visits. To care and follow drug-addicted pregnant women is therefore

particularly challenging and requires interdisciplinary collaboration. The Basel model of care for drug-addicted pregnant women is based on these assumptions. It comprises a round table - meeting of all (health) professionals involved in the third trimester of pregnancy. This guarantees the information transfer and exchange between all caregivers and paves the way for a good start into motherhood of the women concerned. Even then, however, many drug-addicted parents will not succeed in maintaining the necessary stability to take care of their child permanently. Besides some background information and recent study findings the Basel model will be presented and discussed.

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### MULTIDISCIPLINARY PSYCHIATRIC-OBSTETRIC-PEDIATRIC CONSULTATION IN A GENERAL TEACHING HOSPITAL

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**PURPOSE:** Pregnant women with psychiatric diseases, and/or use of psychotropic medication and, in particular, women with psychosocial problems (e.g. homelessness, low intelligence, teenage pregnancy, drug abuse, physically an/or sexually abuse etc.) face increased maternal, foetal and neonatal risks which cannot be managed by a midwife or obstetrician alone.

**METHODS:** In many General Teaching Hospitals in The Netherlands, a system of multidisciplinary care has been developed, in which a multidisciplinary team of

psychiatrist, psychologist, obstetrician, paediatrician, social worker, teenage pregnancy counsellor, midwife, pedagogue and mental health care nurse formulate and practice comprehensive guidance and treatment modalities. Preferably, if possible, this counselling is done before pregnancy. The example of Gelre Teaching Hospital Apeldoorn will be explained.

**RESULTS:** All partners in care, and the pregnant woman herself and her partner, if present, know when and what is necessary to do. Paediatricians know in advance the children at potential psychosocial risk. Video home training for babies is used to improve bonding and attachment between the parent(s) and the baby. In more complicated cases, Infant Mental Health is used to improve parent-baby interaction. Health care givers in the whole chain have become more sensitive in recognizing pregnant women at risk.

**CONCLUSIONS:** This multidisciplinary initiative has improved the healthcare for pregnant women with psychiatric diseases and women with psychosocial problems. Cross-border consultation results in more effective healthcare and improved care for the babies born in this project.

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### MULTIDISCIPLINARY INTERACTION IN A HIGH RISK PREGNANCY CONSULTATION

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Psychosomatics chapter, Sociedad de Obstetricia y Ginecología de Buenos Aires -

**PURPOSE:** Pregnant women with nephrologic and hypertensive disorders need to be treated in multidisciplinary way; not only medically, but also psychologically. Recently, a psychiatrist has been

added to the team. In this presentation it will be pointed out how this functions in practice.

**METHODS:** Since many years, in our hospital (a public teaching tertiary level hospital) we have been working as a team in the outpatient care with an obstetrician and a nephrologist in a high risk consultation dedicated to hypertension, preeclampsia, nephropathies, dialysis and transplantation in pregnancy. Many of the patients are dependent to us because we are a 3<sup>rd</sup> level hospital. Therefore, we frequently get to know them in the second trimester of pregnancy.

Since last year we have included a psychiatrist in our team. Here we describe the method we have developed to deal with these patients and the results we are having until now. Outside of the consultation, in the hospital, we also refer those patients to the social worker, and midwife.

**RESULTS:** Our population is a very low income one. Therefore, it is almost impossible to have any contact with patients before pregnancy. During pregnancy it is important to have a quick approach to these high risk patients. Here we describe how we manage the multidisciplinary work and how the incorporation of the psychiatrist enhanced our care of these patients. We also describe the results of The Edinburgh Depression Scale (EDS) we asked our patients to complete and their results compared with a normal pregnant population.

**CONCLUSIONS:** This multidisciplinary approach and the incorporation of a mental health professional have improved the healthcare for high risk pregnant. Also this organization led us to early diagnosis of psychiatric conditions that could worsen the development of the pregnancy and the newborn care.

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## TRANSDICCIPLINARY PERSPECTIVE ON CHRONIC STRESS AS A SOURCE OF PSYCHOPATHOLOGY IN WOMEN

**Chair** - Enrique Galli S. Universidad Peruana Cayetano Heredia. Universidad Peruana Cayetano Heredia. Lima Peru, [secpsiquiatria@crp.com.pe](mailto:secpsiquiatria@crp.com.pe)

Research suggests that there are differences in the way endocrine and immune systems interact in women and in men. This symposium will present a summary of sex and gender differences in brain structure and function, the role of hormones, the cortico-hypothalamic-hypophysis- adrenal axis, genetics, immune responses and the relationship of cytokines and brain tissue. We will also examine some bio-psychosocial elements that are important for women and the effect of stress on pregnancy related disorders, seasonal depression and the development of infant-mother bonding. These topics are extremely important as they allow us to approach the study and management of mental disorders in

### THE TRANSDICCIPLINARY PERSPECTIVE OF HEALTH

Prof. Dr. Enrique Galli. Universidad Peruana Cayetano Heredia. Lima Peru - [secpsiquiatria@crp.com.pe](mailto:secpsiquiatria@crp.com.pe)

The allostatic load model represents a clear example of interdisciplinary approach to understanding and conceptualization quantitative relationship between chronic stress and medical and Psychiatric pathology during the woman's life. The biggest obstacle to this transdisciplinary perspective has been the existence of like multidimensional constructs psychological environmental psychological subjective, biological target, etc. The biopsychosocial model with allostatic load well explained the body exceptions and the experiences in the body products chronic stress. The traditional operational dissemination of allostatic load involves neuroendocrine, immune, metabolic and cardiovascular dysregulation (Seeman, Singer, Rowe, Horwitz & McEwen, 1997).

The Lupien and colleagues model (2006 - 2010) goes is from the early adversity of women and genetic and epigenetic factors, to mediation and modulation of environmental toxins, to interactions with sexual biology, gender and sex hormones, cortisol and cytokines, among other immunoendocrine factors.

The HPA axis and the SAM (sympathetic adrenal-modular) are examples of stress response in allostasis, which is nothing but an adaptation of biological process that preserve human stability

## **PSYCHONEUROIMUNOENDOCRINOLOGY IN WOMEN**

Dr. Jorge Santiago. Universidad de Buenos Aires, Buenos Aires, Argentina

Psiconeuroinmunoendocrine process include communication between the nervous, immune, endocrine and mental process. They are integrated in a systemic network of communication in which their communication molecules, neurotransmitters, cytokines and hormones may modulate the activity of this psiconeuroinmunoendocrine network. The immune cytokines, peptide hormones, corticosteroids and sex steroids alter the brain activity that influence on behavior, emotions and neurotransmission. Neuropeptides and neurotransmitters modulate the activity of the immune networks. There are brain regions implicated in immune regulation which present lateralization.

Psiconeuroinmunoendocrine responses in women have a different activation pattern that men, partly because of genetic predisposition, partly because of cultural influences, environmental and epigenetic transmission. Gender differences include brain morphology and different responses to sex hormones, stress responses, the sensitivity of the limbic-cortical axis hypothalamus-pituitary-adrenal, behavioral and emotional responses, immune responses and proinflammatory cytokine patterns, predisposition to infection and autoimmunity, pain sensitivity, sleep patterns and genetic differences. Also there are different patterns in women psiconeuroinmunoendócrinos according to stages of life and at different stages of the sexual cycle, which occurs in brain remodeling neurogenesis. The gender psiconeuroinmunoendocrinology is a research field that is growing.

## **STRESS AND ITS EFFECT ON WOMEN'S HEALTH**

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The stress has been characterized, both physiologically and behaviorally, as "fight-or flight response. But

females' responses are more likely to be more nurturant in their involvement with stress. As they experience different psychosocial moments that men, like being a mother, she tends to develop a love response. The love response is a coordinated fusion of varied emotions, thoughts, positive neuropathways, and reward mechanisms that ultimately allow the body, mind, and spirit to maintain equilibrium even when faced stress. The peptides and hormones released with love, including endorphins, oxytocin, dopamine, vasopressin and nitric oxide, that help to turn off the fear response, evoke the relaxation response and create a positive physiology.

## **SEASONAL DEPRESSION AS THE RESULT OF CHRONIC STRESS AND LIGHT DEPRIVATION**

Dr. Enrique Galli Jr.

Seasonal Affective Disorder (SAD) manifests as depressive episodes with recurrent characteristics at a specific time of the year (winter). This may occur on either bipolar or monopolar patients. Symptoms vary but Atypical Depression is common. Women is a special population because the female to male ratio in Seasonal Depression is even higher than in non-seasonal Depression. Besides its interesting also that many female patients with SAD also suffer from premenstrual dysphoric disorder, and light therapy improves this condition too.

Different theories try to explain the pathophysiology of the disorder including a chronobiological one (light and the circadian system) and a monoamine related model (serotonin fluctuation with the season). The environment and chronic stress have an important effect on the female population and may also help explain the epidemiological and clinical differences between the two genders.

Bright-Light Therapy has been used in SAD, as well as on other disorders, such as bipolar depression, premenstrual dysphoric disorder and even some anxiety disorders. Given this is a non-pharmacological approach, in women it has even more value as it would have no negative effect or risk in pregnant population.

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## DEPRESSION DURING PREGNANCY AND POSTPARTUM IN CHILE AND BRAZIL

**Chairs** - Graciela Rojas, University of Chile and Enrique Jadresic, University of Chile, Las Condes Clinic, [graciela.rojas.castillo@gmail.com](mailto:graciela.rojas.castillo@gmail.com)

### INTEGRATING WOMEN'S MENTAL HEALTH INTO PRIMARY CARE: THE CHILEAN EXPERIENCE.

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In the last twenty years Chile has incorporated mental health programs into the primary care level. Some efforts concern the mental health of women in general and perinatal mental health in particular. Firstly, epidemiological studies that were conducted in the country, which demonstrated the importance of mental health in the perinatal period, will be described. Then, the public funded program "Chile grows with you" (Ch.C.C.) will be explained.

Several Chilean studies have determined that about 30% of pregnant women experience unspecific, isolated, mild depressive and/or anxiety symptoms and one out of seven develops a depressive illness. In turn, 40-50% of Chilean mothers exhibit depressive and/or anxiety symptoms following childbirth and at least one in ten acquires a postpartum depression (PPD). Stressful life events, marital conflicts or lack of a partner, unwanted pregnancy, having depressive and/or anxiety symptoms during pregnancy and coming from families with lower incomes are all variables that have been shown to be significantly associated with PPD in Chile.

A randomized controlled trial was carried out in primary care clinics and revealed that treatment of depressed postpartum women by non-medical health workers is not only possible but also effective. This study demonstrated that a multi-component intervention can attain better outcome results after three months when compared to a usual care control group. The intervention included psycho-educational groups, medical consultations, structured pharmacotherapy and systematic monitoring and maintenance of treatment adherence. At three months recovery was 61% (95% CI 51-71%) in the study group versus 34% (95% CI 25-44%) in the usual care group.

Ch.C.C. main objectives are to facilitate a normal psychological and physical development in early childhood, reduce existing inequalities, and promote children's rights. Achieving these objectives requires a significant change in the quantity and quality of services available to children up to four years of age. Pregnant women and children covered by the public health system, representing 84% of the total maternal and infant population in Chile, receive augmented health care services, including education groups on parenting skills, child and mother health care, counseling, and referral services. The program focuses intensive interventions on the families of children living in poverty or with other psychosocial vulnerabilities, representing 40% of the children population.

The Chilean experience demonstrated that the development of mental health programs aimed at helping women and their children in the primary care level is possible. Many variables influenced this development.

### DEPRESSION DURING PREGNANCY: PREVALENCE AND RISK FACTORS AMONG WOMEN ATTENDING A PUBLIC HEALTH CLINIC IN RIO DE JANEIRO, Brazil.

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Giovanni Lovisi, Daniel Pilowsky, Lúcia Abelha, Leticia Fortes, Elie Valencia. University of Rio de Janeiro, Brazil.

Depression is the most prevalent psychiatric disorder during pregnancy and is associated with psychosocial and clinical obstetric factors. Despite being an important public health issue, there are few studies about this issue in Brazil. A cross-sectional study was carried out, involving 331 pregnant women attending a public primary health service over a one-year period in Rio de Janeiro city, Brazil. Participants were interviewed about their socio-demographic status, obstetric/ medical conditions, life events and violence during pregnancy. Depression was assessed using the Composite International Development Interview. The prevalence of depression during pregnancy was 14.2% (95%CI: 10.7-18.5) and associated factors included: previous history of depression and any psychiatric treatment, unplanned pregnancy, serious physical illness and casual jobs. These data emphasize the need

for screening for depression and its risk factors during pregnancy in settings where care is available. Psychosocial interventions and social policies need to be devised for this population.

### **EFFICACY OF A PROGRAM FOR THE MANAGEMENT OF DEPRESSION (PMD) FOR PREGNANT WOMEN ATTENDING PRENATAL CARE IN PRIMARY CARE CLINICS IN SÃO PAULO.**

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Paulo R Menezes, Ricardo Araya, Alexandre Faisal Cury and the PROGRAVIDA research group.  
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Depression is one of the ten most important public health problems worldwide, affecting mainly women, and many experience their first episode of depression during pregnancy or after delivery. The prevalence of perinatal depression is about three times higher in middle or low income countries compared to developed countries. Despite this, there are still scarce evidence on the effectiveness of low cost interventions for the treatment of depressed pregnant women that can be made available at the primary health care level in middle and low income countries. **Objectives:** To evaluate the effectiveness of a simple and low cost depression management program, delivered by nurse assistants, in reducing symptoms of depression in pregnant women who receive prenatal care at Primary Care clinics in São Paulo, compared to routine care. **Method:** We are conducting a community randomized trial with pregnant women with symptoms of depression, accompanied by pre-natal units that adopt the ESF (Estratégia de Saúde da Família) in São Paulo. Participating teams were randomly allocated to have their nurse assistants trained and supervised to deliver the intervention (experimental group) or to offer routine care (control group). The primary outcome is the presence and intensity of depressive symptoms six months after delivery. **Program management for depression (PMD):** The intervention is based on a collaborative model of progressive care, containing elements of Problem Solving (PS), monitoring the intensity of symptoms of depression and treatment adherence, and relapse prevention. The progressive model of care involves the use of therapeutic action of increasing complexity, depending on the severity of depression and response to treatment at each level of

complexity. **Results:** So far, over 300 women have been included in the study. Overall, nurse assistants are engaged and satisfied with their participation as main actors delivering the intervention.

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### **GENDER DIFFERENCES IN MENTAL HEALTH IN LATIN AMERICA AND EUROPE: THE EXAMPLES OF BRAZIL AND PORTUGAL**

**Chair** - Prof. Graça Cardoso, Faculty of Medical Sciences, New University of Lisbon, Lisbon, Portugal, [graca.cardoso@fcm.unl.pt](mailto:graca.cardoso@fcm.unl.pt), [gracacardoso@gmail.com](mailto:gracacardoso@gmail.com)

**BACKGROUND:** Epidemiological surveys have shown gender differences in mental disorders prevalence rates and clinical manifestations in a very consistent way. Generally, women present more anxiety and mood disorders, while substance use and externalizing disorders have higher rates among men. Biological, psychological and social factors have been accounted for these differences, with gender role as an important contributor. Societies where a wider gap between women and men roles exist could probably show greater differences in the distribution of mental disorders, that would be smaller as these roles become more equal.

**GOALS:** To discuss differences in mental disorders distribution and clinical presentation in both genders in Latin America and Europe, as well as the specific social and cultural factors that significantly influence these differences.

**OBJECTIVES:** To compare the main results of the psychiatric surveys developed in Brazil and Portugal within the World Mental health Surveys Initiative related with the gender differences and mental health.

**IMPORTANCE:** The results of the WMHS data make possible a better understanding of gender differences in mental disorders, through comparison of two Portuguese-speaking countries sharing many cultural references but belonging to different regions and development contexts. The results of this analysis represent a good opportunity to discuss epidemiological aspects of mental disorders and gender differences in different social and cultural contexts.

## DIFFERENCES IN MENTAL DISORDERS AND GENDER IN PORTUGAL: THE WORLD MENTAL HEALTH SURVEY FINDINGS

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**BACKGROUND:** Gender differences in mental disorders prevalence rates and clinical manifestations have been consistently shown in epidemiological surveys.

Generally, anxiety and mood disorders are more prevalent in women, while substance use and externalizing disorders have higher rates among men. Biological, psychological and social factors have been accounted for these differences, with gender role considered an important contributor.

**METHODS:** A stratified multistage clustered area probability sample of Portuguese household residents, 18 years of age or above, nationally representative from the mainland was used in the WMH Survey in Portugal. All interviews were administered face-to-face by trained lay interviewers in 2008 and 2009. Mental disorders were assessed with Version 3.0 of the WHO Composite International Diagnostic Interview (CIDI), a fully-structured diagnostic interview.

**RESULTS:** The Portuguese sample (n=3,849) presented a majority of women (51.9%), and of at least high school education (54.8%), and a mean age of 46.5 years. Anxiety disorders were the most prevalent in women followed by mood disorders. Women had a higher prevalence rate of anxiety and mood disorders while men had more substance and other externalizing disorders. Compared to men, women were at greater risk of presenting any mental disorder, (OR=2.2, 95% CI 1.68-2.88), of more severe forms of mental disorders (OR=1.2, 95% CI 0.72-2.01), and of having received any kind of treatment in the previous 12-months (OR=2.2, 95% CI 1.63-2.98). Finally, women were more frequently using psychotropic drugs than men, mainly benzodiazepines (24.3% vs. 9.8%) and anti-depressants (13.2% vs. 3.9%).

**CONCLUSIONS:** In the WMH Survey in Portugal, as in the majority of other developed and developing countries of the WMH Surveys, women presented a higher prevalence of anxiety and mood disorders when compared to men. The importance of gender role, and

of social and cultural contexts in mental disorders clinical presentation and distribution will be discussed.

## GENDER DIFFERENCES IN EXPOSURE TO TRAUMATIC EVENTS AND POST-TRAUMATIC STRESS DISORDER IN THE SÃO PAULO MEGACITY MENTAL HEALTH SURVEY, BRAZIL: PREVALENCE, DISTRIBUTION AND CONDITIONAL RISK

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**INTRODUCTION:** Exposure to traumatic events (TE) are often associated with Post-Traumatic Stress Disorder (PTSD). This paper examines gender differences in the distribution of TE leading to PTSD and the conditional for risk associated with each TE in the general population living in the largest South American metropolitan area.

**METHODS:** The São Paulo Megacity Mental Health Survey is a population-based cross-sectional study assessing a probabilistic sample of adult (18+) residents in the São Paulo Metropolitan Area. A total of 5,037 subjects (response rate 81.3%) were assessed using the World Mental Health Survey Composite International Diagnostic Interview (WMH-CIDI).

**RESULTS:** presented herein are from a sub-sample of 2,942 respondents, who received the PTSD diagnostic section, which assessed the exposure to a series of TE and diagnostic criteria for PTSD.

**Results:** The global prevalence of lifetime PTSD was 3.2% (SE 0.2), and it was 3 times more frequent (OR 3.0 95%CI 1.6-5.7) among women (4.6% SE 0.4) compared to men (1.6% SE 0.42). While most TE involving personal violence against men were resulting from urban violence, women were more victimized by domestic and sexual violence. For both, men and women, the most frequent cause of PTSD was sudden unexpected death of a loved one, accounting for 34% of all PTSD cases, followed by being mugged or threatened with a weapon among women (13.3%), and being beaten up as a child by a caregiver among men (10%). The exposure to rape and sexual assault presented the highest conditional risk for PTSD, both, for men (20.1%) and women (40%).

**CONCLUSION:** Although exposure to potentially traumatic events was frequently reported, the

prevalence of subsequent PTSD was relatively low, and more frequent among women compared to men. Overall, different traumatic events led to PTSD among males and females, but the higher conditional risk for PTSD was associated with sexual violence for both genders.

### **GENDER DIFFERENCES IN THE SYMPTOMATIC PRESENTATION OF DEPRESSION: RESULTS FROM THE SÃO PAULO MEGACITY MENTAL HEALTH SURVEY**

Clóvis Alexandrino-Silva<sup>1</sup>, MD; Yuan-Pang Wang<sup>1</sup>, MD, PhD; Maria Carmen Viana<sup>1</sup>, MD, PhD; Rodrigo S. Bulhões<sup>2</sup>, BSc; \*Sílvia S. Martins<sup>3</sup>, MD, PhD; \***Laura Helena Andrade**<sup>1</sup>, MD, PhD

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**BACKGROUND:** Depression is a heterogeneous clinical syndrome characterized by distinct symptoms profiles. However, few studies have investigated depressive subtypes and their correlates, separately, according to gender.

**METHODS:** The data are from the São Paulo Megacity Mental Health Survey. Symptoms profiles of 1212 subjects (869 women and 343 men) on depressive plus anxiety and manic/hypomanic symptoms of the worst depressive episode in their lifetime were investigated through latent class analysis. The association between correlates and the best gender-specific latent class model was examined by logistic regression.

**RESULTS:** For women, a 3-class model was the best solution: melancholic (39.3%), atypical (19.5%), and mild (41.1%), with the two most symptomatic classes differing among each other in relation to somatic/vegetative symptoms. Subjects in the melancholic and atypical classes were more likely to present lifetime comorbidity with bipolar spectrum, anxiety disorder, alcohol/drug dependence, and to have higher education as compared to those in the mild class. Females in the melancholic class presented greater disability, comorbidity with premenstrual dysphoric disorder, and were more likely to be

previously married than those in the mild class. For men, a 3-class solution emerged: retarded (40.4%), agitated (19.6%), and mild (40.1%), but instead of somatic symptoms the two most symptomatic classes among men differed with regard to psychomotor activity. Males in the retarded class were more likely to have lifetime anxiety disorder and nicotine dependence than those in the mild class. The highest between-class proportion of subjective and objective agitation (100% and 94%, respectively) and racing thoughts (43.9%) was found among men in the agitated class, who displayed a symptomatic profile similar to a bipolar mixed state.

**CONCLUSIONS:** Our population-based study confirms the symptomatic heterogeneity of the construct of depression of current classifications, where subtypes can be recognized at the symptom level. The differences observed in symptoms profiles between genders and comorbidity with other psychiatric disorders have implications for the choice of treatment. These findings might also contribute to establish sound specifiers and criteria for the future nosology of depression.

### **IMPACT OF GENDER ON SERVICE USE EQUITY IN MENTAL DISORDERS: RESULTS FROM THE WORLD MENTAL HEALTH SURVEY IN PORTUGAL**

Manuela Silva, MD, MSc<sup>1</sup>, Graça Cardoso, MD, PhD<sup>2</sup>; Miguel Xavier, MD, PhD<sup>2</sup>; José Caldas-de-Almeida, MD, PhD<sup>2</sup>

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**BACKGROUND:** Research consistently finds that women use primary healthcare services more often than men for mental health issues, although there is little gender difference in the use of hospital services for mental illness. This difference in rates of use is often explained by reporting biases, attitudinal differences, variations in levels of need and type of mental disorder, and social determinants of use.

**METHODS:** A stratified multistage clustered area probability sample of Portuguese household residents, 18 years of age or above, nationally representative from the mainland was used in the WMH Survey in Portugal. All interviews were administered face-to-face by trained lay interviewers in 2008 and 2009. Mental disorders were assessed with Version 3.0 of the WHO

Composite International Diagnostic Interview (CIDI), a fully-structured diagnostic interview.

**RESULTS:** Women make more use of mental health services than men (OR=2.20, 95% CI 1.63-2.98), for all types of health care providers. 31.7% of Portuguese women have sought help from a general practitioner for a mental health problem and 19.1% from a psychiatrist. Being separated, widowed or divorced is an important risk factor for explaining health services usage in both men and women (OR=2.26, 95% CI 1.51-3.40). Health services are sought most often by the middle age groups (OR=2.2, 95% CI 1.1-4.5 for age 50-64), both in men and women, and by those having suffered from a mood or anxiety disorder.

**CONCLUSIONS:** In the WMH Survey in Portugal, it was found that women make more use of mental health services than men, and some social factors for the use of health services were identified. These findings are important for planning effective interventions and services for mental health.

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## A WOMEN'S APPROACH OF (MENTAL) HEALTH

**Chair** - Patricia J.M. van Wijngaarden- Cremers MD, Expert Consultant psychiatrist - COS: Centre for Developmental disorders & Addiction Psychiatry Dimence: Mental Health Province of Overijssel the Netherlands, Senior researcher University Medical Centre Nijmegen St. Radboud on Developmental Psychopathology and Gender, [p.vanwijngaarden@dimence.nl](mailto:p.vanwijngaarden@dimence.nl)

In this symposium / Workshop the topic of a Women's approach to (Mental) Health will be approached from two different angles:

- 1) From a scientific point of view a different approach to understanding and recognizing psychopathology in women will be proposed, considering that neurobiological and neuropsychological underpinnings of emotional and behavioural disturbances are different in females as compared to males. Because many "disorders" have been defined from an externalizing men's point of view, they can be misinterpreted or overlooked in women
- 2) (Mental) health professions are feminizing. We will see that it represents a great asset from

the practical point of view. But will women take over the management and organize services in a patient centered way?

## PSYCHOPATHOLOGY AND PSYCHIATRIC DISORDERS

Patricia J.M. van Wijngaarden- Cremers MD, Expert Consultant psychiatrist - COS: Centre for Developmental disorders & Addiction Psychiatry Dimence: Mental Health Province of Overijssel the Netherlands, Senior researcher University Medical Centre Nijmegen St. Radboud on Developmental Psychopathology and Gender, [p.vanwijngaarden@dimence.nl](mailto:p.vanwijngaarden@dimence.nl)

**BACKGROUND AND PURPOSE** Psychopathology and psychiatric disorders have mainly been defined by behavioural characteristics over the past three decades.

**METHODS AND RESULTS** This systematization has fostered research at various underlying levels. These are: genetics and epigenetics, brain morphology, neural networks and connectivity, patterns of neurotransmission and stress regulation, neuropsychology. Psychopathology can be operationalized in a more developmental and interactive fashion. In that perspective behaviour can be perceived as the dynamic result of interactions between the factors mentioned previously and the environment as early as in the womb. Thus all psychopathology can be perceived as developmental psychopathology with risk and protective factors.

Genetic (pre)disposition

↑↓ ↔ *womb-environment*

epigenetic phenomena

↑↓ ↔ *(womb) environment*

functional pathways – connectivity - neurotransmitters

↑↓ ↔ *environment*

Neuro-cognitive profile

information processing style / capacities

↑↓ ↔ *environment*

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**behavioural phenotype**

↑↓

*social context - environment*

**CONCLUSIONS** Interestingly it appears that underlying mechanisms are not specifically linked to clinical

syndromes: e.g. the same disturbances in the neuropsychological executive functions are seen in clinical pictures as different as depression, schizophrenia, autism or addiction! These findings lead to a more comprehensive understanding of underlying mechanisms in psychopathology. Yet too little attention has been given to gender related factors. Thus developmental deficits or deviances can manifest in different ways in females as compared to males. If clinicians are not acutely aware of these facts, women are often misdiagnosed with internalizing disorders or personality disorders, whereas they in fact have developmental disorders such as ADHD or autism spectrum disorders that ask for a very different clinical approach.

**EDUCATIONAL OBJECTIVE:** the participant will have a new and better understanding of the role of nature and nurture in a multilayered transactional developmental perspective, better fit for understanding psychopathology, diagnosing and treating mental disorders, with special attention for gender influences on the clinical expression.

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**FEMINIZATION IN MEDICAL AND OTHER CARE PROFESSIONS: CHANCES FOR BETTER CARE & RISKS FOR CONTINUITY**

Rutger Jan van der Gaag MD PhD, Professor of Psychiatry (Child & Adolescent) University Medical Centre Nijmegen St. Radboud, President of the Royal Dutch Medical Association (KNMG), [R.vanderGaag@psy.umcn.nl](mailto:R.vanderGaag@psy.umcn.nl)

**BACKGROUND & PURPOSE:** Feminization of professions is no new phenomenon at the level of nursing, counseling and social work, but is becoming more and more prominent in medical and psychological professions. Some see this as a threat and devaluation, but in our opinion the advantages prevail above disadvantages that need to be addressed.

Girls are better at school and pursue this in terms of study performances throughout college and university. In primary care and specializations the 60% women are equally represented in medical and psychological professions. Thus women form the core body of adequate and high quality professional (mental) health care.

Yet in managerial positions in Western European countries women in health professions are underrepresented. There are obviously different reasons for this lack of involvement. There are obviously practical reasons why women are reluctant to engage in time consuming managerial activities. For example women experiencing to a higher degree the double burden of work and domestic/family responsibilities. But they also seem less inclined to enter the jungle of administration and combat for the means of existence of their services and departments, let stand grants and project administration.

**METHODS AND RESULTS** In this presentation data and experiences from a series of conferences amongst female physicians in 2012 in the different districts of the Royal Dutch Medical Association will be presented to review the evidence for these hypotheses. Moreover we will discuss the necessity for such engagements of women to strengthen their positions in the field and stimulate a shift towards a more patient centered (mental) health system.

**CONCLUSION:** Women's involvement in health care and the organization and management of care are essential and will be beneficial to all. Yet special attention is required for competences needed and which should be involved in the (medical – specialization) curriculum to help women achieve these objectives!

**EDUCATIONAL OBJECTIVES:** to draw attention and elicit discussion on feminization in (mental) health care professions.

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## SUBSTANCE ABUSE AND MENTAL HEALTH IN SPECIAL POPULATIONS OF WOMEN: AN INTERNATIONAL PERSPECTIVE

**Chair** - Dace S. Svikis, Ph.D., Virginia Commonwealth University, Richmond, Virginia, USA,

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**Co-Chair** - Gabriela Olivera, National Drug Assembly - Presidency Of Uruguay, Gender Secretariat, Coordinator

While Psychiatric Disorders And Substance Abuse (SA) Co-Occur In Women More Often Than Expected By Chance, Prevalence Rates Vary Both Within And Across Countries Throughout The World. Further, Incidence And Severity Can Be Impact By Physical And Sexual Abuse, And WHO Recently Estimated Between 15 – 71% Of Women Around The World Suffered Physical Or Sexual Violence By An Intimate Male Partner At Some Point In Their Lives. Clearly, Some Women Are More Vulnerable To SA And Mental Illness (MI) Than Others. Understanding These High Risk Populations Is Important, As They Can Help To Elucidate Promising Targets For Treatment And Prevention.

The Goal of This Symposium Is To Examine Patterns Of SA And MI In 4 Special Populations From 4 Diverse Geographic Areas. First, Drs. Svikis And Rusakova Will Describe The Recent Rise In Consumption Of Caffeine-Containing Energy Drinks, Presenting Demographic And Psychosocial Data From School-Based Adolescent And Young Adult Women Residing In Russia And The USA. Next, Drs. Velez And Jansson Will Summarize Maternal SA And MI Data From USA Studies Of Prescription Opiate Misuse Which Has Reached Epidemic Proportions Among Pregnant Women. The Impact Of Such Use On Mother And Infant Will Also Be Highlighted. Third, Professor Howard Will Present Demographic And Clinical Characteristics, Including SA And MH Data, For UK Victims Of Human Trafficking Obtained From A London Mental Health Clinic. Finally, Drs. Olivera And Pascale Will Discuss The Association Between SA And MI In A Sample Of Imprisoned Women In The Country Of Uruguay. Finally, The Discussion Will Highlight Common Patterns As Well As Unique Differences Across The 4 Diverse Special Populations Of Women.

### REFERENCES:

- Dace S. Svikis, Ph.D (Virginia Commonwealth University, Richmond, Virginia, USA)

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- Correlates Of Caffeine Use In Adolescent/Young Adult Women From Russia And The USA
- Martha Velez, M.D. And Lauren Jansson, M.D. (Johns Hopkins University School Of Medicine, Baltimore, Maryland, USA) [Mvelez@Jhmi.Edu](mailto:Mvelez@Jhmi.Edu)
  - Prescription And Other Opioid Dependence In Pregnant Women In The USA
- Prof. Louise Howard (Section Of Women's Mental Health, Institute Of Psychiatry, King's College London's) [Louise.Howard@Kcl.Ac.Uk](mailto:Louise.Howard@Kcl.Ac.Uk)
  - Socio-Demographic And Clinical Characteristics Of UK Victims Of Human Trafficking: Findings From A London Mental Health Clinic.
- Gabriela Olivera (National Drug Assembly - Presidency Of Uruguay, Gender Secretariat, Coordinator) and Dr. Antonio Pascale (Medical Toxicologist. School Of Medicine. University Of The Republic) Montevideo, Uruguay. [Gabrielaoliverau@gmail.com](mailto:Gabrielaoliverau@gmail.com)
  - Association Between Mental Health And Drug Abuse In The Imprisoned Women Of Uruguay.

### CORRELATES OF CAFFEINE USE IN ADOLESCENT/YOUNG ADULT WOMEN FROM RUSSIA AND THE USA

Dr. Dace Svikis (1), Dr Maia Rusakova (2), Dr. Pamela Dillon (1), Ms. Pamela Nora (1).

1) Virginia Commonwealth University, Institute For Drug And Alcohol Studies; Institute For Women's Health; Richmond, Virginia, USA 2) Stellit And St. Petersburg State University, St. Petersburg, Russia

**PURPOSE** The Exponential Growth Worldwide In Consumption Of Caffeine-Containing Energy Drinks, With Caffeine Content As High As 500 Mg Per Can Or Bottle, Has Focused Attention On Potential Adverse Physical And Psychological Consequences. Among Young Adult (18-21 Year Old) Women, Combining Of Energy Drinks With Alcohol Raises Further Concern. The Purpose Of This Presentation Is To Present Caffeine Use Data (Including Caffeine-Containing Energy Drinks) For Adolescent And Young Adult Women From Russia And The USA. We Will Also Describe Other Substance Use And Mental Health Symptoms Associated With Such Use.

**METHODS** Survey Data From Multiple Sources Will Be Presented. Data Collection Sites Are Located In Richmond, VA And St. Petersburg, Russia. Whenever Possible, Standardized Items Are Used To Survey Girls/Women About Demographics, Caffeine, Alcohol And Other Substance Use, As Well As Mood, Affect And Emotional Well-Being. Items Are Translated And Modified To Fit Cultural Norms (E.G., Brands And Beverage Sizes For Caffeine-Containing Energy Drinks). When Appropriate, Comparisons Are Made Using Student's T-Tests For Continuous Measures And Chi-Square For Categorical Variables.

**RESULTS** In One Analysis (N=474), Regular Caffeine Use (Daily Coffee) Was Associated With Higher Levels Of Alcohol Use And Greater Alcohol Related Problems (E.G., Need To Cut Down; Felt Guilty About Drinking; Drank In Situation Where Could Get Hurt). Young Women Who Consumed Caffeine Daily Also Reported More Severe Symptoms Of PMS Than Non-Daily Users, Including Anxiety, Malaise, Tearful/Crying Easily, Mood Swings, And Feeling Sad/Blue (All  $P < .05$ ;  $N=116$ ). Approximately 15% Of Young Females Reported Use Of Caffeine-Containing Energy Drinks ( $N=92$ ) And 13.5% Consumed Them In Combination With Alcohol.

**CONCLUSIONS** Caffeine Use Is Prevalent And Consumed In Various Forms That Include Coffee, Tea, Colas And Energy Drinks. Preliminary Analyses Found Associations Between Regular Caffeine (Daily Coffee) Use And Heavy/Problem Alcohol Use. Women Who Were Daily Coffee Drinkers Also Reported More Severe Symptoms Of PMS. Additional Analyses Are Planned

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#### OPIOID DEPENDENCE IN PREGNANT WOMEN IN THE USA

Martha Velez, M.D.\*; Lauren M Jansson, M.D.\*  
\*Johns Hopkins University School Of Medicine, Department Of Pediatrics, Baltimore, Maryland

**PURPOSE:** Opioid Use During Pregnancy Is A Growing Public Health Concern Due To The Rise In Abuse Of Prescription Opioids (E.G., Hydrocodone, Oxycodone) Among Women Of Childbearing Age, And The Rising Incidence, Morbidity And Health Costs Related To Neonatal Abstinence Syndrome (NAS) Suffered By The Infant Exposed To Opioids In Utero. The Goals Of This Presentation Are To Describe: 1) The Effects Of Opioid Exposure On Fetal And Infant Neurodevelopment, 2) The Pharmacological And No Pharmacological Treatment Of Opioid-Dependent Pregnant And Postpartum Women, And 3) Therapeutic Interventions For The Opioid-Exposed Dyad.

**METHODS:** Opioid Dependent Pregnant Women And Their Infants Who Receive Treatment At An Urban, Comprehensive Mother/Child-Centered Treatment Program For Drug-Dependent Pregnant And Post Partum Women And Their Children Have Been Evaluated To Understand Their Psychosocial Characteristics, Obstetrical Complications And Neonatal Outcomes. In Addition, Fetal And Neonatal Neurobehaviors And The NAS Course Of Infants Exposed To Assisted Medication Treatment (Methadone Or Buprenorphine) During Gestation And Their Treatment Have Been Evaluated. Concentrations Of Methadone In Breast Milk Of Methadone Maintained Women Have Been Elucidated.

**RESULTS:** Participants Tend To Be Multigravid (75%), Near 30 Years Of Age (Mean = 29.4 Years, Sd = 5.7), Varied In Race And Ethnicity (40% African American, 57.5% Caucasian, 2.5% Hispanic), And Unmarried (92.5%). Prescribed Substances Included Psychotropic Medications, Primarily Antidepressants (40%), Asthma Medications (5%), And Antibiotics (12.5%). Most (85%) Smoke Cigarettes Regularly. Methadone Maintenance Is The Current Treatment Of Choice For Opioid Dependent Pregnant Women. In Samples Of Mothers On Methadone Maintenance, With No Evidence Of Use Of Illicit Opioids Or Other Illicit Drugs, Neonatal Birth Weights Were Appropriate For Gestational Age (M Birth Weight = 3078.50 G, Sd 415.50 G). Most Of The Infants Have Symptoms Of NAS During The First 4 Days Of Life, With About Half Of Them (51.4%) Requiring Pharmacologic Treatment. Fetuses And Infants Exposed To Opioids And Other Substance (Polydrug Exposure) Tend To Have Poorer Outcomes Than Those Exposed To Opioid Only. A Large Multisite Study Evaluating Methadone Vs. Buprenorphine During Pregnancy Found That Infants Of Buprenorphine

Maintained Mothers Had Less Severe NAS, And Buprenorphine-Exposed Fetuses Had Better Neurobehavioral Functioning As Compared To Methadone Exposed Fetuses. Several Studies Evaluating Lactation Among Methadone Maintained Women Have Concluded That The Concentrations Of Methadone In Breast Milk Are Low And That Breastfeeding By Methadone Maintained Women Meeting Certain Criteria Is Not Contraindicated. Pharmacologic And Non-Pharmacologic Treatment Protocols For The Infant With NAS Have Been Developed.

**CONCLUSIONS:** In The United States, Opioid Dependence During Pregnancy And In-Utero Opioid Exposure Are Increasing And Posing A Significant Health Burden. Appropriate Prevention And Treatment Strategies May Help Reduce The Medical And Psychosocial Consequences In The Mother-Infant Dyad. A Comprehensive And Dyadic Evaluation And Intervention Is Necessary To Improve Perinatal Outcomes And Decrease The Developmental, Behavioral And Interactional Problems Related To Opioid Use During Pregnancy.

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## SOCIO-DEMOGRAPHIC AND CLINICAL CHARACTERISTICS OF UK VICTIMS OF HUMAN TRAFFICKING: FINDINGS FROM A LONDON MENTAL HEALTH CLINIC

Prof Louise M Howard (1), Dr Melanie Abas (1), Charlotte MacKenzie (1), Dr Siân Oram (1), Dr Cathy Zimmerman(2)

1)Section of Women's Mental Health, Institute of Psychiatry, King's College London's. 2) London School of Hygiene and Tropical Medicine

**PURPOSE** To describe the socio-demographic and clinical characteristics of victims of human trafficking receiving services from a large inner city mental health service.

**METHODS** Study design: Cohort study. Search strategy: Free text searches of the South London and Maudsley NHS Trust (SLaM) Biomedical Research Centre Case Register Interactive Search (CRIS) database were used to identify the case records of trafficked adults and children. CRIS allows the searching and retrieval of anonymised full patient records for mental health service users in contact with SLaM services between 2006 and 2012. Socio-demographic data and information about each patient's most recent primary ICD-10 diagnosis were extracted.

**RESULTS** Case records of 139 people who had been trafficked for sex work, domestic servitude and exploitation in other labour sectors were identified. Data on primary diagnosis were missing for 10 cases. 76% (n=105) of the sample was female. Age at diagnosis ranged from 11 to 50 years (mean 25.7, SD 8.7). Post Traumatic Stress Disorder (18.6%, n=24), depression (7.8%, n=10) and schizophrenia (6.2%, n=8) were the most common diagnoses recorded. Other disorders included acute and transient psychotic disorders, puerperal psychosis, bipolar affective disorder and obsessive compulsive disorder. Childhood emotional disorders were also recorded. Data on referral pathways will also be presented

**CONCLUSIONS** Trafficked people who use mental health services in London appear to suffer from a multiplicity of psychiatric disorders. Services that work with victims of trafficking should recognise the breadth of potential diagnoses and treatments required.

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violence and the physical, mental and sexual health problems associated with human trafficking. *Plos Med* 2012 9(5): e1001224.  
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## **ASSOCIATION BETWEEN MENTAL HEALTH AND DRUG ABUSE IN THE IMPRISONED WOMEN OF URUGUAY**

Gabriela Olivera/ National Drug Assembly - Presidency of Uruguay, Gender Secretariat, Coordinator  
Antonio Pascale / Medical Toxicologist. School of Medicine. University of the Republic, Montevideo, Uruguay.

**PURPOSE** Describe key points emerging on the association between mental health and drug abuse of imprisoned women in Uruguay.

**METHODS** Analysis of secondary data on the following studies:

- Albanés, Lorena, comp (2009). Current situation, research and interventions in HIV / AIDS detainees: prisons in Uruguay 2005-2009. Montevideo, Ministry of Public Health.
- Survey on Drug Use and Associated Factors in incarcerated population in Cabildo women prison. Uruguay. Uruguayan Observatory on Drugs. School of Psychology. United Nations Office on Drug and Crime.
- Preliminary report on prisons and living conditions of prisoners in Uruguay. Peace and Justice Service (SERPAJ) - Uruguay.
- Annual Report 2011: Violence y Criminality. Ministry of Interior. Presidency of the Republic of Uruguay.
- I National Census of Prisoners in Uruguay. University of the Republic, Department of Sociology, Faculty of Social Sciences. December 2010

**RESULTS** The women prisoners in Uruguay represent 7.5% of the total prison population. They have a high level of dependency on drugs; particularly alcohol and cocaine among others. Significant numbers of women prisoners have prior histories of mental health disorders, (psychiatric morbidity, post traumatic stress disorder) and 62% reported lifetime history of psychiatric treatment.

**CONCLUSIONS** Incarcerated women in Uruguay who have Drug Abuse/Dependence seem to have a multiplicity of psychiatric disorders, particularly co -

psychiatric morbidity and post traumatic stress disorder. Uruguay currently has no gender-sensitive program of services or management in the prisons. Attention to gender-specific healthcare needs and mental health issues are needed in female prisons due to its lower number and less degree of conflict and violence.

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- *Other considerations*: The views expressed in this publication are those of the author(s) and not necessarily those of the Department of Health

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## **ESTROGENS AND MENTAL HEALTH**

**Chair** - Judith Usall i Rodié. Parc Sanitari Sant Joan de Déu. jusall@pssjd.org

In recent years, an increasing number of studies have appeared that points to the importance of estrogens and the hypothalamic-pituitary-gonadal axis on the onset, outcome and treatment of mental disorder, especially in schizophrenic psychoses and depression. The objective of our symposium are to present the main data about this relationship.

In the first presentation, Anita Riecher-Rössler will focus on the evidence from clinical as well as from epidemiological and basic research that estradiol, the main component of estrogens, exerts psycho-protective effects. Possible modes of action of this hormone in the brain have been detected. Clinical intervention studies have reported positive results.

In the second presentation Jayashri Kulkarni will focus on schizophrenia and the use of estrogenic compounds as new treatment strategies Following the epidemiological research showing a gender difference in the age of onset of schizophrenia, case reports of schizophrenia relapses in women in low estrogen cycle phases and perimenopausally, plus animal studies showing estradiol augmentation to decrease dopaminergic activation, clinical trials using estradiol

as an augmenting treatment for people with schizophrenia have been conducting with positive results. In this symposium results from our latest estradiol trial in 180 women with schizophrenia will be presented. Also, the latest results from our study using the Selective Estrogen Receptor Modulator - Raloxifene Hydrochloride, as an augmentation of antipsychotic treatment in women with schizophrenia will also be presented.

In the last presentation, Marina Diaz-Marsá will focus in the specific relationship between estrogen and depression, both in terms of etiology, prognosis and therapeutic possibilities.

### **ESTROGENS, GONADAL AXIS AND WOMEN'S MENTAL HEALTH**

Anita Riecher-Rössler Psychiatric University Clinics Basel, Center for Gender Research and Early Detection. Basel, Switzerland [anita.riecher@upkbs.ch](mailto:anita.riecher@upkbs.ch)

Research increasingly points to the importance of estrogens and the hypothalamic-pituitary-gonadal axis in mental disorders, especially in schizophrenic psychoses and depression.

There is mounting evidence from clinical as well as from epidemiological and basic research that estradiol, the main component of estrogens, exerts psycho-protective effects. Possible modes of action of this hormone in the brain have been detected. Clinical intervention studies have reported positive results. Furthermore, there are reports of gonadal dysfunction and states of estrogen deficiency in women with these disorders.

Further research into this area appears promising, as if the clinical effects of estradiol can be confirmed, this could have important implications for prophylaxis and therapy. Estrogen therapy may be helpful in some cases but also carries some risks. More research is needed on the indications and contraindications of hormone (replacement) therapy but also the use of SERMS (Selective Estrogen Receptor Modulators) in the context of mental disorders.

Furthermore, this research might contribute to understanding some relevant pathogenetic mechanisms that underlie some forms of these disorders.

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### **ESTROGEN AND SCHIZOPHRENIA: A NOVEL APPROACH TO MANAGING MENTAL ILLNESS IN WOMEN**

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While the link between estrogen and mental illness was recognised over a century ago, scientific evidence supporting the psychotherapeutic effects of exogenous estrogen has only started to emerge over the past two decades. Although findings are still preliminary, there is now a growing appreciation for the positive impact estrogen treatment can have on symptoms of severe mental illness. The results of two double-blind, randomised controlled trials will be presented. i) An 8-week trial of adjunctive transdermal estradiol in the treatment of acute psychotic symptoms in women with schizophrenia of child-bearing age. Results indicated that the addition of 100 mcg of transdermal estradiol significantly reduced positive and general psychopathological symptoms during the 28-day trial period compared with women receiving antipsychotic medication alone. ii) A 12-week dose-finding trial of a selective estrogen receptor modulator (raloxifene) in post-menopausal women with schizophrenia. Results indicated that participants randomized to receive 120mg/day raloxifene hydrochloride experienced a significantly more rapid recovery of total and general psychotic symptoms compared to both 60mg/day raloxifene hydrochloride and placebo. Estrogen augmentation appears to be a promising novel treatment option for women with schizophrenia.

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## **INTRAFAMILIAR NORMAL AND PATHOLOGICAL RELATIONS. MULTIMODAL THERAPEUTIC INTERVENTIONS**

**Chair** - Manuel Morales-Monsalve MD. General and Child Psychiatrist. Psychoanalyst. Truman Medical Center. Assistant Professor of Psychiatry, University of Missouri Kansas City School of Medicine  
[manuel.morales@tmcmcd.org](mailto:manuel.morales@tmcmcd.org)

**Co-Chair** - Matilde Caplansky. Professor of Post Graduate education in Social Sciences. Universidad Mayor de San Marcos. Lima Peru Training and Supervising Psychoanalyst. Peruvian Psychoanalytic Institute [mati@rcp.net.pe](mailto:mati@rcp.net.pe)

This symposium presents the findings from four different studies one done in Peru with middle age women and three done with immigrant Latino women in the USA. The common themes are issues related to normal and pathological development of women in the context of traumatic events that bring them for outpatient help. Often the trauma goes from generation to generation and is aggravated by the immigrant experience of the Latino women in the USA culture. The multiple sources of oppression have to be considered for therapeutic interventions to be effective. Different modalities of treatment are explored and discussed with different populations in individual, family and group therapy. Use of psychoanalytic, empowering, mentalization and attachment based interventions are presented

### **THE USE OF THE ADULT ATTACHMENT INTERVIEW IN GROUP PSYCHOTHERAPY WITH IMMIGRANT WOMEN IN THE USA WITH HISTORY OF INTERGENERATIONAL TRAUMA**

Manuel Morales-Monsalve MD. General and Child Psychiatrist. Psychoanalyst. Truman Medical Center. Assistant Professor of Psychiatry, University of Missouri Kansas City School of Medicine  
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**EDUCATIONAL OBJECTIVES:** Participants will learn the clinical use and the healing potential of the Adult Attachment Interview in a group therapy format in Latino mothers with an early history of trauma prior to immigration to the USA.

**PURPOSE:** The Adult Attachment Interview (AAI) is very well known in both the research and clinical fields. We present an adaptation of the Adult Attachment Interview for clinical purpose in a group psychotherapy format. This presentation will illustrate the powerful therapeutic potential the AAI brings to Latino mothers in group therapy. Traumatic material in the history of these women can be safely addressed within a well defined therapeutic alliance with the group therapist.

**METHOD:** Group therapy sessions with latino women are held on a biweekly basis in an effort to help understand their maternal concerns with raising their children. We use well known common uses of the benefits of group psychodynamic therapy . Memories of childhood traumatic events emerges in the process and how relevant this becomes in the development of insecure attachment in the mothers as well as in their children. Mothers are agreeable to explore further their own attachment issues through the use of the AAI. The children of these mothers are also engaged in weekly group therapy sessions.

**RESULTS.** Mothers learn the significance of their traumatic life history in the development of their own psychopathology as well as of their children currently . How the past shapes the present and the future. They become more tolerant of the emotional pain it brings the traumatic memories as they find supportive empathy from both other members and the therapist. This is gradually translated in the behavioural change in their children in all areas of functioning.

**CONCLUSIONS.** Often the presence of traumatic history is ignored, denied, put out of awareness by the holders of trauma yet it will unavoidably emerge in the next generation as painful reminders of their past. Mothers who come for help with their children as the presenting problem have to face a tough reality . Group therapy format can be a good therapeutic space to work through the multiple dimensions of trauma and the use of the Adult Attachment Interview can be instrumental to make healing take place and stop the transmission of psychopathology to future generations.

## **THE ROLE OF THE FATHER IN THE PSYCHIC AND EMOTIONAL LIFE OF WOMEN. A STUDY FROM PERU**

Matilde Caplansky. Professor of Post Graduate education in Social Sciences. Universidad Mayor de San Marcos. Lima Peru Training and Supervising Psychoanalyst. Peruvian Psychoanalytic Institute [mati@rcp.net.pe](mailto:mati@rcp.net.pe)

**EDUCATIONAL OBJECTIVES.** Participants will conceptualize the various pathways for the psychic representation of the father in the emotional and psychic life of women. On one extreme he acquires importance because of his very absence. On the other, a provider, guide and source of strength. We examine psychoanalytical concepts from Freud's views to Lacan.

**PURPOSE.** The presentation explores the different view of the father in adult women. We present the various representations of the father. One is a "negative image" in the sense that the father is absent and the absence of the father in women's lives determines a number of psychological issues like "longing for the father" "searching for a father" or denying the importance of the father in women's lives. On the other hand, there is the traditional image of the father, at times idealized as a protector, secure base, provider and the source of security. The presenter explores the various psychoanalytical views of the father, from Sigmund Freud's conception to Jacques Lacan's views.

**METHODS.** Women who live in Peru, from a middle high socio-economical background, with higher education and between 35 and 45 years of age participated in a workshop called "Seminary of studies on the father". Narratives of the participants were analyzed and the different themes were classified in different lines of psychological representations. There were a number of topics like the transgenerational transmission of the role of the father and the image of the father. Another theme, was the importance of a feeling of belonging (filiation) to a family through generations, giving a sense of having roots. Some women ascribed a central role to the father, similar to Freud's views, while others had a different perception of the father image.

**RESULTS.** The presenter illustrates the different psychological representations of the father through a

number of vignettes that contain the most typical views obtained in the seminary participants.

**CONCLUSIONS.** The father is a participant in "triadic relationships" from the moment of birth. The father role has cultural representations, specific family representations and there is a transgenerational transmission of the image of the father in many families. We highlight the importance of understanding these representations which exert a profound influence on current relationships with parents and with partners.

## **EMPOWERING FEMALE IMMIGRANTS IN THE USA VICTIMS OF DOMESTIC VIOLENCE IN THE CONTEXT OF MULTIPLE OPPRESSIONS**

Elena Morales-Bellatin MSW Program Director "Si se Puede" El Centro. Field Supervisor for Kansas University School of Social Work [ebelmor@sbcglobal.net](mailto:ebelmor@sbcglobal.net)

**EDUCATIONAL OBJECTIVES:** Participants will learn the application of Paulo Freire's model of intervention for social transformation among latino women immigrants to the USA where they are simultaneous victims of domestic violence, low socio economic status, social isolation from family among many.

**PURPOSE:** Freire's model of intervention with the oppressed promotes an achievement of mutual inter-dependency and improved self sufficiency without imposing the values from the group or individual facilitator. Participants will become familiar with the model illustrated by the work done with a group of female latino immigrants in a major city in the Midwest of USA. The presenting problem is usually but not exclusive to domestic violence.

**METHOD:** Every participant woman is first assessed individually to detect the level of safety, severity and awareness of the abuse, level of motivation for change, dependency needs, financial self sufficiency, family support and other resources. Then the participant is assigned to an ongoing weekly group sessions with a group facilitator. Confidentiality is required to reassured safety of the members. Crisis is not uncommon and shelters are available if necessary.

**RESULTS.** From dependence to the group and the facilitator women become gradually more mutually inter-dependent and more comfortable exercising assertive skills. This leads the individual participant to develop awareness of their predicament with their

dependence on their abusive husbands . They develop strength to confront themselves first and their husbands later becoming more assertive and equal partners in the marital relationship. Husbands will learn to adjust and trust the change is for better or sometimes ends in temporary or irreversible separation.

Women become leaders to prepare and educate others in the community through diverse activities including theatre to raise awareness of the endemic nature of domestic violence.

**CONCLUSION.** The work with the oppressed and domestic violence in particular has the stigma of not being rewarded by therapeutic interventions and the lack of support of the community at large because of a male dominant value system that is even protected by the church.

However if wisely concocted and with careful design and engagement of diverse community partners including the church significant changes can take place.

### **MENTALIZATION-BASED MULTIMODAL INTERVENTIONS IN WOMEN WITH HISTORY OF CHRONIC TRAUMA AND PERSONALITY DISORDER IN THE PERINATAL PERIOD**

J.Martin Maldonado-Duran MD. Perinatal, infant and child psychiatrist. Truman Medical Center. Associate Professor of Psychiatry, University of Missouri Kansas City School of Medicine

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**EDUCATIONAL OBJECTIVES.** Participants will conceptualize mentalization-based psychotherapeutic interventions used in women who have antecedents of chronic trauma, early unresolved losses, and personality disorder. Sessions have individual, couples or group therapy formats. the patient identifies low mentalization strategies and learns new modes of reacting toward her spouse and the baby.

**PURPOSE.** We present an adaptation of mentalization-based multimodal treatment of severe psychopathology in women and couples in the perinatal period. The women exhibit severe problems with mood dysregulation, constant anxiety, irritability and problems in managing dependency needs, satisfying the multiple needs of the infant and maintaining a positive marital relationship.. The presentation illustrates how focusing on the mind of the woman, her spouse and the baby helps to diminish

symptoms and improves self-regulation, less acting-out and better relationship with the spouse and the baby.

**METHODS.** We review the techniques utilized in individual, couples and group formats. We focus on the theoretical background of the intervention (attachment theory, emotional activation, various levels of mentalization, psychoeducational techniques and emotional support). When the baby is born, the presence of the child assists the therapist in helping the mother to “read the mind” of the baby and be more sensitive to the emotions and behaviors manifested by the baby. The technique can be used in group format, to promote mutual support, obtain feedback from group members, normalize their reactions and learn new styles of reacting to others. The therapist is available after hours for management of crises.

**RESULTS.** Our results suggest improved capacity for emotional regulation, improved levels of mentalization, i.e. diminishing acting out emotions like anger, fear, anxiety (in physical aggression, breaking things, escaping a situation, self-harming) and less hospitalizations and use of substances like alcohol and drugs to regulate emotions. In the couples’ format, it improves the marital relationship as often the partner suffers from similar difficulties. When the baby is born, the therapist also focuses the patient on the mind of the baby, and assists the patient to read more sensitively the emotions, behavior and needs of the baby, attempting to “keep the baby in mind” and wondering about the baby’s reactions to failures in empathy, separations from the mother, etc.

**CONCLUSIONS.** In situations of severe psychopathology, cognitive and behavioral strategies, or interpersonal psychotherapy are less useful due to the patient’s difficulties in trusting, in sustaining relationships and in discussing internal states. These problems can interfere severely with the capacity of the mother to behave empathically and sensitively toward her infant. Mentalization-based strategies help her identify her reactions while under stress, to self-soothe and wonder about the mind of the other, without being certain about what the other is thinking or feeling, acknowledging the opacity of minds, and learning her typical patterns of fear of abandonment, assuming negative or malignant intentions and reading rejection and anger in others.

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## Gender Differences in Mental Health

**Chair** - Daniela Gómez Aguirre, Sociedad Chilena de Neurología, Psiquiatría y Neurocirugía ( SONEPSYN ), Dgomezaguirre@gmail.com

**Co-Chair** - Gloria Gramegn, Sonepsyn, Santiago, Chile

Research shows the differences between women and men in roles and responsibilities, status and power, etc; interact with biological difference, to contribute to difference in the nature of mental health problem. More is known about the difference between males and females is some mental health problems such depression and schizophrenia than others. Gender is a critical determinant of mental health and mental illness. The morbidity associated with mental illness has received substantially more attention than the gender specific determinants and mechanisms that promote and protect mental health and foster resilience to stress and adversity.

Gender differences occur particularly in the rates of common mental disorders - depression, anxiety and somatic complaints. These disorders, in which women predominate, affect approximately 1 in 3 people in the community and constitute a serious public health problem.

Unipolar depression, predicted to be the second leading cause of global disability burden by 2020, is twice as common in women. Gender differences have been reported in age of onset of symptoms, frequency of psychotic symptoms, course of these disorders, social adjustment and long term outcome.

The disability associated with mental illness falls most heavily on those who experience three or more comorbid disorders. Again, women predominate.

Gender specific risk factors:

Depression, anxiety, somatic symptoms and high rates of comorbidity are significantly related to interconnected and co-occurrent risk factors such as gender based roles, stressors and negative life experiences and events.

Gender specific risk factors for common mental disorders that disproportionately affect women include gender based violence, socioeconomic disadvantage, low income and income inequality, low

or subordinate social status and rank and unremitting responsibility for the care of others.

Brain and behavior research

There is increased recognition that biologically mediated gender differences influence behavioral outcomes and may modify vulnerability to different mental disorders, severity of course, or response to different treatments. Included here are basic studies in animals and humans as well as human clinical studies in subjects with mental disorders.

- Gender differences in brain and behavior including structural and functional brain imaging of normative and clinical samples
- Gender differences in the molecular and cellular bases of behavior, e.g. neurotransmitter levels and transporters, receptor subpopulations and enzyme levels
- Gender differences in genetic factors, including differences in gene expression or gene-environment interaction in relation to mental disorders
- Gender differences in the developmental-organizing and activating influences of sex steroids on brain and behavior and interactions with thyroid- and hypothalamic-pituitary adrenal axes, the immune system and neurotransmitters
- Gender differences in the pharmacokinetics, pharmacodynamics and pharmacogenetics of psychotropic medications in relation to hormonal status and developmental phase

Bio-behavioral dysregulation and adaptation to stress

Evidence is accruing that response to stress may be mediated both by sex steroids as well as by experiential differences between men and women. Animal and human studies indicate that gender differences in hormonal factors may modulate physiological and behavioral response to stress. Epidemiological studies show that women are more likely to have experienced certain kinds of stress (e.g. childhood and adult sexual abuse), which are risk factors for mental disorders. Research also indicates that women are twice as likely as men to develop stress-related disorders and depression following exposure to traumatic events. To understand this complex area, multiple approaches are required, ranging from basic developmental and plasticity research to human clinical studies.

Appetite, aggression, exploration, sleep, energy, mood and their biological rhythms as they are

differentially regulated and dysregulated in males and females and in relation to mental disorders.

Developmental differences in males and females in risk for, exposure to, and response to, social and physical environmental variables, including stressors and trauma

- The impact of stress at different developmental stages on gender-differentiated physiological and behavioral responses and risk for mental disorders
- Biological, psychosocial and psychopathological correlates and consequences of violence and abuse of women and girls

Epidemiological and clinical studies of disorders

During the past two decades, advances in diagnosis and survey methodologies have enabled researchers to establish general estimates of the impact and service needs of adult women with mental disorders. This work remains to be done for younger females. The need for such research is particularly pressing, since in many disorders, gender differences emerge first in adolescence when early intervention strategies may be most effective in preventing full-blown mental disorders. Later in the lifespan, there is relatively little information on gender related factors in such important clinical aspects of disorders as risk for recurrence, chronicity, comorbidity and disability. Studies encouraged here include those of epidemiology, diagnosis, lifespan development and course of mental disorders in females. Studies are also encouraged for gender differences in social, behavioral, and biological risk factors for mental disorders.

- Health disparities so as to identify, understand and target the burden of mental illness and related disability, and to improve treatment and services utilization among women and girls of different ethnic and socioeconomic, backgrounds
- Reliability, validity and predictive value of diagnostic classifications and instruments for female populations
- Taxonomies of functional outcomes and disabilities in women and girls with mental disorders and instruments to measure functional changes following interventions
- Screening and identification of high-risk women and girls in primary care settings (e.g., general medical settings and obstetric-gynecology settings) for mental illness

- Demographic variables and cultural and social factors (e.g. work and family roles, marriage, gender discrimination; propensity to use substances) in relation to gender differences in mental disorders
- Childhood risk and protective factors related to the emergence of gender differences in mental disorders (particular mood, anxiety and eating disorders) at adolescence

Reproductive transitions

Menarche coincides with onset of gender disparities in incidence of depression and eating disorders. Menstruation is associated with severe mood variations in a small percentage of women. Since variance in hormonal levels per se has been found to have little correlation with mood or mood change in human research, there is need for studies of the interaction of multiple biological, clinical and environmental factors. Pregnancy and recent childbearing may be associated with higher rates of depressive disorders. This association, as well as the fact that psychotropic drugs are commonly prescribed for women of childbearing age, raises special gender-related clinical and treatment considerations. Bioethical issues in the conduct of clinical research take on added importance since psychotropic agents have the potential to affect the fetus or nursing child.

- The role of hormonal, biological and social factors in:
  - emergence of gender differences in mental disorders during adolescence
  - etiology and course of mental disorders and premenstrual, pregnancy, postpartum and perimenopausal mood changes
  - age-related health and cognitive changes in pre-menopausal, post-menopausal and elderly women with a history of mental disorders
- The impact of maternal disorders on outcome of offspring, especially in relation to clinical and treatment history of mothers during pregnancy
- Interventions to prevent or ameliorate the onset or recurrence of mental disorders during reproductive transitions. For example, studies of the effectiveness and safety of interventions in women during pregnancy and
  - postpartum
  - Interventions for women with serious mental disorders including those requiring chronic

treatment, during pregnancy, postpartum or other reproductive transitions that may heighten risk for recurrence or exacerbation of disorder

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## EXPERIENCES OF DOMESTIC VIOLENCE IN HOSPITALIZED PATIENTS

**Chair** - Dra. Alejandra Inés Maddocks- Secretary of Section Education in Psychiatry of APAL, President Asociación Metropolitana de Psiquiatría, Buenos Aires, Argentina, mail: [alemaddocks@yahoo.com.ar](mailto:alemaddocks@yahoo.com.ar)

**PURPOSE:** To detect the experiences of family violence in hospitalized patients.

To provide a basic structure for the development of family workshops and direct treatment for the problems of domestic violence.

**CONTENTS:** When a family member suffers from a psychiatric disorder, the patient is not the only one suffering problems. The family is affected and not just each member individually. Families experience guilt and it is important to recognize it. Emotional violence has been observed in relatives of patients with schizophrenia, in all its dimensions: expectations abusive, hostile, devaluation, intimidation and threats. There are also expressions that characterize domestic violence in families of patients. Physical violence is manifested in all its forms. Sexual violence observed in families who are forced to have sex. Currently, domestic violence is presented to the most vulnerable: women, children and men to a lesser extent, and can potentiate the presence of a schizophrenic patient, because of how the symptoms affect interpersonal relationships, and otherwise, the imbalance between the cost of the disease. In many of these families, the management of social stigma towards schizophrenia and other disorders is reinforced by the lack of information and understanding of the problem. When the family feels stigmatized, they are isolated because they feel being mentioned and they do not seek guidance, only sometimes when the situation becomes intolerable. The family must receive information, training and legal advice and only the informed family together can bring relieve to the victim. It should be provided a basic structure for the development of family workshops and direct treatment of the problems of domestic violence.

**METHODOLOGY:** Short dissertation triggering each of

the exhibitors. Intervention participants. Registration elements that contribute to the conclusions. Preparation thereof.

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## CAN SHE, OR CAN SHE NOT DO IT ALL?. WOMEN PHYSICIANS AND BALANCE ACROSS THE LIFE SPAN

**Chair** - Silvia W. Olarte, MD Clinical Professor of Psychiatry, New York Medical College, Valhalla, New York, USA,

Over the last thirty years, percentage of women medical students, and women residents have continued to increase. According to the American Medical Association, in 1970, only 7.6% of U.S. physicians were female. By 2006, 27.8% of the physician workforce were women. (1) In 2010, females comprised 48.3% of the U.S. medical school graduates. (2) The percentage of female physicians will rise as the numbers of females matriculating into U.S. medical schools has approximated almost 50% since 2002. (3) Simultaneously the number of dual earner couples is on the rise. Consequently the need to balance multiple roles is a reality that continues to challenge young professionals across the careers spectrum and life cycle.

In 1995, the Association of Women Psychiatrists surveyed its membership to try to understand the impact of having to balance multiple roles had in the professional life of women psychiatrists. (4) At the time, most of the burden of the multiple roles still rested with women professionals. Those women psychiatrists that could combine family life, intimate relationships, and academic involvement where the most satisfied. The price they reportedly paid was decreased availability for personal time. A

more recent systematic review conducted highlighted persistent challenges with work-life balance and career satisfaction among female physicians as a group in comparison to male colleagues

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#### EARLY CAREER: WORK-LIFE BALANCE WHILE STARTING YOUR CAREER

Christina Tara Khan, M.D., Ph.D., Child & Adolescent Psychiatry Fellow, Stanford University School of Medicine

**EDUCATIONAL OBJECTIVES:** At the conclusion of this presentation, the participants should be able to: 1) describe the characteristics of burnout among physicians, 2) understand the literature base on work-life balance among early career psychiatrists, and 3) identify factors that contribute to life-work balance amidst the stressors unique to early career planning, with a focus on cultural issues faced by women and minority physicians.

**PURPOSE:** To present the literature base on early career success, risk factors for burnout, and strategies for achieving work-life balance in a multicultural workplace.

**METHODS/RESULTS:** Review of the literature on early career challenges and success among physicians, and in particular among women and minority mental health professionals. Will discuss barriers to achieving success and strategies for overcoming institutional challenges, including mentoring and faculty support.

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#### SUCCESSFUL STRATEGIES TO OVERCOME CHALLENGES OF GENDER IN PURSUING A RESEARCH CAREER.

Eva Szigethy MD PhD, Associate Professor of Psychiatry, Pediatrics and Medicine, University of Pittsburgh

There is growing evidence that while the number of women interested in pursuing research careers and also getting initial grants is improving. However, women still have more challenges in getting subsequent grants and also have higher academic thresholds to pass for academic advancement and promotion. Given other aspects of career and life that women must balance, they are at particularly high risk for burnout.

**OBJECTIVES:** 1) To understand barriers/challenges faced by women pursuing research careers. 2) To cover strategies for improving success in research endeavors including balancing commitments, choice of mentors, perseverance, and practice of self-stress management techniques to minimize burnout.

**PURPOSE:** To help elucidate challenges and provide strategies of success base on literature review and personal experience as an NIMH-funded researcher.

**METHODS/RESULTS:** To review the literature about research and academic promotion challenges of women and risk factors for burnout and to cover how women can overcome these challenges to have successful and rewarding research careers.

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### **WORK-LIFE BALANCE FOR WOMEN PHYSICIANS/PSYCHIATRISTS: CHALLENGES AND STRATEGIES FOR SUCCESS**

Patricia Isbell Ordorica, M.D, BayCare Health Systems, President, Association of Women Psychiatrists Consultant, Scientific Program Committee, American Psychiatric Association

**OBJECTIVE:** At the conclusion of this presentation, participants should be able to identify work-life challenges commonly faced by women physicians in mid-life and multiple strategies for successfully navigating through this life phase with renewal and at times reinvention of personal and professional goals. Participants will also be able to identify cultural factors that may influence work-balance issues for women psychiatrists in mid-life.

**METHODS/RESULTS:** The presenter, a Latina psychiatrist with primary specialty interest in addiction psychiatry for the past 23 years, has had a career which has spanned academic, military, research, public and private settings. Across a broad career, balancing work and life outside of work has greatly influenced the setting chosen as most conducive to meeting both personal and professional goals. The literature in this area will be reviewed and strategies for successful life-work “balancing” will be highlighted. The role of professional specialty organizations as supports for life-work issues will be discussed. Diverse cultural factors that influence work-balance issues for women psychiatrists in mid-life will be reviewed. Mid-life challenges and strategies for success will be presented with emphasis on renewal and reinvention of personal and professional goals during this exciting and productive phase of life.

**REFERENCE** *The Fatigue Prescription: Four Steps to Renewing Your Energy, Health and Life*. Linda Hawes Clever, M.D. Cleis Press Inc. Berkeley, CA. 2010.

### **ATE LIFE BALANCE: A REFLECTION OF WORK-LIFE BALANCE FOR FEMALE PHYSICIANS/PSYCHIATRISTS**

Silvia W. Olarte, MD Clinical Professor of Psychiatry, New York Medical College, Valhalla, New York, USA

**OBJECTIVES:** 1) To identify personal and professional circumstances later on in life that can increase personal vulnerability and affect professional functioning. 2) to discuss and highlight personal and professional factors that help develop/enhance resilience and self reliance.

**PURPOSE:** To help elucidate challenges and provide strategies of success base on literature review, personal experience and appropriate discussion of psychodynamic factors to enhance self reliance and resilience at a time in the life of the professional when the past weighs larger than the future.

**METHODS/RESULTS:** The presenter will use both personal narrative and clinical vignettes. Personal narrative: the presenter, an MD for 42 years, with a full time varied career in clinical psychiatry, psychoanalysis, and public psychiatry will demonstrate the effect of circumstance and self determination to resolve and or confront universal issues of self doubt, chronic lack of time and resources, chronic stress and its consequences, and a persistent sense of “partially success” in most endeavors, common to professionals handling multiple tasks. Clinical vignettes: in the context of her 35 years of psychodynamic work she will discuss the development of resilience and self reliance and their effect on the overall health and well being of the multitask professional. At a time in the life of the professional when “past is longer than future” and present continues to be elusive in its still crowded reality, she will highlight her talk with pertinent statistical findings pertaining specific to the female professional.

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## FAMILY VIOLENCE AND THE ROLE OF THE HEALTH PROFESSIONAL

**Chair** - Dra. Graciela Lucatelli, Section Psychiatry and Law of Asociación Psiquiátrica de América Latina APAL. Córdoba, Argentina, mail: [lucatelliag@hotmail.com](mailto:lucatelliag@hotmail.com)

**OBJECTIVE:** To recognize domestic violence as a public health problem To identify the role of health professionals in regards to family violence.

**CONTENTS:** Family violence is a multidimensional social phenomenon. It is considered a primary public health problem by international organizations and governments. It entails serious risks to human health both in a physically and psychologically way. This is not new, but nevertheless we can consider it a problem that is growing fast. And not only because of the substantial publicity in the media about the dramatic events of battered women, but due to the fact that domestic violence is no longer considered a "private matter" and it is beginning to be recognized, like we said, as a "problem health", in order to continue the search for solutions.

The health professional intervention is necessary in prevention, detection, treatment and guidance of this complex problem through a comprehensive approach, and coordinated with other professionals and institutions.

It is a new challenge for the health system to give effective responses and interventions.

In regards to domestic violence, prevention activities are placed in the foreground once formulas that should lead to the resolution of this problem have already been investigated.

Our responsibility as health professionals, with its aspects of preventive, clinical performance and interdisciplinary care coordination, accompanied by the necessary forensic component research and the update knowledge and skills, has come together properly with links to relevant professionals in other areas of society, in order to achieve a string of comprehensive approach to domestic violence.

**METHODOLOGY:** Short dissertation triggering each of the exhibitors. Intervention participants. Registration elements that contribute to the conclusions. Preparation thereof.

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## INTIMATE PARTNER VIOLENCE, WOMEN'S MENTAL HEALTH AND COMPROMISED PARENTING: CONSISTENT EVIDENCE FROM THREE COUNTRIES IN THE ASIA PACIFIC REGION

**Chair** - Jane Fisher. Jean Hailes Research Unit, School of Public Health and Preventive Medicine, Monash Univ, Melbourne, Australia [jane.fisher@monash.edu](mailto:jane.fisher@monash.edu)

**OBJECTIVES:** Participants in this symposium will acquire knowledge of:

- methods of assessing women's experiences of intimate partner violence;
- the consistent relationship between exposure to violence and perinatal mental health problems in women;
- the adverse consequences of exposure to intimate partner violence for maternal caregiving.

**BACKGROUND:** Intimate partner violence has been neglected as a risk factor for mental health problems in women during pregnancy and in the early years of parenting. However, if this risk factor is not considered, endeavours to improve women's mental health and reduce the adverse effects of maternal mental health for child health and development are unlikely to be effective. The aim of this symposium is to present data generated in community and clinical cohorts of women in three countries about the impact of experiences of intimate partner violence on their mental health and caregiving capacities.

**MATERIALS AND METHODS:** Data will be presented in four papers from prospective and cross-sectional studies undertaken by research partnerships in Australia, Japan and Vietnam. Participants were recruited from community health services and specialised mental health clinics. Data sources were

psychometric and study-specific measures of common mental disorders and, in the community cohorts, experiences of intimate partner violence. In the non-Anglophone countries, measures had been translated into national languages and validated for local use.

**RESULTS:** In all these studies exposure to emotional, physical or sexual abuse perpetrated by an intimate partner was associated with significantly increased rates of psychological symptoms, including of depression, anxiety, post-traumatic stress disorder, dissociation and compromised coping strategies. In those that investigated its parenting effectiveness was reduced in women who had experienced intimate partner violence.

**CONCLUSION:** This evidence indicates that addressing emotional, physical and sexual violence perpetrated by an intimate partner has to be included in strategies to reduce mental health problems in women and the flow on consequences of compromised caregiving for their children.

### **GENDER-BASED VIOLENCE AND COMMON PERINATAL MENTAL DISORDERS AMONG WOMEN IN RURAL VIETNAM**

Jane Fisher<sup>1</sup>, Thach Tran<sup>1,2,4</sup>, Beverley Biggs<sup>3</sup>, Julie Simpson<sup>2</sup>, Sarah Hanieh<sup>3</sup>, Tuan Tran<sup>4</sup>

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<sup>4</sup> Research and Training Centre for Community Development, Hai Ba Trung District, Hanoi, Vietnam

**BACKGROUND** Gender-based violence has been neglected in investigations of the determinants of common perinatal mental disorders (CPMD) in women. This study aimed to establish the prevalence of lifetime and perinatal experiences of intimate partner violence (IPV), and to investigate the relationship between exposure to IPV CPMD symptoms among women in rural Vietnam.

**METHODS** All women who are 10 – 20 weeks pregnant and living in one of 50 randomly selected communes in Hanam, a rural northern province were eligible to participate in a community-based prospective investigation. They were assessed in

structured individual interviews in early (Wave 1) and late (Wave 2) pregnancy and at two (Wave 3) and six months (Wave 4) after childbirth. Lifetime experience of IPV was assessed at Wave 1 and perinatal experiences at Waves 2 and 4 using the WHO Women's Health and Domestic Violence questionnaire. Symptoms of CPMD were ascertained by the Edinburgh Postnatal Depression Scale–Vietnam Validation.

**RESULTS** In total 497/523 (97%) eligible women were recruited, with 91% retained at Wave 4. Participants were aged on average 26 (4.8) years and all were married. Overall, 27.3% had experienced lifetime IPV: 15.2% emotional abuse and 19.0% physical and 6.7% sexual violence. In the perinatal period, 3.8% reported physical violence during pregnancy and 5.9% any violence in the first six months postpartum. After adjustment for other risk factors lifetime IPV was associated with increased risk of antenatal (AOR 2.5, 95% CI 1.4 to 4.7) and postnatal (AOR 3.1 95% CI 1.7 to 6.1) CMD.

**CONCLUSIONS** Despite recent laws making domestic violence a crime in Vietnam, lifetime experience of IPV remains prevalent among young women in this setting. It constitutes a clear risk factor for CPMD. In order to improve the perinatal mental health of women in rural Vietnam community-based violence reduction strategies are essential.

### **POST-TRAUMATIC COGNITION OF MOTHERS VICTIMIZED BY INTIMATE PARTNER VIOLENCE MAY INCREASE SEVERITY OF MENTAL AND BEHAVIOURAL PROBLEMS OF THEIR CHILDREN**

T. Kamo<sup>1</sup>, T. Yanagita<sup>2</sup>, Y. Kim<sup>3,1</sup>

<sup>1</sup>. Institute of Women's Health, Tokyo Women's Medical University

<sup>2</sup>. Department of Psychology, Taisho University

<sup>3</sup>. Division of Adult Mental Health, National Institute of Mental Health, Tokyo, Japan

**EDUCATIONAL OBJECTIVES:** Reducing post-traumatic cognition of mothers victimized by intimate partner violence (IPV) is likely to be an important target to reduce children's mental and behavioural problems.

**PURPOSE:** The aims of this study were to evaluate cognitive and coping characteristics of mothers victimized by IPV, and to evaluate in what ways these characteristics were related to their children's mental health problems and to their own parenting distress.

**METHODS:** Using self-rating scales and semi-structured interviews, the socio-demographic profiles, general mental health condition(GHQ-30), depression(BDI-II), trauma-related symptoms(IES-R), dissociation(DES-II) post-traumatic cognition(PTCI), coping behaviours(TAC-24) and parenting distress(PSI-SF) of women victimized by IPV and the mental and behavioural problems of their children(CBCL and ECBI) were assessed. There were two groups of participants: one was women who were treated clinically in a psychiatric clinic (IPV-clinical group) and the other was women whose children were attending kindergarten and who had not been victims of IPV(NIPV group). Results were statistically analysed. This study was approved by the ethics committee of Tokyo Women's Medical University.

**RESULTS:** There were 26 women who had experienced IPV and who had a total of 39 children aged 2-7 and, in the comparison group there were 55 women with 71 children. In total scores on the GHQ-30, BDI-II, IES-R, DES-II, PTCI, PSI-SF, CBCL and ECBI, were significantly higher in the IPV-clinical than in the NIPV group. On characteristics of stress coping(TAC-24), mothers in IPV-clinical group used more "problem-avoidance", less "problem-solving/support-seeking" and less "positive-interpretation/diversion" than mothers in NIPV group. Using covariance structure analysis, scores of BDI-II and IES-R were associated with increased PTCI scores in both groups. In IPV-clinical group, scores of "problem-avoidance", and "problem-solving/support-seeking" increased score of PTCI ( $p < .05$ ,  $p < .01$  in respectively), on the other hand score of "positive-interpretation/diversion" reduced it ( $p < .01$ ). Score of PTCI of mothers in IPV-clinical group strongly increased total score of CBCL in their children ( $p < .001$ ) whereas there was no relationship in NIPV group. Total score of CBCL increased score of PSI-SF of the mothers in both groups ( $p < .001$  in both). The score of PSI-SF reduced score of PTCI in IPV-clinical group ( $p < .01$ ), whereas this relationship was reversed in the NIPV group ( $p < .001$ ).

**CONCLUSIONS:** Reducing post-traumatic cognition of mothers victimized by IPV is likely to be an important target to reduce children's mental and behavioural problems. Psychiatric symptoms, coping behaviours and post-traumatic cognition of the mothers should be included when their parenting distress is being considered.

## **PREVENTION AND TREATMENT INTERVENTIONS FOR CHRONIC POSTNATAL DEPRESSION IN WOMEN SHOULD ADDRESS THE PARTNER RELATIONSHIP.**

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Monash University, Melbourne, Victoria, Australia

**EDUCATIONAL OBJECTIVES:** At the conclusion of this presentation, participants should be able to recognize the importance to women's mental health of perceived coercion, control and lack of care from an intimate partner, and appreciate the need to address the partner relationship in prevention and treatment interventions.

**Purpose:** The purposes of the study were to investigate associations between psychosocial factors and sustained symptoms of postnatal depression in an Australian community sample and to identify factors which are potentially modifiable.

**METHODS:** Women attending immunisation clinics in metropolitan Melbourne between 2007 and 2009 with 4 month old infants voluntarily completed a questionnaire, which included sociodemographic details, childhood abuse and reproductive histories, and standardised measures of depression symptoms (Edinburgh Postnatal Depression Scale (EPDS); Cox et al, 1987), partner relationship (Intimate Bonds Measure; Wilhelm and Parker, 1988), infant temperament (Short Temperament Scale for Infants; Sanson et al, 1987) and unsettled infant behaviour (Barr Chart; Hill et al, 1992). Women scoring EPDS >9 completed follow-up interviews at 6 months postpartum including the EPDS. Significant risks for sustained elevated symptoms of depression at 6 months postpartum were identified in multivariable regression analysis.

**RESULTS:** Of the 955 women invited and eligible to participate, 885 (93%) were recruited to the study. Of these, 139 (16%) scored >9 on EPDS and 126/139 (91%) completed the baseline questionnaire. At 6 months follow-up, 38/126 (30%) women had EPDS score >9. Factors significantly associated in univariate analysis with sustained depressive symptoms were a high score on EPDS at baseline, being unmarried, having a history of childhood abuse, an emotionally abusive intimate partner and more difficult infant temperament ( $p < 0.05$ ). Adjusting for other risk factors, experiencing the intimate partner as uncaring,

coercive or critical was associated with sustained symptoms of postnatal depression.

**CONCLUSIONS:** Physical violence against women is an established risk for poor mental health in women. The consequences for women's mental wellbeing of emotional abuse perpetrated by their intimate partner are less well understood. Poor quality intimate partner relationship was associated in this study with sustained symptoms of postnatal depression. The partner relationship is potentially modifiable. Interventions to improve maternal mental health after the birth of a baby should include intimate partners. Content should provide knowledge and skills for partners to adjust to increased needs for emotional availability, practical assistance and avoidance of criticism and coercion.

### **PSYCHIATRIC SYMPTOMS AND SOCIODEMOGRAPHIC PROFILES OF JAPANESE VICTIMS OF INTIMATE PARTNER VIOLENCE**

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**EDUCATIONAL OBJECTIVES** Victims of IPV experience different symptomatology and prognosis in response to each type of event. Thus, it is clinically important to distinguish these differences at the early stage of assessment and treatment.

**PURPOSE** Violence Against Women, or Violence by Intimate Male Partners is a growing concern all over the world, and Japan is not the exception in this phenomenon. This research aimed to describe the sociodemographic characteristics of psychiatric symptoms being experienced by women seeking treatment in a specialist clinic for victims of intimate partner violence at a University Hospital in Tokyo, Japan.

**METHODS** The research applied the quantitative appraisal using the measurement scale specialised in health, incidence and violence. 55 female patients in the Institute of Women's Health, Tokyo Women's Medical University who had the experience of violence by the intimate partners, were selected. Their experience over the past year were assessed in the intake interviews by the Domestic Violence Screening Inventory (DVSI). The General Health Questionnaire-30 (GHQ-30), and the Impact of Evidence Scale-Revised (IES-R) to identify the psychometric questions. The statistical analysis was conducted by the spearman's

rank correlation coefficient and factor analysis using the SPSS Ver.13 J.

**RESULTS** 40% of women were diagnosed as experiencing adjustment disorders, 32.7% as being depressed, 10.9% as having PTSD, and 7.2% co-morbid depression and PTSD. The mean DVSI score accounted for 22.57, of which 'Physical Assault' was 6.36, 'Sexual Coercion' was 3.64, and 'Psychological Aggression' was 12.57. If the maximum score of each subscale is measured as 100 %, the score was 13.3% in 'Physical Assault', 15.2 % in 'Sexual Coercion', and 69.8% in 'Psychological Aggression' respectively.

Factor analysis identifies as follows: factor 1 reflects core PTSD symptom, factor 2 as fatigue, anxiety, poorer general health in GHQ30, and factor 3 as severe depression and suicidality. There was a strong association between 'Physical Assault' and 'Severe Depression and Suicidality' and in the total GHQ-30, the scores of 'Intrusion', 'hyperarousal' in total IES-R. 'Psychological aggression' was positively co-related to 'Intrusion' in IES-R. Sexual Coercion was significantly and positively co-related to all the subscales, particularly to traumatic stress symptoms in the subscales of IES-R.

**CONCLUSIONS** Types of events and symptom profile were significantly correlated. Victims of violence experience different symptomatology and prognosis in response to each type of event. Thus, it is clinically important to distinguish these differences at the early stage of assessment and treatment.

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## **ABORTION: PSYCHOSOCIAL AND ETHICAL ISSUES**

**Chair** - Nada Stotland, Rush Medical College, Chicago, Ill - [nadast@aol.com](mailto:nadast@aol.com)

Unwanted pregnancy is unfortunately very common, despite the availability of modern contraception methods. A very conservative estimate is that a third of all pregnancies are unwanted. Abortion is the most usual solution to the problem of unplanned pregnancy and constitutes one of the safest and most common procedures for women of reproductive age. However, religious and patriarchal ideologies have resulted in legal restrictions for abortion in several regions of the world. This symposium will deal with the impact of abortion on women's autonomy, the lack of evidence for untoward psychological effects of abortion in

comparison to unwanted pregnancy carried to term and efforts to make legal abortion more widely available and acceptable to women in Latin America. Dr Stotland will present evidence on the lack of psychiatric consequences of abortion, Dr Apter will discuss the variations in abortion, natality and maternal mortality rates in countries where abortion is freely accessible as well as the positive impact on women's sense of autonomy, Dr Guerrero will describe advocacy efforts in Peru, where religious interference precludes liberalization of the law. Dr Gil, from Colombia, will present the results of pre abortion counselling which endeavours to work through the crisis posed by unplanned pregnancy into an opportunity for personal growth.

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#### ABORTION DOES NOT CAUSE MENTAL ILLNESS

Nada Stotland, Professor of Psychiatry and Obstetrics/Gynecology at Rush Medical College, Chicago, Illinois, USA

Allegations that abortion causes psychiatric symptoms and disorders have convinced much of the public provide the rationale for many laws restricting abortion access. Publications supporting these contentions are fraught with such methodological lapses, including the lack of information about pre-abortion mental status; the failure to consider the factors leading the women to terminate the pregnancy; a lack of appropriate control or comparison groups; and unscientific manipulations of data, as to invalidate their conclusions. Credible research reveals that the factors leading to the decision to abort, including poverty, abandonment, domestic violence, a lack of social supports, the need to care for existing dependents, and psychiatric symptomatology, are themselves psychosocial stressors, exacerbated by the presence of anti-abortion demonstrators at abortion facilities. There is no evidence that women seeking care at abortion facilities have made impulsive or thoughtless decisions; rather, they do not think it is sensible, or moral, to bear children they cannot

successfully mother. Anti-abortion rhetoric, shockingly, often neglects to consider the risks of childbirth and the obligations of parenting for women who continue their pregnancies.

#### WHEN CHOICE IS BEST FOR ALL!

Dr. Gisèle Apter, MD, PhD Responsable Unite Ppomma : Unité de Psychiatrie Périnatale d'Urgence Mobile en Maternité  
Responsable du Laboratoire de Recherche RePPER Recherche en Psychiatrie et en Psychopathologie à Erasme, EPS Erasme Chargé de Cours, Université Denis Diderot Paris 7

Access to self-determination of motherhood through contraceptive choice and right to use safe, available and affordable abortion when necessary is far from being worldwide. It has been advocated when moral issues could not be put forward, that unwarranted access to reproductive control is a threat to population growth,. However, epidemiological data in France and Europe does not confirm these arguments. The latest study (FECOND) lead in 2011, in France, by the Institute of National Demographic studies gives an overview of the evolution of age-use of different contraceptive techniques. Not only is abortion rate stable, but fecundity rates in France are the highest in Europe. And European data shows that countries that have the best access to contraception, maternal care and leave, have the highest number of births (ie Sweeden and France). How behaviors have evolved and are determined socially and culturally will be discussed confronting epidemiological data with clinical practice. Propositions for policies could use international data in order to enhance women's health with locally adapted processes.

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#### VIOLENCE AGAINST WOMEN: INTERVENTION AND RESEARCH METHODOLOGIES IN LATIN AMERICA

**Chair** - Tesania Velázquez, Pontificia Universidad Católica del Perú, Lima, Perú

Violence against women is a present phenomenon in Latin America; it is expressed through and colludes with other forms of social violence according to the characteristics of each society. Colombia and Peru are

two countries that share a history of political violence and associated problems, like corruption and drug dealing. These problems create scenarios in which gender inequity, and consequently violence against women, are sustained and legitimized.

In the past decades, different models and different programs of intervention have been developed in order to understand violence against women and deal with the situation. However statistic numbers remain the same and, in some cases, have increased; this makes evident that comprehensive theories and models have failed and the dramatic situation lived by many women is still present.

This symposium discusses new intervention and research methodologies in order to solve this problem. It takes into account the impact in mental health, the personal dimension in change, the socio-cultural dimension, and the community and political dimension to create transformation.

#### **THE IMPACT OF VIOLENCE ON THE MENTAL HEALTH OF COLOMBIAN WOMEN. PTSD IN THE CITY OF MEDELLIN: ANALYSIS ACCORDING TO GENDER**

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The prevalence for PTSD is between 9-15%, being more common in women, with a prevalence of 10.5% and only 5% for men. One of the possible causes for this larger PTSD prevalence in women is that they are more exposed to interpersonal violent traumatic events and these precipitate more PTSD than traffic accidents or natural disasters.

For this study the same survey used for the mental health in Colombia was applied. It makes part of the initiative of the World Health Organization called Mental Health World Survey (WMH-CIDI). The sample was taken from civil population ages 13 to 63 years old in the communes and jurisdictions of the Municipality of Medellin. The sample size was 4.179. The CIDI instrument was used to determine the diagnosis of the following mental disorders: anxiety disorder, mood disorder, infancy and childhood disorder, eating disorders, and substance use disorder. A bivariate analysis was carried out using contingency tables for the disorders by age and gender. The proportions for disorders weighted prevalence were obtained.

The prevalence of PTSD according to gender in the different age groups show that disorders are more

frequent in women at a rate of 2:1; as it was found in the Colombia's National Mental Health Study and other studies carried out by WMH consortium. The behavior of PTSD prevalence according to gender and precedence shows that the number of women suffering disorders in rural and urban areas behaves similarly. However, the PTSD prevalence differences among men in urban and rural zones show a relation close to 2:1 being greater in the rural areas. The similar numbers between urban and rural female populations can be explained by the place where women are more exposed to trauma: their domestic space. The finding showing a greater PTSD prevalence among men in the rural areas (jurisdictions) does not correlate with the other findings of the study that show higher psychiatric pathologies prevalence in the urban zones (communes).

In future analysis the study of variables associated with a higher PTSD presence in the male rural population will be relevant.

#### **VIOLENCE AND TRAUMA IN YOUNG WOMEN PERUVIANS**

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Official statistics of maltreatment and abuse in Peru are concerning. A national report on maltreatment and abuse by the women emergency centers shows that 21 052 cases were opened between January and June 2012. We can only estimate the number of victims that do not press charges.

Cultural beliefs have a big influence on perception on violence. Gender-based social constructs may justify violence by linking it to beliefs about gender roles and sexuality (Asencio, 1999). In Latin-American countries as Peru, ideological values of masculinity may legally and socially legitimize criminal acts against minority groups as women and children. Specific cultural beliefs about violence may emerge and legitimize perpetration, domesticating violence and make it something daily (Villaseñor-Farias, 2003; Theidon, 2004).

Due to the factors mentioned before, the comments that victims often have to face, can be very cruel. For example, a girl of 19 years old that has a son of 2 years old, product of a violation pressed charges against her aggressor, but documents did not get on

time to justice so he was never captured. Her mam tells her “two years have passed, it is time you move on” and her psychologist “Why don’t you get together with the aggressor, so your son will at least have a family”. Also known are comments of police officers, like “what have you done to make them treat you this way, or the public opinion, like “Her skirt was too short”. The big question is... If you grow up in a society where violence is omnipresent and ‘accepted’, how does this influence the perception of victims and do they suffer from the same consequences as the ones known by international research? Or do they express their symptoms in a different way?

A lot of research is needed to get to a better understanding of the problem, so more effective interventions will become possible.

### **A COMMUNITY ANSWER TO VIOLENCE AGAINST WOMEN**

Tesania Velázquez , Pontificia Universidad Católica del Perú, [tvelazq@puccp.pe](mailto:tvelazq@puccp.pe)

Violence against women is a problem in our country valid. However, we recognize the progress in legislation, public policy development, intervention programs and improved access to justice. Increasingly placed the issue on the public agenda but look only focuses on victim-perpetrator dichotomy.

It must break with the idea that violence against women only impacts the victim, what happens in a family, at school, on the street affects us all as a group, as a community. Violence breaks down the social fabric and therefore transcends the individual. In that sense, Segato (2003) when referring to sexual violence suggests that this violence does not attack only the order of the individual but also damages the social body. In general, we could say that all violence is not only on the victim but on society and be installed as part of our daily lives, which ends naturalizing and making us less critical of it.

It requires a proposal to address community psychology based on participation, recognition of differences, recognizing and strengthening the capacities of the agencies of women and men. The emphasis is on strengthening community resources, the processes and actions that the community has developed to deal with violence against women and from there generate processes of collective action for the good treatment.

### **A COMPREHENSIVE INTERVENTION MODEL OF VIOLENCE AGAINST WOMEN: CONSIDERING THE PROCESSES OF CHANGE**

Doris Argumedo Bustinza , Pontificia Universidad Católica del Perú, [dargume@puccp.pe](mailto:dargume@puccp.pe)

The present investigation focuses on women who are victims of violence, and to put into evidence factors that contribute to women remaining in high risk situations and factors that may enable women to escape from continued violence. The study is centered around understanding the different stages through which women living with violence pass as they develop changes which enable them to take action to overcome the violence in their lives or to find a different alternative for themselves. The investigation is framed using one of the theories with the majority of empirical evidence in the area of behavioral change and the development of healthy behaviors, the Transtheoretical Model of Behavioral Change (Prochaska y DiClemente, 1984, 1985; Prochaska, 1994; Brown, 1997, 1998; Alexander, Tracy, Radek y Koverola, 2009). The results are oriented to develop intervention programs which define women as managers of their own lives and agents of their own changes even though external resources could be unavailable and context variables could not be under their control. Public policy and legislation must consider the complex steps that women have to pass in order to be able to take actions and put finish to the violence in their lives.

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### **WPA SYMPOSIUM - EDUCATIONAL PROGRAMS FOR MENTAL HEALTH PROVIDERS AND WOMEN’S MENTAL HEALTH**

**Chair** - Edgard Belfort MD, Venezuelan Central University, World Psychiatric Association, Secretary for Education, Caracas Venezuel, [belfortwpase@gmail.com](mailto:belfortwpase@gmail.com) - [belfort.ed@gmail.com](mailto:belfort.ed@gmail.com)  
**Co-Chair** - Marta B Rondon, Universidad Peruana Cayetano Heredia, Lima Peru

The World Psychiatric Association aims to promote the improvement of our people’s and citizens’ mental health. The focus is not only on training specialists and

mental health teams to keep abreast of the latest scientific developments, of but also to achieve the integration of family, institutions, groups and communities for a better understanding of mental health. In this context, it is important that we develop programs of action for the purpose of addressing the special needs of specific groups of patients. Women are often affected by mental distress and illness and they and their families have the expectation of decent treatment, which promotes autonomy and empowerment respectful their fundamental rights. In this symposium, educational activities proposed by WPA will be described. Professor Stewart will present the results of a survey about the teaching of women's mental health carried out in Canada and Professor Rojas will describe the educational activities carried out to implement the care of depression at the primary level in Chile, where 90% of patients are women

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- World Psychiatric Association and education for mental health providers with a gender perspective Donna E Stewart. University Professor, University of Toronto, Canada, donna.stewart@uhn.on.ca A survey on teaching women's mental health in Canada

#### WORLD PSYCHIATRIC ASSOCIATION AND EDUCATION FOR MENTAL HEALTH PROVIDERS WITH A GENDER PERSPECTIVE

Edgard Belfort MD, Venezuelan Central University, World Psychiatric Association, Secretary for Education, Caracas Venezuela

Goal 2 of the current WPA action plan is to plan and implement, in collaboration with all WPA Zone Representatives and local WPA Member Societies, educational programs directed to young psychiatrists and primary care specialists along the lines of clinical and investigative areas of relevance to the fields of psychiatry and mental health in all WPA regions. In order to achieve this goal, WPA has to select the curricula and faculty, as well as nominate the best candidates to receive this education in order to have

impact. The curricula must include specific aspects to enable specialists to address adequately the needs of girls, women and older women, who are often in need of mental health services. Goal 3 of the action plan is to seek appropriate and high quality material to be disseminated via the website. This provides an excellent opportunity to insure that approaches that prove efficacious can be disseminated to all mental health providers, in order to insure equity in services. This presentation will review proposals and institutional opportunities for quality education for specialist and primary care providers.

#### A SURVEY ON TEACHING WOMEN'S MENTAL HEALTH IN CANADA

Prof Donna E Stewart, University Professor, University Health Network, University of Ontario, Canada

**EDUCATIONAL OBJECTIVE:** To highlight the topics to be included in a Women's Mental Health curriculum as part of general psychiatric residency training.

**PURPOSE:** To examine the content and extent of training in topics relating to women's mental health in the 16 psychiatric residency programs in Canada.

**METHODS:** Survey of psychiatric residency training directors and 2 senior resident representatives from all of 16 programs.

**RESULTS:** 93% of residents and 81% of program directors completed the survey. Twenty-one topics were identified as important to training residents to be competent in treating women with mental disorders. Perinatal disorders and doctor-patient boundary issues received the most attention. Most topics received moderate to no attention. Lectures and clinical experience were each assigned 50% of educational time. Only 23% of programs stated they had adequately informed faculty to teach women's mental health topics.

**CONCLUSIONS:** There is inadequate to no teaching of many topics that are essential to treating mental disorders in women. Adequately informed and skilled faculty to teach these topics are scarce. Both faculty development and inclusion and teaching of women's mental health issues need to be improved in psychiatric residency education in Canada. A similar survey needs to be done to evaluate and improve education in psychiatric residency programs in other countries to improve the care of women with mental disorders

## **EDUCATION FOR PRIMARY CARE PROVIDERS: IS THE NATIONAL PROGRAM FOR DEPRESSION A PROGRAM FOR DEPRESSED WOMEN?**

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Since year 2001 the Chilean Ministry of Health has implemented a National Program for detection and treatment of depression in primary care clinics. Among persons treated for depression in primary care, ninety percent are women and most of them have a history of previous depressive episodes, family violence and low social support. Three quarters of female patients have a moderate or severe depression, a rate that is very similar to that observed in secondary care. An evaluation of the program showed high compliance for pharmacological treatment (73.3%) but moderate compliance for individual psychotherapy (47.4%) and group psycho-education (37.8%). Further, a significant decline was observed in the severity of symptoms at the three-month follow-up, the decline was greater among women with the most serious symptoms; a significant decrease in anxiety and somatic symptoms was also observed. To make it possible epidemiological research has been carried out, primary health care professionals have been trained in mental health and psychologists have been incorporated into all primary care teams. Although the program has good clinical outcomes a more specific gender approach is still needed

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## **THE METAPHORS OF THE BODY: SOMATIFORM DISORDERS IN CLINICAL PRACTICE IN PERU**

**Chair** - Laura Perez Arce, Executive Director, Psicointegral, Orientadores Especializados en Salud Mental Integral. Miraflores, Lima, Peru,  
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**Co-Chair** - Marta B. Rondón, Universidad Peruana Cayetano Heredia, Miraflores. Peru,  
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The presentation of somatic symptoms with a demand for repetitive exploration, in spite of normal results affects approximately 2% of women and generates difficulties in the therapeutic relationship and

excessive use of health systems. Culture and ethnicity are related to the prevalence and presenting symptoms. Peru is a multicultural, with different traditions that survive together. Therefore, cultural competence is a requirement to deal with the different ways women express their distress. In this symposium Dr Perez will speak about intercultural manifestations in somatoform disorders in private practice in Lima, Dr Luna will describe the neurological and medical symptoms that extend hospital stay before they are diagnosed as depression and anxiety in a national reference setting, Dr Garcia will present her experience with painful gynaecological symptoms in upper class women who have difficulties coping with the stigma of mental disorders. In closing, Dr Wharton will discuss the psychodynamic interactions of these very complex disorders.

## **INTERCULTURAL ASPECTS IN SOMATIZATION DISORDERS**

Laura Perez Arce, Executive Director, Psicointegral, Orientadores Especializados en Salud Mental Integral. Miraflores, Lima, Peru,  
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Somatization disorders have diverse clinical presentations in different cultural settings. In Peru, because of the diverse ethnic origin and region (seaside, mountain range, rain forest) each human group has a different way of symbolizing feelings (sadness, anger, fear) and beliefs. Diagnosis therefore can be difficult, as patients communicate in their local idiom, which depends on gender as well as cultural and ethnic background. The author will present the different expressions of somatization in women from the Andean regions, who repress emotions such as anger and sadness, originating from interpersonal violence. Their main complaint is pain. Women from the coast present with gastroenterological complaints that mask their powerlessness in domestic violence situations. Self denial arising from the stereotyped gender roles underlies the need to suppress feelings and express distress through physical complaints.

## **SOMATIFORM MANIFESTATIONS IN MEDICINE AND NEUROLOGY, NATIONAL HOSPITAL GUILLERMO ALMENARA**

Lena Luna Matos MD, Hospital Nacional Guillermo Almenara, Lima, Peru, [lenaluna5pe@yahoo.com](mailto:lenaluna5pe@yahoo.com)

Somatoform disorders represent a group of disorders characterized by physical symptoms suggesting a medical disorder, are frequent cause of hospitalization in internal medicine services and neurology. In this symposium we will present the results of an observational study carried out in a large national reference general hospital. We reviewed the cases from October 2012 to February 2013, and we observed that the main cause of consultation and hospitalization were chronic pain, and conversion disorders which were associated with mood and anxiety disorders. Lengthy hospitalizations and excess cost due to multiple explorations were observed. Results are disaggregated and analyzed by gender, to highlight the specific features of these complaints in women.

### **VULVODYNIA AS A GYNECOLOGICAL MANIFESTATION OF PSYCHOLOGICAL DISTRESS**

Alicia Garcia Llerena, Instituto de Ginecología y Reproduccion, Monterrico, Surco, [garciallerena@hotmail.com](mailto:garciallerena@hotmail.com)

Women experience diverse gynaecological symptoms that may have no explanation and therefore do not resolve with treatment. These symptoms cause distress in women, especially when repeated examinations and procedures yield no results. In turn, they may have deep cultural symptoms and may themselves be somatic expression of psychological distress and depression. The author will present a series of women in whom the presenting symptom was vulvodynia, and which required psychiatric intervention upon which the symptoms fully disappeared. Patients had histories of depression and anxiety as well as exposure to interpersonal violence

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### **GENDER ISSUES IN LATE LIFE MENTAL HEALTH AND LONG TERM CARE**

**Chair** - Prof. Martin Prince, MD, MSc, FRCPsych, Psychiatrist, Epidemiologist, Centre for Global Mental Health. Health Service and Population Research Department, [martin.prince@kcl.ac.uk](mailto:martin.prince@kcl.ac.uk)

In low and middle income countries chronic diseases are rapidly becoming the main cause of disease burden being neuropsychiatric conditions important contributors. Numbers of dependent older people are

set to quadruple by 2050. These trends have profound socioeconomic implications particularly for gender issues and equity.

We present preliminary results on the economic and social effects of care dependence in late life. We assess the extent to which onset of dependence is associated to economic difficulties and explore the effects on social relations paying particular attention to gender dynamics and decision-making about caring roles.

The study draws on and extends an established set of international population-based surveys conducted by the 10/66 Dementia Research Group. We focus on 4 countries: Peru, México, China and Nigeria.

### **LONG TERM CARE: A GLOBAL VISION IN THE WORLD TODAY**

Daisy Acosta. Dominican Republic MD. Psychiatrist. US Board Geriatric Psychiatry, Neurology, Professor. National University "Pedro Enriquez Ureña", Vice president "Colegio Dominicano de Neuropsicofarmacología", Principal Investigator – 10/66 Dementia Research Group, Past President Alzheimer's Disease International (ADI) [daisyacosta@codetel.net.do](mailto:daisyacosta@codetel.net.do)

Between 2010 and 2050, the number of people aged 60 and over is projected to increase by one and a quarter billion, reaching 22 percent of the world's population. Population ageing will remain so into the current century with a profound impact on a broad of economic, political and social conditions. In this context a growing problem is that of long-term needs for care (dependence). Number of dependent older people are set to quadruple by 2050.

### **LONG TERM CARE. A CHALLENGE IN LOW AND MIDDLE INCOME COUNTRIES**

Mariella Guerra. MD, PhD. Perú, Psychiatrist. Instituto de la Memoria, Depresión y Enfermedades de Riesgo-IMEDER-. Peruvian University "Cayetano Heredia", Principal Investigator – 10/66 Dementia Research Group Scientific Committee, Peruvian Alzheimer Association, [mariella.guerra.1066@gmail.com](mailto:mariella.guerra.1066@gmail.com)

Demographic change that began in countries now defined as developed is occurring most rapidly in low

and middle income countries (LMIC). 81% of people aged 60 and over will be living in LMIC. In these regions, chronic diseases are rapidly becoming the main cause of disease burden. However, the main focus of health policymakers has been on preventing death from cancer and heart disease, with very little attention to the growing problem of long-term needs for care.

Research conducted by the 10/66 Dementia Research Group in Latin America, India, China and Nigeria shows that more carers are women often also responsible for care of young children in three generation households. A quarter of carers have given up or cutback on work to care.

### **THE INDEP PROJECT IN LOW AND MIDDLE INCOME COUNTRIES**

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#### **Initiatives on Violence against Women in Peru**

The INDEP project is the Economic and Social Effects of Care Dependence in Late Life. The study is carried on in participants 65 years and over from urban and rural sites from Peru, Mexico, China and Nigeria. It assess the extent to which onset of dependence serves as an economic shock to households as a whole, leading to economic vulnerability and impoverishment, exploring the effects on social relations between household members and others in their network. In each of the four countries, six detailed "case studies" using qualitative research methods has been made, to explore in more depth associations.

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### **WOMEN IN PRISON: DIFFERENT SCENARIOS TO THINK ABOUT CRIMINALIZED WOMEN FROM A GENDER PERSPECTIVE**

**Chair** - Msc. Paula Escribens Pareja Pontificia Universidad Católica del Perú Lima, Perú, [pescribens@pucp.pe](mailto:pescribens@pucp.pe)

Women who are imprisoned for having participated in terrorist action as well as those imprisoned for other

crimes are also affected by different forms of violence; prison is a space that reproduces the dynamics of gender violence where there is a victim and an aggressor.

This symposium aims to discuss the different ways of constructing gender identity and the impact of different forms of violence against women in their identities, both as women themselves and for society as a whole, in the context of research conducted by the Commission for Truth and Reconciliation (CTR).

Results of the work of the CTR will be analyzed from a gender perspective that allows us to think how certain problems related to women remain invisible and rejected. Gender encompasses the process of building identities as well as interpersonal relationships. In this sense, it is a key to understand violence against women, as well as the identities and performances of women imprisoned for different reasons. This occurs within a post-conflict context, where although violence that happened has been made visible by the Truth and Reconciliation Commission, little has been done in terms of justice and reparation, and women are still the last priority.

### **LIFE PROJECTS OF FOUR WOMEN VICTIMS OF SEXUAL VIOLENCE DURING THE INTERNAL CONFLICT OF PERU**

Paula Escribens Pareja, Pontificia Universidad Católica del Perú, [pescribens@pucp.pe](mailto:pescribens@pucp.pe)

The present investigation explores the life project of four women that were victims of rape(s) and different types of sexual violence during the internal armed conflict that took place in Peru. These women belong to an alto-andean community of rural Huancavelica where a military base was located for fourteen years. This investigation is inserted within a qualitative paradigm; through in-depth interviews the narratives about the life project of these women and the impact of sexual rape(s) on their life projects are collected.

We found that the four women have a life project that is crossed and re-signified by the experience of sexual rape(s), were the negative impact is magnified when a forced pregnancy occurred as result. The results show that three of these women married an ex-military officer posted at the base located in their community, giving account of the use of identification with the aggressor as mechanism for coping with the impact, as well as the need to

construct a relationship even when the choice of whom the partner is, is very costly. In relation to the cases where a forced pregnancy occurred the following maternal experiences (i.e. other children) were negative and traumatic, even when these were planned and desired.

### **PSYCHOSOCIAL IMPACT OF THE TRUTH AND RECONCILIATION COMMISSION IN PERU: A GENDER PERSPECTIVE APPROACH**

Evelyn Seminario, Pontificia Universidad Católica del Perú, Departamento de Psicología, Lima, Perú, [eseminario@puccp.pe](mailto:eseminario@puccp.pe)

Between 1980 and 2000, Peru was affected by an internal conflict in which murders, kidnappings, disappearances, torture, arrests and other serious crimes and human rights violations were committed. Many countries have established truth commissions to investigate and analyze post conflict societies and human rights violations that occurred during internal wars. This study proposes to analyze, from a gender perspective, the effects of the process of Truth and Reconciliation Commission (TRC) in the Peruvian population, considering the difference of the impact depending on gender as well as the different contact with the work of the TRC. This research is conceived a qualitative paradigm and presents a descriptive approach, based on 10 focus groups with men and women in urban and peri-urban-Lima and Ayacucho.

In this sense, we will identify the consequences of exposure to violence as well as the dissemination of the work of the TRC and the government actions after the delivery of the final report of the TRC. We will also analyze the attitudes, emotions and perceptions associated with forgiveness, reconciliation, human rights and social peace. We will also contrast hypotheses that associate the degree of closeness to the acts of violence and, in general, to the TRC process, with the perception and attitudes towards work, forgiveness to those guilty of human rights violations and national reconciliation from the perspective of an people affected.

### **SELF-PERCEPTION AND INTERPERSONAL RELATIONSHIPS IN A GROUP OF WOMEN VICTIMS OF RAPE: INVESTIGATION WITH THE RORSCHACH PSYCHODIAGNOSTIC TEST**

Adriana Fernandez Godenzi, Pontificia Universidad Católica del Perú, Departamento de Psicología, Lima, Perú  
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The aim of this study was to identify the characteristics of the Rorschach clusters of self-perception and interpersonal relationships in a group of women victims of rape. For this purpose I used the Rorschach Psychodiagnostic Test, a sociodemographic questionnaire and asked information about the rape episode. Significant and highly significant differences were found between the women victims of rape and the comparative group in several Rorschach variables from both clusters, and also in variables regarding information processing, stress management, and the Depression Index (DEPI). On the other hand, for sociodemographic variables, no significant differences were found. Among the study group some significant differences were observed according to variables related to the rape episode: received social support, pregnancy as a consequence of rape and physical damage or disease due to the rape.

### **THINKING ABOUT MENTAL HEALTH INSIDE THE PRISON: TESTIMONIES OF HOMOSEXUAL MASCULINIZED WOMEN IMPRISONED IN LIMA**

Adriana Gallegos Dextre. Pontificia Universidad Católica del Perú – PUCP, [a.gallegdex@gmail.com](mailto:a.gallegdex@gmail.com)

Within a prison relationships are determined by the constraints and permanent surveillance. This determines the ways of socialization and interaction within gender roles and gender performance are deployed. In this context it also can be perceived different homoerotic sexualities that build up a scenario where masculinized homosexual female prisoners are located. Sexual orientation and gender identity of these women make them perceive themselves as abject subjects who are disabled to interact positively with themselves as well as with others and their environment within the prison.

There is a sub culture inside the prison and these women are called “chitos” which derives from the word “machitos”. This nickname concentrates

stigmatization and violence from the environment against these women, which constitute risk factors for mental health that work in addition to those related to their status as prisoners. There is a double transgression embodied by these women's bodies; there is the trace of the crime as well as a sexual orientation censored by the institution in which they are held.

### **GENDER PERSPECTIVE AND PRISON ENVIRONMENT: REFLECTIONS BASED ON A RESEARCH WITH TERRORIST WOMEN IMPRISONED**

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As the Truth and Reconciliation Commission stated, the main actor responsible for the more than sixty thousand deaths between 1986 and 2000 was the communist party "Shining Path". This has been considered as a terrorist organization that was seeking for a structural change for the country, but they used violence and terror as their means. This party recruited women whom at the end represented a third of all its members. Currently, after this war finished many of these women are imprisoned and will stay there for long periods of time.

The image of women convicted by terrorism contrasts with the traditional role assigned to women in a patriarchal order as the Peruvian society. Based on an investigation made with nine women's life stories I propose more complex hypotheses about their gender identity and the construction of their femininity. This investigation allows us to explore their childhood and adolescence as well as their militancy within the party and their experience inside the prison. This shows us the different processes of transformation of their gender identity within each of these aspects. From this, it is possible to reflect about psychological theories that state femininity is a key construct in the process of building the self. These conclusions will allow us to propose methodologies that incorporate gender perspective in the treatment of women imprisoned.

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## **WOMEN'S MENTAL HEALTH AND THE INTERFACE BETWEEN PSYCHIATRY AND GYNECOLOGY**

**Chair** - Prof. Johannes Bitzer ; Head of Department of Obstetrics and Gynecology . University Hospital Basel; Switzerland, [jbitzer@uhbs.ch](mailto:jbitzer@uhbs.ch)

**Co-Chair** - Prof. Anita Riecher ; Department of Adult Psychiatry ; University Hospital Basel ; Switzerland

Women are frequently confronted with health problems and health issues which comprise the mental and physical dimension of their personality and which therefore would need a comprehensive model of biopsychosocial care. The medical system is organised under the dichotomy of specialists for the mind and specialists for the body. It is for the sake of patients that this dichotomy is overcome by collaboration and mutual understanding of the other discipline. We want to show examples of this shared understanding and care

### **HOW TO HANDLE THE WISH FOR GENITAL SURGERY**

K. Marieke Paarlberg, MD PhD, gynaecologist, President ISPOG ; Affiliation: Department of Obstetrics and Gynaecology, Gelre Teaching Hospital  
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Gynaecologists and plastic surgeons are more and more frequently consulted with complaints of the aesthetic appearance and function of the vulva. This workshop will be challenging the participants how to deal with this request as a professional. The request for genital surgery put in a bio-psycho-socio-cultural perspective and the medical ethical principles are considered. Based on the available scientific evidence and practical guidelines considering this subject, recommendations are given 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 genital surgery, i.e. body dysmorphic 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 dysmorphic 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 vulva 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.

**REFERENCE:** Paarlberg KM, Weijenberg PTM. Request for operative reduction of the labia minora; proposal for a practical guideline for gynaecologists. *Journal of Psychosomatic Obstetrics & Gynecology*, 29 (4), 2008: 230-234

### **INFERTILITY – A PHYSICAL OR A PSYCHOLOGICAL PROBLEM – THE CHALLENGE OF COUNSELING**

Sibil Tschudin MD: Department of Obstetrics and Gynecology; University Hospital Basel; [stschudin@uhbs.ch](mailto:stschudin@uhbs.ch)

From a psychological perspective infertility could be characterised as a journey with an unknown destination and an unknown duration, during which momentous decisions have to be made, the couple's intensive cooperation is required and emotional strain is considerable.

A holistic and individualised approach to couples with fertility problems, therefore not only compromises a thorough clinical investigation with regard to underlying medical conditions and treatment options, but also support in coping with the infertility problem. This can best be achieved when applying a patient-centred communication style by asking open

questions and focussing on emotional response. Further more psychological interventions such as crisis intervention, assistance in decision-making, facilitating communication and addressing conflicts (partnership, family), as well as discussing alternatives to biological offspring might be required. Beyond that some patients may benefit from relaxation techniques and need counselling for sexual problems.

A theoretical input will provide background information. Besides this workshop participants will have the opportunity to discuss cases and to practice the required communication techniques.

### **SEXUAL PAIN**

Johannes Bitzer. University Hospital, Basel

Sexual pain is a frequent complaint among women of all age groups. The etiology is in most cases multifactorial including gynecological disease, body image disorder, affective disorders, relationship problems. These factors may interact with each other in a linear time line fashion and/or in a positive feedback way which increases the pain intensity over time.

The diagnosis has to be based on the biopsychosocial model using the 9 field diagnostic diagram which we have developed in our sexological consultation. Biological, individual psychological and interactive social factors are put in relation to a timeline along distant early predisposing factors, triggering and actual maintaining factors.

This scheme is the basis for the development of individual therapeutic strategies. Cases presented by the participants or cases proposed by the speaker will be discussed

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## **WORKSHOPS**

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### **BUILDING POSITIVE HEALTH IN THE MENTAL HEALTH OF FEMALES ACROSS THE LIFESPAN**

**Chair** - Mary Katsikitis, University of the Sunshine Coast, Maroochydore, Queensland, Australia - [mkatsikiti@usc.edu.au](mailto:mkatsikiti@usc.edu.au)

### **A WEB-BASED MOTHER-DAUGHTER COMMUNICATION STRATEGY**

Professor Mary Katsikitis,, University of the Sunshine Coast, Maroochydore, Australia, [mkatsiki@usc.edu.au](mailto:mkatsiki@usc.edu.au)

This paper will introduce an intervention designed to bring mothers and daughters together to discuss and

explore several issues, including interpersonal communication and parenting style, conflict resolution and risk-taking behaviours.

**METHODS:** The study has 2 stages. Stage 1 consisted of meeting with 2 separate focus groups, one with mothers and a separate one with their adolescent daughters. These issues (above) were all identified as pivotal to the mother-daughter relationship at this stage of the developmental cycle (for both mothers and daughters). In Stage 2, we designed a web-based intervention, using technologies such as Facebook and SMS to support our programming.

**RESULTS:** The intervention provides a new opportunity to provide supportive, positive experiences that meet the developmental needs of both groups. The intervention involves activities that mothers and daughters do together, once a week, for a period of 3 weeks. Evaluation of the intervention includes, mother-daughter communication, parenting style, parental confidence in parenting and self-esteem of both parties.

**CONCLUSIONS:** A demonstration of the web-based intervention will be provided.

**REFERENCES:** Katsikitis, M., Statham, D., Rosdahl, J., & Lowe, J. Enablers and barriers to binge drinking in young adults.

<http://www.psychology.org.au/Assets/Files/Proceedings-TOC-2009>

### **EMPOWERING YOUNG WOMEN TO MOVE ON FROM SELF-HARM USING STRENGTHS BASED MENTAL HEALTH PROMOTION**

Professor Margaret McAllister, Central Queensland University, Noosa, Australia, [mmcalli@usc.edu.au](mailto:mmcalli@usc.edu.au)

This paper discusses a school-based program that develops young women's coping and support strategies, called "iCare". The program builds on strengths to foster resilience and to reduce the prevalence of self-harm. Self-harm, defined as self-inflicted injury and neglect, is a common health problem amongst young people, particularly girls. One in 10 Australian young people engage in self harm. This is more than double the general population prevalence and is a major public health concern. A strengths focused response to self-harm, sees it as one strategy within a coping repertoire that needs to be enlarged.

**METHODS:** The iCARE program involves training for facilitators in strengths-focused communication. They deliver a structured group based program to all students

in a high school classroom, and it includes: 1) engaging young people so they feel listened to, valued and able to set goals; 2) building on existing or hidden individual strengths and assets; and 3) encouraging the extension and transfer of solutions from the program to their real-world context. Young people learn together about strategies that provide strength, and facilitate coping with life's challenges in nurturing, rather than self-damaging ways.

**RESULTS:** The study revealed strong support for the program.

**CONCLUSION:** The iCare program is relevant for young women, whether they self harm or want to be better supports for their friends.

**REFERENCES:** McAllister, M., Hasking, P., Estefan, A., McClenaghan, K., and Lowe, J. (2010). A strengths based group program on self-harm: A feasibility study. *Journal of School Nursing*, 26, 289-300.

### **THE ROLE OF RESOURCES IN MANAGING THE MENOPAUSAL TRANSITION.**

Dr Prudence Milllear, University of the Sunshine Coast, Maroochydore, Australia, [pmilllear@usc.edu.au](mailto:pmilllear@usc.edu.au)

This paper identifies possible workplace resources and risks that impact on the timing and health consequences of menopause, and explores how women respond to these occurrences when working. This presentation will explore how a woman's available resources (both personal and from her work) moderate the effects of the menopausal transition on mental health, well-being and job satisfaction.

**METHODS:** A large sample of employed women in Australia and the UK completed an online survey that measured personal resources, symptom severity and treatment, workplace conditions, and how well women found their workplace responded to menopausal symptoms, in addition to their mental health, job and life satisfaction.

**RESULTS:** Specifically, SEM found that women with more personal and workplace resources and more responsive workplaces reported better outcomes of less depression, more job and life satisfaction and a better experience of menopause itself. Women benefited from being more optimistic and having stronger self-efficacy within themselves to managing menopause and its symptoms. Further, work roles that encompassed autonomy in their decision making and social support amongst employees benefited women directly by predicting a better menopausal experience as well as indirectly making the

environment more responsive and supportive of the menopausal women.

**CONCLUSION:** The research highlights two ways to assist women at this time of their lives. First by showing the importance of personal resources to manage this experience and second, by providing guidance to employers about how they can support their employees at this time of their lives.

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## **MATERNAL MENTAL HEALTH: INTEGRATED MENTAL HEALTH MATERNAL CHILD SERVICES IN A PUBLIC HOSPITAL**

**Chair** - Anna M Spielvogel, MD, Ph.D, University of California San Francisco/San Francisco General Hospital, [anna.spielvogel@ucsf.edu](mailto:anna.spielvogel@ucsf.edu)

**Co-Chairs –**

Alinne Barrera Ph.D., University of California, San Francisco, Psychosocial Medicine  
Gloria Castro, PsyD, University of California, San Francisco Infant-Parent Program, Daycare Consultants  
Nancy Liu, Ph.D., University of California, San Francisco, Department of Psychiatry, Post-doctoral Research Fellow  
Camille Moreno, PsyD, University of California, San Francisco Infant-Parent Program Daycare Consultants  
Melissa Nau, MD, University of California, San Francisco, Medical Director, Psychiatric Emergency Services  
Melanie Thomas, MD, MS, University of California, San Francisco, Health Psychology Post-doctoral Research Fellow

**BACKGROUND:** Mental health disorders present risks to a healthy pregnancy and delivery, as well as adequate infant care and child development. The provision of effective mental health services to pregnant and postpartum women is complicated by low uptake of mental health services and the lack of current models of appropriate, cost-effective mental health services.

Lessons learned from our model of care can spur innovation for developing these services. Optimal mental health services should identify at-risk mothers and link them to flexible, comprehensive, culturally-appropriate and family-centered services which are well-integrated with prenatal, postpartum and infant care.

Method: The High Risk Obstetric (HROB) psychiatry team provides mental health services alongside HROB prenatal care. We provide consultation to women and providers

throughout the health network including labor and delivery services. Weekly joint rounds among providers, shared electronic medical records and jointly developed treatment plans for delivery and postpartum care ensure the integration of services.

The population served is 65 % Latina (mostly first-generation immigrants), 13 % African-American and 10% Asian, 10% White, and smaller percentages of Middle-Eastern, African, and Eastern European descent.

Assessments and interventions are adapted to socioeconomic status (SES), cultural beliefs and health care delivery preferences. When possible, the language and cultural expertise of providers are matched to the women. Latinas have access to services informed by the pioneering work of Ricardo Munoz, Ph.D. on evidence-based depression prevention and treatment specifically designed for this population. Infant-Parent Program (IPP) and Child-Parent Trauma therapy, developed by Alicia Lieberman, Ph.D. is accessible to Latina mothers. A domestic violence group led by a clinical social worker and a postpartum infant parent group are available to Latinas. IPP therapists help mothers focus on the baby and link women to long-term IPP when indicated.

The Edinburgh Postnatal Scale (EDS) is administered to screen for symptoms of depression and anxiety, educate women about symptom clusters, determine a threshold for referral to HROB psychiatry and track symptom changes over time.

**OUTCOME:**

1. Improved ability to screen, identify, track and mitigate mental health issues.
2. Provide a combination of culturally-appropriate and evidenced-based services including psychotherapy, psychiatric medication assessment, and/or crisis interventions.
3. Train the next generation of maternal-child health providers including psychiatrists, psychologists, obstetricians, nurses, midwives, and social workers

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## **INPATIENT TREATMENT OF THE PREGNANT PSYCHOTIC PATIENT**

**Chair** - Anna M Spielvogel, MD, Ph.D, University of California San Francisco/San Francisco General Hospital, [anna.spielvogel@ucsf.edu](mailto:anna.spielvogel@ucsf.edu)

**Co-Chair** - Emily K Lee, MD, University of California San Francisco/San Francisco General Hospital

Pregnant women with severe psychotic mental illness present unique challenges and opportunities for mental health providers. Lessons learned from an integrated service for mentally ill pregnant women, delivered in a culturally competent fashion, on a specialized inpatient Women's Issues Consultation Team in an urban public hospital will be described.

Participants will learn about one model of coordinated comprehensive care for high-risk psychotic pregnant women within a public sector general hospital. While every attempt is made to serve psychotic pregnant women in an outpatient setting, inpatient hospitalization plays a critical role in assessing the circumstances of a psychotic relapse, stabilizing the acute crisis, addressing medical and obstetric concerns, and linking women to integrated comprehensive care.

The myth that a medication-free pregnancy is always safest is challenged and replaced by individualized and informed risk-benefit analysis. Perinatal hospitalization should be considered for women with florid psychotic symptoms, delusions about their pregnancy, or those who exhibit psychotic denial; they are at high risk for unassisted delivery. Coordinated treatment planning among obstetrics, psychiatry, and pediatrics can ensure safe deliveries, patient education, and optimal postpartum care.

Assessment, treatment, and discharge planning must involve close collaboration among the patient, family, and obstetrics and psychiatric services. Issues include: cultural factors, pregnancy impact on the mental illness, adaptation to pregnancy, acceptance of treatment interventions, legal issues, and availability of social supports.

Composite case examples will highlight the challenges and opportunities in providing optimal integrated care to psychotic pregnant low-income culturally diverse women

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## EDUCATION IN PSYCHIATRY IN LATIN AMERICA AND THE GENDER PERSPECTIVE

**Chair** - Dra. Alejandra Inés Maddocks- Secretary of Section Education in Psychiatry of APAL, President Asociación Metropolitana de Psiquiatría, Buenos Aires, Argentina, mail: [alemaddocks@yahoo.com.ar](mailto:alemaddocks@yahoo.com.ar)

**PURPOSE:** Determinate the gender perspective into the curricula of psychiatry in Latin America.

Move towards a psychiatry curriculum that has the gender perspective in consideration.

**CONTENTS:** During the last thirty years there has begun to appear significant data about differences in illness and death among men and women. This reflected the existence of a possible slant of gender issues related to health; slant that has facilitated the "Invisibility" of women in the areas of health research, professional education and clinical care.

Family medicine and psychiatry are the two medical specialties that have contributed to foreground the health problems associated to ignoring the diversity, and in particular the inequality of gender.

Depression, anxiety, psychological pain, sexual violence, domestic violence and the increasing rates of substance's abuse have impacted more disproportionately on women than men in different countries of Latin America.

Taking into account these and other relevant issues to women's mental health, the Latin American Psychiatric Association (APAL) has decided to include Women's Mental Health Program in the Presidential Program, where one of its objectives is to improve the aptitudes of the professionals to recognize and attend the consequences related to health problems of gender.

The Gender should be considered in the design and implementation of health policies to safeguard the fairness, aim to the health objectives and also be included in the medical training.

**CONCLUSIONS AND RECOMMENDATIONS:** The mental health of women is been increasingly recognized as the area of greatest impact on individual welfare, family and society. But the development of this field is still a bit precarious despite the progress in the last decades.

The inclusion of gender is a challenge and an urgent requirement in all aspects of policy and curriculum development in education of psychiatry in Latin America, where the education section in psychiatry will be a priority in its work plan 2012 2014. It will be recommended to the countries of Latin America to include the gender perspective in the training of medical students, psychiatrists and primary care physicians.

**METHODOLOGY:** Open the workshop with a brief exposition of the topic acting as a trigger, interaction with representatives of the Section of APAL, Graduate Teachers and other participants in the region. The objective will be to move towards a psychiatry curriculum which considers the gender perspective. In order to fulfill this, all the necessary changes in the modular curriculum of the specialty will be carried on.

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- Gita, S et al Incorporar la perspectiva de género en la equidad en salud: un análisis de la investigación y las políticas. PAHO, 2005

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## RECENT DEVELOPMENTS IN ACTION-FOCUSED THERAPEUTIC STRATEGIES FOR THE TREATMENT OF ANXIETY DISORDERS IN WOMEN

**Chair** - Professor Michael J. Telch, Ph.D., Laboratory for the Study of Anxiety Disorders, University of Texas, Telch@austin.utexas.edu

Anxiety disorders are the most prevalent class of mental disorders affecting adult women. Both pharmacotherapy and psychosocial treatments, particularly behavioural and cognitive therapies, have established efficacy in the treatment of panic disorder, agoraphobia, post-traumatic stress disorder, social anxiety disorder, obsessive-compulsive disorder, generalized anxiety disorder, health anxiety, and specific phobias. Unfortunately, some patients show less than optimal treatment response and others show a return of symptoms following the completion of treatment. Developing augmentation strategies for improving patients' response to treatment remains a critically important goal.

The objective of the proposed workshop is to provide attendees hands on education and clinical training in the application of two action-focused, empirically supported clinical strategies – Safety Behaviour Elimination (SBE; Telch & Lancaster, 2012), and Antagonistic Action Training (AAT; Wolitzky & Telch, 2010). Both strategies can be used alone or in combination with pharmacotherapy, psychotherapy, or their combination. Unlike some clinical techniques, which are disorder-specific, both strategies have the advantage of being applicable to the full range of anxiety disorder patients.

Specific topics covered in this workshop include:

- Theoretical underpinnings of SBE and AAT
- Efficacy data supporting each strategy
- Specific strategies for assessing patients' anxiety-maintaining safety behaviours
- Procedural guidelines for applying each strategy
- Issues in the integration of each strategy with pharmacotherapy and psychotherapy

- Attendee participation will be encouraged and participants will be encouraged to present sample cases for the presenter to illustrate how these action-focused strategies can be applied to tough cases.

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## PYCHOTHERAPIES FOR POSTPARTUM DISORDERS: COGNITIVE BEHAVIORAL TREATMENT OF MAJOR DEPRESSIVE DISORDER AND OBSESSIVE COMPULSIVE DISORDER WITH POSTPARTUM ONSET

**Chair** - Sarah E. Getch, Ph.D. Assistant Professor, Northwestern University, Department of Behavioral Medicine, Clinical Psychology Program, Downers Grove, Illinois USA, [sgetch@northwestern.edu](mailto:sgetch@northwestern.edu)

**EDUCATIONAL OBJECTIVES:** At the conclusion of this workshop, the participants should be able to recognize the unique characteristics of depression and obsessive compulsive disorder postpartum onset, effectively diagnose these postpartum disorders, as well as be able to describe and implement specific CBT strategies and techniques for the treatment of these disorders.

**PURPOSE:** The effective use of cognitive-behavioral therapy (CBT) techniques in the treatment of major depressive disorder and obsessive compulsive disorder (OCD) has been well studied and documented. However, far fewer studies have investigated the use of CBT techniques for postpartum women and, in particular, postpartum minority populations in community mental health. Issues of psychoeducation dissemination in therapy are discussed as well as treatment adherence and attrition.

**METHODS:** This current workshop focuses on the use of CBT techniques for two clinical case studies; one case represents a woman with postpartum depression (PPD) while another case represents a woman with postpartum onset of OCD. Both women were African American with limited financial and social resources as well as poor access to mental health care. Additionally, these cases represent each woman's first contact with a clinical psychologist and psychotherapy. Patients completed self-report forms weekly over a period of 8 weeks to assess depressive symptoms (Patient Health Questionnaire – 9) and obsessions and compulsions (Yale-Brown Obsessive Compulsive Scale), respectively.

**RESULTS:** These clinical case studies partially support the use of CBT techniques in women with PPD and postpartum onset OCD. Issues of contextual and cultural issues and their relationship to treatment outcome are discussed. **CONCLUSIONS:** All women are vulnerable to mental health concerns during the postpartum period, regardless of age, race or ethnicity, marital status, educational level, or socioeconomic status. Continuing the study of empirically supported treatment for complex and diverse populations is imperative in order to significantly reduce depressive and anxiety disorders during the postpartum period

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## ORALS

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### ETIOLOGY AND PREVENTION OF MENTAL ILLNESS

#### SAME OR DIFFERENT LEVELS OF DEPRESSION, ANXIETY AND DISTRESS IN MEN AND WOMEN STARTING CHEMOTHERAPY

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**EDUCATIONAL OBJECTIVES:** At the end of this presentation, the participants should be more aware of the psychological vulnerability of women starting chemotherapy, thus better recognizing their anxiety and depressive symptoms.

**OBJECTIVES:** To compare depression, anxiety and distress in female and male patients starting chemotherapy.

**METHODS:** All consecutive patients, 18 years of age or above, starting chemotherapy for the first time were assessed on the first day of treatment with the Hospital Anxiety and Depression Scale (HADS), the Patient Health Questionnaire-9 (PHQ-9), the Distress Thermometer (DT), and a Visual Analog Scale (VAS) for pain.

Demographics, medical and psychiatric history, and current diagnosis and stage were also assessed.

**RESULTS:** Patients assessed (n=270) were mainly women

(51.5%), Caucasian (91.9%), married (66.7%), living with their family (87.8%), being retired (47.6%), having a low level of education (57.6%), and a mean age of 59.4±11.8 years. Compared to men, women were significantly younger (57.5±12.3 vs. 61.4±10.9, p=.007), had more frequently undergone previous surgery (59 vs. 41%, p=.015), and referred more frequently going to the sessions accompanied (85.4 vs. 74.6%, p=.027). Women showed higher mean scores of depression (HADS – 5.1±4.2 vs. 3.9±3.8, p=.013; PHQ9 – 6.5±4.9 vs. 5.1±4.7, p=.018), anxiety (HADS – 6.6±3.9 vs. 4.7±3.7, p<.001), and psychological distress (DT –4.0±2.7 vs. 2.8±2.5, p<.001). Women were at greater risk of having an HADS anxiety score ≥11 (OR=2.2, CI 1.0-4.0, p=.038). However, they did not differ from men in any demographic variables, nor in stage of illness, level of pain, and previous and current psychiatric treatment.

**CONCLUSIONS:** As expected, when facing chemotherapy women significantly differed from men in presenting higher levels of depression, anxiety, and psychological distress, and being at greater risk of clinically important symptoms of anxiety. These results suggest the need for greater awareness to and a differentiated approach for psychological distress in women starting chemotherapy.

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#### THE SEXUAL DIMORPHISM OF THE CORPUS CALLOSUM IN WOMEN AND MEN MATCHED FOR BRAIN SIZE

E. Luders<sup>1</sup>, F. Kurth<sup>1</sup>, P.M. Thompson<sup>1</sup>, A.W. Toga<sup>1</sup>

**EDUCATIONAL OBJECTIVES:** To recognize that individual differences in brain size account for apparent sex differences in the anatomy of the corpus callosum.

**PURPOSE:** To investigate sex differences in the anatomy of the corpus callosum using brain sized-matched female and male brains. Note, usually brain size between women and men differs, on average, by about 13–15%, with significantly smaller female brains.

**METHODS:** We analysed the structural (T1-weighted) brain images from a sample of healthy subjects (n=48), ranging between 19 and 69 years of age. Specifically, this unique sample consisted of 24 women and 24 men who were pair-wise matched for intracranial volume (i.e., the mean difference was zero). We calculated the thickness (in mm) of each individual corpus callosum at 100 equidistant points across the callosal surface (Luders et al., 2010). We then compared women and men with respect to these point-wise thickness measures, while removing the variance associated with age.

**RESULTS:** When comparing the brain size-matched groups using uncorrected significance thresholds ( $p < 0.05$ ), the corpus callosum was slightly thicker in men than in women. However, the significance cluster was restricted to a very small section within the posterior splenium. Even more importantly, when applying appropriate corrections for multiple comparisons using False Discovery Rate (FDR) at  $q = 0.05$ , the aforementioned effect was no longer significant. Interestingly, regardless whether corrections for multiple comparisons were applied or not, no callosal region was significantly thicker in women compared to men.

**CONCLUSIONS:** Our findings suggest that individual brain size may have accounted for what appeared to be sex differences in callosal anatomy (e.g., larger callosal dimensions in men compared to women), as reported in numerous previous studies. Interestingly, even in this unique data set containing relatively large female brains, we were not able to replicate outcomes from a prior (and highly influential) *post mortem* study demonstrating that “the female splenium is both more bulbous and larger than the male counterpart” (DeLacoste-Utamsing & Holloway, 1982).

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- Luders, E., Thompson, P.M. & Toga, A.W. (2010): The development of the corpus callosum in the healthy

## PREDICTING TRAJECTORIES OF MENTAL HEALTH IN A NATIONAL COHORT OF YOUNG AUSTRALIAN WOMEN

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**EDUCATIONAL OBJECTIVES:** At the conclusion of this presentation participants should be able to identify characteristics of young women associated with mental health problems over time

**PURPOSE:** To identify characteristics in early adulthood associated with patterns of mental health among young women over the following 12 years.

**METHODS:** We used data from 5,569 women who had completed all of the first five surveys (1996, 2000, 2003, 2006 and 2009) of the 1973-1978 cohort of the Australian Longitudinal Study on Women’s Health. Mental health status at each wave was assessed using the SF36 Mental Health Index (cut-point of  $< 52$ ) to discriminate between those with and without psychological distress. Women were categorised into 4 trajectory groups: i) never had psychological distress; ii) early episode (Surveys 1 and 2) with no recurrence; iii) early episode with recurrence; and iv) late episode (Surveys 3-5) with or without recurrence. Multinomial logistic regression identified characteristics at Survey 1 associated with membership of each mental health trajectory group, with never having psychological distress as the reference group.

**RESULTS:** Characteristics at Survey 1 that were predictive of membership of any specific trajectory group in bivariate models at  $p < 0.01$  were included in the multivariate model. These characteristics included measures of: psychosocial characteristics, lifestyle factors, health behaviours, health service use, socioeconomic position and general health.

In the multivariate model, with significance predetermined at  $p < 0.001$ , general health (OR: 2.43, 95%CI: 1.62-3.65) and stress (2.70, 2.21-3.28) were associated with membership of the group having an early episode with no recurrence. These characteristics had even stronger associations with the group having an

early episode with recurrence (3.51, 2.41-5.12 and 3.84, 3.23-4.60 respectively), along with other psychosocial characteristics: history of violent relationship (1.74, 1.32-2.29) and weight/shape dissatisfaction (2.00, 1.69-2.36); and some socioeconomic characteristics: not managing on income (1.55, 1.25-1.93), non-English speaking background (1.80, 1.30-2.48), and being a student at Survey 1 was associated with reduced likelihood of membership (0.59, 0.53-0.89). None of these Survey 1 characteristics was associated with membership of the 'late episode' group, with the exception of stress (1.55, 1.27-1.89).

**CONCLUSIONS:** Psychosocial and socioeconomic characteristics in early adulthood are predictive of ongoing mental health problems and can therefore inform preventive health strategies.

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## PSYCHOSOCIAL ASPECTS AND ORGANIZATIONAL FACTORS AFFECTING BURNOUT AMONG NURSES

Jinkey Leilanie Lu, National Institute of Health, University Of The Philippines Manila

**EDUCATIONAL OBJECTIVES:** This study demonstrated the importance of organizational factors in affecting burnout among nurses in the Philippines.

**PURPOSE:** This study tried to demonstrate (interaction between situational factors, role stressors, hazard exposure and personal factors among 135 nurses in the Philippine General Hospital (PGH). Methods

**RESULTS:** This is a cross sectional study which looked into the The principles of the Maslach Burnout Inventory, Minnesota Satisfaction Questionnaire, Pareek Organizational Role Stressors, Lu's Hazard Exposures, and R. Schwarzer's Perceived Self-Efficacy. Stratified sampling techniques were used based on ward and unit assignments. Majority of the respondents were female (77.8%), married (54.8%) and belonged to the 31 to 40 age group (37%). More than half (58.5%) of the respondents have reported being ill from work in the past 12 months, and 59.3% have said that they have missed work because of an illness. Top five symptoms among the respondents were: headache (78.5%), cough and colds (74.1%), back pain (65.2%), leg cramps (46.7%) and sleep disturbances (42.2%). Upon analysis, the following were significantly associated with burnout: organizational role stress, hazard exposure, self-efficacy, age, number of years as a nurse, illness in the past 12 months, migraine, dizziness, sleep disorder, cough and colds and diarrhea. After multiple regression analysis,

organizational role stress ( $p = .000$ ), migraine ( $p = .001$ ), age ( $p = .018$ ) and illness in the past 12 months ( $p = .000$ ) were found to be significant predictors of burnout. Significant interactions were also found between self-efficacy and hazard exposure, self-efficacy and organizational role stress, and situational factors and hazard exposure ( $p = .000$ ,  $.002$  and  $.005$ , respectively). One-way ANOVA also showed that nurses in inpatient departments and ICUs had significantly higher burnout levels than those in outpatient services.

**CONCLUSIONS:** Organizational factors indeed affected the development of burnout among nurses. The contribution of the study is seen in advancing new concepts in the already existing framework of burnout, and thus, can assist the nurses and the hospital administration on how to control such phenomenon. Solutions should be multi-dimensional and involve the individual, organizational factors and work conditions.

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## EMOTIONAL HEALTH, AGING, EDUCATION, AND WORK ROLE: LESSONS FROM A NURSING WORKFORCE

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- Detail differences in self-perceived emotional health by educational class in one female dominated field, the US nurse workforce
- Explore other variables affecting emotional health in a female dominated profession including: general health, age, gender, work role and setting.

**PURPOSE:** To empirically assess perceived emotional health by education and other demographic factors in a female-dominated workforce.

**METHODS:** This survey design research used a purposive sample of nurses in a single US state ( $n = 5051$ ), with data gathered during the relicensure process. Self-perceived 1) health; 2) emotional health; and 3) intention to leave current position were gathered on a Likert scale and augmented with self-reported demographic data.

Differential licensure status served as a proxy for educational class.

**RESULTS:** Self-reported general health was significantly different across educational cohorts ( $p = <0.0001$ ), as was emotional health ( $p=.003$ ). Excellent general health was more likely reported than excellent emotional health, with reported excellent emotional health ranging from 31% for the highest educational class to 16% for the lowest. Across all educational cohorts, positive perceptions of emotional health increased with increasing age. In the lowest educational cohort, only 36% self reported emotional health as either “very good” or excellent”, while 80% of the oldest cohort (age 65+) reported emotional health as “very good” or “excellent.”

The cohort with highest professional education reported the most positive health self-perceptions; there were also the cohort least likely to indicate an intention to leave their current work position. Women voiced worse emotional health than men, with the notable exception of men in the lowest educational cohort. Finally, there were no statistically significant differences in perceived emotional health by role (direct care, manager, teacher, for example), but there was by setting. Respondents employed in mental health scoring lowest on perceived emotional health.

**CONCLUSION:** These findings contribute to the evidence that suggests women’s perceived emotional health improves with age. Moreover, educational class was strongly linked with more positive self-perceptions. The finding that individuals working in mental health reported the lowest perceived emotional health is intriguing. It may be that these individuals are more in tune with mental health issues, and thus use a unique metric when self-evaluating their own emotional health. A more pernicious potential is that mental health settings are disproportionally stressful or difficult to work in, and this impacts overall health self-perception. Implications for practice, policy, and further research are detailed.

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## POLITICAL AND SOCIOCULTURAL ISSUES

### INTIMATE PARTNER VIOLENCE AND MENTAL HEALTH IN LATIN AMERICAN COUNTRIES: SELECTED FINDINGS FROM VIOLENCE AGAINST WOMEN IN LATIN AMERICA AND THE CARIBBEAN: A COMPARATIVE ANALYSIS OF POPULATION-BASED DATA FROM 12 COUNTRIES

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**EDUCATIONAL OBJECTIVES:** By the end of this presentation, participants will have gained knowledge of the magnitude of intimate partner violence in Latin America and the Caribbean and will be able to identify negative mental health outcomes associated with such violence.

**PURPOSE:** This presentation draws on a comparative analysis of violence against women for 12 countries in Latin America and the Caribbean (Bott et al., forthcoming), highlighting findings related to the effects of intimate partner violence (IPV) on mental health.

**METHODS:** This comparative analysis utilized nationally representative data from seven Demographic and Health Surveys (DHS) and six Reproductive Health Surveys (RHS) carried out between 2003 and 2009 in 12 Latin American and Caribbean countries. First, we standardized indicators of IPV (physical and/or sexual) ever and in the past 12 months. Then, for surveys with available data, we analyzed the prevalence of negative mental health outcomes that women said they had experienced as a result of IPV, including anxiety, depression, feelings of worthlessness, inability to complete their work, fear of additional violence, and suicidal thoughts. In addition, using data from Guatemala and Paraguay, we examined the association between suicidal thoughts and attempts according to experience of IPV ever and in the past 12

months, using Pearson's Chi-square to test for significance.

**RESULTS:** A substantial portion of women ever married or in union in these 12 Latin American and Caribbean countries reported having experienced physical or sexual violence by an intimate partner ever and in the last 12 months.

In the surveys that measured emotional and mental health consequences of IPV, between one-half and more than two-thirds of women who experienced IPV in the past 12 months said they had experienced anxiety or depression severe enough as a result of the violence that they could not complete their usual work. In two surveys that measured this indicator, between 23% and 31% of women who had experienced IPV in the past 12 months told interviewers that they had wanted to kill themselves as a result of the violence. Additionally, in Guatemala and Paraguay, where data allowed an examination of suicidal thoughts according to experience of IPV, women who had experienced IPV were significantly more likely to have contemplated or attempted suicide than those who had not.

**CONCLUSIONS:** These data suggest that IPV is closely associated with negative mental health outcomes. Large proportions of women in Latin American countries who experience IPV report suffering from anxiety, depression, suicidal thoughts, inability to complete their work and obligations, and living in fear of more violence. Experience of IPV in the last 12 months was significantly associated with recent suicidal thoughts and attempts. These findings support growing evidence that violence against women is a major contributing factor to the burden of mental ill health among women, both globally and in the Latin America and Caribbean region (Ellsberg et al., 2008).

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## WOMEN'S MENTAL HEALTH CONCERNS

### ENGENDERING OPTIMAL PSYCHOLOGICAL DISTRESS: RIGHTS VIOLATIONS, GENDER BASED VIOLENCE, DISABILITY AND WOMEN'S MENTAL HEALTH IN CAMBODIA

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**PURPOSE:** At the end of this presentation, participants should be able to recognise and respond to the heightened risk of poor mental health and violence that Cambodian women with disabilities face from household members besides partners.

**ABSTRACT:** Existing research on family violence and poor mental health in women has focussed on intimate partner violence (IPV), been conducted in developed countries and has tended to exclude women with disabilities (WWDs). To redress these gaps in evidence, a study was conducted in Cambodia, a developing country that has the highest level of maternal mortality in South East Asia and a Gender Inequality Index in the bottom third of all countries globally (UNDP, 2011).

**OBJECTIVE:** To establish whether WWDs (compared with non disabled peers) faced a heightened risk of human rights violations, intimate partner violence (IPV) and non partner household violence and how these risks are associated with psychological distress.

**METHODS:** A geographically representative, cross sectional survey was carried out between March and November, 2011. Face to face interviews were conducted with 354 women, half of whom were WWDs, using a modified version of the questionnaire from the WHO Multi Country Study on Women's Health and Domestic Violence against Women. Psychological distress was identified by the WHO Self Report Questionnaire (SRQ) and disability was assessed using the Washington City Group Questions on Disability.

**RESULTS:** Mean age of participants was 31.76 years (sd = 8.36 years) with no differences between WWDs and those without disabilities. More WWDs reported basic human rights violations, being less likely to have ever attended school ( $p=0.04$ ), ever married ( $p=0.000$ ), or in paid employment ( $p=0.01$ ) and more likely to live with their birth families ( $p=0.000$ ). No between group differences were found in IPV prevalence rates but significant differences were reported for all types of household violence excluding partners ( $p=0.001$ ). A

clear gradient in the level of psychological distress was related to disability and violence after controlling for rights violations. WWDs who reported partner violence had the highest mean SRQ score of all women in the study ( $p=0.001$ ) and endorsed 15 out of a possible 20 symptoms of psychological distress. A similar pattern was found for household violence.

**CONCLUSIONS AND IMPLICATIONS:** According to the World Report on Disability, 15% of the world's population has a disability, with higher rates in women than in men (World Report on Disability, 2011). The current study reveals powerful interconnections between disability, household violence and extreme psychological distress that must be urgently addressed by policy makers. In their clinical encounters with WWDs, health care providers should ask about household not just intimate partner violence and understand that WWDs who present with common mental disorders do not do so solely on the grounds of living with a disability or as a result of interpersonal violence but also as a function of living in a society where their human rights, including their right to mental health, have been routinely violated. In Cambodia, where WWDs are less likely to marry, exposure to violence by family members can be life-long and involve multiple perpetrators. Such violence exerts profoundly negative effects on WWDs mental health and if unaddressed, such effects are likely to proliferate and compound over time.

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### **MATERNAL DEPRESSION IN IMMIGRANT FAMILIES: CORRELATES AND CONSEQUENCES**

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**EDUCATIONAL OBJECTIVES:** At the conclusion of this presentation, participants should be able to integrate aspects of community based depression intervention that are salient to depression in women within immigrant families.

**PURPOSE:** The present study examines the impact and course of postpartum maternal depression on family functioning in ethnically and economically diverse immigrant ( $n=68$ ) and a matched group of non-immigrant families ( $n=125$ ), at 5 and 15 months postpartum in the US. Although such research is lacking

in the US, studies in other countries have shown that immigrant mothers experience more depressive symptoms than native-born mothers, and report lowered access to mental health services (Stewart et al., 2008). In addition to the stressors of being an immigrant, new motherhood represents a period of vulnerability for immigrant women due to language and cultural barriers and the need to interface with health-care system.

**METHODS:** Mothers were classified into Depressed ( $n=77$ ) and Control groups ( $n=116$ ) based on a psychiatric interview (SCID-I) at 5 months postpartum, and were followed-up at 15 and 24 months. Self-reports were obtained from mothers on, social support, negative life events, marital adjustment and reports of children's problem behaviors at 15 months. **RESULTS:** Logistic regression analysis indicated that rates of clinical depression were higher in immigrant mothers compared to US-born mothers (50% vs. 35%), regardless of race/ethnicity. Depressed immigrant mothers had lower global functioning scores, lower psychosocial functioning, and were less likely to be in treatment compared to depressed US-born mothers. The impact of negative life events on child internalizing at 15 months problems was significant only in the immigrant group, controlling for socioeconomic status and parental depressive symptoms.

**CONCLUSIONS:** Results showed that although immigrant mothers were comparable to US-born mothers on socioeconomic risk factors, they were more clinically depressed at 5 months, more likely to remain depressed, and show lower psychosocial functioning in the postpartum period, which impacted future child internalizing problems. The findings of these studies offer important implications in counseling and anticipatory guidance for these mothers and their families, and represent a critical step in informing public strategy in promoting family well-being.

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## **MINDING THE DEVASTATION: REDUCING THE MISPERCEPTION OF THE RISK OF CANCER IN PREGNANCY: PRELIMINARY RESULTS**

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**OBJECTIVES:** With advanced diagnostic technology and increased trend for deferred childbearing, the diagnosis of cancer during pregnancy continues to rise. Cancer is a devastating event for pregnant women and their family and care providers. It is associated with severe stress, which itself is teratogenic and may increase the rates of birth defects. The pregnant patient is overwhelmed by feelings of hopelessness, depression, anger, and fear of death. Limited information on the reproductive safety of cancer-complicated pregnancies creates a conflict between optimal maternal management and fetal safety. Moreover, current management guidelines are inconsistent, creating confusion and misperception. As a result, women often deny or delay treatment, which leads to increased maternal morbidity and mortality. The multitude of complex issues that arise with cancer in pregnancy demand for a supportive multidisciplinary team that focuses on women's mental health and evidence-based knowledge to elucidate this matter.

**PURPOSE:** To present an overview of existing knowledge on perinatal cancer management and to show preliminary results on pediatric health and long-term neurodevelopment of 24 children exposed *in utero* to maternal malignancy and its treatment.

**METHODS:** Under the Canadian Consortium of Cancer in Pregnancy Evidence Program, children prenatally exposed to maternal malignancy were assessed at Motherisk. Information on maternal malignancy, its treatment, and obstetric and pediatric outcomes was documented. Children's neurodevelopment was assessed using standardized psychological tests.

**RESULTS:** Fifteen children were exposed to chemotherapy and/or radiation. Nine children exposed only to surgery served as controls. The children's ages ranged from 3 to 12 years. When compared to treatment-exposed children, control children presented with shorter gestations (37.2 weeks vs. 35.2 weeks) and lower birth weights (3115 grams vs. 2600 grams).

Children from both groups were similar in their developmental milestones and anthropometric measurements at testing. There were no statistically significant group differences in children's Full-scale, Verbal, and Performance IQs (105 vs. 104; 106 vs. 104; and 98 vs. 101) or CBCL scores. None of the mothers received psychiatric supportive care. Mothers exposed to chemotherapy and/or radiation presented with more depressive symptoms on the CES-D scale.

**CONCLUSIONS:** Exposure to chemotherapy did not adversely affect children's pediatric and long-term neurodevelopment, which fell within population norms. Shorter gestations and lower birth weights in the control group were due to planned deliveries, for the purpose of commencing treatment. Iatrogenic prematurity, which is associated with increased child morbidity and mortality, should be minimized. There is an increased need for women's mental health support.

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## **TRAJECTORIES OF HEALTH FOR WOMEN WHO HAVE SEPARATED FROM AN ABUSIVE PARTNER**

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**EDUCATIONAL OBJECTIVES:** At the conclusion of this presentation, the participants should be able to describe trajectories of change in 6 indicators of women's mental and physical health over a 7 year period of time after separating from an abusive partner and to examine how past and ongoing abuse affects those trajectories.

**PURPOSE:** The purpose of this study was to better understand the mental and physical health problems associated with intimate partner violence (IPV) which persist after women leave abusive partners by examining

how women's health changes after leaving, and what predicts such change

**METHODS:** This longitudinal analysis used 5 waves of data collected at baseline, and 12, 24, 36 and 48 months later from a community sample of 309 Canadian women who, at intake, had left an abusive partner in the past 3 years. In each wave, standard self-report measures of physical health (i.e. SF12v2, vanKorff's chronic pain scale, PASS Gastrointestinal and Neurological Symptom Subscales), mental health (CESD, Davidson Trauma Scale) and abuse (Index of Partner Abuse, Childhood Trauma Questionnaire) were administered during a structured interview. Latent growth curve modeling in MPLUS was used to estimate trajectories, controlling for baseline age, education, income, child abuse history and severity of past IPV. The impact of current IPV on changes in health was also estimated.

**RESULTS:** While physical health did not change over time, mental health steadily improved, with greater improvement associated with less continuing abuse. However, 7 years after leaving an abusive partner, a substantial portion of women continued to live with clinically significant health problems.

**CONCLUSIONS:** While women's mental health appears to improve after leaving, physical health is more resistant to change. For all variables, significant unexplained variation in growth parameters was noted. These results suggest that there may be different trajectories of change in women's mental versus physical health after leaving, with mental health trajectories being more sensitive to the impact of ongoing IPV. The inclusion of women's personal, social and economic resources as predictors of change in the next phase of analysis may reduce unexplained variation. However, given the heterogeneity of the sample, subgroup analyses may be needed to better capture multiple patterns of change. Attention is required to limit ongoing abuse and the health effects of violence long after separation.

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## WOMEN AND MENTAL ILLNESS: TREATMENT

### NEURODEVELOPMENT OF CHILDREN FOLLOWING PRENATAL EXPOSURE TO SSRIS USING A SIBLING DESIGN

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**OBJECTIVES:** The effects of prenatal exposure to selective neurotransmitter reuptake inhibitors (SRIs), antidepressant medications, on child neurodevelopment have not been adequately studied. Pharmacotherapy for depression during pregnancy involves weighing potential teratogenic risks of antidepressant medications against adverse effects of maternal depression on both the mother and the developing fetus. Twenty-five years of research have failed to separate the effects of pharmacotherapy from the effects of maternal depression on child's cognitive and behavioral development. Genetic and environmental factors are strongly associated with children's intelligence. Sound methodology and sufficient sample size play a significant role in controlling for such factors.

**PURPOSE:** To define the long-term neurodevelopment of children exposed to SRIs during pregnancy and to compare the outcomes to those of unexposed siblings from the same families. This study will also use a novel research design in teratology, a sibling design, in order to control for genetic and environmental effects.

**METHODS:** Participants were recruited from the prospectively collected database in the Motherisk program at the Hospital for Sick Children, Toronto, Canada. We included: Group 1- Mother-child pairs exposed to SRIs during pregnancy; Group 2 - Siblings from the same families unexposed to pharmacotherapy or other teratogens. A sample size of 45 will detect a seven-point Full-scale IQ difference (clinically relevant) between exposed and unexposed siblings, with 90% power.

**RESULTS:** Mother-child pairs exposed to SRIs during pregnancy (n=45) and siblings from the same families

unexposed to antidepressants (n=45) were assessed. There were no differences in maternal pregnancy weight gain. Maternal depression during exposed pregnancy was higher than in unexposed, but the scores did not reach statistical significance (P=0.07). There were no statistically significant differences between the exposed and unexposed siblings in the children's Full-scale, Verbal, and Performance IQs (103±13 vs. 106±12; 104±12 vs. 107±13; and 101±14 vs. 103±11), respectively. There were no differences in the rates of problematic behaviors between exposed and unexposed siblings assessed with the CBCL and Conners' scales. Regression analysis revealed that maternal IQ was a significant predictor for child's intelligence.

**CONCLUSIONS:** Exposure to SRIs did not affect child's long-term neurodevelopment. Genetic and environmental factors are strongly associated with children's intelligence. A sibling design study aids in separating the effects of maternal depression from the effects of pharmacotherapy, providing stronger evidence on drug reproductive safety without the need for a large sample size. Sibling designs should be widely used in drug safety studies in behavioral teratology.

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**PROSPECTIVE ASSESSMENT OF GLUTAMATE LEVELS IN THE MEDIAL PREFRONTAL CORTEX DURING PREGNANCY AND THE POSTPARTUM PERIOD OF WOMEN AT RISK FOR POSTPARTUM DEPRESSION**

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**EDUCATIONAL OBJECTIVES:** At the conclusion of this presentation, the participants should be able to recognize the risk factors for the development of postpartum depression (PPD) and to identify the contribution of glutamate (Glu) levels in the medial prefrontal cortex (MPFC) to the development of postpartum depression (PPD).

**PURPOSE:** The objective of this study was to investigate glutamate levels (Glu) in the MPFC from late pregnancy up to 7 weeks postpartum in healthy controls (HCs) and in women at high risk of developing postpartum depression (PPD) (i.e. those with a previous history of mood sensitivity to female hormone fluctuations).

**METHODS:** Using 3-Tesla in vivo proton magnetic resonance spectroscopy (<sup>1</sup>H-MRS), single-voxel spectra were acquired from the MPFC of 41 HCs and 22 high risk women. Linear mixed (LM) modeling was used to examine the pattern of recovery for metabolites and tissue composition scores over the five time points (pregnancy, 10 days postpartum, 3 weeks postpartum, 5 weeks postpartum and 7 week postpartum) because non-linear equations provided the best fit for predicting metabolites and tissue composition scores over the 7 weeks.

**RESULTS:** We observed a statistically significant interaction between time and group for the water-quantified metabolite Glu. Significance was maintained after correction for changes in tissue composition. Correcting for changes in tissue composition was necessary as % gray matter (%GM) was found to significantly increase over time in both groups from pregnancy up to 7 weeks postpartum.

Glycerophosphorylcholine plus phosphorylcholine (t-Cho) also significantly increased over time but with no group differences.

**CONCLUSION:** This investigation suggests that the vulnerability towards PPD is associated with unique fluctuations of MPFC Glu levels during pregnancy and the postpartum period. Further investigations are needed to determine the specific role that female hormones play in the involvement of the glutamatergic system in the development of mood disorders during the postpartum. From a MRS methodological point of view, it is important to note that the change in %GM seen during pregnancy and the early postpartum should be taken into consideration for subsequent MRS investigations of brain metabolites during pregnancy and the postpartum and lead to statistical correction of metabolite results for tissue composition.

## NEURONAL MECHANISMS OF STRESS-INDUCED OVEREATING IN FEMALE RATS WITH A HISTORY OF DIETING

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**EDUCATIONAL OBJECTIVES:** The participants will get the knowledge on the sex-specific effects of chronic stress and dieting on the neuronal mechanisms affecting feeding in females.

**PURPOSE:** This research was to investigate the neuronal mechanisms related to chronic stress and feeding in females. The hormonal, psychological and behavioral responses to stress demonstrate sex-specific differences. These differences are also significant at the level of regulation of feeding by stress. In fact, the rate of incidence of stress-induced binge eating is about 10 times higher in women compared to men. In addition, stress-induced eating was significantly associated with obesity among women, but not among men. Increase in body weight usually predisposes to dieting. However, food restriction is a strong relapse factor for binge eating episodes in women. The neuronal mechanisms underlying the sex-specific effects of stress and leading to serious psychological and metabolic complications are not yet fully understood.

**METHODS:** Male and female rats were subjected to 7 weeks of mild chronic stress (1 h per week of body restraint in rat 'hummock' which represents non-painful but anxiety-increasing condition) and dieting (2 day per week the rats received 60% of ration eating by the control rats). Body weight, food intake, plasma corticosterone levels as well as the levels of brain expression of stress-related anorexigenic neuropeptide corticotropin-releasing factor (CRF) and orexigenic neuropeptide relaxin-3 were estimated.

**RESULTS:** The chronically-stressed repeatedly food-restricted male (CSFRm) rats significantly decreased when the chronically-stressed repeatedly food-restricted female (CSFRf) rats significantly increased body weight gain compared to their respective control groups. The CSFRf rats significantly increased food intake compared to all other groups during the days of recovery from dieting and stress. Repeated food restriction strongly increased the plasma levels of corticosterone and decreased the hypothalamic expression of CRF mRNA in female rats. In addition, the CSFRf rats demonstrated

significantly higher expression of relaxin-3 mRNA in the brainstem nucleus incertus, the main site of brain expression of relaxin-3.

**CONCLUSIONS:** Repeated dieting combined with chronic stress provoked overeating and overweighting in female but not male rats. Decrease in expression of anorexigenic CRF and increase in expression of orexigenic relaxin-3 in the brain of female chronically-stressed rats with a history of dieting may contribute to the development of stress-induced overeating in females.

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## THE EFFECT OF MAJOR DEPRESSIVE DISORDER ON QUALITY OF LIFE AND PRODUCTIVITY IN THAI PATIENTS

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**OBJECTIVE:** To study the effect of depressive disorder on quality of life and productivity in Thai patients.

**METHOD:** This is a cross-sectional quantitative study. Participants were males and females, more than 18 years old, having depressive disorder diagnosed by psychiatrists using standard criteria of DSM-IV or ICD-10 (F32, 33, 34.1). They received health services from 8 of the psychiatric hospitals under Department of Mental Health, Ministry of Public Health from January to July, 2012. Approximately 400 participants were selected using purposive sampling method. The instruments used in this study were Questionnaires on demographic data, SF-36 Health Survey, and Lost Productive Time (LPT). Data analysis was done by descriptive statistic depending on the type of information. Association between quality of life and loss of productive-time was tested by Pearson's correlation.

**RESULTS:** There were 397 depressive disorder patients who were interviewed by psychiatric nurses. Average age of most of the subjects was 48 years; female (75.1%), age range between 45-54 years (27.46%), Buddhist (92.9%), married (65.0%), primary school education (45.6%), occupation in agriculture (22.9%), and income more than 50,000 baht per year (48.6%). It was found that overall component of mental health in depressive disorder patients was lower than overall physical health, 65.80, SD=13.09 and 69.85, SD=15.09

respectively. Moreover, Vitality scale in quality of life was the lowest; 56.54, SD=18.47 followed by General Health and Mental Health accounting for 59.02 (SD=19.19) and 62.07(18.59) respectively. Interestingly, female who had depressive disorder were found to have lower score in quality of life than male with depressive disorder. Comparing with other studies using SF-36, it was found that the quality of life (due to physical and mental health variance) in depressive disorder patients was lower than patients who had cerebrovascular disease, spinal injury, and in the general population. Furthermore, it was found that the average working

hour per week in depressive disorder patients (33 hours) was lower than that of standard working hour in normal people (48 hours). Lastly, the study found that the effect of depressive disorder was significantly associated less quality of life and daily activities including less productive working hours (P-value < 0.05).

**CONCLUSION:** Depressive disorder causes less productive working and daily activities of normal living including effecting to quality of life. Therefore, prevention of depressive disorder and promotion of good quality of life should be given high priority in the health policy of Thailand.

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## POSTERS

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### **SEX DIFFERENCES IN THE RELATIONSHIPS BETWEEN WORKPLACE PSYCHOSOCIAL FACTORS AND DEPRESSIVE/ANXIETY DISORDERS**

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**EDUCATIONAL OBJECTIVES:** To understand sex difference in the relationships between workplace psychosocial factors and depressive and anxiety disorders.

**PURPOSE:** To investigate sex-specific associations between work stress, effort-reward imbalance, work-family conflicts and depressive and anxiety disorders.

**METHODS:** Data from the Canadian national mental health survey (n = 36,984) and from a large occupational cohort study in Alberta, Canada (n = 4,239), were used. Mental disorders were assessed using the full version of the WHO's Composite International Diagnostic Interview (CIDI).

**RESULTS.** In multivariate analysis of the cross-sectional data, male workers who reported high demand and low control in workplace were more likely to have had major depression (OR = 1.74, 95% C.I.: 1.12, 2.69) and any depressive or anxiety disorders (OR = 1.47, 95% C.I.: 1.05, 2.04) in the past 12 months. In women, high demand and low control was only associated with having any depressive or anxiety disorder (OR = 1.39, 95% C.I.: 1.05, 1.84). Job insecurity was positively associated with

major depression in men, but was not in women. Imbalance between work and family lives was the strongest factor associated with having mental disorders, regardless of gender. In analysis using longitudinal data, the relationships between work environmental factors and MDD differed by sex. In men, high job strain increased the risk of MDD in those who worked 35-40 hours per week; job insecurity and family-work conflict were predictive of MDD. Women who worked 35-40 hours, who reported job insecurity, high effort-reward imbalance and work-family conflict were at higher risk of MDD.

**CONCLUSIONS:** Job strain, effort-reward imbalance, job insecurity and work-family conflicts are important risk factors for the onset of MDD, and should be targets of primary prevention. However, these work environmental factors appear to operate differently in men and in women.

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### **WOMEN PSYCHIATRIC HOSPITALIZATION: STATISTICS AND EPIDEMIOLOGY DATA**

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**EDUCATIONAL OBJECTIVES:** At the conclusion of this presentation, participants should be able to recognize

the different profiles in psychiatric hospitalized patients, and to identify its causes and associated pathologies.

**PURPOSE:** To describe women population undergoing hospitalization at an acute mental-health inpatient ward.

**METHODS:** Descriptive, transversal and retrospective study including 293 women patients over the age of 14, during 30 months, starting April 2010. Performed at Municipal Hospital "Dr. Ramón Carrillo", located in Malvinas Argentinas district, Buenos Aires, Argentina.

**RESULTS:** 52% of hospitalizations were women, in which the most frequent admission diagnosis was psychotic disorder followed by suicide attempt. 43% were undergoing psycho-pharmacological treatment one month prior to admission. 24% were non first-time hospitalizations. The average time of patient's hospitalization was of 23,8 days. Most prevalent diagnosis was Schizophrenia (18%). 51% presented personality disorders, 13% oligophrenia and 10,5% were dual-patients. 8,5% of inpatients were discharged against medical advise.

**CONCLUSIONS:** Proper care Psychiatric hospitalization plays a fundamental role at achieving compensation and stability in certain pathologies. Involving the family helps with treatment's compliance as well as in avoiding future admissions, far more frequent in personality disorders and intellectual disability. The possibility to identify Dual patients becomes essential considering the great challenge they bring to our health care system.

#### REFERENCE

DSM IV-TR, Manual diagnóstico y estadístico de los trastornos mentales, 2002. Barcelona. Elsevier Masson. Bilbao JI, Cueva NP, Millán Ramos CA, Molina Radio CJ, Vega MG, Villagra M. Datos estadísticos y características epidemiológicas de una unidad de internación de salud mental de pacientes agudos de la ciudad de Buenos Aires. Ineba. Mar del Plata 2010.

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### THE GOOD WIFE: HUSBANDS' NEGATIVE IMPRESSIONS OF THEIR SELF SACRIFICING WIVES AND WIVES' DEPRESSIVE SYMPTOMS.

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**EDUCATIONAL OBJECTIVES:** The audience will become familiar with the concept of unmitigated communion and the research linking UC to negative mental health sequelae in women. In addition, they will consider if the

negative outcomes associated with this relational style may vary depending on culture.

**PURPOSE:** Unmitigated communion(UC) is a construct first proposed by Vicki Helgeson (1994) as a possible contributing factor to the gender difference seen in rates of depression between men and women. UC is a relational style characterized by excessive self-sacrifice in which one prioritizes the needs of the other at the expense of the self. Earlier research has found UC to be more prevalent in women and associated with depression and depressive symptoms as well as other negative sequelae (Helgeson & Fritz, 1999). The current study replicates these findings but also explores the association between this self-silencing relational style and partner impressions. Do spouses of individuals with higher levels of UC view their partner's more favorably than those with spouses who are lower in UC?

**METHODS:** 88 married couples were measured on their level of UC, depressive symptoms, their impressions of themselves on various domains, and their impressions of their partner.

**Results:** As predicted, UC was associated with higher depressive symptoms and more negative self views. In addition, this study found that higher levels of UC in wives was associated with being viewed more negatively by their husbands. However, husbands higher in UC were not viewed more negatively by their wives.

**CONCLUSIONS:** The results will be discussed in terms of new directions for future research in a collectivistic culture. Previous UC research has been conducted almost entirely in Western individualistic cultures. Would excessive self-sacrifice be associated with depressive symptoms in the same way in a collectivistic culture? Would wives high in UC be viewed less favorably by their husbands in a collectivistic culture that places even greater value on female communal tendencies? The clinical implications of this research will be discussed.

#### REFERENCES:

- Helgeson, V.S. (1994). Relation of agency and communion to well-being: Evidence and potential explanations. *Psychological Bulletin*, 116, 412-428.
- Helgeson, V.S., Fritz, H.L. (1999). Unmitigated agency and unmitigated communion: Distinctions from agency and communion. *Journal of Research in Personality*, 33, 131-158.

## CHRONOBIOLOGICAL CHARACTERISTICS OF DEPRESSIONS

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Objective of the work is to study circadian rhythms of the parameters of spectral analysis of heart rate variability in the treatment of circular depressions.

**METHODS:** 34 women (average age  $46.1 \pm 13.8$  years) have been studied. According to ICD-10, all of them were diagnosed to have depression (F 31.3–31.4; F 32.0–32.2; F 33.0–33.2). The degree of severity of depression was assessed according to HAM-D. The patients were treated with citalopram (20–60 mg/day) or mirtazapin (30–45 mg/day). Assessing the autonomous regulation of the cardiovascular system the spectral analysis of heart rate variability was applied [1]. The power spectrum density (PSD) of LF (low frequency) and HF (high frequency) range was established. The patients were examined at 1 a.m., 7 a.m., 1 p.m., 7 p.m. prior to the beginning of treatment, following one week, three weeks and upon leaving the in-patient department. The control group consisted of 15 mentally healthy people (mean age  $44.9 \pm 9.3$  years). Members of the control group were examined every season (in October, January, April and July). In order to determine the daily curve of changes in the indices under investigation the group was examined at 1 a.m., 4 a.m., 7 a.m., 9 a.m., 11 a.m., 1 p.m., 3 p.m., 4 p.m., 5 p.m., 7 p.m. in summer.

**RESULTS:** prior to the beginning of treatment desynchronization of the parameters of spectral analysis of heart rate variability and the “sleep-wake” cycle, the increase in the spectrum power within LF- range and the decrease in the spectrum power within HF- range were observed. Reduction of depression symptoms was followed by resynchronization of the rhythms under study, with the spectrum power within LF- range being increased and that within HF- range – decreased.

**CONCLUSIONS:** correlation between depression symptoms and chronobiological disorders testifies to their close pathogenetic link.

### REFERENCE

Heart rate variability. Standards of measurement, physiological interpretation, and clinical use. Task force of the European society of cardiology and the North American society of pacing and electrophysiology. Eur Heart J. 1996; 17: 354-81.

## DEPRESSION AMONG CHILDREN OF IMMIGRANTS: VOICES OF ASIAN-PACIFIC ISLANDER (API) WOMEN

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**BACKGROUND:** Among US women between ages 15-24, Asian-Pacific Islanders (API) have the highest rate of suicide. Nonetheless, little is known about the context and processes that underpin depression among API women. Thus, we compared 21 depressed API women with 18 non-depressed API women in a qualitative study. Three family dynamic themes were found in both groups: (1) stress of being a child of immigrant parents, (2) value conflicts and negotiation within the family, and (3) emotional bonding and control.

**METHODS:** Our sample was drawn from participants in the Asian-American Women’s Sexual Health Initiative Project (AWSHIP) who were: ages 18-35; unmarried; Chinese, Vietnamese, Korean, or a mix thereof; and 1.5 or 2<sup>nd</sup> generation immigrants. Among those who participated in the AWSHIP survey (n = 718), 39 participants were randomly chosen and asked to participate in a semi-structured interview based on their level of acculturation, as well as history of traumatic life events including childhood sexual abuse, forced sex, suicide attempts, and hard drug use. For this study, women were categorized as depressed if their CES-D score was 16 or higher. The interviews were transcribed verbatim and Atlas-Ti was used to analyze emergent coding themes.

**FINDINGS:** Women in both groups have experienced various stresses related to parental immigration including micro-discrimination, financial hardship, and acculturation difficulties. However, the depressed group suffers from constant internal conflict and deeper levels of stress as they struggle to fit into mainstream American culture while striving to uphold the traditional Asian values of their family as the “ideal Asian woman.” Second, depressed women reported more frequent and severe conflicts with parents about their life choices including academic, career, financial, and dating. Third, depressed women reported a pervasive lack of emotional bonding and poor communication with their parents, along with history of ongoing verbal and physical child abuse.

**CONCLUSIONS:** Both non-depressed and depressed API children of immigrants do experience stress related to family immigration and value conflicts with their

parents. However, depressed women reported a greater extent of emotional disconnection and lack of positive bonding experiences with their parents and thus suffer more severely from a sense of disapproval and rejection. In addition to developing culturally-appropriate child abuse prevention programs, mental health awareness programs should be available for API families that emphasize the importance of cultivating mental wellbeing, negotiating values between parents and children, and developing coping skills to relieve stress related to immigration.

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### **MEASURING EMOTIONAL DYSREGULATION IN CHILDREN AND ADOLESCENTS USING THE SNAP-IV RATING SCALE**

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Irritability in children and adolescents has serious implications for the development of adult onset mood and anxiety disorders.

Emotional dysregulation, bipolar mood disorder, severe mood dysregulation and disruptive mood dysregulation disorder are terms used to describe mood issues and difficulties in children and adolescents. There is currently no standard satisfactory rating scale to measure the emotional dysregulation and irritability in these individuals.

We have analyzed over 9000 SNAP-IV rating scales and have been able to identify a cluster of symptoms rated by parents and teachers that seem to identify this group of individuals. It occurs in a higher percentage of individuals with a clinical diagnosis of attention deficit hyperactivity disorder and oppositional defiant disorder. Frequently many of these individuals have been diagnosed as suffering from bipolar disorder. There is a high correlation to the Connors emotional ability score on the Connors rating scale. These 11 symptoms as reported by parents and teachers are easy to identify.

This rating scale is easy to complete and be used in clinical settings.

Using the SNAP-IV rating scale can easily identify all children and adolescents presenting with emotional

dysregulation, anger and irritability in mental health settings.

Appropriate assessment and identification should allow for better treatment planning and clinical interventions in a more consistent manner.

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### **CLINICAL AND PHARMACOLOGICAL RISK FACTORS IN THERAPY OF DEPRESSION IN WOMEN**

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**PURPOSE:** Depression in women has a high frequency and a bad evolution with medical and cognitive risk. Neurobiological model of depression in women is a particularly one, in this model being involved biological, endocrine and psychosocial factors. Hyperactivity of HPA axis is correlated with high level of endogenous cortisol that will be other important risk factors for new born child regarding to follow development and risk of future schizophrenia and cognitive deficit. Depression in women is associated with high level of cortisol and significant decrease of hippocampal volume. In pharmacological therapy of depression in women is used in excess SSRIs or SNRIs, that associated an important increase of prolactinaemia which is responsible for cardiovascular risks and breast cancer.

**METHODS:** We studied 347 women hospitalized in Psychiatry 1<sup>st</sup> Clinic of Craiova between 01.01.2005 – 31.12.2009, diagnosed with major or recurrent depressive disorder based on an inclusion and exclusion criteria.

**RESULTS:** The main medical comorbidities associated with depressive disorder were endocrine (25.64%) and cardiovascular (15.27%) diseases and hysterectomy (10.08%). For these patients, antidepressants medications were SNRIs and SSRIs (75.22%). Cognitive deficit appreciated on MMSE were a medium one and were present at 240 patients (69.16%) and social dysfunction evaluated on GAFS were important at 219 patients (63.11%).

**CONCLUSIONS:** As risk factors were identified aged between 40 and 49 years, presence of psychotraumas during childhood and incomplete remission. Is proposed a clinical and neurobiological model of depression in women and a specific psychopharmacological therapy approach.

## ME OR MY ALTER EGO

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Multiple personality disorder or Split Personality and Dissociative Identity Disorder has always been an ambiguous syndrome in psychiatry, often being given the diagnosis of Schizophrenia due to the auditory hallucinations that are often experienced. Patients with this disorder have often been ignored or even labeled as a malingerers. Their subconscious cry for help often goes unrecognized. One of the contributing factors to the low rate of identification of this disorder is the reluctance of psychiatrists to consider this diagnosis, either due to lack of experience or hesitation due to the fear being doubted by colleagues. In Malaysia where various types Culture Bound Syndromes are seen frequently there is a trend to separate this syndrome from dissociation. This results in people seeking traditional treatment when symptoms of dissociation mimic that of a Culture Bound Syndrome. The fine line differentiating Dissociation from Culture Bound Syndromes may not exist at all as they may be the same syndrome with a different name.

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## WHAT ARE WOMEN WORRIED ABOUT? A QUALITATIVE INVESTIGATION OF SOCIAL DISCOURSES OF PERINATAL ANXIETY.

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**EDUCATIONAL OBJECTIVES:** At the conclusion of this presentation, participants should be able to recognize public health and social discourses that contribute to perinatal anxiety and appreciate the need for psycho-education to assist women to understand and manage their distress.

**PURPOSE:** The aim of this study was to investigate women's views about the sources and nature of perinatal anxiety and their preferred forms of assistance.

**METHODS:** The study took place during brief admissions to a private hospital mother-baby unit in metropolitan Melbourne. Participants completed a brief background questionnaire including the Depression, Anxiety and Stress Scales (DASS21) and took part in small group discussions facilitated by the authors. Participants were

invited to discuss common worries and fears and their preferred solutions. Discussions were audio-recorded, transcribed and analysed thematically.

**RESULTS:** Twenty one women agreed to participate, returned a signed consent form and background survey and attended one of four discussion groups. DASS scores showed that 45% of the sample reported anxiety symptoms in the clinical range and 65% were experiencing mild, moderate or severe stress. Participants reported a variety of sources of worry including fetal and infant danger, breastfeeding failure, fear of criticism and inadequacy as a mother, interpersonal conflict with relatives, the unreliability of maternal intuition to inform infant care, and societal expectations of autonomous decision-making even when available information is conflicting and risk is uncertain. The essential role played in the successful management of anxiety by clinical encounters which provide non-judgmental, empathic support and consistent information was repeatedly emphasised.

**CONCLUSIONS:** Australian social and public health discourses about pregnancy and infant care are important contributors to anxiety in women. Perinatal anxiety is prevalent, disabling and has adverse maternal and infant consequences, but has been less well addressed in research and treatment than depression. Health policy and clinical practice emphasise early detection and treatment for perinatal mental health problems. The results of this study suggest that primary care and specialist clinicians have an important role in providing reassurance and dispelling common sources of anxiety in women during the perinatal period; public health campaigns have a responsibility to present accurate, balanced information in neutral language and will inform a self-help resource to assist women to manage perinatal anxiety.

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## CLINICAL CONSIDERATIONS FOR TREATMENT IN PERIMENOPAUSAL WOMEN WITH CHRONIC PSYCHOTIC DISORDER

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**EDUCATIONAL OBJECTIVES:** To understand the effect of menopause on clinical presentation and treatment of chronic psychotic disorders in perimenopausal women.

**PURPOSE:** As life expectancy has increased over the last century, more women with chronic psychotic illness such as schizophrenia and schizoaffective disorder are reaching menopause. For these women who have been chronically administered antipsychotics, symptoms of estrogen deficiency may be exhibited before the onset of biological menopause. They are at higher risk for osteoporosis and cardiovascular disease due to estrogenic decline, as well as metabolic syndrome and tardive dyskinesia secondary to long-term antipsychotic use. Per literature, estrogen has antidopaminergic properties and is protective against psychotic symptoms. Hence, estrogen deficiency during menopause has been associated with exacerbation of psychotic symptoms and increased antipsychotic dose requirements. Our purpose was to explore pertinent menopause-related treatment considerations in this patient population.

**METHODS:** A literature search using PubMed was conducted using the search terms: perimenopause, menopause, psychosis, estrogen, and antipsychotics. Journal articles were screened and reference lists scanned for relevance to our topic.

**RESULTS:**

Our literature review generated the following treatment considerations:

- Clinicians may need to rule out iatrogenically-induced menopausal symptoms by assessing prolactin levels.
- Antipsychotic doses may need to be increased or parenteral routes considered due to changes that occur in absorption and metabolism of drugs during estrogenic decline.
- Bone mineral density, weight, blood pressure, glucose, cholesterol, and QTc interval should be closely monitored.
- Estrogen replacement or adjunctive treatment can attenuate menopausal and psychotic symptoms, reduce antipsychotic dose requirements, decrease risk for tardive dyskinesia, and have cognitive benefits. These benefits must be weighed against increased risks for clotting, stroke, heart disease, and breast cancer.
- Alternative treatments to alleviate menopausal symptoms should be inquired about and monitored for interactions with antipsychotic medications.
- Primary care providers should be recruited to assist with increased medical monitoring of the physiological consequences of estrogen decline and concurrent antipsychotic use.

**CONCLUSIONS:**

- Changing hormonal status in perimenopausal women with chronic psychotic mental illness impacts the clinical picture as well as treatment considerations.
- Patients at the onset of menopause may experience exacerbation of psychosis. Augmentation with hormones may be a treatment option in this population.
- More research into the relationship between estrogen, antipsychotic use, and perimenopause is important to providing better care for women with chronic psychotic illness.

**REFERENCE:** Seeman, MV. Treating schizophrenia at the time of menopause. *Maturitas* 2012; 72: 117-120.

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## MEMORY LOSS DURING THE MENOPAUSAL TRANSITION: UNDERSTANDING NORMAL VERSUS ABNORMAL

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**EDUCATIONAL OBJECTIVES:**

1. Acknowledge current research regarding evaluation /treatment of memory loss during menopause including: Cognitive differences across the lifespan; Cognitive symptoms and menopause; Hormone use and Alzheimer's Disease; Complementary/alternative treatment options.

2. Differentiate between complaints of memory impairment during menopause and early onset Alzheimer's Disease using case study format for 4 cases.

**PURPOSE:** Recognizing early onset Alzheimer's Disease or other neurocognitive disorders and differentiation complaints of memory loss during the menopausal transition can make a difference in the timely starting of treatment and care planning.

**METHODS:** Case report methodology will illustrate similarities and key differences between memory complaints at menopause, Pick's Disease and early onset of Alzheimer's disease. A purposive, clinical case sampling approach was used to select the four cases. The setting of the study was a neurology speciality care clinic in tertiary care center. A single investigator conducted a retrospective chart review spanning the last decade of practice. Neurobehavioral testing results as well as family/clinical observations of four cases were

used.

**RESULTS:** Although initial patient complaints are similar across all cases, Early onset Alzheimer's was characterized by quick decline in cognition and function. Pick's disease presented with personality and behavioral changes, and disinhibition. Complaints of memory impairment through the menopausal transition were stable over the 3.5 years available in chart review.

**CONCLUSIONS:** The need to recognize neurocognitive disorders in women during the menopausal transition is necessary to assure early and appropriate treatment. In addition, counseling woman regarding cognitive changes during menopause should emphasize normal versus abnormal changes. Promotion of brain healthy habits including exercise, socially active lifestyle, heart healthy diet, and treatment of depression should be emphasized for all women.

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### VICTIMIZATION, SUBSTANCE USE, SEX RISK, AND SERIOUS MENTAL ILLNESS AMONG YOUNG ADULT WOMEN IN MIAMI'S CLUB SCENE

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**EDUCATIONAL OBJECTIVES:** At the conclusion of this presentation participants should be able to identify the associations between victimization, substance use, sexual risk taking and mental health functioning among young women who regularly attend nightclubs.

**PURPOSE:** This study examines the contribution of lifetime victimization history to serious mental illness (SMI), and the strong associations between current SMI and both substance use and sexual risk behaviors among a sample of young women who use club and prescription (Rx) drugs in the context of Miami's club scene.

**METHODS:** Using respondent driven sampling we recruited 78 sexually active women ages 18 to 39 who use club drugs (e.g., cocaine, ecstasy, LSD) and misuse Rx

drugs (e.g., opioids and benzodiazepines). Participants also reported regular and frequent attendance at well known dance clubs. The study is a 3-armed intervention trial designed to examine differences in behavior change by type of assessment modality (self- vs. interviewer-administered) and compared to a waitlist control. Data were collected in the two assessment arms using identical standardized instrumentation.

**RESULTS:** Median age was 24; 54% were Latino, 22% Black, 20% White and 4% other race/ethnicity. 55% reported severe mental health symptoms on a scale that included somatic, depression and anxiety items. Large majorities (87-99%) were current users of alcohol, marijuana, cocaine, ecstasy, benzodiazepines and Rx opioids; 56% Rx stimulants; 45% LSD; and 59% other hallucinogens (e.g., synthetic cannabinoids). 92% reported recent unprotected anal and/or vaginal sex; 59% had two or more sex partners in the past 90 days. Lifetime prevalence of abuse was elevated: 44% physical abuse; 35% sexual abuse, and 33% attack with a weapon. All forms of victimization were strong predictors of SMI ( $p < .001$ ). Serious mental illness was associated with several recent (past 90 day) health risk behaviors: multiple sex partners ( $p < .002$ ), almost twice as many days high or drunk ( $p < .001$ ), and current use of a larger number of different substances (mean=7.5;  $p < .011$ ).

**CONCLUSIONS:** The high levels of interconnected victimization, mental health, substance use and sexual risk factors observed among this sample are underreported in the literature, as young women club scene participants appear to be more similar to other marginalized drug-involved populations than previously considered. Explanatory research designs are needed to more fully understand these interrelationships; nevertheless, these young women are in great need of outreach for mental health and substance abuse treatment services, as well as appropriate HIV and sexually transmitted disease prevention interventions.

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### PSYCHOSOCIAL CHARACTERISTICS OF BRAZILIAN PREGNANT SAMPLE WITH RISK CONSUMPTION OF ALCOHOL

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**EDUCATIONAL OBJECTIVES:** Evidence suggests that alcohol consumption during pregnancy can cause many damages the mother and fetus health. The study should be able to demonstrate specific characteristics of a sample of pregnant with risk consumption of alcohol.

This information supports the development of prevention activities and promoting public health.

**PURPOSE:** The study aimed to describe psychosocial characteristics of Brazilian pregnant women with risk consumption of alcohol in the first trimester of pregnancy.

**METHODS:** The methodology was descriptive, observational and cross-sectional study. We recruited 86 risky drinking and pregnant women in health care services using T-ACE (score more than two points). Women were older than 18 years and had up to 16 weeks of gestation. Data were collected through the following instruments: a structured questionnaire in order to obtain socio-demographic data, history of pregnancy and pregnant women's health, a psychiatric screening questionnaire (SRQ-20), T-ACE and AUDIT for screening alcohol consumption.

**RESULTS:** The mean age was 26.3 years (sd= 5.37). Most were in a consensual union (51.1%), elementary school education (53.4%), was a practitioner of any religion (69.8%) and unplanned pregnancy (75%). When considering all the family income the average was R\$ 1,176.41 (sd = ± 624,35,71) being divided between about 3.56 dependents per family. An increase in the number of abstinent from pregnant women in the first trimester alcohol, however 65% of these have some amount of consumption during pregnancy. Episodes of binge drinking were present, 48.5% of the sample reported having been exposed to one to three episodes (consuming three or more drinks on one occasion) during pregnancy. The mental health assessment identified 48 patients (55.8%) in SRQ positive (score > 7), with greater propensity to psychiatric disorders. We assessed exposure to stressful events during the past year, there is a minimum of one and maximum of eight events (mean = 3.15, SD = 1.7), the most common were: financial difficulties, unemployment, fights relatives and family health problem

**CONCLUSIONS:** Alcohol consumption during pregnancy, psychiatric symptoms and exposure to stressful events were common features in this sample. The evaluation of these factors by health professionals it is therefore useful for treatment, education and promotion of public health.

## REFERENCE

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## MENTAL HEALTH AND LIFE HISTORY OF ALCOHOLICS' WIVES

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**EDUCATIONAL OBJECTIVES:** Stressors of living with alcoholic partners have been associated with women's mental health. Participants: ten wives of men with diagnosis of abuse or alcohol dependence. They don't use alcohol and drugs.

**PURPOSE:** The aim of this study was to identify roles and activities performed by wives, expressed feelings about the marital relationship, family history of origin and symptoms of depression.

**METHODS:** Participants: ten wives of men with diagnosis of abuse or alcohol dependence. Instruments: Roadmap family identification and verification of the absence of chemical dependency on the mother; Genogram Interview, Beck Depression Inventory. Initially we selected men with a diagnosis of alcoholism in the mental health services and their wives were later addressed. After their wives consent a home visit was conducted in order to interview them. Data on participant's characterization and evaluation of the Beck Depression Inventory were analyzed quantitatively. The interviews were analyzed considering the axes indicated in this study goals.

**RESULTS:** It was found that the majority of men were unemployed, 64.2% and 57.1% of working wives, four children had an average length of relationship and an average of ten years. The men were between 30 to 56 years and women 29 to 54 years, 92.8% men and 64.3% of women had incomplete primary education, 28.5% of them were illiterate. The second data analysis showed that the wives besides caring for their children they also cared for her husbands and also took responsibility for financial issues, because many husbands were unemployed. Most of them reported that they needed his help but they didn't have it. 2. Expressed feelings about the marital relationship were guilt, anger and hopelessness. As time goes by the wife realizes that

things are getting worse and that the situation does not change. They were experiencing a jumble of feelings, sometimes manifesting pity, sometimes anger. 3. History of family of origin- many wives were daughters of alcoholic parents and married men who also had problems with alcohol. They also took, when single, the role of taking care of their parents and siblings.

**CONCLUSIONS:** Results support the idea that alcoholic's wives need to receive specialized care to improve their mental health. The burden of responsibility, caring for children, husband and family, has left them vulnerable to developing mental disorders. Health services must target actions for improving these women's mental health.

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**ALCOHOL AND DRUG DEPENDENCE IN WOMEN: DESCRIPTIVE ANALYSIS OF A GROUP OF WOMEN IN AN EARLY PHASE TREATMENT PROGRAM AND LITERATURE REVIEW**

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**BACKGROUND AND OBJECTIVE:** Substance abuse and dependence were considered to be primarily male problems, and many substance abuse studies are conducted with a predominance of male participants. However, recent substance abuse research indicates significant gender differences in the substance-related epidemiology and features. Our main objective is to review some general aspects of drug and alcohol dependence and abuse in women like use patterns and course of illness and several issues related to the evaluation and addressing of psychiatric and medical comorbidities. On the other hand to describe the psychopathological and medical characteristics of a

group of women with alcohol and drug dependence in an early phase- inpatient treatment program.

**METHOD:** Observational Descriptive Study and Literature Review. We conducted a follow- up period of an inpatient group of 67 women during the first phase of a rehabilitation program in our institution:

**PROGRAMA REDES-** Addiction Medicine Center in Bogotá Colombia between 2009 and 2012. (Table 1.)

**KEY POINTS:**

- Gender differences in rates of substance abuse have been consistently observed in the general population and treatment-seeking samples with men exhibiting significantly higher rates of substance use, abuse, and dependence. There may be a gender bias in several studies.
- Telescoping is a term used to describe an accelerated progression from the initiation of substance use to the onset of dependence and first admission to treatment. This phenomenon is mainly observed with alcohol, cannabis and opioids.
- In terms of alcohol use women tend to drink alone, binge less often than men, have more regular patterns and drink smaller quantities as compared to men.
- All pregnant women and women of childbearing age should be screened periodically for alcohol, tobacco, and prescription and illicit drug use.
- There is an important role of co-occurring condition in women with addiction with higher rates of mood and anxiety disorders. It is particularly high the probability of recurrent trauma in this population as seen in this sample. (Table 4

**DISCUSSION:**

- The research evidence shows that there are significant gender differences in drug abuse and that more research is needed.
- Progression or developmental stages of drug involvement are not identical for men and women.
- Women may be more susceptible than men to substance-related consequences: medical, physical, psychological and social.
- Women should be assessed for domestic violence and substance abuse by partners.
- We did not see in this sample a high proportion of women using prescription drugs.

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### **IMPORTANCE OF HEALTH EDUCATION AND PROMOTION IN PREVENTING BULLYING IN JUNIOR HIGH SCHOOL STUDENTS**

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**EDUCATIONAL OBJECTIVE:** To recognize the importance of health education and promotion in preventing bullying.

**INTRODUCTION:** Bullying is a public health problem, it can be divided in physical, psychological, verbal, social and cyberbullying, and it includes the victim, the perpetrator and the spectators (1).

**PURPOSE:** To establish how important is health education and promotion in preventing bullying, which occurs more frequently in Junior High School students.

**METHODS:** The study was quantitative, with a comparative and prospective pretest-posttest design, on 695 students, 144 parents and 40 teachers evaluated with a validated Likert-type scale questionnaire, applied before and after an intervention with interactive materials about health education and promotion. The samples were no probabilistic and by convenience, and descriptive and inferential statistics were used.

**RESULTS:** More than 50% of alumni stated that they suffered bullying regarding heckling, nicknames or teasing about their physical aspect, at least once; 44% have nicknamed or abused their class-mates because they are different; 60% accept as normal the violent actions towards class-mates. Regarding parents, 16% just observe and 3.5% talk sometimes with their children on their relationship with school friends, and 21.5% never intervene in it; whereas 50% never tell teachers if there is a mistreat on their children. About teachers, 90% cannot identify when there is a joke or bullying. After implementing health education and promotion to prevent bullying, 85% of students identified the different

types of violence and the consequences on the victim, the perpetrator and the spectators; while 90% knew what to do against it. All parents recognized how important is communicate with their child, 80% with teachers, and 75% to avoid violence at home. 93% of teachers identified jokes vs bullying and what to do to prevent it. Comparing pretest vs posttest, was significant ( $p>0.05$ ).

**CONCLUSIONS:** The most frequent types of bullying in Junior High School students are verbal, physical and psychological with social exclusion and rejection. These types of bullying are subtle and favor no recognition by both teachers and parents. It is necessary to intervene with a multidisciplinary team to educate students, parents and teachers; in this regard, Nursing students are called to promote health education in schools as a good strategy to prevent bullying. Otherwise silence, complicity and ignorance would damage physical and mental health in our adolescents.

### **FAMILIAL EDUCATION AND THE HEALTH OF OLDER WOMEN IN SOUTH KOREA**

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**EDUCATIONAL OBJECTIVES:** Participants should be able to understand the use and meaning of familial education when measuring health inequality.

**PURPOSE:** Focusing on the meaning of education in cultural context, this study was to examine the effect of familial education and the health of older women.

**METHOD:** Data were from age and area stratified random sample of 569 women aged 60-89, surveyed by face to face home visit interviews across the country. To capture the health effect of familial education, not only their own but male siblings', spouse's and children's education were considered. Health outcomes included depressive symptom, physician diagnosed chronic diseases and activity limitation. Prevalence Ratios(PR) and associated confidence interval(CI) were estimated by multivariate log binomial regressions, considering age, marital status, residence, and household income as covariates.

**RESULT:** Women without formal education, in reference to secondary and higher than secondary educated group, increased the health risk significantly by PR 2.34 (95% CI

1.02-5.38) for depressive symptom, by PR 1.74 (95% CI 1.39-2.17) for chronic diseases, and by PR 3.86 (95% CI 1.69-8.80) for limited activity. Furthermore, the lower the education of male siblings, spouses, or children, the lower the health status exhibited among Korean older women. The effect of children's education on the health of older women was independently associated with their own health.

**CONCLUSION:** This study suggests the necessity of extended discourse and comparative studies on the use of familial education as a useful health inequality indicator for the older women.

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### THE IMPORTANCE OF MONITORING RISK FACTORS FOR DEMENTIA IN WOMEN IN THE INVOLUTIONAL PERIOD

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**INTRODUCTION:** Dementia is a syndrome characterized by progressive memory loss and the development of multiple cognitive defects that include at least one of the following cognitive disturbances: aphasia, agnosia, apraxia and disorders of executive functions.

Dementia arise as a consequence of the expression of different etiological factors. The majority of dementias in the initial stages does not appear as an intellectual deficit, but in the form of behavioral and affective disorders. Risk factors include: age, family history, gender, head injury, education, cardiovascular disease and the presence of Down syndrome. Involutional period covers the period from 45 to 65 years of age. In this period, women undergoing through multiple changes-physical, social, economic, and emotional. This period includes the menopause. It is very difficult to separate the signs related to menopause compared to the signs of aging.

**PURPOSE:** the aim of this paper is to highlight the importance of monitoring the various parameters that increase the risk of developing dementia in women in the involutional period.

**METHODS:** A retrospective analysis of the case

**CASE REPORT:** Z. DJ., 59 year old woman, was first examined by a psychiatrist 5 years ago because of problems in terms of insomnia, depressed mood, intense anxiety, ideas of persecution. During the

outpatient treatment she was treated under the diagnosis of acute psychotic reaction. Anxiolytic and antipsychotic drugs were prescribed in therapy. Applied to the therapy there was a slight improvement of mental condition. 11 months ago she was hospitalized in the neurology department in a comatose state caused by drugs intoxication. After that there were problems in the sense of disorientation, memory loss, emotional numbness, poor verbal production, inability to perform daily activities, walking difficulties, incontinence. Hospitalization at a psychiatric clinic was followed to assess mental state of the patient and the definitive diagnosis. Based on somatic examination, neurological examination, neuropsychological testing and CT scan everything indicated that it was dementia.

**CONCLUSIONS:** : This case highlights the importance of monitoring risk factors for the development of dementia in women in the involutional period, with the aim of early diagnosis, treatment and prevention of complications.

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### HAVE WOMEN MORE RISK FOR MCI THAN MEN? DATA FROM THE NEDICES COHORT

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**EDUCATIONAL OBJECTIVES:** Other population-based survey with MCI data<sup>1</sup> described analogous findings. MCI is not yet a well-established entity but female could have more risk than men, mainly when MCI subtypes are performed

**PURPOSE:** To investigate, if gender influences the incidence of Mild Cognitive Impairment (MCI) in the NEDICES (Neurological Disorders in Central Spain) cohort

**METHODS:** NEDICES is a population census-based cohort study of the elderly (65 and older) with a baseline (1994-5) and a follow-up visit (1997-98). The presence of MCI was determined with a 37-item expanded version of the Mini-Mental State Examination (37-MMSE) divided in different domains. Those subjects below 1.5 SD of the mean population score were considered MCI.

**RESULTS:** There were 1697 evaluated subjects of whom 470 could be classified as MCI (27.7%). 280 of these subjects were female (60%). Within subtypes 54% of them were non amnesic MCI, 29% multidomain MCI and 17% amnesic MCI. In Cox-Proportional Hazards models adjusted for other covariates (age and literacy) female gender remained as an independent risk factor for MCI with a 1.4 HR (CI95 1.2-1.7).

**CONCLUSIONS:** The data from NEDICES survey reveals that psychometrically defined MCI incidence is increased among the women of the cohort. This could not be explained by the effect of greater longevity or an increased proportion of illiterate subjects within this group as these variables were properly controlled in the multivariate analysis.

#### REFERENCE

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## IS THERE EVIDENCE FOR THE UTILITY OF ANTIDEPRESSANT PHARMACOTHERPY FOR THE TREATMENT OF VULVODYNIA? A SYSTEMATIC REVIEW OF THE LITERATURE

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**EDUCATIONAL OBJECTIVES:** At the conclusion of this presentation, participants will recognize the shortcomings of the existing literature regarding antidepressant pharmacotherapy in vulvodynia treatment.

**INTRODUCTION:** Vulvodynia refers to chronic pain or discomfort affecting the vulva. Untreated or inadequately treated vulvodynia can impair a woman's capacity for sexual activity, employment and life enjoyment. Although antidepressants have often been recommended as a potential treatment, the evidence supporting this recommendation has not been systematically assessed.

**PURPOSE:** A comprehensive search of the available literature was conducted to evaluate the efficacy of antidepressant pharmacotherapy in the treatment of vulvodynia.

**METHODS:** Informed by the revised Consolidated Standards of Reporting Trials (CONSORT) and the Meta-analysis Of Observational Studies in Epidemiology (MOOSE) statements, the methodological quality of published reports addressing the utility of antidepressants in the treatment of vulvodynia was conducted.

**RESULTS:** The search yielded 13 published reports, i.e., two randomized controlled trials, one quasi-experimental trial, seven non-experimental studies and three case reports. A number of methodological shortcomings were identified in several of the reports with respect to study design including lack of clear inclusion/exclusion criteria, small sample sizes, lack of control/placebo comparison groups, insufficient blinding, lack of validated outcome measures of pain and sexual functioning and insufficient longitudinal follow-up of treated patients.

The vast majority of studies utilized tricyclic antidepressants (TCAs). Evidence supporting the benefits of TCAs studied to date was limited, i.e., based largely upon descriptive reports but unsubstantiated by randomized controlled trials. There were no systematic investigations into, and no studies that directly compared other classes of antidepressants for treatment of vulvodynia. The paucity of carefully designed empirical investigations in the literature to date limit the extent to which definitive statements can be made regarding whether antidepressant efficacy is related to vulvodynia sub-type, duration of symptoms prior to treatment initiation, the presence of psychiatric comorbidities, antidepressant dosing and duration of treatment or the tolerability of side effects.

**CONCLUSIONS:** There is insufficient evidence to support the recommendation of antidepressant pharmacotherapy in the treatment of vulvodynia. Although the literature suggests that a subset of vulvodynia-afflicted patients derive symptom relief from antidepressants, additional research is required to identify those characteristics that would predict those patients for whom antidepressants are likely to be effective.

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## SEXUALITY OF WOMEN WITH AFFECTIVE DISORDERS

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**EDUCATIONAL OBJECTIVES:** The functioning of women with affective disorders in diagnosis as well as the influence of pharmacotherapy are subject to the occurrence of sexual dysfunctions, which within that particular group, has recently become an issue widely addressed in a number of research studies. Despite the common knowledge of such problems they are frequently omitted or even marginalized. Only an insignificant number of women report any difficulties in that area in direct conversations with their physicians, and at the same time few therapists have enough courage to inquire about their patients' sexual life.

**PURPOSE:** The aim of the hereby-presented multi research-center studies is the description of how frequent sexual impairments touch women with affective disorders in diagnosis, as well as the assessment of illness' and pharmacotherapy's influence on their occurrence.

**METHODS:** So far 135 women aged 18-65 have been examined. The aim is to achieve the 300 women studied. The research was based on a number of standardized questionnaires: The BSP Questionnaire (Poles' Sexuality Research), Female Sexual Functioning, Male Sexual Functioning, the Hamilton Rating Scale for Depression and the Young Mania Rating Scale. Additionally information was gathered on the course of illness itself, duration of episodes and types of pharmacological treatment. The subjects were recruited from a group of individuals under diagnosis and those hospitalized the Department of Psychiatry and Psychotherapy of Medical University of Silesia in Katowice, II Department of Psychiatry of the Institute of Psychiatry and Neurology in Warsaw as well as the Adult Psychiatric Ward of University Hospital in Cracow.

**RESULTS:** Among the studied patients, the most common diagnosis was recurrent depressive disorders, followed by bipolar disorder and depressive episode. The most common problems reported by women were: reduced need for sex (61.5%), rarely achieved orgasm (49%), abnormal vaginal lubrication (37%), lack of orgasm (34%) and lack of enjoyment of sex (33 %).

**CONCLUSIONS:** The issue of sexual dysfunction should play a greater role in the course of therapy. All patients in the course of the study were taking antidepressants. The presence of sexual dysfunction in women should encourage therapists to answer the question to what extent are they caused by the disease or antidepressant drug administered. A significant difference between the percentage of women reporting directly to their doctors the presence of sexual dysfunction and the results carried out on the basis of questionnaires should encourage therapists to direct questions about the presence of the disorder in this sphere of life.

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## PREMENSTRUAL DYSPHORIC DISORDER (PMDD) DUE TO PARADOXICAL EFFECTS OF PROGESTERONE

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**EDUCATIONAL OBJECTIVES:** The participants will be educated in a possible pathogenesis of sex steroid induced negative mood changes.

**PURPOSE:** to give a review of sex steroid relation to negative mood in premenstrual dysphoric disorder.

**METHODS:** Overview of own results combined with literature data.

**RESULTS:** Certain women experience negative mood symptoms during progesterone or progestagen addition in sequential hormone therapy (HT). In women with PMDD increased negative mood symptoms related to progesterone increase during the luteal phase of ovulatory menstrual cycles. In anovulatory cycles no symptom or sex steroid increase occurs. The symptoms are not mediated by the classical hormonal progesterone receptor as the progesterone receptor antagonist mifepristone does not inhibit the symptoms. Therefore other explanations have been sought and one hypothesis is that the symptoms are provoked by progesterone metabolites on the GABA-A receptor

system. GABA-A is the major inhibitory system in the brain. Positive modulators of the GABA-A receptor include the progesterone metabolites allopregnanolone and pregnanolone, benzodiazepines, barbiturates, and alcohol. Studies on the effect of GABA-A receptor modulators have shown that in certain individuals GABA-A receptor modulators, including allopregnanolone, have biphasic effects. In low concentrations they paradoxically give adverse, anxiogenic effects whereas in higher concentrations show beneficial, calming properties.

Positive GABA-A receptor modulators induce strong paradoxical effects e.g. negative mood in 3%–8% of those exposed, while up to 25% have moderate symptoms thus similar as the prevalence of PMDD, 3%–8% among women in fertile ages, and up to 25% have moderate symptoms of premenstrual syndrome (PMS).

In women on progesterone in HT, the severity of these mood symptoms are related to the allopregnanolone serum concentrations in an inverted U-shaped curve. Negative mood symptoms occur when the serum concentration of allopregnanolone is similar to endogenous luteal phase levels, while low and high concentrations have less effect on mood.

Progesterone/allopregnanolone treatment in women increases the activity in the amygdala (measured with fMRI) similar to the changes seen during anxiety reactions.

Patients with PMDD show decreased sensitivity in GABA-A receptor sensitivity to diazepam while increased sensitivity to allopregnanolone. This agrees with findings in animals showing a relation between changes in alpha4 and delta subunits of the GABA-A receptor and allopregnanolone.

**CONCLUSION:** These findings suggest that negative mood symptoms in women with PMDD are caused by the paradoxical effect of allopregnanolone mediated via the GABA-A receptor. Reference: Bäckström T, Haage D, Löfgren M, Johansson IM, Strömberg J, Nyberg S, Andréen L, Ossewaarde L, Wingen GA, Turkmen S, Bengtsson SK. Paradoxical effects of GABA-A modulators may explain sex steroid induced negative mood symptoms in some persons. *Neuroscience*: 2011;191:46-54.

## PREMENSTRUAL DYSPHORIC DISORDER IN EAST ASIA: A REVIEW OF THE LITERATURE

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**EDUCATIONAL OBJECTS:** There has been increasing interest in examining changes in mood present during women's hormonal fluctuations in East Asia. Much of this research focused on post-partum depression. To our best knowledge, there has been no similar assessment of the research literature regarding Premenstrual Dysphoric Disorder (PMDD) in East Asia.

**PURPOSE:** Fluctuations in ovarian steroids during specific phases of the reproductive cycle, such as premenstruation, have been hypothesized to contribute to women's increased vulnerability to depression. This current study's goal is to summarize the literature regarding PMDD in the East Asian countries of Taiwan, China (including Hong Kong and Macau), Japan, and Korea.

**METHOD:** A Pubmed and Chinese Electronic Periodical Service (CEPS) literature review was conducted using the key words "Premenstrual Dysphoric Disorder" along with "Japan," "Korea," "Taiwan," "Hong Kong," and "Macau." Using these criteria, 17 articles were found. Three articles were excluded because they did not involve PMDD in the aforementioned countries. In addition to this search, an article found in a review of the research on reproductive mental health disorders in China was utilized. That review contained one article regarding PMDD with an English language abstract, which was utilized in this current article.

**RESULTS:** The rates of PMDD in East Asia (1.3-2.8%) appear to be lower than that seen in the Western literature (3-8%). Many of the risk factors for PMDD were the same in the Eastern and Western literature, although some key differences were found. The few studies on treatment of PMDD in East Asia have shown positive results.

**CONCLUSIONS:** The rates of PMDD appear to be lower in East Asia, though reasons for this result are discussed. Few studies have been conducted examining the efficacy of psychotropic medications commonly used to treat PMDD in this population.

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## **RECOGNITION OF MENTAL HEALTH AFFECTATION AS A CAUSE FOR THERAPEUTIC TERMINATION OF PREGNANCY IN A RESTRICTIVE SETTING**

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**EDUCATIONAL OBJECTIVES:** At the conclusion of this presentation the participants should be able to recognize mental health affectation as a cause for therapeutic termination of pregnancy (TOP)

**PURPOSE:** To enable primary care providers to recognize the affectation of mental health in women presenting with unplanned/unwanted pregnancy

**METHODS:** Retrospective study of women presenting for counseling upon receiving a positive pregnancy test who were found by trained PCP to have significant affectation of their mental health between January 2012 and January 2013

**RESULTS:** PCPs are able to inquire about emotional issues and feel comfortable doing so. In most cases women identified by PCPs indeed present with severe mental health affectation and go on to receive different diagnoses, of which depression is most common. Preliminary results indicate that younger, unmarried, unemployed or independently employed and with secondary or post secondary education women have a high risk of presenting affectation of their mental health when confronting unwanted pregnancy.

**CONCLUSIONS:** It is possible to effectively train primary care providers for the recognition of significant affectation of mental health in order to offer therapeutic TOP

We are advancing in the objective of making therapeutic, and hence, safe TOP available to more women.

The implications are that primary care and sexual and reproductive health providers can be very valuable in dealing with emotional issues in women of reproductive age and that the recognition of mental health affectation

allows more women to be offered TOP in safe conditions, thus protecting her life and health.

## **LITERATURE REFERENCE**

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- Rondon, Marta B: Salud Mental Aborto Terapeutico. Consorcio de Investigacion Económica y Social. Observatorio del Derecho a la Salud, Lima 2009.

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## **WHAT WERE WE THINKING, A GENDER-INFORMED PROGRAM TO PREVENT POSTNATAL MENTAL HEALTH PROBLEMS IN WOMEN**

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**EDUCATIONAL OBJECTIVES:** To have increased knowledge of

- Gender stereotypes in the traditional conceptualizations of postnatal mental health problems in women;
- The strengths and limitations of prior universal strategies to prevent postnatal depression;
- A novel gender-informed psycho-educational approach to postnatal mental health promotion.

**PURPOSE:** Of the seven trials of interventions to prevent postnatal mental health problems in women published by 2010, none were gender informed, addressed social risk factors directly, or implemented an effective translation process. There was little evidence of effectiveness. The aim was to develop and test an innovative psycho-educational program to prevent postnatal depression and anxiety in primiparous women.

**METHODS:** What Were We Thinking (WWWT) is a structured evidence-informed one-day prevention program for implementation with couples and their infants in primary care. It is innovative in addressing three under-recognized gender-based risk factors and mediators: management of unsettled infant behaviour, adjustments to new roles and responsibilities in the intimate partner relationship, and severe occupational fatigue, directly. The effectiveness of WWWT was tested in a before and after controlled trial in seven local

government areas in Victoria Australia. The primary outcome was period prevalence of any episode of depressive, anxiety or adjustment disorders established by Composite International Diagnostic Interview (CIDI) in primiparous women in the first six months postpartum.

**RESULTS:** In total 399/646 (62%) women were recruited; 210 received only standard care and 189 the intervention; 364 (91%) were retained at follow up six months postpartum. In women without a psychiatric history (232/364; 64%), 36/125 (29%) met CIDI diagnostic criteria for anxiety, depression or adjustment disorders in the control group, compared with 16/107 (15%) in the intervention group. WWWT was evaluated by > 90% of program participants as salient and acceptable. In those without a psychiatric history, the adjusted odds ratio for experiencing a common postpartum mental disorder was 0.43 (95% CI 0.21, 0.89) in the intervention compared to the control group.

**CONCLUSIONS:** A gender-informed brief psycho-educational group program offered in universal primary care is effective in reducing common postpartum mental disorders in women. A stepped approach might improve outcomes in women with a psychiatric history. Taking it to scale requires strategies to address practitioner knowledge gaps and gender stereotypes, consumer learning needs, and community action.

**REFERENCE:** Fisher JRW, Wynter K, Rowe HJ. Innovative psycho-educational program to prevent common postpartum mental disorders in primiparous women: a before and after controlled study. *BMC Public Health* 2010, 10: 432

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### EARLY PREDICTIVE BIOMARKERS FOR POSTPARTUM DEPRESSION POINT TOWARDS THE ROLE OF ESTROGEN SIGNALLING

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**EDUCATIONAL OBJECTIVES:** This presentation will demonstrate how postpartum depression can be diagnosed as early as the third pregnancy trimester using peripheral blood biomarkers, reveal a possibly

mechanism underlying the vulnerability towards postpartum depression and suggest possible treatment.

**PURPOSE:** Postpartum depression (PPD) affects approximately 13% of women and has a negative impact on mother and infant, hence the aim of this study was to identify reliable biological tests for early detection of PPD.

**METHODS:** An association study in a longitudinal discovery and replication cohort with psychopathology, genome-wide gene expression and hormones measured in the 1st and 3rd pregnancy trimesters and early postpartum was performed. Gene expression was measured on Illumina HumanHT12v4 microarrays. Estradiol and estrion were measured from plasma. Statistical analysis was performed in R.

**RESULTS:** We identified a biomarker panel of transcripts which were differentially expressed between the PPD and euthymic women and allowed prediction of PPD with an accuracy of 88% in the discovery and replication cohorts during the 3<sup>rd</sup> pregnancy trimester. Within these transcripts, we observed a significant enrichment of transcripts implicated in selenium, folic acid and estrogen signalling.

**CONCLUSIONS:** This is the first study to identify predictive biomarkers for postpartum depression. These results suggest that PPD can be robustly early on and these findings have implications for predictive testing of high-risk women and prevention and treatment for PPD.

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### PROVIDER-PATIENT COMMUNICATION ON STRESS MANAGEMENT AND MOOD DURING PREGNANCY

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**PURPOSE:** The primary aim of the project was to conduct focus groups with pregnant women to examine their perceptions on patients-provider communication during prenatal visits pertaining to mood and stress management. In particular, to determine what types of communication between healthcare providers (HCP) and patients facilitates or prevents patient engagement and adherence to stress management techniques and depression therapies.

**METHODS:** Seventy pregnant women were recruited from local healthcare clinics of which 51 met eligibility criteria. The final sample resulted in 24 pregnant, English speaking women between the ages of 18 and 46

years old with the majority being Caucasian (75%; n=18), 62% married (n=15) and 75% having some healthcare insurance (n=18). Three focus groups interviews were conducted and a brief survey was administered that assessed sociodemographic factors and perceived quality of patient – provider communication. Atlas/Ti software was used to code and analyze the focus group data for themes and patterns. SAS software was used to compute descriptive statistics.

**RESULTS:** Specific facilitating factors related to effective patient-provider communication on mood and stress management were identified as well as numerous barriers at patient, provider and system levels. Overall key elements of effective patient-provider communication included establishing rapport, continuity of care, asking open-ended questions, having access to community resources, being proactive about healthcare received, among others.

**CONCLUSIONS:** These findings will help inform the future development of interventions aimed at improving patient-provider communication on stress and mood during the antenatal period.

**LEARNING OBJECTIVES:** At the conclusion of this presentation, participants should be able to identify facilitators and barriers as well as recommended practices related to providing quality patient-provider communication on mood and stress management during the perinatal period.

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## **MOTHERHOOD IN A VULNERABLE SOCIAL CONTEXT: THE FLOWER-DOLL WORKSHOPS**

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**EDUCATIONAL OBJECTIVES:** At the conclusion of this presentation, the participants should be able to know and elaborate alternative institutional treatments whenever mothers are presenting emotional difficulties with mothering.

**PURPOSE:** Our purpose is to offer a psychotherapeutic environment to the emotional expression of pregnant women, with the aim of helping them to live the motherhood as an integrated and authentic experience.

**METHODS:** Pregnant women who live in a public institution during pregnancy and post partum period take part of psychotherapeutic workshops. The

encounters occur in groups in a weekly basis. During the treatment we sew a flower-doll with the patients, who share their emotional experience about motherhood with the group and psychotherapist. After this first sewing the process continues with baby's clothes and objects or whatever the patients want to sew.

**RESULTS:** The patients begun to think about motherhood in terms of the good enough infant care. We observed changes in their conceptions about maternal experiences and the infant's needs. Almost all mothers who had doubts about being able to take care of their future babies achieved the emotional condition of mothering their own children.

### **CONCLUSIONS:**

- The sewing psychotherapeutic workshop approach facilitates the emotional sharing on which is based their reflections about maternal role and the construction of a healthy mother-infant relationship.
- We consider that the project achieved our objectives
- Even in precarious conditions, such as poverty, drugs abuse, homeless women, prostitution, rape and violence we saw a reestablishment of their process of emotional development and a reorganization of their caring ability.
- We acknowledge the relevance of the psychologist's role in a social clinic, emphasizing the importance of a team work, according to which the psychologist will help the doctor, the social assistant, the midwife, the nurse, among others.

### **LITERATURE REFERENCE**

- Aiello-Vaisberg, T.M.J. (2004). A alma, o olho e a mão [The soul, the eye and the hand]. In T.M.J. Aiello-Vaisberg Ser e fazer: Enquadres diferenciados na clínica winnicottiana [Being and doing: Unique approaches in the Winnicottian clinic]. Sao Paulo: Ideias e Letras.
- Badinter, E. (2010). *Le conflit: la femme et la mere* [The conflict: the woman and the mother]. Paris: Flammarion.

## **PRENATAL MICRONUTRIENT SUPPLEMENTATION AND POSTPARTUM DEPRESSIVE SYMPTOMS IN A PREGNANCY COHORT**

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**EDUCATIONAL OBJECTIVES:** This presentation discusses the multiple factors, including selenium intake from supplements, history of depression, and social support, that are associated with the risk of postpartum depressive symptoms. From this presentation, participants will understand the importance of dietary supplementation, particularly the intake of selenium, for pregnant women.

**PURPOSE:** This study investigated the association between prenatal micronutrient supplementation and the risk for symptoms of postpartum depression in a longitudinal pregnancy cohort from the Alberta Pregnancy Outcomes and Nutrition (APrON) study.

**METHODS:** Participants came from a cohort of the first 600 APrON women. Pregnant women <17 weeks gestation were recruited. Supplemental nutrient intake and symptoms of depression (measured with the Edinburgh Postnatal Depression Scale (EPDS)) were collected at each trimester and 12 weeks postpartum.

**RESULTS:** Of the 475 participants who completed the EPDS at least twice in pregnancy and at 12 weeks postpartum, 416 (88%) scored <10 and 59 (12%) scored  $\geq 10$ , where an EPDS  $\geq 10$  is considered to be "at least probable minor depression". Mean nutrient intakes from supplements were higher in women with lower EPDS scores, particularly selenium ( $p = 0.0015$ ) and omega-3s ( $p = 0.01$ ). Bivariate analyses showed that several demographic and social/lifestyle variables were associated with EPDS  $\geq 10$ : not having been born in Canada ( $p = 0.01$ ), greater number of chronic conditions ( $p = 0.05$ ), greater number of stressful life events during this pregnancy ( $p = 0.02$ ), and lower prenatal and postnatal support ( $p = 0.0043$  and  $p = 0.0001$ , respectively). Adjusting for covariates and nutrients known to be associated with postpartum depression, logistic regression showed that having a prenatal EPDS  $\geq 10$  increased the odds of postpartum depressive

symptoms (second and third trimester OR = 3.29, 95% CI = 1.55 - 7.01,  $p = 0.004$  and OR = 4.26, 95% CI = 2.05 - 8.85,  $p < 0.0001$ , respectively), while prenatal supplemental selenium (per 10 mg, OR = 0.76, 95% CI = 0.74 - 0.78,  $p = 0.0019$ ) and postnatal social support (OR = 0.87, 95% CI = 0.78 - 0.97,  $p = 0.0015$ ) were protective.

**CONCLUSIONS:** In the opinion of the authors, the project achieved its objectives in determining that multiple factors, including history of depression, level of social support, and intake from micronutrient supplementation, are associated with the risk of postpartum depressive symptoms. This knowledge could inform on clinical practice when consulting pregnant women about postpartum depression. Implication for future research on dietary supplementation in pregnancy with special attention to selenium intake is warranted.

### **LITERATURE REFERENCE**

- Marcus SM: Depression during pregnancy: rates, risks and consequences--Motherisk Update 2008. *Can J Clin Pharmacol* 2009, 16:e15-22.
- Goh YI, Bollano E, Einarson TR, Koren G: Prenatal multivitamin supplementation and rates of pediatric cancers: a meta-analysis. *Clin Pharmacol Ther* 2007, 81:685-91.

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## **MAY INSOMNIA IN LATE PREGNANCY PREDICT POSTPARTUM DEPRESSIVE SYMPTOMS? - A POPULATION BASED LONGITUDINAL STUDY**

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**EDUCATIONAL OBJECTIVES:** At the conclusion of this presentation, the participants should be able to know how sleep normally changes from pregnancy to after delivery, and to recognize the components of insomnia that may predict later development of postnatal depression.

**PURPOSE:** This study aimed to describe changes in sleep pattern, insomnia and depressive symptoms before and after delivery, and to evaluate whether level of sleep problems during pregnancy may predict postpartum depression.

**METHODS:** A population based longitudinal study of all women scheduled to give birth at Akershus University Hospital, Norway was conducted from November 2008 to April 2010. Consenting women were handed a questionnaire in gestational week 17, and thereafter received a questionnaire by mail in week 32 of pregnancy and 8 weeks after delivery. In total, 2088 women (45%) returned all three questionnaires. This study presents data from the two last questionnaires. The Edinburgh Postnatal Depression Scale (EPDS) measured depressive symptoms. The Bergen Insomnia Scale (BIS) measured insomnia. In addition, total sleep duration, sleep efficiency and wake time of baby were reported.

**RESULTS:** Mean sleep duration was reduced by 49 minutes after delivery (from 7.33 to 6.5 hours), and mean sleep efficiency was reduced from 84 to 75%. However, in spite of more awakenings at night, the self-reported insomnia scores improved, from 17.2 to 15.4, and the prevalence of insomnia according to the DSM-IV criteria decreased from 61.5% in pregnancy to 53.9% after delivery (All  $p < 0.001$ ). Increased wake time during night seemed to be partly compensated by shorter time of sleep initiation, and women reported less daytime impairment and were more satisfied with the sleep they got after delivery compared to during pregnancy. Nearly 21% of women had EPDS  $\geq 10$  at some point, of whom 162 (7.8%) in pregnancy only, 153 (7.3%) in postpartum only, and 116 (5.6%) were depressed at both times. Elevated insomnia scores, but not estimated sleep duration or sleep efficiency seemed to predict later development of postpartum depression. Women whose depression remitted postpartum had lower EPDS scores in pregnancy and showed normalisation of sleep parameters and improvement in insomnia scores. Women who remained depressed both before and after delivery had the highest scores at both the EPDS and the BIS during pregnancy.

**CONCLUSIONS:** Women may sleep shorter, but better after delivery. Women with insomnia during pregnancy are at increased risk of developing postpartum depression, and women who recover may still have residual insomnia. Clinicians should evaluate level of daytime impairment and subjective sleep satisfaction in addition to actual sleep and wake times when treating

insomnia in the perinatal period. Further studies should evaluate whether treatment of insomnia may prevent postnatal depression.

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## HIGH-RISK PREGNANCY AND ITS EFFECTS ON WOMEN'S MENTAL HEALTH AND THE TRANSITION TO MOTHERHOOD

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**EDUCATIONAL OBJECTIVES:** To examine short and long term consequences of high-risk pregnancy on pregnant women's mental health and the transition to motherhood.

**PURPOSE:** To assess the impact of high-risk pregnancy on women's mental health during pregnancy and to examine whether high-risk pregnancy is associated with less favourable maternal functioning and lower sense of efficacy compared to low-risk pregnancy three months postpartum.

**METHODS:** A group of 31 high-risk and 29 low-risk pregnant women were interviewed during pregnancy and again three months postpartum. High-risk pregnancy was indicated if the pregnant woman was hospitalized for at least one week. During pregnancy, participants completed the State-Trait Anxiety Inventory (STAI)(Spielberger et al., 1970), and Beck Depression Inventory (BDI)(Beck, 1978). After birth women completed the Parent Sense of Competence Scale (PSOC) (Gibaud-Wallson & Wandersman, 1978) and the Parenting Stress Index-Short Form (PSI-SF)(Abiden, 1986). Maternal reflective functioning was assessed with the Parent Development Interview (PDI-R)(Slade et al., 2003). Maternal interactive behavior with infants was videotaped and coded with the Coding Interactive Behavior (CIB) (Feldman, 1998).

**RESULTS:** High-risk pregnant women reported significantly higher levels of depression ( $M=4.10$ ,  $SD=4.78$ ) and anxiety ( $M=45.47$ ,  $SD=11.58$ ) during pregnancy compared to low-risk pregnant women ( $M=2.08$ ,  $SD=1.85$ ;  $M=33.98$ ,  $SD=7.48$ , respectively). After birth, high-risk-pregnancy mothers reported significantly lower parental efficacy ( $M=3.56$ ,  $SD=.64$ ) and showed lower reflective functioning ( $M=3.64$ ,

$SD=1.01$ ) compared to low-risk- pregnancy mothers ( $M=3.86, SD=.51; M=4.27, SD=1.12$ , respectively). When interacting with their infants, high-risk-pregnancy mothers showed significantly lower sensitivity ( $M=3.84, SD=.67$ ), less effective structuring of their infants' play ( $M=4.42, SD=.72$ ) and less dyadic reciprocity ( $M=3.57, SD=1.03$ ), compared to low-risk pregnancy mothers ( $M=4.26, SD=.33; M=4.81, SD=.33; M=4.19, SD=.72$ , respectively).

**CONCLUSIONS:** The results show that high-risk pregnancy increases the risk of expectant women to experience higher level of depression and anxiety symptoms during the pregnancy period, thus supporting the study's hypothesis regarding the short term negative effects of high-risk pregnancy on women's mental health. Furthermore, the findings also show that high-risk pregnancy is associated with less favorable maternal interactive behavior, lower parental reflective functioning and diminished sense of maternal efficacy compared to low-risk pregnancy, thus suggesting that high-risk pregnancy may have long term negative effects on the transition to motherhood. Therefore, women experiencing high-risk pregnancy may benefit from psychosocial support during pregnancy and shortly after birth.

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## **EMOTIONAL TRAUMA, UNRESOLVED LOSS AND DISSOCIATIVE PHENOMENA DURING THE PERINATAL PERIOD. EFFECTS ON THE MOTHER AND EFFECTS ON THE PARENT INFANT RELATIONSHIP**

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**EDUCATIONAL OBJECTIVES.** Participants will gain an understanding of the clinical presentations of dissociative phenomena, the impact of the pregnancy, and of the baby on the clinical manifestations, risks for the infant and the maternal role. Evaluation and intervention strategies are described based on case examples.

**PURPOSE.** To examine the clinical presentation of posttraumatic dissociative experiences in women during pregnancy and the postpartum period. Explore the

childhood experiences that may have led to this style of psychic functioning. Analyze the effects of these experiences on the mother infant relationship and the general functioning as a mother. To describe tools to assess these phenomena and describe clinical intervention strategies in parent infant psychotherapy

**METHODS.** A subsample of 30 women from a larger group of clinical referrals (150) who were evaluated “in depth” by a clinical team, and who presented marked dissociative experiences were selected for further analysis. Their childhood experiences of loss, physical and sexual abuse, and neglect are analyzed and the possible pathways leading to dissociative phenomena in the present are explored. The majority exhibit severe dissociative experiences and a handful manifest dissociative identity disorder. We describe the clinical manifestations observed in the woman including her capacity to be a mother and the observed effects on the parent infant relationship.

**RESULTS.** There is a strong correlation between experiences of neglect, physical and sexual abuse during childhood, of a severe and chronic nature. However, other women who also suffered such experiences do not manifest clear dissociative phenomena. The pathway to dissociation seems to be associated with being intelligent, exhibiting creativity and having an intense fantasy life, with the capacity to “pretend” and imagine alternative states of being. Also, being “alone” with no one to trust may predispose to these experiences (not being believed, being trapped without escape, etc.). We observe that in some cases the woman does not frighten the baby but has a relatively preserved maternal ability. In other, the mother notices strong aggressive and rejecting tendencies toward the child, which take over her mind at periods of stress. The internal conflict with the motherhood experience seems pervasive.

**CONCLUSIONS.** It is necessary to identify dissociative experiences during the perinatal period, and to explore their origin, to offer understanding and support to the woman who suffers them, and to provide an understanding of the survival value of dissociation. This identification is essential to offer an adequate clinical intervention that prevents as much as possible the transgenerational transmission of trauma and dissociation to the baby.

### **LITERATURE REFERENCE**

Lyons-Ruth, K., Dutra, L., Schuder, M. R., & Bianchi, I. (2006). From infant attachment disorganization to adult dissociation: Relational adaptations or traumatic

experiences? *Psychiatric Clinics of North America*, 29,63 – 86.

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### **RATES AND RISK FACTORS FOR SICK LEAVE DURING PREGNANCY – A LONGITUDINAL STUDY**

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**EDUCATIONAL OBJECTIVES:** At the conclusion of this presentation, the participants should be able to know some of the reasons given for and factors associated with sick leave during pregnancy.

**PURPOSE:** To describe the prevalence of, reasons given for, and factors associated with sick leave during pregnancy.

**METHODS:** A population based longitudinal study of all women scheduled to give birth at Akershus University Hospital, Norway was conducted from November 2008 to April 2010. Consenting women were handed a questionnaire in gestational week 17, and thereafter received a questionnaire by mail in week 32 of pregnancy. Multiple logistic regression analyses were performed to examine associations with somatic, psychiatric, and social factors.

**RESULTS:** By week 32, 63.2% of the 2918 women included were on sick leave, and 75.3% had been on sick leave at some point during their pregnancy. Pelvic girdle pain and fatigue/sleep problems were the main reasons given for sick leave. Being on sick leave in all trimesters was strongly associated with hyperemesis, exercising less than weekly, chronic pain before or during pregnancy, infertility treatment (all  $p < 0.001$ ); younger maternal age, conflicts in the workplace (both  $p < 0.01$ ); multiparity, previous depression, insomnia, and lower education (all  $p < 0.05$ ). Sick leave was associated with elective cesarian section and higher infant birth weight ( $p < 0.01$ ). Adjustment of the work situation was associated with 1 week shorter duration of sick leave.

**CONCLUSIONS:** A majority of women receive sick leave during pregnancy, but sick leave might not be caused by pregnancy alone. Further studies are needed to evaluate whether treatment of chronic pain, pelvic back pain, insomnia and nausea may lead to less sick leave and better quality of life among pregnant women. In addition to previous medical and psychiatric history, work conditions, and socioeconomic factors also need to be addressed in order to manage sick leave during pregnancy.

**LITERATURE REFERENCE:** Dørheim S, Bjorvatn B, Eberhard-Gran M. Sick leave during pregnancy: a longitudinal study of rates and risk factors in a Norwegian population. *BJOG: An International Journal of Obstetrics and Gynaecology*. Accepted Sept 2012, manuscript ID 2012-OG-11006R1

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### **PERIMENOPAUSE AND INCIDENCE OF DEPRESSION IN MIDLIFE WOMEN: A POPULATION-BASED STUDY IN TAIWAN.**

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**EDUCATIONAL OBJECTS:** We used the data of Taiwan National Bureau of Health Promotion data to examine the relationship between depression and menopausal status and found independent of menopausal symptoms but perimenopausal status increases the risk of depression.

**PURPOSE:** To examine the relationships between depressive symptoms, menopausal status, and menopausal symptoms in middle-aged women.

**METHOD:** This cross-sectional, population-based study involved patients in the Taiwanese community. Data were retrieved from the nationwide 2002 Health Promotion Knowledge, Attitude, and Performance Survey in Taiwan. We assessed depressive symptoms using the Taiwanese Depression Questionnaire with a cut-off point of 18 of 19. Self-reported perception of menopausal status, frequency of menstrual periods in the preceding 12 months, and a history of oophorectomy surgery were used to categorize the women's menopausal status into premenopause, perimenopause, postmenopause, and surgical menopause.

**RESULTS:** A total of 3359 women aged 40-55 years were selected. Among these patients, 145 women (4.7%) experienced higher levels of concurrent depressive symptoms. The increase in depressive symptoms was significantly associated with menopausal status and most of the menopausal symptoms. After controlling for age, marital status, education, income, smoking, hormone therapy, and menopause symptoms, multivariate logistic regression showed that perimenopause was still significantly associated with depression in midlife women (odds ratio 1.97; 95% confidence interval 1.24-3.14).

**CONCLUSIONS:** Independent of menopausal symptoms, perimenopausal status increases the risk of depression.

**LITERATURE REFERENCES:**

Cohen LS, Soares CN, Vitonis AF, Otto MW, Harlow BL. Risk for new onset of depression during the menopausal transition: the Harvard study of moods and cycles. Arch Gen Psychiatry 2006;63:375-382.

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**POSITIVE ASSOCIATION BETWEEN DEPRESSION AND MENOPAUSAL SYMPTOMS: A CROSS-SECTIONAL STUDY FROM A MENOPAUSE-RELATED MOOD CLINIC**

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**EDUCATIONAL OBJECTIVES:** We use structured interview and Stages of Reproductive Aging Workshop (STRAW) criteria in clients of a special menopause-related mood clinic and found the positive association between depression and climacteric symptoms. But STRAW is a good enough standard or not may need more discussion.

**PURPOSE:** A special menopause-related mood clinic was set up in the psychiatric out-patient setting of a medical center. The present study examined the demographic and clinical characteristics of patients and tried to analyze any possible association between mood and climacteric symptoms.

**METHOD:** The participants were 180 consecutive patients who visited the clinic during a 4-year period. All subjects were interviewed by experienced psychiatrists using the structured Mini-International Neuropsychiatric Interview (MINI) and classified into 4 groups: reproductive, perimenopause, and natural postmenopause according to the STRAW criteria, and

surgical menopause, according to previous surgical history. We used the Hamilton Depression Rating Scale (HAMD) for depression and the Greene Climacteric Scale (GCS) for symptomatology evaluation.

**RESULTS:** The subjects ranged in age from 34 to 68 years, with a mean of  $50.1 \pm 6.04$  years. The most common diagnosis in the 4 groups was major depressive disorder (66.1%, 69.4%, 68.7%, and 75.0% respectively). Regarding menopausal symptoms, the most common was found to be difficulty in sleeping (58.3%), followed by feeling tired or lacking in energy (49.6%), feeling tense or nervous (48.0%), feeling unhappy or depressed (46.46%), and others. We classified subjects into 3 groups according to HAMD score (< 8, 8~17, and > 17), and found significant differences in all subscales of the GCS except sexual dysfunction.

**CONCLUSIONS:** This was the first study in which psychiatrists used a structural interview and the standard STRAW definition, and the positive association between depression and climacteric symptoms implies the importance of managing depression in menopausal women.

**LITERATURE REFERENCES:** Parry BL. Perimenopausal depression. Am J Psychiatry 2008;165(1):23-27.

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**COGNITIVE DECLINE AT MENOPAUSE: TRUE OR FALSE**

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**OBJECTIVES:** A common complaint during the climacteric concerns problems with cognitive function. The nature and extent of cognitive deficits during the menopausal transition are uncertain. There is evidence of both estrogen and psychological effects on cognition. Thus the cognitive domains affected and the extent of cognitive decline, if any, due to either changes in hormonal status and/or to accompanying physical and psychological changes are moot.

The objective of this study was to examine potential relationships between cognitive function and menopausal status, and to include psychosocial and affective state variables to elucidate their function as either independent or mediating variables.

**METHODS:** Women (N=128) from the general population (aged 45 to 61) were recruited to cover pre- peri- and post-menopausal stages. Standardised

neuropsychological tests and computerised reaction time measures of attention were used to assess verbal, visual, visuomotor, and attentional capacity. Data for psychological status, demographic variables and menopausal symptoms were also obtained.

**RESULTS:** Groups included 22 premenopausal, 50 perimenopausal, and 38 postmenopausal women. Eighteen users of hormone replacement therapy provided a separate group in statistical analyses. Data were analysed by univariate and multivariate analysis-of-variance and analysis-of-covariance.

Differences between the menopausal groups were not apparent on conventional neuropsychological test. Significant predictors included menopausal estrogen deficiency symptoms (hot flushes and night sweats) ( $p < .03$ ), sweat intensity ( $p < .001$ ), coping style ( $p < .01$ ), affective distress ( $p < .000$ ) and IQ ( $p < .000$ ).

Computerised reaction time tests of attention showed significant group differences for Simple Reaction Time ( $p = .05$ ), Choice Reaction Time ( $p < .02$ ), and Lexical Accuracy ( $p < .04$ ), with the perimenopausal and postmenopausal groups showing a decline relative to the premenopausal group. Linear and quadratic trends favoured the pre- and postmenopausal groups over the perimenopausal group.

Predictors of attentional measures included the Menopausal Symptoms Score ( $p < .03$  and  $p < .008$ ), IQ ( $p < .000$ ), Age ( $p < .01$ ), Affective Distress ( $p < .02$ ). Attentional measures predicted Verbal Fluency ( $p < .01$ ), Digit Symbol ( $p < .002$ ), and Visual Memory ( $p < .001$ ).

**CONCLUSION:** Some deficits in cognitive performance during the menopausal transition are evident and so accumulating evidence indicates that cognitive function may be compromised at this time. Severity of menopausal symptoms rather than menopausal status better predict cognitive performance. Both hormonal and psychological factors affect performance. Impacts on everyday living and the effects of psychosocial factors and personal vulnerabilities are all issues that require further study.

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## WOMEN ATTITUDE AT PSYCHODRAMA GROUP: AN ANALYSIS BASED ON CLINICAL PRACTICE

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**EDUCATIONAL OBJECTIVES:** the participants should be able to differentiate the specific attitude, predisposition and level of participation of women towards psychodrama. This could help to better choose and propose psychotherapeutic options to male and female patients.

**PURPOSE:** to compare attitude and participation in psychodrama group therapy between male and female patients.

**METHODS:** A descriptive analysis of variables related to attitude towards psychodrama and participation was made. Medical records from two psychotherapeutic groups –carried from 2007 to 2012- were analysed. Group 1 included 65 patients aged 20-40 years with affective or/and personality disorder (psicosis was exclusion criteria) with at least 10 years of illness. Group 2 included 46 patients aged 40-60 with the same diagnosis, with 7 years of illness. Data from records included: a) demographic characteristics; b) clinical diagnosis based on DSM-IV-TR; c) Other concomitants treatments (psychopharmacological and/or psychotherapeutic); d) indication of acceptance of the psychodrama group in initial interview; e) attending meetings, individual dramatizations, participation in games and group exercises, praises majority of the rest of the group for their involvement, etc. f) Drop outs and retention in the psychodrama group.

**RESULTS:** Women accepted more often than men to enter the group, were more spontaneous and participatory, and remained in the treatment group until discharge with significant higher proportion.

Furthermore, women accepted more to acting out their emotions and interpersonal interactions on stage - even choosing auxiliary male roles- and participated more in games and group exercises. They tended to show a more genuine spontaneity, that is, through a readiness to creatively improvise and respond in the moment.

**CONCLUSIONS:** Women showed a more favourable attitude towards psychodrama compared with men.

**LITERATURE REFERENCE:** C. Baim, J. Burmeister, and M. Maciel, "Psychodrama: Advances in Theory and

## **THE STRUGGLE OF WOMEN WARRIORS: THE EXPERIENCE OF WORKPLACE DISCRIMINATION**

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**EDUCATIONAL OBJECTIVES:** Participant will be able to recognize the mental and physical health challenges and strengths of women in the military and can begin to take a proactive, preventative approach to maintain their health.

**PURPOSE:** To demonstrate that these women, invisible to the scientific and health care community, deal with structural, familial, interpersonal and intrapersonal stressors throughout their day. Over time, if neglected, these stressors reduce women's abilities to contribute successfully to their own, their families' and societies' well being.

**METHODS:** A review of the literature was conducted to determine the state of the science, limitations, and future direction.

**RESULTS:** Despite a dramatic increase of women in traditionally male-dominated occupations, women continue to experience unique challenges across civilian and military settings including implicit and explicit gender inequality and environments and/or procedures designed for all-male workforces. For instance, women are grossly-underrepresented in positions of leadership and underpaid when compared to their male counterparts despite equal qualifications and experience. Research continues to substantiate the toll of gender discrimination in the workplace on mental and physical health outcomes among women. More specifically, comprehensive literature reviews of laboratory and community studies have documented the harmful health effects of discrimination across a range of mental health outcomes including depression and anxiety (Williams, Neighbors, & Jackson, 2003) and physical health problems such as hypertension, obesity, high blood pressure, and substance use (Williams & Mohammed, 2009).

The unique experiences and challenges of women working in a male-dominated environment are unlikely to be more evident than in the context of

today's military. The role of women in the military and combat settings has expanded significantly during the most recent US military campaigns. As a result, women are being exposed to potentially traumatic events and enduring toxic occupational environments at greater rates. Despite this greater involvement, women continue to be underrepresented across military leadership positions and report significantly more instances of military sexual trauma and discrimination. Furthermore, military women must routinely prove to their male peers that they are capable of surviving in a combat setting.

**Conclusions:** Research to date suggests that military women are at increased risk for post-deployment hospitalization and report poorer health outcomes than their male counterparts. This demonstrates the need to focus on stressors unique to women in male-dominated fields in an attempt to prevent negative mental and physical health outcomes. These high-functioning, high-performing women in the military may serve as the ideal population in which to focus this discourse and program of research.

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## **MENTAL HEALTH AND LIFE HISTORY OF ALCOHOLICS' WIVES**

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**EDUCATIONAL OBJECTIVES:** Stressors of living with alcoholic partners have been associated with women's mental health. Participants: ten wives of men with diagnosis of abuse or alcohol dependence. They don't use alcohol and drugs.

**PURPOSE:** The aim of this study was to identify roles and activities performed by wives, expressed feelings about the marital relationship, family history of origin and symptoms of depression.

**METHODS:** Participants: ten wives of men with diagnosis of abuse or alcohol dependence. Instruments: Roadmap family identification and verification of the absence of chemical dependency on the mother; Genogram Interview, Beck Depression Inventory. Initially we selected men with a diagnosis of alcoholism in the mental health services and their wives were later addressed. After their wives consent a home visit was conducted in order to interview them. Data on participant's characterization and evaluation of the Beck Depression Inventory were analyzed quantitatively. The interviews were analyzed considering the axes indicated in this study goals.

**RESULTS:** It was found that the majority of men were unemployed, 64.2% and 57.1% of working wives, four children had an average length of relationship and an average of ten years. The men were between 30 to 56 years and women 29 to 54 years, 92.8% men and 64.3% of women had incomplete primary education, 28.5% of them were illiterate. The second data analysis showed that the wives besides caring for their children they also cared for her husbands and also took responsibility for financial issues, because many husbands were unemployed. Most of them reported that they needed his help but they didn't have it. 2. Expressed feelings about the marital relationship were guilt, anger and hopelessness. As time goes by the wife realizes that things are getting worse and that the situation does not change. They were experiencing a jumble of feelings, sometimes manifesting pity, sometimes anger. 3. History of family of origin- many wives were daughters of alcoholic parents and married men who also had problems with alcohol. They also took, when single, the role of taking care of their parents and siblings.

**CONCLUSIONS:** Results support the idea that alcoholic's wives need to receive specialized care to improve their mental health. The burden of responsibility, caring for children, husband and family, has left them vulnerable to developing mental disorders. Health services must target actions for improving these women's mental health.

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## A REPRODUCTIVE HEALTH EDUCATION PROGRAM FOR MEDICAL FEMALE STUDENTS IN JAPAN

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**EDUCATIONAL OBJECTIVES:** Health education including the one about reproductive health as biological and psychosocial properties for female university students is a must, especially since medical education bears a lot of stress. But university authorities are at a loss how to put this necessity into practice. At this academic institution health education from the viewpoint of women's health is given since several years at the orientation sessions for freshmen.

**PURPOSE:** To evaluate students' reaction toward the presently given health education via a questionnaire, and to consider future issues.

**METHOD:** Previous to having the questionnaire filled in, internists, gynecologists and psychiatrists had delivered explanatory speeches about necessary live styles during the stay at the university, about health issues like menstrual problems, pregnancy, birth etc., and last not least about psychological problems frequently occurring among female university students like relations with the other sex, jealousy, doubts about one's own ability, identity crises etc. We took the opportunity to advertise the existence of the Students' Health Administration Center as a place to go for advice and counsel how to cope with health related problems. After the lectures the questionnaire sheets were distributed to 116 freshmen who filled them out anonymously.

**RESULTS:** The 76 students among the 116 who returned the questionnaire (a return quote of 65%) said ①unanimously that the lectures were very useful to them, and ② 90% that it will help them in their hitherto student life. ③88% had their knowledge increased, ④ 93% answered that they were at ease knowing where to receive counseling, ⑤ 94% where in agreement that health administration is a necessity. Furthermore, ⑥ 38% thought it difficult to look after their health for themselves, ⑦ 12% felt quite insecure about their upcoming student life, ⑧ 68% wanted to learn the skills for coping with stress.

**DISCUSSION:** Through enhancement of students' knowledge by having good health education and by providing a place for counseling it was possible to give students some assurance about their student life, but about a tenth felt insecure even after the lectures, which showed us how difficult it is in reality to administer

mental and physical health. This was a reminder that education about health self-administration including concrete stress-management cannot be dismissed.

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## **FACTORS AFFECTING DECISIONAL CONFLICT FOR WOMEN WITH CERVICAL CANCER IN TAIWAN**

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### **EDUCATIONAL OBJECTIVES:**

1. To quantify decisional conflicts for women with cervical cancer.
2. To examine the reasons for these decisional conflicts.
3. To propose ways for preventing these decisional conflicts in the clinical setting.

**PURPOSE:** This study establishes the relationship between decisional conflicts and their contributing factors among cervical cancer population, and offers insight on tailoring an appropriate strategy to support them during their decision-making process.

**METHODS:** This project funded by National Science Council of Taiwan. It examined how specific mental health and sociodemographic characteristics relate to decision conflict. In the proposed model, the DCS (Decisional Conflict Scale) was used as primary outcomes reflecting the amount of decision in confidence and communication satisfaction of patients by using COMRADE (Combined Outcome Measure for Risk communication And treatment Decision making Effectiveness) scale. Statistical analyses included scale reliability, construct validity, item-domain convergent/discriminant validity. A stepwise regression model was developed to identify specific psychosocial factors related to the decisional conflict outcomes.

**RESULTS:** Of the patients, 92 were eligible, and 85 agreed to participate; the mean age was 57.5 (standard deviation 12.8) years. Cronbach's alpha coefficients suggest that both the DCS and the COMRADE demonstrated acceptable internal consistency reliability (>0.91 for the DCS and >0.94 for the COMRADE). For the DCS, the Pearson's correlation coefficients suggest that convergent/discriminant validity was satisfied for all of the DCS. By contrast, Pearson's correlations of COMRADE were not supported for the domain of risk communication (0.685-0.866, 0.614). Factors influencing women's decisional conflict included the Communication Satisfaction summary scores and Decision in Confidence

summary scores, respectively. Communication Satisfaction summary scores were associated with values clarity ( $\beta = 0.387$ ,  $p < 0.001$ ), support ( $\beta = 0.688$ ,  $p < 0.001$ ), uncertainty ( $\beta = -0.173$ ,  $p = 0.002$ ), effective decision ( $\beta = 0.164$ ,  $p = 0.012$ ). This model predicted 96% of the variance in patients' communication satisfaction. Decision in Confidence summary scores were associated with support ( $\beta = 0.251$ ,  $p < 0.001$ ), uncertainty ( $\beta = 0.695$ ,  $p < 0.001$ ). This model predicted 94.3% of the variance in patients' decision in confidence. Overall, there were no significant among the sociodemographic characteristics.

**CONCLUSIONS:** Most of the extant research focuses on DCS scores and which scores hinder patients in decision making. Although decisional conflict occurs as a consequence of the difficulty inherent in the type of decision being made, affective and social factors can exacerbate the perceived uncertainty. Based on these preliminary findings, four psychical factors showed strong associations across the decisional conflict subscales, including the values clarity, support, uncertainty, effective decision. The findings of the study can be useful for measuring decisional conflict in women with cervical cancer. Further, decisional conflict can be lowered with decision supporting interventions. Information about options, benefits, risks, and side effects can make people feel more informed. Values can be clarified using strategies such as: describing outcomes in sufficient detail to better judge their value. Women may feel more supported in decision making if they are guided or coached in the steps of deliberation. As a consequence, their uncertainty stemming from these conflict factors may decline, and they may feel they have made a better decision. By better decision, they may feel that they have made a more informed value-based decision, are more likely to stick with their choice, and are more satisfied with the decision.

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## **WOMEN WITH IMPLANTABLE CARDIOVERTER DEFIBRILLATORS: IMPACT OF REMOTE MONITORING ON PSYCHOLOGICAL STATUS AND QUALITY OF LIFE.**

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**EDUCATIONAL OBJECTIVES:** A gender bias in Implantable Cardioverter Defibrillator (ICD) population is explained by underrepresentation of cardiac pathology indicating ICD implantation in women. The underlying cardiac pathology of female population is different from that of male and is characterized by a greater number of secondary indications. Existing data describe psychological status and quality of life of mixed population. We focused on women and examined also the impact of remote monitoring of implantable devices. Participants should be able to recognize psychological difficulties related to ICD implanted women and understand impact of remote follow-up.

**PURPOSE:** Purpose of the present study is to understand the impact of ICD implantation on psychological status and quality of life on woman population having traditional or remote follow-up.

**METHODS:** Out of 127 ICD implanted women in our institution, we selected 40: 20 having remote control (age range:35-84, mean 53,8) and 20 with periodic hospital control (age range:46-80, mean 55,7), matched for clinical features (mean EF 40,55% versus 43,65%). They undergo a psychological evaluation, regarding presence of depression, anxiety and quality of life. They are asked to answer a 15 minutes interview, including Beck Depression Inventory (BDI), State-Trait-Anxiety Test (STAI) and SF-36 Health Survey.

**RESULTS:** At the present time patients are still submitting their answers. As soon as all questionnaires will be collected, we will have a general view of our patients state of physical and mental health and how they manage to live with ICD and sudden death risk. Statistical analysis will be carried out, looking for differences between the two groups.

**CONCLUSIONS:**

- Data about quality of life and psychological needs will give us a starting point to create a network supporting women implanted with ICDs.
- We expect that no impact or a favourable effect is to be seen in the remote follow-up group. Remote follow-up does not exclude relational care due to dedicated team performing controls with telephonic contact.

**LITERATURE REFERENCE**

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**ACCEPTANCE AND COMMITMENT THERAPY REDUCES DEPRESSION SYMPTOMS IN WOMEN WITH FIBROMYALGIA SYNDROME**

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**EDUCATIONAL OBJECTIVES:** At the conclusion of this presentation, the participants should understand basic principles of Acceptance and Commitment Therapy (ACT) and how it changes the experience of chronic illness for participants. They will also learn about its impact on mood in a pilot randomized controlled trial.

**PURPOSE:** The purpose of this study was to determine whether ACT has the potential to improve patients' reports of depressive symptoms and reduce the relationship between depressive symptoms and physical functioning.

**METHODS:** Females with fibromyalgia syndrome (n = 28) who volunteered for the study were randomly assigned to receive either ACT or an education control intervention. They attended individual treatment sessions once weekly for 8 weeks. Assessments included the Patient Health Questionnaire (PHQ-9) and the PROMIS Physical Functioning Scale administered at baseline, post-intervention, and 12 weeks after completion.

**RESULTS:** Depression scores improved for both groups from baseline to post-intervention. For the ACT group, depression scores continued to decrease; however for the control group scores returned to baseline by 12 weeks follow-up. There were no changes in physical functioning scores over time for either group. Correlation analyses showed that among ACT participants, the relationship between physical functioning and depression, which was high at baseline (r = .73) went down to non-significance at post-intervention (r = .17). Among control group participants, the correlation at baseline (r = .65) was maintained at post intervention (r = .60). At 12 weeks however, both groups had similar correlations between physical

functioning and depression ( $r = .54$  for ACT;  $r = .55$  for control).

#### CONCLUSIONS:

- ACT shows promise as an effective intervention for depression and may be helpful in altering the relationships between feelings and daily physical functioning.
- Through ACT, patients were able to see the experiences of fibromyalgia in a new light, and therefore not experience depressed mood related to these, which is important as some of the experiences of having fibromyalgia are either difficult to change or do not yield good functioning when they do.
- ACT is intended to address maladaptive avoidance and control and help patients instead to channel their energy into developing a rich life with their illness. It is possible that this emphasis created changes in depression, such that symptoms rather than depression impacted physical functioning.
- ACT should continue to be studied as a treatment for FM. This should include research to determine whether more than 8 sessions or subsequent booster sessions should be incorporated into future protocols.

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### ASSOCIATION BETWEEN HIGHLY ACTIVE ANTIRETROVIRAL THERAPY NON-ADHERENCE AND TOBACCO USE IN WOMEN LIVING WITH HUMAN IMMUNODEFICIENCY VIRUS IN A PUBLIC HOSPITAL IN LIMA, PERU.

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**EDUCATIONAL OBJECTIVES:** At the conclusion of this presentation, the participants should be able to appreciate new findings about HAART non-adherence.

**PURPOSE:** Explore the association between HAART non-adherence and Tobacco use in a sample of Peruvian women living with HIV.

**METHODS:** We performed a secondary data analysis of non-adherence among 66 HIV positive women in HAART between ages 18 and 60 years who were enrolled in a cross-sectional study performed during January-February

2012 in Cayetano Heredia Hospital. Data were collected using the CES-D and a survey with questions regarding sociodemographic variables, history of depression, current alcohol and tobacco consumption and medication adherence (pill count assessment). Bivariate analysis was performed with Fisher Test and we calculated an OR with 95% confidence interval (bootstrapping).

**RESULTS:** HAART non adherence was found in 19.7% of the women studied. Women who consumed tobacco had seven times as likely to being non adherent than women who did not (95% CI= 1.5 – 35;  $P < 0.05$ ).

**CONCLUSIONS:** Our preliminary results showed a new association between tobacco use and HAART non adherence. Further studies with higher sample size would provide more evidence of this association, considering the adjustment with the other mentioned variables.

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### REPRODUCTIVE RIGHTS OF MENTALLY RETARDED ADOLESCENTS IN CROATIA

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Throughout the history of mankind, people with mental disabilities were often victims of intentional and irrational discrimination and stigmatization, and deprived of their basic civil rights, which includes public and especially private lives. During the 20th century throughout the developed world, we have moved towards empowerment of persons with mental retardation and accepting them as equal citizens who have their own dreams. However, the issue of sexuality is still a problem. Adolescents with mental retardation during puberty undergo hormonal storm as their healthy peers. Therefore, it is necessary to provide them with

sex education and to inform them about their sexuality in order to understand their gender needs and desires. Misunderstanding of these facts, increase the risk of sexual abuse and other form of maltreatment. Their sex education should be adapted to their level of mental disability, life circumstances, and personal physical characteristics. With unbiased sex education, special attention should be given to conducting routine gynecologic care of adolescents and young women with certain mental disabilities. Due to certain psycho-physical and cognitive limitations, and previously experienced traumatic experience for a pelvic exam, a small number of mentally retarded women have regular gynecological care, which contributes to their health. In the event of marriage, they need to be educated about marriage, duties and responsibilities, sexual relations, contraception, parenting. Pursuant to the Act on the Protection of Persons with Mental Disorders, regarding also mentally retarded, any such person in the Republic of Croatia has the right to protect and improve the health, and therefore reproductive health, which includes the possibility of respecting personal choice, and thus the choice of intimate boyfriend/girlfriend, and personal sexual life. Special measures arising from the Act should not be considered as a form of unequal treatment, or privilege, but as a way of acknowledging the mentally retarded as people who have their dignity and individuality.

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## **THE PHILOSOPHY AND METHODS OF EXPERIENTIAL PRACTICE AND TREATMENT OF MENTAL HEALTH ISSUES IN WOMEN AND MOTHERS WITH DEVELOPMENTAL DISABILITIES**

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**EDUCATIONAL OBJECTIVES:** At the conclusion of this presentation participants will demonstrate an understanding and be able to apply the philosophy and methods of experiential practice with women in multiple clinical and cultural contexts. Participants will come away with hands on experience utilizing experiential activities as a tool in the treatment of women's mental health with particular attention on mothers with developmental disabilities.

**PURPOSE:** This presentation addresses how various forms of experiential practice can assist mothers with mental health needs and developmental disabilities in enhancing their capacity to work toward change and either prevent or regain custody of their children.

**METHODS:** This presentation explores both the philosophy and methods of experiential practice and their application to mothers living with developmental disabilities and mental illness. Illustrations of how experiential practice can assist mothers in developing concrete parenting skills to navigate the lifelong challenges presented by the intersectionality of developmental disabilities and mental illness.

**RESULTS:** This promising work has not yet been applied in a clinical context. However, results in other areas with both women in general and developmental disabilities specifically suggest promising results. In one study of one experiential approach (wilderness therapy) three day interventions were equivalent to a year of group psychotherapy (Cole, Erdman, & Rothblum (1994).

**CONCLUSIONS:** The power of experiential work with woman facing numerous mental health issues is overwhelming. This presentation seeks to build upon the growing evidence of the power of this work with a historically marginalized population. The concrete nature of these experiences provides these women with tangible and dramatic opportunities to build skills to fulfill their right to self-determination and mothers.

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## **SUPPORTING MOTHERS WITH INTELLECTUAL DISABILITIES AND MENTAL HEALTH CONCERNS AS PARENTS**

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**EDUCATIONAL OBJECTIVES:** As a result of this presentation, participants will (1) demonstrate an understanding of the intersection of intellectual disabilities (ID), mental health concerns and parenting ability. (2) Participants will be able to make appropriate

accommodations and (3) offer appropriate services to mothers with ID and mental health concerns.

**PURPOSE:** The purpose of this presentation is to inform professionals of the necessary treatment accommodations to effectively treat mothers with ID and mental health concerns so that they can maintain custody of their children.

**METHODS:** In response a training program was developed for professionals and pre/post knowledge and attitude test was administered to participants.

**RESULTS:** The major findings of this evaluative study are related to (1) the existence of barriers to quality services and (2) the successful outcomes of the trainings. Agency level barriers appear to exist for clinicians who work with mothers with ID and mental health concerns, particularly those agencies and clinicians who have smaller percentages of these clients on their caseloads. The trainings that were created to improve attitudes, knowledge and skills when working with parents with ID were found to be effective. A paired samples t-test confirmed that there was a significant increase in overall scores before and after the trainings; many items showed statistically significant improvement.

**CONCLUSIONS:** In the US and in many other countries, professionals recognize the rights of parents with intellectual disabilities (ID) to raise their children but are often not trained to provide specific services geared to support mothers with ID and mental health concerns. Mothers with ID would benefit from coordinated mental health, ID and parent support services but existing services are characterized by gaps and lack of cross-agency communication. Training for professionals resulted in more accurate knowledge of ID, a more positive and optimistic attitude regarding mother's ability to resolve mental health issues and raise their own children and increased skills. Training content and implications for practice and future trainings will be discussed.

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## **CULTURAL FACTORS AFFECTING WOMEN WITH INTELLECTUAL DISABILITIES AND MENTAL HEALTH ISSUES**

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**EDUCATIONAL OBJECTIVES:** As a result of this poster presentation international participants will be able to (1) identify women with intellectual disabilities (ID) as a diverse population; (2) identify mental health concerns with women with ID; (3) identify ethnic and cultural factors that intersect with disabilities and mental health; (4) evaluate the appropriateness of existing services as they related to this special population (5) describe best culturally sensitive practice approaches.

**PURPOSE:** The purpose of this presentation is to describe the unique service delivery and cultural components needed to develop best practice approaches for women with ID and mental health concerns.

**METHODS:** This exploratory study examines current mental health practices in the United States for mothers with ID with an emphasis on cultural modifications necessary to optimize the treatment success. A survey was developed and administered to professionals working with this population in several program across the United States. The major cultural groups served by these agencies included: African Americans, Latinas, Asian and Native American.

**RESULTS:** The results of this exploratory study examined professional practices in response to family characteristics including: the use of extended family/support system, child rearing practices and role definition, help seeking behaviors, religious and spiritual factors and society's ambivalence and potential oppression toward this marginalized population.

**CONCLUSION:** The results of this study indicate that the service response varies with individual works in the same agency serving the same cultural group. In many cases workers were unable to describe cultural modifications made to meet the needs of this population. Professionals saw the initial challenge as adapting mental health practices to individuals with ID versus providing services through a cultural lens. Results indicate that further work is needed to strengthen the connection between practice informed research and research informed practice that addresses the complex intersectionality of ID and cultural context.

Recommendations for cultural sensitive practice from a national and international perspective will be included.

#### LITERATURE REFERENCE:

- Azar, S.T., Robinson, L.R., & Proctor, S.N. (2012). Chronic neglect and services without borders: A guiding model for social service enhancement to address the needs of parents with intellectual disabilities. *Journal of Mental Health Research in Intellectual Disabilities*, vol5: (130-156).
- Lewellyn, G., Traustadottir, R., McConnell, D. & Sigurjonsdottir, H.B. (eds). (2010). *Parents with Intellectual Disabilities; Past, Present and Futures*. West Sussex, UK: Wiley-Blackwell.

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### LATINO WOMEN'S ACCURACY IN REPORTING DEPRESSION STATUS: COMPARISON OF SINGLE-ITEM SELF REPORT TO RELIABLE DIAGNOSTIC TOOL

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**EDUCATIONAL OBJECTIVES:** At the conclusion of this presentation, the participants will have a better understanding of the relationship between self-report and actual depressive symptoms among Latinos in the U.S. This is important because cultural factors may impact reporting behavior, which may determine access to treatment and the type of treatment prescribed.

**PURPOSE:** The primary aim of this study was to examine the relationship between self-reported symptoms of depression and Patient Health Questionnaire (PHQ-9) scores. In the state of Indiana, 32% more Hispanic adults report feelings of depression (within a previous two week timespan) than non-Hispanic Whites, yet Hispanics are less likely to be diagnosed with a depressive disorder<sup>1</sup>. We sought to determine whether self-perception and self-report of depression differed significantly from measurable and diagnosable symptoms in this population.

**METHODS:** We asked 57 adult (mean age = 35.62, SD = 11.74) Latino females to complete a brief survey at a local health fair in Indianapolis, Indiana. The survey included all questions from the PHQ-9 and a one-item question: "Are you depressed?" The Likert-type scale for this final question matched the scoring categories of the PHQ-9. The PHQ-9 is a highly valid and reliable instrument. It categorizes individuals as not depressed,

minimal symptoms, minor depression, moderately severe and severe major depression.

**RESULTS:** We scored the PHQ-9 and placed each participant in a category based on the score obtained according to the PHQ-9 instructions. On the PHQ-9, most participants scored as not depressed (61.4%) followed by minimal symptoms (29.8%), and minor depression (8.8%). On the single item assessing depression most participants reported not being depressed (71.7%), followed by 'a little' (26.7%) and 'very much' (1.7%). Latino women in our sample were moderately accurate in assessing their level of depression. The correlation between the PHQ-9 and the one-item self-reported depression was  $r = .450$  ( $p < .001$ ). Of the women who reported not being depressed, 75.6% were correct according to the PHQ-9. Of the women who reported minimal symptoms, 46.7% were correct according to the PHQ-9.

**CONCLUSIONS:** Our sample reported low levels of depressive symptoms both through the PHQ-9 and through the one-item self-report measure. Findings suggest that Latino women who do not have symptoms of depression are relatively reliable in their self-assessment, however, as depressive symptoms increase reliability of self-report decreases. Based on these and previous findings, we recommend brief, reliable measures such as the PHQ-9 be used in clinical settings to determine whether further, more in-depth evaluation of depression is necessary. Our findings have significant implications for clinical practice as they suggest that a quick, single-item self-report measure may not provide reliable information for Latino women with depressive symptoms.

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### ADAPTATION OF VIRTUAL REALITY TO ACCOMMODATE WOMEN FROM DIFFERENT ETHNIC GROUPS

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**EDUCATIONAL OBJECTIVES:** This presentation should raise congress participants' awareness of the necessity of modifying virtual reality therapy to accommodate women from various ethnic groups, especially traditional cultures. In addition, we hope to increase audience

awareness of treating women from a different ethnic group.

**PURPOSE:** Examine importance of matching therapist and client ethnicity, effects of mismatching on behavior and effectiveness of Virtual Reality Therapy and the role of social desirability scores in spurious post therapy ratings.

**MATERIALS AND METHODS** Arab and Jewish female students (64 from each group) experienced a flight VRE, and then filled out questionnaires. Half of the Arab and Jewish participants interacted with a female experimenter that was of the same ethnicity, and the second half of each group interacted with an experimenter of differing ethnicity. Participants sat on an airplane seat with woofers attached to it to make it vibrate according to the "movement" of the plane. They wore a head mounted display which enabled them to view the interior of the plane in three dimensions. If participants moved their heads to the left, they were able to view the changing views through a virtual window. The plane took off, flew in good and in bad weather and finally landed. The VRE was 10 minutes. Questionnaires included demographic, presence, trait and state curiosity, and social desirability.

**RESULTS** Preliminary findings supported our hypotheses which were: Ethnic matching intensifies the VRE experience (and thus its effectiveness). Women who were matched on ethnicity were less inhibited in the VRE, enabling them to turn their heads, thus seeing through the "virtual window", intensifying their experience. Arab women were influenced more by ethnic matching than Jewish women. Jewish women tended to behave with less inhibition, turning their heads more than Arab women. Arab women tended to give higher ratings on presence due to increased social desirability scores. In addition, Arab women had lower curiosity scores.

**CONCLUSIONS** Our results suggest that matching therapist and client on ethnicity is very important. In addition, therapists should become aware of intervening factors, such as social desirability, that might interfere with ethnic women's therapeutic experiences. Ignoring the effects of social desirability may result in slanted results in studies and in inadequate treatment.

#### LITERATURE REFERENCE

- Almog, I., Wallach, H.S., and Safir, M.P. (2009). Ethnicity and sense of presence in a Virtual Environment: Arab women – a case in point. Virtual Rehabilitation International conference, 2009, June 29, 2009, 78-82.

- Farsimadan, F., Draghi-Lorenz, R., & Ellis J. (2007). Process and outcome of therapy in ethnically similar and dissimilar therapeutic dyads. *Psychotherapy Research*, 17(5), 567-57.

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### POSTTRAUMATIC STRESS DISORDER, PARTNER VIOLENCE AND ALCOHOL MISUSE

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**EDUCATIONAL OBJECTIVES:** At the conclusion of this presentation, participants should be able to describe racial/ethnic disparities among women in the U.S. related to posttraumatic stress disorder (PTSD), intimate partner violence (IPV), and alcohol use.

**PURPOSE:** The aims of this study were to examine the effect of PTSD on alcohol use outcomes among non-Hispanic white, non-Hispanic black, and Hispanic U.S. women with and without traumatic IPV, and whether nativity and acculturation among Hispanic women and discrimination among black and Hispanic women increase the risk of poor alcohol outcomes.

**METHODS:** This longitudinal study utilized data from the National Epidemiologic Surveys of Alcohol and Related Conditions, which conducted face-to-face household interviews in 2001 and follow-up interviews in 2003 among the civilian non-institutionalized U.S. population aged 18 years and older. Age of onsets for exposures and outcomes were used to conduct multiple extended Cox regression.

**RESULTS:** PTSD predicted binge drinking in the full sample, driven mainly by periods of acute PTSD (adjusted hazard ratio [aHR] 13.48; 95% confidence interval [CI] 4.71, 38.59); IPV also independently predicted binge drinking. Similar results were found among white women. Only IPV among black women and higher acculturation among Hispanic women were significantly associated with binge drinking. PTSD predicted frequent heavy drinking only among Hispanic women with lower acculturation (aHR 4.59; CI 1.21, 17.41); a history of discrimination was associated with alcohol abuse among Hispanic women as a whole. IPV but not PTSD predicted alcohol abuse in the full sample

and among white and black women; discrimination was also associated with alcohol abuse among black women. Neither PTSD nor IPV predicted alcohol abuse among Hispanic women, but foreign-born women were less likely and those with higher acculturation more likely to have an alcohol abuse diagnosis. Only IPV predicted alcohol dependence in the full sample and among white women. Among black women, PTSD marginally predicted alcohol dependence only among those without a history of discrimination (aHR 4.43; CI 0.99, 19.78). Findings were similar to those of alcohol abuse for Hispanic women.

**CONCLUSIONS:** The novel findings revealed in this study suggest that PTSD may influence the development of hazardous drinking, while IPV appears to more consistently predict poor alcohol outcomes overall. Findings varied by race/ethnicity, with discrimination and acculturation playing a significant role. These findings suggest that interventions to prevent and reduce traumatic experiences and their effects may lessen the burden of poor alcohol outcomes and should be culturally-specific.

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## **STUDY OF PERSONAL AGENCY ON WOMEN IN CONJUGAL GENDER VIOLENCE SITUATION.**

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In the health psychology field, some theories and scientific findings provide relevant information about the internal barriers that some women show in order to confront and stop the conjugal violence. However, they locate the phenomenon of violence in an individual level and guide appreciations in women as a vulnerable group (and not socially violated). This has impacted on how their problems are interpreted and addressed. A main axis in the construction of the object of study starts from the appreciation of the capabilities of agency of women, namely, their initiative to transform situations that are oppressive for them, as is conjugal violence. To do this, the Framework to Enabling the Empowerment (Pick y Sirkin, 2010) was used. This Framework incorporates psychosocial elements and focuses on the real freedoms that people enjoy. The purpose of this research was to identify the different ways in which women, despite the limitations of their context, perform actions to change

the situation in which they are. A qualitative design and a kind of descriptive study under the interpretive paradigm were used, conducting in-depth interviews in two groups of women: a) those that had experienced psychological, physical, sexual or economic violence in their relationship; and b) those that were facing it at the time of the study. The main criterion for their inclusion, in both cases, was reproductive age. Sampling was intentional, and the theoretical saturation was the main indicator to suspend the sampling. Atlas TI software was used to perform an information analysis. The findings show that women do not remain passive in the face of violence; depending on the duration of the conjugal relationship, strategies arise. These strategies are tested by women in order to transform the violent situation they face. Such strategies are materialized into meaningful actions and generate change processes, which in turn are supported by the context, and strengthen the person's motivational processes to act. As well, the type of actions that impulse and/or hinder to stop violence depend on the duration of the conjugal relationship, on the processes of the person (attitudes, degree of autonomous functioning, emotions, critical and reflective capacity; problem solving, decision-making) and the margins that provide the context to act (socio-cultural norms of gender, type of response of the services of formal and informal support) which, as a whole, are tools for dealing with conjugal violence and may or not lead to a high sense of agency.

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## **PSYCHOLOGICAL ASSESSMENTS IN FEMALE VICTIMS OF DOMESTIC VIOLENCE IN THE FORENSIC FIELD. AN INTERVENTION MODEL**

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**EDUCATIONAL OBJECTIVES:** Presenting a psychological intervention model in the processes of judicial investigation in the criminal field of female victims of domestic violence.

**PURPOSE:** Describe what the interventions performed in adult females that have undergone domestic violence entail.

**METHODS:** Psychological-clinic-legal interviews used for the creation of experts' reports on female victims.

**RESULTS:** The technical team of domestic violence carries out psychological assessments on women that have experienced domestic violence incidents and formulate a report, from that moment on begins a process of investigation made by the Domestic Violence.

Specialized Public Prosecutor's Office that requests the intervention of professionals to obtain information about the events through a professional handling of the situation that can offer stability, protection of privacy and offers an immediate solution. Psychologists carry out two kinds of assessments in the judicial field: reports and psychological inspections on victims.

The information is gathered through psychological interviews with administrative project techniques to determine: personality traits, credibility of the victims recount and risk factors.

**CONCLUSIONS** It is considered that this type of intervention in victims of domestic violence can provide specific information about the profile of people that go through similar situations of physical, emotional or economical abuse, can detect traits of vulnerability to adjust the judicial measures to the protection needs of women and create derivations for them to receive specialized psychological help.

The instance of professional intervention allows women to be heard with respect and assistance while at the same time it allows judicial answers according to their necessities. The psychological assessment at this point widens the way we perceive the problematic of domestic violence directing the main focus to the person who asks for help at the judicial field.

**LITERATURE REFERENCE:** Ley 9283 de Violencia Familiar de la Provincia de Córdoba; Hilda Marchiori Victimología, la víctima desde una perspectiva criminológica asistencia victimologica Editorial Brujas 2004 Córdoba Argentina.

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## **COPING STRATEGIES AND PTSD AMONG FEMALE CIVILIAN VICTIMS OF WAR**

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**EDUCATIONAL OBJECTIVES:** At the conclusion of this presentation the participants should be able to

recognize the most commonly used coping strategies among women who experienced civilian war-related trauma.

**PURPOSE:** To exam which coping strategies have an impact in overcoming posttraumatic stress disorder symptoms among women who have experienced at least one war-related traumatic event and compare them with women who did not experience such trauma.

**METHODS:** This research is a part of larger study on psychobiology of PTSD. A total of 400 female participants were included in the study out of which 298 has experienced at least one war related traumatic event. All participants have completed a socio-demographic questionnaire and Way of Coping questionnaire. Structured clinical interview CAPS was performed with traumatized women in order to assess intensity of PTSD. Participants were thus divided into four groups: women with present PTSD, women with life time PTSD, women who were traumatized but have never developed PTSD, and control group of non-traumatized women.

**RESULTS:** Participants with lifetime PTSD significantly more often use positive reinterpretation compared with PTSD participants, and use more distancing and self control compared with control group. Women with present and lifetime PTSD significantly more often use escape/avoidance as coping strategy compared with women without PTSD and control group. Women with present PTSD significantly more often use negative coping compared with other groups of women. Regression analysis has showed that coping strategies explain up to 14% of intensity of PTSD symptoms, however the only significant individual contribution is that of avoidant coping.

**CONCLUSIONS:** Positive coping strategies can be related with overcoming posttraumatic stress symptoms. Avoidance coping strategy is an important factor in maintaining PTSD symptoms which is in line with disorder itself. The obtained results have a clinical value in working with traumatized women.

### **LITERATURE REFERENCES:**

Arcel,T.,L., Tocilj Šimunković, G. (1998.) War Violence, Trauma and the Coping Process. Zagreb: IRCT Zagreb. Folkman S., and Lazarus, R.S. Ways of coping questionnaire Research edition. Palo Alto, CA: Consulting Psychologists Press.

## **RELATIONSHIP BETWEEN GENDER AND INNOVATION CULTURE IN BRAZILIANS TECHNOLOGY-BASED COMPANIES**

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This research based on psychosociological view analyses relationships between gender and innovation culture in technology-based companies in São Paulo state, Brazil.

It aims to identify femininity and masculinity characteristics in innovation culture and understand how these dimensions, as defined by Hofstede (1980), make innovation easier or harder. A mixed investigation strategy has been chosen (quanti-qualitative design). The considered hypotheses are: I) Innovation process focuses more efforts on visible apparatuses, such as technology, than on intangible aspects, as innovation culture and social competences; and II) Innovation culture presents more masculinity characteristics (hardness and toughness) than femininity (softness and tenderness). The research was divided in two steps: the first one was consisted by a quantitative survey about characteristics of innovation culture of technology-based companies that agreed on participating in this research. The sample was formed by 15 companies. The qualitative analysis was made in depth, based on psychosociological theory. Investigation tools: semi-structured interviews with managers and employees from the development team, field observations, questionnaires and specific organizational culture and innovation culture inventories.

Results support the first hypothesis and partially the second one. Data suggest that innovation is positively related to the existence of specific organizational culture. There is no need of all the aspects described in literature in order to make innovation processes happen; but the existence of social competences, such as tolerance for ambiguity and error, supportive leaderships, open communication and cohesion ease the construction of innovation and worker health. The innovation culture aspects considered insufficiently developed in the observed companies in the second phase are mostly femininity characteristics. Innovation process could have been favored by a greater gender balance in the organizational environment and valorization of social competences and team members care practices (femininity characteristics). Characteristics

such as support to the team, tolerance to error, encouragement of changing and of use of creativity, and need for solving conflicts inside teams could be increased by the presence of women in the leadership. Organizational environments still cherish masculinity aspects more than femininity ones, even though specialized literature point out some of the latter as innovation accelerators. Therefore, innovation processes in technology-based companies could benefit from building an organizational culture based on healthier relationship between genders.

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## **IMPACT OF GLOBAL WOMEN LEADERS ON MENTAL HEALTH OUTCOMES**

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Women's mental health has always been an essential and challenging topic; however it remains an underserved domain in many areas of the world. Given the current international geo-political climate, it is imperative for women leaders to become even more globally involved in promoting the importance of prevention, adequate treatment and rehabilitation for all mental health issues that affect women primarily.

There are several areas where a widespread, global and multidisciplinary effort could promote lasting changes and significantly improve outcomes. Specifically in the areas of screening assessments, suicide awareness, abuse and maternal mental health most countries could agree to collaborate and join resources to prevent suicide, prevent abuse, improve early detection and treatment access, as well as improve psycho-education and support for young mothers who are at high risk of developing mental illness.

Global women leaders would envision and seek to forge alliances among national women's mental health association, draw new favorable legislation, use common medical resources more efficiently and use innovative technological advances to offer mental health resources to those who need it most, at the appropriate time.

An integration of available epidemiologic databases would not only facilitate improved outcomes, but would also allow for a comprehensive, multidisciplinary approach and therefore reduce morbidity from a variety of comorbidities.

Ultimately, a heightened effort to educate, mentor and promote global women leaders would increase awareness for women's mental health issues on the international scene, reduce stigma, reduce overall costs and prevent further suffering for millions of women and their families.

This oral presentation would focus on several specific strategies (legislative, financial, technological,

political etc.) that a global leader could consider in fulfilling this vision and accomplishing their noble mission.

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