

DRSP's reliability and responsiveness was also assessed. **RESULTS:** Studies showed women with PMDD experience severe physical and emotional symptoms at the luteal stage of the menstrual cycle (five days before menses), primarily as a result of hormonal fluctuations associated with ovulation. Physical symptoms include: aches/pains; breast tenderness/swelling; bloating; weight gain; increased appetite/cravings; sleep problems; fatigue and difficulties concentrating. Emotional symptoms include: mood swings; depressed mood; anxiety/tension; anger; irritability; decreased interest; and feelings of being overwhelmed. The experience of these symptoms contributes to functional impairment in women with PMDD, particularly in terms of: social functioning; work/school functioning; productivity; role functioning; relationships; and activities of daily living. A review of DRSP item content revealed all symptoms and impacts of PMDD are captured by the DRSP, supporting the face and content validity of the instrument. Studies also showed the DRSP to have acceptable internal consistency (Chronbach's alpha ≥ 0.7), test-retest reliability (ICC correlations 0.67–0.99) and responsiveness to improvements following treatment (effect sizes 0.64–1.71). **CONCLUSIONS:** PMDD is associated with physical and emotional symptoms which can have a significant impact on patients' lives. The DRSP is a valid, reliable and responsive patient-reported tool for assessing PMDD-related symptoms and their impact. The DRSP could be useful for clinicians during general practice, or for clinical trials in identifying PMDD populations or the impact during treatment.

PIH32

WOMEN'S PREFERENCES FOR OVARIAN STIMULATING HORMONES IN THE TREATMENT OF INFERTILITY

Espallardo O¹, Lizan L², Polanco C¹, Paz S², Palumbo A³, de La Fuente P⁴, Rodríguez M⁵, Sánchez F⁶, Martínez-Salazar J⁷, Lizzán C⁸, Marqueta J⁹

¹Merck Serono, Madrid, Spain, ²Jaume I University, Castellon, Spain, ³Centro de Asistencia a la Reproducción Humana de Canarias, Santa Cruz de Tenerife, Canarias, Spain, ⁴CEFIVA, Oviedo, Spain, ⁵IVI Castellón, Castellón, Spain, ⁶GINEMED, Sevilla, Spain, ⁷IVI Madrid, Madrid, Spain, ⁸IVI Alicante, Madrid, Spain, ⁹IBI, Palma de Mallorca, Spain

OBJECTIVES: Little is known about preferences for technological developments of women undergoing fertility treatments. This study aims to investigate the preferences for ovarian stimulating hormone (OSH) therapies of infertile women undergoing assisted reproduction, to determine the utility values ascribed to different attributes of OSH treatments, and to estimate women's willingness to pay (WTP) for OSH. **METHODS:** A representative sample of ambulatory patients ready to receive, or receiving, OSH therapies for infertility were recruited from seven specialized private centers in six Autonomous Communities in Spain. Both WTP and conjoint analysis (CA) were used to elicit preferences. Attributes and levels of OSH treatments were identified by literature review and two focus groups with experts and patients. WTP valuations were derived by double-bounded (closed-ended) and contingent ranking methods. **RESULTS:** 167 patients [mean age: 36 years (SD 4.2)] were interviewed. Most participants (53.9%) had a high education level (university degree), were married (77.2%), referred an estimated net income beyond €1500 per month (50.9%) and had paid between €501 and €1500 for their most recent hormonal treatment (57.6%). In 52% of cases, there was more than one cause of infertility (sperm related factors, 31%). Maximum WTP for an OSH treatment was €800 (median) per cycle, which exceeds previously reported cost per OSH cycle with combo therapies (€691.65), while 75% would pay €1500 or less. 56.8% were willing to pay additional €51–300 for a 1–2% effectiveness gain. Utility values (CA) showed that effectiveness (37.0) was the most valued attribute (costs 24.9; safety 16.5; information sharing with physicians 13.5). Cost of last OSH cycle and WTP shown positive correlation ($r = 0.203$, $p < 0.05$). **CONCLUSIONS:** WTP for OSH therapies exceeds current cost. Additional WTP exists for 1–2% effectiveness improvement. Effectiveness and costs were the most important determinants of preferences, followed by safety and information sharing with physicians.

PIH33

DRUG USE BEFORE AND DURING PREGNANCY IN REPUBLIC OF SERBIA

Petric M¹, Ilic K², Tasic L³

¹University of Belgrade, Faculty of Pharmacy, Belgrade, Serbia, ²Serbia and Montenegro, ³Faculty of Pharmacy, Belgrade, Serbia and Montenegro, ⁴University of Belgrade, Faculty of Pharmacy, Belgrade, Serbia and Montenegro

OBJECTIVES: To investigate drug use six months before (SMBP) and during pregnancy (DP) among Serbian pregnant women (SPW). **METHODS:** Pharmacy based cross-sectional survey was conducted among SPW between March through April 2009. Specially designed questionnaire was used for collecting data on socio-demographics, health status, and drug (Rx and over the counter) use. Vitamin and iron supplements were not included in the analysis. **RESULTS:** 260 SPW completed the questionnaire. 69.6% of SPW were 25–34 years old, 75.8% lived in the city area, the majority were high school or college graduates, and 55.4% were pregnant with their first child. 9.4% of SPW had a chronic disease. There was not a statistically significant decrease in the percentage of SPW taking drugs DP compared to SMBP (53.9% and 53.0%, respectively), as well as in an average number of drugs taken (1.54 ± 0.73 and 1.45 ± 0.66 drugs/women, respectively (range 1 to 4 before and during pregnancy)). The most frequently used drug classes by SPW were: analgetics/antipyretics, hormones, anti-infectives, tocolitics and anti-hypertensives (25.5%, 25.5%, 19.7%, 13.7%, and 7.3%, respectively). The most frequently used analgetics/antipyretic was paracetamol (62.83%), while the most frequently used anti-infectives were penicillins and cephalosporins (77.0%). The only used tocolitics were fenoterol and hexoprenaline and the only used hormones were dydrogesterone and progesterone. Drugs that were used

belonged to these FDA fetal risk categories B, C, and D (diazepam, alprazolam and diclofenac in the 3rd trimester) (52.6%, 26.3%, and 15.8% respectively). SPW did not use drugs in the FDA category X. Before pregnancy folic acid usage was low (5.5% PW) while during the 1st, 2nd and 3rd trimester of pregnancy usage was 69.96%, 15.05%, 5.93%, respectively. **CONCLUSIONS:** Differences in drug use DP and SMBP among SPW was negligible. The most frequently used drug classes during pregnancy were: analgetics/antipyretics, hormones, anti-infectives, tocolitics and antihypertensives.

PIH35

THE APPLICATIONS OF GEOGRAPHIC INFORMATION SYSTEM TO QUALITY OF LIFE STUDIES: USING TAIWAN AS AN EXAMPLE

Yang JJ¹, Yao G²

¹National Taiwan University, Taipei, Taiwan, ²National Taiwan University, Taipei, Taiwan

OBJECTIVES: The comparison among diverse regions and populations is one of the important issues on the study of quality of life (QoL). This study demonstrated that how Geographic Information System (GIS) can help us on the study of QoL. By mapping the QoL scores and objective QoL-related data on regional maps, GIS help us to interpret the QoL data more intensively. **METHODS:** The QoL data was collected from the 2001 National Health Interview Survey (NHIS) in Taiwan. 13,010 participants were randomly selected to complete the WHOQOL-BREF (Taiwan version). Mean scores of the four QoL domains were used for each of the 25 administrative divisions. This study also collected 41 objective QoL-related variables for each of the divisions from the 2001 National Statistics. The variables include the facets of demography, public security, medical resource, welfare, level of education, occupation structure, financial state, and environment. All variables were illustrated on the map of Taiwan by GIS with gradient colors. The correlation coefficients between QoL domain scores and these objective variables were also calculated. **RESULTS:** Based on the correlation coefficients, no significant correlation was found between psychological domain score and the objective variables. Four, three, and eleven variables were statistically correlated with physical, social, and environmental domain scores respectively. In comparisons of the GIS maps between QoL and the objective variables, interpretation on the QoL distribution became easier. In general, QoL decreased from northwest to southeast. The significant correlation coefficients indicated that financial state, occupation structure and level of education were comparatively related to QoL which were confirmed by the GIS maps. **CONCLUSIONS:** In this study, we demonstrate the GIS technology can be an assistant to study the regional distribution of QoL. Moreover, objective QoL-related variables can be combined to interpret the QoL distribution intensively. This approach may be beneficial for policy making.

PIH36

DETERMINANTS OF HEALTH-RELATED QUALITY OF LIFE (HRQOL) IN POSTMENOPAUSAL WOMEN ENROLLED IN POSSIBLE EU®

Freemantle N¹, Martinez L², Cooper C³, Diez-Perez A⁴, Horne R⁵, Ortolani S⁶, Pfeilschifter J⁷, Shepherd S⁸, Marciniak A⁸, Gitlin M⁹, Guillemin F¹⁰

¹University of Birmingham, Birmingham, UK, ²French Society of General Practitioners, Bois d'Arcy, France, ³MRC Epidemiology Resource Center, Southampton, UK, ⁴Dept de Medicina, Barcelona, Spain, ⁵The School of Pharmacy, University of London, London, UK, ⁶Instituto Auxologico Italiano, Milan, Italy, ⁷Alfried Krupp Krankenhaus, Essen, Germany, ⁸Amgen Ltd, Uxbridge, UK, ⁹Amgen Europe GmbH, Zug, Switzerland, ¹⁰Nancy-University EA 4003, Nancy, France

OBJECTIVES: POSSIBLE EU® is an ongoing, prospective observational study exploring the experience of postmenopausal women receiving bone loss medications in Europe. We previously reported that these women had substantially impaired HRQoL. This baseline analysis identifies potential important predictors of HRQoL in these women. **METHODS:** A total of 3402 women were enrolled in 3 treatment cohorts: established (treated ≥ 1 year), inception (initiating) or switching treatment. Clinical data and HRQoL (including EQ-5D) were collected at baseline (N = 3011). A multivariable analysis model was fitted to identify determinants of EQ-5D score. The linear relationship of each variable was assessed using a forward selection process (entry level 0.05). The non-linear relationship of the selected variables with the outcome, were assessed using natural logarithmic and cubic spline transformations. Analyses were performed using SAS software, version 9.1 and GNU R. **RESULTS:** For the full analysis set, median age (Q1, Q3) was 69 (61, 76) years; women had a median of 3 ongoing comorbid conditions at baseline. A high proportion of patients had hypertension (44%), ongoing back pain (41%), osteoarthritis (34%) hyperlipidaemia (32%), ongoing upper GI issues (18%), prior vertebral fractures (13%), and depression (13%). For the 3011 patients, 12 variables were significantly associated with EQ-5D score, explaining 39.4% of the residual variance (Table). **CONCLUSIONS:** In European women who are receiving/initiating bone loss medication, any prior vertebral fracture, ongoing depression, fear of falling, number of ongoing comorbid conditions, upper GI issues and back pain are prevalent, and strongly predictive, of lower HRQoL. **Table:** Determinants of EQ-5D utility [0 to 1 continuous score]: The effects are Intercept: 0.1801, -0.1083, 0.486, 0.2195; Inception vs. Established*: -0.04862, -0.06822, 0.02903, <.0001; Switch vs. Established*: -0.01271, -0.03901, 0.01360, 0.3435; Lack of fear of falling: 0.00545, 0.005092, 0.005808, <.0001; Ongoing depression: -0.1076, -0.1345, -0.08076, <.0001; Any prior vertebral fractures: -0.09239, -0.1225, -0.06223, <.0001; Number of ongoing comorbid conditions: -0.01122, -0.01773, -0.00471, 0.0007; Ongoing upper GI (GERD, reflux, dyspepsia): -0.04067, -0.06549, -0.01586, 0.013; Ongoing back pain: -0.03455, -0.05594, -0.01316, 0.0016; BMI: -0.00298, -0.0049, -0.00105, 0.0024; Ongoing seizure