

Thursday, October 12, 2017

11:10 am – 12:20 pm

Friday, October 13, 2017

7:00 am – 8:00 am

Poster Presentation

Paper ID: 118

Postpartum Musculoskeletal Pain and Sexual Function

Sandi Tenfelde, PhD, RN, APN

**Objectives:**

1. At the conclusion of this presentation, the learner will be able to state two history questions to identify musculoskeletal concerns for postpartum women.
2. At the conclusion of this presentation, the learner will be able to state two history questions to identify sexual health concerns for postpartum women.
3. At the conclusion of this presentation, the learner will be able to state three physical exam techniques to identify musculoskeletal concerns for postpartum women.

**Purpose:** Many women experience postpartum musculoskeletal pelvic pain, significantly impacting their quality of life. Pelvic pain can be localized internally as pelvic floor myofascial pain or externally as pelvic girdle pain (PGP). The relationship between postpartum musculoskeletal pelvic pain and sexual function is understudied. Our objective was to characterize sexual functioning in postpartum women with and without musculoskeletal pelvic pain.

**Methodology:** Framework Selected components from the Wilson and Cleary Health-Related Quality of Life (HRQOL) Model were used to guide the selection of measures. Methods Women who delivered a baby within the last year participated in this observational cross-sectional study. The Female Sexual Function Index measured the primary outcome of sexual functioning. Women were evaluated for pelvic floor muscle tenderness and strength using the Modified Oxford Scale. We evaluated PGP with palpation of long dorsal ligaments, modified Trendelenburg's test, Patrick's Faber test, active straight leg raise, posterior pelvic pain provocation (P4) test, and palpation of symphysis pubis. Women used a numeric rating scale to quantify their pain

and indicated location on a pain diagram. Participants who reported pelvic pain and had at least one positive physical exam finding were classified in the pain group. The Pelvic Girdle Questionnaire measured physical activity limitations. General health questions included demographic and pregnancy related data, the Edinburgh Postpartum Depression Questionnaire, and the SF-12 for general quality of life.

**Results:** 45 women completed the study, with 20 women in the pain group. Self-rated pain scores correlated with physical exam findings. The majority of women with pain had both PGP and pelvic floor myofascial pain (n=15). Women with pain were significantly more likely to report less sexual satisfaction ( $t(42)=2.75, p=0.009$ ) and having a less normal sex lives ( $t(41)=4.07, p<0.001$ ) than women without pain. Women with pain were more impaired in their overall physical activity ( $t(36)=3.95, p<0.001$ ).

**Conclusion:** Women with postpartum musculoskeletal pain were significantly more likely to report problems with sexual function. Women with pain and reduced sexual function reported more depressive symptoms, impaired physical activity, and reduced overall quality of life. Addressing sexual functioning in postpartum pelvic pain appears to be a critical factor in clinical assessment.

Thursday, October 12, 2017

11:10 am – 12:20 pm

Friday, October 13, 2017

7:00 am – 8:00 am

Poster Presentation

Paper ID: 119

Provider Adherence to Adolescent Sexual Behavior Risk Reduction  
Assessment

Guidelines

Nicole Sovey, DNP, MSN, WHNP-BC

**Objectives:**

1. Discuss current adolescent disparities with unintended pregnancy and sexually transmitted infections.
2. Discuss recommended guidelines for assessing adolescents' sexual behavior risks and HPV vaccination status.
3. Discuss providers adherence to guidelines as well as providers role in improving adolescent gynecologic and reproductive outcomes.

**Purpose:** Sexual behavior assessment and human papillomavirus (HPV) vaccination reduce sexually transmitted infections (STIs) and pregnancy risk in adolescents'. The purpose of this study was to identify performance gaps in provider compliance with established ACOG and CDC guidelines regarding HPV vaccination uptake and sexual behavior risk evaluation guidelines. Study results provide quality improvement measures for early adolescent gynecological visits for providers and healthcare systems.

**Summary:** A retrospective chart review was conducted on adolescent patients between 13-19 years of age, who initiated care at an outpatient women's health clinic located in a rural Midwestern community. A self-developed data collection form incorporating elements of the CDC metrics of evidence-based guidelines for sexual history taking and HPV vaccination screening was used for the chart review. Measurement variables included provider evaluation of the following: HPV vaccination status, HPV vaccine recommendation and initiation if unvaccinated, and evaluation of sexual

activity when appropriate including the 5 P components (partners, practices, prevention, protection, past history).

**Outcomes:** The mean age of adolescent patients to enter the clinic and establish care was 16. In the study 69% were evaluated for the HPV vaccination, fewer than 40% had received the vaccine, less than 30% were then recommended for the vaccine, and 15% initiated the vaccination series. Over half were found to be sexually active, however, there were inconsistencies in the assessment of specific quality measures. Frequency for provider evaluation of birth control use was 63.8%, condom use 40.6%, number of partners 21.7%, type of sexual practices 2.9%, and history of STIs 20.3%.

**Implications:** Unintended teenage pregnancy along with sexually transmitted infections (STIs) is a major public health concern. Advanced practice nurses working with adolescent populations can optimize assessment and evaluation approaches for sexual behavior risk reduction. Identifying risky adolescent sexual behavior and reviewing HPV vaccine uptake at initial gynecologic exams can considerably improve health outcomes. Assessing adherence to current practice guidelines on these two representative variables during adolescent reproductive health visits is the first step to achieving improved outcomes.

Thursday, October 12, 2017

11:10 am – 12:20 pm

Friday, October 13, 2017

7:00 am – 8:00 am

Poster Presentation

Paper ID: 121

Towards the Prediction of Preterm Birth using Full Mueller Matrix Imaging of  
Cervical Collagen

Nola Alexandria Holness, CNM, ARNP-Adult, PhD

Joseph Chue-Sang

Mariacarla Gonzalez

Yuqiang Bai

Susan Stoff

Jefferson Gomes

Amir Gandjbakhche

Viktor V. Chernomordik

Jessica Ramella-Roman, PhD

**Objectives:**

1. To utilize polarized light to image the collagen content and structure in the cervixes of pregnant women 24 to 36 weeks with and without threatened preterm labor.
2. To analyze changes in cervical collagen in pregnant women with threatened preterm labor.
3. To identify pregnant women at risk for preterm birth by developing a positive predictive cervical collagen bio-marker.

**Purpose:** Although preterm birth is the number one cause of infant mortality and neurological disorders in the world, there is not yet a reliable or accurate method for diagnosing women at risk of preterm labor. Cervical collagen is the main component for providing strength and maintaining the weight and structure of the cervix in order for the fetus to gestate. As pregnancy progresses, cervical collagen becomes more disorganized and allows the weakening and opening of the cervix for birth. The changes in cervical collagen may occur prematurely in situations leading to preterm birth. These changes in collagen organization can be analyzed using Mueller Matrix Polarimetric imaging of the characteristic organization of collagen.

Understanding the changes in collagen structure and content in pregnant women and those in preterm labor may provide a method of predicting women at risk for preterm birth. The purpose of this study is to determine a positive predictor of preterm labor through the use of data representing cervical collagen changes.

**Methodology:** During the standard pelvic speculum examination by a Certified Nurse Midwife of pregnant clients 24 to 36 weeks gestation in an OB Triage setting, the Mueller Matrix Colposcope with specialized camera and lenses will be positioned such that images of the cervix may be taken by the Biomedical Engineer. The images will serve as the data and the cervical collagen composition will be analyzed through mathematical computations.

**Results:** Testing of the Mueller Matrix Colposcope system demonstrated strong retardance, depolarization and organization of collagen in porcine cervixes, ex-vivo. The system was then used for cervical imaging in vivo with the human cervix exhibiting strong retardance and depolarization. Pregnant women 24 to 36 weeks in threatened preterm labor will be compared with women of similar gestational ages who are not in preterm labor to identify differences in their cervical collagen content and structure. Thus, a possible positive predictive value for preterm births may be determined from the findings of this study.

Thursday, October 12, 2017

11:10 am – 12:20 pm

Friday, October 13, 2017

7:00 am – 8:00 am

Poster Presentation

Paper ID: 123

Project THRIVE: A multidisciplinary one-stop shop model of healthcare for survivors of human trafficking

JoNell E. Potter, PhD

Stephen Symes, MD

D. Jeffrey Newport, MD, MS, MDiv

Anastasia Godur, MPH, MPA

Grechen Mills, BS

Ira Karmin, MD

Panagiota Caralis, MD, JD

**Objectives:**

1. Define human trafficking and recognize the signs/symptoms of human trafficking when presented with an affected patient.
2. Review common medical and psychiatric morbidities among survivors of human trafficking.
3. Identify strategies to sustain comprehensive health care services that foster compassion, trust, support and stability for survivors.

**Purpose:** The purpose of this program is to provide an overview of a model of medical care designed for human trafficking survivors.

**Summary:** Human trafficking for sex and labor is a national epidemic. Most victims access health care while being trafficked. Once rescued, many victims need medical and mental health services. A comprehensive “one-stop shop” model of health care offering multidisciplinary services in a single location for survivors of human trafficking was designed to provide a patient centered approach within an environment that fosters compassion, trust, support and stability was designed and implemented to assist survivors with access to primary care, women’s health and mental health services. The clinic’s goal is to establish stable and consistent health care that is respectful, comprehensive, and sensitive to survivor needs.

**Outcomes:** Key components of the model include consistent providers and streamlined intake procedures to reduce redundancy of patient history details often painful to repeat. All were rescued as adults, and trafficked on average over 15 years. Multiple chronic medical and psychiatric morbidities include PTSD, hepatitis C, pelvic pain, depression, anxiety, suicide ideation, and chronic headaches. In addition to sexual abuse, a history of physical abuse is a common finding. Isolation and fear are predominate. Social support and family networks rarely exist for this population. Despite years of abuse and neglected health care needs, they survived. Trust with providers is key to improving adherence. The tragic stories of abuse & torture have a dramatic emotional impact on staff; programs must devote attention & incorporate interventions into programs to assist staff & faculty with coping.

**Implications:** Every individual story for these women is different and tragic, however the human spirit among these patients is strong. Most have been seen by health care providers while being trafficked. Nurse Practitioners providing health care in a variety of settings will benefit from this presentation to gain knowledge regarding the recognition and known strategies to provide interventions for this population.

Thursday, October 12, 2017

11:10 am – 12:20 pm

Friday, October 13, 2017

7:00 am – 8:00 am

Poster Presentation

Paper ID: 124

Impact of an Electronic Clinical Decision Support Tool on Early Maternal  
Glucose  
Screening in Pregnancy

Shannon Santo, DNP, RN, WHNP

Jennifer Allen, DNP, RN, WHNP-BC

Debra Ilchak, DNP, RN, FNP-BC, CNE

**Objectives:**

1. Describe the health impact of undiagnosed and uncontrolled diabetes in pregnancy.
2. Identify maternal risk factors prompting early screening for diabetes in pregnancy.
3. Discuss integration of an electronic clinical decision support tool to increase early maternal glucose screening during pregnancy in women with risk factors.

**Purpose:** The purpose of this project is to implement the clinical practice guideline for early maternal glucose screening during pregnancy in women with risk factors through the integration of a clinical decision support tool in an electronic health record.

**Summary:** Undiagnosed, uncontrolled diabetes in pregnancy can lead to maternal and infant health comorbidities as well as have adverse long-term effects for mother or baby. Although routine screening for gestational diabetes mellitus (GDM) occurs between 24 and 28 weeks gestation, the American Congress of Obstetricians and Gynecologists (ACOG) recommends screening earlier in pregnancy for women at risk for undiagnosed type 2 diabetes. Risk factors include previous history of GDM, known impaired glucose metabolism, or obesity (BMI equal to or greater than 30). To align with the clinical practice guidelines, the project site implemented a practice change for early maternal

glucose screening during pregnancy in women with risk factors through the integration of a clinical decision support (CDS) tool embedded in the electronic health record (EHR). CDS tools can be utilized as a point of care strategy to remind providers of the clinical practice guidelines and to assist providers in decision-making related to screening. Participating providers (n=18) received training on the screening recommendations, CDS tool, and were provided a screening algorithm for reference. The CDS tool was utilized during the initial obstetrical visit for at-risk women without a pre-pregnancy diabetes diagnosis and who entered prenatal care prior to 24 weeks gestation.

**Outcomes:** Data analysis will be completed in April 2017. A convenience sampling chart review of the participating provider's patient charts will be audited pre and post implementation to determine rates of early screening for diabetes in pregnancy in at-risk women, documentation of CDS tool use, and referral to the registered dietician when applicable.

**Implications:** Nurse practitioners play an essential role in screening and educating patients about their health risks and management of diabetes in pregnancy. A point of care CDS tool can improve provider adherence to clinical practice guidelines for early maternal glucose screening during pregnancy. Early screening for undetected diabetes is associated with prompt diagnosis and treatment initiation.

Thursday, October 12, 2017

11:10 am – 12:20 pm

Friday, October 13, 2017

7:00 am – 8:00 am

Poster Presentation

Paper ID: 129

An Educational Intervention to Increase Human Papillomavirus  
Awareness and Intent to Vaccinate

DeAndra D. McDuffie, DNP, WHNP-BC, ANP-C

**Objectives:**

1. To describe a comprehensive communication strategy to providers for initiating and disseminating HPV and HPV vaccine education.

**Purpose:** The purpose of this health improvement project was to develop and evaluate the impact of an educational intervention on knowledge of HPV/HPV vaccine and intent to vaccinate or recommend HPV vaccination in African American women in a clinical setting. The Health Belief Model provided the theoretical framework.

**Summary:** Thirty eligible participants—AA women between 18-70 years—were recruited and completed the project. Educational tools (patient handout and four-minute video) were created using evidence based approaches gathered from the literature review. The educational tools were created with an integrated pre/post-education quiz. Eligible participants were recruited from the patient waiting area. Informed consent was obtained, and participants completed the pre-education quiz. Upon completion of the patient handout and educational video, participants concluded the study with the post-education quiz.

**Outcomes:** Statistical analysis revealed a HPV knowledgeable population, however where knowledge deficits existed, the educational intervention improved knowledge. Among the target population (18-26 years), a significant increase in intent to vaccinate after the educational intervention transpired. Statistical significance expressed an increase to recommending the vaccine after an educational intervention.

**Implications:** Low national HPV vaccine rates and wider racial gaps of deaths from cervical cancer demonstrate a need for educational interventions among the African American community to increase knowledge and acceptability. This project is important to women's health by demonstrating that improved knowledge in the clinical setting will increase intent to vaccinate among AA women. This leads to a positive impact on HPV-related disparities and such educational interventions should be considered in clinical practice to aid in narrowing racial gaps among AAs and improving HPV-related healthcare outcomes.

Thursday, October 12, 2017

11:10 am – 12:20 pm

Friday, October 13, 2017

7:00 am – 8:00 am

Poster Presentation

Paper ID: 131

Women living in crisis areas of Sub-Saharan Africa's use of family planning:

A review of the literature

Kelly Ackerson, PhD, RN, WHNP-BC

Ruth Zielinski, PhD, CNM, FACNM

**Objectives:**

1. Describe the interplay between poverty, fertility rates and maternal and infant mortality.
2. Recognize that women desire birth spacing and limiting births, but few use any form of birth control.
3. Identify barriers to use of modern contraceptives.

**Purpose:** Explore available research and summarize factors that inhibit or promote family planning and contraceptive use among refugee women and women from surrounding areas living in Sub-Saharan Africa. Too many women continue to die from pregnancy and childbirth related causes. While rates have decreased over the past two decades, maternal mortality remains very high in Sub-Saharan Africa. Family planning and use of modern contraceptives decrease maternal mortality, yet rates of use in Sub-Saharan countries with the highest rates of maternal death remain very low.

**Methodology:** A review of the literature published between 2006 and 2016 was conducted using Cochrane Library, Cumulative Index to Nursing and Allied Health Literature, OVID, power search, and PubMed databases. Sixteen articles were chosen for full review. Findings were discussed within the framework of the Interaction Model of Client Health Behavior.

**Results:** Twelve studies met the inclusion criteria. Utilization of modern contraceptive methods was low. Women were socially influenced to avoid use of contraceptives by husbands and others in the community. Reasons included lack of trust in western medicine and desire to have large families. Barriers to

access was affected by low socioeconomic status and proximity of clinics. Healthcare providers were believed to be unqualified, with many women being treated disrespectfully. Knowledge and understanding of contraceptives was low; many women knew different methods were available, however, many held misconceptions. Certain contraceptives were believed to cause death, infertility and side effects. These beliefs contributed to fear of use. This lack of knowledge and fear, even with the desire to space and limit births, affected motivation to use contraception. In Sub-Saharan Africa, underuse of family planning services, thus contraceptive use, is a multifactorial issue. New community based approaches are needed to educate women, men (husbands), community leaders as well as healthcare providers. It is imperative that researchers and women's healthcare providers be culturally sensitive and address family planning uptake with a holistic approach.

Thursday, October 12, 2017

11:10 am – 12:20 pm

Friday, October 13, 2017

7:00 am – 8:00 am

Poster Presentation

Paper ID: 132

Implementation of a Universal Screening Program to Increase Identification and Treatment of Perinatal Mood and Anxiety Disorders Among Pregnant and Postpartum Women

Laura Bartlett, RN, MSN, WHNP-BC

**Objectives:**

1. Ninety percent of women will be screened for PMAD using a standardized, validated screening tool at least once during the perinatal period between January 1, 2017-May 1, 2017.
2. Data extraction of diagnosis codes, clinical encounters and orders, EPDS scores, occurring during pregnancy and up to 180 days postpartum reveals an increase in identification and treatment of PMAD by 50%.
3. Fifty percent of women who have been referred to the behavioral health clinic for symptoms of PMAD will establish care and treatment of symptoms.

**Purpose:** The purpose of this project is to evaluate whether the consistent implementation of a valid and reliable screening tool for perinatal mood and anxiety disorders in the clinic setting, as well as follow-up care, will result in better identification and treatment.

**Summary:** From January 16, 2017 until May 1, 2017, clinicians at the OB/GYN clinic will be implementing use of the Edinburgh Postnatal Depression Scale (EPDS) to screen patients for perinatal mood and anxiety disorders. Women will be screened at the initial obstetric intake visit, 24 week visit, 36 week visit, 2 week postpartum visit (if applicable), and 6 week postpartum visit. With results of 10 or greater, the clinician must identify if a patient is at risk. If patients are not yet established with a mental health provider, women will be referred to a local clinic devoted to the mental health of women during the perinatal period. Following implementation, data will be obtained from the EHR to assess for overall effectiveness of the project. EPDS scores will be analyzed to determine number of women with scores of 10 or greater. ICD-10

codes will be extracted from the EHR to determine the number of women with symptoms of perinatal mood and anxiety disorders identified by the clinician. Chart reviews of all eligible participants will be performed to identify if they were screened for perinatal mood and anxiety disorders using the EPDS.

**Outcomes:** The project is still in process. Initial results demonstrate > 50% improvement in identification of women with perinatal mood and anxiety disorders with utilization of the standardized screening protocol.

**Implications:** Health implications are aimed at improving outcomes for mothers and infants through the identification and treatment of perinatal mood and anxiety disorders. Through use of a standardized universal screening, patients will be more regularly and effectively screened for perinatal mood and anxiety disorders. Improving identification will improve treatment for perinatal mood and anxiety disorders, and subsequently will improve maternal and infant health outcomes.

Thursday, October 12, 2017

11:10 am – 12:20 pm

Friday, October 13, 2017

7:00 am – 8:00 am

Poster Presentation

Paper ID: 133

Implementation and Evaluation of a Physical Activity and Dietary Program  
among

Female Prisoners in a Federal Prison

Rosemary Johnson, DNP, APRN, ANP-BC

Kerry A. Milner, DNSc, RN

Christine Heng, DDS, MPH

Anna E. Greer, PhD, CHES

Sue DeNisco, DNP, FNP-BC

**Objectives:**

1. Discuss the prevalence of obesity, lack of physical activity and poor diet in federal incarcerated females.

**Purpose:** Obesity is an epidemic among female prisoners. The relationship between obesity and resilience has not been well studied among this population. The aim of this study is to evaluate the effects of a 12-week physical activity and dietary program on the body mass index (BMI) and resilience among female prisoners.

**Methodology:** The setting is a federal prison camp in New England. Female prisoners who were 18 years and older; spoke and read in English; had been incarcerated for 12 months; had more 6 months left on their sentences; had BMI 18; and had medical clearance were eligible to participate in the program. Participants were given data-storing pedometers to record their physical activity, i.e., daily step counts. They were required to attend three educational classes on healthy eating and portion control, using the visual aids on ChooseMyPlate.gov, as part of the dietary program. Data on MyPlate usage and commissary purchases were collected weekly. Resilience levels were measured at baseline, 6 weeks, and 12 weeks.

**Results:** Thirty female prisoners were recruited sequentially and 29 of them completed the program (September 18, 2016, to December 15, 2016). At baseline, the average age was 42.9 years (SD=12.0), weight was 86.0 kg (SD=19.1 kg) and BMI was 32.1 (SD=5.9). The majority of the participants reported low physical activity levels in the past. The mean step counts during this period vary between 6729 (SD=3237) and 9138 (SD=3204). MyPlate usage ranged from 40% (SD=23%) to 60% (SD=19%). Over 60% achieved a mean weight loss of 1.2 kg (SD=2.1 kg). Mean resilience at each data point was 144 (SD=24), 140 (SD=39), and 148 (SD=18), respectively. Trends during the 12-week period showed inverse relationships between step counts and MyPlate usage with BMI. Although resilience continues to increase over the period, there was no clear relationship with BMI. This study shows a positive impact of a physical activity and dietary program on resilience; even though its impact on BMI was small. Future studies could evaluate the impact of this low-cost program on other female prisoners on a larger scale.

Thursday, October 12, 2017

11:10 am – 12:20 pm

Friday, October 13, 2017

7:00 am – 8:00 am

Poster Presentation

Paper ID: 138

Improving quality of care during gynecological examinations  
by reducing anxiety and discomfort

Kristen Leigh Ransone, DNP, APRN, FNP-C

**Objectives:**

1. To describe the evidence underlying the project development.
2. To identify two interventions effective at decreasing anxiety and discomfort during gynecological exams.
3. To discuss implications of the outcomes for women's health and patient-centered care.

**Purpose:** The purpose of this poster presentation is to describe the development, implementation and outcomes of a quality improvement project undertaken to address anxiety and discomfort felt by women during gynecological examinations.

**Summary:** This project was conducted in a single-setting military family practice clinic over a period of 2 months. All the women who presented for a routine gynecological exam were offered a choice of music to be played throughout their visits and their pelvic exams were conducted without the use of stirrups. At the completion of the visit, they completed an 8-question survey about the experience.

**Outcomes:** Using a Likert-type survey tool, the following results were collected in 17 women. Average scores were: (1) physical discomfort 1.47 (1=no discomfort to 5= complete discomfort), (2) sense of vulnerability 1.41 (1=no vulnerability to 5=completely vulnerable), (3) sense of control 1.35 (1=fully in control to 5=total lack of control), (4) sense of anxiety 1.58 (1=no anxiety to 5=highly anxious), (5) overall quality of care 1.17 (1=excellent to 5=poor). A total of 94% reported this experience made them more likely to return for a wellness exam in the future.

Open-ended survey comments supported that the experience was extremely positive.

**Implications:** Women of all ages and backgrounds commonly feel anxiety and discomfort during their gynecological examinations, which can lead to delays in screening and treatment of disease. This clinical project successfully demonstrated how simple interventions can be applied to the gynecological visit to improve the patient's experience and overall quality of patient-centered care. By creating a more positive experience, women will be more likely to return for future routine screening and disease treatment.

Thursday, October 12, 2017

11:10 am – 12:20 pm

Friday, October 13, 2017

7:00 am – 8:00 am

Poster Presentation

Paper ID: 139

Obesity Reduction through Culturally-Sensitive Targeted Education for Adult Hispanic Women: A Pilot Program Implemented in a Church Setting

Christy Chantharath, DNPc

Sarah Fincham, DNP, ARNP

**Objectives:**

1. Increase healthy behaviors knowledge in Hispanic women.
2. Evaluate the feasibility of implementing a promotora-led program within a church setting.
3. Encourage healthy behavior changes through goal-setting.

**Purpose:** This project sought to evaluate whether a promotora-led health education program compared to current practices improved health knowledge and healthy lifestyle behaviors in adult Hispanic women within Franklin County, WA. A secondary aim includes evaluating whether implementing such a program in a church setting is feasible and sustainable.

**Summary:** Classes based on USDA guidelines were held for Spanish-speaking adult women at a Hispanic church in Pasco, WA. The primary educator, or “promotora,” was a Hispanic woman who was an active member within the church setting. She was provided with extra training to deliver basic nutritional and physical activity information for this project. Classes included a brief lecture, discussion, and a small activity or quiz. Evaluation methods included pre- and posttesting administered on the first and final classes.

**Outcomes:** Participation far exceeded expectations, with attendance ranging from 56 to 68 adult women. The facilities were donated, the promotora volunteered her time, and childcare was provided at no charge by the church. The six classes were rescheduled several times due to inclement weather, scheduling conflicts, and promotora illness. One class was canceled altogether taking the original six planned classes down to five. Healthy behaviors

knowledge improvement, goal setting, and participant satisfaction in the program are still being evaluated.

**Implications:** Significant barriers remain for access to healthcare for immigrants in the United States. Targeted efforts to reach Hispanic women, who are often preparing the meals and caring for children, make improvements in their family's daily living may have the greatest impact on health improvement within the Hispanic community as a whole. Partnering with a familiar and comfortable setting allowed this pilot program to operate on limited resources, attract greater participation, and facilitate childcare services. Educating the promotora took less than 10 hours in total, and while the material itself took significantly longer to compile and organize, once established could be used repeatedly for subsequent classes. Utilizing the church setting and lay educators may be an effective and cost-efficient strategy for reaching underserved Hispanic women for other communities as was found here.

Thursday, October 12, 2017

11:10 am – 12:20 pm

Friday, October 13, 2017

7:00 am – 8:00 am

Poster Presentation

Paper ID: I-137

Knowledge of CDC contraceptive use guidelines by Nurse Practitioners  
is associated with same day insertion

Susan Rawlins, WHNP

Jonathan Lloyd, PhD

Yiyong Fu, PhD

Barbara A. Silvernail, PhD, RN

**Objectives:**

1. To assess NPs use of the MEC/SPR when considering IUD insertion.
2. To assess how MEC/SPR use correlates with SDI.
3. To assess how practice setting impacts SDI practices.

**Purpose:** Intrauterine device (IUD) contraception is highly effective in preventing unintended pregnancy but is underutilized in the US. The Center for Disease Control Medical Eligibility Criteria (MEC) and Selective Practice Recommendations (SPR) as well as the American Congress of Obstetricians and Gynecologists (ACOG) recommend same day IUD insertion (SDI) protocols to minimize barriers to use. Neither the MEC/SPR nor ACOG recommends routine screening for sexually transmitted infections (STI) prior to IUD placement for women at low risk for STI. However, misconceptions persist regarding eligibility for and timing of IUD placement. Survey objectives were to assess: 1. NPs use of the MEC/SPR when considering IUD insertion; 2. How MEC/SPR use correlates with SDI; and 3. How practice setting impacts SDI practices.

**Methodology:** NPWH members were eligible to participate in a 10-question online survey available via the member website in Fall 2016. Participants were surveyed regarding clinical experience with IUD placement, practice setting, and use of MEC/SPR when selecting IUD contraception. Data were summarized descriptively, and logistic regression analyses were used.

**Results:** Among 637 respondents completing the survey, private practice (46.9%) was the most common setting. Most were women's health NPs (78.5%), and 82.0% had 2 years of experience with IUD placement. Approximately half (50.2%) reported always/often consulting MEC/SPR guidelines. SDI was not available at 54.6% of practices, and the majority (64.4%) did not require STI testing prior to IUD placement. There was a strong association between not requiring STI testing and providing SDI (OR 2.1;  $p < 0.0001$ ). Use of MEC/SPR guidelines correlated with increased SDI provision (1.7;  $p < 0.007$ ). Respondents from clinics requiring STI testing were significantly less likely to consult MEC/SPR guidelines (0.6;  $p = 0.006$ ). The above inferential estimates were approximately the same after adjusting for practice setting (private vs non-private). When comparing practice setting, private clinics were less likely to provide SDI than non-private (0.4,  $p < .0001$ ). These survey results suggest that clinics where the NPs consult MEC/SPR guidelines are less likely to require STI testing and more likely to provide SDI. Outreach and training should be prioritized to improve adherence to MEC/SPR guidelines, which may result in increased SDI and a reduction in unintended pregnancies.

Thursday, October 12, 2017

11:10 am – 12:20 pm

Friday, October 13, 2017

7:00 am – 8:00 am

Poster Presentation

Paper ID: I-149

Safety of Flibanserin in Premenopausal Women With Hypoactive Sexual  
Desire Disorder: Analysis of Phase 3, Placebo-Controlled Trials

Brooke Faight, MSN, WHNP-BC, IF

James Yuan, MD, PhD, MBA

Krista A. Barbour, PhD, MPH

Robert Kissling, MD

**Objectives:**

1. To identify common adverse events associated with flibanserin use.
2. To recognize less common but clinically relevant adverse events associated with flibanserin treatment.
3. To explain the benefits of nighttime dosing of flibanserin.

**Purpose:** Flibanserin, a multifunctional serotonin agonist and antagonist, is indicated for the treatment of acquired, generalized hypoactive sexual desire disorder (HSDD) in premenopausal women, at a recommended daily dose of 100 mg (taken at bedtime [qhs]). This analysis evaluated the adverse event (AE) profile of flibanserin in premenopausal women with HSDD.

**Methodology:** The analysis pooled patient-level data from five 24-week, randomized, double-blind, placebo-controlled, phase 3 studies.

**Results:** The analysis population included randomized patients who received 1 dose of flibanserin 100 mg qhs (N=1543) or placebo (N=1905). Mean age was 35.8 years; the majority of patients (88.2%) were white. Mean duration of exposure to study medication was 139.0 days for flibanserin and 147.4 days for placebo. The most common AEs (2% of flibanserin-treated patients and twice the rate for placebo) were dizziness (11.4% for flibanserin vs 2.2% for placebo), somnolence (11.2% vs 3.1%), nausea (10.4% vs 3.7%), insomnia (4.9% vs 2.4%), and dry mouth (2.4% vs 0.9%). The majority of AEs were mild or moderate in intensity; severe AEs were experienced by 6.9% and 4.7% of

patients taking flibanserin or placebo, respectively. The incidence of sedation-related AEs (defined as dizziness, somnolence, fatigue, or sedation) was 28.6% in the flibanserin group and 9.4% in the placebo group.

Hypotension/syncope-related AEs (defined as blood pressure decreased, circulatory collapse, dizziness postural, hypotension, loss of consciousness, orthostatic hypotension, syncope, or syncope vasovagal) occurred in 0.5% of flibanserin-treated patients (0.7% of patients with and 0.3% of patients without self-reported alcohol use at baseline) and 0.3% of placebo-treated patients (0.3% each for alcohol users and nonusers). AEs led to treatment discontinuation for 12.8% of patients receiving flibanserin and 5.9% of patients receiving placebo. The most common AEs leading to discontinuation in the flibanserin group (>1% of patients) were dizziness (1.7%), nausea (1.2%), somnolence (1.1%), and insomnia (1.1%). Flibanserin, at the recommended dose of 100 mg qhs, was generally well tolerated in premenopausal women with HSDD. Flibanserin is to be taken at bedtime to minimize the impact of AEs and the prescribing information includes a boxed warning regarding the use of flibanserin with alcohol.

Thursday, October 12, 2017

11:10 am – 12:20 pm

Friday, October 13, 2017

7:00 am – 8:00 am

Poster Presentation

Paper ID: I-150

A Survey of women's exPerience wIth estRogen treatment, sexual health, and  
provIder communicaTion on VVA: the SPIRIT study

Diane Pace, PhD, APRN

Nancy Berman, MSN, APRN

David Archer, MD

Alex Galitsky

Dale Kappus, MSc

Andrew Kaunitz, MD

Sharon Parish, MD

**Objectives:**

1. Clarify the current knowledge of women's experiences with vulvar and vaginal atrophy (VVA) symptoms, a feature of genitourinary syndrome of menopause (GSM).
2. Understand VVA's impact on women's lives.
3. Identify opportunities for healthcare providers to improve patient knowledge and facilitate appropriate treatment.

**Purpose:** Understand how symptoms of VVA, including vaginal dryness, irritation, and dyspareunia, impact women's lives and evaluate how healthcare provider (HCP)-patient interactions affect treatment preferences.

**Summary:** An online survey was conducted among women from GfK's KnowledgePanel® and augmented by users of prescription treatments from online opt-in consumer panels. Participants included 3,031 postmenopausal women (45-75 years) with VVA symptoms (13% of whom self-reported a VVA diagnosis).

**Outcomes:** Of the 2,759 women who saw HCPs for women's health needs, 1,300 women saw an OBGYN; 1,076, a primary care physician (PCP); 94, a physician's assistant; 230, a nurse practitioner (NP; with 75 at an OBGYN

office [NP-OBGYN]); and 59, elsewhere. VVA was somewhat/very interfering with many aspects of life, including enjoyment of sex (71%), sexual spontaneity (64%), and ability to be intimate (61%). Quality of life was also affected, including sleep (33%), temperament (31%), and enjoyment of life (28%). Despite this impact, only 53% of postmenopausal women with VVA discussed symptoms with an HCP; such conversations were usually initiated by patients. Though NPs-OBGYN were more likely to initiate discussions of postmenopausal symptoms, only 23% did. Compared with OBGYNs or PCPs, conversations with NPs-OBGYN were reported as more satisfactory and comprehensive. Only 2% of women did not discuss treatment options while visiting NPs-OBGYN vs 13% or 14% visiting OBGYNs or PCPs, respectively. Further, women who saw NPs-OBGYN were more likely to currently, and continuously, use prescription treatments (including both estrogen- and non-estrogen-based options), though only 23% did so. Conversations with NPs-OBGYN were more likely to include an explanation of estrogen risks. Still, nearly half of women not using treatment (42%) were very/extremely concerned over the amount of estrogen in prescription products, and 38% who saw NPs-OBGYN agreed/strongly agreed they were interested in treatments with the lowest dose of vaginal estrogen.

**Implications:** This study highlights the need to continue building relationships between women and their HCPs and further educate women on VVA symptoms. Among HCPs, NPs in OBGYN practice appear more likely to include comprehensive, collaborative discussions with their patients, leading to informed decision-making about treatment options.

Thursday, October 12, 2017

11:10 am – 12:20 pm

Friday, October 13, 2017

7:00 am – 8:00 am

Poster Presentation

Paper ID: I-151

The Investigational Drug Bremelanotide for Hypoactive Sexual Desire Disorder (HSDD): Efficacy Analyses from the RECONNECT Studies

Anita H. Clayton, MD

Sheryl A. Kingsberg, PhD

James Simon, MD

Robert Jordan

Johna Lucas, MD

**Objectives:**

1. To assess the effect of bremelanotide on desire and distress related to low sexual desire among premenopausal women with hypoactive sexual desire disorder (HSDD).
2. To assess the effect of bremelanotide on other key measures of sexual function.
3. To assess the safety of bremelanotide.

**Purpose:** To evaluate the efficacy of bremelanotide (BMT) as a treatment for HSDD in premenopausal women.

**Methodology:** RECONNECT comprises 2 Phase 3 trials. The Core phase includes a 4-week screening period, a 4-week single-blind placebo period, and a 24-week randomized double-blind period during which participants self-administered BMT (1.75 mg) or placebo subcutaneously using an auto-injector, as-desired, prior to sexual activity. Co-primary endpoints: change in the desire domain of the Female Sexual Function Index (FSFI-D) and the Female Sexual Distress Scale-Desire/Arousal/Orgasm (FSDS-DAO) score for being bothered by low sexual desire (item 13). Secondary endpoints: change from baseline to end-of-study in the FSFI total, arousal, lubrication, orgasm, and satisfaction scores; FSDS total and bother scores; Women's Index of Treatment Satisfaction (WITS-9) score; self-assessed benefit, and satisfying

sexual event (SSE) items of the Female Sexual Encounter Profile-Revised (FSEP-R).

**Results:** The primary efficacy population comprises 1202 women (mean age 39 years; >80% white; most frequent diagnosis HSDD with decreased arousal). In both studies, women using BMT had significantly ( $P=0.001$ ) increased scores on the FSFI-D indicating an increase in desire and a significant ( $P=0.01$ ) reduction in their item 13 score on the FSDS-DAO indicating a reduction in distress related to low sexual desire. On secondary outcomes, BMT was associated with significant improvements from baseline in FSFI total, and arousal, lubrication, orgasm, and satisfaction domain scores ( $P=0.01$ ), FSDS total and bother scores ( $P=0.01$ ), and WITS-9 and self-assessed benefit ( $P<0.0001$ ). FSEP-R scores for satisfaction with desire and arousal were significantly improved only in Study 301 ( $P=0.01$ ). Changes in the number of SSEs did not differ significantly from placebo; however, women taking BMT reported a higher percentage of sexual encounters as satisfactory. The most frequent adverse events were nausea, flushing, and headache; most were mild or moderate. TEAEs led to treatment discontinuation/interruption in 18.1% of BMT subjects (vs 2% with placebo). BMT's safety profile was consistent with prior experience. Bremelanotide is associated with a clinically meaningful and statistically significant improvement in desire and a decrease in distress, both fundamental characteristics of HSDD. Bremelanotide may also improve other key aspects of sexual function—arousal, lubrication, and orgasm, in premenopausal women with HSDD.

Thursday, October 12, 2017

11:10 am – 12:20 pm

Friday, October 13, 2017

7:00 am – 8:00 am

Poster Presentation

Paper ID: I-152

Development of an Exit Study to Contextualize and Assess Meaningfulness of a Potential Treatment for Hypoactive Sexual Desire Disorder (HSDD)

Patricia E. Koochaki, PhD

Dennis A. Revicki, PhD

Hilary Wilson, PhD

Robin Pokrzywinski, PhD

Robert Jordan

Johna Lucas, MD

**Objectives:**

1. Develop an exit study for use in 2 identical Phase 3 studies of bremelanotide, an investigational treatment for premenopausal women with HSDD, to understand: 1) motivations to seek treatment and treatment goals;
2. Experiences during the study, including experience with the treatment device, and
3. To assess the experiences and differences between women who did and did not report experiencing a meaningful benefit.

**Purpose:** Develop an exit study for use in 2 identical Phase 3 studies of bremelanotide, an investigational treatment for premenopausal women with HSDD, to understand (1) motivations to seek treatment, treatment goals, and experiences during the study, and (2) to assess the experiences and differences between women who did and did not report experiencing a meaningful benefit.

**Methodology:** A mixed-method design was used to develop an exit study including a quantitative survey to obtain data on meaningfulness of treatment benefits, whether expectations for treatment were met, and satisfaction with the injection device (Part 1) and qualitative research to understand patients' experiences and impacts of treatment, explore why treatment was

meaningful, whether expectations for therapy were met, and experiences with the injection device (Part 2). Survey development included 15 cognitive debriefing interviews to assess face and content validity. The survey was refined based on these interviews. In Part 1, volunteers completed the survey at the clinic after their last visit of the core phase of the study. In Part 2 individual, semistructured, telephone interviews were conducted with a subset of participants in Part 1 by interviewers trained in qualitative interview techniques. All subjects, clinic staff, and interviewers were blinded to treatment. Atlas.ti software was used to analyze interview transcripts.

**Results:** 242 volunteers completed the quantitative survey and 80 of these volunteers (35 randomized to bremelanotide; 45 to placebo) participated in qualitative interviews. The mean age of participants was 38.9 years; 98.3% had a male partner; 62.4% were diagnosed with HSDD with decreased arousal (average duration of HSDD diagnosis 55.2 months). Part 1 provided quantitative data on the proportion of volunteers who reported meaningful benefits. In Part 2, the most common reason cited for enrolling in the trial was to increase sexual desire, highlighting its importance at diagnosis and as a primary endpoint in clinical trials. Further, subjects provided descriptions of their experiences and impact of improvements on physical and emotional symptoms, quality of life, and partner relationships. The design implemented in this exit study helps contextualize the clinical data and provides new insights on women's experiences on bremelanotide and meaningfulness of treatment.