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01. Prevalence and Risk Factor Profile for Human Papillomavirus Infection Among Uyghur Women in Xinjiang

Guzalnur Abliz, Fatima Mijit, Tangnur Ablimit, Hua Li, Ling Lu, Avagul Yuksal, Tunsahan Abdurehym

5th Department of Gynecology, Affiliated Tumor Hospital of Xinjiang Medical University, Urumqi, China

Background: In China, the prevalence of cervical cancer is very high among the Uyghurs, an ethnic minority in the Xinjiang region. When cervical cancer is diagnosed in Uyghur women, about 80–90% of cases are at advanced stages, beyond the opportunity for operation. Thus, in the present study, we explored factors that may contribute to the high incidence of cervical cancer in Uyghur women to provide a theoretical basis for a future project regarding comprehensive cervical cancer prevention and control in Xinjiang.

Objective(s): To investigate the current status of HPV infection and its risk factors within rural Uyghur women in order to provide guidance for cervical cancer prevention in Xinjiang.

Material/Methods: A survey of HPV infection factors was conducted on 6000 sexually active Uyghur women aged 21 to 60 years in Karakax County of the Hotan region between June 15 and November 15, 2013. The participants were also tested for HPV infection.

Results: The overall HPV infection rate was 8.42%. HPV infection rate was higher in women who were older than 45 years. The logistic regression model showed that women who had a long interval between showers (OR=4.358), with education levels of junior college and above (OR=3.369); participating in frequent intercourse (OR=2.222), use of oral contraceptives (OR=2.071), cleaned their vaginas (OR=1.608), use of intra-uterine devices (OR=1.467), whose husbands were smokers (OR=1.377) were at higher risk of HPV infection.

Conclusions: Our findings suggested that women older than 45 should be screened and monitored closely. Meanwhile, education include improving women's bad health habits, advocating for condom use, persuading their spouses to quit smoking should be emphasized.

02. The Importance of Adding Vitamin D Status (25OHD) to the Allostatic Load Index in Reproductive Aged Women

Eynav Accortt

Cedars-Sinai Medical Center, Los Angeles, California

Background: Allostatic load (AL) is an index of multi-system physiological “wear-and-tear,” operationalizing emergent chronic disease risk and predicting morbidity and mortality. AL has been proposed as an organizing framework for studying pregnancy outcomes; however, little data exists. A recent study showed that pregnancy complications were associated with

higher AL in 2,448 mothers. Additional AL biomarkers for the study of pregnancy would be valuable.

Objective(s): We hypothesized that including vitamin D deficiency (serum 25(OH) D < 20 ng/ml) in an AL index would better predict adverse pregnancy outcomes.

Material/Methods: The Community Child Health Network (CCHN) is a community-based participatory research network (5 sites) that enrolled a large cohort of women at birth and followed them for two years with interviews, ultrasound, and biomarkers (10 AL components). A composite of five adverse pregnancy outcomes, abstracted from patient charts (birth weight, preterm birth, preeclampsia, gestational diabetes or hypertension), was created. Vitamin D status was measured 24–39 weeks postpartum in a sample of 123 women from the Los Angeles site.

Results: 28% (34) experienced one or more of the five adverse outcomes. Vitamin D status was significantly, but not strongly, inversely correlated with 6 of the 10 AL biomarkers (Spearman's $r = -0.16$ to -0.33 , $p < 0.05$). Logistic regression results, controlling for maternal age and race, showed that high AL significantly predicted the composite outcome. Adding vitamin D status as an 11th component improved the prediction based on fit statistics (Delta (-2LogL) = 4.251, $p = 0.034$), and the Akaike Information Criterion was smaller (improved) with 25(OH) D as an added predictor.

Conclusions: Results suggest that including 25(OH) D in the AL score is a valuable addition identifying postpartum women who might develop adverse pregnancy outcomes in the next pregnancy. Future work focuses on whether adding 25(OH) D to AL improves prediction of early risk for other specific conditions such as maternal cardiovascular disease.

03. Male Partners' Involvement in Pregnancy Related Care Among Married Men in Ibadan, Nigeria

Ayodeji Adebayo¹, Olayinka Falade-Fatila²

¹University of Ibadan, Ibadan, Nigeria

²University College Hospital, Ibadan, Nigeria

Background: Maternal death remains a public health burden in the developing countries including Nigeria. The major causes are pregnancy related and lack of male involvement in pregnancy related care (PRC) is one of the contributory factors. In Nigeria, most studies on male involvement are focused on family planning services.

Objective(s): This study was carried out to assess the knowledge and involvement of male partners in PRC in Ibadan, Nigeria.

Material/Methods: A descriptive cross sectional study was conducted among 367 married men in an urban community using a semi-structured, interviewer-administered questionnaire. Responses to questions on knowledge of PRC were converted to a 33-point scale. Scores greater than or equal to the mean knowledge score (26.2) was categorized as good knowledge. Similarly, responses to involvement in PRC questions were converted to a

24-point scale with scores greater than or equal to the mean (15.1) classified as good involvement. Data were analyzed using descriptive statistics and association between qualitative variables was established using Chi-square test at $p=0.05$.

Results: The mean age of respondents was $37.5 (\pm 7.5)$ years. Above two-third (68.7%) had secondary education and 92.6% earned a monthly income of N50,000 or less. Sixty-three percent had good knowledge of PRC. Overall, 56.9% had good involvement in PRC; 19.6% and 19.9% followed their partners for antenatal care (ANC) visits and post-natal clinic (PNC) respectively. A higher proportion of respondents with good knowledge were involved in accompanying their partners for ANC visits ($p=0.008$), PNC clinic ($p=0.014$), labor ward ($p=0.050$) and arranging means of communication for their partners in case of emergencies ($p<0.001$). Job demand, social stigma and long waiting time were reasons highlighted for their non-involvement in PRC.

Conclusions: The study revealed gaps in male partners' involvement in pregnancy related care. This informed a need to advocate for a change in focus of reproductive health program to accommodate men.

04. Mental Health Problems of Women of Reproductive Age in a Rural Community of South-West Nigeria

Ayodeji Adebayo¹, Tolulope Soyawo²

¹University of Ibadan, Ibadan, Nigeria

²University College Hospital, Ibadan, Nigeria

Background: Mental health is a component of reproductive health which is generally and is still not given priority in low and middle income countries. In Nigeria, efforts to improve women's health have focused on issues related to reproduction such as family planning and fertility while women's mental health has been relatively neglected.

Objective(s): This study was conducted to determine the prevalence and predictors of mental health problems in non-pregnant reproductive age women in a rural setting of south-west Nigeria.

Material/Methods: A community based cross-sectional survey was conducted using a cluster sampling technique to select 283 non-pregnant women aged 15–49 years. Mental health was assessed based on respondents' experience of any symptoms of depression and anxiety. Data was analyzed using descriptive statistics, Chi-square and multivariate logistic regression at 5% level of significance.

Results: The mean age of the respondents was 25.6 ± 7.8 years with the highest proportion (57.1%) between 15–24 years. The prevalence of depression and anxiety was 28.9% each while 19.8% experienced both. Gynecological conditions was a predictor of anxiety (OR 2.7; 95% CI 1.3–5.6) while previous history of miscarriage was a predictor of depression (OR 10.5; 95% CI 1.0–108.8).

Conclusions: This study showed that mental health problems are quite prevalent in women of reproductive age group in the study setting. There is a need for reproductive health polices in Nigeria to recognize mental health problems as a contributor to the burden of diseases in women and integrate it into reproductive health services. There is also a need to promote public health interventions to target women with gynecological conditions and who experience miscarriage to effectively reduce the burden of mental health problems among the population.

05. Experience and Disclosure of Sexual Assault among Undergraduates in a Tertiary Institution in South-West Nigeria: A Gender-Based Analysis

Adebola Adejimi¹, Olukemi Sabageh¹, Oluwatimileyin Adedokun²

¹Department of Community Medicine, Ladoke Akintola University of Technology (LAUTECH), LAUTECH Teaching Hospital, Osogbo, Osun State, Nigeria,

²Ladoke Akintola University of Technology (LAUTECH), Osogbo, Osun State, Nigeria

Background: Sexual violence, including sexual assault, is a significant public health problem on university campuses but this may be seen as a private issue and it may be under-reported.

Objective(s): The objective of this study was to assess and compare the experience and disclosure of sexual assault among male and female undergraduates in Ladoke Akintola University of Technology (LAUTECH), Ogbomosho, South-western Nigeria.

Material/Methods: A cross sectional study of 1538 undergraduates who were selected using a multi-stage sampling technique was conducted. A pre-tested and self-administered questionnaire on the experience and disclosure of sexual assault was used in data collection. Chi square test was used to assess associations between categorical variables and the predictors of experience and disclosure of sexual assault were determined using logistic regression at a level of significance of 5%.

Results: The mean age was 21.9 ± 2.6 years and 58.4% were female. The prevalence of sexual assault one year preceding the study was 9.4% and 14.6% among male and female respondents respectively. About 36.7% of male and 44.3% of female victims shared their experience of sexual assaults with someone, mainly with informal support providers such as friends and family members. Majority (90.1%) did not disclose their experience of sexual assaults to a formal support system. Significantly, higher proportions of female respondents and those with any previous history of sexual intercourse experienced sexual assault one year preceding the study. However, age, marital status and sexual orientation were not significantly associated with the experience or disclosure sexual assaults. Respondents with any previous history of sexual intercourse were more likely to experience sexual assault [Odds Ratio (OR): 5.1 (95% Confidence Interval (CI): 1.86–14.06)]. Females were more likely to experience [OR: 1.5 (95% CI: 1.07–2.08)] and to disclose [OR: 1.8 (95% CI: 1.05–2.93)] sexual assaults. Disclosure of sexual assaults to someone was associated with increasing years of study.

Conclusions: Sexual assault was quite prevalent among undergraduates in LAUTECH, Ogbomosho, Nigeria and affecting more females than males. The high non-disclosure rate can be a barrier to the success of sexual assault preventive efforts. Targeted gender-based preventive interventions and policies are needed to address these problems in the institution.

06. Improving Osteoporosis Screening at MacNeal Family Medicine Center

Mirtha Aguilar Alvarado¹, Amy Harrison²

¹MacNeal Hospital, Gwinnett Medical Center, Lawrenceville, Georgia

²MacNeal Hospital, Berwyn, Illinois

Background: The number of women above 65 years old receiving osteoporosis screening remains low. 3, 1, 16. Information about the status for this test at MacNeal Family Medicine

Center is limited and no specific interventions were developed in the past to improve this service.

Objective(s): 1. To obtain baseline data about osteoporosis screening rates in our practice. 2. To improve the osteoporosis screening rates in female patients aged 65 to 80 years old by reaching patients with reminder by a phone call and a mailed reminder along with a mailed order for bone mineral density test (BMD).

Material/Methods: A non-randomized prospective pre-post intervention study was completed. Women aged 65 to 80 years old who received services between October 1st 2012 to October 31st 2014 at MacNeal Family Medicine Center were selected from the electronic medical record. A baseline of women screened for osteoporosis was established. Patients who did not have bone density test were selected and received a phone call reminder followed by a mailed reminder and an order for the test. Pre and post intervention results were obtained and compared.

Results: Ninety three of two hundred thirty four (40%) females of aged 65 to 80 years old had BMD prior to our intervention and of these 53% had the diagnosis of osteoporosis. Phone calls followed by a mailed reminder letter and order for BMD testing increased the percentage of women with the test done from 40 to 48%.

Conclusions: At baseline, the percentage of females aged 65 to in the Family Medicine Center who had a screening test for osteoporosis is 48%. The percentage of female with diagnosis of osteoporosis in the Center is elevated compared to those found in the National Health Osteoporosis Survey. A phone call followed by a mailed reminder letter and an order for BMD test increased the rate of osteoporosis screening, however did not reach the expected percentage.

07. Gender Differences in Authorship Collaboration Patterns: The Experience of a Dental School in a Developing Country

Maha ElTantawi¹, Amr Fathy², Mohamed Alsafi³, Asim Al-Ansari¹

¹College of Dentistry, University of Dammam, Dammam, Saudi Arabia

²Faculty of Engineering, Alexandria University, Alexandria, Egypt

³Faculty of Dentistry, Alexandria University, Alexandria, Egypt

Background: Faculty members' involvement in research ensures timely transfer of knowledge and helps train students in the use of the evidence-based approach. Less publications and citations signify a problem in research translation and reflect on the faculties' ability to fulfill their role.

Objective(s): To assess gender differences in authorship collaboration patterns among a group of faculty members in a dental school in a developing country.

Material/Methods: A database was developed to include the publications of faculty members at the Faculty of Dentistry, Alexandria University, Egypt who publish internationally. The approval of the Research Ethics Committee was obtained. Information was collected about each faculty member's international publications, his/her co-authors and their h-index. Social network analysis (SNA) was used to analyze co-authorship network. Using Gephi software, networks' parameters were calculated including number of nodes (co-authors) and edges (collaborations), degree (number of collaborators an author is connected to), network den-

sity (ratio of actual to potential collaborations), number of connected components (co-authorship groups) and average path length (average number of authors connecting two co-authors). Gender differences were compared using the SNA-generated statistics.

Results: A total of 421 co-authors were included in the network. Women faculty members formed 15.9% of authors publishing internationally with the network including publications that were cited 7464 times. Exclusively male collaboration produced 70.1% of all network citations and exclusively female collaborations produced 5.8%. Same gender collaborations resulted in fewer collaborators per author among women than among men (degree=2.567 and 5.119). Subnetworks including only women faculty members were fewer and denser than those formed by men only. Most authors with high h-index were men. However, some women with high h-index formed the nucleus of research groups that were mostly formed of men with high h-index with few connections.

Conclusions: Women formed a smaller portion of authors publishing internationally and had fewer citations whether collaborating exclusively with women or with a mix of women and men. The co-authorship patterns of women faculty at this school may be responsible for their lower impact on research. Promoting opportunities for international collaborations potentially reduces the gap in number of publications and citations between men and women faculty members.

08. Impact of a Prenatal Labor Pain Management Educational Intervention in Primiparous Women

Patricia L. Antoine

Old Dominion University, Norfolk, Virginia

Background: The pain that women experience during labor is extreme yet the education and preparation of the primiparous woman for that experience is inadequate. The consequences of this may lead to anesthetic and obstetric complications and dissatisfaction, specifically, with their pain management experience, and the overall childbirth experience.

Objective(s): Evaluated the impact of the prenatal educational program on labor pain management in changing knowledge, perceptions, and likelihood to choose early pain management in primiparous women.

Material/Methods: A Quasi-experimental design was used. Fifty-three subjects participated in this project. The intervention occurred during already existing prenatal classes. Participants were primiparous women ages 18–40 who were able to speak and write English. They participated once in a prenatal pain management program. The method was repeated over a 12-week period with different participants in subsequent prenatal classes. Outcomes were assessed pre and post intervention.

Results: There were no statistically significant difference in pre and post likelihood to consider early pain management ($p=.084$) or likelihood to request an epidural ($p=.533$). 48.1% of participants perceived labor pain as being severe and 52.8% believed that they would be able to handle the pain of childbirth. Pre and post mean knowledge scores were statistically significant (5.25 versus 8.96).

Conclusions: Education and preparation of primiparous women are needed early during the pregnancy concerning pain management options in addition to natural childbirth classes. Also this study needs to be conducted with a larger number of participants that includes a more diverse group of primiparous women.

09. The Early Start Program Experience: Cigarette Smoking During Pregnancy and Links to Other Substance Use and Maternal and Neonatal Outcomes

Mary Anne Armstrong¹, Lue-Yen Tucker¹, Cosette Taillac¹, Amy Conway¹, Nancy Goler³

¹Kaiser Permanente, Division of Research, Oakland, California

²Kaiser Permanente, Oakland, California

³Kaiser Permanente, OB/GYN Vallejo, Oakland, California

Background: Cigarette smoking during pregnancy is related to adverse maternal and infant outcomes. Kaiser Permanente Northern California (KPNC) has a well-established prenatal substance abuse screening and treatment program called Early Start (ES) which identifies women who smoked cigarettes before and during pregnancy.

Objective(s): (1) To compare the estimated rate of cigarette smoking during pregnancy in KPNC to California and US rates. (2) Determine if women screened as “smoker only” but upon ES assessment were also positive for alcohol/other drugs had worse outcomes than women screened as “smoker only” but were not positive for alcohol/other drugs.

Material/Methods: Of 345,543 women who completed ES Screening Questionnaires between 02/01/1999–12/31/2014 and had a live birth or intra-uterine fetal demise, 3,995 indicated “smoker only” during pregnancy. A control group of 221,796 non-smokers, non-substance users was identified (total cohort=225,791). The “smokers only” were subdivided into 5 groups based on assessment results and treatment status. The groups were compared on numerous outcomes, including preterm delivery, low birth weight, assisted ventilation, placental abruption, and intra-uterine fetal demise, using Chi-squared tests and logistic regression.

Results: In 2003, the estimated smoking rate during pregnancy in California was 8.7% vs 10.7% in the US. The KPNC rate was 5.6%. Among the assessed “smokers only”, 38% admitted to alcohol/drug use at assessment. The unadjusted rates for most outcomes were lower in the treated “smoker only” group who assessed positive for alcohol/other drugs compared to both the untreated “smokers only” who used alcohol/other drugs and the confirmed “smokers only” regardless of treatment.

Conclusions: The cigarette smoking rate during pregnancy in KPNC is significantly lower than both US and California rates. Receiving treatment was the key factor related to lower rates of adverse outcomes. “Smokers only” who used alcohol/other drugs may have received more treatment if their substance use was considered more severe than that of confirmed “smokers only”.

10. Sex-Differences in Outcomes After Transcatheter Aortic Valve Replacement: A Systematic Literature Review

Yasameen Azarbaijani, Kathryn O’Callaghan, William Sanders, Changfu Wu, John Laschinger, Danica Marinac Dabic, Christopher Ronk, David Strauss, Daniel Canos, Robbert Zusterzeel

FDA, Silver Spring, Maryland

Background: Aortic stenosis is a common valvular disease, especially in the aging population of Western countries. While surgical aortic valve replacement is the predominant treatment for patients with symptomatic severe aortic stenosis, 30% to

40% of patients are not eligible for surgery due to advanced age, severe left ventricular dysfunction, or other comorbidities. Transcatheter aortic valve replacement (TAVR) has been shown to be an alternative therapeutic approach for these patients showing better or equal results compared to surgical valve replacement. However, the effects of sex on outcomes after TAVR remain to be elucidated.

Objective(s): We gathered and compared all previously reported sex-specific data on effectiveness and safety outcomes after TAVR.

Material/Methods: We conducted a search in PUBMED and EMBASE using the following key words: ‘transcatheter aortic valve replacement’, ‘transcatheter aortic valve implantation’, ‘sex differences’, ‘gender’, ‘sex characteristics’. Selected publications consisted of original reports that included sex-specific data on outcomes after TAVR and were written in English. From the publications we collected information on sex-specific baseline features, procedural characteristics and post procedural outcomes after TAVR. We used mortality, valve complications, cerebrovascular complications, vascular complications and other outcomes as our main endpoints.

Results: After in- and exclusion criteria were applied, our search resulted in 25 publications. At baseline, men had more comorbidities than women, especially in terms of pre-procedural cardiovascular disease and cardiac interventions. Women were older, had higher aortic valve gradients and a higher ejection fraction. While there were no significant sex-differences in mortality rates at 30 days, most studies reported better survival in women at mid- and long-term follow up with hazard ratios (for women compared to men) ranging from 0.27 (95% CI: 0.09–0.84) to 0.91 (95% CI: 0.75–1.10). Other outcomes included aortic regurgitation, which was the most common valve complication. At 30 days of follow up, aortic regurgitation was more prevalent among men (12%–24% and 7–19% in women and men, respectively). Stroke rates were similar at 30 days (women: 1%–7% and men: 1%–5%). Women also had higher rates of vascular complications at 30 days, ranging from 6%–20% compared to 2%–14% in men and higher bleeding rates ranging from 10%–44% compared to 8%–25% in men. Myocardial infarction was similar between the sexes as well as tamponade, kidney injury/failure and sepsis. Permanent pacemaker implantation was more frequent among men with rates from 10%–25% in women and 15%–31% in men.

Conclusions: In this systematic literature review we found a better survival in women compared to men after TAVR at mid- and long-term follow up. However, in general women had more vascular complications and bleeding, but less aortic regurgitation and pacemaker implantations; stroke rates were similar between women and men. These findings may partly be explained by better baseline characteristics and less valve mismatch in women compared to men. Results should be interpreted with caution as most measures only include raw percentages. Future studies including a larger sample of patients, preferably based on individual-patient data meta-analysis, are required to confirm and thoroughly evaluate these preliminary findings.

11. How to get Gender Medicine into the Doctor’s Office

Angelika Bader, Margarethe Hochleitner

Medical University of Innsbruck, Innsbruck, Austria

Background: In Austria, all diplomas in post-graduate programmes are awarded by the Austrian Medical Association

(the licensing authority in this case is the Austrian Medical Association). There are two types of post-graduate diploma: specialisation (surgery, cardiology, etc.) and diploma for cross-cutting disciplines (sports medicine, geriatrics).

Objective(s): To get Gender Medicine into the doctor's office (family doctors and all doctors in private practice) we decided to set up a diploma programme for Gender Medicine that would give family doctors and all specialists a diploma in Gender Medicine to demonstrate to their patients that they take an interest in and have knowledge of Gender Medicine.

Material/Methods: At our request the Austrian Medical Association agreed to set up a diploma program in Gender Medicine. We developed a course in Gender Medicine consisting of 10 modules of 16 hours each running three or four semesters, just as for many other diploma courses.

Results: The Austrian Medical Association started a diploma programme for Gender Medicine in 2015. The goal of the course is: knowledge of Gender Medicine on the basis of evidence-based knowledge should be incorporated into all aspects of medicine, i.e. prevention, diagnosis, therapy and rehabilitation. Essential contents are: Women's Health/Men's Health, sexuality and reproduction, cardiology, pharmacology, endocrinology/metabolism, diabetes mellitus, lipid metabolic disorders, osteoporosis, weight, psychiatry, addiction, emergency medicine, gastroenterology, nephrology, physician-patient communication, prevention, public health. The diploma programme in Gender Medicine concludes with a presentation and a final paper. The diploma in Gender Medicine is granted to physicians who successfully conclude the modules and the examinations.

Conclusions: The diploma in Gender Medicine permits physicians to acquire a general understanding of Gender Medicine and how to incorporate Gender Medicine aspects into all medical disciplines and it demonstrates this knowledge to their patients.

12. Experience of Intimate Partner Violence Among Urban Women in Southwestern Nigeria

Mary Balogun

Department of Community Medicine, College of Medicine, University of Ibadan, Nigeria, Ibadan, Nigeria

Background: Intimate Partner Violence is widespread and deeply ingrained and has serious impacts on women's health and well-being. In Nigeria, studies that have addressed Intimate Partner Violence (IPV) to women have focused mainly on physical violence.

Objective(s): The purpose of the study was to determine the prevalence, types and factors associated with experience of IPV among urban women in Southwestern Nigeria. Attitude to wife beating was also assessed.

Material/Methods: 300 urban women aged between 15 and 49 years selected using multistage sampling method were interviewed using semi structured interviewer administered questionnaire.

Results: Lifetime prevalence of IPV was 70.0%, controlling behavior was 57.7%, psychological violence –33.7%, physical violence –13.7%, and sexual violence –16.4%. Predictors of controlling behavior were young age of women (25–34 yrs) (OR=2.0; 95%CI 1.1–3.9) and history of partner's involvement in physical fight (OR=8.2; 95% CI 1.1–65.4). Predictors of physical violence were partner's alcohol consumption (OR=3.2; 95% CI 1.4–7.2) and history of partner's involvement in physical fight (OR=4.5; 95% CI 1.2–17.3). Having fewer children (≤ 2) (OR=4.6; 95% CI 1.6–16.0) and history of partner's involvement in

physical fight were predictors of sexual violence (OR=8.4; 95% CI 1.4–51.8). About 23.4% of women justified wife beating. The most common reason for justification was that the woman had been unfaithful (22%).

Conclusions: IPV and its different types is a common experience among Nigerian urban women. Different strategies are needed to prevent and reduce IPV.

13. Sex Differences in Recent Mental Health Disorders Among Military Sexual Trauma Victims Using Data from a National Veteran Health Survey

Shannon Barth, Erin Dursa, Robert Bossarte, Aaron Schneiderman

Department of Veterans Affairs, Washington, District of Columbia

Background: Since 2002, the Department of Veterans Affairs (VA) has conducted universal military sexual trauma (MST) screening for all veterans utilizing VA health care. Previous studies have reported mental health conditions among VA users with MST, though few have reported on the experience of a population-based sample of veterans.

Objective(s): The objective of this study is to describe sex differences in recent depression, anxiety, alcohol abuse, and PTSD among veterans reporting MST.

Material/Methods: VA's "National Health Study for a New Generation of U.S. Veterans" is a population-based health survey of 20,563 veterans deployed in support of Operation Enduring Freedom and Operation Iraqi Freedom and non-deployed veterans. VA MST screener questions on the survey allowed measurement of MST in a confidential, non-clinical setting. The Patient Health Questionnaire measured depression, anxiety, and alcohol abuse. PTSD is measured using the PCL-17. We calculated weighted prevalence estimates of mental health among those reporting MST, and sexual harassment and sexual assault separately. Weighted adjusted odds ratios and 95% confidence intervals were calculated for mental health outcomes, stratified by sex and controlling for military and demographic variables.

Results: Among women, 27% of those reporting MST had major or other depressive syndrome. The prevalence of a depressive syndrome among men reporting MST was 35%. The pattern was similar for anxiety (men=20%, women=17%), alcohol abuse (men=37%, women=20%) and PTSD (men=27%, women=19%). Those reporting MST were at increased risk for recent mental health conditions (e.g., PTSD: women – aOR=2.50, 95%CI=1.97, 3.18; men – aOR=2.30, 95%CI=1.81, 2.92).

Conclusions: Mental health conditions are highly prevalent among both women and men MST victims. Veterans reporting MST are at increased risk for potentially-related mental health conditions. One explanation may be that women are more likely to seek treatment for MST.

14. What Are the Barriers and Facilitators to Improving Virginia's HPV Vaccination Rate – A Stakeholder Analysis

Miev Carhart, Jessica Malpass, Donna Schminkey, Emma Mitchell

University of Virginia School of Nursing, Charlottesville, Virginia

Background: Despite availability of the human papillomavirus (HPV) vaccines and recommendations from various professional organizations, HPV vaccination completion rate remains low for girls at 39.7% nationally and 35.9% in Virginia and for boys 21.6% nationally and 22.5%. These rates are far below the Healthy People 2020 goal of 80% and many adolescents are at risk for developing preventive HPV-related cancers.

Objective(s): The purpose of this study is to identify barriers and facilitators to improving the HPV vaccination rate in central and southern Virginia.

Material/Methods: Semi-structured, key informant interviews with purposive sampling of stakeholders were conducted. Thirty-one stakeholders were interviewed and analysis is underway.

Results: The analysis of unique barriers and facilitators from 28 interviews will be presented.

Conclusions: The data from these interviews will be interpreted through the lens of the socio-ecological model in order to identify potential strategies to improve HPV vaccination rates.

15. Occurrence of Pelvic Pain Post-Procedure Among Women who have Undergone Female Sterilization Procedures - A Retrospective Claims Analysis of Commercially Insured Women in the U.S.

Patricia Carney, Jianying Yao, Amy Law

Bayer HealthCare Pharmaceuticals Inc., Whippany, New Jersey

Background: Women with pre-existing pain (headache, backache, pelvic pain, fibromyalgia) may have an increased risk of pelvic pain after sterilization.

Objective(s): To evaluate occurrence of pelvic pain in the 12 months following hysteroscopic (HS) and laparoscopic (LS) sterilization in the US.

Material/Methods: Women aged 18–49 years with claims for HS or LS (1/1/2010–12/31/2012) were identified from the MarketScan Commercial claims database. Women were required to have 6 months of continuous insurance coverage prior to the date of the sterilization procedure (baseline) and 12 months afterward (follow-up). Diagnoses for pain conditions during baseline (chronic headache, fibromyalgia, pain in lower back or pelvis/lower abdomen) were identified with ICD-9-CM codes. Occurrence of acute pelvic pain (APP) post-procedure was defined as ≥ 1 diagnosis for pelvic pain 2 weeks to 3 months post-procedure. Chronic pelvic pain (CPP) post-procedure was defined as ≥ 2 diagnoses on different dates for pelvic pain with ≥ 1 occurring after 2 weeks and another occurring > 3 months post-procedure.

Results: Among the study population, 12,031 underwent HS (mean age: 37.0 years) and 7,286 underwent LS (mean age: 35.8 years). During baseline, 23.5% ($n=2,827$) of women with HS and 27.1% ($n=1,971$) of women with LS received a diagnosis of a pain condition. In both the HS and LS groups, women who had a pre-existing pain diagnosis vs. those without pre-existing pain, had higher rates of APP (HS-cohort: 9.1% vs. 3.4%, $p<0.0001$); LS-cohort: 10.2% vs. 3.70%, $p<0.0001$) and CPP (HS-cohort: 9.2% vs. 3.6% $p<0.0001$; LS-cohort: 12.0% vs. 4.5%, $p<0.0001$) in the one year post-procedure.

Conclusions: Among women with hysteroscopic and laparoscopic sterilization procedures, those with pre-existing pain had higher percentages of APP and CPP after sterilization procedures, although causality cannot be established. Early identification of

women at higher risk for APP or CPP after sterilization procedures may be helpful during pre-procedural counseling.

16. Male Partner Role in Elective Abortion: Implications for Family Planning and Post-Abortion Care

Susan Cha, Saba Masho

Department of Family Medicine and Community Health, Virginia Commonwealth University, Richmond, Virginia

Background: Approximately 43% of all unintended pregnancies end in elective abortions. Little is known about the extent to which paternal pregnancy desires influence a woman's decision to terminate pregnancy.

Objective(s): This study examines the association between couple pregnancy intentions and elective abortion in women.

Material/Methods: Data came from the National Survey of Family Growth (2006–2010). Primiparous women who lived with one partner/husband at first pregnancy conception were included in the analysis ($n=4,263$). Couple pregnancy intention dyads were categorized as: both intended, both unintended, mom intended only (M+D-), dad intended only (M-D+). Pregnancy outcome for the first pregnancy was dichotomized (abortion; no abortion). Descriptive statistics provided unweighted frequencies and weighted percentages of characteristics. Multiple logistic regressions were used to obtain odds ratios and 95% confidence intervals. All analyses were conducted in SAS to account for the complex sampling design.

Results: Couples with discordant pregnancy intentions (M+D-, M-D+) and both unintended pregnancy had higher prevalence of women who were racial/ethnic minorities, of low income, and younger aged at conception than couples where both intended pregnancy ($p<0.0001$). Couples with discordant pregnancy intentions and both unintended pregnancy had significantly increased odds of elective abortion compared to those who both intended pregnancy.

Conclusions: Family planning or post-abortion service providers may need to consider the interpersonal dynamics of couple-based decision-making and behaviors to prevent elective abortions due to unintended pregnancy. Women should be encouraged to have ongoing discussions about pregnancy with their partners.

17. Abdominal Binders to Improve Ambulation and Decrease Pain After Cesarean Delivery

Patricia Chambers

Northern Westchester Hospital, Mount Kisco, New York

Background: Women after cesarean section (C-section) report more pain with activity than those who had a vaginal delivery. They also express concerns about taking analgesics while nursing, suffering pain to prevent medications entering into their breast milk. Nurses noted that women who brought abdominal binders to wear post C-section ambulated more frequently and longer. Offering abdominal binders was not standard of practice and, a systematic review of the literature failed to produce evidence about the effectiveness of abdominal binders post C-section.

Objective(s): The purpose of this project was to evaluate the use of abdominal binders to decrease pain and increase ambulation in women post C-section.

Material/Methods: This EBP project received IRB exempt approval. All women post C-section were offered an abdominal binder before the first post-operative ambulation. Pain and ambulation were assessed at 12, 24, 36, 48 and 60 hours post-C-section in 94 women with /without binders. The binders were removed for regular assessments per standards of care and whenever the woman wanted it removed.

Results: 94 women post C-section with an average age of 33.4 years were included in the project. Across all assessment times, wearing an abdominal binder was significantly associated with less pain ($\chi^2=27.42(8)$, $p=.001$), and increased ambulation ($\chi^2=19.55(1)$, $p<.000$). No significant differences in the length of time out of bed ($p=.40$), or the level of activity when out of bed ($p=.13$) were noted. Additionally, the women consistently reported that the binders made them feel more confident and comfortable.

Conclusions: This project adds to the evidence that abdominal binders benefit women post C-section. Across all assessments, women wearing binders scaled their pain less, and ambulated earlier than those who did not wear a binder. Based on the data from this project, abdominal binders posts C-section are beneficial.

18. The Psychosocial Impact Among Women with Abnormal Cervical Pap Smear Result

Ya-Ping Chen¹, Lee-Ing Tsao¹, Whei-Mei Shih², Yen-Yen Yu³

¹*School of Nursing National Taipei University of Nursing and Health Sciences, Taipei, Taiwan*

²*Chang Gung University of Science and Technology, Taipei, Taiwan*

³*Taoyuan Innovation Institute of Technology, Taipei, Taiwan*

Background: In the Past 20 years, the incidence and mortality of cervical invasion cancer has been decreasing because rigorous National screening policy approximately 60,000 women who had abnormal cervical pap every year in Taiwan. The Psychosocial impact of this group of woman induced feared cancer, fertility and sexual activate, there were only a few studies on topic in the literature.

Objective(s): To describe the psychosocial impact and related factors among women with abnormal cervical smear during follow-up period.

Material/Methods: Purposive sampling a total of 109 participants were women. Research tools include demographic background questionnaire and Process Outcome Specific Measure (POSM) questionnaire.

Results: In the study approximately sixty persons of women fear about the diagnosis cancer, all women who had planned for pregnant might worried about fertility. In the sexually active group, forty persons worried about sexually life. The age and helpful knowledge sources from medical staff are predictive to psychosocial impact for 16.6% of variation ($F=8.19$, $p<.001$). During follow-up period women need clear explanation of their condition and treatment (86%), expeditious diagnosis and treatment (72.5%), a warm trusty environment for consultation (32%).

Conclusions: We need to pay more attention to care for those women's needs who with abnormal Pap smear; it is recommended to build a specialist advice and a privacy medical environment. Should focus on young women's fertility and family support. Regardless of the smear result severity, we must focus on individual women of consulting. The study also lists those Questions and answers which women often inquire to provide clinical care reference.

19. Depression and Internet Use in Married and Working Women

Insook Cho¹, Young Sook Park²

¹*Inha University, Nursing Department, Incheon, South Korea*

²*Seoul National University, College of Nursing, Seoul, South Korea*

Background: The Internet (including social media) has been considered an effective medium for delivering mental health interventions to childbearing women in the community. However, little is known about their Internet-use behaviors.

Objective(s): We explored their overall Internet use and type of Internet use according to their occupation and the presence of depression.

Material/Methods: This work was performed as a part of a survey that investigated depression among married, working, and childbearing women in South Korea. (1) In 2010, a questionnaire was sent to a convenience sample of 765 women aged 24–45 years nationwide, who were stratified by occupational class. The subjects were asked about their overall and type of Internet use and their level of depression were assessed using the Beck Depression Inventory–II, along with other personal and social factors.

Results: The depression score was significantly higher in service and manual workers than in professional employees ($F=9.09$, $P=0.0001$). The Internet was used by 99.9%, 94.5%, and 84.9% of professionals, service workers, and manual workers, respectively. Information gathering was the main reason for using the Internet among 94% of professionals, while interpersonal communication and entertainment were more common reasons among service and manual workers ($X^2=39.12$, $P<0.0001$).

Conclusions: These findings suggest that service and manual workers should be the first intervention targets of depression intervention, and that the digital approaches for delivering on-line mental health services should vary with occupational class. Services aimed at service and manual workers should focus on utilizing the communication and entertainment functions of the Internet rather than providing only relevant factual information.

20. What do Lebanese Women Know About Cervical Cancer and Human Papillomavirus? A Report on Awareness Levels in Urban Communities

Jacques Choucair, Sara Abboud

Saint Joseph University, School of Medicine, Beirut, Lebanon

Background: Knowledge about HPV and cervical cancer lacks.

Objective(s): To evaluate the knowledge of urban adult Lebanese women regarding the symptoms and risk factors of cervical cancer and the diagnostic tests and vaccination of human papillomavirus (HPV) infection. To measure in the same population the uptake of the cervical cancer-screening test (Pap smear) and the uptake of HPV vaccination, and determine the factors that may influence them.

Material/Methods: 444 Lebanese women above 18 years of age, residing in Beirut and Mount-Lebanon, with no medical background, were recruited online and in health care facilities to fill out a 32 item questionnaire about cervical cancer and HPV.

Results: 45.7% of the women aged 18 to 25 y, residing in Mount-Lebanon (51.8%), single (49.3%), with high education qualifications (73.9%) and currently employed (49.1%) in a field not related to health (84.9%). They did not visit a general physician (64%) or a gynecologist (64.6%) regularly. 85.6% were aware of

cervical cancer; HPV infection involvement in the pathogenesis of cervical cancer was identified in 53.9% of cases. 35.6% of women were aware of HPV infection but 80.4% believed they lack information. 37.6% of participants had been screened by Pap smear for cervical cancer at least once whereas 9% did not know what a Pap smear was. Screening was significantly associated with cervical cancer awareness and regular visits to general health physicians and gynecologists. Only 11.7% of participants aged 18 to 35 were vaccinated against HPV. Vaccination uptake was significantly associated with cervical cancer awareness, religion, field of work and studies, and regular visits to gynecologists.

Conclusions: Urban Lebanese women in Beirut and Mount-Lebanon are not well informed about cervical cancer and HPV. Screening by Pap smear and HPV vaccination uptakes are non-satisfactory. Further interventions are required to improve these numbers.

21. Bless Her Heart Initiative: Use of Information Technology to Target High-Risk Women Veterans for Ischemic Vascular Disease Prevention Interventions

Sharon Jamie¹, Ralph W Clark¹, Linda Hyder Ferry¹, Patricia Applegate²

¹ Loma Linda University, Loma Linda, California

² Loma Linda University, Redlands, California

Background: The Veterans Health Affairs (VHA) Electronic Health Record (EHR) is not designed to easily select veterans “at risk” for ischemic heart, cerebral, or peripheral artery disease using the Atherosclerotic Cardiovascular Disease (ASCVD) Risk Estimator.

Objective(s): The “Bless Her Heart” initiative identified the at-risk population of Women Veterans (only 8% of VHA population) for any ischemic vascular disease (IVD) diagnosis at the VA Loma Linda Healthcare System using information technology to motivate those at highest risk to reduce at least one risk factor in a year.

Material/Methods: The risk factors included in the ASCVD Risk Estimator were gathered from EHR diagnoses and laboratory results (age, diabetes, tobacco, hypertension, HDL & TChol) to identify Women Veterans at highest risk (10 year ASCVD risk >20%), including those who already have a diagnosis of IVD. For all Women Veterans with existing IVD diagnoses, we verified their clinical diagnosis and conducted a quality improvement audit for IVD management adherence to clinical practice guidelines.

Results: Out of 4072 Women Veterans, we identified 263 with an IVD diagnosis and 114 in the high-risk group from the EHR. We found no evidence for an IVD diagnosis for the 263 (misclassification). All high-risk women (>20%) were invited to women-only workshops for: online VHA health-risk assessment, health learning competency, depression screen, and verification of all IVD risk factors unique to women, (e.g., pre-eclampsia, PCOS, hormone therapy, etc.). In addition, women with HgbA1c >9% (n=53) were scheduled for a workshop to meet with physicians, psychologists, pharmacists and dietitians to remove barriers to achieving better control, e.g., depression, transportation, no internet access, fear of needles.

Conclusions: EHRs can effectively identify target populations to cost-effectively intervene with those at highest risk of IVD and reduce morbidity and mortality. Women-only initiatives help to overcome unique challenges inherent in a male-dominated healthcare system.

22. Safety of Flibanserin in Women Treated for Depression with an SSRI or SNRI: A 12-Week, Randomized, Placebo-Controlled Study

Anita Clayton¹, Harry Croft², James Yuan³, Louise Brown³, Sam Spigelman³

¹ University of Virginia School of Medicine, Charlottesville, Virginia

² San Antonio Psychiatric, Research Center, San Antonio, Texas

³ Sprout Pharmaceuticals, A Division of Valeant Pharmaceuticals North America LLC, Bridgewater, New Jersey

Background: Sexual dysfunction is common in patients with untreated depressive disorders, and antidepressant medications may contribute to sexual dysfunction. Flibanserin is a 5-HT_{1A} agonist and 5-HT_{2A} antagonist FDA-approved for the treatment of acquired, generalized hypoactive sexual desire disorder in premenopausal women.

Objective(s): To assess the safety of flibanserin in women (18–50 years old, not postmenopausal) who were taking a selective serotonin reuptake inhibitor (SSRI) or serotonin-norepinephrine reuptake inhibitor (SNRI) for treatment of depression and had symptoms of decreased sexual desire and related distress.

Material/Methods: In this 12-week, multicenter, double-blind, placebo-controlled study, eligible patients were randomly assigned to receive flibanserin 100 mg/d or placebo, administered at bedtime (qhs). The primary endpoint was the occurrence of adverse events (AEs).

Results: Overall, 111 patients were randomly assigned to treatment (flibanserin, n=73; placebo, n=38). The number of randomized patients was lower than planned (n=200 overall) because the study was terminated early by the sponsor for administrative reasons. Among randomized patients, 3.6% (flibanserin, 2.7%; placebo, 5.3%) discontinued due to AEs. AEs were reported by 65.8% and 71.1% of patients in the flibanserin and placebo groups, respectively. The most common AEs (incidence ≥3% for flibanserin) in the flibanserin versus placebo groups, respectively, were dry mouth (5.5% vs 2.6%), headache (5.5% vs 18.4%), insomnia (5.5% vs 2.6%), back pain (4.1% vs 2.6%), dizziness (4.1% vs 0.0%), fatigue (4.1% vs 5.3%), and sedation (4.1% vs 5.3%). No worsening of depression or anxiety was noted in flibanserin-treated compared with placebo-treated patients. No serious AEs were reported; there were no instances of suicidal ideation or behavior. There was no evidence of withdrawal AEs during the post-treatment period.

Conclusions: Flibanserin 100 mg qhs was generally safe and well tolerated in this study of premenopausal women with decreased desire and related distress receiving treatment for depression with an SSRI or SNRI. ClinicalTrials.gov identifier: NCT01040208.

23. MyHealtheVet to Enable Shared Decision Making Regarding Menopause and Hormone Therapy in Postmenopausal Women Veterans

Stuti Dang¹, Berry Thavalathil², Carlos Gomez-Orozco², Victor Cevallos², Diana Ruiz¹, Alyce Kuo¹, Remberto Rodriguez¹, Panagiota Caralis¹, Silvina Levis¹

¹ Miami Veterans Affairs Healthcare System - GRECC, Miami, Florida

² South Florida VA Research Foundations, Miami, Florida

³ Miami Veterans Affairs Healthcare System, Miami, Florida

Background: Perimenopausal women would benefit from discussions with provider regarding menopause, associated conditions, and appropriate hormone therapy in order to make shared decisions regarding this sensitive and controversial topic. The Health Information Technology for Economic and Clinical (HITECH) Act aims for universal adoption and “meaningful use” of electronic health records in the primary care settings. Meaningful use includes providers using secure electronic messaging to communicate with patients via patient portals.

Objective(s): To evaluate the Veterans Health Administration’s patient portal “MyHealthVet” use by women Veterans, determine their knowledge and discussions of menopause with providers.

Material/Methods: We surveyed women Veterans age 45–60 in the Miami, West Palm Beach and Orlando VAHS.

Results: Six hundred fifty-one women responded. The average age was 53, 12% Hispanic, 68% White, 25% Black, and 90% had college education. There were no ethnic differences in socio-demographic characteristics. All participants performed well on the menopause knowledge test; the average score was 83.9%. However, their knowledge lacked in defining menopause and its impact on urinary symptoms. Overall, 61% had MyHealthVet access, of those only 2/3 used it in the last 30 days; 27% communicated with providers via secure messaging, only 12% regarding menopause. Sixty-seven percent expressed wanting to use secure messaging for menopause management, but 29% of these did not have MyHealthVet access. Miami participants were surveyed regarding shared decision making with their provider about menopause treatment. Twenty-five participants responded. Of these, 32% stated their doctor asked about their preferences, 28% selected an option together, and 36% reached an agreement on how to proceed.

Conclusions: A need exists for increased communication regarding menopause between patients and providers. Patient portals offer a feasible and economical tool to enhance communication and shared decision making. The gap between women who use patient portals and those willing to needs to be bridged by addressing access and usability issues.

24. Castor Oil as a Natural Alternative to Labor Induction: A Retrospective Descriptive Study

Andrea DeMaria¹, Beth Sundstrom¹, Grace Moxley¹, Kendall Banks¹, Ashlan Bishop¹, Lesley Rathbun²

¹College of Charleston, Charleston, South Carolina

²Charleston Birth Place, Charleston, South Carolina

Background: Fifty percent of US women report receiving Pitocin to induce or augment labor. Side effects include increased risk of caesarean birth, infection, uterine hyperstimulation, and decreased maternal satisfaction with the birth experience. Castor oil is a common alternative to pharmacological induction techniques.

Objective(s): The purpose of this study is to better understand castor oil as a nonmedical agent of labor stimulation.

Material/Methods: A retrospective clinical chart review was conducted of all women who gave birth at a freestanding birth center located in the southeastern US between January 2008 and May 2015. Overall, 323 women who used castor oil for labor stimulation gave birth afterwards. De-identified information from birth logs and electronic medical records was entered into SPSS 22.0 for analysis. Descriptive statistics were analyzed for trends in safety and effectiveness.

Results: Of the 323 mothers who utilized castor oil to stimulate labor, only 30 (9.3%) required a caesarean birth, while 287 (88.9%) were enabled to birth vaginally at the birth center or hospital. The incidence of maternal side effects was less than 7%, and adverse effects of any kind were reported in less than 15% of births. Independent sample t-tests revealed that gestational age ($p=0.26$), woman’s age ($p=0.23$), and BMI ($p=0.28$) were not significantly associated with ability to successfully give birth at the birth center after castor oil consumption. However, a t-test revealed significant differences by parity ($p<0.01$), suggesting parous women were more likely to birth at the birth center after using castor oil.

Conclusions: Our study demonstrated castor oil use as a natural alternative to stimulate labor. Nearly 90% of women in the study who received castor oil were able to give birth vaginally. Findings indicate further research is needed to compare the safety and effectiveness of castor oil to other labor induction techniques in a clinical trial.

25. Community Based Outreach and Intervention Models That Facilitate Enrollment of African American Older Adults in Brain Related Research

Cornelya Dorbin, Monica Parker

Emory University, School of Medicine, Atlanta, Georgia

Background: While Alzheimer’s occurs in all racial and ethnic groups, research shows that the burden is especially high among African Americans. Some studies indicate that older African Americans are two to three times more likely to have Alzheimer’s disease and dementia than Caucasians. Despite these facts and the implementation of a U.S. federal law (NIH Revitalization Act of 1993, PL 103-43) African Americans continue to be underrepresented in Alzheimer’s disease research. The Emory Alzheimer’s Disease Research Center (ADRC) developed a community based approach to address these barriers to research participation. The Registry for Remembrance (RfR) was established in 2008, with support from the National Institutes of Health, as the cornerstone of the Emory ADRC’s effort to reduce the stigma and threat of clinical trial participation for women and minorities.

Objective(s): Understand the use of translational approaches that foster biomedical research participation among African American older adults. Recognize meaningful and reciprocal community engagement supports productive alliances with a coalition of partners.

Material/Methods: Results from focus groups provided key strategies to overcome barriers to research participation for AAs. The first series of focus groups was held in 2009. Subsequent focus groups led by the Emory ADRC Outreach Directors were held in 2014. Themes from the quantitative and qualitative data were collected from men and women ranging in age from 40 to 90.

Results: Focus group findings identified strategies to reduce barriers for research participation of AAs. A key strategy was the development of Brain Health Forums. • Host preventive health and aging well educational programs, that facilitate research navigation and healthcare systems • Provide personal and timely response to all questions • Produce easy to understand documents that explain studies and feature actual investigators and participants • Provide dedicated financial and administrative support to expand outreach programs and operational activities • Reciprocate by building on collective strengths of AA community partners through the identification of mutual self-interest • Establish and maintain partnerships with community organizations that provide services in the AA community.

Conclusions: Participation in translational approaches that foster biomedical research participation among African American older adults in partnership with churches, sororities, and civic organizations has successfully addressed many of the barriers to AA recruitment that are identified in the literature.

26. What will we learn from Screening 10,000 African American Women for Heart Disease Risk Factors?

Molly Dunham-Friel¹, Senait Asier¹, Gina Lundberg¹

¹Emory University, School of Medicine, Atlanta, Georgia

²Emory University, Atlanta, Georgia

Background: Hypertension in the Southeast region of the United States is at an all-time high, especially in the African American female population. It has been found that 61% of African American women have hypertension and 63% of those women will have a stroke. The cause for concern is that 36% of the population with hypertension is undiagnosed and going untreated. Cardiovascular disease is the number one cause of death in women; this is 10 times the death rate from breast cancer. Due to the high prevalence of hypertension and cardiovascular disease in this region, there is a high need for community heart health screenings. These screenings will enable further research while benefiting the community.

Objective(s): Research objectives of this project: -To screen 10,000 African American Women for heart disease risk factors in the Metro-Atlanta Community. -To benefit the Metro-Atlanta community and provide a comprehensive, quality heart health screening. -To collect data for statistical analysis and participant follow up. -To help us understand the current state of hypertension and heart disease risk factors in African American women in Metro-Atlanta. -To draw conclusions on what socio-economic factors could potentially be contributing to poor heart health outcomes.

Material/Methods: We conduct a monthly community health screening which includes collecting patient data and testing for: blood pressure, cholesterol, body mass index, waist circumference and cardiovascular risk score. Once the data is collected and all screening are complete each participant is given educational material and has the chance to review results, ask questions and get advice from Cardiology Physicians, Nurse Practitioners or Registered Nurses. The participant is referred if needed and provided with extensive information on heart health, hypertension, heart disease, diet, exercise, diabetes and Emory social media options. This screening is run on a 100% volunteer basis, requiring at least 20 clinical volunteers per screening. Once the data is collected and the patient has completed the screening, the data is entered into a HIPPA approved REDCAP database for analysis. Six months post screening we follow up with the patient to see if they have experienced any behavior changes or need further clinical care. We partner with the community in order to hold these health screening events.

Results: Our preliminary results have shown: Blood Pressure: Out of the 87 patients we have complete screening data on 28 were found to have high/elevated blood pressure which is 32% of our screened population. (systolic of 140 and above) BMI: Of the 87 patients screen 54 had a BMI of 30 or greater (62% of women screened). That puts over half of the women screened in the obese category according to the NIH BMI guidelines. Uninsured: We found 12 out of 87 patients were uninsured (13.7%). Low Income: We found 26 out of 87 patients had an annual household income between \$12-\$24,000 (29.8%) Cardiovas-

cular risk assessment: 25 out of 87 Women screened had a 10 year cardiovascular risk assessment score of 7.5%.

Conclusions: This project will continue over the course of the next five years, and possibly extend further. We will continue to analyze the data as we collect and conduct further health screenings in the community. Our goal is to reach 10,000 African American women. Once we have this large data set we will have publishable results.

27. Effect of Stabilizing Exercises Augmented by Pelvic Floor Training on Postpartum Low Back Pain

Abeer ElDeeb¹, Adly A. Sabbour¹, Khaled S. Abd-Ghafar¹, Waled A. Ayad²

¹Department of Physical Therapy for Women's Health, Faculty of Physical Therapy, Cairo University, Giza, Egypt

²Department of Obstetrics and Gynecology, Faculty of Medicine, Al-Azhar University, Cairo, Egypt

Background: Low back pain (LBP) is a common problem during pregnancy, which may persist after delivery affecting 25% of postpartum women. It is a dull aching pain in the lumbar region experienced on trunk forward flexion and associated with restricted lumbar spine movements. Postpartum LBP has an adverse impact on the quality of life (QOL) and may lead to socioeconomic detriment.

Objective(s): This study aimed to investigate the effect of adding pelvic floor training to stabilizing exercises on pain intensity, functional disability and strength of pelvic floor muscles in postnatal women with LBP.

Material/Methods: Forty postnatal women, with a history of low back pain during pregnancy persisting for 6 months after delivery, engaged in the study. They aged 25–35 years; body mass index was >25 and <30 kg/m². They were randomly distributed into two groups; the control group (n=20) engaged in stabilizing exercises, which focused on exercising multifidus and transverse abdominals while the study group (n=20) engaged in the same stabilizing exercises and pelvic floor strengthening exercises. Both groups exercised 3 sessions per week for 12 weeks. Visual analog scale (VAS) was used to assess pain intensity, Oswestry disability index (ODI) to assess functional disability, modified Schober test to measure forward flexion range of motion (ROM) of the trunk and Kegel perineometer to measure the strength of the pelvic floor muscle.

Results: Compared with the control group, the study group showed a significant decrease (P<0.001) in pain and functional disability, as well as a significant increase (P<0.001) in pelvic floor muscle strength, but non-significant difference in trunk flexion ROM.

Conclusions: The findings suggest that pelvic floor strengthening exercise should be recommended, as an integral part in the management strategies of postpartum LBP.

28. The Impact of Energy Efficient Projects on Gender-Based Violence in Humanitarian Emergencies

Shaza Elmahdi

Afrotechana, Springfield, Virginia

Background: The danger of assault whilst collecting firewood is much clearer in conflict settings than in normal settings, where women and girls are often assigned to collect firewood. Firewood

collectors can walk tens of miles away from their villages or camps to find the increasingly scarce combustible materials. That's why they are potential targets for perpetrators. In August 2006 the International Rescue Committee (IRC) reported over two hundreds assaults in a five-week period from a single camp in Darfur. While Médecins sans Frontières reported over 200 cases per month in 2005. Given the stigma associated with rape, it is extremely likely that the real number of rape survivors and sexual assaults is higher (MSF 2005) The high risk of GBV in relation to firewood collection can be characterized on: (1) gender, (2) time, and (3) distance related to firewood collection in addition to the status of the conflict itself (whether it is active or not).

Objective(s): To identify and analyze literature regarding the impacts of cook-stoves initiatives on GBV and women and girls' protection in humanitarian situations. •To identify effective strategies to decrease violence against women through clean cook-stoves as a public health intervention method. •To identify best practices for increasing safe access to energy efficient projects.

Material/Methods: A comprehensive search of peer-reviewed articles and grey literature was conducted using PubMed, Scopus, Lancet, Google Scholar and Google, as well as concentrated searches of specific journals and websites.

Results: Twenty five (25) studies were included in the analysis. Intervention programs shown to decrease exposure to SGBV risks for women and girls after involvement in the clean cookstoves projects, especially with the interventions that included awareness, community education, women empowerment and income generating support.

Conclusions: While many studies looked at the impact of energy efficient projects on SGBV, few of them has the base line survey to compare the results, and many other intervention programs have not been rigorously evaluated or well-documented, through this systematic literature review, promising practices have been identified and recommendations made to strengthen the evidence-base of effective intervention, in terms of reducing the rates of exposure to SGBV, especially in conflict and post conflict situations and humanitarian emergencies.

29. Demographics of Study Participants in Clinical Trials for Oncology Drugs Approved by FDA CDER from January to November 10, 2015

Emmanuel Fadiran, Hilary Wright, Merina Elahi, Ayomide Igun, Greg Soon, Alice Chen, Anne Pariser

FDA, Silver Spring, Maryland

Background: In 2015, an estimated 810,170 new cancer cases will be diagnosed in females. In order to assess efficacy and safety of drugs in the diverse patient populations who might use them post-approval, the US FDA has implemented guidance and regulation to encourage greater participation of women and minorities in clinical trials (CTs).

Objective(s): To assess demographics in oncology CTs submitted in support of new molecular entity (NME) New Drug Applications (NDAs) and Biologics License Applications (BLAs) ("new drugs") recently approved by the FDA's Center for Drug Evaluation and Research (CDER).

Material/Methods: Subjects' sex, race, and age (<65 years, ≥65 years), and presence of sex-based analyses were assessed from sponsors' final clinical study reports for new oncology drugs approved between January 1 and November 10, 2015.

Results: Seven NDAs and 1 BLA were approved, but the BLA was excluded because it had a pediatric indication. A total of 157

trials (phases 1, 2, and 3) including 12,654 subjects were examined. Overall, 52.2% of subjects were women, 66.1% were Caucasian, and 20.9% were ≥65 years. Women were 40.8%, 54.2%, and 57.2% of subjects in phase 1, 2, and 3 CTs, respectively. The ratio of the proportion of women in late-phase CTs to the proportion of women in disease population (PPR) was ≥0.8 for 6 NDAs and <0.8 for 1 NDA. Five NDAs included both efficacy and safety sex-based analyses, 1 NDA included only safety sex-based analysis, and 1 NDA included only efficacy sex-based analysis.

Conclusions: Relative to their proportion of the disease population, female representation was comparable to (PPR between 0.8 and 1.2) or greater than men's in late phase trials for 6 of the 7 oncology drugs we examined. Participation of women in early-phase CTs was lower than in late-phase CTs; however, improvements have been made in female participation compared to previous findings. Late-phase CTs are where FDA's risk-benefit assessments are typically made.

30. Do Forms of Address Reveal Gender Bias in a Professional Setting?

Julia Files¹, Sharonne Hayes², Patricia Friedrich³, Marjorie Jenkins⁴, Michael Bryan¹, Christopher Wittich⁵, Melissa Lyle⁵, Suneela Vegunta⁶, Ryan Melikian³, Trevor Duston³, Yu-Hui Chang¹, Marcia Ko¹, Anita Mayer⁶

¹Mayo Clinic in Arizona, Scottsdale, Arizona

²Mayo Clinic Division of Cardiovascular Diseases, Rochester, Minnesota

³Arizona State University, Phoenix, Arizona

⁴Texas Tech University Health Sciences Center, Amarillo, Texas

⁵Mayo Clinic Rochester, Rochester, Minnesota

⁶Mayo Clinic Women's Health Clinic, Scottsdale, Arizona

Background: Gender bias has been identified as one of the drivers of gender disparity in academic advancement and remains a significant challenge for women in the workplace. Word choice and selective use of forms of address may reflect conscious or unconscious assumptions about gender roles.

Objective(s): To evaluate the prevalence of use of a formal professional title during speaker introductions at Internal Medicine Grand Rounds (IMGR).

Material/Methods: We conducted a retrospective observational study of speaker introductions occurring at consecutive IMGR. We restricted the analysis to the sessions where both the speaker and the referents had a doctoral degree (MD/PhD/Pharm D/DMD). We recorded gender and credentials of speakers and referents. We reported the frequency counts and percentages of referents that were called and were not called by their professional titles.

Results: A total of 321 forms of address between a speaker and a referent were analyzed. Female speakers (FS) were more likely to use a professional title when introducing any referent male (MR) or female (FR) during the first form of address when compared to male speakers (MS). (FS 96.2% (102/106) vs MS 65.6% (141/215); p<0.001) Female dyads (FS introducing FR) utilized formal titles during the first form of address 97.8% (45/46) compared to male dyads (MS introducing MR) who utilized a formal title 72.4% (110/152) of the time (p=0.007). In mixed gender dyads where the speaker was female and referent male (FS introduces MR), formal titles were used 95.0% (57/60) of the time. Male speakers introducing female referents utilized the professional title 49.2% (31/63) of the time. (p<0.001).

Conclusions: We report the first study to examine the association between gender and address practices during formal introductions of participants at IMGR. In this study, women introduced by men at IMGR were less likely to be addressed by their professional title than were men introduced by men. Subtle, yet pervasive practices can negatively impact a woman's career trajectory and her satisfaction with her career. Unequal address practices may amplify the issues of isolation, marginalization and professional discomfiture expressed by women faculty in academic medicine.

31. Marital Satisfaction, Sexual Dysfunction and Obsessive-Compulsive Disorder (OCD): The Neglected Links

Firoozeh Raisi¹, Habibollah Ghassemzadeh¹, Narges Karamghadiri¹, Alipasha Meysamie², Reihaneh Firoozikhojastefar³, Maryam Sorayani¹, Abbas Ali Nasehi⁴, Jalil Fallah⁵, Narges Ebrahimkhani⁶

¹Roozbeh Psychiatric Hospital, Tehran University of Medical Sciences (TUMS), Tehran, Iran

²Medical Faculty, Tehran University of Medical Sciences, Tehran, Iran

³Psychosexual Department of Roozbeh Psychiatry Hospital, Tehran, Iran

⁴Iran Helal Institute of Applied Science & Technology, Tehran, Iran

⁵Department of health, National Organization for Civil Registration, Tehran, Iran

⁶Bahonar Hospital, Alborz University of Medical Sciences, Alborz, Iran

Background: Although OCD has major impact on familial, occupational, social and interpersonal functions, there are sparse clinical research on the correlation between marital satisfaction and OCD.

Objective(s): This study assesses the correlation between sexual dysfunction and marital satisfaction in OCD patients

Material/Methods: Samples consisted of 56 (36 female, 20 male) married OCD patients (18 and 50 years old) referred to the Outpatient Clinic of Roozbeh Psychiatric Hospital and 3 private psychiatric clinics in Tehran since 2011 to 2013. Questionnaires including: FSFI, IIEF, MOCI, OCI-R, Demographic and Marital Satisfaction questionnaire.

Results: A significant correlation was found between washing subscale of MOCI and marital satisfaction. Also, sexual function's scores in female (arousal, lubrication, sexual satisfaction, pain and total scores) and marital satisfaction's score were significant and correlation between IIEF/FSFI and marital satisfaction was satisfactory.

Conclusions: OCD seems to have an effect on sexual function and marital satisfaction through avoidance, compulsions, impaired intimacy. Therefore, assessment of sexual function and marital satisfaction should be considered in these patients.

32. The Impact of Pain on BMI, Exercise, and Weight History on African-American Breast Cancer Survivors

Sherilyn Francis¹, Selina Smith², Lee Caplan³, Ernest Alema-Mensah⁴

¹Morehouse School of Medicine, Atlanta, Georgia

²Institute of Public and Preventative Health, Department of Family Medicine, Georgia Regents University, Augusta, Georgia

³Community Health and Preventative Medicine, Morehouse School of Medicine, Atlanta, Georgia

⁴Clinical Research Center & R-Center Biomedical Informatics Unit, Morehouse School of Medicine, Atlanta, Georgia

Background: African-American (AA) breast cancer survivors are dying at higher rates than Caucasians. This disparity in mortality may be remedied by interventions focusing on health-related quality of life factors (HRQoL).

Objective(s): In this study, we assessed the associations between pain and BMI, exercise, and weight history among AA breast cancer survivors.

Material/Methods: Study participants (n=175, mean age=56.8 years) completed a survey assessing demographic and HRQoL factors. The study population was compared to a national population using NHIS data (n=432, mean age=66.5 years). Bivariate and multivariate modeling was used to assess the relationship between the pain and outcome variables.

Results: Study participants reported lower pain intensity scores than the NHIS population (2.1 vs. 3.2, p<0.01). There were no population differences in pain interference (p > 0.05). A large portion of both populations were overweight or obese (72.3% vs. 65.3%, p > 0.05). Although 72.67% of the study participants reported regular participation in exercise, compared to 24.0% of the NHIS population (p<0.001), the study participants reported fewer days and minutes of exercise (2.11 days vs. 3.5 days, p<0.001; 33.30 minutes vs. 46.1 minutes, p<0.001). More of the study population attempted to lose weight following diagnosis and treatment (67.8% vs. 30.4%, p<0.001). Within the study population, pain intensity (odds ratio=3.7, p<0.001) and pain interference (odds ratio=3.3, p<0.01) were associated with a lack of exercise. Within the NHIS population there was an association between pain intensity and BMI (p<0.05). There were no associations between pain intensity or pain interference and weight history (p > 0.05).

Conclusions: AA breast cancer survivors may not engage in the recommended physical activity frequencies because of pain. These results suggest that interventions which assess pain among AA breast cancer survivors are urgently needed.

33. Colorectal Cancer Screening Among Privately Insured Post-ACA by Sex and Race

Idalid Franco¹, Mark Ommerborn², Therese Fitzgerald¹, Amy Glynn¹

¹Harvard Medical School/Brigham & Women's Hospital, Connors Center for Women's Health, Boston, Massachusetts

²Brigham & Women's Hospital, Center for Community Health and Health Equity, Boston, Massachusetts

Background: The ACA's removal of cost sharing for preventive services among privately insured seeks to address financial barriers in accessing timely care. Prior studies found disparities in colorectal cancer (CRC) testing but none examined the effectiveness of the ACA on privately insured by sex and race.

Objective(s): To understand the barriers to CRC testing in privately insured individuals post ACA by sex and race.

Material/Methods: We used 2013 Behavioral Risk Factor Surveillance System survey to evaluate CRC testing rates of privately insured patients by race and sex. CRC testing was defined by USPSTF recommendations. Multivariable logistic

regression models estimated associations between covariates and CRC testing.

Results: Thirty-nine states asked about insurance type, with 142,641 of respondents privately insured. Adjusted for covariates Whites who had low income (OR 0.58, 95%CI 0.45–0.75), less than high school education (OR 0.55 95%CI 0.36–0.85), five or more years since last check-up (OR 0.21, 95%CI 0.15–0.30) and did not have a personal doctor (OR 0.59, 95%CI 0.47–0.74) were less likely to have CRC testing. Blacks who were in poor health (OR 3.02, 95% CI 1.13–8.09) were more likely to have CRC testing. Hispanics with five or more years since last check-up (OR 0.01, 95%CI 0.01–0.09) and dissatisfied with care (OR 0.07, 95% CI 0.01–0.44) were less likely to have CRC testing. Men (OR 0.46, 95%CI 0.34–0.63) and women (OR 0.66, 95%CI 0.48–0.91) who did not have a personal doctor were less likely to have CRC testing.

Conclusions: Disparities by socioeconomic status and patterns of care seeking are still apparent in privately insured individuals. Further research is needed to better understand disparities by subpopulations among privately insured and can be more fully understood by looking at factors beyond socioeconomic status including regular source of care, satisfaction with care, and health status.

34. Listening to Women: Expectations and Experiences in Breast Imaging

Aimee Gallagher¹, Susan Harvey²

¹*Society for Women's Health Research (SWHR), Washington, District of Columbia*

²*Johns Hopkins Medical Institutions, Lutherville, Maryland*

Background: Women may have misconceptions about mammography which impact breast cancer screening behaviors. Screening mammography has been shown to reduce mortality 20% in women (aged 40–74), demonstrating its effectiveness. Understanding women's views on mammography may assist in understanding how to improve utilization, early detection and therefore impact survival.

Objective(s): To assess women's knowledge and attitudes towards mammography, including misconceptions, barriers, motivators, and emotional responses.

Material/Methods: SWHR queried 3501 women of varied race/ethnicity in the US (aged 18–93) in 2014 using a survey that consisted of 10 eligibility questions and 39 attitudinal and knowledge questions about mammography. Women participated through internet surveys, telephone interviews or personal interviews in English or Spanish.

Results: Although 78% women agreed that mammography was an important part of breast health, only 54% reported having an annual mammogram. Cost and lack of adequate insurance coverage were cited as barriers to scheduling and attending mammography appointments. The majority of women (63%) were unaware that mammography was a no-cost-to-the-consumer benefit under the Affordable Care Act (ACA). Motivating factors for attending mammography appointments included recommendations from a healthcare provider (56%) or a reminder at a check-up (53%). Forty-seven percent reported having received at least one call-back after undergoing mammography screening rounds; with further evaluation, 89% of the call-backs were determined to be false positives. This was identified as a concern by women and 82% of respondents wanted imaging with improved specificity. Increased sensitivity in mammography was also identified as an important factor for 81% of women.

Conclusions: Barriers and motivators regarding mammography were identified. Misconceptions about costs and lack of adequate coverage may be overcome by educating women about ACA coverage. Healthcare providers' recommendations motivated women to have a mammogram, identifying a provider education opportunity. Educating women about newer technologies may reduce the anxiety associated with this testing and improve outcomes.

35. Use of Social Media and Text Messaging Outreach in the Recruitment of Millennials into a Phase 3 Contraceptive Patch Study

Elizabeth Garner

Agile Therapeutics, Inc., Princeton, New Jersey

Background: Recruitment of healthy millennials into clinical trials in the digital age can be challenging. Millennials are known to rely on social media and text messaging for communication and information. In addressing slower than expected enrollment in the SECURE trial, a Phase 3 study of an investigational hormonal contraceptive patch, a digital social media and text messaging recruitment campaign was undertaken.

Objective(s): To measure the impact of a social media and text messaging outreach campaign used to enhance awareness and boost enrollment in a large Phase 3 trial of an investigational contraceptive patch.

Material/Methods: Teuteberg Incorporated, a company specializing in clinical trial recruiting through social media and online advertising, and mProve Health, a company focused on text messaging/SMS systems for recruitment, were engaged to support patient recruitment for the SECURE trial. Geo-targeted, IRB-approved advertisements for the study were placed on key search engines (using targeted keywords), Facebook, Pandora, and Spotify. Interested subjects living within a set radius to study sites were directed to the study website via targeted online advertisements, from which a prequalification web screener could be accessed online or via SMS text messaging through mProve Health's mCAST system. The prescreener included 5 questions to assess potential eligibility for the trial. Potential subjects meeting prescreening criteria were provided the option to have their contact information given to a participating site in their location via a secure encrypted patient portal. Weekly metrics were gathered, including number of hits to the study website, number of referrals, and conversions to screenings at each study site. Sites were asked to provide final dispositions of all referrals.

Results: The outreach campaign increased screening and enrollment for the trial over a 2-month period, allowing for successful completion of enrollment. Final metrics are pending at the time of abstract preparation.

Conclusions: Social media and mobile technology outreach platforms are highly effective tools to support recruitment of healthy millennials into clinical trials.

36. A Procedure Curriculum to Train Community-Based Family Medicine Residents on Long-Acting Reversible Contraception Insertion

Bhavika Patel, Rose Ann Ghabour, Neha Sachdev, Annabelle Dimapilis

Virtua Family Medicine, Voorhees, New Jersey

Background: The use of long-acting reversible contraceptives (LARCs) has increased significantly, yet the number of family physicians providing these services remains low (1, 3). This leads to barriers in accessing LARCs for many women, especially adolescents. Family physicians who train in residency programs where LARC insertions are routinely performed are more comfortable and more likely to continue these procedures in their practice (3, 4), yet many community-based family medicine residencies do not include LARC insertion in curriculum.

Objective(s): The objectives of this curriculum are to increase the number of LARC insertions performed at a community-based family medicine residency and increase the comfort level of resident physicians in discussing and inserting LARCs.

Material/Methods: Dedicated, mandatory training workshops were held on Nexplanon and IUD insertion for residents and faculty. A procedure committee of resident and faculty champions, nurses and MAs developed office protocols for scheduling, performing and billing LARC insertion. Graduation requirements were updated to include LARC insertion as a required procedure.

Results: Five insertions were performed since implementation of the curriculum in October 2015. The electronic medical record will be used to track insertion numbers for two years. An anonymous baseline survey was sent to 18 residents, 12 alumni and 5 faculty members regarding overall comfort and likelihood of providing insertions in practice. Currently, 40% of respondents reported being “very” or “mostly” likely to provide LARC insertion in their practice and 50% reported being “mostly” or “very” comfortable discussing LARCs. The survey will be repeated at the end of the next two academic years for comparison and analysis.

Conclusions: Current comfort level with discussing and performing LARC insertions in family medicine residents is low. With procedure training and regular opportunities for LARC insertions, resident comfort level and numbers of insertions are expected to increase.

37. Comparative Analysis of Inpatient Costs for Obstetrics and Gynecology Surgery Patients Treated with Intravenous (IV) Acetaminophen Plus Opioids or IV Opioids Alone for Postoperative Pain

Ryan Hansen¹, An Pham², Stela Balaban², George Wan²

¹University of Washington, Seattle, Washington

²Mallinckrodt Pharmaceuticals, Hazelwood, Missouri

Background: Recovery from obstetrics and gynecology (OB/GYN) surgery is oriented toward restoring functional outcomes while reducing length of stay and medical expenditures. Optimal pain management is a key to reaching these objectives.

Objective(s): To compare OB/GYN surgery patients who received combination IV acetaminophen (IV-APAP) and IV opioid analgesia to those who received IV opioids alone on length of stay (LOS) and hospitalization costs.

Material/Methods: Retrospective analysis of the Premier database (between January 2009-June 2015) comparing OB/GYN surgery patients who received perioperative pain management with combination IV-APAP and IV opioids to those who received only IV opioids starting on the day of surgery and continuing up to the second post-operative day. OB/GYN surgery (caesarean section/total hysterectomy) patients were identified using common procedural terminology and international

classification of diseases version 9 procedure codes. Among those subjects, the receipt of IV-APAP and IV opioids was identified using service records and patients who received IV non-steroidal anti-inflammatory drugs were excluded from the IV opioids group.

Results: We identified 225,142 OB/GYN surgery patients with 89,568 (40%) who had received IV-APAP. Subjects averaged 36 years of age and were predominantly Caucasian (60%). Majority of subjects ranked in the minor or moderate categories for both severity of illness and risk of mortality (APR-DRG SOI and ROM, respectively). Unadjusted LOS for IV-APAP was 3.1 days (S.D. 2.7) compared to 3.3 days (S.D. 3.0) with only IV opioids, a statistically significant difference of 0.20 days ($p < 0.0001$). Unadjusted hospitalization costs were \$9,043 (S.D. \$7,564) for IV-APAP and \$9,546 (S.D. \$8,653) for IV opioids, also significantly lower by \$503 ($p < 0.0001$). Differences in hospitalization costs remained statistically significant in our instrumental variable models, with IV-APAP associated with \$484 lower hospitalization costs (95% CI: -\$760 to -\$208, $p = 0.0006$).

Conclusions: Compared to opioids alone, managing post-OB/GYN surgery pain with the addition of IV-APAP is associated with decreased hospitalization costs.

38. Assessing Medical Student Competency in IPV Screening and Management

Memoona Hasnain¹, Sonia Oyola², Fasika Alem¹, Talia Shear²

¹University of Illinois College of Medicine, Chicago, Illinois

²University of Chicago Pritzker School of Medicine, Chicago, Illinois

Background: Despite the recognized need for health professionals to competently assess and address health needs of persons experiencing IPV, preparing physicians to address this issue remains suboptimal. The lack of training in IPV in U.S. medical schools represents a missed opportunity to adequately prepare future physicians.

Objective(s): The purpose of this research was to conduct a cross sectional study to assess medical students' preparedness to screen for and address the needs of persons who have experienced IPV.

Material/Methods: An online survey was administered to all medical students at two LCME accredited medical schools during Fall 2014-Spring 2015. The survey questions were drawn from an existing survey instrument, PREMIS (Short et. al, 2006), a validated tool designed to assess healthcare professionals' attitudes and preparedness related to screening for IPV. An online survey tool, Qualtrics, was used to collect survey data. Quantitative data were analyzed using descriptive statistics. Narrative data was summarized using content analysis methodology.

Results: 137 medical students consented to participate and completed the online survey. The mean perceived preparedness score was 32.57 (SD 12.7), corresponding to the “minimally prepared” level. The mean perceived knowledge score was 46.24 (S.D. 17.3), corresponding to the “very little” perceived knowledge level. 66% of students reported that they do not currently screen patients for IPV, 7% reported screening all new patients, and 20% reported screening all patients with abuse indicators on history or exam “Time constraints” and “lack of role models” were major themes identified as obstacles to integrating IPV training into medical school curriculum.

Conclusions: Medical students report low perceived knowledge and preparedness related to IPV screening. Moreover, we found low reported rates of actual IPV screening amongst medical students. Medical student reported barriers to training include time limitations and lack of faculty role models. The findings of this study indicate a need for further medical education innovation in this field.

39. Recruitment Feasibility Study for Reducing Postpartum Smoking Among Low-Income and Hispanic Women

Helai Hesham, Sandra Curet

Lehigh Valley Health Network, Allentown, Pennsylvania

Background: Tobacco smoking is the leading preventable cause of premature morbidity and mortality. Pregnant women represent a unique subgroup for who continued smoking is associated with adverse outcomes, including increased risk of ectopic pregnancy, spontaneous abortion, preterm delivery, low birth weight, and perinatal mortality.

Objective(s): This study examines the feasibility of recruitment for, and implementation of, a smoking cessation program among low-income pregnant women in a community-based healthcare setting.

Material/Methods: We recruited 60 low-income pregnant smokers who received either the Forever Free for Baby and Me or Libres Para Siempre... Por Mi Beb  y Por M , smoking cessation self-help booklets and completed baseline, 1 month, 8 month and 12 month postpartum assessments.

Results: Total number of eligible patients was 107 and 60 were recruited with a 56.1% enrollment rate. Permanent attrition rates were found to be 16.7% (1 month), 43.3% (8 month), and 56.7% (12 month). Overall quit rate at 12 months postpartum was 19.2%.

Conclusions: Within our population demographic self-help booklets for smoking cessation provided wanted and needed education with positive results. The program had a 19.2% quit rate overall at 1 year postpartum and nearly 50% of patients reported not smoking at all or "a few" cigarettes at 1 year. Nearly 96% showed some reduction from what they were smoking prior to the program. Self-help booklets were efficacious and offered a low-cost modality for relapse-prevention assistance to low-income pregnant and postpartum women.

40. Regional Variations in Vaginal HPV Prevalence and Vaccination Among Females Across Time in NHANES (2003–2012)

Jacqueline Hirth, Tabassum Haque Laz, Yong-Fang Kuo, Christine McGrath, Jonathan Starkey, Richard Rupp, Abbey Berenson

University of Texas Medical Branch, Galveston, Texas

Background: The South has a lower rate of human papillomavirus (HPV) vaccination compared to other regions of the US despite having higher rates of cervical cancer. Lower rates of vaccination may contribute to inequalities in HPV prevalence and prolong regional cervical cancer disparities.

Objective(s): To evaluate vaginal HPV regional prevalence of vaccine-type HPV (types 6, 11, 16, and 18) and vaccination between regions using data from the National Health and Nutrition Examination Survey (NHANES).

Material/Methods: Five NHANES cycles (2003–2012), including 10,247 women between 14 and 59 years of age with adequate vaginal samples to detect HPV DNA, were combined to evaluate regional variations in HPV prevalence between 4 Census regions of the US. Bivariate comparisons were made using Rao-Scott chi-square tests. Stratified logistic regression analyses were used in order to assess differences in HPV prevalence between regions by pre-vaccine years (2003–2006) and post-licensure years (2007–2012). Estimators were weighted to adjust for complex sampling design.

Results: Vaccine initiation among the total sample was lowest in the South (5.7%) compared to the Northeast (6.3%), the Midwest (6.2%), and the West (6.5%). Regional comparisons revealed differences for any type of HPV ($p < 0.01$), high risk types ($p < 0.05$), high risk non-vaccine types ($p < 0.05$), and any non-vaccine types ($p < 0.01$). In analyses stratified by the pre-vaccine and post-licensure years, women in the South had higher odds of any HPV types and non-vaccine types compared to the Northeast. During post-licensure years, women in the South were more likely to test positive for vaccine type HPV and high-risk vaccine type HPV.

Conclusions: Women in the South experienced a higher odds of testing positive for HPV, with the most notable being the high risk vaccine-type HPV during the post-licensure years for the vaccine. These findings suggest that disparities in vaccination may contribute to unequal regional prevalence of HPV vaccine types.

41. Is Resilience a Protective Factor for African American Women with Depressive Symptoms in a Community Based Primary Healthcare Center?

Kisha Holden

Morehouse School of Medicine, Atlanta, Georgia

Background: Depression is one of the most prevalent mental health problems in the United States. Depression is a treatable medical illness that can occur in any woman, at any time, and for various reasons regardless of age, race or income. Research centered on improving mental health outcomes in the primary care setting is considered a public health priority. Not only do a large percentage of individuals receive all or part of their mental health treatment in primary care settings, but racial minorities in particular are more likely to report depressive symptoms to primary care physicians than to mental health practitioners. Nevertheless, more women than men reported that they prefer advice about depression from their primary care physician and a critical link to aid in identifying and addressing depression and associated issues for African American women (AAW).

Objective(s): The objectives of the study are to: 1) ascertain selected risks and protective factors for depressive symptoms among AAW seeking primary care, and 2) determine the prevalence and correlates of depressive symptoms, including the role of resilience among AAW in a community based primary healthcare center.

Material/Methods: This cross-sectional pilot study ascertained self-report data from 290 AAW women concerning background factors, diagnosed chronic diseases, and measures of depressive symptoms and resiliency. Descriptive statistics, Pearson product-moment correlation and logistic regression analyses were conducted.

Results: Findings indicate that depressive symptoms are experienced by 49% of AAW and 10% of these women indicated a history of suicidal ideation. AAW had moderately high resil-

iciency scores that had a statistically significant inverse relationship with depressive symptoms. This suggests that resiliency is a protective factor for depressive symptoms. Depressive symptoms were positive correlated with AAW's diagnosis of at least one chronic disease (e.g., diabetes, heart condition, and mental health disorder). The strongest predictors of depressive symptoms were previous diagnoses of a mental health condition and unemployment.

Conclusions: This study adds to the dearth of research concerning correlates and predictors of depressive symptoms among a clinic sample of AAW. It supports the need for better integration of mental and behavioral health in primary healthcare settings.

42. The Support Group as a Tool to Address Sexual Abuse Issue Among Young Girls

Elyse Igihozo

Capacitar, Kigali Rwanda

Background: In Rwanda during the genocide, sexual violence has been used as a weapon of war where about 250,000 women were raped and many were infected with HIV/AIDS (UNIFEM, 2006). The Government of Rwanda considers gender as one of the most important initiatives in the construction of durable peace and sustainable socioeconomic development. "It is essential to act now," Claire insisted Bisamaza Permanent Secretary Ministry of Youth, citing a study of behavioral surveillance in 2006 in which 12.1% of Rwandan girls reported having had first reports sex with a man at least ten years older. In a 2005 survey on demography and health, years HIV prevalence was estimated at 1.4% HIV prevalence among women aged 15–24, a rate three times higher than among young men the same age.

Objective(s): Inform the community about the extent and consequences of sexual abuse based on gender. Create awareness for health professionals on psycho social care of the young girls sexually abused.

Material/Methods: Since 2010, Capacitar Rwanda took the initiative to coaching girls teenage girls (14–18 years) who were sexually abused and infected with HIV. Capacitar its holistic biopsychosocial approach has greatly concerned the psychological aspect by individual therapy, family therapy, and group therapy and relaxation area while working effectively with others services, among others, medical, nutritional and social. During the school holiday, Capacitar put into place the holiday camp program for the young girls to educate them their rights.

Results: CAPACITAR RWANDA created a meeting place for the support group at the Muslim school in Nyamirambo Kadafi every Sunday afternoon. This group includes 17 female rape victims (14–18 years) including 12 abused by older men, 2 abused by family members 1 abused by his adoptive parent. These girls have group therapy where they are sharing experience. From the years above, over 90% of the members of this group became more cohesive and integrated.

Conclusions: Support groups for young women who have been sexually abused are a successful strategy to address gender based violence.

43. Sexual and Reproductive Rights and Experience of Intimate Partner Violence Among Female Teachers in South-West Nigeria

Winifred Imoyera, Ayodeji Adebayo

University of Ibadan, Ibadan, Nigeria

Background: Intimate partner violence (IPV) is the most common form of domestic violence in Nigeria and a violation of human rights. Many women in Nigeria are unaware of their sexual and reproductive rights (SRRs) and are unable to exercise them especially in the face of violations to their persons by an intimate partner. There is paucity of information on women's understanding of their SRRs and how it relates with their experience of IPV in Nigeria.

Objective(s): This study was conducted to assess the knowledge, prevalence and pattern of IPV among female secondary school teachers and to determine the association between knowledge of SRRs and experience of IPV in South-West Nigeria.

Material/Methods: A descriptive cross sectional study was conducted among 364 teachers using a multi-stage sampling technique. A semi-structured self-administered questionnaire was used to obtain information on respondents' knowledge of SRRs and experience of IPV. Data was analyzed with descriptive statistics and association between SRRs and experience of IPV tested with Chi-square at $p=0.05$.

Results: The mean age of respondents was 36.1 ± 7.8 . Less than one-half (41.2%) had good knowledge of SRRs. About 60% had ever experienced at least one form of IPV (sexual: 19.8%; verbal: 42.9%; physical: 8.0%; emotional: 38.2%). Significantly, higher proportion of respondents with good knowledge of SRRs experienced verbal IPV compared to 34% of those with poor knowledge ($p=0.006$).

Conclusions: The study revealed poor knowledge of SRRs and high prevalence of IPV among the study population. There is a need for in-service training regarding SRRs among secondary school female teachers who may serve as custodians of same to their students and communities.

44. Implementation and Assessment of the "It's Only Natural: Mother's Love, Mother's Milk" Campaign

Ashani Johnson-Turbes¹, Ursuline Singleton², Brieon Arthur¹, Danielle Nielsen¹

¹*ICF International, Atlanta, Georgia*

²*Office on Women's Health, Washington, District of Columbia*

Background: A recent report demonstrated that racial/ethnic disparities in breastfeeding rates are a present and persistent challenge in the United States with a high rate of discontinuance and racial/ethnic disparities, particularly among African Americans. Given this, the Office on Women's Health (OWH) supports ICF International to implement and test the "It's Only Natural: Mother's Love, Mother's Milk" campaign (ION).

Objective(s): This project is aimed at using (and examining use of) a culturally-appropriate, 2-pronged campaign implementation strategy to enhance adoption of breastfeeding as a best practice in African American communities. The project seeks to contribute to a positive shift in breastfeeding initiation, duration, and attitudes and to make breastfeeding a societal and cultural norm in the African American community.

Material/Methods: A 2-pronged ION implementation strategy, along with use of the #it'sonlynatural hashtag, was used to implement the ION in 3 states with low breastfeeding rates: Alabama, Louisiana, and Mississippi.

Results: Strategy 1 involved conduct of 4 trainings to train 28 local women to disseminate the ION at the grass roots level in 3 states. Women also facilitated 27 in-person, mother-to-mother support meetings across 8 breastfeeding clubs in AL and MS and distributed campaign materials during a national conference targeting African American women (the 2015 Essence Festival).

Strategy 2 involved 211 healthcare professionals attending 3 breastfeeding summits where 399 ION materials were disseminated. During 2014–2015 there were 1.8 thousand tweets from 1.4 thousand contributors reaching 2.5 million Twitter accounts.

Conclusions: There is value in using a culturally-appropriate, 2-pronged strategy to implement the ION. This approach involved a partner with proven success reaching target audiences suggesting that this is an effective approach to reach African American audiences and ultimately help reduce breastfeeding disparities.

45. Quality Of Life and Psychosocial Status of Women Cancer Patients (Wcp) from Malwa Region of Punjab, India

Rajinder Kaur¹, Parneet Kaur²

¹Punjabi University, Patiala, India

²Guru Nanak Dev University Amritsar, Patiala, India

Background: Quality of life (QOL) and psychosocial well-being of breast and gynaecological women cancer patients (WCP) is influenced by the diagnosis and treatment of the disease. Moderate to severe depression is the main paradigm.

Objective(s): To analyze the impact of diagnosis and treatment on QOL and psychosocial status of WCP suffering from breast cancer (BC), cervix cancer (CC) and ovarian cancer (OC) in Malwa region of Punjab.

Material/Methods: 300 WCP visiting OPD's of various Government Hospitals from February-April 2014 completed the predesigned EORTC questionnaires viz. QLQ-C30 (general cancer module), QLQ-BR23 (Breast cancer module), QLQ-CX24 (Cervix cancer module) and QLQ-OV28 (Ovarian cancer module). Goldberg's depression scale and Kuppuswamy's socioeconomic scale (2012) were administered for the measurement of depression and socioeconomic status, respectively.

Results: Present study concluded that more than half of the WCP were illiterate (62.33%), depressed (MDV=47.54) and from rural background (73.33%). Studied age group 39–58 years suffered extensively from women related cancers (BC, 54.84%, MDV=41.53; CC, 54.55%, MDV=43.07; OC, 69.23%, MDV=46.78). Depression levels elevated and QOL diminished with each chemotherapy or radiotherapy dose. Patients without surgery have poor QOL and high depression levels (BC, 7.09%, MDV=44.27; CC, 81.81%, MDV=43.07; OC, 76.92%, MDV=46.2) along with fatigue, pain and dyspnoea. Statistically significant results observed in QOL of BC/CC patients ($p > 0.001$) as well as in social functioning of BC/OC and CC/OC patients.

Conclusions: We concluded that chemicals used in agricultural fields and lack of awareness regarding personal health care tremendously affects the health status and well-being of Punjabi women. There is utmost need of personal health care awareness campaign for Indian women as most of the women reach hospital at last stage of cancer.

46. 17 β -Estradiol Induced Effects on ACL Laxness and Neuromuscular Activation Patterns in Female Runners

Iman Khowailed

Touro University, Henderson, Nevada

Background: Female athlete's increased risk for non-contact anterior cruciate ligament (ACL) injury has been well docu-

mented (Dedrick et al., 2008, Ireland and Ott, 2004). Women are two to eight times more likely to injure their ACL when compared to men in comparable sporting activities (Wojtys et al., 1998). The discrepancy in ACL injury risk between sexes has been attributed to multiple factors including differences in anatomical, hormonal, biomechanical, and neuromuscular characteristics (Ireland and Ott, 2004).

Objective(s): To investigate the effects of 17 β -Estradiol across phases of menstrual cycle on the anterior cruciate ligament (ACL) laxness and neuromuscular control patterns around the knee joint in female runners.

Material/Methods: Twelve healthy female runners, who reported normal menstrual cycles for the previous 6 months were tested twice across one complete menstrual cycle for serum levels of 17 β Estradiol (E), and knee joint laxity (KJL). Electromyographic (EMG) activity of the quadriceps and hamstrings muscles was also recorded during running on a treadmill. The changes in the EMG activity, KJL, and hormonal concentrations were recorded for each subject during the follicular and the ovulatory phases across the menstrual cycle.

Results: An observed increased in KJL in response to peak E during the ovulatory phase, was associated with increased pre-activity of the hamstring muscle before foot impact ($p < 0.001$). A consistent pattern was also observed in the firing of the quadriceps muscle recruitment pattern throughout the follicular phase associated with decreased hamstring recruitment pattern during weight acceptance phase of running ($p = 0.02$). Additionally, low ratio of medial to lateral quadriceps recruitment was associated with a significant reduction of the quadriceps to hamstring co-contraction ratio during the follicular phase.

Conclusions: Changes in KJL during the menstrual cycle in response to 17 β -Estradiol fluctuations changes the neuromuscular control around the knee during running. Female runners utilize different neuromuscular control strategies during different phases of the menstrual cycle which may contribute to increase ACL injury risk.

47. Routine Pelvic Exams: Women's Attitudes and Beliefs in Light of New Guidelines

Juliana Kling¹, Suneela Vegunta¹, Stephanie Faubion², Mina Al-Badri¹, Amit Shah¹, Heather Fields¹, Mark Wallace¹, Barbara Ruddy¹, Michael Bryan¹, Kathy MacLaughlin²

¹Mayo Clinic in Arizona, Scottsdale, Arizona

²Mayo Clinic Rochester, Rochester, Minnesota

Background: Routine pelvic exams have been a fundamental part of the annual physical exam for women for decades. However, recent guidelines from the American College of Physicians (ACP) recommend against routine pelvic exams in asymptomatic, non-pregnant, average risk women.

Objective(s): To evaluate women's attitudes and beliefs regarding pelvic exams and how knowledge of new guidelines will affect their attitude and beliefs.

Material/Methods: A descriptive cross-sectional study was performed using a self-administered written survey. Non-pregnant women aged 21 years or more presenting to outpatient clinics at Mayo Clinic Arizona or Mayo Clinic Rochester were presented with the survey. The survey was developed after a thorough review of the literature and was revised to a final form based on provider suggestions. The survey was pre-tested by staff for clarity and comprehension. After inquiring about pelvic exam practices and beliefs, participants were then informed of the ACP

guidelines to identify how it would affect their attitude and beliefs regarding pelvic exam frequency. Demographics and pertinent medical history questions were also collected from participants.

Results: 671 mostly Caucasian, married, educated female participants completed surveys. Pelvic exams were described as reassuring and respectful, and a majority believed they were useful in detecting ovarian cancer (74.6%), were necessary to screen for sexually transmitted infections (STIs) (71%) or prior to initiating contraception (67%). 54% believed they should have yearly pelvic exams, and 49% reported having yearly pelvic exams. Once presented with the ACP guideline, a significantly lower percentage planned to continue yearly pelvic exams (34.9%, $p < 0.0001$).

Conclusions: Women report pelvic exams are reassuring, important and despite evidence to the contrary, believe them necessary for STI screening or contraception initiation and useful for ovarian cancer detection. After education on pelvic exam screening guidelines, fewer women planned to continue yearly pelvic exams.

48. Research Professionals' Experience and Perspectives on Women's Participation in Clinical Research

Anita Kurt, Lauren Semler, Matthew Meyers, Bernadette Glenn-Porter, Samantha Myles, Stephen Dusza, Jeanne Jacoby, John Smulian

Lehigh Valley Health Network, Bethlehem, Pennsylvania

Background: Despite continued focus and federal funding requisites, significant gender and racial disparities persist in clinical research participation. Although understanding regarding research professionals' perspectives about barriers to minority participation has improved, their perspective regarding women's enrollment remains understudied.

Objective(s): To research professionals' attitudes, barriers and potential facilitators to enrolling women in clinical research.

Material/Methods: We conducted an anonymous and voluntary nationwide survey of research professionals whose institution received NIH and/or AHRQ funding in 2013 to conduct clinical research. Research professionals were surveyed regarding factors perceived as barriers deterring women from participation versus factors deterring research professionals from enrolling them (7 questions each) on a 5-point Likert-type scale ranging from "strongly disagree" (score=1) to "strongly agree" (score=5).

Results: Out of 13,541 recipients, only 1,007 (7.4%) responded. After excluding those 374 who were not involved in enrolling patients, 633 surveys were analyzed. Of these, 409 (64.6%) were from investigators, 473 (74.7%) were enrolling in federally funded studies, and 335 (52.9%) were female. Fear of unknown side-effects and unavailability for follow-up visits were the most significant perceived patient barriers to women's participation, both with a median score of "4" (IQR=1). Respondents were neither hesitant nor listed any factor as significant barrier to enrolling women (all with a median score of "1," IQR=1). Women over child-bearing age were considered more likely to participate in research (median "3," IQR=0). A majority indicated that DVDs demonstrating how to approach female candidates might be useful in enrollment training (median "3," IQR=1).

Conclusions: Research professionals perceive that women over child bearing age are more likely to participate in clinical research than younger women. Although they expressed no

hesitance in approaching women for participation, a majority responded that DVDs demonstrating how to approach women for research might improve their comfort with enrolling women.

49. The Clinical Utility of a Precision Medicine Blood Test Incorporating Age, Sex, and Gene Expression in the Evaluation of 288 Women Presenting with Stable Symptoms Suggestive of Obstructive Coronary Artery Disease: Subgroup Analysis from the PRESET Registry

Joseph A. Ladapo, MD, PhD¹, Matt Budoff, MD², David Sharp, DO³, Michael Zapfen, MS⁴, Lin Huang, PhD⁴, Bruce Maniet, DO⁵, Lee Herman, MD⁶, Mark Monane, MD⁴, Richard F. Wright, MD⁷

¹*NYU School of Medicine, New York, New York*

²*UCLA, Torrance, California*

³*Doctors for Health, Omaha, Nebraska*

⁴*CardioDx, Redwood City, California*

⁵*Bells Medical Clinic, Bells, Texas*

⁶*Johns Creek Primary Care, Suwanee, Georgia*

⁷*Pacific Heart Institute, Santa Monica, California*

Background: Advancements in precision medicine hold significant promise for improving care among patients at risk for or diagnosed with cardiovascular disease. A blood-based age/sex/gene expression score (ASGES) incorporating key features of precision medicine has shown clinical validity with a 96% negative predictive value in determining a patient's current likelihood of obstructive coronary artery disease (CAD).

Objective(s): To better characterize the clinical utility of the ASGES, a community-based registry was established to evaluate its effect on clinical decision-making.

Material/Methods: The prospective PRESET Registry enrolled stable, non-acute adult patients presenting with symptoms suggestive of obstructive CAD from 20 US primary care practices from September 2012 to August 2014. Demographics, clinical characteristics, and ASGES results (predefined as low [ASGES ≤ 15] or elevated [ASGES > 15]) were collected, as were referrals to cardiology or further functional/anatomic cardiac testing (ETT, ECHO, MPI, CCTA, ICA) after ASGES testing. Patients were followed for 1-year post-ASGES testing.

Results: Among the 288 women cohort (median age 57 years), clinicians referred 20/218 (9%) patients with low scores versus 31/70 (44%) patients with elevated scores to cardiology or advanced cardiac testing (unadjusted OR 0.13, $p < 0.0001$; adjusted OR 0.14, $p < 0.0001$). Six patients experienced major adverse cardiovascular outcomes during follow-up: all were considered unrelated to obstructive CAD.

Conclusions: In this community-based cardiovascular registry, the age/sex/gene expression score demonstrated clinical utility and long-term safety in the evaluation of women with suspected obstructive CAD, thereby minimizing unnecessary referrals and additional testing of low-risk patients. Our work adds to the evidence base for precision medicine in cardiovascular care.

50. Prenatal Discussion of Contraceptive Options in Teenage Pregnancies

Roxanne Lamarre

University of Texas Medical Branch, Galveston, Texas

Background: Teenage pregnancy has been associated with lost social and economic opportunities as a result of less formal education. As well as greater emotional burden resulting in increased risk of depression and anxiety and lower overall life satisfaction during and after the pregnancy. Up to one-third of teenage mothers will become pregnant again within a year of delivery, highlighting the need for adequate postpartum contraceptive use. There have been no published guidelines for postpartum contraception counseling nor on the best time to initiate such a discussion.

Objective(s): To determine if contraceptive options are discussed during prenatal care among pregnant teenagers.

Material/Methods: Hospital and outpatient clinical records were reviewed for teenagers between the ages of 12 and 19, who delivered between January 1st and December 31st 2013 at the University of Texas Medical branch in Galveston (UTMB) John Sealy Hospital and received prenatal care at one of the UTMB-affiliated ambulatory clinics. The data used a logistic regression model on receipt of prenatal contraceptive counseling in a multivariate model. $p < 0.05$ was considered significant.

Results: A total of 244 postpartum teenagers with a mean age of 17.6 ± 1.2 years were included in this study. The majority were Hispanic (57%), followed by white (34%) and black (9%). Of the patients, 41% had less than 10 prenatal visits. Only 14% of the patients had a discussion about contraception during these prenatal visits, most of which occurred after 29 weeks of gestation (66%).

Conclusions: Pregnant teenagers are not frequently counseled about postpartum contraceptives. When counseling does occur it happens in the third trimester, which may not provide sufficient time for a thorough consideration of contraceptive options. Guidelines on when the provider should discuss postpartum contraception during the pregnancy may improve these numbers and should be discussed among national medical organizations.

51. Why are Maternal Mortality Rates Decreasing in California?

Elizabeth Lawton¹, Dan (Susan) Sun¹, Mark Damesyn¹, Connie Mitchell²

¹California Department of Public Health, Maternal, Child and Adolescent Health Division, Sacramento, California

²California Department of Public Health, Center for Family Health, Sacramento, California

Background: After a steady rise in maternal mortality rates (MMR) from 1999–2006, California experienced a statistically significant decline from 2006–2013. This decline occurs concurrently as U.S MMR has increased. California investigated maternal deaths from 2002–2007 to understand the rise, and based on findings, implemented targeted obstetrical quality improvement efforts.

Objective(s): To describe trends and select factors that may have contributed to the decline in MMR.

Material/Methods: Using death certificate data, we measured trends, timing of mortality, population differences, and causes of death among women before and after 2006.

Results: The California MMR declined 57% between 2006–2013 dropping from 16.9 deaths per 100,000 live births in 2006 to 7.3 deaths in 2013, reflecting a 12.4% annual decrease ($p < 0.0001$). The MMR includes ‘early’ maternal deaths (deaths while pregnant or within 42 days postpartum). If ‘late’ maternal death (43–365 days postpartum) rates were calculated, California experienced a 276% increase ($p < 0.0001$) during 2006–2013. The combined mortality rate (0–365 days postpartum) during the same

period was overall decreased by 20% ($p = 0.4121$). Early deaths decreased across all age groups, but late deaths increased among women aged 30 years or more. No differences in trends were noted for race/ethnicity, country of origin, or educational attainment. Trends in causes of death for 2006–2013 showed a 3.4% annual decline among grouped preeclampsia, obstetric hemorrhage, and obstetric embolism deaths ($p = 0.409$).

Conclusions: The decline in California’s early MMR is in stark contrast to national rates. However, when late deaths are added, the MMR remains relatively stable. These findings suggest that hospital-based quality improvement efforts in California begun in 2010 may be contributing to improved survival during acute obstetrical emergencies. Increased later deaths may be attributable to chronic diseases such as cardiovascular illnesses, consistent with higher rates of late deaths among older California women. Further study is underway to assess the decrease in the MMR in California.

52. Health-Related Quality of Life and Related Factors Among Women with Coronary Artery Disease

Chih-Ping Lee¹, Lee-Ing Tsao², Chao-Chung Ho¹, Mei-Hsiang Lin²

¹Hsinchu City, Taiwan

²Taipei, Taiwan

Background: Women have the same rate of suffering from coronary artery disease as men ten years after menopausal. Coronary artery disease is a chronic condition that requires long term treatment and follow-up. The role of these women transforms from caregiver to caretaker after suffering from coronary artery disease. This change affects their physical and mental status as well as their functional health status. However, it is often underemphasized that which factors affect women’s health related quality of life.

Objective(s): This research is to inspect five health related quality of life (physical limitation, stability of angina, frequency of angina, satisfaction of treatment and quality of life), social support (family, friend, and health professionals) and their related factors and to analyze important predictive factors that affect women’s health related quality of life.

Material/Methods: This research is a cross-sectional correlational research with convenient sampling. Sixty-seven women with coronary artery diseases were enrolled in this research in a cardiology outpatient clinic of a teaching hospital in northern Taiwan from January 2015 to September 2015. Structured questionnaire was implemented as data collection tool including information of geographic characteristics, health related quality of life (Seattle Angina Questionnaire, SAQ, Chinese version) and questionnaire of social support.

Results: Five dimensions of health related quality of life were analyzed using correlational regression analysis, including physical limitation and age, comorbidity, social networking, and support from friends. Age and support from friends are predictive to physical limitation, accounting for 21.4% of variation. Treatment is predictive to stability of angina, accounting for 20.6% of variation. Under the category of frequency of angina, age and treatment are predictive to frequency of angina, accounting for 13.4% of variation. Under the category of quality of life, treatment and support from friend are predictive to quality of life, accounting for 21.7% of variation.

Conclusions: Aged women with limited physical function need to be careful of their activity status. Nursing disease education

shall be tailor-made based on their age group and shall include energy-saving activity method. It is recommended to form patient support group for aged women with limited physical function, providing positive support. This research also discovered that spouses are not participative in coronary artery disease care. It is recommended that spouse and family participate in the coronary artery disease treatment and provide necessary support. It is important to inspect if patients develop social isolation because of their physical limitation. Encourage patients to participate in activities they are interested in and to use community resource to expand and stabilize their social network such as volunteering and religious activities. Community health nurses shall routinely visit patients with higher risk or provide phone support. Actively assess and understand the need of women with coronary artery disease, and provide related information or resource. Different treatment will affect the frequency and stability of angina. Patients and their family shall be educated about emergent signs of disease and when to seek medical attention no matter if they have stent placement or not in order to prevent complications. It is also recommended to set up coronary artery disease case manager to follow-up health function status of patients.

53. Excluded Data: Women in the Fire Service: A Review of Current Literature

Kayla Lindsay

The University of Alabama, Reston, Virginia

Background: There are 112,950 firefighters in the United States, only 3.7% are women. Over half of departments have no female firefighters at all. Female firefighters are often excluded from research studies because of the low population, they may be easily identified, or could have unknown effects on research results that are so heavily male dominated.

Objective(s): The purpose of this project was to find gaps in literature regarding female firefighter health.

Material/Methods: Inclusion criteria for this review were articles in the English language, primary prevention studies, interventions, wellness campaigns, and health related research of all research designs, searched in EBSCOHOST. The audience targeted included female firefighters of any age. Studies included focused on mental health, physical activity, nutrition, injury prevention, and overall wellness at the primary prevention level from the years 2005 to 2015.

Results: There are very few academic research articles regarding firefighter health, fitness, nutrition, and overall wellness. There are even fewer that include female populations.

Conclusions: The gender roles of the fire department play a pivotal part in fitness and health among females in the fire service. More research both qualitative and quantitative is warranted in this area. Further understanding about mental health, physical activity, nutrition, injury prevention, and overall wellness of the female firefighter population will help inform successful strategies for future wellness programs.

54. Outcomes Associated with Abdominal and Vaginal Hysterectomies: Complication Rates and Post-Surgical Expenditures

Melissa Lo, Wade Bannister

Optum, Eden Prairie, Minnesota

Background: Hysterectomies are performed on approximately 600,000 women annually in the US; it is the second-most

common surgery for women. The two primary methods are abdominal hysterectomies which remove the uterus and cervix through an incision in the abdomen and vaginal hysterectomies where the removal occurs through the vaginal canal.

Objective(s): To compare rates of post-surgical complications and associated total healthcare costs nine months after the procedure between abdominal and vaginal hysterectomies.

Material/Methods: Using claims data from a commercially insured population between 2013 and 2014, we retrospectively compared women receiving abdominal hysterectomies (n=6,937) to women receiving vaginal hysterectomies (n=23,735). We used chi-square tests to compare rates of post-surgical events between surgery types and developed a statistical model to estimate post-surgical costs.

Results: Among women under age 46, post-surgical rates of endometriosis, infections, ovarian cysts, and benign uterus neoplasms were statistically significantly higher among women receiving abdominal hysterectomies while post-surgical rates of genital organ prolapse were significantly higher among women receiving vaginal hysterectomies. Similar results were found for the women age 46 and over, with post-surgical rates of genitourinary cancer also significantly greater among women receiving vaginal hysterectomies. After controlling for patient age, comorbidities, and medical risk, the estimated expenditures in the nine months following surgery were significantly higher for women receiving abdominal hysterectomies as compared to vaginal hysterectomies, with an estimated difference of \$7,284.

Conclusions: This study indicates higher rates of many types of complications for women who have total abdominal hysterectomy compared to vaginal hysterectomies. Post-surgery costs nine months after were also significantly higher.

55. Internal Medicine (IM) Versus Obstetrics and Gynecology (OB/GYN) Resident Comfort in Caring for Women at High Risk of Future Cardiovascular Disease Due to Medical Morbidity of Pregnancy

Amy Loden

Washington University in St. Louis, Saint Louis, Missouri

Background: Women with prior gestational diabetes or pregnancy induced hypertension, including preeclampsia, eclampsia and HELLP Syndrome are at increased risk of future cardiovascular disease.

Objective(s): Investigate the difference between IM versus OB/GYN resident's comfort in advising women with prior glycemic or hypertensive pregnancy complications of their future cardiovascular disease risk in order to evaluate the learning needs of women's health care providers.

Material/Methods: An electronic, anonymous and voluntary survey was sent to 149 IM and 34 Ob/GYN residents at Barnes Jewish Hospital. Residents identified their best personal description ("not", "somewhat", "very" or "extremely") regarding comfort in knowledge of preventive care guidelines for women with abnormal glycemic or hypertensive pregnancy disorders and advising these women of their associated future increased cardiovascular risk. They also identified their comfort in caring for non-pregnant adult women with 1) glycemic disorders or 2) hypertension without prior pregnancy complications. Residents identified their level and program of training following the survey.

Results: Survey response rates were 59% (N=87) for IM and 76% (N=26) for OB/GYN. IM and OB/GYN trainees were

respectively “very or extremely comfortable” (6% vs 55%) advising women with abnormal glycemic or hypertensive pregnancy disorders of their future increased cardiovascular risk. Resident comfort was static despite year of postgraduate training for this category of women. Conversely, IM and OBGYN residents respectively reported being “very or extremely comfortable” managing 1) hypertension (82% vs 4%) or 2) glycemic disorders (64% vs 8%). Resident comfort managing these risks increased with each year of training.

Conclusions: OB/GYNs should collaborate with Internists regarding women at high risk of future cardiovascular disease due to prior glycemic or hypertensive pregnancy complications in order to optimize preventative cardiovascular care.

56. Internal Medicine (IM) Versus Obstetrics and Gynecology (OB/GYN) Resident Comfort in Providing Evidence Based Preventative Care to Women

Amy Loden

Washington University in St. Louis, Saint Louis, Missouri

Background: Adult women present for preventive care to both OB/GYN and Internal Medicine physicians. Certifying Boards in both specialties expect Diplomats to provide comprehensive preventative care to non-pregnant adult women. Graduating residents from each specialty may feel inadequately prepared to address concerns commonly seen in the other specialty and may be unfamiliar with preventative recommendations of both specialties regarding the same topics.

Objective(s): Investigate the difference between IM and OB/GYN resident’s comfort in providing preventative care regarding five measures addressed in both specialties for non-pregnant adult women in order to evaluate the learning needs of women’s health care providers.

Material/Methods: An electronic, anonymous and voluntary survey was sent to 149 IM and 34 Ob/GYN residents at Barnes Jewish Hospital. Residents identified their best personal description (“not”, “somewhat”, “very” or “extremely”) regarding comfort in knowledge of preventive care guidelines for 1) depression, 2) obesity, 3) hyperlipidemia, 4) pre-diabetes and diabetes, and 5) osteoporosis screening in the non-pregnant adult female patient based on current evidence based recommendations. Residents identified their program and postgraduate year of training following the survey.

Results: Survey response rates were 59% (N=87) for IM and 76% (N=26) for OB/GYN residents. IM and OB/GYN trainees were respectively “very or extremely comfortable” managing 1) depression (29% vs 12%), 2) obesity (39% vs 15%), 3) hyperlipidemia (82% vs 4%), 4) pre-diabetes and diabetes (64% vs 8%) and 5) osteoporosis screening (33% vs 27%). Resident comfort in managing all conditions increased with each postgraduate training year for both programs.

Conclusions: Both Internist and OB/GYNs are expected to be experts in women’s preventative care. Residency curricula in IM and OB/GYN should be optimized to better prepare graduates to meet this expectation.

57. Safety and Efficacy of Eluxadoline in Female Patients with Irritable Bowel Syndrome with Diarrhea

Susan Lucak¹, Alben Halpert², Charlene Morris³, Laryl Riley⁴, Leonard S. Dove⁵

¹Weill Cornell Medical Center, New York, New York

²Boston Medical Center, Boston, Massachusetts

³Pamlico Medical Center, Bayboro, North Carolina

⁴Gastroenterology Specialists, Inc., Westerly, Rhode Island

⁵Allergan plc, Driftwood, Texas

Background: Eluxadoline, a locally active, mixed μ -opioid receptor and κ -opioid receptor agonist, and δ -opioid receptor antagonist, is approved for the treatment of irritable bowel syndrome with diarrhea (IBS-D).

Objective(s): To evaluate the efficacy and safety of eluxadoline in female patients with IBS-D in two double-blind, placebo-controlled Phase 3 trials (IBS-3001, IBS-3002).

Material/Methods: Patients meeting Rome III criteria for IBS-D were randomized to twice-daily eluxadoline (75 or 100 mg) or placebo. Efficacy was evaluated through 26 weeks and assessed via a composite response endpoint, requiring simultaneous improvement in abdominal pain and stool consistency. Patients who met both daily pain responder ($\geq 30\%$ improvement in abdominal pain) and daily stool consistency responder (Bristol Stool Scale score of <5) criteria for $\geq 50\%$ of days were considered responders.

Results: A total of 2423 IBS-D patients (1602 female) were enrolled across both trials. Significantly greater proportions of patients receiving eluxadoline 75 mg (female: 25.7%, $p=0.001$; male: 27.3%, $p<0.001$) or 100 mg (female: 27.5%, $p<0.001$; male: 26.1%, $p=0.002$) vs. placebo (female: 17.5%; male: 15.2%) were composite responders over Weeks 1–12. Similar results were seen over Weeks 1–26. For the stool consistency component over Weeks 1–12, significantly more patients receiving eluxadoline 75 mg (female: 33.3%, $p<0.001$; male: 33.2%, $p=0.002$) or 100 mg (female: 34.6%, $p<0.001$; male: 35.1%, $p<0.001$) were responders than those receiving placebo (female: 21.6%; male: 21.3%). The proportion of pain responders over Weeks 1–12 was significantly higher only for male patients receiving eluxadoline 100 mg (46.3%, $p=0.048$) vs. placebo (37.9%). Reporting of gastrointestinal adverse events was generally greater in females (75 mg: 33.7%; 100 mg: 29.9%; placebo: 21.7%) than in males (75 mg: 22.6%; 100 mg: 23.4%; placebo: 15.2%).

Conclusions: Eluxadoline is effective and well tolerated in women with IBS-D based on the results of two large Phase 3 clinical trials.

58. Can Mindful Body Awareness Buffer the Effects of Poor Body Image on Stress Reactivity in Women?

M. Kathleen B. Lustyk

Seattle Pacific University and University of Washington, Seattle, Washington

Background: Poor body image is prevalent in women and is associated with stress. Mindful Body Awareness (MBA), an awareness of normal, non-emotive bodily processes and physical sensations, buffers reactivity to a laboratory stressor in women (Lustyk et al., 2012). Given that poor body image is associated with stress and MBA is stress reducing, investigating the interaction among these variables is warranted.

Objective(s): We investigated the effects of body image and MBA on hemodynamic and state anxiety responses to a laboratory stressor in women. Our primary objective was to assess the moderating effect of MBA on the relationship between poor body image and stress.

Material/Methods: Reproductive age (18–45 years) women (N=40) completed assessments of body image and MBA as part of a laboratory stress test. Testing occurred mid-day during participants' follicular phase. Electrocardiography continuously monitored heart rate (HR), blood pressure (BP) was taken at timed intervals, and state anxiety was assessed at baseline and immediately following the stressor (i.e., Paced-Serial Addition Task (Gronwall, 1977) and recovery.

Results: Analyses with BP and state anxiety were non-significant. MBA was inversely related to and significantly predicted HR reactivity and MBA significantly buffered the effect of poor body image on HR reactivity.

Conclusions: Our HR reactivity results for those with poor body image extends survey findings (Reaves et al., 2014) while the effects of MBA on HR reactivity replicates prior results (Lustyk et al., 2012). That MBA buffered the effects of poor body image on stress is a novel finding thus expanding our understanding of interrelationships among these variables while arguing for mindfulness-based stress-reduction interventions for those with poor body image.

59. Evaluation After Different Types of Surgery Using Mesh for Pelvic Organ Prolapse Repair

Ana Carolina Marchesini¹, Thomaz Rafael Gollop², Laís Rodrigues Bertoche³, Laís Paulon Sautchuk³

¹Jundiaí School of Medicine, Jundiaí, Brazil

²Jundiaí School of Medicine, São Paulo, Brazil

³Jundiaí School of Medicine, Jundiaí, Brazil

Background: Studies comparing the repair of pelvic organ prolapse (POP) through conventional surgery versus surgery using synthetic mesh do not present uniform performance and benefit results from the use of mesh, which is partially related to the great diversity of mesh kits available in the market.

Objective(s): Analysis of Pelvic Organ Prolapse Quantification system (POP-Q) parameters after POP repair surgeries using different types of synthetic mesh.

Material/Methods: Fifty-one women who undergone surgery in the Pelvic Floor wing of the School of Medicine of Jundiaí (Brazil) were included retrospectively. The Study was approved by the Research Ethical Committee. Different types of macro-porous and monofilament polypropylene mesh have been made available free of charge through the Unified Health System (SUS) which is a state owned agency, however without patterns for the materials. We used the following kits: GynecareProlift®, Dynamesh-PR4®, Dynamesh-SIS®, Dynamesh-PR2®, Dynamesh-PRS® and Uphold®.

Results: We used mesh in 84% of subjects; only 8 patients have undergone conventional surgery. Among patients who had mesh surgery, 88% had initial stage 3 or 4 and in postoperative care only 9.5% had shown stage 3 ($p < 0.001$). Dynamic POP-Q parameters changed expressively after surgery ($p < 0.001$). Point C varied the most, with average of less 10 cm on patients that had mesh surgery ($p < 0.001$). As regards complications, we have found: 1 patient developed stress urinary incontinence; 1 patient had increased bleeding without the need for blood transfusion; 1 patient died after mesenteric thrombosis in the 17th postoperative day. One patient showed symptomatic mesh exposure. Another patient presented posterior vaginal wall prolapse after the repair exclusively of the anterior wall.

Conclusions: Surgeries using mesh presented significant improvement of POP-Q parameters regardless of the type of mesh used.

60. Footprint to Evaluate the Feet of Diabetic Women

Beatriz Martínez, Sílvia Tasso, Adriana Silva, Ana Raphaela Simões, Nadja Barbosa, Marcos Mesquita Filho

Vale do Sapucaí University, Pouso Alegre, MG, Brazil

Background: Women with diabetes mellitus (DM) can develop many different foot problems. Even ordinary problems can get worse and lead to serious complications. Foot problems most often happen when there is nerve damage also called neuropathy. This can cause tingling, pain (burning or stinging), or weakness in the foot. It can also cause loss of feeling in the foot, so you can injure it and not know it. Poor blood flow or changes in the shape of your feet or toes may also cause problems. High plantar pressure is a proven risk factor for ulceration among individuals with DM. The photopodoscopia is one of the tools used in screening for high plantar pressure among these subjects. However, an examination photopodoscopia is not accurately demonstrates the high pressure area and there is no specific computer program to analyze the image plant.

Objective(s): Use footprint method to evaluate the feet of diabetic women.

Material/Methods: Our footprint method was developed by medical professionals and systems analysts from the University of Vale do Sapucaí, Minas Gerais, and Brazil. It is in registration process with the National Institute of Intellectual Property (INPI). Footprints were taken from 64 diabetic women using the photopodoscopia and our footprint method. It was compare high pressure points plant between the two tests. It was analyzed the agreement and intra-rater reliability.

Results: The average age was 63 ± 10.8 . The weighted kappa coefficient was high concordance ($Kw > 0.79$) for the intra-examiner analyses for most of the points studied on both feet.

Conclusions: Our footprint method with a specific computer program to analyze the footprints feature ease of handling and low cost, which can represent an important impact on the prevention of foot ulcers in diabetic women.

61. Functional Capacity and Sleep Quality in Diabetic Women

Beatriz Martínez¹, Vanessa Gomes¹, Thamires Santana¹, Ronan Costa², Raphael Dutra¹

¹Vale do Sapucaí University, Pouso Alegre, MG, Brazil,

²Universidade do vale do Sapucaí(UNIVAS), Pouso Alegre, MG, Brazil

Background: Some population-based surveys have shown that the prevalence of self-reported poor sleep increases after the age of 60. Poor sleepers subjectively experience longer sleep latencies, frequent nocturnal awakenings, less total sleep time, more difficulty initiating and maintaining sleep, and excessive daytime sleepiness. Many investigators report a female predominance in poor sleep, especially after 45 years of age. Concomitantly with these reports, females are more frequently users of sedative-hypnotic medication. Physical exercise is associated with improvement of cardiovascular, respiratory, muscular, endocrine and nervous system, and a better sleep quality. However, the association of these two conditions and diabetes mellitus (DM) is unclear.

Objective(s): Evaluate the association between functional capacities and sleep quality in diabetic women.

Material/Methods: It was a cross-sectional study with 200 women with DM type 2 (47 no sedentary, and 153 sedentary), from a single public health service in Brazil. The patients were interviewed with a questionnaire which contained information on sociodemographic profile and physical health conditions. Sleep quality was measured with the Pittsburgh Sleep Quality Index (PSQI). Physical exercise was measured by time of aerobic exercise at least 150 minutes per week. Functional capacity was measured with Lawton Index. The analysis was made through chi-square test, Fisher test, Mann-Whitney test, and Pearson Correlation. The significance level was set at 5% ($p < 0.05$).

Results: Mean age were 61.04 ± 9.67 in no sedentary (NS) and 63.9 ± 11.3 in sedentary (S), $p = 0.6$. Ethnicity, white were 83% in NS and 79.7% in S, $p = 0.6$. Over 10 years of DM were 57.4% in NS and 65.3% in S, $p = 0.3$. Psychotropic drugs users were 53.2% in NS and 63.4% in S, $p = 0.2$. Alcohol drinking were 85.1% in NS and 88.8% in S, $p = 0.5$. Current smoking were 12.5% in NS and 11% in S, $p = 0.5$. Coffee drinking were 98% in NS and 95% in S, $p = 0.4$. A1C less than 7% were 31.9% in NS and 26.8% in S, $p = 0.5$. Obesity were 46.8% in NS and 44.4% in S, $p = 0.8$. Good sleepers were 40.4% in NS and 26.1% in S, $p = 0.05$. There was correlation with quality of sleep and functional capacity in NS ($r = 0.3$; $p = 0.03$) and S ($r = 0.4$; $p < 0.001$).

Conclusions: There was no association between sleep quality and physical exercise in diabetic women, however there was a positive correlation between sleep quality and functional capacity in no sedentary and sedentary women.

62. Risk Factors for Foot Complications in Diabetic Patients: Sex Differences

Beatriz Martínez, Camila Silveira, Gustavo Côrtes

Universidade do vale do Sapucaí (UNIVAS), Pouso Alegre, MG, Brazil

Background: The diabetes mellitus (DM) is considered one of the diseases which the most affects the contemporaneous women and men and strikes populations all over the world, regardless of their economic and social levels. The foot complications represent the major cause of lower limbs non-traumatic amputation in the world, the 85% of them being preceded by ulceration. The risk factors to the development of foot complications are decreased sensitivity, chronic foot pain, peripheral vascular disease, deformities, and others. No study has shown differences in these risk factors between women and men.

Objective(s): Compare the risk factors for foot complications between women and men with DM.

Material/Methods: It was a cross-sectional study with a sample of 204 diabetic patients (113 women and 91 men). They had eighteen years old or more and type 2 DM. The study was approved by the Research Ethics Committee of the Vale do Sapucaí University (UNIVÁS), Brazil. The patients were interviewed with a questionnaire which contained information on sociodemographic profile and physical health conditions. Statistical analysis was carried out using the Statistical Package for the Social Sciences (SPSS) 18.0 (SPSS Inc., Chicago, IL, USA). Results were expressed as mean \pm standard deviation, and absolute and relative frequencies. The statistical analysis was made through chi-square test, Wilcoxon rank sum test and Spearman's correlation test. The significance level was set at 5% ($p < 0.05$).

Results: Women and men showed mean age was 62.9 ± 12.7 and 64.2 ± 10.5 years ($p = 0.1$), respectively. The prevalence of

single marital status was 38% in women and 17.6% in men ($p = 0.01$). The proportion of physically inactive was 75.2% in women and 70.3% in men ($p = 0.4$). The women had a lower proportion of obesity (37.2% vs 64.8% in men; $p = 0.01$) and alcohol drinking (1.8% vs 12.1% in men; $p = 0.0001$). There was no association between physically inactive and chronic foot pain, in both sex ($p = 0.2$). There was association between obesity and decrease of sensitivity of the foot in women ($p = 0.05$), but not in men ($p = 0.5$).

Conclusions: Although women have a lower prevalence of obesity compared with men, there was an association of this disease with the decreased sensitivity of the foot.

63. Molecular Breast Imaging as an Adjunct to Mammography and Breast Ultrasound: Our Initial Experience in the Community Based Tertiary Care Setting

Anne Moch¹, Eileen Ming², Laura Horne², Ann Curley¹, Kimberly Macaron¹, Lillian Stern³

¹Capital Health Medical Center, Pennington, New Jersey

²Epi Excellence, Garnet Valley, Pennsylvania

³Methodist Hospital Division of Thomas Jefferson University Hospital, Philadelphia, Pennsylvania

Background: Molecular breast imaging is a useful adjunct to mammography and ultrasound with high sensitivity (100%), specificity (88%), and detection rate for cancers (32%) and high risk lesions (21%).

Objective(s): This study describes our first 21 months experience with molecular breast imaging (MBI) in a community based tertiary care breast center.

Material/Methods: All MBIs performed from 2/2012 through 11/2013 were retrospectively reviewed and patients followed for at least 12 months. Data collected included patient demographics and breast density, indication, biopsy outcome, BIRADS 3, and follow-up findings. Sensitivity, specificity, and positive and negative predictive values were calculated on a patient (not lesion) basis.

Results: Of 151 female patients who underwent MBI, most were white, post-menopausal, with dense fibroglandular tissue. Median age was 53. The most frequent indications included problem solving (32%), high risk screening (30%), and evaluation for extent of disease (16%). 52 MBIs (34%) were positive of which 81% had dense breasts. All went on to biopsy (63%), further imaging (67%) and/or recommendation for 6 month follow up MBI (BIRADS 3; 7%;), unless lost to follow-up (11.9%). Among the 38 biopsies in 33 patients with a positive MBI, 32% were malignant and 21% high risk lesions; the remainders were negative/benign (including fibroadenoma and fat necrosis). All available follow-up of BIRADS 3 were negative. Among 99 patients with negative MBIs, none of the 88 with available information had cancer on follow-up. Sensitivity and NPV were 100%, specificity was 88%, and PPV was 33% overall and 39% in the subset of patients with dense breasts.

Conclusions: Our initial experience with MBI in a community based tertiary care breast center supports the use of this modality as an adjunct to mammography and ultrasound. In this tertiary care setting, we found a similarly high sensitivity and specificity for MBI comparable to that found in the academic and community settings.

64. Promoting Women's Rights to Reduce Risk of Gender Based Violence Among Rwandan Women

Christian Dominique Murinda

Akwos, Kigali, Rwanda

Background: The government of Rwanda in consultation with its development partners, civil society organization, private sectors and non-government organizations has implemented the necessary political legal and institutional framework to do so. According to reports, the women and children who suffer the most from acts of domestic violence and it's the men who consistently abuse the authority, power and responsibility ascribed to them by Traditional Rwandan Culture. A MIGEPROF study showed that from 2002–2007 over 25% of women were victims of sexual violence, over 12% were victims of physical violence, and over 13% were victims of physiological violence.

Objective(s): Provide psycho-social and legal support for women who are victims of domestic violence. Educate women about their rights and those of their children. To improve women's life.

Material/Methods: With partnership between AKWOS as Association of Kigali Women in Sport and WE-ACTx conducted a survey of 382 HIV + women who attend the WE-ACTx Clinic. The results showed that 32.7% had experienced physical violence, 25.9% had experienced sexual domestic violence, 20.7% had experienced sexual violence, and 46.6% had experienced psychological violence. AKWOS designed a psycho-social intervention using group therapy to support these women and football as a relaxation to them. AKWOS established the anti-gender based violence campaign through women's soccer game.

Results: Since 2012 the reports of the AKWOS psycho-social and judicial services teams give testimony to the positive changes of their patients. 78% of women legalized their legal marriage, and they have learned about reclaiming their rights with the help of legal services, and psycho-social support has given these women strength to combat depression and stress. Now they have the confidence, strength, security to build for their futures.

Conclusions: To eradicate the Gender based violence must be implemented in all domains and multi-disciplinary efforts: advocacy, sensitization, community mobilization and education in order to create a culture of non-violence.

65. Effect of Flibanserin on the Pharmacokinetics of a Combined Ethinylestradiol/Levonorgestrel Oral Contraceptive in Healthy Premenopausal Women

Jamie Noll, Louise Brown, James Yuan, Sam Spigelman

Sprout Pharmaceuticals, Division of Valeant Pharmaceuticals North America LLC, Bridgewater, New Jersey

Background: Flibanserin, approved by the US Food and Drug Administration for the treatment of acquired, generalized hypoactive sexual desire disorder in premenopausal women, is primarily metabolized by cytochrome P450 3A4 (CYP3A4). CYP3A4 is also involved in the metabolism of ethinylestradiol (EE), a widely used estrogenic component of oral contraceptives.

Objective(s): To evaluate the effect of steady-state levels of flibanserin on single-dose pharmacokinetics of EE and levonorgestrel (LNG) in a combination oral contraceptive.

Material/Methods: In this open-label, randomized, two-way crossover, phase 1 study, healthy premenopausal women were randomized to receive a single morning dose (fasting) of 30 µg EE/150 µg LNG alone or after 14 days of flibanserin 100 mg once-daily (evening dose) treatment, with a 4-week washout period between treatments. Plasma samples were assayed by a validated high-performance liquid chromatography-tandem mass spectrometry method.

Results: Of the 24 women enrolled (mean age, 38.0 years), 23 completed the study. After single-dose EE/LNG administration alone, the EE maximum plasma concentration (C_{max}) was 64.6 pg/mL and area under the plasma concentration-time curve from time zero to infinity (AUC_{0-∞}) was 654.3 pg·h/mL. Steady-state levels of flibanserin increased the EE C_{max} by 1.06-fold and the EE AUC_{0-∞} by 1.09-fold. After single-dose EE/LNG administration alone, the LNG C_{max} and AUC_{0-∞} was 4.7 pg/mL and 48.6 pg·h/mL, respectively. Steady-state levels of flibanserin decreased the LNG C_{max} by 1.02-fold but did not change the LNG AUC_{0-∞}. All adverse events were mild to moderate in intensity (incidence: 12.5% and 100% for EE/LNG treatment alone and with coadministration of flibanserin, respectively).

Conclusions: Pretreatment of flibanserin 100 mg once daily for 2 weeks did not relevantly change the single-dose pharmacokinetics of EE or LNG, suggesting that coadministration of flibanserin may not affect the exposure and efficacy of the contraceptive. However, the incidence of adverse events was increased with the coadministration of flibanserin.

66. Musculo-Skeletal and Other Work Related Disorders Among Female Garment Workers in Ibadan, Southwest Nigeria

Folashade Omokhodion, Mary Balogun

University of Ibadan and University College Hospital, Ibadan, Nigeria

Background: Garment workers in Nigeria are mostly self-employed. Many are women who work within their homes or designated shops. Their work involves hand raising, lifting and pedaling and consequently they may suffer musculo-skeletal and other work related disorders.

Objective(s): To assess the work conditions, musculo-skeletal and other work related disorders of female garment workers in Ibadan, southwest Nigeria.

Material/Methods: A cross sectional study design was utilized. Data on work conditions and musculo-skeletal disorders were collected from consenting female garment workers working within the catchment area of the Primary Health Care center run by the University College Hospital, Ibadan. Permission to conduct the study was obtained from the garment workers' association. The Oyo State Ministry of Health Ethics committee gave ethical approval.

Results: A total of 125 female garment workers were recruited. Their mean age was 26.5 ± 9.3 years, 52% were married and 77% had secondary education or higher. Majority, 95% worked more than 8 hours a day, 87% worked 6 days a week, 21% spent more than 3 hours a day standing and 58% spent more than 3 hours a day sitting. Work activities involved bending in 92%, lifting in 32%, hand raising in 14% and pedaling in 100%. Workplace hazards reported were noise, 63%, vibration, 40%, dust exposure, 19% and exposure to moving parts of machines, 58%. Needle prick accidents were reported by 81%. Current

health problems were low back pain, 14%, other musculo-skeletal pain, 14%, eye problems 11% and respiratory symptoms 13%. The top three health problems of concern were low back pain 64%, musculo-skeletal /joint problems, 54% and needle prick injuries, 21%.

Conclusions: Simple workplace remedies can be recommended to reduce musculo-skeletal disorders in this group of workers and health services can be channeled through their unions by building on existing structures of the Primary Health Care system.

67. Why do Married Women Resort to Induced Abortion Despite Availability of Free Contraceptive Services?

Ernest Orji

Obafemi Awolowo University, Ile-Ife, Nigeria

Background: Unintended pregnancy reflects the failure of family planning programmes to meet the contraceptive needs of all women at risk especially married women. While studies had been done in Nigeria on induced abortion, all these studies focused on women generally or on adolescents or teenagers. There is scarcity of studies focusing primarily on sexually active married women in reproductive age group. According to Nigerian NDHS report in 2013 contraceptive prevalence among currently married women was 15%. This is worrisome bearing in mind that contraceptives are now provided free in Nigeria health facilities.

Objective(s): To understand why these women procure abortions when the means to avoid unwanted pregnancies are available free of charge.

Material/Methods: This study assessed the factors associated with induced abortion among married women in Ife Central Local Government in Osun state, Nigeria. The study employed both quantitative and qualitative research methods. The quantitative study was cross-sectional in design and carried out with the aid of a semi-structured questionnaire applied to 402 married women attending the primary health centres in the Local Government. The qualitative design consisted of four focus group discussions with married women. Univariate, bivariate and multivariate analyses were done and statistical significance was accepted at $p < 0.05$. The qualitative data was analysed and presented with Z-Y index table.

Results: The results showed that 34.3% of the respondents have had unintended pregnancies within their marriage years. Majority of them (84.1%) reported that they had one unintended pregnancy. A major reason for having the unintended pregnancy was not using contraceptives despite the fact that majority of the respondents were aware of family planning methods and where they could get the methods. 14.2% of the respondents have had one or multiple induced abortion during their marriage years. Dilatation and Curettage was the most common method of induced abortion. The respondents with 1 living child were more likely to have had unintended pregnancies when compared to the respondents who have 3 living children [OR 8.37, (95% CI 2.89–24.06) $p < 0.001$]. Those who had never used contraceptives were also more likely to have had unintended pregnancies when compared to those who had ever used contraceptives [OR 4.08, (95% CI 2.25–7.42) $p < 0.001$]. The respondents who had never used contraceptives were more likely to have had induced abortion when compared to those who had ever used contraceptives [OR 2.91, (95% CI 1.34–6.32) $p = 0.007$]. Those who

have had 2 or more pregnancies were also more likely to have terminated unintended pregnancies when compared to those who had had 1 pregnancy. The association between the fertility intention of the respondents and their use of contraceptives was statistically significant ($p < 0.001$) showing an unmet need for contraception among those who wish to delay their next birth. Results from the qualitative study showed that the major reasons married women were not using contraceptives included the fear of side effects and their husbands' being against it. 16.4% of them had abortions complications such as abdominal pains, excessive vaginal bleeding, and fever among others. While 70% of these women sought treatment in private clinics, 30% used self-medications.

Conclusions: The study showed that despite high awareness of family planning methods, a high percentage of married women still have unintended pregnancies and resort to having induced abortion though they were aware that it is illegal.

68. Return of Menstruation and Perceived Risk of Pregnancy Among Women on Exclusive Breast Feeding in Nigeria Community

Ernest Orji

Obafemi Awolowo, University, Ile-Ife, Nigeria

Background: Misconceptions about timing for return of menstruation, pregnancy risk, and inadequate knowledge about effective use of modern contraceptive methods pose major public health challenge in women of reproductive age in developing countries.

Objective(s): This study aimed at determining pattern of resumption of menstruation among exclusively breastfeeding women, determinants of variations in the return of menstruation after delivery and perceived risk of pregnancy among exclusively breastfeeding women within Ife Central Local Government Area, Osun State.

Material/Methods: The study was a descriptive cross-sectional survey, employed both qualitative and quantitative design. A semi-structured interviewer administered questionnaire was used to collect data for the quantitative study while Focus Group Discussion Guide was used for the qualitative study.

Results: Findings revealed that a significant proportion (89.4%) of breastfeeding women in Ife Central Local Government effectively breastfeed their babies in line with World Health Organization recommendations. Sixty seven percent of the breastfeeding women remained amenorrhoeic at sixth month post-delivery, 12.8% of the women resumed menstruation within the first two months, 14.8% resumed between third and fourth months, 5.4% resumed between fifth to sixth months after delivery. Seventy five percent of the women relied only on Lactational amenorrhoea as a means of contraception while only 24.4% use modern contraceptive method after delivery. Forty six percent of the breastfeeding women solely chose the contraceptive method used while a quarter of them made such decisions with their husband which suggests a high level of autonomy and informed decision making among this category of women in this sub region. Age (OR=0.574, 95% CI) and parity (OR=0.94, 95% CI) of breastfeeding women are the most significant determinants of resumption of menstruation after delivery. Majorities (70%) of the breastfeeding women perceived themselves to be at low risk of pregnancy and were similarly observed to be at low risk of pregnancy when assessed.

Conclusions: Age and parity of the breastfeeding women were the significant determinants of resumption of menstruation

after delivery. Majority of the breastfeeding women perceived themselves to be at low risk of pregnancy and were similarly observed to be at low risk of pregnancy when assessed.

69. OB-GYN Resident Physicians Recommendations for Long Acting Reversible Contraception and Possible Coercion

Latoya Patterson, Beverly Gray

Duke University Medical Center, Durham, North Carolina

Background: Contraceptive coercion has been used in the past to prevent reproduction in minorities and low income women. Recommending long acting reversible contraception to low income and minority postpartum patients who do not prefer these methods may be coercive.

Objective(s): The purpose of this study is to test the effect of patient's sociodemographic characteristics and contraceptive preferences on resident physicians' postpartum contraceptive counseling patterns.

Material/Methods: We surveyed a national sample of 258 obstetrics and gynecology resident physicians, with a 30 item instrument, each composed of 8 of 32 scenarios of postpartum patients that varied by race, parity, socioeconomic status (SES) and patient's preferred form of contraception. Resident physicians indicated which form of contraception they recommended for each patient.

Results: Contraceptive recommendations that matched the patient's preference did not differ by race, parity or SES ($p=0.77$, $p=0.99$, $p=0.48$). However when patients were unsure about contraceptive preference, resident physicians were more likely to recommend long acting reversible contraception to patients with higher parity ($p=0.01$); though this was not associated with race or SES ($p=0.84$, $p=0.12$). When patients preferred Nexplanon, those residents who recommended Nexplanon were more like to recommend inpatient placement of the implant for patients with increased parity and lower SES ($p=0.03$, $p=0.01$) but not based on race ($p=0.89$).

Conclusions: Resident physicians contraceptive counseling practices for long active reversible contraception may differ based on parity and SES. Unconscious bias may underlie these differences. In order to address the potential for coercion in specific patient groups, it is important to educate residents of these differences.

70. Effectiveness of Intraperitoneal Chemotherapy in Recurrent Ovarian Carcinoma: Toxicity, Survival Benefits and Related Quality of Life

Giorgia Perniola, Cristina Don Francesco, Elisa Morrocchi, Claudia Marchetti, Violante Di Donato, Innocenza Palaia, Angela Musella, Ludovico Muzii, Pierluigi Benedetti Panici

Sapienza University of Rome, Rome, Italy

Background: Up to now, the favorable results of randomized clinical trials and meta-analyses [1–5] supported the use of Intraperitoneal (IP) chemotherapy as first line treatment in optimally cytoreduced advanced ovarian cancer.

Objective(s): The purpose of this study was to evaluate the effectiveness of intraperitoneal (IP) chemotherapy in terms of toxicity, survival benefits and related quality of life (QoL) in a cohort of platinum-sensitive recurrent ovarian cancer (ROC) patients.

Material/Methods: ROC patients were evaluated to undergo secondary cytoreduction and/or to receive chemotherapy with endovenous gemcitabine and ip cisplatin, administrated by direct puncture needle, under ultrasonographic guidance.

Results: Between January 2008 and December 2014, 57 consecutive patients were enrolled. A total of 621 IP procedures were performed, with a mean of 10.9 procedures per patient. Nine procedures (1.4%) were not performed as a result of patients' non-compliance. A specific analysis for 2 sub-groups of patients was conducted: Group 1, including optimally cytoreduced patients (42 patients; 74%) and Group 2, consisting of not-cytoreduced patients, undergoing laparoscopy or paracentesis (15 patients, 26%). There was 32% grade 2 and 14% grade 3 neutropenia; 14% grade 2 and 4% grade 3 anemia, 25% grade 2 and 11% grade 3 thrombocytopenia. Non-hematologic toxicity was mild, and procedural complications rate was 2.9%. Compliance for HRQL assessments was high whilst patients were on treatment (range, 95% to 98%). Patients optimally cytoreduced achieved a median OS of 54 months (95% CI, 8–75 mo) and a median DFS of 19 months (95% CI, 6–75 mo). Group 2 showed a median OS of 21 months (95% CI, 6–37 mo), $p<0.001$.

Conclusions: IP chemotherapy confirmed to be feasible and safe with scarce side effects and good survival outcomes.

71. Contraceptive Initiation Following Abortion and Risk of Subsequent Unintended Pregnancy Among Insured Women

Debbie Postlethwaite¹, Justine Lee², Maqdooda Merchant¹, Katie Alton³, Amy Alabaster¹, Pratima Gupta⁴, Tina Raine-Bennett¹

¹*Division of Research, Kaiser Permanente, Oakland, California*

²*Kaiser Permanente, Vallejo, California*

³*Kaiser Permanente, Oakland, California*

⁴*Kaiser Permanente, San Francisco, California*

Background: Barriers persist for insured women as well as uninsured women regarding immediate initiation of effective contraception post-abortion, thus putting them at risk for another unintended pregnancy.

Objective(s): The primary aim was to compare the initiation of contraception within 90 days of abortion by type of abortion services provided within an insured population. The secondary aim was to assess the risks of having a subsequent unintended pregnancy (abortion or self-reported at entry to prenatal care) within 12 months.

Material/Methods: A retrospective cohort study was conducted on 12,671 insured women age 15–44 receiving abortions through Kaiser Permanente Northern California (KPNC) in 2011–2012. Randomized proportional sampling (abortion services provided within KPNC versus from contracted abortion providers) was used to select the analytic cohort. Demographic and clinical characteristics (age, race/ethnicity, gravidity, parity, type of contraception initiated within 90 days of abortion, and evidence of an unintended pregnancy within 12 months) were collected through electronic database extraction and physician-led medical record review. Analysis included descriptive statistics, chi-square tests and t-tests. Logistic regression models were used to assess predictors of contraception initiation within 90 days post-abortion and having a subsequent unintended pregnancy within 12 months.

Results: No contraception was initiated by 38% of women with abortions performed within KPNC compared with 49% from contracted providers ($p=0.005$). Women initiating

short-acting reversible contraception (SARC) or no method (ref. long-acting reversible contraception [LARC]) post-abortion were almost 4 times as likely to have another unintended pregnancy within 12 months (OR: 3.66, CI: 1.48–9.03, $p=0.005$; OR: 3.75, CI: 1.50–9.36, $p=0.005$, respectively). There was no significant difference in unintended pregnancy within 12 months in women initiating SARC versus no method (OR: 1.03, CI: 0.63–1.66, $p=0.92$).

Conclusions: Immediate and effective post-abortion contraception, as an essential component of abortion care, should be integrated into all abortion care settings, thereby reducing a woman's risk for a subsequent unintended pregnancy.

72. Integrating Behavioral Health with Centralized Intake for Maternal, Infant and Early Childhood Home Visiting (MIECHV): Lessons from a Multi-Community System Enhancement Pilot

Sarah Price¹, D. Crystal Coles², Nancy Jallo³, Patricia Kinser⁴, Susan Kornstein⁵

¹Virginia Commonwealth University, School of Social Work and Institute for Women's Health, Richmond, Virginia, USA,

²VCU, Richmond, Virginia, USA,

³School of Nursing, Institute for Women's Health, Virginia Commonwealth University, Richmond, Virginia, USA,

⁴School of Nursing, Virginia Commonwealth University, Institute of Women's Health, Virginia Commonwealth University, Richmond, Virginia, USA,

⁵Institute for Women's Health, Virginia Commonwealth University, Richmond, Virginia, USA

Background: Enhancing women's mental health during and around the time of pregnancy is a public health concern. Universal screening has been criticized for identification without service engagement, particularly for low income women receiving public assistance (Kozhimannil et al, 2011). The Behavioral Health Integrated Centralized Intake project is a multi-year effort to enhance behavioral health risk screening and service utilization among low-income and under-resourced communities in Virginia.

Objective(s): This study considers the initial efficacy of the BH-CI approach by examining prevalence and patterns of risk for perinatal depression, substance use, interpersonal violence and smoking in community settings which are points of first contact for home visiting enrollment (N = 1,515); and exploring referral patterns for women with one or more identified areas of behavioral health risk.

Material/Methods: Initial identification utilized the Institute for Health and Recovery (IHR) Behavioral Health Risks Screening Tool which includes concurrent screening for perinatal depression, substance abuse, interpersonal violence, and smoking. This tiered community screening and engagement protocol moves from initial risk identification, to application of standardized screening instruments and finally to service engagement using SBIRT for service engagement.

Results: During the first full year of program implementation, 1,515 perinatal women participated in centralized intake and 1,409 engaged the behavioral health risk screening (93% participation). Of these women, 22% met risk triggers for perinatal depression; 11.6% for current alcohol or substance use, 10.2% for current or past intimate partner violence, and 18% for current tobacco use. Over 80% of risk-identified participants were successfully referred to one or more home visiting, mental health/substance abuse treatment or community service programs.

Clusters of elevated risk were associated with higher rates of referral.

Conclusions: Behavioral health risk screening and service enhancement were able to be successfully implemented by centralized intake staff members in standard community care. Rates of risk identification at point of first contact are similar to national prevalence estimates. Embedding screening into existing community context partnering with multiple providers appears to be an effective way to immediately link women with supportive community interventions.

73. Factors Associated with Maternal Knowledge of Pertussis and the Tdap Vaccine

Denise Ragland, Kristie Hadden, Nalin Payakachat

University of Arkansas for Medical Sciences, Little Rock, Arkansas

Background: In 2013, the Centers for Disease Control's Advisory Committee on Immunization Practices released new guidelines recommending Tdap (tetanus, diphtheria, and pertussis) vaccination during pregnancy regardless of previous pertussis vaccination.

Objective(s): This study explored factors that were associated with knowledge of pertussis and the Tdap vaccine in pregnant women.

Material/Methods: A cross-sectional survey study was conducted at a university-based women's clinic during May-August 2014. Consented participants took a multi-part electronic survey on a tablet device while at the clinic. The survey consisted of a 10-item assessment of health literacy, a 9-item pre-test assessing participant knowledge of pertussis (score ranges from 0 to 9), and questions regarding perceptions of the vaccine and demographics. A Tdap vaccine information statement (VIS) was provided afterward. The same 9-item knowledge of pertussis questions were administered after participants reviewed the VIS. The pre- and post-knowledge scores were compared using a paired t-test. Regression analysis was employed to explore associations between demographics and health literacy level on pertussis/Tdap knowledge.

Results: A total of 279 pregnant women participated in the study. The participants' average age was 26.4 years (SD=5.69). 27% of the study population had adequate health literacy. The average post-test knowledge scores were significantly higher than pre-test scores (6.4 vs. 4.2, $p<0.001$). Higher health literacy scores ($p<0.001$), advanced education levels ($p=0.001$), and later gestational age ($p=0.004$) were positively associated with higher pertussis/Tdap pre-test knowledge scores. Higher health literacy scores ($p=0.029$) and older age ($p=0.041$) were associated with improved knowledge scores.

Conclusions: Providing information about Tdap vaccine via a VIS significantly increased maternal knowledge of pertussis/Tdap vaccination. Health literacy played a significant role in participants' learning in our sample. Counseling pregnant women, especially those with limited health literacy, about pertussis/Tdap has the potential to improve vaccination rates in this population.

74. BRCA1 Mutations in Women with HGSOC and TNBC: Molecular Players that Drive Transformation as Potential Therapeutic Targets

Alexus Footman, Veena Rao

Morehouse School of Medicine, Atlanta, Georgia

Background: African American women have a higher mortality rate of triple negative breast cancer (TNBC) than other ethnic groups. High grade serous ovarian cancers (HGSOC) also have higher mortality rates in AA women than that of Caucasian Americans (CA). Women who carry a germline mutation in BRCA1 gene typically develop TNBC and HGSOC. Our group has previously cloned several BRCA1 isoforms which function as tumor suppressors of TNBC and ovarian cancers. We have found WT BRCA1 isoforms unlike the disease-associated mutant to bind a novel protein Ubc9. These mutant BRCA1 proteins have lost their capacity to function as tumor suppressors.

Objective(s): This study is based on the hypothesis that lack of association of Ubc9 with BRCA1 in patients with TNBC and HGSOC results in deregulated levels of Ubc9 which could trigger migration and distant metastasis of tumor cells.

Material/Methods: The methods used in this study were tissue culture, immunofluorescence analysis, western blot analysis, RT PCR analysis, siRNA analysis, migration assays and ECIS assays.

Results: In this study we have used physiologically relevant patient derived cell lines which harbor BRCA1 mutations and report in vivo association of BRCA1 and Ubc9 in normal mammary epithelial cells but not in BRCA1 mutant TNBC and HGSOC cells by immunofluorescence analysis. BRCA1 mutant TNBC, HGSOC and ovarian tumor tissue showed higher levels of Ubc9 compared to normal cells and tissues using western blot /RT PCR analysis. Furthermore we have knock-down Ubc9 expression using siRNA in these cells and studied the proliferation and migration using electric cell substrate impedance sensing (ECIS) assay.

Conclusions: Our results demonstrate for the first time a physiological link between BRCA1 mutation, high Ubc9 expression, increased growth and migration of TNBC and HGSOC cells. These studies suggest Ubc9 to be a major player in driving cancer cell migration and tumor metastasis implicating this pathway as a potential therapeutic target in BRCA1linked TNBC and HGSOC.

75. Recent Violence Against Homeless and Unstably Housed Women: Addressing Unique Findings to Improve Health Care Delivery in Areas of High Poverty

Elise Riley, Jennifer Cohen, Kelly Knight, Kara Marson, Alyson Decker, Martha Shumway

University of California, San Francisco, California

Background: Poverty and psychiatric disorders are linked to gender-based violence and violence predicts missed medical appointments among women, yet contextual information that could aid in prevention and treatment planning is sparse.

Objective(s): We determined correlates of violence that differentiated perpetrators (primary partner [PP] and non-primary partner [non-PP]), and violence types (emotional, physical and sexual) among homeless and unstably housed women.

Material/Methods: A probability sample of homeless and unstably housed women was recruited from San Francisco community venues. Study participants completed interviews regarding sociodemographic factors and violence; psychiatric disorders were assessed using the Diagnostic Interview Schedule-IV.

Results: Among 291 women, the mean age was 40 and 90% screened positive for ≥ 1 mental illness. Violence experienced included emotional violence perpetrated by PPs and non-PPs

(24% PP vs. 50% non-PP, $p < 0.01$), physical violence (11% PP vs. 19% non-PP, $p = 0.01$) and sexual violence (7% PP vs. 22% non-PP, $p < 0.01$). The odds of PP and non-PP violence increased with each additional psychiatric diagnosis and decreasing levels of social isolation across violence types ($p < 0.05^*$). The odds of physical violence from a non-PP were higher among persons reporting unmet subsistence needs (Adjusted Odds Ratio [AOR]=2.30*), while the odds of sexual violence from a PP increased with age (AOR=1.11 per year*).

Conclusions: All types of violence were more commonly perpetrated by persons who were not primary partners, suggesting that a sole focus on domestic violence screening in health care settings may inadvertently miss most of the violence in this population. In addition, the odds of violence increased as social isolation decreased, which is inconsistent with some prior studies. Contrary to findings in the general population, social isolation may be protective for women in impoverished communities with high levels of psychiatric co-morbidity. These findings may have applicability to settings in which violence and mental health are not routinely assessed.

76. Female Condom Provides a Non-Hormonal Dual Protection Option for Female Contraception

Brooke Faught, Irwin Goldstein, Mark Martens, Kelli Rodriguez, Lisa Levin

The Female Health Company, Chicago, Illinois, USA

Background: Use of male condoms for contraception and STI protection can be associated with a lack of control for women, as well as, decreased pleasure for them, their sexual partners, and negative reactions to latex. With the recent report from the CDC warning that STI's are at epidemic levels. What options are out there for women?

Objective(s): The objective of this study was to survey and interview women with regard to use of the only FDA and WHO approved class III medical device, the FC2 Female Condom. The FC2 has the dual indication for preventing pregnancy and HIV/AIDS and other STIs.

Material/Methods: This study involved an online survey and was conducted on two all women audiences. The first audience were condoms/short term hormonal contraceptive users who volunteered to switch to FC2 during a 6-month trial period. The second audience was independent online purchasers of the FC2. Nineteen came from the focus group participants and 15 responses came from the independent purchasers.

Results: Respondents identified as 67% Caucasian, 9% Hispanic or Latino, 9% Black, 6% American Indian or Alaskan Native, 6% Asian and 3% did not want to identify. Independent purchasers were age 25–64, and focus group respondents were age 22–45. Thirty-two percent were single, 59% were in a long term relationship, and 9% were married. Of the questions asked, women responded positively to, "Overall how well did you like the FC2 female condom?" (71%); positively or neutrally to, "How easy was it to use the FC2 female condom?" (82%). Among attributes respondents agreed with were: "Is an effective form of contraception" (85%); "Allowed me to take control of my own protection" (79%); "Made me feel protected" (71%); "Made me feel good about my contraceptive choice" (65%); "Improved the feeling/pleasure of sex" (21% with 32% neutral); "Felt more natural for my partner than male condom" (41%); and "Allowed spontaneity" (47%). Forty-seven percent of survey respondents reported purchasing FC2 multiple times, 47% would buy it again within 6 months, and 82% would recommend it to others.

Conclusions: While barrier contraceptives are most often used by males, the FC2 Female Condom offers an internal female condom that provides a non-hormonal, latex free option for dual protection against HIV/STI's and unplanned pregnancy. This study indicated a positive acceptance by a majority of women, and counseling regarding its indications and availability should be provided in discussions with female patients.

77. Negotiating the Divide: Gender and Salary

Theresa Rohr-Kirchgraber¹, Paul Kirchgraber², Tisha Reid¹, Teri Duell¹

¹IU National Center of Excellence in Women's Health, Indianapolis, Indiana

²Covance Central Labs, Indianapolis, Indiana

Background: With the passing of the "Equal Pay Act" of 1963, women understood that there would no longer be two different pay scales for the same job, but alas pay differences along gender lines still exists.

Objective(s): According to the Status of Women report card, Indiana received a "D" in employment and earnings. In medicine, the median income of young female physicians is about \$18,000/year less than their male counterparts. In one academic study, a woman physician was found to earn over \$360,000 less in her 30-year career than a man working the same hours, with the same qualifications.

Material/Methods: To overcome this obstacle and to increase understanding of the problem with potential solutions, the IU National Center of Excellence in Women's Health (IUNCOE) along with the American Medical Women's Association (AMWA) has teamed up to create a program called Negotiating the Divide: Gender and Salary (NTD). NTD has become a signature program with the IUNCOE and through partnership with AMWA is held across multiple Indiana locations and beyond state lines including California.

Results: NTD brings residents, scientists, fellows, physicians, lawyers, and other professionals together to discuss pay discrepancies, negotiation skills to empower female leadership in medicine and science.

Conclusions: At no cost to the hosting institutions or groups, NTD has educated over 300 students, residents and physicians. Survey data demonstrated that 90% of participants were extremely or very satisfied with the program; 92% improved in knowledge; and 82% documented that the information presented was useful to their career. The purpose of NTD is understanding the scope of the problem, recognizing the gap and why it exists; and empowering women to appreciate their worth and engage in negotiation techniques that result in better salary and job satisfaction.

78. Health Literacy and Women's Health: Empowering Women to Partner in their Healthcare

Stacey E. Rosen

Northwell Health, Lake Success, New York

Background: The Katz Institute for Women's Health (KIWH) is part of Northwell Health, which serves a geographic area encompassing more than 8 million people. KIWH is a dedicated healthcare partner to educate, empower, nurture and guide women through their healthcare needs at every stage of life.

Objective(s): 1. Identify the importance of low health literacy and its impact on patient safety and poor health outcomes. 2.

Discuss strategies that foster partnerships among healthcare providers and the communities they serve. 3. Discuss how applying the NPS to women's health can be fundamental to improving the nation's health. 4. Identify the importance of and strategies to empower patients to make informed decisions about their health and wellness.

Material/Methods: KIWH aligned its philosophy, principles and activities with National Prevention Strategy (NPS) to maximally improve the health of the populations that it serves. KIWH focuses on the need to educate patients, providers and the public to create a partnership to optimize health through aligning its efforts with the strategic directions of the NPS: Empowered People and Elimination of Health Disparities.

Results: Key programs were developed including: 1. Women's Heart Health Program, which provides personalized care for the prevention, early detection and treatment of cardiovascular disease in women. 2. KIWH Wellness Campaigns, which promotes women's health throughout the year through focused wellness campaigns. System-wide activities are coordinated to educate female employees and community members, including lectures, informational tables, health screenings and outreach. 3. KIWH Resource Center, which offers women seamless, coordinated access to all of NSLIJHS clinical programs and services. In 2014, it served over 4,500 callers.

Conclusions: As healthcare in America moves toward population health management, wellness and prevention become critically important as we transition from: •Value Blind to Value Based •Disease and Treatment to Prevention and Wellness •Episodic and Fragmented to Seamless and Coordinated.

79. The Role of Maternal Low Birthweight on Fetal Growth in Virginia

Sylvia Rozario¹, Saba Masho², Derek Chapman²

¹Virginia Commonwealth University, School of Medicine, Department of Family Medicine and Population Health, Division of Epidemiology, Richmond, Virginia

²Virginia Commonwealth University Department of Family Medicine and Population Health, Division of Epidemiology, Richmond, Virginia

Background: The US has a relatively high infant mortality rate when compared to other developed countries. Small for gestational age (SGA) is an important indicator of poor fetal growth and a major cause of infant mortality and morbidity. Existing literature suggests that intergenerational risk factors influence the occurrence of adverse birth outcomes; but there is paucity of evidences to back up this suggestion.

Objective(s): This study examines the effect of maternal low birthweight (LBW) on infants' fetal growth in Virginia. In order to explore the possible pathways by which maternal birthweight could be associated with infants' fetal growth, the current study also assesses the relationship of maternal medical complications with maternal LBW and infant SGA.

Material/Methods: Data from a multigenerational birth dataset, created by linking 2005–2009 Virginia resident live birth data to 1960–1997 Virginia maternal live birth data, were analyzed (n=159,210). The outcome variable, infant SGA, was defined as a birthweight= \leq 10th percentile for a given gestational age. The primary exposure variable, maternal birthweight (BW), was dichotomized as LBW ($<$ 2,500g) and normal BW (2500+g). Adjusted odds ratios (AOR) and 95% confidence intervals (CI) were generated using multiple logistic regression models. Sub-population analysis was conducted stratified by race/ethnicity.

Results: The prevalence of maternal LBW and infants' SGA in Virginia were 7.4% and 10.6%, respectively. Maternal LBW was associated with increased odds of SGA infants after adjusting for potential risk factors in the current pregnancy (AOR=1.63, 95% CI=1.52, 1.76). Maternal medical history factors, such as respiratory disease, diabetes, hypertension, eclampsia, and previous preterm or SGA infant, were significantly associated with both maternal LBW and infant SGA.

Conclusions: The mother's birthweight may be a useful indicator in addressing adverse birth outcomes for infants. Public health program and policy must focus on factors throughout the life course of women in order to fully address inequities in birth outcomes.

80. Designing and Validation of a Questionnaire to Assess Women's Experiences of Menopause (QAWEM)

Masoumeh Simbar¹, Sevil Hakimi², Fahimeh Ramezani Tehrani³

¹Department of Midwifery and Reproductive Health, School of Nursing and Midwifery, Reproductive Endocrinology Research Center, Research Institute for Endocrine Sciences, Shahid Beheshti University of Medical Science, Tehran, Iran

²Clinical Psychiatry Research Center, School of Nursing and Midwifery, Tabriz University of Medical Science, Tabriz, Iran

³Reproductive Endocrinology Research Center, Research Institute for Endocrine Sciences, Shahid Beheshti University of Medical Sciences, (Yaman), Tehran, Iran

Background: Contemporary tools to assess health status of menopausal women concentrate only on physical and psychological symptoms of menopause while women experience some complications of other aspects of health.

Objective(s): This study aimed to design and validate a comprehensive questionnaire to assess women's experiences in all aspects of health related to menopause.

Material/Methods: This was a mixed sequential exploratory study. At first section a qualitative phenomenological study was performed on 18 menopausal women to assess their health experiences in menopause and data was analyzed using the steps described by van manen. The pool of items was extracted from the qualitative part which was completed by some items extracted from an extensive literature review on the related questionnaires. Face and content validity of the preliminary designed questionnaire was assessed using qualitative methods and calculating Impact score, content validity ratio (CVR) and content validity Index (CVI). Exploratory Factor Analysis was then performed using Varimax rotation to assess construct validity of the questionnaire. The reliability of the questionnaire was assessed using internal consistency and test retest stability measurement. Data was analyzed by version 22 of SPSS.

Results: The preliminary questionnaire with 137 items was designed by the qualitative part and the literature review. After qualitative face validity assessment by 20 participants as well as calculating impact score of the items, 131 items were remained. Then the questionnaire's content validity was assessed by 10 experts and average CVR=and S-CVI=0.98 were obtained. Thereafter, questionnaire with ... items were completed by 287 menopausal women and the data were analyzed by Exploratory Factor Analysis to assess the construct validity. The value of KMO was satisfactory (0.92) and the Bartlett's test of Sphericity was significant (P<0.0001). Scree plot inspection and Kaiser's criterion showed 6 factors including Physical symptoms, Psychological

symptoms, Concerns, Attitude, Feelings and Adaptation which explained 62.2% of the total variance. Reliability of QAWEM was evaluated as satisfactory by internal consistency (α Chronach=0.7) and the test-retest stability coefficient of 0.78. Finally QAWEM was introduced by 44 items scoring 1 to 5 (never to always) with total range of 44 to 220 which is calculated as percent for each factor as well as for total score.

Conclusions: QAWEM is a valid and reliable tool to assess women's experiences of menopause. QAWEM with 6 factors including: concern, attitude, feeling and adaptation experiences during menopause; is able to evaluate all aspects of menopausal women's experiences of health and so their quality of life. In compare to other instruments, QAWEM shows more acceptable construct validity, reliability and internal consistency.

81. The Impact of the Severity of Menopausal Symptoms on the Sexual Function of Post-Menopausal Women

Masoumeh Simbar¹, Soheila Nazarpour², Fahimeh Ramezani Tehrani³

¹Department of Midwifery and Reproductive Health, School of Nursing and Midwifery, Reproductive Endocrinology Research Center, Research Institute for Endocrine Sciences, Shahid Beheshti University of Medical Science, Tehran, Iran

²Department of Midwifery and Reproductive Health, School of Nursing and Midwifery, Shahid Beheshti University of Medical Sciences and Health Services, Tehran, Iran

³Gynecology, Reproductive Endocrinology Research Center, Research Institute for Endocrine Sciences, Shahid Beheshti University of Medical Sciences, Tehran, Iran

Background: Menopause is a normal event in women's lives that is of utmost importance as one of health issues in the range of reproductive health. This period time forms a complex stage of women's life due to physical and mental changes. After menopause, the ovaries stop the producing of considerable amounts of estrogen. Therefore, the symptoms and diseases associated with estrogen deficiency show a growing importance in women's health (1). Therefore, any disorder leading to inconsistency, and thus, dissatisfaction of sexual relations can be associated with sexual dysfunction

Objective(s): The purpose of this study was to examine the correlation between the severity of menopausal symptoms and sexual function.

Material/Methods: This is a community-based, descriptive-analytical study of 405 post-menopausal women, aged 40 to 60 years. A multi-stage, random sampling was conducted. The data was obtained using the Female Sexual Function Index (FSFI), the Menopause Rating Scale (MRS), and a researcher-made questionnaire.

Results: Sexual dysfunction was observed in 61% of the subjects. The psychological symptoms were identified as the most severe menopausal symptoms, and the lowest score was obtained by urogenital symptoms. The scores in all domains of MRS and the MRS total scores were in a negative correlation with the FSFI total scores (P=0.000). In the women with diminished sexual relations and sexuality after menopause, the urogenital scores and total scores of MRS were significantly higher, comparing to others (P=0.000, P=0.001). The urogenital scores ($r=-0.283$, P=0.000) and the MRS total scores ($r=0.116$, P=0.020) had a significant, positive correlation with dissatisfaction with sexual relationship. The severity of menopausal symptoms was a negative, prognostic factor in the FSFI total scores and the scores in all domains of sexual function except satisfaction. The MRS total score was a predictor for the rate of

variation in sexual relations and sexuality after menopause, as well as satisfaction with marital relationship.

Conclusions: The severity of menopausal symptoms could have a negative impact on sexual function. Thus these symptoms need to be taken into consideration in implementing women's health initiatives regarding sexual function.

82. Experiences and Perceptions of Gynecologists and Midwives About Virginity Examination and its Consequences on Youth Reproductive Health: A Qualitative Study

Masoumeh Simbar¹, Fatemeh Rahmanian², Fahimeh Ramezani Tehrani³

¹Department of Midwifery and Reproductive Health, School of Nursing and Midwifery, Reproductive Endocrinology Research Center, Research Institute for Endocrine Sciences, Shahid Beheshti University of Medical Science, Tehran, Iran

²Department of Midwifery, School of Nursing and Midwifery, Larestan Azad Islamic University, Fars, Shiraz, Iran,

³Reproductive Endocrinology Research Center, Research Institute for Endocrine Sciences, Shahid Beheshti University of Medical Science, Tehran, Iran

Background: Virginity examination is known as a custom and norm in some countries including Iran and medical teams are involved in the examination and hymen repairment process. The main aims for virginity testing are mentioned as "assessment of abstinence", "delay for sexual relationship until marriage", "HIV/AIDS/STIs prevention", "keeping honor of family by defending of females' virginity" in different cultures. However, making a revision in medical practitioners' role for performing this process is seemed essential following different views of the practitioners and towards virginity testing and hymen repairment. It seems necessary to investigate the related beliefs to make an informed and responsible decision for reproductive health system.

Objective(s): This qualitative study aims to explain gynecologists' and midwives' perceptions and experiences towards virginity testing and its effects on youth sexual-reproductive health.

Material/Methods: This was a qualitative study using content analysis approach. Fifteen participants including 7 gynecologists and 8 midwives recruited by purposeful sampling method for beginning and then snowball sampling method. They were interviewed by semi-structured in-depth individual interview using a guide questions. All interviews were recorded and transcribed verbatim. Transcripts were coded and analyzed using conventional content analysis method.

Results: Content analysis showed 3 categories "the examination's identity", "the examination's requirements", and "prevention of negative consequences of the examination". The category of "the examination identity" had three sub-categories including 1) the reasons for virginity testing, 2) prognostic value of the examination, and 3) expanding unusual sexual relationships and STIs. The subcategories of "the examination's requirement" were 1) the necessity for planning and monitoring of the examination process and for the consequences of negative results, 2) training, support and safety of medical and midwifery system, 3) reproductive health rights and ethics. The sub-categories of "prevention of negative consequences of the examination" were 1) community empowerment and 2) prevention strategies for bad consequences of the negative results.

Conclusions: The results showed that planning on monitoring of the examination process is necessary for preventing of bad consequences of the negative results by the health system. Community

empowerment to prevent violence against women and stigmatization, and professional training for correct prognosis and providing appropriate counseling for the negative results are recommended. Besides, emphasis on hymen virginity examination without appropriate sexual health education, leads to unusual sexual relations, expanding STIs and increasing demand for hymen repairment.

83. Impact of a Wellness Coaching Program for Racial/Ethnic Minority Women on the Health Behaviors of their Family Members

Sara Simonsen¹, Brenda Ralls², Kathleen Digre³, Coalition for a Healthier Community for Utah Women and Girls¹

¹University of Utah, Salt Lake City, Utah

²Utah Department of Health, Salt Lake City, Utah

³University of Utah School of Medicine, Salt Lake City, Utah

Background: Gender roles often ascribe responsibility for purchasing and preparing foods and planning leisure-time activities to women, allowing them ample opportunities to influence the health behaviors of family members.

Objective(s): We evaluated the impact of a wellness coaching program targeting women on the diet and physical activity behaviors of children, spouses/partners, and grandparents living in the home.

Material/Methods: A community-based participatory research project was conducted with a coalition including leaders from African American, African Immigrant/Refugee, American Indian, Latino, and Pacific Islander communities. We assessed the impact of a 12-month program on changes in health behaviors of women and their family members. We trained women from each community as wellness coaches. Coaches recruited women to participate and helped them set tailored health behavior goals using Motivational Interviewing. Participants were randomized to receive either monthly coaching or quarterly coaching.

Results: Data were assessed for 239 women; 65% had children; 49% had a spouse/partner, and 11% had a grandparent at home. At 12 months, more than half of the women reported their children and/or grandparents had increased fruit and vegetable consumption and physical activity. More than half of the women also reported that their spouses/partners increased fruit and vegetable consumption. The lowest reported increase was spouse/partner physical activity, and even that was close to half (48%). There were no differences in family health behavior changes between study arms. In multivariable models, women who reported being successful/very successful at achieving their own goals were 2.6 times as likely to report their spouses/partners had an increased physical activity level ($p=0.0203$).

Conclusions: Wellness coaching programs targeting women may impact health behaviors of their family members. Women who are successful at changing their own behaviors are more likely to impact partner behaviors. Future research should capture the magnitude of this reach by collecting data directly from children, partners, and other family members.

84. Gender Differences in Burnout and Coping Mechanisms in Internal Medicine Residents

Brielle Spataro¹, Sarah Tilstra², Doris Rubio¹, Melissa McNeil¹

¹University of Pittsburgh, Pittsburgh, Pennsylvania

²UPMC, Pittsburgh, Pennsylvania

Background: Burnout is a significant problem facing internal medicine residents contributing to increased risk of depression and suicidal ideation. Coping mechanisms may affect burnout and may differ based on sex.

Objective(s): To determine sex differences in burnout and coping in internal medicine residents.

Material/Methods: The study was a retrospective cross-sectional study of reported burnout and coping mechanisms used by internal medicine residents in June 2014 at a large academic center and its community affiliate. Two-hundred eighty-five PGY-1, 2, 3 and 4 and incoming PGY-1 residents were surveyed. The Maslach Burnout Inventory-General Survey (MBI-GS) and Brief COPE were given to measure levels of burnout and frequency of use of coping mechanisms. Percentages of residents who met criteria for burnout and high levels on each of the subscales of emotional exhaustion, cynicism and professional efficacy, were calculated and stratified by sex. Chi-squared tests were used for statistical significance. Average frequency of use of each coping mechanism by sex was calculated with statistical significance determined by two sided t-tests.

Results: There was a 69% completion rate (198/285) with 100 men and 98 women. Women had higher levels of burnout (30% vs 15%, $P=0.014$) and emotional exhaustion (22% vs 9%, $P=0.005$). Women used the adaptive coping mechanisms of emotional support ($P=0.001$) and instrumental support ($P=0.018$) more frequently but also used the maladaptive coping mechanism of self-blame more frequently ($P=0.022$).

Conclusions: Greater use of self-blame as a coping mechanism may be a major factor in the higher rates of burnout and emotional exhaustion in women resident physicians as compared to men. Educators must pay attention to use of self-blame by female residents and as it may be a red flag for resident distress.

85. Implementation of the Myriad Genetic Screening Questionnaire and a Multidisciplinary Team Approach to Improve Early Diagnosis of Hereditary Breast Cancers in High-Risk Populations at a Safety Net Institution

Dimitra Lotakis, Anitha Srinivasan, Anisha Chadda, Prabhat Bhattarai, Marc Wallack

Metropolitan Hospital Center, NYMC, New York, New York

Background: Studies have shown that as much as 5–10% of diagnosed breast cancers are hereditary in nature. Multiple gene mutations are responsible for this disease burden, with only 10% being BRCA1 and BRCA2. With the advent of accessible genetic testing, early detection and treatment of patients with hereditary cancers has resulted in overall improvement of survival rates and management.

Objective(s): The purpose of this study is to determine whether implementation of the Myriad Genetic Screening Questionnaire along with an improved multidisciplinary team approach to management during the initial Breast Surgery clinic visit have a positive effect on early recognition for genetic risk factors and improves accessibility to genetic testing. In the past, selected high-risk patients were referred to a genetic counselor at a women's health center for genetic screening and subsequent testing.

Material/Methods: Retrospective case report examining a six month period extending from June to November 2015 at Metropolitan Hospital Center, NYC HHC. ANOVA Analysis

focused on comparing the three-month period immediately preceding and following implementation of the Myriad genetic screening questionnaire and multidisciplinary approach. All patients presenting to Surgery clinic with a chief concern involving breast pathology are provided the Myriad genetic screening questionnaire from the clerk when registering. This form is completed in the waiting room and reviewed by the provider during the visit. If significant risk factors are identified, the patient is counseled regarding risks and benefits of testing. If the patient chooses to pursue testing, consent is obtained and blood is drawn on site by nursing staff. Patients who undergo testing are then provided a follow up appointment with specialized geneticist to discuss their results. Clinic staff including clerical support, nurses, PCAs, PAs, Resident and Attending Physicians underwent training on use of questionnaire and sample collection kit.

Results: Overall screening and understanding of patient's cancer related family history improved after implementation. In the three months prior to our protocol, only eleven patients were provided screening questionnaires. Following implementation over one hundred patients successfully completed screening questionnaires and were assessed for genetic testing. Compliance improved and an increased number of high-risk patients were successfully identified.

Conclusions: When caring for patients at a safety net institution, consolidation of care is vital to overall patient health. Reducing the number of appointments required to provide necessary services is important to aid provision of high quality care. In our experience a multidisciplinary approach aimed specifically at screening and identifying holds the greatest efficacy. Further investigation will work to extend this screening process to include patients with ovarian and colonic cancers as well. Conflicts of Interest: Myriad contributed to the creation of workflow and multidisciplinary staff education during this intervention.

86. Patient-Centered Sexual Function Outcomes Among Midlife Women

Holly N. Thomas¹, Megan E. Hamm¹, Rachel Hess², Sonya Borrero¹, Rebecca C. Thurston¹

¹University of Pittsburgh, Pittsburgh, Pennsylvania

²University of Utah, Salt Lake City, Utah

Background: Sexual dysfunction is common among midlife women and can have significant negative impacts on quality of life. There is disagreement about which sexual function outcomes to target in clinical trials, and there is little research exploring treatment preferences, particularly among midlife women.

Objective(s): We gathered qualitative data among sexually active women aged 45–60 to explore patient-centered sexual function outcomes and treatment preferences.

Material/Methods: Twenty interviews and three focus groups were conducted in person by a trained facilitator using an interview guide; sessions were audio-recorded and transcribed. We used a thematic analysis approach for data analysis. Codebook development by two investigators proceeded using an iterative process until a final codebook was agreed upon; the primary investigator then coded all data. Codes relating to outcomes and treatment preferences were examined to identify key themes.

Results: Among 39 total women, the mean age was 53; 54% were White, 36% were Black, and 10% were other races. When asked what treatment outcomes they desired, women referenced

specific sexual problems: low desire, pain/vaginal dryness, decreased arousal, and decreased ability to orgasm. However, when women were asked about the most important aspect of their sex life, they discussed emotional as opposed to physical outcomes. Emotional outcomes included enhanced intimacy and connection with one's partner, mutual pleasure and reciprocity, and feeling loved and desired. Many women preferred behavioral over pharmaceutical treatments, citing concern about side effects as well as belief that women's sexual problems can have emotional as well physical aspects that are better addressed by behavioral approaches.

Conclusions: In the development and testing of treatments for sexual dysfunction in women, both more immediate physical outcomes, such as increased desire, as well as more downstream emotional outcomes, such as enhanced intimacy, should be considered to ensure that treatments are patient-centered. Many women prefer behavioral over pharmaceutical treatments; researchers should continue to develop non-pharmaceutical treatment options for women with sexual dysfunction.

87. Encouraging Diverse Women to Participate in Clinical Trials: Attitudes, Motivators, and Opportunities for Engagement

Carley Thompson

FDA Office of Women's Health, Silver Spring, Maryland

Background: Clinical trials help to advance the understanding of sex differences and health conditions unique to women. Changes in government policy, advocacy, and recruitment have helped to increase the inclusion of women in clinical research. However, there are still opportunities to learn what impacts whether diverse women participate in clinical trials. In 2015, the FDA Office of Women's Health (OWH) launched the Diverse Women in Clinical Trials Initiative, in collaboration with the NIH Office of Research on Women's Health, to raise awareness of the importance of participation of diverse women in clinical trials and to share clinical research best practices. OWH sought to better understand women's attitudes, motivators for participation and opportunities for engagement.

Objective(s): To understand women's knowledge about clinical trials. To determine motivators, barriers for diverse women to participate in clinical trials.

Material/Methods: OWH conducted an environmental scan and literature review to identify existing clinical trials education projects and research on recruitment, motivators and barriers to participation. OWH also conducted three qualitative focus groups with women ages 21–64 in Los Angeles, Dallas and Washington, DC to learn more about women's knowledge, motivators, and barriers to participation.

Results: The research found that women were more likely to participate in a clinical trial if they thought they were helping their community, family or friends or were referred to a study by someone they knew or by their health care provider. The research also indicated that a common barrier for women is not being asked to participate. Others included: (1) lack of culturally sensitive recruitment; (2) the risk and unknown side effects; (3) possible costs of participation; and (4) logistics of participating.

Conclusions: By tapping into women's key motivators the initiative can help to encourage greater participation. There also exists an opportunity to provide health care providers with tools to educate patients about clinical trial participation.

88. WH“Y” Long-Acting Reversible Contraceptives: Identifying and Addressing Millennial Misconceptions

Pretty Verma¹, Vivien Brown², Pamela Liao², Elizabeth Chertkow², Christine Palmay²

¹*University of British Columbia, Vancouver, British Columbia, Canada*

²*Department of Family and Community Medicine, University of Toronto, Toronto, Ontario, Canada*

Background: While contraceptive uptake rates in developed countries are as high as 74% in developed nations unintended pregnancy rates continue to be upwards of 65%. (1) Although, long-acting reversible contraceptive devices (LARCs) have been shown to be highly effective (1,2,3) in Canada only 2.3% of women use them. (1)

Objective(s): In this study, we identified misperceptions of LARC use that may deter use among young women, with the goal of development of a patient counselling and educational resource.

Material/Methods: In order to identify determinants of IUCD use, a content-based analysis was conducted on relevant literature. A literature search was performed on PubMed to include qualitative and quantitative studies of any design published in English between 2008–2015 whose subjects included women aged 16–35. Content-analysis was conducted on the abstracts of any relevant studies to distil major themes of misperceptions or barriers to women's use of long-acting reversible contraceptives. “Misperceptions” were identified as such when primary literature or guidelines refuted the claim or when evidence was inconsistent. These findings resulted in the basis of a e-resource for patient education.

Results: Our results identify the specific themes regarding perceptions and barriers to use of Long-Acting Reversible Contraception (LARCs) in youth populations. These included themes such as 1) reversibility of the contraceptive method 2) suitability for use in nulliparous women, 3) discomfort with LARC placement and removal 4) concerns over menstrual changes, and 5) infection risk. We have created a short presentation to address identified misconceptions.

Conclusions: LARC uptake in Canada may be impeded by a number of misconceptions and barriers specific to young women. By developing a digital patient education tool, we hope to improve uptake of LARCs in this population. An educational tool created in response to our findings can be found at: www.talkwithyourdoc.ca.

89. Experience, Emotions, Anxiety and Feeling in Unwanted Pregnancy a Qualitative Research in Women Referring to Maternal Clinic Affiliated to Shiraz University of Medical Sciences, 2010

Zahra Yazdanpanahi, Marzieh Akbarzadeh, Ladan Zarshenas, Farkhondeh Sharif

Shiraz University of Medical Sciences, Shiraz, Iran

Background: Unwanted pregnancy has affected different aspects of our life. Researchers point out if a child's birth is unwanted, an increase in maternal issues such as psychological, physical, social and economic problems can be observed. Also, some studies show that unwanted children have more unsafe and miserable life while being annoyed and neglected by their parents and are in need of treatment for their mental problems.

Objective(s): The evaluation of Experience, emotions, anxiety and feeling in unwanted pregnancy.

Material/Methods: This study is a qualitative method which is studying a kind of basic theory. An interview was done with 20 women with unwanted pregnancy who referred to maternal clinic affiliated to Shiraz University of Medical Sciences in 2009. They were selected by convenience sampling. Data were gathered through deep and semi-individual structured interviews with women who had unwanted pregnancy. After data collection, all the written content was analyzed through Juorjy and Colaizzi's method. Through this method, description, explanation and categorization of data were done and major issues were obtained.

Results: Based on the participants' opinion, unwanted pregnancy can be the cause of several problems. The first problem arising from this condition is physical problem And the next one is related to mental reactions such as maternal emotions like embarrassment for being pregnant, mother's own negative affection, being worried about missing family and other children, and psychological reaction related to terminating the pregnancy through illegal abortion, and the husband's disagreement about the termination. They blame themselves for thinking about abortion or illegal abortion and worry about their doubts for guilt feeling. Another problem which results from unwanted pregnancy is family problems like husband's behavior and his negative outlook towards his child and fetus. 4. The next category belongs to anxiety about the future of their child including economic, social and relational problems, and suppression of the children's logical expectations. The last problem is about lack of maternal emotional support.

Conclusions: Negative psychological and quantitative impacts of unwanted pregnancies on the mothers and infants' health are considerable. A closer observation by family and health care provider for unwanted pregnancies and its results is emphasized; therefore, they should be taken care of as high risk pregnancies, requiring family support. Keywords: experience, sensation, anxiety, unwanted pregnancy.

90. Cardiac Resynchronization Therapy in Women: Meta-Analysis of Clinical Trials and Post-Market Comparative Effectiveness Studies

Robbert Zusterzeel, Kathryn O'Callaghan, William Sanders, Daniel Canos, David Strauss

FDA, Silver Spring, Maryland

Background: Women have been historically underrepresented in clinical trials. Therefore, an information gap may exist on the

safety and effectiveness of medical devices in women. One area where women are particularly underrepresented is in trials of heart failure devices, such as cardiac resynchronization therapy (CRT). CRT is a pacemaker therapy for selected patients with chronic heart failure and has been shown to reduce heart failure hospitalizations and mortality while improving quality of life.

Objective(s): We assessed the effectiveness of CRT separately in women and men using pre-market and post-market data sources.

Material/Methods: In 3 separate studies (1 pre-market meta-analysis and 2 post-market registry studies) we analyzed long-term mortality outcomes after CRT in subgroups by sex and electrocardiographic (ECG) characteristics (i.e. QRS morphology and duration). In the meta-analysis of pre-market clinical trials we combined individual-patient data from 3 clinical CRT-defibrillator (CRT-D) trials (MADIT-CRT, RAFT, and REVERSE; >4,000 patients total) submitted to the FDA as part of pre-market approval applications. In the 2 post-market studies we used data from the National Cardiovascular Data Registry (NCDR) Implantable Cardioverter Defibrillator Registry (>31,000 and >75,000 patients respectively).

Results: The pre-market meta-analysis showed that women had a 55% relative mortality reduction with CRT-D (compared with standard implantable defibrillator [ICD] alone) while men had a 15% reduction. In patients with left bundle branch block (LBBB, a block in the left-sided conduction system of the heart), women benefited even more (61% relative reduction) while men benefited to a lesser extent than women (32% reduction in mortality). Without LBBB, neither women nor men benefited from CRT-D. In the first post-market study of >31,000 CRT-D patients, we observed that women had an 18% lower mortality risk than men, while with LBBB this difference was even greater (21% lower death risk in women than in men). Among patients without LBBB, CRT-D was not associated with a mortality differential by sex. In the second post-market study of >75,000 patients, women had a 23% lower mortality risk with CRT-D than those with an ICD while in men this difference was 12%. Both women and men with a LBBB had lower mortality risks with CRT-D compared to ICD, but again this was more pronounced among women (26% lower mortality risk in women and 16% lower risk in men). Without LBBB, women and men only had slightly lower mortality risks with CRT-D.

Conclusions: In both pre-market and post-market studies, CRT-D was associated with a significantly lower mortality in women than in men particularly in the presence of LBBB. This sex difference highlights the importance of including more women in clinical trials, and conducting sex-specific analyses such as these of combined datasets and large post-market registries.