

# **Gender and Health: Impacts of Structural Sexism, Gender Norms, Relational Power Dynamics, and Gender Inequities**



**Poster Abstract Submissions (1–66)**

**October 26, 2022**

\* indicates a poster presentation.

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## Narrative (N1–N14)

\*N1: Are Gender Traits and Ideology Associated with Stress and Burnout Among Midlife Women?

**Author:** Sabik, NJ

**Institutional Affiliation:** University of Rhode Island

**Discipline:** Public Health; Psychology

### **Abstract:**

Women experience greater burnout as compared to men, particularly in the context of caregiving (Pines et al, 2011). This is particularly relevant for women at midlife, when gendered expectations may contribute to experiencing stress and burnout. To date, researchers have not empirically examined the associations between gender roles, stress, and burnout among midlife women. Gendered traits and traditional gender ideology were assessed via self-reported questionnaires, along with perceived stress and burnout. Data were collected from 301 women ages 40 to 65 in the United States and United Kingdom via an online survey in 2018. Analyses controlled for potential confounding variables, including whether women were partnered, whether they were living with children they were raising, age, education level, employment status, and whether they have chronic health conditions that may affect levels of stress and burnout. Results indicated that higher femininity and personal masculinity were associated with lower stress and burnout; social masculinity was unrelated to stress and burnout. Traditional gender ideology was not associated with stress or burnout. Stress mediated the associations between femininity and personal masculinity and burnout, such that lower scores on both feminine traits and personal masculine traits were associated with higher stress, and this was in turn associated with greater burnout. Results indicate that positive aspects of personal gender traits, both masculine and feminine, were associated with lower stress and lower burnout. Increasing both connection and warmth, as well as strength in beliefs and conviction, can be potentially protective against stress and subsequent burnout. Further, traditional feminine traits did not contribute to higher stress, rather a lack of these traits may put women at risk for higher stress. Connection, warmth, and compassion are important for lower stress, particularly when self-directed, and feminine traits should not be overlooked in considering stress mitigation and burnout in this population.

**Keywords:** gender roles

## N2: Effects of Gender Inequality on the Selection of Research Topics

**Author:** Corona-Sobrino, C

**Institutional Affiliation:** Universitat de València

**Discipline:** Sociology

### **Abstract:**

The proportion of women scientists in Spain in recent decades has been increasing (41% of research personnel) with respect to men, but their permanence in the research career is decreasing (Government of Spain, 2021). It has been shown that women find it more difficult to progress through the career ladder and stay longer on the same scale, which translates into lower financial remuneration, among other effects (CSIC 2020). The reasons behind this gender gap are multiple and, as I want to analyze, may be influencing the selection of research topics.

The main objective of the research is to study the possible connections between patterns of gender inequality in scientific research and the selection of research topics or questions by scientific personnel. The project will study how the different factors that influence women's research careers (working conditions, work-life balance, etc.) can influence the selection of research topics in the discipline of biomedicine.

The epistemic conditions of research have received less attention in the literature (Gläser & Laudel 2015; Laudel & Gläser 2014). From this question emerges the need for a theoretical-conceptual framework for comparing research topics or problems. Some problems, for example, involve greater risk-taking than others (measured in the probability of success), resource necessity, level of interdisciplinarity or collaboration, and so on. A secondary objective thus emerges: To develop a theoretical-conceptual and methodological framework to study the decision-making process in the choice of research problems and topics, and to enable systematic comparison between topics.

The project is structured in case studies. Four research groups in different biomedical research centres have been selected. A diverse sample is sought in terms of the level of performance and specialization and gender diversity in their leadership. It has been conducted 4 in-depth interviews (so far) and bibliometric analysis.

**Keywords:** gender inequity; structural sexism; measurement

### N3: Exploring Gender-Diverse Experiences of Hereditary Cancer Risk in the U.S.

**Author:** Roth, SR

**Institutional Affiliation:** JHU/NIH Genetic Counseling Training Program

**Discipline:** Genetic Counseling

**Abstract:**

Individuals with diverse gender identities are being newly recognized as a significant proportion of the population seeking genetic counseling in the U.S. Yet transgender and nonbinary individuals are underrepresented in genetic counseling research and underrepresented in research on LGBTQI+ health more broadly (Glessner et al., 2012; Heng et al., 2018; McCann & Brown, 2018; Nathan et al., 2019). This lack of representation in research creates a cycle of exclusion from the production of medical knowledge, which in turn affects the quality and equity of care received by gender-diverse people (Cameron & Stinson, 2019; Collin et al., 2016). These issues are particularly significant in the field of cancer genetic counseling, where gender diverse individuals with elevated cancer risk receive risk assessment, counseling, and referral to support based on risk figures and standards of care developed for presumed cisgender individuals (Berliner et al., 2021; Sutherland et al., 2020; von Vaupel-Klein & Walsh, 2021). How gender diverse individuals with inherited cancer syndromes navigate the clinical and everyday challenges associated with their diagnoses is largely unknown to genetics providers, and this gap has implications for providers' abilities to provide inclusive and appropriate care. In this poster presentation, I will address this gap by drawing on a cross-sectional, qualitative study exploring the lived experiences of gender diverse individuals with increased risk of cancer, focusing on how gender diverse identity affects individuals' perceptions and experiences of cancer risk management.

**Keywords:** gender roles; gender norms; gender inequity



\*N4: Gender Contexts and U.S. Women's Health

**Authors:** Short, SE; Wang, R; Zacher, M

**Institutional Affiliation:** Brown University

**Discipline:** Sociology; Demography

**Abstract:**

For decades, scientists have elaborated how gender and gendered experiences are relevant to health. Much of this research has focused on sex differences in morbidity and mortality and on analyses of gender gaps in diagnoses, care, and clinical outcomes—effectively anchoring discussion at the individual level and on sex assigned at birth. Recent work on structural sexism eloquently makes the case for the importance of gender as structure and for measuring sexism as macro-level context.

Building on this work, we observe the theoretical importance of cultural beliefs to gender systems. Using population data, we construct novel summary measures of beliefs about women, work, and family, across states in the U.S. over a period of 20 years. We then explore whether and how these measures are associated with women's self-assessed health. Preliminary results indicate: 1) significant variation in cultural beliefs about gender across place and time in the U.S.; 2) multidimensionality in these gendered cultural beliefs; and 3) a negative association between sexist cultural beliefs and health. We conclude by discussing the implications for future research on women's health.

**Keywords:** gender norms

## \*N5: Gender Norms and Gender Equity as Behavioral Drivers for Health Services Uptake by Men in Eswatini

**Authors:** Mhazo, ML; Dlamini, G; Churchyard, T; Gamedze, S

**Institutional Affiliation:** Kwakha Indvodza

**Discipline:** Social Science

### **Abstract:**

Eswatini has made significant progress in controlling HIV, prevalence has stabilised and incidence has declined by 31% since 2010. The country has a high treatment coverage (86%). HIV prevalence is among highest in the world (27.3%). Less men are aware of their status than women. Previous studies to understand Swazi men's health-seeking behaviours revealed that men are reluctant to access healthcare services or avoid sexual health services due to facility and provider issues resulting in them preferring informal providers (traditional healers). Adult Swazi men believe that men are the sole decision makers in the home including decisions about sexual and reproductive issues. This leaves women and young girls at risk of HIV infection. In 2018 about 90% new HIV infections was among adolescents of which 31% occurred among young women (15 to 24 years).

Kwakha Indvodza conducted research to determine health risks, gender sensitivity, and health-seeking behaviors of 599 men from 17 groups (18–49 years old) in rural and peri-urban areas of Eswatini. Qualitative and quantitative data were collected using questionnaires on health risk assessment and gender equality measures (using the Gender-Equitable Men [GEM] Scale) and documentation of group dialogues. Questions were on attitudes toward HIV, health services uptake, COVID-19, and gender equity. Health self-assessment indicated that 53% had had sex without a condom with someone whose sexual history they didn't know, and 43% do not always use a condom when engaging in sexual activities. Also, 51% indicated that they do not visit a health facility after getting a sexually transmitted infection (STI). The average score on the GEM Scale was 32.5/45, resulting in an equality score of 0.7. The percentage of respondents with a score above 31 (high gender equality) was 58%. Individual questions responses showed that 46 % agreed men must have final say in all decisions, 66% agreed men need to be tough, 24% agreed if a man pays lobola he owns the woman, 35% agreed wife needs to respect and accept what husband says, 35% agreed that men are always ready for sex and 63 % agreed most important role of a woman is taking care of her home.

Results show that in Eswatini gender roles are still strict and followed, gender roles directly influence HIV transmission, men have risky behaviours having sex without condoms and generally do not visit a health facility after getting an STI. Dialogue discussions revealed that men use both modern and traditional health services. Barriers to modern health services access are related to service providers' attitudes, service delivery issues (e.g., privacy, waiting times, and opening times), and access to health service centers. Results also show that there is a consensus on the need for separate facilities or times for male health services uptake and that men believe in self-examination, that they are stronger than women, and that they do not need much health care.

**Keywords:** gender roles; gender norms; gender power relations; gender inequity

\*N6: “I Know Myself Again, Which Makes Me Motivated for Life”: Feasibility and Acceptability of Using the Experience Sampling Method with Trauma-Exposed Sexual Minority Women

**Authors:** Scheer, JR; Cascalheira, CJ; Helminen, EC; Shaw, TJ; Schwarz, AA; Jaipuria, V; Brisbin, CD; Kokesh, K; Batchelder, AW; Sullivan, TP; Jackson, SD

**Institutional Affiliation:** Syracuse University

**Discipline:** Clinical Psychology

**Abstract:**

Intensive longitudinal designs (e.g., the experience sampling method [ESM]) hold promise for examining the dynamic interplay between daily adversity (e.g., trauma, stigma), coping strategies, and behavioral and mental health issues among marginalized populations. However, few studies have used ESM with sexual minority women (SMW), an understudied population at risk for adversity and poor behavioral and mental health.

We sought to assess the feasibility and acceptability of using once-daily (i.e., interval-contingent) ESM with 161 trauma-exposed SMW ( $M_{age} = 29.1$ ,  $SD = 7.57$ ); 20.5% nonbinary; 32.3% queer; 52.2% people of Color; 14.3% with annual incomes  $\leq$ \$9,999; 30.4% in Southern United States (U.S.). SMW completed one comprehensive (45-60-minute online) baseline assessment and once-daily brief online surveys for 14 days. Daily surveys assessed past-24-hour stressors, stress responses, and behavioral and mental health symptoms. At the end of the 14-day ESM period, SMW answered three open-ended questions about participating in this study and about research with SMW in general. Regarding feasibility, 151 participants (94%) initiated the ESM study portion (after the baseline assessment), 130 (81%) were retained through day 14, and 72 (45%) completed all 14 daily surveys. ESM completion level was associated with race/ethnicity and U.S. region. Qualitative data regarding acceptability indicated that SMW perceived this ESM design as meaningful and comprehensive; reported manageable discomfort when answering trauma-related questions; reflected on stressors, coping, and health issues in insight-oriented ways (e.g., described new perspectives); and provided suggestions for research and clinical and policy efforts.

These findings could inform modifications to ESM protocols to improve their feasibility and acceptability among trauma-exposed SMW and promote ongoing utility of this valuable method. Researchers could consider our feasibility and acceptability findings (e.g., possible structural barriers to daily compliance; intersectional gender-related stressors as potential treatment targets) when developing culturally tailored treatments using ESM, such as just-in-time adaptive interventions, for this population.

**Keywords:** intersectionality; measurement; modifiable factors; minority health and health disparities

\*N7: Intimate Links: Applying a Critical Sexuality Framework to Promoting Women's Sexual Health in Rehabilitation Settings

**Author:** Ghasseminia, R; Nichols, T

**Institutional Affiliation:** University of North Carolina at Greensboro

**Discipline:** Public Health Education

**Abstract:**

This poster will discuss current gender inequities in sexual healthcare provided to women following a spinal cord injury (WWSCI). The role of heteronormativity and structural sexism in care will be described and the Critical Sexuality Studies framework (CSS) will be examined as an important tool for future research and practice expansion.

Disparities in sexual health outcomes are amplified for WWSCI in rehabilitation settings. Rehabilitation centering sexual health is not highly prioritized and practitioners report both a lack of training and discomfort providing sexual rehabilitation care. Sexual healthcare practice, when it occurs, is based on cis-gendered male norms and a heteronormative approach. The paralyzed bodies of WWSCI are rarely if ever discussed in practice or research. Instead, SCI research focuses on men and their embodied sexuality post SCI.

The tenets of CSS speak to the lived experience of WWSCI and their sexual healthcare. This poster describes potential applications of CSS to systematically interrogate the structural sexism entrenched in SCI rehabilitation. Examples will be provided to demonstrate the framework's utility in reconceptualizing SCI sexual healthcare educational materials and topics, broadening the scope of practitioner training, and disrupting gender disparities in SCI sexuality research. Specific examples will be highlighted, including heteronormative sexual health educational materials that limit illustrations to penile-vaginal intercourse and WWSCI's experiences of providers focusing their sexual healthcare education on fertility and menstruation instead of learning adaptive methods to achieve sexual satisfaction.

CSS is a tool that researchers and practitioners can use to dismantle inequities created by sexist and heteronormative approaches to SCI rehabilitation. It addresses the health impact of structural sexism by providing a framework to reconceptualize how WWSCI's sexual health education and outcomes are prioritized, how rehabilitation professionals are trained, and to challenge gender inequities in SCI sexual health research.

**Keywords:** structural sexism; gender inequity; gender power relations; gender norms; intersectionality

## \*N8: Multilevel Structural Sexism and Mental Health: Comparing Women and Men in Different-Gender Couples

**Authors:** Kwon, H; Kamp, DC; Meier, A; Manning, W; Stantoznik, J; Van Riper, D

**Institutional Affiliation:** University of Minnesota Twin Cities

**Discipline:** Sociology

### **Abstract:**

Mental health is gendered; women tend to have poorer mental health compared to men. Most research has focused on how individual factors explain gender differences. However, feminist scholars have argued that gender should be conceptualized as a multi-level system of stratification including institutional, interactional, and individual levels. We examined how meso- and micro-level measures of structural sexism was associated with mental health including loneliness, depressive symptoms, and generalized anxiety.

We used data from the National Couples' Health and Time Study (NCHAT), a nationally representative study of cohabiting and married U.S. adults aged 20 to 60 (n = 1,515 couples). Restricting the sample to primary respondents who had their partners complete the survey and those in different-gender couples resulted in a sample of 968 couples. For the micro-level measure, we used the respondents' perception of the safety of their community for women. Meso-level structural sexism measures included logged ratio of annual incomes, the ratio of ages, and the relative educational attainment between partners. We are coding the macro (i.e., state) level indicators and will present these results at the conference. We used hierarchical linear regression to test whether each level's structural sexism indicators increased the proportion of variance accounted for in loneliness, depressive symptoms, and generalized anxiety.

Preliminary results indicated that the safer the respondents perceived their area to be for women, the lower the level of loneliness, depression, and anxiety for both women and men. Also, the older the male partner was compared to the female partner, the more loneliness the female partner reported. Among men, having the same educational attainment as their partner was associated with higher levels of anxiety compared to when their partner had higher educational attainment. These results suggest that creating safer spaces for women is essential for improving both women and men's mental health.

**Keywords:** gender inequity; structural sexism; measurement; modifiable factors; gender norms

## N9: Opportunities and Innovations to Reduce Gender Inequities in Obstetrics

**Authors:** Mayer, RE; Dingwall, A

**Institutional Affiliation:** The MITRE Corporation

**Discipline:** Maternal Health

**Abstract:**

The United States is the only developed country with increasing maternal mortality rates. This problem disproportionately affects Non-Hispanic Black and American Indian/Alaska Native women, whom are 2-3 times more likely to suffer a pregnancy-related death than Non-Hispanic White women, as well as pregnant people who live in rural areas “maternity care deserts,” which require them to travel long distances to access care.

Research shows that gender-based norms and structural sexism—for both patients and providers—can lead to poor outcomes in maternal care. Furthermore, flaws in data collection and analysis emphasize the complexity of maternal health challenges and inequities. In 2021, MITRE, a Health Federally Funded Research and Development Center operator, partnered with the March of Dimes to convene federal and state agencies, academic researchers, nonprofits, and other members of the maternal health community at Saving Lives: A Data-Driven Summit to Improve Maternal Health. Participants identified 14 opportunities to improve maternal health data collection, analysis, sharing, and reporting. In addition, MITRE created the Maternal Mortality and Morbidity Interactive Dashboard (3MID), which empowers users to make data-driven decisions to reduce maternal morbidity and mortality and reduce health disparities. Telemedicine has emerged as a promising practice for obstetric care to address challenges related to social determinants of health, such as transportation which tend to disproportionately impact economically and socially marginalized pregnant women. MITRE, in collaboration with the Mayo Clinic, is developing a population-based dashboard for outpatient clinics and practice managers to explore how telemedicine could impact prenatal care and, ultimately, improve equity and health outcomes for their diverse communities.

In this poster session, we will share opportunities identified during the summit for data quality improvement, continued engagement, and data-driven strategies to improve maternal health outcomes, as well as maternal health innovative tools created by MITRE.

**Keywords:** gender inequity; interventions; innovation; gender norms; structural sexism

\*N10: RAising the Investment in Sex and gender Evidence (RAISE): A Structural Intervention to Close the Sex and Gender Data Gap

**Authors:** Dougherty, BE; Bogner, HR; Mamtani, M; McAllister, A; Oquendo, MA; Schreiber, CA

**Institutional Affiliation:** Perelman School of Medicine at the University of Pennsylvania

**Discipline:** Women's Leadership and Advancement in Academic Medicine; Research on Sex and Gender in Health

**Abstract:**

The medical sex and gender data gap is well established. Despite this fact and efforts by the federal government, including the 21st Century Cures Act in 2016, the assertion that sex and gender do not matter or are too complex to incorporate perpetuates the male default bias at every stage of research from preclinical mice models to clinical trial recruitment. The lack of sex and gender disaggregated data has led to an intrinsically biased medical system that is guided by a spurious understanding of disease processes as they present in women. Sex and gender-disaggregated data is critical to achieving gender equity in academic medicine.

The RAising the Investment in Sex and gender Evidence (RAISE) initiative, launching in October 2022, is a structural intervention that aims to 1) advance women scientists and achieve gender equity in the scientific workforce and 2) incorporate the analysis of sex and gender differences into research programs throughout one academic medical center. RAISE is powered by two long-standing programs in the Office of Inclusion, Diversity, and Equity, whose missions are to support the advancement and leadership of women in academic medicine; promote education and research in women's health and women's careers; and illuminate understanding of the wide-reaching and established sex differences in disease prevalence, phenomenology, and treatment. RAISE will provide faculty with grant funding to embark on new research, or revisit earlier findings, applying sex and gender-disaggregated data analysis. RAISE grantees will participate in programming and consult with statisticians, and other expert partners, to gather, synthesize and disseminate sex and gender-disaggregated data. The program will co-sponsor a research symposium with Penn PROMOTES where grantees will disseminate their findings. This poster will provide a blueprint of this innovative program and present its implications and plans for sustainability.

**Keywords:** gender inequity; structural sexism; measurement; interventions

## N11: Reducing U.S. Male Suicide Mortality Through Attention to Hegemonic Masculinity

**Authors:** Winterrowd, E; Canetto, SS

**Institutional Affiliation:** Regis University

**Discipline:** Psychology; Women's and Gender Studies

### **Abstract:**

In the United States, suicide is a leading cause of death. In the U.S., as elsewhere, suicide is a gendered and culturally patterned health phenomenon. U.S. men across age groups are less likely to report suicidal thoughts and to engage in suicidal behavior, but more likely to die by suicide than women. Suicide rates are highest during adolescence among Indigenous males, and in late adulthood among European-American males. According to Suicide Scripts Theory (Canetto, 1997), a theory that addresses intersectionalities of gender, culture, age, and suicide, this "gender paradox" in suicidality (Canetto & Sakinofsky, 1998) relates to cultural and gender norms. In the U.S., nonfatal suicidal behavior is associated with femininity norms of passivity and weakness (e.g., "call for help," "failed attempt") whereas fatal suicidal behavior is viewed through the lens of hegemonic masculinity's restricted emotionality and agency (e.g., "rational," "successful"). Consistent with suicide script theory, U.S. studies show that in European-descent communities, suicide is viewed as more permissible for older adults, and for men more than women. Studies show that suicide permissibility predicts actual suicide. Males in conventionally masculine industries (e.g., construction, police) have among the highest suicide mortality as do boys who identify as more conventionally masculine. There is also evidence of a stigma for U.S. males of surviving a suicidal act and therefore presumably being "weak" and "failing" at suicide, like women.

Challenging U.S. scripts of gender and suicide has the potential to reduce suicidality in men and women. This includes avoiding language such as "failure," "success," and "attempt" when discussing suicidality and supporting expansive gender narratives associated with suicide protection (e.g., awareness that suicide is hurtful to the bereaved as a reason for living). Research is needed on suicide scripts associated with low suicide mortality (e.g., those of older adults of African descent).

**Keywords:** psychology; women's and gender studies



## N12: Systematic Review of Virtual Reality for the Treatment of Mental Disorders Associated with Gender-Based Violence

**Author:** Khatri, H

**Institutional Affiliation:** The University of Texas at Dallas

**Discipline:** Art; Humanities; Technology

### **Abstract:**

The prevalence of mental disorders among female victims of Gender-Based Violence (GBV) is 24.5% vs. men at 16.3%. Virtual reality (VR) has been used for treating various mental illnesses, but no study has explored its usability for treating the conditions associated with victims of GBV, specifically the female population.

Goals of this research include: (1) To synthesize existing literature on VR interventions to manage and treat mental health conditions commonly associated with female victims of GBV. (2) To design an immersive VR Therapy Model for treating mental health conditions associated with female victims of GBV. The methodology followed the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) guidelines and had two inclusion criteria: (1) studies that enrolled participants in VR interventions and (2) mental disorders associated with GBV in *The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition*.

Research findings show phobia 84%, anxiety 74%, depression 70%, chronic pain 68%, PTSD 56%, substance abuse 47%, persecutory delusion 42%, attempted suicide 34%, psychosis 32%, eating disorder 30%, and schizophrenia 25% associated with GBV in women. The results of the studies assessing the use of VR for treating these mental conditions for general patients include a significant decrease in levels of fear, anxiety, depression severity, self-criticism, anger, depression, craving for alcohol and drug use, suicidal ideation, distress, eating disorder, and subjective pain with improvement in self-compassion. The output of the review is a VR Therapy Model using gaming simulations to shift perspective from being a “victim” to a “superhero.”

**Keywords:** gender inequity; interventions

## N13: The Influence of Gender Norms on Social Behavior Change Interventions in Nigeria

**Authors:** Onyechi, LC; Shittu, AA

**Institutional Affiliation:** Johns Hopkins Center for Communication Programs

**Discipline:** Social Behavior Change Communication

### **Abstract:**

Despite growing interest in gender and its impact on health care, a lack of clarity remains on gender-related factors that influence health care access and use of health services in Nigeria. Understanding the myriad of socio demographic, relational, cultural, and structural factors that hinder or facilitate health seeking behavior is essential for the design and delivery of effective Social Behavior Change (SBC) interventions.

The United States Agency for International Development's (USAID) Breakthrough ACTION-Nigeria (BA-N) goal of increasing the practice of priority health behaviors in the areas of malaria, maternal, newborn, and child health + nutrition, family planning, tuberculosis through an equitable gender environments cannot be met without considering the multisystemic gender-related factors that influence health-care access and identify effective strategies that reduce barriers and improve health service access and use as well as health-seeking behaviors of women and men

In the inception of the project, BA-N conducted a desk review and qualitative assessment in Abuja federal capital territory and Sokoto State. Key informants, 23 representatives from civil society organizations, international organizations, and government agencies working on gender, male engagement, masculinity, youth, and health care were interviewed. In-depth interviews were conducted with 16 health-care practitioners who provide services for tuberculosis, malaria, HIV, family planning, nutrition, and MNCH.

The research suggests that, seeking health care in Nigeria are multidimensional and may be influenced by a woman's social position in the household, sociocultural factors, her economic status, age, and education while men who hold traditional constructions of masculinity are less willing to utilize preventive health care. However, external factors like Provider level and structural factor also contributes. Since inception, BA-N has worked tirelessly towards applying evidence-based SBC strategies, implementing innovative approaches that expand the evidence base on the role of SBC in gender transformation, and mobilizing national and state partners to work collaboratively toward a shared agenda.

**Keywords:** gender norms

## N14: Women and Suicide: The Global Evidence Impels a Paradigm Shift in Theory, Research, and Prevention

**Author:** Canetto, SS

**Institutional Affiliation:** Colorado State University

**Discipline:** Psychology

### **Abstract:**

A dominant gender stereotype in the United States (U.S.), is that women are protected from suicide. This theory is based on U.S. women's lower suicide mortality, relative to men's. U.S. patterns, however, are not universal. In several countries (e.g., Bangladesh, China, Indonesia, Iraq, and Pakistan) women represent the majority of suicide decedents. In other countries women and men have similar suicide rates. Also in most countries, women have higher rates of nonfatal suicidality (World Health Organization 2014). Another U.S. gender stereotype is that women's suicide is an act signaling psychological fragility and disintegration in response to relatively trivial personal relationship problems while men's suicide is an indication of serious social and economic disintegration. In other words, in the U.S., women's suicide is psychologized while men's suicide is politicized.

In this presentation dominant U.S. stereotypes of women and suicide are challenged via an examination of global data. These data show that social, economic, and legal discrimination are associated with higher rates of female suicide. In many countries with high female suicide mortality suicide is a culturally-scripted way to protest against, and escape community-and state-enabled discrimination, abuse, and violence—women having no other socially-acceptable recourse against such discrimination, abuse, and violence. The global evidence on the social, economic, and cultural factors in women's suicidality calls for a paradigm shift in theory, research, and the prevention of women's suicidality, in the U.S., and elsewhere.

**Keywords:** gender norms; structural sexism; gender inequity; gender power relations; intersectionality; modifiable factors; global perspectives; violations of women's human rights

## Structured (S1–S52)

### \*S1: A Framework for Teaching Sex and Gender Health: Four Core Tenets

**Authors:** Sleeper, R; Newman, CB; Chin, EL; Kling JM

**Institutional Affiliation:** Texas Tech University Health Sciences Center Jerry H. Hodge School of Pharmacy

**Discipline:** Pharmacy

#### **Abstract:**

**Background:** Sex as a biological variable and gender as a sociocultural variable influence health, disease pathophysiology, treatment, and outcomes as well as personal attitudes towards medicines and health care in general. The concepts of sex and gender differences, however, have not been systematically incorporated into education across health professions.

**Objectives and Methods:** Since 2015, four sex and gender health education summits have built upon the effort to grow awareness and promote the integration of this content into all health professions' curricula. A significant outcome of these summits was the development of a framework for education about sex and gender specific health through a set of core educational tenets. These four tenets represent the collaborative effort of an interprofessional writing team, drawing from the input of facilitated interprofessional groups during summit workshops.

**Results:** The tenets assert that all health care professionals should be able to: (1) Demonstrate knowledge of sex and gender specific health, (2) Evaluate literature and the conduct of research for incorporation of sex and gender, (3) Incorporate sex and gender considerations into clinical decision making, and (4) Demonstrate patient advocacy with respect to sex and gender.

**Conclusion:** These tenets provide a framework for teaching sex- and gender-specific health that can be readily integrated into existing curricula. The tenets may be used within all professions to develop practice guidelines, competency statements, and/or assessment benchmarks, within the structures of their respective accrediting bodies. We anticipate that this model will lead to more rapid diagnosis and treatment, enhanced patient safety, better outcomes, and reduction in health disparities and the economic burden of care. Above all, we hope to raise a generation of healthcare practitioners who will approach clinical care with a sex-and-gender lens, ultimately resulting in a more empathetic and patient-centered model of care for all.

**Keywords:** interventions

## S2: A Gendered Perspective on Dietary Acculturation in North America

**Authors:** Ginny, L; Jandaghi, P; Vatanparast, H

**Institutional Affiliation:** University of Saskatchewan College of Pharmacy and Nutrition

**Discipline:** Nutrition

### **Abstract:**

**Background:** The dietary acculturation process and its impact on immigrant health is an emerging public health issue. The modifying effects of gender on dietary acculturation among adult immigrants in North America are not well understood.

**Objective:** In this scoping review, we aimed to identify existing evidence and knowledge gaps regarding gender differences with respect to dietary acculturation in North America (Canada and the United States).

**Method:** Five databases (Global Health, MEDLINE, Web of Science, Cochrane Library, and Embase) were searched for original studies and reviews published during 2000 - 2022. Nineteen studies focused on immigrants and dietary acculturation across both genders were included.

**Results:** Many studies found that length of stay in Canada or the U.S. was associated with increased dietary acculturation, often characterized by increased consumption of processed foods and decreased consumption of traditional dishes, among both genders. Some studies found that men experienced greater dietary acculturation than women, despite efforts to maintain traditional diets. Women were more likely to be concerned with consuming a healthy diet. The current literature does not explain the impact of interrelated factors on dietary acculturation using intersectionality-based analysis across different ethnicities and genders in North America.

**Conclusions:** Potentially harmful aspects of dietary acculturation, such as poor diet quality, were more notable among men as their length of residence in the host country increased. Developing a gender-specific protocol for measuring acculturation with ethnic-specific questionnaires, while also accounting for immigration duration, would produce standardized and comparable results. Policymakers could use this comprehensive dietary information to establish health-promoting policies and programs. Further studies are needed to articulate dietary acculturation risks and health benefits of traditional ethnic foods.

**Keywords:** gender roles

### S3: A Qualitative, Intersectional Study of Barriers to Access to Treatment for Opioid Use Disorder for Women of Reproductive Age

**Authors:** Bulgin, D; Murry, VM; McElroy, T; Mirza, S; Schlundt, D; Bonnet, K; Pena, M; Patrick, SW

**Institutional Affiliation:** University of Tennessee, Knoxville

**Discipline:** Nursing

**Abstract:**

**Background:** The opioid crisis remains a public health emergency; and is increasingly impacting women, with exponential increase in overdose deaths among women of reproductive age. Despite evidence that medications for opioid use disorder (MOUD) are effective for preventing adverse outcomes from opioid use disorder (OUD), most individuals do not receive treatment. Barriers to accessing MOUD are structural and interpersonal, including disparate access in predominately Black and Hispanic communities. Further, there is evidence that disparities in MOUD access intersects with race/ethnicity and pregnancy status.

**Objectives:** Qualitative data were analyzed from a National Institute on Drug Abuse–funded (R01DA045729) randomized simulated patient (“secret-shopper”) field experiment of outpatient buprenorphine-waivered providers and opioid treatment programs. Our primary aim was to analyze descriptions of barriers women encountered when seeking MOUD, attending specifically to descriptions of experiences based on race/ethnicity and pregnancy status.

**Methods:** Women were hired as callers, representing White, Hispanic, and Black female vocal features and public/private insurance across the age range 25-30 years. 28,651 calls were made seeking MOUD. There were 17,970 unique free-text comments to the question “Please give an objective play-by-play of the description of what happened in this conversation.” Data were analyzed using an iterative inductive-deductive approach.

**Findings:** Preliminary analysis demonstrated common structural (e.g., social exclusion, discrimination, structural stigma, and financial barriers) and interpersonal (e.g., labeling, microaggressions, stereotyping) barriers to obtaining appointments. Callers reporting as pregnant and publicly insured noted more structural barriers than privately insured women, and the interpersonal remarks callers noted were predominately based on economic status. Ongoing analyses are being conducted to determine: 1) if and how callers’ race/ethnicity influences barriers to appointment access and 2) if and how clinic type and characteristics of the clinic community influences barriers to appointment access.

**Conclusion:** Preliminary findings demonstrate a need for multilevel interventions to improve women’s access to MOUD and their experiences with administrative and medical staff when accessing treatment.

**Keywords:** intersectionality; modifiable factors

## S4: Acceptability of Hormones as a Smoking Cessation Aid and Menstrual Cycle Shame in Women of Reproductive Age

**Authors:** Choi, BM; Mallahan, S; Werts, SJ; Allen, AM

**Institutional Affiliation:** University of Arizona

**Discipline:** Health Outcomes

### **Abstract:**

**Background:** About 20 million women use combustible cigarettes in the U.S., and although most are motivated to quit, only a small portion successfully stop smoking. Research has shown that ovarian hormones, which show cyclical patterns during menstrual cycles, affect smoking and cessation-related behaviors. Modifying hormone levels via exogenous hormones may lead to improved smoking cessation outcomes. However, the acceptability of this approach is unknown. Further, the acceptability may also be influenced by menstrual cycle shame (MCS).

**Goals/Objectives:** We explored the association of MCS with willingness to use exogenous hormones for smoking cessation.

**Methods:** We administered an anonymous, cross-sectional online survey using Prolific to women (18-40 years old) who self-reported smoking. MCS included 11 statements that were responded to with 7-point Likert-type scales to produce a total score (range 0-7) and included bothersome (range 0-7) and shame subscales (range 0-7). Willingness to use hormones (oral contraceptive, depot medroxyprogesterone acetate, transdermal patch, vaginal insert, subcutaneous implant, intrauterine device) was also assessed with a 7-point Likert-type scale. Descriptive and logistic analyses were conducted using SAS.

**Results:** Respondents (n=220) were, on average, 29.3 years old and non-Hispanic White. Overall, MCS-total was 4.43 (standard deviation; [SD]:±0.98), MCS-bothersome was 5.79 (SD: ±1.08), and MCS-shame was 3.29 (SD: ±1.39). Willingness to use transdermal patch increased by 1.70 odds (95% confidence interval [CI]: 1.04-2.77) with each one-unit increase of the MSC-bothersome subscale. No other significant associations were observed.

**Conclusions:** Overall, MCS may be associated with willingness to use a transdermal patch but does not appear to be associated with willingness to use exogenous hormones as a smoking cessation. Further research is warranted to understand potential factors affecting acceptability of hormones for smoking cessation.

*Funding provided by the Prevent Cancer Foundation.*

**Keywords:** interventions; modifiable factors

## \*S5: Addressing Reproductive Coercion and Intimate Partner Violence: Evidence from Two ARCHES Trials

**Authors:** Silverman, JG; Pearson, E; Uysal, J; Johns, N; Liambila, W; Paul, D; Menzel, J; Shakhider, MAH; Konika, RA; Wendoh, S; Undie, CC

**Institutional Affiliation:** Center on Gender Equity and Health; University of California, San Diego

**Discipline:** Public Health

### **Abstract:**

**Background:** Reproductive coercion (RC) and intimate partner violence (IPV) negatively impact women's health and well-being, including greatly increasing risk for unintended pregnancy. The Addressing Reproductive Coercion in Health Settings (ARCHES) intervention trains health providers to counsel and screen for RC and IPV during reproductive health counselling, providing education to increase female agency to use family planning (FP) successfully despite partner/family opposition, and facilitating awareness and access to community-based IPV services.

**Objective:** To test effectiveness of the ARCHES intervention adapted for use with FP clients in Nairobi, Kenya and abortion clients in urban Bangladesh in increasing modern FP use and reducing RC, IPV, and incident pregnancy.

**Methods:** Evaluations were conducted in six facilities in each country, using a cluster-randomized design in Bangladesh (n=2,686 abortion clients) and a matched control design in Kenya (n=659 FP clients). Participants completed surveys at baseline (prior to counseling), exit (immediately after counseling), and 3-month follow-up. Participants completed additional follow-up surveys at 6 months in Kenya and 12 months in Bangladesh. Follow-up data were combined in Kenya to maximize power. Generalized logistic mixed-effects models were used to assess differences in outcomes over time between intervention and control groups.

**Results:** Women in intervention facilities in both countries had significantly higher odds of modern FP use at follow-up (Kenya: AOR=2.19,  $P<0.05$ ; Bangladesh: 3-month AOR=1.86,  $P<0.001$ ; 12-month AOR=1.46,  $P<0.01$ ) and lower odds of incident pregnancy in Kenya (AOR=0.42,  $P<0.001$ ) compared to women in control facilities. Women in intervention facilities had somewhat lower odds of reporting physical IPV at follow-up, and there were mixed results on reporting RC and sexual IPV.

**Conclusions:** ARCHES increases FP use and reduces incident pregnancy and physical IPV in these settings and should be considered for integration in FP and abortion services in facilities with infrastructure for privacy during counseling.

**Keywords:** gender power relations; interventions



## S6: Administrative Barriers to Accessing Post–Sexual Assault Psychosocial Care During Governmental Reforms in Québec: A Narrative Report

**Authors:** Bortolussi-Courval, É; Krauth-Ibarz, T; McDonald, EG; Lemay, M; Hraibeh, R

**Institutional Affiliation:** Division of Experimental Medicine, Faculty of Medicine and Health Sciences, McGill University

**Discipline:** High-Value Health Care

### **Abstract:**

**Background:** Between 2021 and 2022, the government of Québec, Canada, undertook legal, medical, and psychosocial care reforms for survivors of sexual violence (SSV).

**Objective:** Through a narrative report, we aim to explore the barriers faced by one SSV in Québec in accessing post-assault support and the impact of the reforms on the experience of SSVs accessing care.

**Methods:** Data was collected from one SSV who shared her story with authors. Significant events in the timeline for accessing support were plotted against the timeline of Québec’s sexual violence policy reforms in 2021-2022. Specific outcomes collected included timely access to medical care, legal services, psychological counseling, and trauma informed training for police support.

**Results:** *Access to medical services:* The assault took place in September 2021. Clinicians refused to perform a rape kit exam at a nearby hospital because they did not serve the region the SSV lived in. That was in spite of a policy that guarantees access to a rape kit at whatever site the SSV chooses. She had to visit another institution instead, leading to a 4-hour delay.

*Access to legal aid:* The SSV received free legal aid from a clinic through October-December 2021. In January 2022, the Justice Ministry of Québec removed all funding to legal clinics for SSVs and redirected SSVs to a government-funded platform, Rebâtir. Unfortunately, the case file was not transferred and so the legal process had to begin again from the start.

*Interactions with members of the police force:* Justice Québec is currently performing pilot projects (in other regions) for trauma-informed police support for SSVs. The police detective assigned to the case informed the SSV that pressing charges would “ruin the assaulter’s reputation” that the accused seemed like a “good guy who wouldn’t want to harm anyone.”

*Access to psychological counseling:* The Ministry for the Status of Women renewed funding for SV/IPV for 2022-2027. Three establishments refused to provide services as the SSV lived outside of their jurisdiction. The 4th establishment had a waitlist of 8-12 months. The SSV was informed that a facility would “soon be built nearby” where she could access care.

**Conclusions/Impact:** Québec’s reforms to improve SSV access to care in actual fact created significant barriers for one SSV in receiving support following a sexual assault. Future research should assess psychosocial impacts of policy reforms on SSVs and aim to implement more efficient survivor-centered care.

**Keywords:** gender power relations; structural sexism; modifiable factors; intersectionality

**\*S7: Advancing Gender Equity in Health Research Through Innovative Engagement and Inclusion: The *All of Us* Research Program**

**Authors:** Lee, M; Ramirez, AH; Foster, CS; Mendoza, M; McMaster, SJ; Alerté, S; Martinez, E; Baskir, RS; Schully, SD; Watson, KS

**Institutional Affiliation:** National Institutes of Health (NIH) Office of the Director

**Discipline:** Community Engagement; Precision Medicine; Chromatin; Biology; Genomics

**Abstract:**

Background: The All of Us Research Program is building one of the nation’s largest research platforms aiming to transform the future of health by providing researchers with expansive and diverse health data including populations historically underrepresented in biomedical research (UBR). All of Us seeks to engage one million or more participants spanning different ages, racial and ethnic identities, and regions of the country. Intentional efforts for community and participant engagement ensure diversity in gender identity, sexual orientation, socioeconomic status, education, disability, and health status with the aim to address health inequities including those in regard to gender. The All of Us dataset provides unprecedented opportunities for a wide range of studies to understand how biological, behavioral, and environmental factors influence health and a broad range of diseases and conditions. The participant diversity in All of Us coupled with multi-dimensional data types including electronic health records, bio-samples and bioassays, surveys, physical measurements, and mobile health data foster research that can reduce existing gender inequities in health research.

- Objectives: Describe *All of Us*’ commitment to equity, diversity, and inclusion to address gender inequalities in research.
- Discuss community engagement as a vital component to address historical barriers impacting the inclusion of women and gender minorities on both sides of research.
- Describe projects in the Researcher Workbench aiming to advance research to mitigate gender inequalities.

Results: All of Us enrolled more than 510,000 participants, with 221,500 self-identifying as women, 33,780 self-identifying as sexual and gender minorities (SGM), 1,160 self-identifying as transgender, and overall 80% UBR, demonstrating the impact of intentional and innovative community engagement. The program registered more than 2,600 researchers, 1,228 of whom self-identify as women and 32 of whom self-identify as SGM. These researchers developed 68 research projects addressing the intersectionality of health disparities and gender inequities in health research.

**Keywords:** intersectionality; gender inequity; interventions; community engagement

**\*S8: Advancing Understanding of Structural Sexism and Population Health Inequities: Introducing a Novel Modeling Approach to Capture Life-Course and Intersectional Effects**

**Authors:** Beccia, AL; Agénor, M; Baek, J; Ding, EY; Lapane, KL; Austin, SB

**Institutional Affiliation:** Division of Adolescent and Young Adult Medicine, Boston Children's Hospital; Department of Pediatrics, Harvard Medical School

**Discipline:** Social Epidemiology

**Abstract:**

Accumulating evidence links structural sexism to gendered health inequities, yet methodological challenges have precluded comprehensive examinations into life-course and/or intersectional effects.

Here we describe a novel approach for population health research on structural sexism that uses sequential conditional mean models (SCMMs) to jointly account for life-course exposure trajectories and high-dimensional interactions between multiple dimensions of social identity and experience. To illustrate, we then apply this method to study how cumulative exposure to U.S. state-level structural sexism from childhood through young adulthood shapes mental health at the intersection of gender, race/ethnicity, and sexual orientation.

Data come from the Growing Up Today Study, a cohort of 16,875 children aged 9-14 years in 1996 who we follow through 2016. Using a composite index of relevant policies and societal conditions (e.g., abortion bans, wage gaps), we classify states according to their level of structural sexism and sum the number of years participants lived in a high structural sexism state to quantify cumulative exposure. We fit a series of SCMMs to estimate the effect of cumulative exposure across the study period on various mental health outcomes (e.g., depression, eating disorders), controlling for individual- and state-level confounders with propensity scores. We then introduce social-identity-by-structural-sexism interaction terms to test whether effects differ between and/or within gender groups over time.

Analyses reveal that cumulative exposure to structural sexism (1) increases risk of adverse mental health outcomes by 5–8%; (2) disproportionately affects multiply marginalized groups (e.g., racial/ethnic and/or sexual minority girls/women); and (3) partially explains the observed intersectional inequities. Substantively, such findings suggest that long-term exposure to structural sexism may contribute to the inequitable social patterning of mental health among young people living in the U.S. More broadly, SCMMs represent a promising approach to examining the complex links between structural sexism and health across the life course.

**Keywords:** intersectionality; structural sexism; analytic methods

## S9: Analysis of Ophthalmology Fellowship Educational Leadership and Trainees Gender Trends

**Authors:** Saadeh-Jackson, S; Miller, KN; Richards, NQ; Amendola, MF

**Institutional Affiliation:** Virginia Commonwealth University Health System; Rush University Medical Center

**Discipline:** Ophthalmology

### **Abstract:**

**Importance:** Over the past decade, the number of women enrolled in medical school has continued to increase despite women representing less than a quarter of practitioners in the field of ophthalmology. While ophthalmology residency gender data is available, the gender trends across ophthalmology fellowship program trainees and directors is not known.

**Objective:** To determine the gender trends within different ophthalmology fellowship programs and the gender ratios of fellowship program directors.

**Design:** Cross-sectional

**Setting:** Fellowship program websites were searched for a roster of current fellows in February 2020.

**Participants:** 122 institutions with one or more ophthalmology fellowship programs: neuro-ophthalmology, pediatric ophthalmology, uveitis, cornea, glaucoma, oculoplastic surgery, retina/vitreous, and oncology/pathology.

**Main Outcomes and Measure:** Variables analyzed included the gender of fellows, number of fellows, and gender of fellowship program directors. Fisher's exact test\* was undertaken to establish statistical significance.

**Results:** Female-dominated fellowship programs included neuro-ophthalmology (11/15; 73%), pediatric ophthalmology (22/31; 70%), uveitis (7/11; 63%), and cornea (24/47; 51%). Glaucoma (23/47; 48%), oculoplastic surgery (31/66; 47%), retina/vitreous (32/114; 28%), and oncology/pathology fellowships (1/5; 20%) were considered female minority subspecialties. Female fellowship directors remain in the minority (less than 50%) across all eight fellowships examined. Female-dominated fellowship programs had significantly higher rates ( $P=0.007^*$ ) of female fellowship program directors (34%) versus female minority programs (21%).

**Conclusions:** In reviewing ophthalmology fellowship programs, there is a lack of female representation throughout fellowship program leadership. Programs with higher female fellow representation had significantly high rates of female program directors. However, data was limited due to lack of current fellow rosters at 60% of institutions. Future investigations will focus on fellowship applicants and the influence program directors' gender might have on selection criteria for various subspecialty training.

**Keywords:** gender inequity; structural sexism

**\*S10: Application of Machine Learning Methodologies to Understand Violence Against Women Using Survey Data from India**

**Authors:** Raj, A; Dehingia, N; McDougal, L; Singh, A; Kumar, K; McAuley, J

**Institutional Affiliation:** Center on Gender Equity and Health; University of California, San Diego

**Discipline:** Public Health; Social Sciences

**Abstract:**

**Background:** Application of machine learning (ML) to understand survey data on sexual violence (SV) may offer insight to this underreported concern.

**Objective:** We used ML combined with iterative thematic analysis (ITA- an approach developed by our team involving qualitative coding of ML generated variables) to identify risk factors for SV reported by women in the Indian National Family and Health Survey 2015-2016 (NFHS-4).

**Methods:** Using national representative NFHS-4 data, we integrated ML logistic regression (lasso and ridge) with ITA, where we coded ML generated variables, removed all variables in the theme with variables that contribute most to the outcome, and regenerated models and coding until we could generate no new themes. We validated our findings via comparisons to those from neural networks and from prior epidemiologic analyses.

**Results:** SV is most likely to occur in marriage and linked to a history of family and partner violence, lesser freedom of movement and economic agency, and lesser access to media and health care. Non-marital and marital SV have similar predictors for all women, but SV reported by unmarried adolescents correlates with higher wealth and mobility, suggesting divergent risks for SV based on age and relationship to the perpetrator. Findings are comparable to that seen in neural network analysis and prior epidemiologic papers, validating our ML-ITA approach, and extend prior work by documenting SV links with differences in SES by age of victim and low health service access.

**Conclusion:** ML-ITA is a valid analytic approach that can offer insight into survey data on violence against women and can also elucidate variables associated with a given outcome that may not otherwise have been hypothesized.

**Keywords:** gender power relations; structural sexism; innovative methods of analysis; modifiable factors

## S11: Associations of Multiple Forms of Gender-Based Violence with Women's Family Planning Use and Unintended Pregnancy in Three Countries

**Authors:** Uysal, J; Pearson, E; Tomar, S; Undie, CC; Liambila, W; Paul, D; Shakya, H; Wendoh, S; Johns, N; Menzel, J; Silverman, JG

**Institutional Affiliation:** Center on Gender Equity and Health; University of California, San Diego

**Discipline:** Violence Prevention; Women's Sexual and Reproductive Health Research

### **Abstract:**

**Background:** Reproductive coercion (RC) and intimate partner violence (IPV) are distinct forms of gender-based violence (GBV) that constrain women's reproductive autonomy. RC comprises behaviors, most often perpetrated by male partners and family members, to intentionally control and interfere with female's family planning (FP) use and pregnancy decisions. Global estimates indicate that 1 in 3 women will experience IPV in her lifetime; less evidence exists on prevalence of RC.

**Objectives:** To describe prevalence and associations of RC and IPV, overall and by specific form, on FP use and unintended pregnancy in Kenya, Bangladesh, and Niger.

**Methods:** Surveys were conducted in urban Kenya (n=659) and Bangladesh (n=2,686) with girls and women (15 to 49 years old) seeking FP and abortion services, respectively, and in Niger (n=968) with a rural population-based sample of married girls (ages 13–19). Mixed-effects regression was utilized to test associations between lifetime RC and IPV, overall and by specific form, with unintended pregnancy. As the Bangladesh sample occurred within abortion care, previous abortion was modeled instead of unintended pregnancy. Multinomial mixed-effects models assessed overt and covert vs. no FP use.

**Conclusions:** Lifetime RC prevalence was 38% in Kenya and 10% in Bangladesh and Niger. Lifetime IPV prevalence was 48% in Kenya, 45% in Bangladesh, and 23% in Niger. Women experiencing IPV had significantly higher odds of unintended pregnancy and previous abortion. RC was positively associated with these outcomes, but lost significance after controlling for IPV. In Kenya, Bangladesh, and Niger samples, RC was associated with increased odds of using FP covertly compared to overtly and, in Kenya and Bangladesh, using FP covertly compared to no use. Associations will be presented across RC/IPV forms.

**Knowledge Contribution:** RC and IPV are prevalent and associated with threats to women's reproductive health in samples across these three countries.

**Keywords:** gender inequity; reproductive coercion; intimate partner violence; gender-based violence

## S12: Association of Neighborhood Deprivation and Lung Cancer in African American Men and European American Men in the NCI–University of Maryland Case Control Study

**Authors:** Pichardo, C; Pichardo, M; Dorsey, T; Wooten, W; Zingone, A; Agurs-Collins, T; Nebeling, L; Ambs, S; Harris, CC; Ryan, BM

**Institutional Affiliation:** Health Behaviors Research Branch, Behavioral Research Program, Division of Cancer Control & Population Sciences, National Cancer Institute

**Discipline:** Public Health

### **Abstract:**

**Importance:** African American (AA) men have a higher risk of developing lung cancer than European American (EA) men. Previous studies revealed mixed associations between neighborhood deprivation and lung cancer risk; but data is sparse for AA men.

**Objective:** To examine the association between neighborhood deprivation and lung cancer risk.

**Setting and Participants:** This is an age- and race-matched case–control study of 2,044 AA and 3,249 EA from the NCI-University of Maryland recruited between 1998-2003.

**Exposure:** 2000 Census-tract standardized neighborhood deprivation index as continuous and quintiles (Q). Covariates included age, family history of cancer, body mass index, race, smoking status, COPD, gender, and education. The outcome was lung cancer status.

**Results:** In risk-adjusted logistic regression models (OR, 95% confidence interval), residing in neighborhoods with higher neighborhood deprivation was associated with increased disease odds (quartile [Q] 2: 1.30, 1.04–1.61; Q3: 1.39, 1.12–1.71; Q4: 1.48, 1.20–1.84; Q5: 2.57, 2.05–3.19) compared with neighborhoods with low deprivation (Q1). In sex- and race-stratified analysis, the magnitude of the relationship was stronger among African Americans (Q3: 3.07, 1.82–5.16 versus Q1), particularly among men (Q3: 1.32, 1.00–1.73; Q4: 1.59, 1.22–2.07; Q5: 2.46, 1.91–3.15 versus Q1), than EA men (Q1: 1.30, 1.04–1.62; Q2: 1.37, 1.10–1.70; Q4: 1.38, 1.11–1.72; Q5: 1.86, 1.49–2.32). European American women residing in neighborhoods with very high deprivation had greater disease odds (Q2: 1.38, 1.10–1.72; Q3: 1.43, 1.14–1.78; Q4: 1.42, 1.13–1.73; Q5: 1.99, 1.58–2.50 versus Q1) compared to AA women (Q5: 1.71, 1.33–2.25 versus Q1).

**Conclusions:** Residing in neighborhoods with high deprivation may adversely influence lung cancer risk, with greater risk observed among AA men. Findings suggest that changing neighborhood environments might have important implications for lung cancer disparities. Tailoring neighborhood interventions to address cancer risk for AA men living in neighborhoods with greater socioeconomic deprivation is of importance.

**Keywords:** gender inequity; neighborhood deprivation; cancer disparities

**\*S13: Association of Pregnancy Status and Community Race Composition with Likelihood of Acceptance for Treatment of Opioid Use Disorder**

**Authors:** Bulgin, D; Patrick, SW; McElroy, T; McNeer, E; Dupont, W; Davis, MM; Murry, VM

**Institutional Affiliation:** University of Tennessee, Knoxville

**Discipline:** Nursing

**Abstract:**

**Background:** Rates of opioid use disorder (OUD) among pregnant women have increased dramatically over the past two decades. Medications for OUD (MOUD) are highly effective in preventing adverse outcomes for mothers and infants; however, most mothers and infants with OUD do not receive them. Emerging evidence suggests that factors associated with health inequities (e.g., race/ethnicity, pregnancy status) impact access. Community characteristics and composition may also influence MOUD access.

**Objectives:** Using data from a National Institute on Drug Abuse–funded (R01DA045729) randomized simulated-patient (“secret shopper”) field experiment of outpatient buprenorphine-waivered providers and opioid treatment programs (OTPs), we aimed to determine if secret-shoppers were less likely to receive an appointment if their race/ethnicity was not the majority race/ethnicity of the clinic where they sought treatment and if outcomes varied by pregnancy status and clinic type.

**Methods:** A logistic regression model was fit to assess likelihood of obtaining an appointment by race/ethnicity and pregnancy status for predominantly non-White versus predominantly White community distribution after accounting for potential confounders established a priori.

**Results:** Of 3,547 calls, 23% were to clinics in >50% non-White communities. There were no significant differences in obtaining an appointment by caller’s race/ethnicity. In comparison to >50% non-White communities, there were more buprenorphine-waivered providers (89% versus 77%,  $P<0.001$ ) and fewer OTPs (11% versus 23%,  $P<0.001$ ) in  $\geq 50\%$  White communities. Each 10% increase in non-White community distribution was associated with a 6% increase in obtaining an appointment (AOR, 1.06; 95% CI, 1.02–1.10). The likelihood of obtaining an appointment increased if calling an OTP (AOR, 4.94; 95% CI, 3.52–6.92) and if the caller was not pregnant (AOR, 1.79; 95% CI, 1.53–2.09).

**Conclusions:** We found that calling for an appointment in predominately white communities or being pregnant were associated with a lower likelihood of being accepted for treatment. A health equity lens is crucial when crafting policies to improve MOUD access while also dismantling existing structural barriers.

**Keywords:** intersectionality; modifiable factors



## S14: “Because I Can”: Motivations for Participation in a Semiprofessional Women’s Tackle Football League

**Authors:** Duffy, DM; Berg, A; Rhea, CK

**Institutional Affiliation:** University of North Carolina at Greensboro

**Discipline:** Female Athlete Health; Kinesiology; Exercise; Sport Science

### **Abstract:**

**Background:** In the United States (U.S.) it is a widely accepted belief that participation in tackle football is only for men. However, women’s participation in tackle football dates to the early 1930’s and today there are more than 4000 female tackle football players participating in one of three leagues in the U.S. Sport participation is very clearly defined based on tradition, culture, and social expectations, which are often dictated by masculine ideology. Masculine ideology refers to culturally accepted beliefs about masculine gender roles that subscribe to and embody the ideas of physical dominance, competition and antifemininity (Beaglaioich, et. al, 2013). When female athletes participate in sports that do not fit within the expected gender norms, like football, they may experience internal and external conflict known as the gender role strain paradigm (GRSP). The GRSP suggests that when gender norms are opposed and acted against participation may be seen as defying their gender roles.

**Methods:** Surveys were distributed to 30 of the 31 teams in the Independent Women’s Football League (n=681). Surveys were distributed using the Qualtrics©2015 software package for ease of participant access and usage. The survey included questions regarding demographic information, motivations for participation in tackle football, as well as gender role conflict. They were open-ended with no character limitations. Two hundred and forty-five players completed the survey (36% response rate).

**Results:** Inter-rater reliability was established between two researchers before themes were determined and decided on. Initially, responses regarding participation were coded and then clustered into three themes: (1) “because I can,” (2) to be a role model, and (3) to provide an outlet for aggression. Two gender role conflict themes emerged: (1) “to prove that I am strong” and (2) redefining what it means to be a “woman.”

**Keywords:** gender roles; gender norms

**\*S15: Bridging the Gap of Sex and Gender Differences in Medicine and Research: A Trainee Initiative for Improved Sex- and Gender-Specific Patient Care**

**Authors:** Levine, SR; Chaturvedi, SM; Galoustian, NA; Qiu, JM; Hartenstein, BA; Kwolek, D; Webinski, J

**Institutional Affiliation:** Brigham and Women's Hospital, Harvard Medical School

**Discipline:** Anesthesiology

**Abstract:**

**Background:** Sex- and gender-based medicine (SGBM) aims to understand how biological sex and gender affect pathophysiology and expression of human disease. However, decades of research lacking female animal models has led to societal medical practices to be male based. This knowledge gap likely explains why in 8 out of 10 FDA discontinued medications, women experienced the majority of toxic effects, including death (Government Accountability Office, 2001; Makkar, 1993; Franconi, 2007).

**Objectives:** Despite efforts for the last 30+ years to include women in medical research and report data by sex, there has been little translation of sex and gender differences into medical education. Less than 20% of medical schools have an integrated SGBM curriculum outside of traditional obstetrics and gynecology (Ob/Gyn) (Jenkins, 2016). The Sex and Gender Health Collaborative (SGHC) of the American Medical Women's Association (AMWA) is a national organization with the goal of advancing SGBM education. We aim to mobilize trainees to create a resource of SGBM content that will bridge the gap in traditional medical education curricula.

**Methods:** Phase one involved nine students who were paired with medical experts to research and design innovative SGBM educational materials highlighting sex and gender differences in diseases. Resources created from phase one initiatives is publicly available on the SGHC/AMWA website. In phase two, we recruited over 300 students globally to produce SGBM content for fifty common medical conditions.

**Conclusions:** In survey data from phase one, students agreed that participating in this project increased their knowledge of SGBM and helped them develop skills in literature review, content creation, writing, and editing. Phase two pre-survey data from 205 volunteers show that 52.5% of participants do not have an SGBM curriculum in their medical schools outside of Ob/Gyn. Improved SGBM understanding within the next generation of medical professionals will advance sex- and gender-specific medical practices and health care quality for all.

**Keywords:** gender inequity; interventions; modifiable factors; structural sexism

## S16: Collective Consensus and Action as the Catalyst for Countermanding Structural Sexism and Gender and Racial Inequities in Rare Disease Research and Clinical Care

**Authors:** Cohen, K; Buchanan, M; Davis, C; Shivas, T; McGowan, M

**Institutional Affiliation:** Foundation for Sarcoidosis Research

**Discipline:** Nonprofit Patient Advocacy

### **Abstract:**

**Background:** Sarcoidosis affects roughly 175,000 Americans. Studies show that African American (AA) women are nearly three times more likely than White men and women to be impacted by sarcoidosis. AA women have more severe sarcoidosis, resulting in 18 times higher hospitalization rates and 12 times higher mortality rates than White men and women. In discussing gender inequality, the Foundation for Sarcoidosis Research (FSR) believes we must consider racial inequality, as well.

**Objectives:** Through patient empowerment strategies, facilitated dialogue, and collective decision-making, FSR is building a recipe to advance diagnosis, improve treatment, and drive better outcomes for AA women with sarcoidosis.

**Methods:** Drawing on research in this area, FSR has created a multiphase project looking to build and test creative solutions to advance care and improve patient outcomes.

- **Phase One: Awareness and Understanding:** Through the creation of patient and clinician advisory committees, FSR built a working group charged with pulling from research and patient clinician experiences to create educational pieces for wide distribution.
- **Phase Two: Referral Network and Improved Diagnosis and Treatment Pathways:** FSR has built a pilot program aimed at building a bridge between expert care centers and local-level community groups with the purpose of improving communication pathways to advance clinical and scientific knowledge, improve referral networks, and begin to close the gap of care and outcomes.
- **Phase Three: Advancing Clinical Trial Equity:** FSR is leading the charge to build on knowledge of barriers for African Americans in clinical trials by creating advanced consensus building techniques to build strategies to increase opportunity and to build out more welcoming structures for AA women's representation in clinical trials.

**Conclusions:** Phase One reached over 500,000 individuals, resulted in extensive organic media coverage, and began a national dialogue on racial gender needs in care and outcomes. Phase Two and Three of these efforts are still underway – preliminary learnings will be discussed.

**Keywords:** intersectionality; gender power relations; gender inequity; structural sexism; interventions; modifiable factors

**\*S17: Developing a Peer-Led Navigation Program That Addresses Intersectional Stigma to Improve Access to PrEP for HIV Prevention for Women Involved in the Carceral System**

**Authors:** Dauria, EF; Kulkarni, P; Ayana, S; Christopoulos, K; Shumway, M; Tolou-Shams, M

**Institutional Affiliation:** University of Pittsburgh

**Discipline:** Behavioral and Community Health Sciences

**Abstract:**

**Background:** Nationally, women account for about 19% of new HIV infections. Women involved in the carceral system experience multifaceted and stigmatized sexual and substance use behaviors that increase their risk of HIV acquisition. While pre-exposure prophylaxis (PrEP) is an efficacious HIV prevention strategy, few interventions exist to increase uptake among women. This study describes how the Intersectionality-Enhanced Consolidated Framework for Implementation Research was applied to develop and pilot KINSHIP, a peer-led PrEP linkage navigation intervention designed specifically to address intersectional stigma as a health care barrier for women involved in the carceral system (WICS).

**Methods:** Data were collected via semi-structured interviews with WICS (n=10) and stakeholders from the carceral and public health systems (n=14). Interviewers presented participants with a vignette outlining the proposed five-session, 30-day KINSHIP model and asked participants to provide feedback related to session content, structure, and delivery. Data analyses were informed by the Intersectionality-Enhanced Consolidated Framework for Implementation Research using inductive thematic analysis. Analyses were facilitated using Dedoose.

**Results:** Factors in the outer setting aligned with patient needs and resources—including that to be successful, the intervention should be compatible by addressing experiences of discrimination related to women’s intersecting stigmatized identities (e.g., related to gender, race, carceral system involvement, substance use) without retraumatizing them. To maximize compatibility and access to knowledge and information, sessions should be brief (about 30 minutes), flexibly ordered, and offer an opportunity for social support. For successful implementation inner setting characteristics should be addressed by leveraging existing points of system contact by partnering with carceral system staff, and marketing KINSHIP to system partners as a support that would not complicate existing processes.

**Conclusions:** Participants were optimistic about KINSHIP because it was perceived to address gaps in existing HIV prevention services. Results will inform a pilot test assessing feasibility and acceptability of KINSHIP to improve PrEP linkage for this population.

**Keywords:** intersectionality; gender inequity; interventions

## S18: Development of a Theory of Change to Address Gender- and Sex-Related Issues in Current Research Policy and Practice in Australia: A Study Protocol

**Authors:** Hallam, L; Gadsden, T; Halliday, L; Norton, N; Carcel, C; Woodward, M; Si, L; Downey, L

**Institutional Affiliation:** The George Institute for Global Health

**Discipline:** Medical and Health Science

### **Abstract:**

**Background:** The Sex and Gender Policies in Medical Research (SGPMR) project aims to address historical sex and gender bias by working to improve sex and gender considerations in Australian health and medical research policy and practice. The ultimate goal of changing research policy and practice is to reduce health inequities, but to do so, it is essential to understand modifiable factors and intervention points—across evidence generation, translation, and implementation—that should be targeted by the project.

**Objectives:** The objective of this study is to develop a theory of change (ToC) which seeks to transparently map explicit change pathways from the consideration of sex and gender in health and medical research, policy, and practice to meaningful social, health, and economic impacts for Australians.

**Methods:** This qualitative study will involve engagement with stakeholders of the SGPMR project over two stages of data collection to develop a ToC. Stakeholders will be interviewed to identify the key problems in the current health and medical research landscape in relation to sex and gender, the activities and outputs that would address these problems, and how these may lead to positive changes in outcomes and societal impacts. The interviews will be qualitatively analyzed to develop a draft ToC, which will then be presented at a stakeholder workshop. Consensus will be obtained using the nominal group technique on the core elements of the ToC, including the structure, the language, and the pathways from problem to impact.

**Impact:** The development of the ToC will make explicit the pathways to impact for improving the consideration of sex and gender in health and medical research, policy, and practice in Australia, highlighting how key activities can lead to improvements in addressing gender bias in research practice and health outcomes and where, and how, important action and policy levers can create change.

**Keywords:** interventions; modifiable factors

**\*S19: Effect of a Gender-Synchronized Family Planning Intervention on Inequitable Gender Norms Among Husbands of Adolescent Girls in a Cluster-Randomized Controlled Trial in Niger**

**Authors:** Boyce, SC; Minnis, AM; Deardorff, J; Shakya, H; Challa, S; Aliou, S; Nouhou, AM; Silverman, JG

**Institutional Affiliation:** University of California, San Diego

**Discipline:** Gender Equity; Epidemiology

**Abstract:**

**Background:** Evidence suggests public health interventions that change inequitable gender norms, alongside other elements in the socio-ecology, can reduce the harmful health effects of gender inequity, but significant gaps exist in understanding what intervention approaches work. The current study assesses whether gender norms among husbands were changed by the Reaching Married Adolescents in Niger (RMA) intervention, which aimed to increase modern contraceptive use among married adolescent girls and their husbands in rural Niger.

**Methods:** Using baseline (T1) and 24-month follow-up (T2) data from the four-arm factorial cluster-randomized control trial of the RMA intervention, we assessed for effects of three intervention arms (small groups, household visits, combination) on social norms regarding gender inequity. Social norms were measured using a new social norms adaptation of the Gender-Equitable Men Scale (SN-GEMS). To assess effects, we used an adjusted hierarchical difference-in-difference linear regression model with inverse probability of censoring weighting.

**Results:** The mean SN-GEMS score at T1 was 4.1 [n=1,055; range: 0–5; SD, 1.1], indicating high levels of perceived inequitable gender norms. Assignment to the RMA small groups intervention was associated with a 0.62 lower score on the SN-GEMS (95% CI: -1.05, -0.18) relative to controls at T2. In contrast, assignment to household visits was associated with a 0.32 higher score on the SN-GEMS scale (95% CI: -0.16, 0.80), but this finding was not significant. No significant effects were detected for the combination intervention.

**Conclusions:** The present study is one of a limited number of evaluations of social norm–focused interventions in low- and middle-income contexts that have shown direct effects on social norms. As a low-cost, simple, scalable, and transferrable intervention with promising evidence, this community health worker–based small group intervention could be valuable for reducing the negative impact of inequitable gender norms on health and well-being in similar settings.

**Keywords:** gender norms; gender power relations; measurement; interventions; modifiable factors

**\*S20: Effects of a Brief Nurse-Led Intervention on Secondary Prevention of Intimate Partner Violence: A Randomized Controlled Trial in Public Antenatal Clinics**

**Authors:** Hatcher, AM; Woollett, N; Pallitto, C; Suec, A; Stockl, H; García-Moreno, C

**Institutional Affiliation:** University of North Carolina at Chapel Hill

**Discipline:** Social Science; Public Health

**Abstract:**

**Background:** Intimate partner violence (IPV) is underpinned by structural sexism, patriarchal norms, and unequal gender power dynamics. IPV occurs frequently among perinatal women, but efficacious interventions to reduce this form of violence are limited, particularly in low- and middle-income settings (LMIC).

**Objectives:** This randomized controlled trial examined antenatal care as a point of care to prevent new episodes of perinatal IPV in Johannesburg, South Africa.

**Methods:** Participants were pregnant women accessing their first antenatal care visit in one of four public primary health clinics. Patients were allocated in a single-blinded manner using blocked randomization envelopes to study arms. The intervention was a single session delivered by a nonspecialist nurse (psychoeducation, safety planning, onward referrals). Enhanced standard care was a nonspecialist nurse's providing a printed referral list. Questionnaires assessed past-year IPV exposure, safety behaviors, probable depression or anxiety, self-efficacy, community resource use, and socio-demographics. The intention-to-treat analysis used mixed-effects modeling, controlling for site as a random effect. The trial was preregistered (ISRCTN35969343).

**Results:** Of 1,531 pregnant women screened, 424 (27.3%) reported past-12-month IPV at baseline. Of 422 randomized women, 365 (86.5%) were followed to study endline (6–24 weeks postpartum). New IPV exposure was significantly lower among intervention compared to enhanced standard care participants (AOR, 0.52; 95% CI, 0.32–0.83;  $P=0.006$ ). The trial identified significant improvements in safety behaviors (Cohen's  $d=0.28$ ,  $v=0.014$ ) and clinically meaningful reduction in probable depression or anxiety (Cohen's  $d=0.32$ ,  $v=0.023$ ) but no observable effects on general self-efficacy ( $P=0.360$ ) or community resource use ( $P=0.960$ ).

**Conclusions:** Our findings suggest that a brief nurse-led antenatal intervention can reduce IPV, improve safety behaviors, and decrease symptoms of common mental disorders. Routine antenatal care may be a prime location for IPV services in LMICs, though more work is required to translate these efficacy findings into effectiveness at the population level.

**Keywords:** interventions; modifiable factors; intimate partner violence

[\\*S21: The EMERGE \(Evidence-based Measures of Empowerment for Research on Gender Equality\) Conceptual Framework for Empowerment Measures](#)

**Authors:** Raj, A; Dey, AK

**Institutional Affiliation:** Center on Gender Equity and Health; University of California, San Diego

**Discipline:** Public Health; Social Sciences

**Abstract:**

**Background:** EMERGE is an online platform designed to strengthen access to and use of gender empowerment measures by survey researchers in the social sciences, health, and development. To guide identification and development of high-quality empowerment measures, we required a clear conceptual framework to understand empowerment from a measurement perspective.

**Objective:** The objective of this work is to provide an overview on the process of our EMERGE empowerment framework for survey measurement, key empowerment constructs covered under this framework, and the breadth of measures identified using this framework.

**Methods:** We conducted a review of empowerment theories from across social science disciplines for the development of our EMERGE conceptual framework, with inputs from more than 50 cross-national experts. Using this framework, we have identified and reviewed 800-plus open-access measures on quality of science and usability for researcher consideration and offer highlights regarding quality of science and measure availability by empowerment construct.

**Results/Conclusions:** Empowerment is a process and an outcome predicated on social hierarchy and movement against hierarchy at the individual or collective level. It includes critical consciousness and choice beyond what is socially sanctioned (consciousness of choice–aspiration–conviction), agency in the forms of capacity to achieve and actions against what is socially sanctioned (can–act–resist), and achievement of self/collective-determined goals. Empowerment is influenced by internal attributes, both strengths and weaknesses (e.g., trust, motivation), external social, political, economic, and familial contexts inclusive of supports (e.g., assets, resources) and impediments (e.g., social alienation and backlash), and underlying social norms that dictate position, behaviors and opportunities based on social characteristics and positioning. Empowerment measures largely focus on behavioral agency, not choice nor self/collectively determined goals, and, in health, largely are in the area of family planning. We need more conceptually based empowerment measurement research.

**Keywords:** measurement; intersectionality; modifiable factors



## \*S22: Examining Intersections of Structural and Social Stigma in Perinatal Substance Use Service Delivery

**Authors:** Nichols, TR; Gringle, MR; Welborn, A

**Institutional Affiliation:** University of North Carolina at Greensboro

**Discipline:** Public Health Education

### **Abstract:**

**Background:** Pregnant and/or parenting people who use drugs are highly stigmatized, with stigma experienced in service delivery serving as a significant barrier to care engagement. This stigma is both intersectional and multilevel, occurring at the nexus of structural stigma, social stigma, and self-stigma. Given that structural stigma can be difficult to make visible, it is especially important to examine how it is enacted within specific contexts.

**Objective:** Using an intersectional lens, the objective of this study was to examine the interplay of structural and social stigma in perinatal substance use service delivery (PSUSD) and gain a deeper understanding of how stigma can serve as a pathway to health inequities.

**Methods:** A grounded theory design was used to examine PSUSD in North Carolina over a 7-year period. Data collected included interviews and focus groups with service professionals, participant observations at local and regional meetings, workshops, and conferences where service delivery was discussed; and publicly available documents on policies and procedures used. The analysis included open and focused coding to build model components and situational analysis maps to capture critical sociocultural context.

**Results:** The resulting model depicts structural stigma in PSUSD—consisting of an overlapping relationship between regulations and resources, with access to care and the training/education of service professionals at the intersection. Pathways between these structural factors and social stigma expressed in the data are detailed. The application of an intersectional lens highlights a precarious vulnerability—consisting of race, ethnicity, class, gender norms, media representations, and historical constructions—that exacerbates inequitable care engagement and outcomes.

**Impact:** By grounding a model of structural and social stigma in the specific context of PSUSD, structural factors and pathways that often remain hidden can be brought to light. The model can help identify levers of change for multilevel stigma reduction interventions.

**Keywords:** intersectionality; gender norms; structural sexism; gender inequity

## S23: Expanding HIV/AIDS and Reproductive Health Interventions for Black Caribbean Girls and Women: Highlighting the Role of Ethnicity and Psychosocial Support

**Authors:** Jolly, JA

**Institutional Affiliation:** Amherst College

**Discipline:** American Studies; Black Studies

### **Abstract:**

Background: Black women experience stark inequities in HIV/AIDS care access and health-related outcomes compared with White women. Though new HIV infections among Black women declined by 21% from 2010 to 2016, Black women continue to be disproportionately affected by HIV, accounting for nearly 60% of new HIV infections in U.S. women despite making up less than 15% of the female population. To date, there is little research, specifically aimed at understanding how disease experience and burden varies by ethnic identity, class, and developmental stages. Moreover, little knowledge exists on the relevance and efficacy of HIV prevention with heterogeneous Black populations, such as African American and Caribbean girls and women. Few studies examine the structural contexts that facilitate marginalization and social vulnerabilities and gendered, racial inequities that impact sexual and reproductive health and HIV-related outcomes.

Objectives: This project will conduct an intersectional analysis on how ethnicity, socioeconomic class, and age shape access to HIV/AIDS care and psychosocial support among Black Caribbean girls and young women in Brooklyn, New York. There are three primary aims: (1) to identify gaps related to sexual and reproductive health services (e.g., STIs/HIV) among Caribbean girls and women ages 18–24 in New York City; (2) to characterize the distribution of concepts related to autonomy (e.g., self-efficacy versus collective efficacy, perceived autonomy, perceived competence, and control); and (3) to examine how the relationship between ethnic identity and psychosocial support (e.g., peer networks, family and community support, neighbors, counselors organizational and institutional ties) influences culturally relevant protective factors among Caribbean girls and young women ages 18–24. Ultimately, this project aims to explore whether the HIV health inequities that Black girls and women experience can be ameliorated through a holistic care model that includes psychosocial support and engagement of Black women in the planning and implementation of culturally resonant HIV interventions that embrace intersectionality and asset-based approaches.

**Keywords:** gender roles; gender inequity; modifiable factors

## S24: Factors Associated with Early Adolescent and Youth Fertility

**Author:** Mahamadou, Al

**Institutional Affiliation:** Cooperazione Internazionale

**Discipline:** Sexual and Reproductive Health

### **Abstract:**

**Background:** Adolescent fertility has serious consequences, not only on maternal and child health but also on the socioeconomic situation of the population. Given the physiological immaturity of these children, the risk of death is particularly high, especially because their children have a high chance of dying after their births. In Benin, strategies such as information, education, and communication (IEC) and advocacy, communication, and social mobilization (ACSM) aim to delay the age of initiation of sexual relations, which could contribute to the reduction of early and unwanted pregnancies among adolescents.

**Methods:** This is a case–control study with a study population that consists of adolescent girls ages 10–19, including 50 cases and 100 controls, in the community of Tori-Bossito, Benin. This study concerns school and non-school. Cases were chosen non-probabilistically in the city. Witnesses are matched to cases according to age, residence, and work environment at the rate of one case for two witnesses. Data collection was conducted by survey interview using a questionnaire in accordance with ethical principles. The data were entered using Epi Info 7.2.1.0 and analyzed using Stata 11 software. The determination of factors associated with pregnancies was possible thanks to a multiple conditional logistic regression model at the 5% threshold.

**Results:** We investigated 150 adolescent girls—50 cases against 100 controls, for a prevalence of 33.33%. The average age of the study population was 17.64 years  $\pm$  2.16. It was 17.64 years  $\pm$  2.17 years in controls and 17.64 years  $\pm$  2.19 years in cases. After phasing out nonsignificant variables, seven variables were identified as being associated with adolescent fertility in Tori-Bossito in 2022. These were sex education by parents ( $P=0.023$ ), having information on family planning ( $P=0.002$ ), sources of information on family planning ( $P=0.004$ ), family type ( $P=0.042$ ), husband's or father's occupation ( $P=0.014$ ), self-esteem ( $P=0.005$ ), and marital status ( $P=0.041$ ).

**Conclusions:** Fertility has a considerable influence on the size and age structure of the population, and its evolution in the coming decades will be crucial for the demography of sub-Saharan Africa. Thus, adolescent fertility has serious consequences, not only on maternal and child health but also on the socioeconomic situation of the population. Analysis of adolescent fertility is particularly relevant to inform health policy and strategies and programs related to reproductive health.

**Keywords:** modifiable factors

**\*S25: Gender and Racial/Ethnic Disparities in Relationships Between Financial Hardship and Sleep Disturbances Among U.S. Adults During the COVID-19 Pandemic**

**Authors:** Gaston, SA; Strassle, P; Alhasan, DM; Perez-Stable, EJ; Napoles, AM; Jackson, CL

**Institutional Affiliation:** National Institute of Environmental Health Sciences

**Discipline:** Epidemiology

**Abstract:**

**Background:** Sleep health disparities by gender and race/ethnicity prior to the COVID-19 pandemic are well documented, and minoritized groups have been disproportionately affected by financial hardships (FHs) during the pandemic. FH can contribute to stress, cause sleep difficulties, and exacerbate sleep health disparities.

**Objective:** To investigate differences by gender and race/ethnicity in associations between financial hardship (FH) and sleep disturbances (SDs)

**Methods:** We used data collected from December 2020 to February 2021 among 5,339 American Indian/Alaska Native, Asian, Black/African American (BAA), English- and Spanish-speaking Hispanic/Latino, multiracial, Native Hawaiian/Pacific Islander (NHPI), and non-Hispanic White (NHW) men and women in the nationally representative COVID-19's Unequal Racial Burden (CURB) study. Participants reported six types of FHs (e.g., inability to pay bills) during the pandemic, which we summed and categorized, and completed the four-item Patient-Reported Outcomes Measurement Information System SD short form. Adjusting for sociodemographic, health behavior, and health characteristics, weighted linear regression estimated associations between FH and standardized SD scores (range=32–73).

**Results:** Substantial FH (n=4–6 hardships) was more prevalent among women (24%) than men (20%) and highest among BAA, Spanish-speaking Latino, and NHPI adults. Women also had higher SD scores than men (mean  $\pm$  standard deviation = 53 $\pm$ 9.3 versus 51 $\pm$ 9.8). Men and women with substantial FH had more severe SDs compared to men and women without FH. However, little FH (n=1 hardship) was associated with higher SDs only among women ( $\beta$ =1.24 [95% CI, 0.40–2.09] versus  $\beta$ men=-0.01 [-0.83–0.81]). While all women with substantial FH had more severe SDs, only NHW women had higher SDs with little FH.

**Conclusions:** The burden of FH was higher among women and most minoritized groups in the U.S., and associations with SD severity varied by both gender and race/ethnicity. Intersectionality, along with risk and resilience factors, warrants further study to inform tailored interventions and prevent the exacerbation of sleep health disparities.

**Keywords:** intersectionality; gender inequity; modifiable factors

## \*S26: Gender Differences in Suicidality Trends Among Parents with Young Children Since the Start of the COVID-19 Pandemic

**Authors:** Gao, YA; Krans, EE; Chen, Q; Rothenberger, SD; Zivin, K; Jarlenski, MP

**Institutional Affiliation:** University of Pittsburgh

**Discipline:** Health Services Research; Health Policy

### **Abstract:**

**Background:** The COVID-19 pandemic increased caregiving demands of families with young children by restricting child care, school closures, and stay-at-home orders. Parents reported higher levels of stress, anxiety, and depression in 2020 than in years prior. Women reported providing more child care than men, suggesting the pandemic's impact on parental mental health may differ by gender. We examined whether trends in suicidality differed by gender among parents of young children during the pandemic.

**Methods:** Using deidentified national administrative health care data from Optum's Clinformatics Data Mart version 8.1 (2007–2021), we included adults ages 26–64 with a dependent child younger than 5 enrolled in the same employer-sponsored health insurance plan for 30 days or longer between January 1, 2016, and September 30, 2021. The outcome was a diagnosis of suicidal ideation and/or intentional self-harm in any enrolled month. The exposures were gender and time (pre- and post-March 2020). We conducted an interrupted time series study to estimate changes in monthly diagnosed suicidality rates between male and female parents before and after March 2020, adjusting for age, race, ethnicity, and enrollment month.

**Results:** We included 1,155,252 (51.5%) mothers and 1,086,543 (48.5%) fathers of children younger than 5. Among mothers, there was an average monthly increase in suicidality rates of 0.3 per 100,000 before March 2020, which accelerated to 0.34 per 100,000 after March 2020 (slope change=0.038 per 100,000,  $P<0.05$ ). Among fathers, there was an average monthly increase of 0.32 per 100,000 before March 2020, which fell to 0.18 per 100,000 (slope change=-0.14 per 100,000,  $P<0.05$ ) after March 2020.

**Conclusions:** There was an increased trend in suicidality rates among mothers, relative to fathers, after March 2020, which could be explained by exacerbated gender inequities in childcare responsibilities during the pandemic. Increasing workplace flexibility and access to mental health services in parents with young children may be important tools for suicide prevention.

**Keywords:** gender roles; gender norms; gender power relations; gender inequity; structural sexism; interventions; COVID-19 policies; modifiable factors

## S27: Gender-Based Salary Differences in Academic Medicine: A Retrospective Review of Data from Six Public Medical Centers in the Western United States

**Authors:** Miller, HE; Seckel, E; White, C; Sanchez, D; Rubesova, E; Mueller, C; Bianco, K

**Institutional Affiliation:** Stanford University

**Discipline:** Obstetrics and Gynecology

### **Abstract:**

**Background:** The more education a woman has, the greater the gender disparity in salary is seen. Representation of women in medicine is increasing dramatically; however, the gender salary gap remains. There is an increasingly large body of evidence that gender affects not only salary but also faculty rank and research productivity. In order to close the salary gap in academic medicine, we must be clear where in total compensation packages this disparity originates.

**Objectives:** We assessed the effect of gender, rank, and research productivity on compensation for faculty at academic medical centers.

**Methods:** This was a web-based retrospective review of salary for professors in 2016. Archived online faculty profiles were reviewed for gender, rank, and compensation (total, baseline, and supplemental). Total compensation was defined as baseline compensation plus supplemental income. Baseline compensation was defined as base salary minus reductions due to participation in the voluntary Employee Reduction in Time and phased retirement programs. Supplemental income was defined as additional salary for clinical care and research (e.g., grants). Elsevier's Scopus was used to collect data on h-index, a measure of research productivity. Linear regression models were estimated to determine the relationship between these factors and salary.

**Results:** Our study included 799 faculty from six state-run, publicly funded academic medical centers in the western U.S.—225 assistant professors (51% women), 200 associate professors (40% women), and 374 full professors (32% women) from general surgery (26% women), obstetrics and gynecology (OB-GYN) (70% women), and radiology (34% women). Total compensation was significantly higher for men across all professorial ranks in both general surgery ( $R^2=0.159$ ,  $F[4,299]=14.123$ ,  $P<0.01$ ) and OB-GYN ( $R^2=0.068$ ,  $F[4,174]=3.172$ ,  $P<0.05$ ). Women faculty within these departments earned almost \$75,000 less than their men colleagues. The disparity in salary originates from gaps in supplemental income, as baseline compensation was not significantly different between men and women. No significant gender difference in total compensation for radiology was found ( $R^2=0.01$ ,  $F[4,266]=0.591$ , NS). Higher h-index was associated with higher baseline compensation across all departments, as well as with supplemental income for general surgery. Higher h-index was related to lower supplemental income for radiology and was not related to supplemental income for OB-GYN.

**Conclusion:** Further investigations should focus on discrepancies in supplemental income, which may preferentially benefit men.

**Keywords:** gender inequity; structural sexism; measurement

S28: “I Will Not Suck the Bones After the Men Have Finished Eating”: Perspectives on Broadening Female Expectations, Education, and Opportunities in Rural Pakistan from a Longitudinal Cohort Study—1989–2014

**Authors:** Chen, NM; Azam, SI; McCormick, BJJ; Rasmussen, ZA

**Institutional Affiliation:** Division of International Epidemiology and Population Studies, Fogarty International Center

**Discipline:** Social Sciences

**Abstract:**

**Background:** Oshikhandass is a poor, remote village in mountainous Gilgit-Baltistan, Pakistan. Historically, women ate after men, a symbol of patriarchal structures inhibiting women’s access to resources. Substantial investment in female education through the 1980s changed women’s opportunities over two generations.

**Objectives:** To understand longitudinal population changes and determinants in women’s access to opportunities for education, employment, income, and medical and financial agency.

**Methods:** From 1989 to 1996 (Study 1), children younger than 5 were enrolled in a longitudinal cohort study; data were collected on parents’ education and occupations, household characteristics, and childhood disease. During 2011–2014 (Study 2), previously enrolled children, now young adults, were interviewed about their life courses, and household socioeconomic data were collected.

**Results:** Women’s opportunities expanded beyond the household between the two studies spanning two decades. Data collected on education, employment, and income compared mothers in Study 1 with the mothers in Study 2, some of whom were children in the first study. With prioritization of female education, maternal illiteracy dropped between the two generations (from 70% to 27%). Female and male young adults’ mean educational years were comparable (11.1 years). Though most mothers remained housewives (90% in Study 1 and 86% in Study 2), mothers in 2011–2014 reported 16 different types of jobs (e.g., teachers, nurses, scientists). Income inequities persisted. While the percentage of households with female earners increased (from 12% to 23%), females earned less than males (Study 1 mean monthly income \$26, versus \$53 for males; Study 2 mean monthly income \$129, versus \$254 for males). In 2011–2014, women still seldom made final medical (19% of households) or financial (13% of households) decisions.

**Conclusions:** Women could expect improved educational attainment and occupation diversity; however, disparities in income and medical and financial agency suggest that structural constraints still limit women’s status and autonomy. Despite persistent gender inequities, our data suggest women are experiencing increased opportunities in rural Pakistan.

**Keywords:** gender roles; gender inequity; gender norms; structural sexism

## \*S29: Large-Scale Characterization of Gender Differences in Age at Diagnosis and Time to Diagnosis in Longitudinal Observational Health Data

**Authors:** Sun, TY; Hardin, J; Reyes Nieva, H; Natarajan, K; Cheng, RF; Ryan, P; Elhadad, N

**Institutional Affiliation:** Columbia University

**Discipline:** Observational Health Research; Biomedical Informatics

### **Abstract:**

**Background:** There is increasing evidence of longer time to diagnosis for women in some diseases, but there has not been a systematic assessment across a large number of conditions and across a large number of data sources.

**Objectives:** To assess differences in the time to diagnosis between women and men across 112 conditions from multiple disease categories in four large observational health data sets.

**Methods:** Longitudinal records from MarketScan Commercial Claims and Encounters (CCAE), a commercial claims dataset (n=158 million patients), Medicaid (n=32 million patients), Medicare (n=10 million patients), and the electronic health records of a large tertiary care medical center (n=6 million patients) are analyzed to select cohorts for 112 conditions, spanning 16 disease categories (e.g., circulatory, digestive, and mental). For each condition, presenting symptoms are identified automatically, as well as through manual curation from the longitudinal records, and only the symptoms common to men and women are kept for analysis. Several time-to-diagnosis metrics are computed between onset of presenting symptoms and date of diagnosis (e.g., mean time between presenting symptom and diagnosis) across each condition and database.

**Conclusions:** For most conditions, women experience a longer time between onset of symptoms and diagnosis of disease than men. While specific conditions differ for databases, the trend persists across claims databases and manually curated versus automatically identified presenting symptoms. In MarketScan CCAE, 108/112 conditions were diagnosed later in women (98/112 in Medicaid, 79/112 in Medicare, and 48/112 in the medical center). Our analysis highlights systematic gender differences in patterns of disease diagnosis and suggests that symptoms of disease are measured or weighed differently for men and women. Results and visualizations are available for exploration at <https://even.dbmi.columbia.edu/characterization>.

**Keywords:** measurement; gender inequity



## S30: Marital/Partner Status and Patient-Reported Outcomes Following Myocardial Infarction: A Systematic Review

**Authors:** Zhu, C; Tran, PM; Leifheit, EC; Spatz, ES; Dreyer, RP; Nyhan, K; Wang, S; Lichtman, JH

**Institutional Affiliation:** Yale School of Public Health

**Discipline:** Cardiovascular Disease Epidemiology

### **Abstract:**

**Background:** While being married/partnered has been associated with lower mortality and morbidity following myocardial infarction (MI), little is known about its impact on patient-reported outcome measures (PROMs). We summarized published research on the association between marital/partner status and PROMs among MI patients and explored sex differences.

**Methods:** Five databases (Medline, Web of Science, Scopus, Embase, and PsycInfo) were comprehensively searched on January 10, 2022. Two authors independently screened titles and abstracts, examined full texts, assessed methodological quality, and extracted data. PROMs were grouped into four prespecified domains—health-related quality of life (HRQOL), functional outcomes, symptoms, and personal recovery outcomes (i.e., well-being, competence, activation, and empowerment)—and qualitative synthesis was conducted within each domain. We created domain-specific summary tables specifying study characteristics (country, participants, female percentage, observational/interventional study, quality), outcomes (cardiac-specific/generic instrument, time collected), and results (estimates, direction, significance).

**Results:** Of the 1,599 unique records screened for eligibility, 26 studies with 9,982 total participants were included. Of studies reporting HRQOL, 54% (7/13) reported a significant association between married/partnered status and higher HRQOL, which was measured using five different scales (two cardiac-specific). Being married/partnered was linked with better physical and social functioning in three of five studies that assessed functional outcomes. Married/partnered individuals had fewer depression symptoms in one of five studies and greater patient competence in one of eight studies reporting these outcomes. We found large heterogeneity in study quality, inconsistent covariate adjustment, and insufficient representation of female participants across studies. Sex differences were not evident, as most studies adjusted for sex and did not report sex-specific results.

**Conclusions:** Married/partnered MI patients had improved HRQOL and functional outcomes, but the associations with symptoms and personal recovery outcomes were less clear. Our detailed review can inform better methodological approaches and suggest standardized reporting to facilitate future research on these relationships and sex differences.

**Keywords:** intersectionality; modifiable factors; gender inequity; measurement

## S31: Measuring Sexual Violence and Harassment in Population-Based Surveys

**Authors:** Johns, NE; Dehingia, N; Raj, A

**Institutional Affiliation:** Center on Gender Equity and Health; University of California, San Diego

**Discipline:** Public Health

### **Abstract:**

**Background:** The #MeToo movement brought into the foreground the commonality and range of sexual violence (SV) experiences people face, but we continue to lack population estimates of SV inclusive of sexual harassment (SH) and population-representative data on associations between SV and mental health.

**Objectives:** To assess (a) past-year prevalence of SV in California reported over the period of 2020–2022 and (b) associations between past-year SV and health outcomes in California in 2022.

**Methods:** We analyzed online survey data from the California Study on Violence Experiences Across the Lifespan (CalVEX), conducted with representative samples of adults in California in 2020, 2021, and 2022 (n=approximately 2,000 per year). We assessed past-year verbal SH, cyber SH, transphobic/homophobic SH, physically aggressive SH (e.g., stalking), quid pro quo or exploitative sexual coercion, and forced sex, as well as health data on past-2-week depression and anxiety symptoms, past-30-day substance misuse (binge alcohol use and illicit drug use), and past-year suicidality. We calculated prevalence and change over time in SV from 2020 to 2022 and associations between SV and health in 2022, stratified by gender.

**Results:** 15% of California adults—4.4 million people—had experienced SV in the previous year in 2022. Verbal SH was most common (8%), followed by cyber SH (6%), transphobic or homophobic SH (4%), physically aggressive SH (2%), sexual coercion (1%), and forced sex (0.3%); only transphobic/homophobic SH was higher for men than women. SV increased from 2020 to 2022. Past-year prevalence of SV was higher for those reporting severe mental health symptoms (for females: 36% versus 9%; for males: 33% versus 5%), substance misuse (females: 24% versus 12%; males: 26% versus 7%), and suicidality (females: 24% versus 3%; males: 60% versus 9%) compared with those not reporting these outcomes. SV inclusive of harassment is increasing, yielding population-level health impacts.

**Keywords:** gender inequity; measurement

## \*S32: Measuring Social Norms Related to Sanctions and Harassment of Women in the Workplace

**Authors:** Dehingia, N; Lundgren, R; Rao, N; Yore, J; Raj, A; EMERGE; World Values Survey; Social Norms Learning Collaborative

**Institutional Affiliation:** University of California, San Diego

**Discipline:** Public Health

### **Abstract:**

**Background:** Structural sexism manifests via norms that constrict women's social participation, including at work. Few measures assess norms underlying structural sexism related to women's employment.

**Objective:** To share findings from new gender norms measures related to sanctions and sexual harassment of women in the workplace in Ethiopia, Kenya, and Zimbabwe. Measures were created by the Evidence-based Measures of Empowerment for Research on Gender Equality (EMERGE) initiative Empowerment Measures Platform, the Social Norms Learning Collaborative, and the World Values Survey (WVS).

**Methods:** In 2019, WVS, a population-based survey on social attitudes and norms conducted across more than 120 countries, included new measures on social sanctions against women's paid work (e.g., family conflict, criticism from in-laws, and views of women as immoral) and descriptive norms on sexual harassment of women in public and workspaces. Data offer first-time population estimates on these norms in Ethiopia (n=1,230 adults; 622 men and 608 women), Kenya (n=1,266 adults; 637 men and 622 women), and Zimbabwe (n=1,215 adults; 600 men and 615 women).

**Results:** Findings on gender norms are largely comparable across national settings. We find that 10–15% of Ethiopians report social sanctions against women in the workplace and 22–25% report sexual harassment of women in public spaces. Among those working outside the home, 6% report daily or frequent sexual harassment of women at work. We find that half of those in Zimbabwe report social sanctions and sexual harassment of women in public spaces; among those working outside the home, 24% report daily or frequent sexual harassment of women. One-third of adults in Kenya report social sanctions; half of respondents report sexual harassment of women in the street, and among those working outside the home, 12–17% report sexual harassment of women at work.

**Conclusions:** Norms and sanctions against women in the workplace persist and can be measured at a population level, allowing for tracking of progress and policy impacts at scale.

**Keywords:** gender norms; gender roles; structural sexism

### S33: Men and Women at Work in Canada, 1991–2016

**Authors:** Quinn, EQ; Harper, A; Rydz, E; Smith, P; Koehoorn, M; Peters, C

**Institutional Affiliation:** School of Population and Public Health, University of British Columbia; Oncology Department, Cumming School of Medicine, University of Calgary; CAREX Canada, University of British Columbia

**Discipline:** Population and Public Health

**Abstract:**

**Background:** Women's increased labor force participation in Canada is an established trend over the past 40 years, but there is a perception that this increase has translated into an associated decrease in the gendered division of occupations and the labor force over the same time.

**Objectives:** The study aimed to document which occupations are highly divided by sex/gender in Canada and to examine the trends in the sex/gender distribution of occupations since 1991. The evidence is intended to inform occupational health and safety policies and procedures by including issues of sex/gender as part of the discourse on risk prevention when warranted. Key avenues for inquiry are provided for future research based on the findings.

**Methods:** Data obtained from the six Canadian censuses between 1991 and 2016 were analyzed, and descriptive statistics were used to examine the labor force composition within various resolutions of the National Occupational Classification codes by sex/gender. Generalized estimating equations (GEE) Poisson regression models were used to generate time- and occupation-adjusted estimates for incidence rate ratios with corresponding 95% confidence intervals for sex/gender differences in worker population growth.

**Results:** Using the census data from 1991 to 2016, over 40% of broad occupational classifications (including health, education, sales, etc.) were highly divided, with three-quarters of these occupations composed mainly of men (approximately 80%). For the most precise occupational classifications (e.g., senior manager—financial, communications, and other business services), 58% of these occupations were highly divided and composed mainly of men (78%). Over time, an increase in sex/gender divide was observed in several occupations, including trades, transportation, and health. The only job category seen to move toward parity was management occupations.

**Conclusions:** Minimal change toward equal sex/gender distribution across all occupational categories was observed between 1991 and 2016, including some occupations having shifted towards further segregation. Future research should investigate factors associated with the sex/gender segregation that persist over time in higher-income countries, including explanations from literature: gender essentialism, organizational hierarchies, and change-resistant labor markets.

**Keywords:** gender inequity; measurement; gender roles

## S34: Menstrual Cycle Symptoms in Transgender Women

**Authors:** Houghton, LC; Schipper, KA; Prochazka, SJ; Winkler, IT

**Institutional Affiliation:** Columbia University

**Discipline:** Human Rights

### **Abstract:**

**Background:** There is anecdotal evidence from transgender women that a cycle of symptoms similar to menstruation occurs when taking gender-affirming hormone therapy (GAHT).

**Objectives:** Our primary research question is, For transgender and nonbinary people assigned male at birth (AMAB) who take GAHT, how do these experiences of menstrual cycle–like symptoms manifest? Does this experience affirm their gender identity? Our project aims to bring the experiences of these historically marginalized groups into the broader discussion of menstruation.

**Methods:** We are recruiting 20 transgender women and nonbinary people AMAB who are 18 or older and take GAHT. First, we conduct semi-structured interviews to gain insights into their personal experiences with GAHT and the menstrual cycle. Second, participants use a menstrual tracking mobile application to input and track their menstrual cycle–like symptoms and GAHT use over 3 months. Third, over a 1-month period, participants provide dried urine samples, which we assess for the steroid hormone metabolome to determine whether there are hormonal changes that explain the cyclical symptoms that are similar to the symptoms of menstruation.

**Results:** We recruited the first six participants, who are actively tracking symptoms and collecting urine samples. Initial thematic coding of the interviews has provided insights that some transgender women are interested in menstruation as an experience shared by women and find this affirming of their gender identity. We will present full sample and hormonal results at the conference.

**Conclusions:** Whereas most research on the menstrual cycle focuses on “female” hormones, such as estrogen and progesterone, our study investigates the entire steroid metabolome, which includes “male” and “stress” hormones. The gendering of hormones has limited the biomedical understanding of the menstrual cycle. By highlighting the experiences of gender diversity in menstruation, we are promoting diversity, equity, and inclusion in science and society while simultaneously providing research for medical professionals to draw upon when treating transgender patients.

**Keywords:** intersectionality; gender norms; measurement; transgender health

## S35: Misdiagnosis of Cardiovascular Disease: A Review of Gender Bias in Acute Cardiovascular Diagnostic Clinical Decision Support Tools

**Authors:** Brown, J; Milicia, A; Miller, K

**Institutional Affiliation:** MedStar Health National Center for Human Factors in Healthcare

**Discipline:** Health Care Delivery Research; Human Factors Engineering

### **Abstract:**

**Background:** Cardiovascular disease (CVD) is the leading cause of death and disability of women in the U.S. Despite years of clinical and biological research and groundbreaking progress addressing CVD, errors in the diagnosis of, communication about, and the treatment of CVD disproportionately affect women.

**Objectives:** We conducted a systematic literature review to capture, summarize, and describe potential biases and limitations associated with the development of currently used acute cardiovascular diagnostic clinical decision support (CDS) tools.

**Methods:** We searched the Embase and Medline databases for development studies of cardiovascular diagnostic CDS tools that have been validated and implemented in at least one setting. We identified data elements that were both evaluated for model inclusion and included in final models/tools and whether those included sex, gender, age, social determinants of health, etc. CDS tool design elements such as description of tool use, how results of the tool are described or presented, and any information regarding limitations were also identified.

**Conclusions:** Our search yielded 2,854 articles, and we included 51 articles, each covering a unique CVD CDS tool. Of the 51 tools, only four included any variables related to social determinants of health—e.g., education, employment, and income. Sex was evaluated for model inclusion in almost all of the tools, whereas gender-specific variables were evaluated in almost none. Design elements were not specified in most of the studies, with little description of how results were displayed or communicated to end users and/or patients. We identified wide variation in CVD CDS tools in terms of populations evaluated, data elements included, and description of design/end user communication. The lack of social determinants of health and gender-related variables may contribute to some of the known biases and limitations associated with widely used CVD CDS tools. Future work will design, develop, and test gender-specific ways to address misdiagnosis of CVD in women.

**Keywords:** measurement; interventions; modifiable factors

## \*S36: Online Misogyny on Twitter in India: Validating a Typology to Measure Its Prevalence

**Authors:** Dehingia, N; Raj, A

**Institutional Affiliation:** University of California, San Diego; San Diego State University

**Discipline:** Public Health

### **Abstract:**

**Background:** Online misogyny is a violation of women’s digital rights and a form of gender-based violence (GBV) associated with adverse health outcomes. Yet there is no standard taxonomy of online misogyny, impeding our comprehensive understanding of this issue.

**Objective:** This study involves development and validation of a theory-based typology for online misogyny on Twitter in India and examination of its temporal prevalence from 2018 to 2021.

**Methods:** Based on our preliminary research on online hate speech—as well as feminist theory, which posits that misogyny stems from patriarchal values of men’s superiority over women and manifests via gender-based control and abuse—we developed the following typology for online misogyny: sexual objectification, sexist abusive content (e.g., gendered name-calling), threatening to harm, asserting inferiority, justifying GBV, and dismissing feminist efforts.

We systematically selected a subsample of tweets (n=40,672) to have an adequate representation of gender- and non-gender-related tweets for coding. Trained research assistants qualitatively coded these tweets as misogynistic or nonmisogynistic. Two graduate-level gender researchers further classified misogynistic tweets using our misogyny typology. Inter-rater kappa scores for both rounds of qualitative coding were high (>0.80). This coded set of tweets was fed into machine learning models to calculate daily prevalence of online misogyny across tweets from India between 2018 and 2021 (n=35 million).

**Conclusions:** Our typology shows validity in terms of correlations across types. Sexual objectification of women is the most common form (57%), including sexual shaming content; 11% of misogynistic tweets justified GBV or dismissed feminist efforts, likely indicating “backlash.” We find that online misogyny on Indian Twitter is prevalent, with 2% of overall daily tweets being misogynistic, and online misogyny has increased from 2018 to 2021. Our study offers a valid typology for online misogyny and shows high and increasing prevalence of this abuse. Future research should replicate the approach for cross-national validation.

**Keywords:** measurement; gender inequity

## \*S37: Preventing Perinatal Depression, Substance Use, and Self-Harm Ideation to Design Injury-Related Maternal Early Warning Systems and Reduce Maternal Morbidity and Mortality

**Authors:** Li, Q; Provencio-Vasquez, E; Palusci, VJ; Zhang, L; Feder, L; Susser, ES

**Institutional Affiliation:** University of Mississippi School of Nursing

**Discipline:** Obstetrics and Gynecology; Social and Injury Epidemiology

### **Abstract:**

**Background:** We design steps and respond to the National Institutes of Health's Implementing a Maternal health and PRenancy Outcomes Vision for Everyone (IMPROVE) initiative. Homicide, suicide, and drug overdose are the leading causes of pregnancy-associated deaths in the U.S. and are preventable. However, their risk factors—such as maternal depression (MD), substance use (SU), and self-harm ideation (SHI)—have not been evaluated in maternal early warning systems for screening and prevention to reduce maternal morbidity and mortality. Comprehensive relationship education (CRE) is an evidence-based preventive intervention to address marital distress and intimate partner violence. **Objectives:** We aimed to evaluate the effectiveness of nurse home visiting programs augmented with CRE on preventing MD, SU, and SHI.

**Methods:** We performed secondary analyses of a longitudinal randomized controlled trial from 2007 to 2010. In the Nurse-Family Partnership (NFP) program in Oregon, 238 first-time, low-income mothers were randomized to a standard program or an augmented program with nurses delivering the Within My Reach relationship education curriculum during pregnancy. At baseline and at 1-year and 2-year follow-ups, research assistants interviewed mothers using the Edinburgh Postnatal Depression Scale, which includes SHI; the Alcohol Use Disorders Identification Test; the Drug Abuse Screen Test; and the Revised Conflict Tactics Scale. Multilevel zero-inflated negative binomial regression models and the proportional odds model of generalized estimating equations were performed, adjusting for maternal race/ethnicity, age, educational attainment, and nativity status.

**Results:** The augmented NFP program did not reduce any of the three targeted risk factors over the 2-year follow-up. The wave and intervention interaction terms were not significant ( $P > 0.05$ ) and had limited power (e.g., <10%) in power analyses.

**Conclusions:** The NFP program augmented with CRE did not affect MD, SU, or SHI. These findings inform efforts to build a consortium, engage fathers, enhance co-parenting, identify settings, and design a hybrid effectiveness–implementation pilot trial of injury-related maternal early warning systems to prevent these risk factors.



**Keywords:** intersectionality; gender power relations; gender inequity; interventions; modifiable factors; violence-related maternal early warning systems; maternal morbidity and mortality

## S38: Psychosocial and Behavioral Correlates of Memory-Related Help-Seeking Among Sexual Minority Women 50 Years of Age or Older

**Authors:** Scheer, JR; Caceres, BA; Helminen, EC; Cascalheira, CJ; Schwarz, AA; Jaipurayar, V; Hughes, TL

**Institutional Affiliation:** Syracuse University

**Discipline:** Clinical Psychology

### **Abstract:**

**Background:** Individuals who seek help for memory-related problems typically experience progressive cognitive decline and functional impairment, given that many delay seeking help during early stages of cognitive decline. Because Alzheimer's disease and related dementias lack curative treatment, risk reduction strategies for preventing cognitive impairment are critical and rely on early detection of dementia among groups at heightened risk of cognitive decline, such as sexual minority people. The estimated annual costs associated with sexual and gender minority older adults living with dementia exceed \$17 billion. Thus, it is critical to reduce inequities in dementia risk and promote cognitive health among diverse older sexual minority women (SMW)—e.g., lesbian and bisexual women—a National Institutes of Health disparity population.

**Objectives:** This study examined sociodemographic, psychosocial, and behavioral health correlates of memory-related help-seeking in a community-based sample of SMW 50 years of age or older.

**Methods:** Data are from the Chicago Health and Life Experiences of Women Study, a community-based, 22-year, five-wave study of SMW age 18 or older. We focused on Wave 3 data, collected in 2010–2012, because it includes the largest and most diverse sample (n=726). We used data from participants age 50 or older (n=196). In separate multivariable logistic regression models, we regressed memory-related help-seeking on sociodemographic characteristics, psychosocial risk factors, and behavioral risk factors.

**Conclusions:** SMW with annual incomes of \$40,000 or more were less likely than those with incomes less than \$5,000 to report memory-related help-seeking. SMW who had sought help for memory-related concerns were more likely to have experienced adulthood physical assault, severe post-traumatic stress disorder symptoms, and severe discrimination than those who had not, and they were also more likely to report current tobacco use. These novel findings underscore the need for culturally sensitive gerontological prevention and intervention approaches (e.g., promoting cognitive reserve) to detect cognitive decline during prodromal stages of dementia and improve cognitive functioning among older SMW.

**Keywords:** gender inequity; intersectionality; modifiable factors

## S39: Psychosocial and Financial Burden Associated with Family Building in Physicians and Medical Students

**Authors:** Levy, MS; Kelly, AG; Mueller, C; Brown, AD; Jeelani, R; Caban-Martinez, AJ; Talib, H; Arora, VM; Salles, A

**Institutional Affiliation:** University of Miami Miller School of Medicine

**Discipline:** Obstetrics and Gynecology

### **Abstract:**

**Background:** Women physicians are more likely to delay family building and face infertility compared with the general population. For those in medicine who desire children, the journey to building a family is challenging to navigate, especially for women. To better characterize these challenges, we quantified the well-being and financial burden incurred as they build their families.

**Methods:** We administered a cross-sectional questionnaire via email and social media to a sample of physicians and medical students from April to May 2021. Financial burden was assessed by cost for each method of family building. Psychosocial burden was assessed by measuring delays in childbearing due to training and associated regret, the impact of “fertility issues” on well-being, infertility diagnosis, utilization of therapy, relationship strain, and time spent using assisted reproductive technology (ART).

**Results:** The infertility rate differed significantly by stage of training, with 2.5% of medical students, 10% of residents, 18.9% of fellows, and 34.2% of practicing physicians holding this diagnosis ( $\chi^2[8]=441.568$ ,  $P<0.001$ ). Participants ages 32 and up were more likely to have delayed childbearing due to training ( $n=1,303$ , 63.9%) compared with participants ages 31 and under ( $n=682$ , 53.7%) ( $\chi^2[1]=33.423$ ,  $P<0.001$ ). More participants age 32 or older ( $n=549$ , 28.8%) used ART compared with participants under the age of 32 ( $n=40$ , 3.5%) ( $\chi^2[1]=296.749$ ,  $P<0.001$ ). Participants who used ART incurred, on average, \$36,494.85 in out-of-pocket costs.

**Conclusions:** In the largest study to date on infertility and family building among physicians and medical students, we found significant psychosocial and financial burdens associated with family building. Approximately one-third (34.2%) of practicing physicians reported being diagnosed with infertility. Female physicians were also 38 times more likely to use ART than the public (18.8% versus 0.5%). Most of these burdens are borne by women and impact their careers, thereby contributing to the gender leadership gap in medicine.

**Keywords:** gender roles; gender inequity; modifiable factors

**\*S40: Quality of Life in Women and Men with Ischemia with No Obstructive Coronary Arteries (INOCA): A Patient Self-Report Survey from INOCA International**

**Authors:** Ranasinghe, S; Khan, N; Bairey Merz, CN; Wei, J; George, M; Berr, C; Chieffo, A; Camici, PG; Crea, F; Kaski, JC; Marzilli, M; Gulati, M

**Institutional Affiliation:** Barbra Streisand Women's Heart Center, Cedars-Sinai Medical Center

**Discipline:** Cardiology

**Abstract:**

**Background:** Women with obstructive coronary artery disease have a relatively lower quality of life (QOL) compared with men, but our understanding of gender and QOL in ischemia with no obstructive coronary arteries (INOCA) is limited.

**Objective:** We aimed to understand the QOL in women and men with INOCA from self-reported physical, social, and mental health.

**Methods:** We conducted a survey of patient members of INOCA International—a patient education, support, and advocacy group—with an assessment of self-reported health measures. Functional capacity was retrospectively estimated using the Duke Activity Status Index, assessing levels of activities performed before and after symptom onset.

**Results:** Among the 1,579 patient members of INOCA International, the overall survey completion rate was 20.8% (91.2% women). Of the 297 respondents who self-reported INOCA, 276 respondents (92.9%) frequently experienced symptoms of chest pain, pressure, or discomfort. Estimated functional capacity, expressed as metabolic equivalents (METs), was overall higher prior to, compared with after, INOCA symptom onset ( $8.6 \pm 1.8$  METs versus  $5.6 \pm 1.8$  METs,  $P < 0.0001$ ). For every 1 MET decline in functional capacity, there was a significantly greater decline in QOL for men compared with women with a loss in physical health ( $4.0 \pm 1.1$  versus  $2.9 \pm 0.3$  days/month,  $P < 0.001$ ), a loss of mental health ( $2.4 \pm 1.2$  versus  $1.8 \pm 0.3$  days/month,  $P = 0.001$ ), and a loss in recreational activities ( $4.1 \pm 2.0$  versus  $2.9 \pm 0.3$  days/month,  $P = 0.0001$ ).

**Conclusions:** Though INOCA is predominantly reported in women, functional capacity declines are associated with a greater impact on QOL in men compared with women in an international INOCA survey. These findings highlight the need for future studies to examine the QOL of people with INOCA, including psychosocial gender- and sex-specific factors.

**Keywords:** gender inequity; measurement

**\*S41: Racial Disparities in Opioid Use Disorder–Related Hospital Use Through 1 Year Postpartum Among Virginia Medicaid Members**

**Authors:** Martin, CE; Britton, E; Shadowen, H; Bachireddy, C; Harrell, A; Zhao, X; Cunningham, P

**Institutional Affiliation:** Virginia Commonwealth University

**Discipline:** Addiction Medicine; Obstetrics and Gynecology

**Abstract:**

**Background:** Virginia, like other states, has witnessed drastic increases in overdose deaths. However, how the overdose crisis has impacted postpartum Virginians has not been described.

**Objectives:** We report, stratified by race (non-Hispanic White versus non-Hispanic Black), the prevalence of prenatal opioid use disorder (OUD) among Virginia Medicaid members and the association of prenatal OUD treatment with OUD-related hospital use during their first year after giving birth.

**Methods:** This population-level retrospective cohort study used Virginia Medicaid claims data for live infant deliveries between July 2016 and June 2019. The primary outcome of OUD-related hospital use included overdose events, emergency department visits, and acute inpatient stays. Independent variables were prenatal receipt of medication for OUD (MOUD) and receipt of non-MOUD treatment components (e.g., case management and behavioral health). Descriptive and multivariate analyses were performed, stratified by race to bring attention to the devastating impacts of the overdose crisis within communities of color.

**Results:** The study sample included 96,649 deliveries (35% by Black birthing individuals). Postpartum OUD-related hospital use occurred in 10.7% of deliveries with OUD, more commonly after deliveries by non-Hispanic Black birthing individuals with OUD (16.5%) than their non-Hispanic White counterparts (9.7%). Deliveries by Black individuals with an OUD diagnosis demonstrated 11 times the odds of postpartum OUD-related hospital use (AOR, 10.992; 95% CI, 5.364–22.526); this contrasts with the odds of postpartum OUD-related hospital use for deliveries by White individuals with an OUD diagnosis, which were only double the odds of postpartum OUD-related hospital use (AOR, 2.323; 95% CI, 1.735–3.109) for deliveries by their counterparts without an OUD diagnosis. Prenatal OUD treatment, including MOUD, was not associated with decreased odds of postpartum OUD-related hospital use in the race-stratified models.

**Conclusions:** The intersection of the reproductive life course with racism and sexism renders postpartum Black birthing individuals with OUD at particularly high risk for morbidity and mortality. We continue to urgently need effective strategies that address the systemic and structural drivers of disparities in OUD care.

**Keywords:** intersectionality; interventions

S42: Relationship and gender Equity Measurement Among Gender-inclusive Young women and Non-binary youth in British Columbia (RE-IMAGYN BC): A Youth-Led, Community-Based Qualitative Research Study Protocol

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**Institutional Affiliation:** University of California, San Diego; Simon Fraser University

**Discipline:** Gender and Health

**Abstract:**

**Background:** Gender inequity is a structural determinant of health. Yet the current ways in which we understand and measure gender inequities in health research have mostly focused on the experiences of monogamous, cisgender, heterosexual women.

**Objectives:** To address critical data gaps in the advancement of gender equity for a diversity of women, our study will engage with gender-inclusive young women and gender-nonbinary youth (YWNB) in British Columbia (BC), Canada, to (1) create a youth participatory approach to gender equity measurement development; (2) uncover how youth of diverse genders and relationship experiences understand gender equity in their relationships and their perceptions of existing measures of gender equity; and (3) identify recommendations for adapting and developing inclusive gender equity measures for use among diverse YWNB.

**Methods:** Using community-based research (CBR) methods, we hired and trained three youth research associates (YRAs) and brought together 10 Youth Advisory Committee (YAC) members ages 19–28 with queer, transgender, and/or non-monogamous identities and experiences to conduct and consult on all aspects of our study. Purposive sampling will aim to recruit about 30 YWNB ages 16–29 with diverse identities who live in BC and are currently or have recently been (prior 12 months) in a non-heterosexual and/or non-monogamous relationship. YRAs will conduct about 10 cognitive interviews each, using an interview guide co-developed and piloted by youth on our study team. Cognitive interviews will assess youth perceptions of two gender equity measures selected in partnership with the YAC and YRAs. Data will be analyzed collaboratively using best cognitive interviewing practices. Recommendations for scale adaptations and development will be made to reflect the diverse realities of YWNB in BC.

**Impacts:** Results from our study will be used to make recommendations to advance gender equity measurement that is inclusive of a diversity of youth relationships, experiences, and identities.

**Keywords:** intersectionality; gender power relations; measurement; gender norms; gender inequity

## \*S43: Sexist Discrimination Partly Explains Associations Between Traditional Gender Role Beliefs and Alcohol and Drug Misuse Among Young Latina Women

**Authors:** Ertl, MM; Dillon, FR

**Institutional Affiliation:** Columbia University; New York State Psychiatric Institute

**Discipline:** Psychology

### **Abstract:**

Background: Marianismo beliefs are traditional gender role beliefs that encourage Latinas to be nurturing, self-sacrificing, and spiritually strong (Castillo et al., 2010). The construct of marianismo beliefs is multidimensional, comprised of five belief pillars that are differentially associated with health (Piña-Watson et al., 2014), with some beliefs identified as protective against substance use (Sanchez et al., 2017) and others linked with increased substance use (Kulis et al., 2010). Few studies have examined possible explanatory factors underlying the link between marianismo beliefs and substance misuse. According to the theory of gender and power (Wingood & DiClemente, 2000), sexism (i.e., sexist discrimination in the form of gender-specific, negative life events or stressors [Klonoff & Landrine, 1995]) is a social force that produces gender inequities. Sexism may link marianismo and substance misuse, as gender-based beliefs may be reinforced through sexist experiences that impact substance misuse and overall health.

Objectives: This study tested hypotheses that sexism would mediate associations between marianismo beliefs and alcohol and drug use among Latinas.

Methods: Participants were 609 Latina undergraduates ages 18–26. Measures assessed marianismo beliefs (Marianismo Beliefs Scale; Castillo et al., 2010), sexism (Schedule of Sexist Events; Klonoff & Landrine, 1995), alcohol use (Alcohol Use Disorders Identification Test; Saunders et al., 1993), and drug misuse (Drug Abuse Screening Test-10; Skinner, 1982). Covariates included age, year in college, birth country, ability status, immigration generation status, and socioeconomic status. Path analysis was used to examine hypotheses, and mediation was tested with bootstrap procedure using 1,000 bootstrap samples.

Conclusions: Results indicated that (a) certain marianismo beliefs were protective factors against substance misuse and (b) sexism significantly mediated associations between certain marianismo beliefs and alcohol and drug misuse. Findings emphasize the need to address the impact of sexism on health among Latinas and may inform screening and health interventions that address substance misuse.

**Keywords:** gender roles; structural sexism; modifiable factors

## \*S44: Spillover Effects of Structural Sexism on Children's Health Insurance Status

**Author:** Liu, SY

**Institutional Affiliation:** Montclair State University

**Discipline:** Public Health

### **Abstract:**

**Background:** Structural sexism in the U.S. is associated with adverse population health outcomes among women. In the U.S., policies implemented by male politicians often differ from those implemented by female politicians (e.g., reduced spending on social and welfare programs). Given the large proportion of children in the U.S. whose health insurance is through public spending programs, structural sexism may also have spillover effects on children's health care access.

**Methods:** I merged data from the 2018–2019 National Survey of Children's Health with information on the percentages of legislators in the state legislatures in 2016 who were women (i.e., tertiles of the percentages of legislators who were women). The outcomes were current health insurance status (uninsured versus insured) and whether one had experienced a gap in health insurance in the past 12 months (yes versus no). I used multilevel logistic regression models, adjusting for potential individual-level confounders, including gender, age, household income, and race/ethnicity. State-level potential confounders included the z-transformed proportion of the state population in poverty and population size. Furthermore, I examined whether family-level socioeconomic status was an effect measure modifier in these associations. All analyses were survey-weighted.

**Results:** Residing in a state with the highest tertile is associated with increased odds of being currently uninsured (OR, 0.78; 95% CI, 0.65–0.94) and increased odds of having experienced a gap in health insurance (OR, 0.63; 95% CI, 0.43–0.92). Stratified analyses found no effects among low-income households. Statistically significant effects were only found among families with household incomes that were 400% or more above the federal poverty level (OR, 0.63; 95% CI, 0.73–0.92 for insurance gap and OR, 0.65; 95% CI, 0.43–1.00 for currently uninsured).

**Conclusions:** The health impact of structural sexism is not limited to women and is associated with health insurance status in children. However, the benefits of greater female political representation on health insurance status may disproportionately benefit high-income families.

**Keywords:** structural sexism; modifiable factors



## S45: Strategies to Improve Transgender Inclusion in Intimate Partner Violence Programs: Voices from Trans Women Survivors

**Authors:** Akande, M; Adrian, H; Del Farno, A; Johnson, D; Zlotnick, C; Operario, D

**Institutional Affiliation:** Johns Hopkins Bloomberg School of Public Health

**Discipline:** Women's Sexual and Reproductive Health

### **Abstract:**

**Background:** Transgender women (TW) in the United States experience some of the highest rates of intimate partner violence (IPV) and are at heightened risk for HIV. Due to the uniqueness of how TW experience violence relative to cisgender women, existing health services often fail to provide adequate, safe, and affirming care for TW survivors of IPV. There is a need for comprehensive IPV–HIV prevention interventions tailored to TW, and TW should be integral to the intervention development process.

**Objectives:** (1) Identify the unique barriers that inhibit TW experiencing IPV from seeking health services; (2) Evaluate the self-identified needs of TW survivors of IPV and how they can inform relevant health services.

**Methods:** We conducted six 90-minute focus groups. Three with eleven (N=11) TW and three with nine (N=9) health and social services providers who specialize in trans care. Discussions explored IPV experiences and survivorship, HIV and IPV risk factors and behaviors, empowerment strategies, and existing IPV resources. Six themes emerged: (1) defining IPV; (2) identity disclosure and chronic violence; (3) relationship safety; (4) barriers to health care; (5) desires for improved services; and (6) trans identity nuances. Generally, TW sought a more inclusive definition of IPV, shared how childhood environments punished them for their identity and predisposed them to normalize abuse later in life, noted how living with an abuser might be safer than living in a shelter or on the streets, felt health services often led to additional trauma, wanted greater trans-competency among providers, and discussed nuances of their trans-survivor identities.

**Conclusions:** Existing services for IPV survivors are heteronormative and tailored to cisgender women. TW's unique experiences necessitate comprehensive IPV services that are responsive to their needs. Based on these qualitative findings, we developed a trans-inclusive counseling manual to address IPV and HIV among TW, which is undergoing pilot testing.

**Keywords:** structural sexism; gender inequity; interventions

[\\*S46: The Effects of a Gender Equity and Family Planning Counseling Intervention on Quality of Contraceptive Counseling and Contraceptive Use in Rural India](#)

**Authors:** Averbach, S; Johns, NE; Ghule, M; Dixit, A; Begum, S; Battala, M; Saggurti, N; Silverman, JG; Raj, A

**Institutional Affiliation:** Center on Gender Equity and Health; Department of Obstetrics, Gynecology & Reproductive Sciences; University of California, San Diego

**Discipline:** Medicine; Reproductive Health; Public Health

**Abstract:**

**Background:** Gender-transformative interventions are of increasing interest in family planning (FP) and public health efforts, yet few FP interventions that engage men and directly address gender norms have been implemented and rigorously evaluated. FP interventions are also increasingly utilizing endpoints beyond FP use, to ensure autonomy and patient-centered care.

**Objectives:** We evaluated the CHARM2 (Counseling Husbands and wives to Achieve Reproductive health and Marital equity) intervention, which engaged health care providers to deliver gender-equity and FP sessions to married couples using a person-centered shared decision-making approach for contraception counseling. We assessed whether the intervention was associated with improved quality of care reported by participants and whether quality of care mediated the effect of the intervention on contraceptive use.

**Methods:** This study involved 1,201 married couples in rural Maharashtra, India, who participated in the CHARM2 cluster-randomized controlled trial between 2018 and 2020. We assessed the effect of CHARM2 on perceived quality of care—as measured by the Interpersonal Quality of Family Planning (IQFP) scale—using a difference-in-differences mixed-effects linear regression. We then assessed mediation of the association between CHARM2 and modern contraceptive use by IQFP score.

**Results:** Intervention participants had higher mean IQFP scores (3.2; SD, 0.6;  $P < 0.001$ ) than control participants (2.3; SD, 0.9;  $P < 0.001$ ) at 9-month follow-up. The quality of care reported mediated the effect of the intervention on contraceptive use (indirect effect coefficient, 0.29; 95% CI, 0.07–0.50).

**Conclusions:** The person-centered, gender equity–focused CHARM2 intervention improved women’s perceived quality of care. Effects on quality of care mediate observed effects of the intervention on contraceptive use. FP interventions should focus on improving person-centered outcomes, such as quality of care, rather than contraceptive use targets. By focusing on improving person-centered care, interventions will improve contraceptive use among those who desire a method while meeting the holistic reproductive health needs of clients and couples.

**Keywords:** interventions; gender roles; gender norms

**\*S47: The Influence of Gender Roles and Norms on the Physical Activity of South Asian Women and Girls: A Scoping Review**

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**Institutional Affiliation:** Institute for Public Health and Medicine, Northwestern University

**Discipline:** Public Health

**Abstract:**

**Background:** Women and girls from South Asian (SA) backgrounds (Indian, Pakistani, Bangladeshi, Sri Lankan, and Nepalese) have lower levels of physical activity (PA) compared with those from other racial and ethnic backgrounds. Their PA levels may be influenced by gender roles and norms across their lifetimes.

**Objective:** This scoping review seeks to describe the literature on the impact of gender roles and norms on PA among SA women and girls.

**Methods:** Five databases were searched, and articles were included if they explored gender-specific barriers or facilitators of PA specific to SA women and girls living in Canada, the U.S., and England. In total, 1,768 articles were identified and 13 were included.

**Data Synthesis:** An established framework of social environmental influences on women's PA behaviors (Vratzel et al., 2008) was modified to include criteria specific to SA women and girls. Themes were then identified and categorized based on three levels of influence: interpersonal, environmental interactions, and cultural beliefs/values.

**Results:** Of the 13 articles, 12 were qualitative research and 1 was an intervention study. The most common facilitator was social support from a family member (interpersonal level)—husbands for SA women and parents for SA girls. The most common barrier was culturally dictating gender roles that discouraged PA for SA women and girls. Culturally acceptable forms of PA (e.g., religious dance, daily prayers) and modesty norms varied by religion. Perceptions about participating in PA varied between first- and second-generation immigrants (environmental interactions); however, the majority perceived women and girls' PA participation as "Westernized" behavior.

**Conclusions:** Limited intervention studies have aimed to increase the PA of SA women and girls. Such interventions must address gender roles and norms and test whether enhanced social support and culturally acceptable forms of PA are effective strategies to increase PA levels of this population.

**Keywords:** gender norms; gender roles; modifiable factors; interventions

## \*S48: The Interplay of Substance Use and Relationship Power Dynamics Among African American Women

**Authors:** Wade, KD

**Institutional Affiliation:** Charles R. Drew University of Medicine and Science

**Discipline:** Substance Use

### **Abstract:**

**Background:** In 2018, the Females of African American Legacy Empowering Self (FemAALES) Project was a National Institute on Minority Health and Health Disparities–funded study to conduct a randomized controlled trial of a focused HIV/STD prevention intervention with low-income African American women who report sex with high-risk men.

**Objective:** We examined associations between the drug-using behaviors of study participants and their male partners and the power dynamics of their partnerships using FemAALES study data.

**Methods:** We analyzed self-reports among 183 participants with main partners who provided sufficient data to be grouped into four categories of partnerships based on any current use of “hard” drugs by the women and any lifetime use of crack cocaine, an injection drug, or methamphetamine by their partners. We examined scores on the Sexual Relationship Power Scale (SRPS) in each subgroup and analyzed scores using the chi-square test and analysis of variance.

**Results:** Women were divided into four groups: (1) women who reported any recent substance use and reported a history of substance use in their partners (n=29); (2) women who reported substance use but not in their partners (n=34); (3) women who did not report substance use but did report it in their partners (n=32); and (4) women who did not report substance use in themselves or their partners (n=88). The 88 women who indicated no substance use in themselves or their partners had the highest mean SRPS score (3.15; SD, 0.635). The 29 women who reported substance use in both themselves and their partners had the lowest scores (2.60; SD, 0.822). SRPS average means were similar in the categories in which only the women or only the partner was using.

**Conclusions:** Low-income African American women who report substance use in themselves and their partners have less relationship control than women who do not. Understanding how substance use and recovery trajectories contribute to relationship control and decision-making is imperative in substance use research designed for understanding both use and adherence to treatment and intervention.

**Keywords:** gender power relations

**\*S49: The Representative Studies Rubric: 12 Steps to Enhance the Representation of Women and Other Underrepresented Populations in HIV Research**

**Authors:** Minalga, BJ; Siskind, RL

**Institutional Affiliation:** Fred Hutchinson Cancer Research Center

**Discipline:** HIV Research; Social Work; Sexual Orientation and Gender Identity

**Abstract:**

**Background:** The underrepresentation of women in HIV research occurs as a constellation of systemic processes, many of which are institutionalized in the field of clinical research. Failure to prioritize women and other underrepresented populations in HIV research results in compromised generalizability, gendered disparities in antiretroviral (ARV) regulation and coverage, safety, and efficacy uncertainties of ARV use in pregnancy and breastfeeding, and undermined efforts to address health disparities.

**Objectives and Methods:** The Office of HIV/AIDS Network Coordination (HANC) developed a tool, the Representative Studies Rubric (RSR), consisting of a 12-item questionnaire that can be applied to study protocols to facilitate enhanced inclusion of women and other underrepresented populations. We pilot tested the RSR in a retrospective analysis of 100% of study protocols (n=47) conducted by the National Institutes of Health–funded HIV/AIDS clinical trials networks that were actively enrolling study participants in September 2021. Findings were presented to research leadership with the recommendation to implement the RSR proactively as a protocol development tool.

**Results:** A significant number of study protocols excluded women and gender minorities with no justification for exclusion provided (cisgender women, 1 study; transgender women, 18 studies; transgender men, 25 studies; gender-nonbinary people, 32 studies). Exclusion most often occurred passively through ambiguous and exclusionary definitions of study populations. Only 12 studies (26%) correctly defined the study population in terms of sex assigned at birth and gender identity. About two-thirds of the studies prohibited the participation of pregnant individuals, and over half of the studies required participants to actively avoid becoming pregnant, citing nonspecific safety uncertainty. Recruitment plans largely failed to prioritize women and other underrepresented populations, and stigmatizing language was ubiquitous. After being presented with these findings, research leadership endorsed the recommendation to implement the RSR proactively as a protocol development tool.

**Keywords:** structural sexism; measurement; interventions; gender inequity

**\*S50: The Twisted Truth: Decision-to-Incision Time for Ovarian Versus Testicular Torsion**

**Authors:** Schachter, AE; Gwan, APM; Boudreaux, TM; Guice, KM; St. Martin, TL; Boudreaux, SR; Nair, N; Chapple, AG; Guidry, C; Jernigan, A

**Institutional Affiliation:** Department of Surgery, University of Tennessee Health Science Center

**Discipline:** General Surgery; Obstetrics and Gynecology

**Abstract:**

**Background:** Ovarian torsion (OT) and testicular torsion (TT) are surgical emergencies. Delays in the treatment of either condition will result in loss of gonadal function and fertility. Decision-to-incision (DTI) time is a previously defined metric that reflects the efficiency with which hospital resources can be mobilized to initiate surgery after a surgeon has made the decision that a patient needs an emergent operation. Comparing DTI times in patients undergoing gonadal detorsion can illuminate disparities in patient treatment.

**Objective:** This study describes the length of time between a surgeon's decision to operate emergently on gonadal torsion and the start of the operation—i.e., the DTI time—and compares DTI times for OT with DTI times for TT.

**Methods:** Twenty-one emergent cases of OT and 19 emergent cases of TT were identified at a large tertiary referral center between August 2015 and December 2019. DTI was calculated retrospectively based on case posting time and incision time as recorded in the electronic medical record (EMR). Variables of interest included patient age and gender, time of day, surgeon gender and experience level, and gender of the support staff in the operating room. A Poisson regression was used.

**Results:** Significantly longer DTI was identified for OT cases, operations with female staff, and surgeries conducted at night or on weekends. The median DTI for OT was 153.2 minutes, versus 80.2 minutes for TT ( $P=0.003$ ). OT cases were significantly more likely to have a DTI > 90 minutes than TT cases (OR, 8.38; 95% CI, 1.78–48.2).

**Conclusions:** Cases of OT were found to have a significantly longer DTI than TT cases, concerning for disparate outcomes for women with gonadal torsion. Achieving gender equity in health care and excellent patient outcomes requires collaborative engagement among all members of the patient care team.

**Keywords:** gender inequity; structural sexism; measurement; modifiable factors; gender power relations

## S51: Understanding the Role of Women’s Agency in Maternal and Child Health Services Utilization Using the “Can–Act–Resist” Conceptual Framework

**Authors:** Dey, AK; Bhan, N; Rao, N; Ghule, M; Chatterji, S; Raj, S

**Institutional Affiliation:** University of California, San Diego

**Discipline:** Public Health

### **Abstract:**

**Background:** Women’s utilization of maternal and child health services reduces risk for maternal and neonatal morbidity and mortality. Global efforts have increased access and availability of these services as part of efforts toward universal health care coverage, but during the COVID-19 pandemic, fears regarding quality of care and increased household burdens—factors related to the Evidence-based Measures of Empowerment for Research on Gender Equality (EMERGE) initiative’s can–act–resist model of agency—may have affected care utilization.

**Objectives:** To assess whether women reporting concerns regarding health access due to prioritization of COVID-19 (“can” exposure 1) and increased domestic responsibilities during COVID-19 (“can” exposure 2) affected their receipt of needed health care for self or children (“act” outcome 1) and whether delayed health seeking mediated these effects of these exposures on our outcome (indicating “resist”).

**Methods:** We surveyed married women in rural Maharashtra, India (n=1,021), on their health and economic concerns in February and March 2021, before the severe second wave of the pandemic. To evaluate our objectives, we used adjusted regression models on our exposure variables with each outcome and assessed mediation effects of delayed health care seeking.

**Results:** We found significant associations of health system concerns (ARR, 2.01; 95% CI, 1.52–2.67) and increased burden of domestic care (ARR, 1.77; 95% CI, 1.28–2.44) with nonreceipt of health care (can–act) and a significant association of increased burden of domestic care with delayed health care seeking (ARR, 1.85; 95% CI, 1.20–2.87). Delayed health care seeking mediated the associations between each of our exposure variables and our outcome variable, nonreceipt of needed health care (can–act–resist).

**Conclusions:** System- and household-level impediments affect women’s self-efficacy and action—i.e., agency—regarding health care use for themselves and their children, suggesting that interventions supportive of women’s agency are needed at multiple levels.

**Keywords:** measurement; modifiable factors

**\*S52: Women's Choice to Include Male Partners in Family Planning Counseling: The Roles of Intimate Partner Violence, Reproductive Coercion, and Covert Family Planning Use**

**Authors:** Pearson, E; Uysal, J; Undie, CC; Paul, D; Liambila, W; Menzel, J; Wendoh, S; Silverman, JG

**Institutional Affiliation:** Center on Gender Equity and Health; University of California, San Diego

**Discipline:** Public Health

**Abstract:**

**Background:** Engaging men to promote family planning (FP) use is a prominent global strategy, but few studies have considered women's and girls' preferences or how women's experiences of intimate partner violence (IPV) and reproductive coercion (RC) may affect their safety and ability to use FP.

**Objective:** To understand how women's choice to involve their male partners in FP counseling relates to previous experiences of physical and sexual IPV, RC, and covert FP use.

**Methods:** Baseline surveys were conducted with urban women seeking FP services in Kenya (n=659) and abortion services in Bangladesh (n=2,686) participating in a trial to test an intervention providing education on RC and IPV and offering male partner FP counseling. Logistic mixed-effects models tested cross-sectional associations between the outcome (desire to involve the male partner in FP counseling) and RC and IPV experience and history of covert FP use.

**Results:** IPV and RC were common in the study populations (IPV: 45–63%, RC: 10–37%). Experience of RC and IPV and history of covert FP use were associated with significantly lower odds of choosing male partner inclusion in FP counseling.

**Conclusions:** Women's violence experiences are negatively associated with interest in involving a male partner in FP counseling among clients receiving education on the topics of RC and IPV, suggesting that with counseling, clients are empowered to consider their personal situation and decide whether partner counseling would be beneficial. A blanket approach encouraging involvement of male partners in clinic-based FP counseling may not be desirable or safe for many women, especially those who are facing recent experience of RC and IPV and those using FP covertly. Promotion of male engagement strategies should be implemented with care, and women and girls must be the ultimate decision-makers regarding such involvement.

**Keywords:** gender power relations; interventions