

**Structure/Method/Design:** We created the Women in Global Health Research Initiative in 2014 to identify and address gender-based challenges that contribute to women's attrition from the field. These include: 1) lack of senior female mentorship, 2) limited training and leadership development opportunities, 3) difficulty balancing career and personal life, and 4) health and safety risks. Our Initiative developed interventions to mitigate these challenges at personal, institutional, and policy levels.

**Outcome & Evaluation:** Our pragmatic strategies address each of the four challenges both at Weill Cornell and at our international sites. The Initiative now connects over 100 women researchers across 24 academic institutions, including women from low- and middle-income countries (LMICs), through a mentorship network. Women in the network mentor each other on topics such as maternity leave, sexual harassment, and navigating gender biases. We offer condensed leadership development seminars designed for researchers unable to attend semester-long programs, and remotely-accessible seminars. Female global health faculty at Weill Cornell can apply for "Research-Enabling Grants" that support research assistants during maternity leave or time away from their international site. The Initiative also provides health and safety training for women conducting global health research. The Initiative's impact will be evaluated by long-term retention of female faculty working in global health research at our institution.

**Going Forward:** The challenges faced by women in global health research are particularly exacerbated for women in LMICs. A major goal is to enact similar strategies at our international sites with the shared goal of promoting women into global health leadership. We are organizing leadership and career development opportunities at our international sites, supporting women leaders at our sites in addressing sexual harassment, and expanding our mentorship network to connect more female researchers from LMICs.

**Source of Funding:** None.

**Abstract #:** 2.025\_WOM

### Intimate Partner Violence and Unintended Pregnancy among Young Pregnant Women in Low-and Middle Income Countries: Integrative Review of the Literature

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**Background:** According to the World Health Organization, about 16 million adolescent girls give birth every year, 95% of them from Low-and Middle Income Countries (LMICs). Intimate partner violence (IPV) is prevalent in LMICs and a known risk factor for unintended pregnancy. The purpose of this review was to understand the state of the scientific literature regarding the intersections between unintended pregnancy among young women and IPV in LMICs.

**Methods:** A literature review was conducted using databases, PubMed, Medline, CINAHL, and OVID. The search terms included unintended pregnancy or adolescent pregnancy and intimate partner violence or some related terms such as domestic violence, coercion, etc. Inclusion criteria included: primary research study, publication in English; published between 2007 and 2016;

setting in LMIC; at least 20% of study population between 15-24 years old.

**Findings:** 13 independent articles representing populations within 11 LMICs (Iran, Jamaica, South Africa, India, Nepal, Thailand, Burma, Colombia, Ghana, Lebanon, Uganda) met criteria and were included. We will present our findings on demographics and associated factors. For example, on average, 39% of young pregnant women were married before the age of 20 years, and among women disclosing IPV, the prevalence of unintended pregnancy among young pregnant women was between 11% and 69% in included studies. Physical abuse by the partner was more commonly reported than sexual violence. Low education and income of husband were significantly associated with IPV during pregnancy. Qualitative findings revealed significant verbal abuse, including accusations of working as a sex worker, and cultural variables such as abuse from in-laws and other factors.

**Interpretation:** IPV and unintended pregnancy are closely intertwined among young people in LMICs, include significant verbal abuse, and relationship-level variables (e.g., husband's income and education) and culture (e.g., child marriage, abusive in-laws) often influences these complicated situations. These intersecting factors likely produce significant maternal-child health risks, thus IPV detection and prevention efforts are needed, not only for women but also for community. More research is needed to identify effective adolescent pregnancy interventions in LMICs that attend to IPV risk. Qualitative and mixed-methods research in LMICs may be particularly useful to understand cultural factors specific to the context.

**Abstract #:** 2.026\_WOM

### E-Cigarette Use In Pregnancy: A Human Rights-Based Approach To Policy and Practice

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**Background:** The use of e-cigarettes is increasing, and in pregnancy is a potential health concern for both mother and baby. A 2016 World Health Organization report states that: "evidence is sufficient to warn... pregnant women... against ENDS [e-cigarette] use." Guidelines for healthcare professionals on e-cigarette use in pregnancy, published by the UK Smoking in Pregnancy Challenge Group, similarly state that: "We... don't know about any risks to unborn babies from exposure to [e-cigarette] vapour." Yet these guidelines also recommend that: "if a pregnant woman chooses to use an electronic cigarette and if that helps her to stay smokefree, she should not be discouraged from doing so." Equally concerning is the UK Medicines & Healthcare Products Regulatory Authority's recent approval of the 'e-Voke' e-cigarette to aid smoking cessation during pregnancy.

**Methods:** We analyze clinical practice guidelines on e-cigarette use in pregnancy from a range of settings, contrasting them to United Nations human rights treaties. We discuss how these treaties could be engaged in the development of best practices for midwifery and healthcare practice.

**Findings:** United Nations human rights treaties, in particular the 1979 *Convention on the Elimination of All Forms of Discrimination Against Women*, 1989 *Convention on the Rights of the Child*, 1948 *Universal Declaration of Human Rights* and 1976 *International Covenant on Economic, Social and Cultural Rights* oblige Member States to adopt policies and practices that protect children's right to healthy development and women's rights to health, appropriate pregnancy services, and education to support the health of herself and her children. We find a large variation between practice guidelines in terms of how closely recommendations on e-cigarette use in pregnancy align with these human rights obligations.

**Interpretation:** In clinical practice, a higher degree of vigilance is needed to ensure that both providers and patients are given clear, accurate messages about the known and unknown risks associated with e-cigarette use. Clinical practice guidelines should consider both scientific evidence and global human rights principles. Within a human rights framework, health providers have an ethical obligation to ensure that pregnant patients can make informed decisions on all matters related to their pregnancy, including e-cigarette use in pregnancy.

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### **Social Factors Influencing Family Planning Knowledge, Attitudes, and Practices in the Ngäbe Population in Bocas del Toro, Panama**

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**Background:** According to Panama's 2009 National Sexual and Reproductive Health Survey, only 19% of indigenous women in Panama use modern family planning (FP) methods. Despite the Ngäbe representing 62% of the indigenous population, there is limited research on their use of FP.

**Methods:** 14 Ngäbe communities in Bocas del Toro served by Floating Doctors were surveyed. Women between the ages of 18 and 50, who had >2 children were invited to be interviewed about FP knowledge, attitudes, and practices.

**Findings:** A total of 148 women were enrolled, mean age 32.18 (SD = 8), and mean number of pregnancies 4.9 (SD = 2.5). On average, first sexual encounter occurred at age 14.7 (SD = 1.9), with first pregnancy occurring at age 16.3 (SD = 2.5), and mean spacing between first and second pregnancy was 2.8 years (SD = 2.1). Only 7% of women could not name any family planning method. Women reported ideal age to begin having children as 21.5 (SD = 4), and reported ideal birth spacing as 4.8 years (SD = 2.4). 78% did not want to have more children but only 32% were currently using FP. 40% of women currently not using FP had used a form of FP in the past. 41% of women used any FP methods. Respondents with unmet need for FP reported

concerns about side effects (48%) and lack of access (32%) as main barriers to using FP. Women practicing indigenous religions were less likely than all other religious groups to use FP ( $X^2 = 19.0$ ,  $p < 0.001$ ). FP use was higher for women who received information on FP during prenatal visits ( $X^2 = 8.5$ ,  $p = .003$ ), from health care providers ( $X^2 = 7.5$ ,  $p = .006$ ), and who talked with a health care provider about FP during the last year ( $X^2 = 4.8$ ,  $p = .029$ ). There was no significant association between age, location, education level, marital status, number of pregnancies, and FP use.

**Interpretation:** Ngäbe women believe it is important to delay first birth, increase birth spacing, and have fewer children. However, misconceptions about FP and concerns about side effects are widespread and deter FP use. Receiving accurate FP information from health care providers increases use. Qualitative research is needed to more fully understand how indigenous beliefs and traditional practices influence FP use.

**Source of Funding:** University of Connecticut School of Medicine.

**Abstract #:** 2.029\_WOM

### **Saving Mothers Project-Distribution of Birth Kits with Misoprostol in Two Rural Districts of Mara Region Tanzania: The challenges with survey data**

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**Program/Project Purpose:** The "Saving Mothers Project" in Bunda and Tarime Districts of Mara Region, was conducted from October 2015 to early 2017. Pregnant women were provided with clean delivery kits with misoprostol to prevent infection and postpartum hemorrhage. The kits were distributed through community health workers (CHWs) and nurses. The women were instructed to seek a health facility for birth, but the kits could be used for home births, delivery on route, and at the facility as supplies were often lacking. Also, CHWs were given mobile phones equipped with an m-health application to register the pregnant women, send them reminders to attend antenatal clinic, warn them about danger signs, and track their delivery outcomes.

**Structure/Method/Design:** We randomized all the pregnant women who were registered by the CHWs using the m-health application. We then interviewed 20 percent of the group using a structured interview on tablet computers in order to evaluate the success of the project. We will report on the first 12 months of data collected.

**Outcome & Evaluation:** We surveyed approximately 2,323 women in Bunda District (1,485) and Tarime District (838). The facility birth rates for the participating women was high at 83%, all attended by a skilled health provider. Only 4% of women had no provider available (either alone or with family or friends only) and a further 12% had a TBA. The reported facility birth rate with the m-health data and from the District Health Offices showed improvement in facility births, but not to the extent of our data. It appears women falsify their delivery location if they have a non-facility birth as they are aware that home births are not approved of by the government.