Interviews were facilitated and interpreted with community liaisons/ staff. The interviews assessed knowledge and opinions concerning women's reproductive health and healthcare access, CC and screening, health education, and preventive health. The study qualitatively analyzed collections of statements concerning each of these topics via the following HCD ideation procedure: download of learnings, identification of themes, creation of insight statements, translation of these statements into opportunities for design, and designation of design principles.

**Outcome & Evaluation:** Several key themes emerged to guide the design, including participants': unfamiliarity with secondary prevention strategies; unawareness of disease presenting without symptoms; misconceptions concerning the cause of CC and the purpose/outcomes of CC screening; favor toward group education, games, metaphors, and images; and potential educational discouragement due to embarrassment and immaturity of peers. The design project applied these themes and consequent design principles to create a rapid prototype of a CC-focused educational curriculum, including several culturally-respectful in-class activities designed to emphasize fundamental learning objectives. Prototype journey-mappings, metaphors, and games were tested with five Kaqchikel women to elicit feedback that was then integrated into a re-iterated curriculum.

**Going Forward:** The curriculum will be piloted in early 2017. The course will then be implemented in the communities surrounding San Lucas Tolimán by UVA-GI staff, with continual evaluation through course exams, information retention exams, and surveys. HCD application processes will be shared with other UVA-GI projects and global health innovators.

**Source of Funding:** Community Based Undergraduate Research Grant, Raven Fellowship, UVA Medical Innovation + Human-Centered Design VentureWell Grant.

Abstract #: 2.023\_WOM

### Preliminary Results: Youth Friendly Reproductive Health Provision Preferences among Youth, Parents, and Health Providers in Malawi

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**Background:** Malawi's population growth is exacerbating growing food insecurity and environmental degradation while stretching already scarce government health and education funding. With two-thirds of the population under the age of 25, reducing unmet need for family planning among youth (15-24 years) as a means to reduce unwanted pregnancies is a priority for the reproductive health agenda. Uptake of family planning among youth and changes

in youth-specific fertility rates have been slow despite recent investments.

**Methods:** To investigate reasons for slower than expected decreases in youth-specific fertility rates we collected opinions and perceptions about youth-focused family planning provision in Malawi using qualitative methods, including semi-structured interviews and focus groups. Three districts were selected to maximize variability in reproductive health outcome measures, region, and provider performance. Facility catchment areas were randomly selected and participants were recruited by health facility staff and NGOs. Youth aged fifteen to twenty-four and parents or legal guardians of youth were recruited for demographic-specific focus groups, and clinic and community-based providers of family planning services were recruited for interviews.

**Findings:** We held seventeen semi-structured interviews with health providers and thirty-four focus group discussions with youth and parents. Varied preferences exist for family planning services including provider age, facility versus community-based distribution, and the desire for family planning counseling. Youth know of available contraception but have little knowledge of how they work and misconceptions are widespread. Health workers also face many challenges, ranging from busy workloads to challenging norms surrounding sexual and reproductive health in Malawi. Parents' attitudes were reported to play a vital role in both facilitating and preventing youth access and utilization of family planning services.

**Interpretation:** This study adds to existing research by examining the barriers and preferences for youth-friendly family planning provision among youth, parents, and health providers in Malawi. The differing preferences among the groups make policies and interventions aimed at improving family planning services for youth challenging and context specific. The impact of social norms is often counterproductive with family planning investments, policies, and political will in Malawi. These preliminary results suggest that improving health provider training, method availability, and counseling could help improve access and utilization of family planning among youth in Malawi.

Source of Funding: Global Affairs, Canada.

**Abstract #:** 2.024\_WOM

# Closing the Gender Gap in Global Health Leadership and Why it Matters

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**Program/Project Purpose:** Improving women's health and reducing inequalities is fundamental to global health, and multiple studies demonstrate that female leaders enact policies that improve the health of women and children. Despite this, global health leadership is highly skewed towards men. Female trainees make up three-quarters of those interested in global health, yet women hold only a quarter of senior leadership positions in the field. Addressing the gender gap in global health leadership is essential for equity and the promotion of women's health globally.

**Structure/Method/Design:** We created the Women in Global Health Research Initiative in 2014 to identify and address genderbased 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.

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### 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.

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### 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 women 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.