testing if men provide it in the home. Limitations concern study restriction to southern Malawi; strengths include a contribution to inadequate literature on male testing preferences.

**Funding:** None.

**Abstract #:** 2.029_MDG

**Anemia as a risk factor for postpartum hemorrhage in HIV positive women in KwaZulu Natal, South Africa**

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**Background:** Postpartum hemorrhage (PPH) is a major public health problem which affects a significant number of women worldwide and contributes to global maternal morbidity and mortality. Anemia in pregnancy has been shown to correlate strongly with blood loss at delivery. The purpose of this study was to investigate the association between anemia and postpartum hemorrhage (PPH) in an HIV endemic population.

**Methods:** A retrospective chart review of pregnant women delivering at two semi-urban district hospitals in KwaZulu Natal, South Africa between January 1, 2013 and December 31, 2013 was conducted. HIV status, antenatal hemoglobin, estimated blood loss and presence or absence of a PPH were obtained.

**Findings:** Four hundred and seventy-three charts were reviewed. Postpartum hemorrhage occurred in 35 women (7.4%). One hundred ninety-three women (40.8%) were anemic (Hb <10). One hundred sixty-seven women (36.5%) were HIV positive. Of those with PPH, 54.5% were HIV positive and 51% were anemic.

**Interpretation:** The prevalence of anemia among women delivering at two semi-urban district hospitals in KwaZulu-Natal, South Africa is high. Anemia in HIV positive pregnant women is a risk factor for postpartum hemorrhage in the study population. Further investigation is needed to determine how best to treat anemia in HIV positive pregnant women to decrease hemorrhage-associated maternal morbidity and mortality.

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**Abstract #:** 2.030_MDG

**Sexual coercion among students at the University of Cape Coast, Ghana**

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**Background:** Sexual coercion refers to an array of encounters that compel an individual to have sex against his or her will. Factors associated with sexual coercion have not been explored among university students in Ghana. The current study surveyed students at the University of Cape Coast, in Ghana, about their experiences of forced and coerced sex.

**Methods:** Data for the study were collected via a tablet computer-based, self-administered survey of resident students of the University of Cape Coast in Ghana, one of Ghana’s 6 public universities. Sexually experienced students were asked a series of questions about their first time having sex, as well as their most recent time having sex. All participants, regardless of if they had responded that they had had sexual intercourse, were asked, “Has anyone ever physically forced, hurt or threatened you into having sexual intercourse?” Those who answered yes, as well as those who reported they were “very unwilling” to have sex on either their first or last time having sex were considered to have experienced sexual force or coercion. This was used as the outcome variable for multivariate logistic regression analysis.

**Findings:** 480 females and 556 males completed the survey. 124 (25.8%) of the females and 242 (44.2%) of the males have had sexual intercourse. Almost 42% of the females reported they were “not at all willing” to have sex the first time. 126(26%) females and 91 (16%) males have had sex either because they were forced or coerced, or when they were “very unwilling”. Those students who reported experiencing forced or coerced sex were more likely to have had an abortion (OR 2.9), to have engaged in transactional sex (OR 1.9) and to be female (OR 3.5).

**Interpretation:** While programs to improve sexual and reproductive health targeted to young people often stress the importance of abstinence until marriage, this goal is not achievable for many as they are not willingly having sex. Programs which only teach abstinence are not responding to the realities for many of their participants and overlook young people’s experiences with violence and coerced sex.

**Funding:** None.

**Abstract #:** 2.031_MDG

**Innovative student run program teaches students simulation based clinical skills in a low-resource setting**

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**Background:** In the United States, medical students receive minimal clinical experience during the first two years of the classroom-based curriculum, with even less training regarding low-resource environments. In an effort to increase the clinical opportunities available to first and second year medical students, the student-run Global Health Alliance (GHA) at Texas Tech University Health Sciences Center developed an innovative, hands-on program for the learning and application of clinical skills in low-resource settings. This educational program uses clinical simulations to teach specific skill sets adapted to settings where resources are limited. These simulations challenge students to think critically and apply newly learned clinical skills to react to acute care situations.

**Methods:** Participants travel to the Texas Tech wilderness campus in Junction, Texas to take part in hands-on clinical simulations over
a two-day period. Participants include the medical student planning committee, medical students from all four years, and physicians from different specialties. The 15 clinical simulations focus on teaching 11 skill sets including trauma stabilization, intubation, spinal immobilization, medicinal plants, and survival skills. A clinically trained third year medical student is paired with a group of first years to guide them through the simulations. Fourth year medical students and physicians play the role of the patients in each scenario and provide feedback to the first year teams after each scenario.

Conclusions: The Wilderness Retreat challenges team members to adapt clinical skills to the environment to help those in need. The retreat exposes first and second year medical students to situations in which they are able to practice stabilizing patients through their newly acquired clinical skills. The physicians are reminded of the importance of supplementing technology-rich medical education with fundamental clinical skills imperative for global healthcare. The Wilderness Retreat provides a structure for multi-level group collaboration and further development of skills for making quick decisions and remaining calm under pressure.

Funding: None.

Abstract #: 2.032_MDG

Family planning messaging sources at primary health centers in Addis Ababa, Ethiopia

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Background: In order to reach the MDGs and SDGs, access to reproductive health services, including highly effective forms of contraception, is necessary. This pilot study aimed to assess how women who visited primary health clinics learn about their family planning (FP) options.

Methods: We surveyed 60 reproductive-age women between June and August 2015 who were either initiating or changing FP methods at ten primary health center FP clinics associated with St. Paul’s Hospital Millennium Medical Center (SPHMMC). After signing or fingerprinting a written consent form, women were asked about their FP history, their current knowledge about method choices, where they have seen or heard FP information, and where they go for FP information. This study received IRB approval from both the University of Michigan and SPHMMC.

Findings: We gathered education, marriage, employment, parity, and desired children data from the 60 surveyed women. 53.3% of the surveyed women had utilized injectable contraception, followed by oral contraceptive pills (31.7%) and implants (28.3%). Injectable contraception was the most well known method among surveyed women (88.3%), followed by implants and oral contraceptive pill (76.7% and 70% respectively). Mass media sources (television and radio)—71.7% and 60% respectively—were the most recognized sources of FP information, followed by friends (53.3%) and community events (45%). 89% of surveyed women indicated their preference for health clinics when in need of FP information.

Interpretation: Our data suggest that among women in Addis Ababa, most receive their FP information from mass media sources, specifically television and radio. This points to a potentially important factor in achieving target seven of Sustainable Development Goal 6—universal access to sexual and reproductive health-care services. We hope this preliminary data provides public health policymakers and planners in Ethiopia with the framework to further study the role of messaging in FP utilization countrywide.

Funding: The first two authors received funding from the University of Michigan for study-related travel.

Abstract #: 2.033_MDG

Evaluating religious influences on barriers to the uptake of maternal services among Muslim and Christian women in rural north-central Nigeria

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Background: Uptake of antenatal and PMTCT services are low in Nigeria. Less than 60% of pregnant women attend 4 antenatal care (ANC) visits and <40% of births are attended by skilled attendants. Only 30% of HIV-positive women receive drugs for prevention of mother-to-child transmission (PMTCT). However, the Christian-dominated South has fared better on these indicators than the Muslim-dominated North. Consequently, maternal infant outcomes are worse in the North than the Southern. This study evaluated for religious beliefs and practices influencing access to ANC and PMTCT services among Muslim and Christian women in rural North-Central Nigeria (42% Muslim, 56% Christian).

Methods: Targeted participants were HIV-positive, pregnant or of reproductive age. Participants were recruited on a rolling basis from rural communities in the Federal Capital Territory and Nasarawa State. Themes explored were utilization of facility-based services, provider gender preferences, and Mentor Mother acceptability. Thematic and content approaches were applied to manual data analysis. Ethical approval was obtained from the Institute of Human Virology-Nigeria and the University of Maryland-Baltimore.

Findings: Sixty-eight women were recruited; 72% self-identified as Christian, and 28% Muslim. There were no significant religious influences identified among barriers to maternal service uptake. All participants preferred facility-based services even though they acknowledged access challenges. Women of both religious faiths identified transportation cost and healthcare facility location...