

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.

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**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.

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### 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

a significant problem. Muslim women's uptake limitations were more due to economic dependence on male partners than religious law. Neither Muslim nor Christian women had provider gender preferences; positive provider attitude was more important. All women found Mentor Mothers highly acceptable.

**Interpretation:** In our study population, major barriers to uptake of maternal health services appear to be independent of, or minimally affected by religious influences. Male partners should be educated to support their wives' ANC and/or PMTCT service costs. PMTCT programs should target integrated ANC-PMTCT services to rural areas with significant HIV burden. Healthcare providers need behavior change training to improve attitudes, and Mentor Mothers should be supported to improve PMTCT service uptake. Study limitations included relatively low representation of Muslim women among participants.

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### Parental knowledge and acceptability of infant male medical circumcision For HIV prevention at Mbarara Regional referral hospital

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**Background:** Worldwide in 2013 more than 35 million people had HIV/AIDS and 1.5 million people died from it. To the available prevention methods, male circumcision has been considered as an additional strategy against the disease. WHO also strongly recommends neonatal male circumcision for long term HIV prevention.

**Methods:** This cross sectional study was conducted among biological parents of children aged one year and below attending a young child clinic at MRRH in April 2015. Participants were interviewed using an interviewer-administered questionnaire. Data was collected on socio-demographic characteristics, knowledge on infant male medical circumcision (IMMC) and acceptability of infant male medical circumcision. Data was analysed by computing frequencies, percentages for variables, and running descriptive statistics on all variables. Ethical approve was sought from the Faculty research and ethics committee of Mbarara University.

**Findings:** The mean age for the 88 respondents was 29.3 years. Thirty (34.1%) participants reported to ever had a child circumcised while 58 (65.9%) reported never had a child circumcised before the study. The majority, 55 (63.2%) reported to have at least some knowledge about IMMC. There was a significant relationship between the knowledge of parents about IMMC and the parental acceptability for IMMC. The perceived barriers to IMMC uptake were found to be at a bigger percentage compared to the perceived benefits.

**Interpretation:** Many parents need to have their children circumcised within six months but they don't know where to go for the services and most of these have limited understanding of the procedure and it's likely implications at that age. Information about

IMMC should be incorporated in the postnatal clinic services. Just like the routine immunizations, the ministry of health should make IMMC part of the routine infant services.

**Abstract #:** 2.035\_MDG

### Fertility options of HIV-positive women in South India

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**Background:** Improved access to combination antiretroviral therapy (cART) and prevention of mother-to-child HIV transmission (PMTCT) programs in low and middle income countries (LMIC) has resulting in women living with HIV/AIDS (WLHA) to consider conception and parenthood. The interaction of socio-cultural norms, perceived risks of mother-to-child HIV transmission (MTCT), and availability of PMTCT/ART programs can influence women's fertility decisions. We surveyed WLHA to assess their knowledge of MTCT, family planning, and reproductive health, as well as the effectiveness of contraceptives.

**Methods:** Eligible HIV-positive women attending an ART clinic at a public district hospital in Mangalore, India were interviewed by a trained research assistant using a structured questionnaire that addressed five different categories: demographic information; basic knowledge of HIV transmission/prevention; views on fertility; use of contraception; and health care workers' perceived practices.

**Findings:** Of the 200 WLHA surveyed, the majority (67%) were between 30-40 years of age, employed(58%), Hindus(87%) and lived in rural areas(80%); 40% of women had primary education; 53% were widows and 43% of women were married. Moderate to severe immune suppression was noted in 21% and 78% were receiving cART. Women had a relatively good basic knowledge about MTCT but many did not know that condoms can prevent transmission; 33% of women thought that HIV infection was caste-specific. Over 76% of WLHA stated that a positive HIV diagnosis did not change their desire to have children; however only 68% think that WLHA should become pregnant. Condoms are the preferred method to prevent both STD's and unplanned pregnancies; 25% of women admitted to irregular use and <10% used no form of protection. Ninety percent of women think that contraceptive use is dependent upon the male partner's approval. One-third of women cited travel costs and long distance to clinic as major barriers to follow-up; 23% of women perceived a doctor or nurse's negative attitude during treatment at the ART clinic.

**Interpretation:** Unmet need for contraception is high among WLHA. Health care workers must provide counseling regarding fertility desires of WLHA. Additional efforts are needed to promote reproductive health, reduce stigma and effectively integrate family planning and HIV care and treatment services.

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