

PrEP. The median age of these participants was 31.5 years (range 21–57). Both participants who declined or initiated PrEP identified similar reasons to decline PrEP. The leading reasons to decline PrEP were its perceived side effects, such as skin rash and nausea, and anticipated logistical barriers to adherence, such as transportation costs to obtain refills. Another major reason to decline PrEP was the perceived social stigma associated with its use, including PrEP's association with promiscuous behavior. Participants were concerned that if they were seen taking PrEP, this would reveal that they had an HIV-positive partner. Furthermore, many felt that using PrEP was redundant with other HIV transmission prevention tools, such as condoms or male circumcision.

Interpretation: Among serodiscordant heterosexual couples enrolled in an HIV prevention trial, misconceptions of PrEP's side effects and adherence requirements, as well as stigma associated with its use are significant barriers to its initiation. While we are optimistic that PrEP has the ability to drastically reduce HIV transmission, successful efforts to roll-out PrEP in resource-limited settings need to address these important barriers.

Funding: NIH/NIMH K01MH100994.

Abstract #: 2.039_MDG

Community life center: Strengthening primary care in Africa (learnings from 1st pilot in Kenya)

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Program/Project Purpose: The Community Life Centre (CLC) is a community-driven integrated primary care intervention. Most primary care interventions are limited by their ability to scale or sustain the growing demand for clinical services. The aim of Community Life Centre is to co-create a self-sustainable community health hub that improves primary health outcomes.

Structure/Method/Design: The program has three goals: (1) improve primary care outcomes, (2) implement community-engagement strategies to enable financial sustainability, and (3) achieve economies of scale.

A solar-powered Community Life Centre (CLC) has five components

1. Co-designing a primary care facility with the community
2. Community-led commercial services to supplement income-generation by the CLC
3. Strengthen skilled-human resource capabilities
4. Empowering Community Health
5. Operational monitoring and evaluation

The first CLC pilot was implemented in Kenya in partnership with a local County Government. An existing Level-II facility was upgraded to a Level-III Health Centre. The stakeholder map for the CLC includes the community, the existing health ecosystem, the governance and administrative structures (formal and informal).

Outcome and Evaluation: Our short-term outcomes are based on improvements in clinical service-utilization. In this regard, we have observed increase in service utilization (20 times increase

in OPD footfall, 3 times increase in ANC footfall, and nearly 600 deliveries over a 15-month period). The current facility is equipped to provide services for 24-hours with minimal power-outage.

In the long-term, we expect improved effectiveness of service delivery and self-sustainability of the CLC based on community-driven strategies including commercial services.

Going Forward: There are three ongoing challenges: (1) devolution of primary care services has negatively impacted operational and supply-chain mechanisms; (2) disconnected key performance indicators that affect care—coordination between community health and primary health systems, and (3) informal mechanisms that are not fully-integrated into the health ecosystem (church, TBA, etc.)

Moving forward, one of the key goals is to translate improved outcomes to policy-level dialogues to improve primary care readiness. An additional goal is to demonstrate clinical and cost-effectiveness of the CLC program in extremely low-resource and marginalized settings in partnership with global organizations including UNFPA.

Funding: Private.

Abstract #: 2.040_MDG

The adequacy of antenatal care services among slum residents in Addis Ababa, Ethiopia

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Background: Maternal mortality has been shown to be lower in urban areas than in rural areas. However, disparities for the fast-growing population of urban poor who struggle as much their rural counterparts to access quality healthcare are masked by the urban averages. This paper aims to report on the findings of antenatal adequacy among slum residents in Addis Ababa, Ethiopia.

Methods: A quantitative and cross-sectional community based study design was employed. A stratified two-stage cluster sampling technique was used to determine the sample and data was collected using structured questionnaire administered to 837 women aged 15–49 years. Binary logistic regression models were employed to identify predictors of adequacy of antenatal care. A single overall ANC adequacy indicator was constructed using three indicators i.e., timing of first visit, number of visits, and adequacy of service content.

Results: The majority of slum residents did not have adequate antenatal care services i.e., only 50.7%, 19.3% and 10.2% of the slum resident women initiated early antenatal care, received adequate antenatal care service contents and had overall adequate antenatal care services. Pregnancy intention, educational status and place of ANC visits were important determinant factors for adequacy of ANC in the study area. Women with secondary and above educational status were 2.9 times more likely to have overall adequate care compared to those with no formal education. Similarly, women whose last pregnancy was intended and clients of private healthcare facilities were 1.8 and 2.8 times more likely to have overall adequate antenatal care compared to those whose last pregnancy was unintended and clients of public healthcare facilities respectively.

Interpretation: In order to improve ANC adequacy in the study area, the policymaking, planning, and implementation processes should focus on the inadequacy of ANC among the disadvantaged groups in particular and the slum residents in general.

Funding: University of South Africa provided some financial support for data collection.

Abstract #: 2.041_MDG

Reproductive health contribution to the burden of surgical conditions in Uganda

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Background: Reducing maternal mortality is a prominent area of global health policy and investment. In relation to surgery, cesarean sections often represent a plurality of surgical output in low-income countries, such as Uganda. We describe access to maternal health care, family planning and the burden of surgical conditions represented by reproductive health needs.

Methods: A 2-stage cluster-randomized sample was designed to represent the Ugandan population at a national level. The validated Surgeons Overseas Assessment of Surgical Needs household survey was used. At each household, the head of household was asked about deaths within the previous 12 months; through a random selection of 2 household members, if either member was a female above age 12, she was asked about her reproductive health needs. Variance estimation of proportions and rates were determined by Taylor Series Linearization.

Results: We analyze data for females above age 15 years. There were 1,043 women of reproductive age (15–49 years) who recalled 1,726 deliveries; 50.2% (95%CI, 44.2 – 56.1) of deliveries occurred at a health facility. Among women age 15–35 years, facility deliveries comprised 57.1% (95%CI, 50.8 – 63.4). The cesarean delivery rate was 6.8% (95%CI, 4.0 – 9.7), and 1.0% (95%CI, 0.5 – 1.5) of deliveries occurred by instrumental assistance. Three point eight percent (3.8%) (95%CI, 2.2–6.5) of women of reproductive age reported at least one instance of difficulty delivering without receiving a caesarean; financial constraints were cited by 31% of these women (10/32). Modern contraceptive prevalence rate among married and single women was estimated at 19.8% (95%CI, 16.4–23.8). Of 153 household deaths within the previous month, we report only one maternal death.

Discussion: This study reaffirms low rates of cesarean and instrument deliveries in Uganda. Despite universal access to maternal care, individuals are still citing financial barriers, raising questions about

service availability and effectiveness of programs to provide universal coverage. Family planning uptake is still low in Uganda. The extremely low maternal death is due to a sample size not originally powered to acquire maternal mortality rate or ratio.

Abstract #: 2.042_MDG

Factors affecting acceptance of day care center-based mass drug administration for preschool-age children in the Philippines

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Background: Chronic soil-transmitted helminths (STH) infection in children can cause nutritional, growth and cognitive deficits¹, remaining a significant public health problem in the Philippines. A 2006 baseline survey conducted by the Department of Health showed 43.7% of preschool-aged children (PSAC) had at least 1 STH infection². A school-based, teacher-assisted mass drug administration (MDA) program decreased the prevalence of heavy infection among school-age children³, suggesting a day-care center (DCC)-based, DCC worker-assisted MDA may decrease STH burden among PSAC⁴. Before implementation, acceptability of this program must be determined. In regions with better knowledge among parents about MDA and STH infections, we hypothesize there is higher acceptability of DCC-based MDA for PSAC.

Methods: Knowledge, Attitudes, and Practices (KAP) surveys were distributed to parents of PSAC in 2 regions of Western Visayas, Iloilo (N=59) and Guimaras (N=98), evaluating the beliefs and knowledge of MDA for STH. Written consent was obtained and study received exempt status by institutional review board. KAP scores were evaluated with descriptive statistics and compared by region using the Mann-Whitney U Test. Acceptability was defined as willingness to consent to MDA currently and in future, and was compared by KAP score using Chi-squared test in the 2 regions.

Findings: KAP data showed that parents in Guimaras had significantly higher knowledge scores than those in Iloilo (p=.001). Acceptance was significantly higher for Guimaras with 83% of parents accepting of immediate MDA compared to 65% in Iloilo (p=0.013), although not significant for consenting future rounds of MDA (p=.061). A higher knowledge score was associated with higher acceptance of current (p=.014) and future (p=.005) DCC-based MDA.

Interpretation: There was a high rate of acceptance of MDA by parents in the Western Visayas, suggesting health education and advocacy efforts of programs like War on Worms are working. Especially in Guimaras, higher scores reflected higher acceptability. Although MDA acceptance for PSAC is high, local health leaders continue to be concerned over the high infection rates, emphasizing the need for improved sanitation programs in the region.

Funding: Dean's Summer Research Grant; Stanley Prostednik Award.