prior management training, become skilled hospital administrators immediately improving the hospitals they run, transferring knowledge to their staff, and developing the function of the health system. The MHA program leadership articulated its faculty and institutional capacity building goals at the beginning; Yale GHLI endeavors to transfer the MHA to the local universities after graduating three cohorts: Yale GHLI leading in first year, co-delivering in the second, and providing audit and support in the third.

Outcomes & Evaluation: MHA faculty and staff benefit from technical, administrative, and professional development support; hospitals are the recipients of important MHA student-led quality improvement initiatives. The programs have a common core curriculum, course content, capstone assignments, program structure, and emphasis on strategic problem solving; however each are tailored to include local context and to address training needs. In 2014, Ethiopia Ministry of Health conducted a qualitative evaluation on the MHA. Preliminary results showed MHA trained CEO-led hospitals have significantly better planning, implementing, and monitoring of hospital programs. Evaluation in Rwanda will follow.

Going Forward: As MHA is still new to some of the host-universities and faculty members are not trained experts on all hospital quality improvement areas, the faculty advisor to student ratio is high. The program provides close and frequent mentorship to students and fa

Funding: In-kind and fiscal support comes from CDC, ministries of health, regional health bureaus, MHA-host universities, the Clinton Health Access Initiative, and Yale GHLI.

Abstract #: 02ETC087

# Comprehensive Sexuality Education in Zambian schools: Why do kids need it?

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Background: In 2013, UNESCO commissioned Education Development Center (EDC) to implement a national study in Zambia of schools schools and teacher training institutions (TTIs), to collect data on the knowledge, behavior and attitudes of young people between the ages of 10 and 24 with regard to sexual and reproductive health; the availability and quality of Comprehensive Sexuality Education (CSE) in schools; and safety, discrimination and harassment both in and out of school. The study will serve as the baseline for a national project, "Strengthening CSE Programmes for Young People in School Settings in Zambia".

**Methods:** The study collected cross-sectional data on a nationally representative sample of young people between 10 and 24 years of age who are enrolled in and attending a school or a TTI. In total, 1,815 students from 115 schools and 9 TTIs, and 390 teachers took part in the baseline assessment.

Findings: The study found that 25% of Zambian school students in grades 4 through 12 and 50% of TTI enrollees answered 95% or more of essential HIV/AIDS facts questions correctly. Over two-thirds of students displayed accepting attitudes towards people with HIV/AIDS and would share a meal, buy food from a HIV-positive shopkeeper and would be friends with a person living with HIV. Significantly more female students were found to have accepting attitudes toward HIV-positive persons. Analyses of sexual activity of students show that by the age of 16, 17% of girls and 33% of boys report having had sex. Only 36% of schools in the study reported that they have systems to refer students for clinical SRH services, and only about two-thirds of 14 to 17 year old students knew where to find SRH information and or receive SRH services. Of all students, 40%

of girls and 36% of boys report having been victims of violence or harassment. A significant proportion of students, especially females, experience bullying and sexual harassment in schools. Although many schools have adopted violence prevention policies, only 2% of schools communicated those policies to school staff, parents and students. More than 75% of schools did not communicate their policies to anyone.

Interpretation: The study findings are significant for educators and health providers in Zambia, as well as the international donor community, to inform their efforts to promote SRH among young people and reduce unwanted pregnancies and as well as sexually-transmitted infections including HIV. The study provides vital information on SRH behaviors, experiences and attitudes of young people, as well as school response including their provision of comprehensive sexuality education in schools, provision of health and SRH referrals, and ensuring that the school environment is safe from violence, harassment and discrimination.

Funding: Funded by UNESCO under contract to Swedish International Development Agency.

Abstract #: 02ETC088

### UpToDate-GHDonline collaboration: Increasing uptake and access

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Program/Project Purpose: GHDonline.org, a product of the Global Health Delivery Project at Harvard University, has provided a platform of professional virtual communities (PVCs) for thousands of health care implementers around the world to connect, share, and discuss delivery challenges, focusing primarily on low-resource settings. GHDonline has partnered with UpTo-Date (UTD)—an evidence-based, physician-authored clinical decision support tool used by 700,000 clinicians in 158 countries and almost 90% of academic medical centers in the United States—to provide free UTD access to professionals working in resource-limited settings. The UTD International Grant Subscription program has focused primarily on developing the clinical capacity of health care providers who deliver medical care, education, or related services to poor or underserved populations outside of the US.

Structure/Method/Design: Health care professionals or institutions (proficient in English, have some Internet access, cannot afford a subscription, outside the US) can apply for a year-long free UTD subscription through GHDonline. All applicants must complete the free GHDonline membership form and a short application. GHDonline and then an UTD committee screens applications before granting awards, UTD recipients are asked to provide monthly feedback on utility of UTD or suggest new areas for UTD to address in the private GHDonline community. Individuals and institutions can apply to renew their subscription annually.

Outcomes & Evaluation: Since 2009, this partnership has impacted 16,787 clinicians in in more than 60 countries. Grant recipients have posted 1600+ comments in both public and private GHDonline communities. Qualitative responses from the grant recipients demonstrate that UTD access continues to be crucial in improving the accuracy of diagnosis, treatment and disease management; in training health care staff; and in improving delivery of medical services.

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Going Forward: The UTD International Subscription program hopes to collaborate with additional partners such as the University of Malawi, Partners in Health, and Doctors Without Borders for research on its potential impact. Greater awareness of the program could increas

Funding: The UTD International Grant Subscription program is funded by Wolters Kluwer Health.

Abstract #: 02ETC089

## Evaluation of a structured pre-departure orientation in a medical student global health education program

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Program/Project Purpose: There is limited published information on optimal strategies for preparing medical students for global health electives. In 2010, faculty at the David Geffen School of Medicine at UCLA developed a day-long pre-departure orientation (PDO) designed to bring faculty and students together and using a combination of lectures and small group discussions on topics pertaining to health and safety, cultural sensitivity, ethics, and clinical topics relevant to students' global sites. All students completing the PDO provided an evaluation of the experience. We retrospectively reviewed these surveys to learn the strengths and weaknesses of the PDO. We hypothesized that regardless of prior global health experience, all students would find that our PDO contributed to their ability to be safer, more culturally sensitive, and better prepared for their global health experiences, and that students would also value the opportunity for mentorship in a small group setting.

Structure/Method/Design: In 2010-14, medical students who participated in UCLA's global health education programs were required to attend the PDO. Anonymous surveys were administered at the end of each orientation evaluating the duration and structure, content, and utility of topics covered. The surveys utilized the Likert scale and also included free response questions. Summary statistics were generated using excel. Qualitative data was coded using a grounded theory approach to identify core themes and subthemes. The research was exempted by the UCLA IRB.

Outcomes & Evaluation: One hundred five medical students attended the PDO during this four-year period and completed the evaluations. All students (100%, n=105) reported that small group discussions contributed to their learning and 99.0% (n=104) of students reported learning new information during the orientation. Students identified the following strengths of the PDO: small group and site-specific discussions (n=38, 19.7%), health and safety information (n=36, 18.7%), and the opportunity to learn from the UCLA global health community in an intimate setting, including faculty, staff, and other students (n=34, 17.6%). In the 2012-14 academic years, 54 students completed an evaluation upon return from their electives. Of the 41 students who had previous global health experience, 38 (92.7%) agreed that they were prepared. All students with no prior global health experience agreed that the PDO adequately prepared them.

Going Forward: The PDO was successful in preparing students for their global health experiences, regardless of previous experience. Students were especially enthusiastic about the opportunity to interact with faculty in small group settings. Our data are limited by leads

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#### Assessing access to maternal healthcare in rural Haiti

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Background: Haiti has the highest rate of maternal mortality in the western hemisphere. Fontaine, a small, isolated village in the Northern Plateau Province of Haiti represents one such location where medical services are desperately needed. We were asked by the community to assist in improving access to healthcare for all. To achieve this goal and after discussion with community leadership, we started with a maternal health access assessment to have a better understanding of existing strengths and needs. The purpose of this study was to establish a baseline understanding of the current maternal healthcare practices and to determine the attitudes and perceived barriers to maternal healthcare within this community.

Methods: We utilized both qualitative and quantitative research methods to ascertain the relevant maternal health needs. We conducted 7 focus groups, which were audio-taped and transcribed. The primary author summarized the major themes, which were accepted by the secondary authors. We also revised and locally adapted the 2002 WHO Maternal Health Survey to survey 306 mothers by convenience sampling in order to determine the proportion of women who received prenatal care, the type of care they received, where they received care and if they delivered in a hospital or at home.

**Findings:** 68% of mothers completed no more than primary school education and 66% identified as housewives or farmers. Of mothers who had delivered in the past 5 years, 95% had at least one prenatal visit from a trained provider. However, 73.8% of these women sought the majority of their prenatal care from TBAs and 75% delivered at home under the supervision of a traditional birth attendant. Themes from the focus groups revealed that although most community members believe that TBAs play a vital role in their community, there is a strong desire to deliver in a hospital under the care of a physician. Financial and geographical barriers were cited as the greatest obstacle in preventing mothers from seeking this care.

Interpretation: Maternal access to healthcare in this part of rural Haiti compares similarly to national rates published in the WHO world health statistics 2013 for Haiti: approximately 25% of women delivered in a hospital. As anticipated, financial and geographic barriers were cited as the major challenges to achieving better healthcare access. Although this demonstrates a significant lack of access to maternal health services, these data revealed that there is a community perception of this need and a collective desire to engage in the creation of solutions for healthcare access such as a local clinic and trained healthcare providers. We plan to utilize this data in the programmatic development process as well as baseline data for further programmatic evaluation.

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# Examining ourselves: Who does global health research really serve?

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