Improving educational outcomes of girls in rural Ghana: a multi-intervention, community owned approach

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Program/Project Purpose: The educational achievements of women are related to reduced fertility and improved education and health outcomes for their children, including survival rate, cognitive function and education levels. Therefore, the failure of women to achieve high education levels is an important factor in the intergenerational transmission of poverty. The Ghana Health and Education Initiative's (GHEI) education sector aims to improve the educational outcomes and opportunities of children, with an emphasis on girls, in a large rural village in Ghana, and has greatly expanded between 2004-2014.
Structure/Method/Design: GHEI's education programs include a scholarship program, girls' empowerment camp and intensive supplemental education programs for both well performing junior high school (JHS) students. Some programs are focused on a few well-performing students while others are focused on students in the entire community. The community's involvement and ownership is essential and integrated throughout. Our primary outcome measure is performance on a standardizednational examination taken after JHS called the Basic Education Certificate Examination (BECE). Students must pass this test to be admitted to senior high school, and students who achieve a high pass are more likely to be admitted. Records of BECE scores for Humjibre JHS, Bibiani-Anhwiaso-Bekwai District were obtained from the Bibiani District Administration. Data was analyzed using STATA v.10.
Outcomes & Evaluation: The percent of girls passing the BECE examination in the intervention area increased from 4% in 2001 to 100% in 2013 ($p < 0.05$), and has remained at 100% for the last 5 years. The district girls' scores improved from 33% in 2001 to 94% in 2013 ($p < 0.001$). High pass scores for girls increased from 1.1% in 2001 to 10.1% ($p < 0.01\%$), a ten-fold increase, in the cumulative years 2012-2013 in the intervention area, versus an increase from 10.6% to 22% in the district over the same time period ($p < 0.0001$), roughly a two-fold increase.
Going Forward: These results demonstrate the potential for dramatic improvement in educational outcomes for girls in rural Ghana at a relatively low cost of $7.94 per child per year. Over the past decade, girls from the intervention area now pass the BECE as often as girls in the district. We have seen a large improvement in high pass achievement relative to the district girls (ten-fold vs. two fold increase), but still fewer girls in our village achieve high pass. Ongoing challenges include funding high quality services at a low cost in a low resource environment, expanding our reach to all girls students, and parental and community support for girl students. Looking forward, we plan to continue the support of students in our intensive supplemental program, while working to support and reach more girls in the general community.
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Developing a home-based couples HIV counseling and testing intervention: perspectives of HIV-negative pregnant women and their male partners

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Program/Project Purpose: Across sub-Saharan Africa, pregnant women's fears of HIV-related stigma from male partners is associated with reduced utilization of HIV testing, maternity care, and PMTCT services. From July to September of 2014, as a part of a study aiming to adapt an existing evidence-based intervention for couples HIV counseling and testing (CHCT) into a home environment, qualitative interviews were conducted in order to explore the acceptability of a home-based couples HIV counseling and testing intervention among HIV-negative pregnant women and their male partners.
Structure/Method/Design: Ten HIV-negative pregnant women and ten male partners of such women were recruited for in-depth qualitative interviews at two sites in the Nyanza region of Kenya, an area of high HIV prevalence. Drawing from the Interdependence Model of Health Behavior Change, we assessed the barriers to male involvement in perinatal care, facilitators to couple HIV disclosure, and preferences for home visit counseling, testing, and service delivery. Preliminary analyses of these data were presented at a stakeholder meeting with health facility, community, and governmental representatives in order to refine a home-based CHCT intervention.
Outcomes & Evaluation: We found that home-based CHCT is acceptable and may reduce barriers to male supportiveness for pregnancy and postnatal care, as well as assist in safe HIV status disclosure between couples. Male partners cite time and financial cost of traveling to clinics and lack of other men at antenatal clinics as barriers to accompanying their pregnant wives. Fear of discordant results, stigma, and violence or break up of the relationship were discussed as hindrances for couple HIV testing, along with cultural factors such as the role of other family members or polygamous relationships that complicate health-seeking and treatment decisions. Most participants felt that they would welcome trained health workers who visit them at home to educate them about pregnancy and offer CHCT. Recommendations for successful home visits included visiting all pregnant women regardless of HIV status, making prior public announcements, providing perinatal education to both partners, and training the health care workers in assisted disclosure, how to handle discordant results, and strict confidentiality.
Going Forward: In collaboration with key stakeholders, the study investigators are designing a culturally relevant and feasible home-based CHCT intervention to minimize barriers for pregnant women and their male partners who want to utilize couple HIV counseling and testing and antenatal services. Existing evidence-based CHCT protocols will be modified accordingly and a randomized pilot study of the intervention will be conducted. The results of this qualitative study suggest that a home-based CHCT intervention will be acceptable and welcomed by HIV-negative pregnant women and their male partners, providing that the health care workers are well trained and ensure confidentiality.
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Gender disempowerment, condom use, and HIV transmission among female sex workers in Salvador, Brazil

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Program/Project Purpose: While Brazil is lauded for its exemplary HIV prevention model, the majority of HIV prevention programs promote safe sex through education, ignoring the realities of gender disempowerement and inequality, which increase the susceptibility of

female sex workers (FSWs) to instances of violence and disease. This paper analyzes factors associated with gender disempowerment and lack of condom use among FSWs in Salvador (Bahia), Brazil who engage in heterosexual interactions with male clients. An understanding of the sources of gender disempowerment is key to developing culturally-appropriate and effective policy interventions.
Structure/Method/Design: Over two, three-month periods (October-December 2011; May-August 2012), interviews were conducted with sixteen female sex workers and focus group discussions were conducted with 35 female sex workers at Projeto Força Feminina. The latter is an organization located in Pelourinho, the Historic District of Salvador, that works with FSWs to promote safe sexual practices and combat gender-based violence. Three life histories were also conducted with three of the sex workers. Additionally, Dr. Edivania Landim, the former head of the HIV/AIDS program of Bahia was also interviewed.
Outcomes & Evaluation: Of the 35 FSWs interviewed, all except one were Salvador natives. The median age was 27 (inter-quartile range: 19-56), with the majority of the women being in their mid twenties to early thirties. Most participants (56%) identified as single or not dating. None was married at the time of the study. Ten of the women had children with whom they lived. Over one-third (37.5%) of the women reported always using condoms. The top three reasons reported for lack of condom use were (1) clients offered higher wages for unprotected intercourse, (2) women were sexually assaulted by clients/police, (3) women offered unprotected sex to clients in order to steal clients from other FSWs.
Going Forward: Increased emphasis should be placed on female-specific forms of protection, e.g. female condoms, microbicides. Because organized prostitution is illegal in Brazil, the results indicate that lack of organization drives competition among FSWs, increasing health risks. Unionization is necessary to gain political acknowledgement of sex worker rights. Legalization of the trade will allow for regulation of the profession and increase the ability of FSWs to unionize.
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Assessment of household water purification practices in the Milot Valley, Haiti

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Background: Haiti has faced a cholera epidemic since 2010. Government and non-governmental organizations have been promoting the importance of household water purification. In Northern Haiti's Milot Valley, recent research demonstrated high E. coli levels in public water sources, including those that would be considered "improved" by the World Health Organization. Given the high risk of waterborne infection, our research assessed current household water purification practices in the Milot Valley.
Methods: We performed a cross-sectional study via home visits in Milot and surrounding communities. From June to July 2014, 64 households were enrolled using convenience sampling and bilingual interpreters. Each household was represented by a single respondent at least 18 years old. Households were asked if and how they purified their drinking water. Presence of water purification products in the home was ascertained. If chlorination of drinking water was reported, a sample was tested for chlorine. To measure perceived personal risk, we asked if households knew someone who had been sick and/or died of cholera. The study was approved by the Institutional Review Board at Tufts University School of Medicine, Boston, MA. Informed consent was obtained using an audio recording and verbal agreement.
Findings: Thirty-nine percent (25/64) of households reported "always" treating drinking water, 25% (16/64) reported "sometimes," and 11% (7/64) reported "never." Another 25% (16/64) reported obtaining pre-treated water. Sixty-four percent (41/64) reported chlorination as their treatment method; no households reported filtration or boiling water. Twenty-five percent (16/64) had a chlorine-based water purification product at home, and of these, 86% (14/16) knew its correct usage. Twelve of 41 (29%) households reporting chlorination had water available to test. Of these 12, three households did not currently have a water purification product at home, and all three tested negative for chlorine. The remaining nine households had a water purification product at home, and seven tested positive for chlorine (78%). Fifty percent (8/16) who reported "sometimes" treating their drinking water cited "cost" as a barrier. Eighty percent (51/64) knew someone who had been sick and/or died of cholera.
Interpretation: Our data suggest that Milot Valley communities recognize cholera's threat and their own high risk. Households with water purification products at home demonstrate correct usage. Despite this knowledge, a large proportion of households are not treating their drinking water. While our data suggest that cost remains an important barrier, future studies should focus on perceived self-efficacy of water purification methods among households not regularly purifying their water. Limitations of this study include households not having water available to test, relatively small sample size, and use of convenience sampling.
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Assessing early childhood nutrition knowledge and practices and perspectives in rural Kenya

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Program/Project Purpose: Early childhood nutrition is a critical determinant of physical and cognitive development. According to the Kenya Bureau of Statistics, in 2011, 23.7% of children under 5 in the Kisumu district were stunted, and 4.1% were wasted. In order to gain a better understanding of the etiology of this childhood malnutrition, University of British Columbia's Global Health Initiative (GHI), in collaboration with the local NGO Partners in Community Transformation (PCT), conducted focus group discussions (FGDs) with male and female caregivers, and community health workers (CHWs) over a six week period between June-July 2014. The project aimed to find ways to optimize early childhood nutrition practices such that overall health in Kisumu improves.
Structure/Method/Design: FGD questions were designed to assess general nutrition knowledge, and nutrition practices specifically related to mothers with children < 5 years old. All participants were selected by the PCT Community Health and Education Coordinator based on the following criteria: age ≥ 18, child caregiver or CHW status, and Kisumu district residency. A total of five FGDs were held in Kaila, Kit Miyaki, and Kajulu Koker; three FGDs were held with female caregivers, one with male caregivers, and one with CHWs. Each FGD had a maximum of 15 participants. In addition, nutritionists and representatives from the Ministries of Health and Agriculture were interviewed to gain a better understanding of the societal