Improving Women's Health in East Africa by Expanding Services and Access

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Introduction

Women in East Africa lack knowledge of and access to healthcare services. High rates of cervical cancer, sexually transmitted disease infection, and unplanned pregnancies throughout the region have further marginalized already vulnerable women. High disease rates and numerous unplanned pregnancies hinder girls from attending school and women from generating income. One way to improve the human security of women in East African countries is to provide access to family planning and reproductive health (FP/RH) education and services.[i] This paper offers two examples of health initiatives as a means to promote gender equality and community resilience: decreasing cervical cancer rates and increasing access to family planning.

Cervical cancer is the most prevalent form of cancer in women in Malawi.[ii] Forty-five percent of cancers in women are cervical, and less than 3% of women are screened for HPV (the virus that leads to cervical cancer) every three years (figure 1 in the appendix).[iii] Malawi has the highest rates of cervical cancer in Africa with roughly 7.5% of women expected to develop cervical cancer at some point in their lives.[iv] In Uganda, women are under-educated about modern contraceptive practices, resulting in a contraceptive prevalence rate (CPR) among women ages 15-24 of 28.7%—which is low and shows a disparity among developed and developing countries.[v]

Jhpiego, a successful nonprofit that is an affiliate of Johns Hopkins University focusing on improving the health of women and families in developing countries, should consider the following: (1) improving cervical cancer rates in 16 Malawian low resource districts by expanding screening services and (2) increasing access to family planning using mobile phones among Ugandan adolescents to combat the pressing health issues facing women in the region. To address these issues, Jhpiego should identify strong partners to aid in implementation initiatives, train Jhpiego staff on medical screening methods, educate local clinical staff to support medical screening methods, and conduct impact evaluations to determine the project implementation's success.

A. Improving Cervical Cancer Rates in 16 Malawian Low Resource Districts

Jhpiego's Involvement in Cervical Cancer Prevention and a Need for Further Intervention

At the current rate of human papillomavirus (HPV) contraction in Malawi, it is estimated that 5% of women will die from the sexually transmitted disease, which causes cervical cancer.[vi] Per every 100,000 women in Malawi, there is an incidence rate of 46.5—disproportionate to the regional figure of 25.8 per every 100,000 in Eastern Africa (figure 2 in the appendix).[vii] From

1999 to 2006, under Jhpiego's mission to improve the health of women and families in developing countries, Jhpiego's Malawi team focused on cervical cancer intervention in Malawi with funding provided by the UK Department for International Development (DFID), USAID, and the Bill & Melinda Gates Foundation.[viii]

During this time frame, Jhpiego worked with the Malawian Reproductive Health Unit of the Ministry of Health to implement a cervical cancer screening program, utilizing the low-cost single-visit visual inspection with acetic acid (VIA) method. More than 80 providers were trained and approximately 16,000 women were screened.[ix] In 2007, Jhpiego partnered with Save the Children to increase utilization of maternal and newborn health services.[x] The new collective goal has been to improve the quality of mother to child health services; however, the rate of women being diagnosed with cervical cancer in Malawi has remained an issue.

Facts on the Problem: Why Cervical Cancer Needs a Refocus in Malawi

In Malawi, 3,684 women are diagnosed with cervical cancer each year and roughly 2,314 die from the disease annually.[xi] Women infected with HIV have a higher incidence of HPV infection rates, as well as greater prevalence and longer persistence rates.[xii] In Malawi, there is a 12.9% HIV prevalence among women.[xiii] If these HIV positive women come in contact with the HPV, they have a higher risk of developing precancerous lesions and may have a more rapid progression to cancer than women who are not HIV positive.[xiv]

Facts on Solutions: Highly Preventable and Low Cost

Through screening and vaccinations, 93% of cervical cancers can be prevented.[xv] Regular screenings reduce the risk of dying from cervical cancer by 80 to 90%.[xvi] Given the high number of cervical cancer screenings that Jhpiego's Malawi team accomplished, Jhpiego still has the opportunity to fulfill their organization's mission by reintroducing the VIA screening method. The VIA method is cost-efficient, in that it requires less than US $0.50 per capita to implement in primary-care settings in low-resource countries.[xvii] Jhpiego, along with local organizations and the Malawian Ministry of Health, has the ability to reduce the number of women that die from cervical cancer.

Recommendations

Recommendation 1: Train Jhpiego's Malawi Staff on VIA Cervical Cancer Screening Methods

Training Jhpiego Malawian staff will allow for the successful adaptation and implementation of VIA cervical cancer methods before conducting any screenings. In order to re-implement the previous successful Jhpiego VIA screenings, the Malawi team will train their lead district midwives and nurse practitioners that reside in the sixteen Jhpiego focus districts around the country.[xviii] Having Jhpiego dedicate a project that specifically screens in sixteen of twenty-nine Malawian districts will decrease the amount of Malawian women that have expressed that there is a lack of accessibility, affordability and availability to cervical cancer screenings.[xix] These trainings will occur at Jhpiego Malawian headquarters and will be conducted by Jhpiego's lead Malawian Midwife and Country Director to ensure proper training and skill attainment. Once the trainings are complete, the midwives and nurses will utilize their learned skills in their respective country districts.

Recommendation 2: Educate Local Nursing Staff to Support Community VIA Screenings

Having Jhpiego's Malawian team of lead district midwives train their local supportive staff on screening for cervical cancer will allow for successful adaptation into the local communities. With Jhpiego's Malawian team implementing VIA cervical cancer screenings in sixteen districts, support from staff, at the local organizations where screenings will take place, will be needed to ensure that the organizations are properly conducting these screenings.

Challenges and Opportunities

Despite the importance of reducing this preventable cancer, funding for such interventions can be difficult to acquire. Due to more publically known campaigns, most funding goes toward interventions that address high rates maternal mortality, HIV/AIDS, and other public health concerns. Since cervical cancer is easily prevented and cost-effective to treat, donors need to consider funding such projects.[xx] In order to fund training sessions and pay for VIA screening supplies, Jhpiego should apply to current and past donors such as USAID, DOD, DFID and the Bill & Melinda Gates Foundation. It is important, when applying for these grants, to explain the low cost of Jhpiego screening methods—proving their cost-effectiveness. Along with the low cost, the majority of Jhpiego staff has medical or health-related backgrounds, leading to a minimal training cost and an overall inexpensive implementation for Jhpiego's Malawian team.

B. Increasing Access to Family Planning Using Mobile Phones among Ugandan Adolescents

Current State of FP/RH Knowledge, Preparation and Use in Uganda

In Uganda, only 14.95% of women age 15-24 received family planning and reproductive health (FP/RH) information.[xxi] The 2011 Ugandan Demographic and Health Survey (DHS) reported that women age 15-24 are 17.3% less likely to use contraception in comparison to their female counterparts age 25-44.[xxii] Modern contraceptive use among sexually active unmarried women have a higher unmet need than married women—43% versus 33%.[xxiii] Based on the lack of FP/RH information and services shared with Ugandan women, the low contraceptive prevalence rate (CPR) persists.

More than four in ten births (43%) are unplanned in Uganda.[xxiv] Ugandan women have a 5.9 fertility rate[xxv], giving birth to nearly two children more than they would prefer.[xxvi] Adolescent Ugandan women are extremely vulnerable to such pregnancies, as one in five adolescent women (age 15-24) is sexually active.[xxvii] The lifetime opportunity cost of a Ugandan adolescent pregnancy–measured by the young mother's foregone annual income over her lifetime–is 30% of annual GDP or $670 US—per child per year.[xxviii] The Ugandan DHS found that adolescents are reluctant to seek FP/RH services due to the stigma and consequences (e.g. school dismissal, abandonment from parents and unclear abortion rights) associated with premarital sex.[xxix]

Aside from contraception use and unplanned pregnancy, the HIV prevalence in Uganda has increased from 6.5% in 2010 to 7.4% in 2015.[xxx] If Uganda invests in FP/RH education, GDP

per capita is projected to reach $6,084 by 2040[xxxi] —up from current GDP, which is currently at $572.[xxxii]

Ugandan Mobile Phone Usage

Ugandan cell phone ownership is currently at 65% (figure 3 in the appendix).[xxxiii] Ugandan youth are 66% more likely than adults to use cellphones for text messaging, and 51% more likely to use them for media messages.[xxxiv] In 2014, there were 4,196,113 mobile internet subscriptions (figure 4 in the appendix).[xxxv]

An M4RH Model: Tanzania and Kenya

In 2010, M4RH was introduced as a pilot project in Kenya and Tanzania. Created by FHI 360, utilizing WHO FP/RH materials, M4RH established an opt-in messaging health communication platform where users accessed information about FP/RH. The pilot was funded by USAID's PROGESS project and had a startup cost of $203,475 ($1.62 per user). Most of the costs were attributed to SMS fees because the pilot program paid for outgoing and incoming messages. An evaluation determined users to be willing to pay for M4RH services.[xxxvi]

As a part of the Kenyan pilot project, a randomized controlled trial was conducted entirely via text message demonstrating that there was a 13% improvement in FP/RH knowledge among those in the control group. Common queries received in messages included: information about clinic locations, natural methods, condoms, and emergency contraception.[xxxvii] With 45,390 messages exchanged, M4RH program decreased misconceptions and provided privacy and confidentiality free of cost.[xxxviii] The M4RH program has reached roughly 70,000 Tanzanian and Kenyan youth.[xxxix] The cost that users incurred was limited to the cell phone data used—ensuring affordability for beneficiaries.[xl]

Recommendations

Recommendation 1: Implement M4RH Pilot with Marie Stopes Uganda (MSU)

Jhpiego has the opportunity to provide an innovative FP/RH educational approach to their beneficiaries using the M4RH model. In order to ensure successful M4RH implementation, FHI360 suggest the following: (1) determine Ugandan technology experts capable of supporting the M4RH platform, (2) select a service provider (preferably one with low SMS rates for users), (3) conduct an FHI360 M4RH content review and select cultural content that is applicable for Ugandans, (4) create pre-established responses that will automatically reply to user queries, and (5) make the M4RH appealing by way of sharing its benefits through promotional advertisement throughout Kampala.[xli]

Jhpiego should begin with a pilot program at the MSU Kavule site in Kampala. Starting in Kampala is crucial, as this urban city has an unmet FP/RH education need of 16%.[xlii] For a year-long period, the M4RH Ugandan pilot should be offered to adolescents who utilize services at the site. MSU should be selected because they are the largest FP/RH organization in Uganda—reaching 931,000 people (figure 5 in the appendix)[xliii]—saving the Uganda healthcare system US $137.8 million.[xliv]

Recommendation 2: Conduct an Impact Evaluation on Ugandan M4RH Implementation

After a year of monitoring the usage quantitatively and receiving feedback and suggestions from users via qualitative methods, the Jhpiego Evaluation Team should conduct an impact evaluation to understand the effects of the M4RH program on Uganda adolescents who utilize MSU. The impact evaluation will be conducted in order to ensure that the M4RH program yields successful results. Upon a successful pilot, the Ugandan M4RH program will be improved and other sites will be explored to determine where the M4RH program can be further marketed.

Challenges and Opportunities

Despite the importance of increasing FP/RH knowledge in Uganda, funding is limited due to sub-Saharan African campaigns focusing on high rates of maternal mortality, HIV/AIDS, and other public health concerns. When Jhpiego applies for program support grants, it is essential to explain the low cost of the M4RH program—especially if users are paying for their queries—to prove cost-effectiveness. Furthermore, it will be important to share the long-term impacts that FP/RH education has on Uganda's GDP.

Conclusion

To fill the women's health disparity gap among developed and developing countries and breakdown the cycle of poverty, women's health must be addressed. A successful organization, such as Jhpiego, should take a leading role in addressing these global public health issues. Addressing cervical cancer and FP/RH grants women the opportunity to be more effective in their communities. By identify local partners to aid in implementation initiatives, training Jhpiego staff on medical screening methods, educating local clinical staff to support medical screening methods, and conducting impact evaluations to determine implementation's success, the organization has the ability to further their innovative work and provide essential services to marginalized women most in need in East Africa.

Appendix

Figure 1: Estimated coverage of cervical cancer screening in Malawi, by age and study

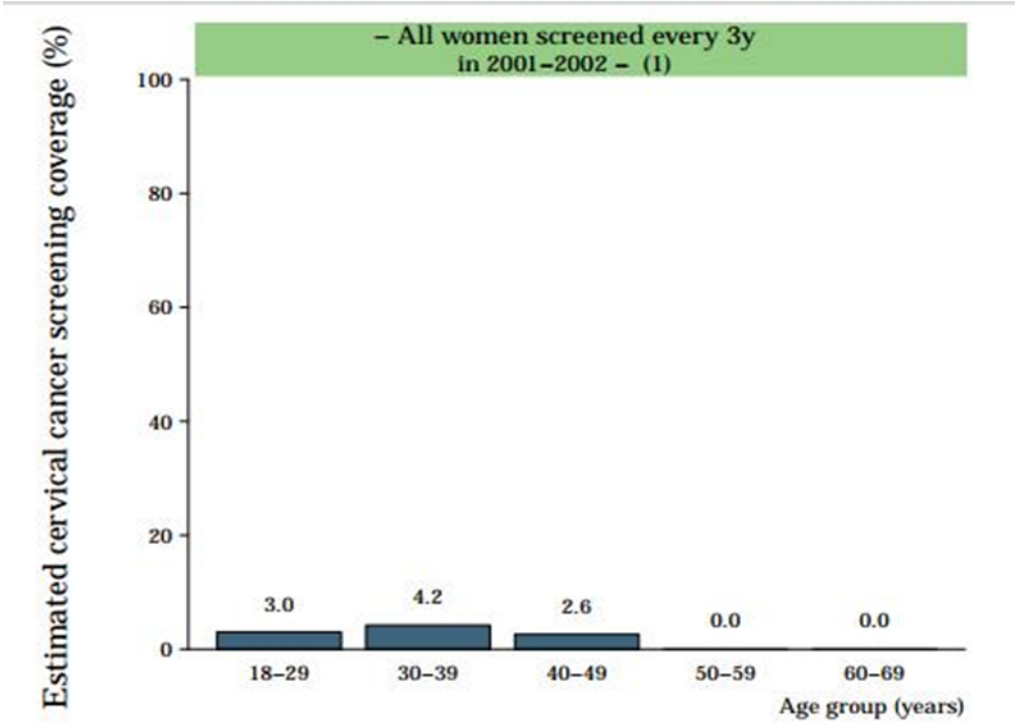


Figure 2: Age-specific mortality rates of cervical cancer in Malawi compared to Eastern Africa in the World (estimations for 2012)

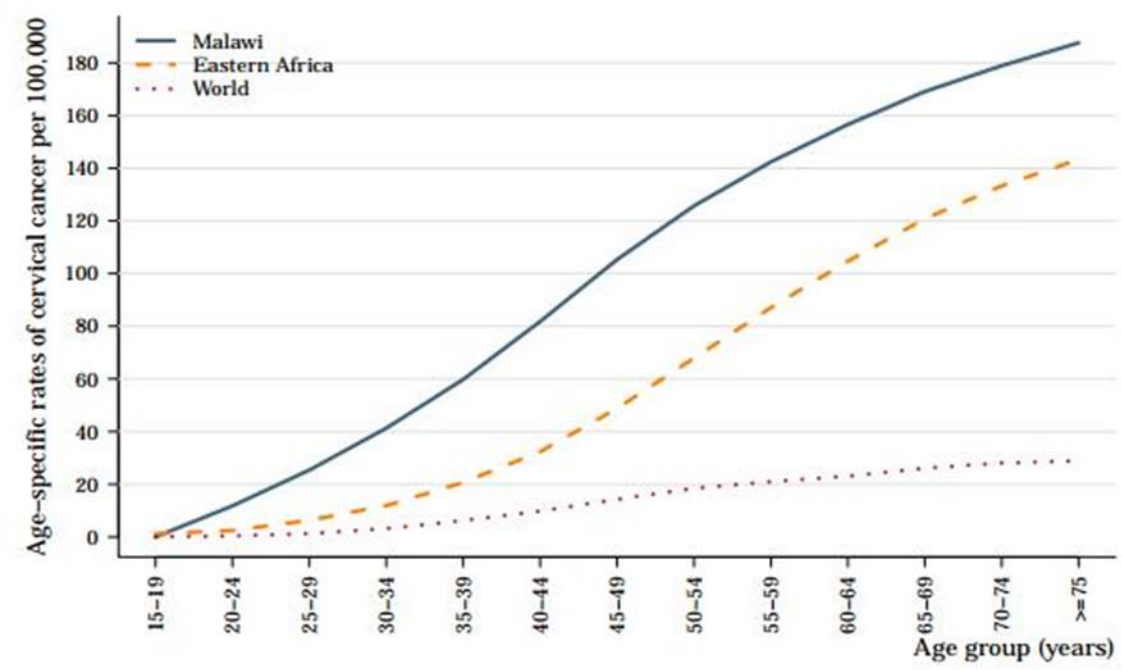


Figure 3: Cell Phone Ownership in Africa

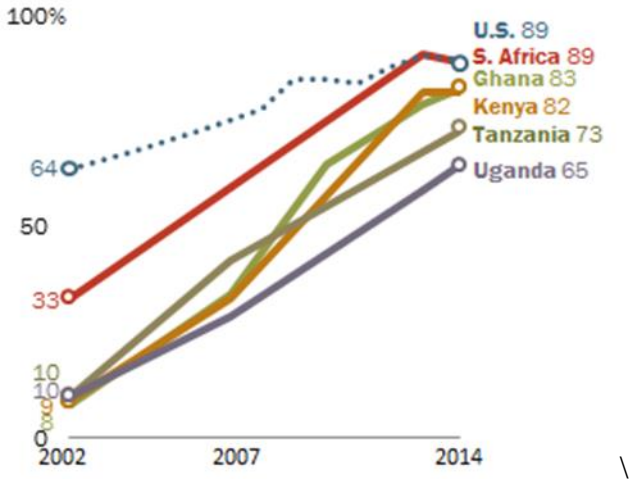
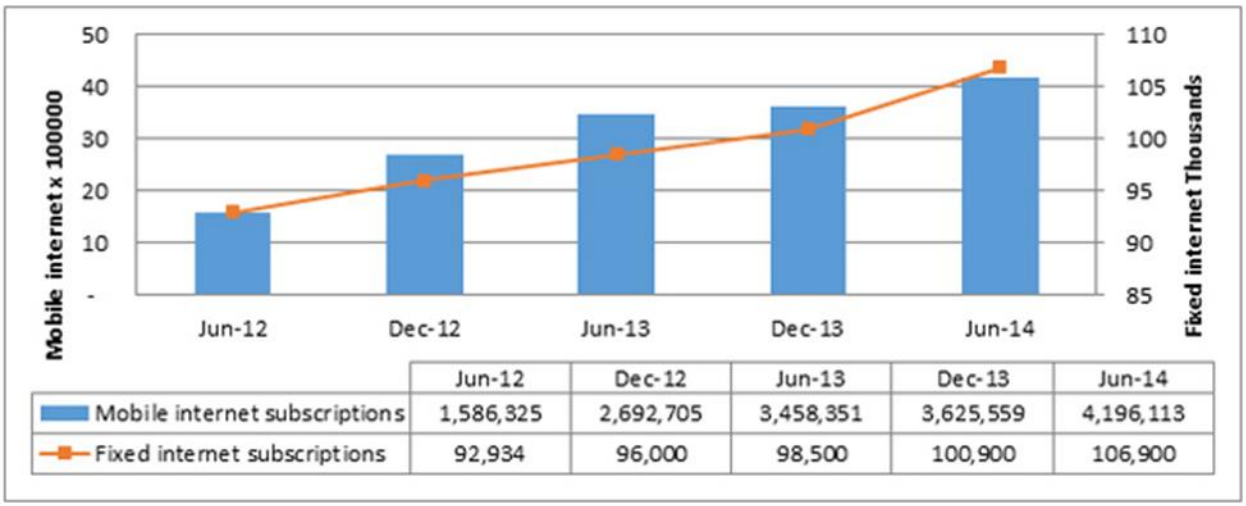


Figure 4: Fixed and Mobile Internet Subscriptions



	Jun-12	Dec-12	Jun-13	Dec-13	Jun-14
Mobile internet subscriptions	1,586,325	2,692,705	3,458,351	3,625,559	4,196,113
Fixed internet subscriptions	92,934	96,000	98,500	100,900	106,900

Figure 5:

In 2013, we estimate that MSU's ongoing programming resulted in*	
People using family planning provided by MSU	931,000
Unintended pregnancies prevented	374,000
Unsafe abortions prevented	87,000
Maternal deaths prevented	830
Savings for families and healthcare systems**	UGX 68.4bn

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