A Collaborative Family Planning Program in Rural Uganda Utilizing Community Health Workers
ALISON SCHROTH HAYWARD, MD, MPH; KELSEY BROWN, MD’22

ABSTRACT
In 2015, a household survey was conducted in rural eastern Ugandan villages to determine fertility rate, prevalence of childbirth in the hospital setting, use of and unmet need for modern contraception. There remains a high fertility rate as well as high unmet need for contraception in the surveyed villages. However, Uganda Village Project’s community health worker-based family planning program has shown promise to address these concerns.

KEYWORDS: Uganda, family planning, reproductive health, community health workers

BACKGROUND
In rural Uganda, there are many barriers to accessing reproductive healthcare, family planning counseling and contraception. According to the most recent Uganda Demographic and Health Survey (DHS), women in Uganda experience a large gap between wanted fertility rate and actual fertility rate. Wanted fertility rate is the average number of children a woman wants to have by the end of her childbearing years. Actual fertility rate is the total number of children a woman has by the end of her childbearing years. For Ugandan women in rural areas, such as the region served by Uganda Village Project, actual fertility rate was 1.3 children higher than the wanted fertility rate. The large gap among women in rural area suggests that there is a need for more family planning counseling and contraception. The DHS suggests that 32% of sexually active unmarried women have an unmet need for family planning.

In rural Uganda, lack of access to health centers and pervasive misinformation about contraception pose as large barriers to women and girls accessing contraception. These barriers, among others, help to explain why 1 out of every 4 women living in rural areas become pregnant or have their first child between ages 15 and 19. Pregnancy and childbirth-related complications are the leading cause of death for girls aged 15 to 19. Pregnant adolescents also experience a significantly higher rate of severe neonatal conditions such as preterm delivery, low birthweight infants, and stillbirth. They also face a higher risk of perinatal systemic infections, eclampsia and endometritis.

Uganda Village Project (UVP), a grassroots nonprofit based in eastern Uganda, has partnered with community health workers (CHW) and local health center staff to assess the family planning needs of the community and to provide necessary and desired access to family planning programs to women and adolescent girls living in rural Uganda.

RESEARCH SETTING AND PARTNERSHIP
Uganda Village Project was co-founded by Alison Hayward, MD, MPH, a member of the faculty of the Department of Emergency Medicine of the Warren Alpert Medical School of Brown University. Since 2003, UVP has partnered with villages to improve community health through implementation of the Healthy Villages Initiative. The objective of this initiative is to provide a set of programs addressing community health needs prioritized by residents of target villages, including malaria prevention, HIV/AIDS testing and counseling, safe water, sanitation and hygiene, obstetric fistula awareness and support, and family planning/reproductive health services. In order to achieve this objective, UVP partners with community leaders, community health workers on Village Health Teams (VHTs) and local health center staff to promote community health and to perform household-based needs assessments throughout target villages. Through conducting a series of surveys in the region, Uganda Village Project has obtained a detailed combination of demographic information and health indicators from a large randomized sample of our target population in order to provide the most needed health interventions to rural Ugandan villages.

PROGRAM DESCRIPTION
The UVP family planning program is integrated into the Healthy Villages Initiative. Family planning outreaches are run by UVP staff, Village Health Team family planning representatives and family planning nurses from local health centers (HCs). Before the scheduled outreach, a family planning representative from the Village Health Team helps mobilize women from the village to attend the event. On the day of the outreach, the family planning nurse and a UVP staff member travel to the target village, conduct an educational session, and provide one-on-one contraception
counseling to the women in the village. After counseling, the nurse provides each woman the contraception method of her choice. Outreaches occur every 12 weeks to ensure clients are able to receive timely contraceptive injections or pill refills for continuous use.

Men are typically not recruited to attend these events. In the past, female attendees have refused birth control if a man in the village was present at the outreach, as they fear he might disclose her birth control use to her husband. Based on anecdotal evidence and observation, it has become clear that family planning is not widely accepted among men in the villages. This creates additional barriers to women achieving family planning goals and ensuring healthy, desired pregnancies. To help break down this barrier, Uganda Village Project has taken steps to ensure that men are also receiving necessary family planning education. UVP conducts male specific outreaches at the local trading center or other places where men frequent. The conversations at these outreaches typically include information surrounding planning for desired family size and addressing misconceptions about contraceptives.

Adolescents also do not frequently attend family planning outreaches. Based on internal data, only 2% of attendees at UVP’s outreaches in 2015 were younger than 19. In order to engage adolescents in family planning discussions, UVP also conducts reproductive health outreaches specifically for adolescents that include games or competitions. Young people who attend are specifically invited to the next HIV or family planning outreach. By making these connections and providing education, UVP intends to lower the rate of unmet contraceptive need, reduce pregnancy rates amongst adolescents, increase HIV testing and knowledge, and lower the prevalence of pediatric HIV cases.

**METHODS**

In 2015, community leaders from Bukakaire, Kitukiro and Nabirere villages provided the study team with a list of households in their village. The study team assigned each household a number and then used a random number generator to choose which houses to survey. By the end of the data collection period, a total of 351 households, from across the three villages, had completed the household-level needs assessment survey as a part of the Healthy Village Initiative.

The household-level needs assessment was a quantitative survey that included modules on household demographics, malaria, family planning, obstetric fistula, water, sanitation, hygiene, and HIV, as well as including child anthropometry with measurements of the height, weight, and mid upper arm circumference of household children. The family planning module was completed by the female head of the household. Descriptive statistical analysis was performed on all collected data using StataSE. The study protocol was approved by both the Uganda National Council of Science and Technology and the Brown University Institutional Review Board.

**RESULTS**

Out of the 351 households interviewed, 323 females completed the family planning module of the survey. The age of the women completing the survey ranged from 17 years old to 100 years old, with the average age being 37 years old. The self-reported total fertility rate was 6.29, which was slightly higher than Uganda’s total fertility rate, which is 5.4, as well as higher than the 5.9 rate reported for Uganda’s rural areas. 121 (49.8%) of the women interviewed had given birth in the past 12 months and the overwhelming majority (87.7%) of those births occurred in a hospital setting.

Of the 323 women interviewed, 71% were not currently using a form of modern contraception. Out of those women, 52% reported that they would like to be. The most commonly cited reasons for not using modern contraception included fear of after effects (43%), advanced maternal age/infertility (19.5%), and desire to become pregnant (10.7%).

**DISCUSSION**

There is currently a significant unmet need for contraception and family planning programs in rural villages in eastern Uganda, as elucidated by UVP’s household survey results. The limitations of this survey included the format of household surveying being less likely to reach certain populations, such as women who work outside the home in the town or trading center, or adolescent females who would be attending secondary school. Our survey was only completed by female heads of the household, whereas the Uganda DHS has continually shown a greater need for family planning services amongst unmarried, sexually active women. Thus, the need amongst the population overall, including adolescent females and unmarried young adults, is likely even higher than these figures reflect.

Illustrating the barriers faced by women in the village in seeking family planning services, a large majority of the women surveyed were not using any modern method of birth control, and more than half those women stated they would like to be. Concerns about the safety of modern birth control methods are high in this population, since rumors of embarrassing or dangerous side effects are prevalent. Future efforts by Uganda Village Project will be aimed at further assessment of the specific needs of adolescent and young, unmarried females in our target communities and how they can better be served, as well as trying to improve accessibility of discreet family planning services for those who do not wish to attend public educational events.

**CONCLUSION**

By surveying villages at the household level, assessing the specific needs of village residents, and providing educational and interventional outreaches focused on reproductive health and the provision of family planning services in conjunction with local public health centers, Uganda Village Project hopes to continue to work to address the needs of people living in rural eastern Uganda.
References


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Disclaimer

The views expressed herein are those of the authors and do not necessarily reflect the views of the Alpert Medical School or Brown Emergency Medicine.

Authors

Alison Hayward, MD, MPH, Assistant Professor, Department of Emergency Medicine, Warren Alpert Medical School of Brown University.
Kelsey Brown, MD’22, Warren Alpert Medical School of Brown University.

Correspondence

Alison Hayward, MD, MPH
Warren Alpert Medical School of Brown University
55 Claverick St, 2nd floor
Providence, RI
860-748-5358
Fax 401-444-4307
ahs.hayward@gmail.com