

# The Need to Reemphasize Behavior Change for HIV Prevention in Uganda: A Qualitative Study

Edward C. Green, Phoebe Kajubi, Allison Ruark, Sarah Kanya, Nicole D'Errico, and Norman Hearst

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*Uganda has long been considered an AIDS success story, although in recent years declines in prevalence and incidence appear to have stalled or even reversed. During the early stages of Uganda's AIDS prevention program, health messages emphasized behavior change, especially fidelity. Ugandans were made to fear AIDS and feel personally at risk of dying from a new, poorly understood disease. In this research, six focus group discussions with 64 participants in peri-urban and rural areas outside Kampala suggest that HIV prevention messages have shifted in the direction of risk reduction: condoms, testing, and drugs. Ugandans now seem less afraid of becoming infected with HIV, at least in part because antiretroviral therapy is available, and this diminished fear may be having a disinhibiting effect on sexual behavior. Participants believe that HIV rates are on the rise, that more individuals are engaged in multiple and concurrent sexual partnerships, and that sexual behavior is less restrained than a generation ago. These findings suggest that AIDS-prevention programs in Uganda would benefit from refocusing on the content that yielded success previously—sexual behavior change strategies. (STUDIES IN FAMILY PLANNING 2013; 44[1]: 25–43)*

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In the late 1980s and early 1990s, when most African countries were in denial about AIDS being a serious problem, Ugandan President Yoweri Museveni led an innovative, culturally grounded response to the disease that was low-tech, low-cost, and sustainable. His approach focused more on the alteration of sexual behavior than on the use of condoms and medications. During this period, the primary emphasis of Uganda's AIDS prevention program was on restricting the number of sexual partners through faithfulness and fidelity (later called "Zero Grazing"), and discouraging multiple and concurrent sexual partnerships (MCP) (Slut-

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Edward C. Green is Associate, Department of Population, Family and Reproductive Health, and Allison Ruark is a doctoral candidate, Department of International Health, Johns Hopkins Bloomberg School of Public Health, 615 N. Wolfe Street, Baltimore, MD 21205. E-mail: egreendc@gmail.com. Phoebe Kajubi is Senior Researcher, Child Health and Development Centre, School of Medicine, and Sarah Kanya is Lecturer, Department of Social Work and Social Administration, Makerere University. Nicole D'Errico is a doctoral candidate, Department of Anthropology, University of Florida. Norman Hearst is Professor, Family and Community Medicine and Epidemiology and Biostatistics, University of California, San Francisco.

kin et al. 2006). National HIV prevalence began to decline in the late 1980s and early 1990s, several years before condoms were readily available. This suggests that much of the decline in prevalence can be attributed to “home grown” (Okware et al. 2005: 627), community-derived solutions: abstinence and being faithful (Allen and Heald 2004; Shelton, Halperin, and Nantulya 2004; Stoneburner and Low-Beer 2004; Genuis and Genuis 2005; Green and Witte 2006; Kirby 2008; Kinsman 2010).

By the early 1990s, the government had developed a multisectoral approach to HIV prevention, control, and care that called for the “concerted involvement of all individuals, communities, public and private sectors, including civil society and community-based organizations, in the effort to contain the epidemic” (Uganda MOH and ORC Macro 2006: 3). Under Uganda’s program, women were empowered, local communities and faith-based organizations were mobilized, and young people were reached through prevention messages before they became sexually active. The program also included HIV testing and counseling. The relative role of condom provision and promotion in Uganda’s program has been debated by proponents and critics of condom social marketing, probably because advocates of all prevention strategies wish to portray Uganda’s early, unparalleled success as proof of the effectiveness of their favored approach.

The scientific community increasingly recognizes the difficulty or impossibility of demonstrating that most of the standard HIV prevention interventions have had a positive biological effect at the population level in the generalized, sexually transmitted epidemics of Africa. This holds true for various condom promotion programs, the treatment of sexually transmitted infections (STIs), voluntary counseling and testing, and “safer sex” counseling (Stephenson and Obasi 2004; Matovu et al. 2005; Gray and Wawer 2007; Sherr et al. 2007; Potts et al. 2008; Padian et al. 2010). The exceptions seem to be male circumcision and reductions in multiple sexual partnerships. Data from Uganda, in particular, have been used to support the effectiveness of reductions in multiple sexual partnerships, which went by culture-specific names like “Zero Grazing” or were captured in campaign themes such as “Love Faithfully” or “Stick to One Partner” (Moodie et al. 1992; Green et al. 2006; Slutkin et al. 2006; Kirby 2008; Parkhurst 2010).

By the mid-2000s, the growing consensus in the scientific literature was that reductions in multiple—and probably concurrent—sexual partners was the factor that primarily accounted for Uganda’s dramatic reduction in prevalence and incidence (Allen and Heald 2004; Shelton, Halperin, and Nantulya 2004; Stoneburner and Low-Beer 2004; Genuis and Genuis 2005; Okware et al. 2005; Green et al. 2006; Slutkin et al. 2006; Kirby 2008; Parkhurst 2010). The turnaround of the Uganda AIDS epidemic is one of the most dramatic ever documented, with HIV prevalence declining by approximately two-thirds, from 18 percent in 1992 to 6 percent in 2002 (Wabwire-Mangen et al. 2009). Some of the decline probably occurred because of the natural course of the epidemic, as the most behaviorally susceptible became infected and removed from the pool of individuals who could become newly infected. Yet the extent of the prevalence decline in Uganda and the fact that HIV-related mortality rates stabilized in the early 1990s while prevalence continued to decline suggest that real declines in HIV incidence occurred (Stoneburner and Low-Beer 2004).

Uganda’s earlier success has recently shown signs of erosion. The 2011 Uganda AIDS Information Survey (AIS) revealed an HIV prevalence of 7.3 percent among Ugandan adults aged 15–49 (greater than the 6.4 percent measured by the 2004–05 AIS). The AIS also revealed

that declines in HIV incidence and prevalence observed during the 1990s had leveled off (MOH [Uganda] et al. 2012). Only one of three regions experienced declines in HIV prevalence between the two surveys: Kampala, from 8.5 percent to 7.1 percent. Although increasing HIV prevalence in Uganda may be, in part, a result of individuals living longer with HIV in the presence of antiretroviral therapy (ART), the increase in HIV prevalence among young people (for example, among those aged 15–19, from 1.5 percent in 2004–05 to 2.4 percent in 2011) suggests that HIV incidence, at least within this cohort, may be on the rise. Data from an ongoing incidence study in Rakai District have found that incidence has stabilized but is no longer declining significantly, even as HIV prevalence is beginning to rise in the presence of greater ART coverage (Wawer et al. 2012). Similarly, evidence from a cohort study in nearby Masaka District revealed that HIV incidence declined between 1990 and 1998, but from 1999 to 2005 HIV prevalence rose, incidence stabilized, and some subgroups showed signs of increasing incidence coinciding with riskier sexual behaviors (Shafer et al. 2008).

Behavioral trends may explain these HIV incidence and prevalence trends. National surveys from the period 1988–2005 show decreases in risky sexual behaviors among adults during the 1990s and increases in risky behaviors during the 2000s. A 2008 analysis of these surveys noted “recent increases in some HIV-related risk behaviors” and concluded that “prevention efforts should be reinvigorated to address this, otherwise the past success in the HIV fight will be reversed” (Opio et al. 2008). Between the 2000–01 Demographic and Health Survey (DHS) and the 2004–05 Uganda HIV/AIDS Sero-Behavioral Survey (UHSBS), a statistically significant increase was found in the proportion of sexually active Ugandans reporting two or more partners in the past year, from 2 percent to 4 percent among women and from 24 percent to 29 percent among men (Opio et al. 2008). The proportion of Ugandans reporting high-risk sex (sex with a nonmarital, noncohabiting partner) also experienced statistically significant increases in the same period, from 14 percent to 15 percent of women and from 28 percent to 37 percent of men (Opio et al. 2008). In the 2011 Uganda AIS, the proportion of sexually active men and women reporting multiple partners decreased to 2000–01 levels, with 2 percent of women and 25 percent of men reporting two or more partners in the past year. For the first time, the 2011 AIS also measured concurrent sexual partnerships, finding that they were common among those having multiple sexual partnerships. Among men and women who had multiple sexual partnerships in the past year, the majority also reported concurrent sexual partnerships in the past year (59 percent of women and 82 percent of men). The 2009 Uganda HIV Modes of Transmission study also suggested a possible rise in concurrency when it described “a shift in the epidemic from spreading mainly in casual relationships to also seeing a large proportion of new infections in people in long-term stable relationships” (Wabwire-Mangen et al. 2009: v).

Recent Ugandan AIDS-strategy documents reveal that condoms and HIV testing have been increasingly emphasized in place of sexual behavior change. A textual analysis of Uganda’s national AIDS documents indicates that after about 2000, Zero Grazing and partner fidelity were seldom mentioned in official AIDS strategy or planning documents, nor were abstinence or delay of sexual initiation. In 2006, the Uganda AIDS Commission and Ministry of Health issued a report in which Ugandan authors synthesized a number of peer-reviewed articles and other data sources and provided their perspective on Uganda’s purported increase in new infections. The report noted “a shift of focus towards service access messages as op-

posed to behavior change messages, [and] reliance on mass media with limited individual and community contact/dialogue” (Wabwire et al. 2006: 37). A section of the report relating to young people also placed more focus on messages pertaining to service access than on those concerning behavior change. According to this report, the problem in Uganda did not seem to be insufficient condoms or testing, but rather an overemphasis on messages for counseling and testing services and a lack of sexual behavior change messages. By 2009, Uganda’s new (2007–12) National Strategic Plan was titled “Moving Toward Universal Access.” Language and program impact indicators associated with sexual behavior change were largely absent from this document, the development of which was funded and influenced by Western donor organizations (Ruteikara 2008).

During the shift toward risk reduction interventions, ART became an increasingly important element of Uganda’s response to AIDS. Uganda was one of the countries where HIV counseling and testing was pioneered and where ART was first field-tested in Africa. In Tororo and Busia districts beginning in 2003, health care providers visited rural homes and dispensed antiretroviral drugs to HIV-infected men and women, resulting in high adherence rates (Weidle et al. 2006). In the Rakai cohort, the proportion of people living with HIV (PL-HIV) who were receiving antiretroviral therapy increased from 1 percent to 30 percent in the latter 2000s. Expanded treatment coverage coincided with slightly increased HIV prevalence (from 11.2 percent to 12.2 percent), and with modest (and statistically insignificant) declines in HIV incidence (Wawer et al. 2012).

These trends in Uganda raise an important question: Why have infection rates stopped declining in the country widely considered to have been the world’s great AIDS success story? The answer has immense implications for how large sums of money are spent annually on AIDS prevention in Uganda and elsewhere. We designed the present study to assess how patterns of AIDS risk behavior have evolved during recent years in a segment of the Ugandan general adult population.

This qualitative research was conducted prior to our conducting a quantitative household survey, the methodology and results of which have been published separately (Kajubi et al. 2011; Hearst et al. 2012). A random sample, door-to-door household interview survey was conducted in 2009 in two poor peri-urban communities on the outskirts of Kampala. The Ugandans who were surveyed reported that the prevention messages they heard most often were about condoms and testing, and they themselves considered these the most important, followed closely by messages about being faithful. Respondents who ranked condom messages (but not testing messages) as more important also had higher levels of risk behavior (Hearst et al. 2012). Respondents reported high levels of risk behavior, with 29 percent of men and 7 percent of women reporting multiple sexual partnerships in the past six months, 21 percent of men and 3 percent of women reporting concurrent partnerships, and 22 percent of men and 32 percent of women reporting that they believed their sexual partners had concurrent partners (Kajubi et al. 2011). Those who believed AIDS was a severe threat were less likely to report multiple sexual partnerships, and the researchers noted that evidence existed of “potential for the type of behavioral disinhibition caused by treatment that has been observed elsewhere in the world,” primarily among men who have sex with men (Kajubi et al. 2011: 156; see also Stall et al. 2000; Elford, Bolding, and Sherr 2002; Van de Ven et al. 2002; da Silva et al. 2005).

## METHODS

The purpose of the present research was to use focus group discussions (FGDs) to provide context to, and meaning and interpretation for, the quantitative data provided by the door-to-door survey. Survey and narrative data, combined with what is known about national HIV and behavioral trends, provide a degree of “convergent validity” in which several methods provide mutually reinforcing results. We conducted six FGDs with a total of 64 participants, divided by sex and residence (rural or peri-urban) (see Table 1). Four FGDs (two with men and two with women) were conducted in two zones in Kawempe Division, a peri-urban area near the city of Kampala, just prior to conducting the random sample household survey in the same area, but with different individuals. Peri-urban environments are located in between consolidated urban areas and rural areas, and play a mediating role between the two. We also conducted two FGDs (one with men and one with women) in Mukono District, a rural agricultural district east of and contiguous to Kampala District. The purpose of conducting these FGDs in rural areas was to provide greater geographic variety within the sample.

Each FGD lasted 90–120 minutes and was facilitated by Ugandan social scientists affiliated with Makerere University in the local language, Luganda. All discussions were recorded and later transcribed and translated by social science graduates from Makerere University experienced in qualitative research. Prior to conducting the FGDs, we approached community leaders (Local Council 1 chairpersons) to explain study objectives and describe the categories of participants needed. Participants were identified and recruited with the help of the chairpersons of the local councils that govern the communities where data were collected, and were selected because they were considered knowledgeable about the topic to be discussed. Inclusion criteria were being aged 30–39 years and residing in either the peri-urban sites (Tebuyoleka and Mukalazi Local Council 1 zones, Kawempe Division, Kampala District) or the rural site (Mpumu Local Council 1 Zone, Mukono District). This age range was selected so that participants would be old enough to remember HIV prevention messages from the 1980s and 1990s.

The FGDs followed a semistructured topic guide. As examples, the following are the first three questions: (1) How is AIDS going in Uganda in recent years? Is it getting better or worse? Why? (2) What are the best ways to prevent AIDS? Why? (3) What are the AIDS prevention messages one hears or sees these days? Where do these originate? How are they transmitted? How are they perceived?

A codebook comprised of both inductive and deductive codes was developed by a US graduate student. Coding was assisted by the MAXQDA qualitative data analysis software. Analysis focused on co-occurrences of themes, major patterns in and between the datasets, and pattern exceptions. We looked specifically for exceptions across gender, specific focus groups, and neighborhoods.

**TABLE 1** Number of participants in the six focus group discussions (FGDs), by location of FGD, according to sex, Uganda, 2009

Community	Women	Men
Mpumu (rural)	12	12
Tebuyoleka (peri-urban)	12	10
Mukalazi (peri-urban)	12	6

## FINDINGS

Three major themes arose in our findings: how perceptions of AIDS have changed; how AIDS prevention messages have changed over time; and what motivates risky sexual behaviors, especially multiple, concurrent, and extramarital partnerships. Because we found no notable differences in responses between the peri-urban and rural areas, we report the results of all six FGDs together. We also did not note significant differences in responses by sex, with one exception: women tended to blame men for what they often called “promiscuity,” whereas a surprising number of men blamed women for the same behavior.

### Changes in Perceptions of AIDS

The first topic raised in the FGDs concerned the current perception of AIDS and whether the epidemic is getting better or worse. As discussions progressed, participants were prompted to compare AIDS today with AIDS in the late 1980s and early 1990s, when Uganda’s prevention program had a distinctive character and when a great deal of behavior change and both HIV incidence and prevalence decline took place. Respondents spoke openly about how fear of HIV in the 1980s made individuals less willing to engage in risky sex.

The change that happened at that time [early 1980s] is that people got to know how bad AIDS was and so they controlled themselves. They were careful about their sexual behavior; they abstained, reduced sexual partners, and many married people resorted to being faithful to their spouses because AIDS was increasing, which is not the case right now because people now know that even if they got it, they would get drugs that were not there those days. [Male]

People are not protecting themselves. The situation has worsened. In the 1980s, AIDS had not yet spread so much, but it has increased because there is laxity in having protected sex. [Male]

Many participants observed that with antiretrovirals (ARVs) available and widely used, knowing who has AIDS is no longer possible because everyone appears healthy. Constant, visible reminders that individuals may have a fatal, incurable disease no longer exist. Participants believed that the lack of visual evidence of HIV infections has led to a decreased concern about becoming infected with HIV and to less cautious sexual behavior. ARVs and lack of fear of HIV were often mentioned together, more so than any other themes in the FGDs.

Ever since people began getting ARVs, it has caused them to have irresponsible sex. They don’t fear each other anymore or that they might infect each other with the AIDS virus. [Female]

AIDS has increased. I blame those who brought the ARVs. You find a girl looking so beautiful and full of life, shaking her body and yet she is infected and is taking ARVs. There is no way you can tell that she has AIDS, so you just go ahead and befriend her and have sex with her. That’s why AIDS has increased so much compared to how it was in the recent years where people used to fall sick and everyone would just see that the person is infected with obvious signs of AIDS. [Male]

Some participants spoke of the importance of surviving AIDS to remain alive to raise their children, and some endorsed “fear appeal” messages to warn about the serious consequences of AIDS.

When people heard the rate at which homes or whole households were being wiped away because of AIDS in Masaka and Rakai [two districts in southwest Uganda], they changed their behaviors for the sake of their children. Whenever someone heard or saw that [orphaned child], he would say “ooo-o-oh my children.” Then he would control himself by abandoning the promiscuous lifestyle and say “let me live longer and look after my children.” [Female]

People should be educated about AIDS at all levels. Some people may not know that AIDS will kill them when they have not prepared and planned for their children. If you show them that they will die and leave their children when they are still young, there is an impression this will create causing them to change. [Male]

Sensitization about the seriousness of the disease and its negative impact on the community is the best prevention. [Female]

Some disagreement was expressed about the benefit of HIV testing. Some participants reported feeling that testing was not helping the HIV problem in Uganda because knowing one’s status does not necessarily cause one to disclose to one’s partner or change one’s behavior. Other participants reported that testing had a positive impact.

These days, wives also go for testing, and when they find out they are infected they keep it to themselves. And you may not know that your husband is on ARVs, but when you get to know, it leads to disagreements in your marriage. You get a divorce, your children get scattered, all because of nondisclosure. [Female]

For some people, when they go for HIV testing and they get to know their status, they change their way of living and become responsible. If a man finds such a person and makes a pass at her, she will not stop to listen. [Female]

### **Changes in AIDS Prevention Messages**

Participants were also asked about current AIDS prevention messages and how they are perceived. As with nearly all topics, no major differences in perceptions of messages were found by sex. Both men and women reported most often hearing or seeing messages associated with testing, condoms, faithfulness, and abstinence, in that order. In transcripts of the FGDs, the words “test” or “testing” appeared 267 times; “condom(s)” appeared 194 times; “faithful” or “faithfulness” appeared 57 times; and “abstain” or “abstinence” appeared 33 times. The terms “Zero Grazing” and “Love Faithfully”—old slogans for sexual fidelity—were not mentioned.

The message we hear is that if you have AIDS, you can go to TASO [The AIDS Support Organisation] to be tested. If you are not infected, you have to know your status, go and get tested, then know your status, then you can go to TASO for treatment. The messages are about getting tested. [Male]

Campaigns are more about condoms. The health workers carry out those campaigns. They do them in workshops and over the radio. [Female]

The messages we hear are about testing your blood, knowing your status, and how you are to live your life. If you know your status, take ARVs, then you can preserve your life better than someone who uses condoms. [Female]

In response to a direct question about the influence of testing on behavior, one participant commented:

[Testing] has driven us to become more promiscuous [laughs]. It has made people more promiscuous because they take ARVs as a treatment for HIV. [Female]

Distrust in the impact of both condoms and ARVs stirred anger among a few male participants who went as far as to suggest banning condoms and ARVs and imprisoning those infected with HIV who spread the disease.

I support the idea that condoms should be banned because I know that if they are banned then I will not have anything that will make me go and have sex. What has spoiled us so much is the trust we put in condoms. [Male]

Condoms should be banned, but also these drugs should be banned so that people go back to the other original situation when there were no ARVs. This I believe can scare people into adopting safe-sex behaviors because of having no solution if they get infected. [Male]

[PLHIV who spread HIV] should be given a punishment like being imprisoned for life. If someone infects others, then he should be imprisoned and the law should be so tough on such people. If there were hard punishments given to these people, you will find that AIDS will decrease. [Male]

In response to a question from the moderator about prevention approaches considered “best,” participants often asserted that faithfulness was the most effective method. This is perhaps surprising given the perception that most recent messages are about testing and condoms, and given the impression from FGD comments that multiple and concurrent sexual partnerships (MCP) are common, even among women.

Faithfulness to one’s partner is the best. Even if you test, but when your partner does not trust you, it will not help. Faithfulness is the best. [Female]

Yes [faithfulness] is the best. It helps people not to contract AIDS through extramarital affairs and dying as a result. [Male]

One man argued for couples being tested and then remaining faithful:

Go and test with your partner and be faithful to her. You have to protect yourself. Even if the government brings rules to prevent HIV/AIDS, they will not help unless one makes an individual decision to protect [oneself] against getting infected. [Male]

## **Motivations for Risky Sexual Partnerships**

Participants were asked how common was having regular sexual relations with two or more sexual partners at the same time, how those partnerships got started, and how they were sustained. In recent years, enough discussion about multiple and concurrent sexual partnerships has taken place for FGD participants to be comfortable using this terminology and even its abbreviation, “MCP.” Women said, at times contradicting one another, that multiple and concurrent sexual partnerships were “too much among the men,” “common among women,” “not



common with women but common with men,” and “existed but are not common.” A number of participants did not think most individuals were practicing faithfulness.

There are very few who can be faithful. Most people have extramarital affairs. [Male]

It is two-way—both sides can be promiscuous. There are few who are faithful to one partner. [Male]

Participants believed that societal norms, including a tradition of polygyny, make having multiple partners easier for men. Some participants thought MCP was more common among men, whereas others thought women were “catching up with men” in having multiple and concurrent sexual partnerships.

The men do it most. The men have a problem that whatever woman comes in front of them is the best. I may have my wife here, [but] when I drive to Mbarara in Western Uganda, I find a new one. When I go to Fort Portal in the Southwest, I see another beautiful one. If you drive for 10 kilometers, every 4 kilometers you will find a woman because they look so good these days. Normally, women are more stable than the men. [Male]

Participants associated poverty, and especially wealth, with MCP. Much discussion ensued about a rise in materialism. Wealth allows for mobility, attracts sexual partners, and makes one able to afford an additional relationship. Several participants used the term “sugar mummy,” referring to women who initiate sexual relationships with and financially support younger sexual partners.

When the man has no money, he will be in unity or agreement with his wife. When he gets money, he becomes proud and puffed up. He goes out to get other women instead of enjoying the money with his wife, and yet this money would help both of them to develop their home. He goes and gives it to other women. The relationship begins with a man giving money to a woman. [Female]

What has really brought about that issue [MCP] is money. If a man has enough money and he finds a girl who is attractive, he finds no problem in renting a house for her, to keep finding her there. And it's the same with women. Some women who have [their own] money can rent a house for a man, where she has sex with him. [Female]

The youth, whether girls or boys, [may] have no jobs, and some do not want to work. So you find they are forced to get a sugar mummy or daddy who is older than them in years, provided they give him or her money. [Male]

A number of participants believed that poverty encourages MCP, because transactional sex is a means for women (and sometimes men) to earn money, gifts, and material goods. This finding arose among men as often as among women. Men and women were candid in talking about women's desires for material goods, yet revealed a double standard: men who engaged in MCP for material goods were viewed by both men and women as clever and cunning, whereas women who did the same were viewed by both men and women as materialistic.

On the side of the ladies, we desire so many things and have no jobs to get money from. So we must use our bodies to get the money. [Female]

We know some married women who go at night for commercial sex to earn a living. They do not have capital to start up a business, so the only means of earning money to get [food] is exchanging their body for sex.... All this has been caused by poverty. [Female]

A man who is badly off financially will get a rich woman who gives him a room and he does for her whatever she wants.... Poor men can be conned by rich women and AIDS is common among the poor marrieds.... Men go for extramarital sex at times to get money from rich women. [Male]

Women who engage in MCP for money were often reported to use the money for products to make themselves beautiful, and feminine beauty was known to entice men.

Women who look so attractive have brought too much trouble.... We desire to look beautiful so much.... We go to the extent of having unprotected sex to get the means to maintain our looks. Even if the wife at home protects herself from AIDS, once the husband sees an attractive girl who has changed the hairstyle, he goes right away. He even leaves his wife because of the attractive looks of the other one ... and ends up getting the disease. [Female]

The FGD topic guide included a question about sex workers, in an attempt to better define the type of partner with whom men, in particular, become involved. The responses suggested that in this context “sex worker” is a Western rather than indigenous construct, and that a norm of transactional sex exists rather than the by-the-hour prostitution found in many parts of the world outside Africa. One woman laughed and stated: “Madam, who do you think are the sex workers? We are, the women.”

To distinguish extramarital sex from other types of multiple and concurrent sexual partnerships, we proposed the following topics for discussion: “Does extramarital sex happen often in Uganda? Who does it and why? Can you think of anything that encourages it or discourages it? Who are the husbands’ or wives’ extramarital partners? Are they casual or commercial sex partners, or are the relationships ongoing?” Considerable discussion took place concerning who was more likely to engage in extramarital affairs (husbands or wives); motives such as economic insecurity, sexual satisfaction, or revenge; and greed and deception.

Extramarital affairs among women are caused by the poverty in our society today. There may be someone who has a television set, yet this woman’s husband does not have one. Then her friend will tell her, “You have a poor man. Can I get you one who is rich? [Male]

Extramarital sex is very common. Both the man and wife do it. A married woman, once she learns that her husband has extramarital sex, the wife also takes revenge by having extramarital affairs. Very often, especially among the marrieds, when you get to know that your husband is involved in extramarital affairs, you will say, “As he brings AIDS, I will also bring [AIDS].” [Female]

The woman may have produced six children and she has become worn out, yet the man is still strong. So I go and get a woman who is younger than my wife because my wife has expired, ha-ha! I may get a woman who has got money. [Male]

For a man to cheat or have an extramarital affair will depend on how the wife handles him. Some women do not know how to play the game well. They are not good in bed. A man can sleep with one woman today, and when he sleeps with another one and realizes that she is better than the previous one, his heart will go after her so the cycle continues. [Male]

Participants agreed that much lying and deceit are involved in such relationships.

You con [a woman] knowing that she is somebody's wife, and she tells you "I will see you at 10 a.m. and from there I have to rush home because my husband will be bringing back the child at midday from school." Yet she will be going to another man's place, so lying must be involved. [Male]

We asked women who the partners of married women tend to be, in part because less is known about women's extramarital affairs, and because in surveys women consistently report fewer outside partners than men do.

Women who still have a strong sexual desire and yet their husbands have grown old and he no longer satisfies her, such women go for the young men who have the strength to satisfy them sexually. [Female]

I will have sex with a married man who has got his wife and I become one of his concubines. I join the number of sexual partners. It's not that I am going to get married to him; I just have sex with him and we both continue with our marriages. [Female]

The married women get engaged in extramarital sex with married men to provide what the husband fails to provide for her. She cannot fall in love with a student. [Female 1] So long as he gives you money, you go with him. [Female 2]

## DISCUSSION

Participants in this research reported that lessened concern about AIDS had resulted in increased risky sexual behaviors, that AIDS prevention messages had changed to emphasize testing and condoms more than sexual behavior change, and that multiple and concurrent sexual partnerships were common and motivated by a variety of factors, particularly poverty and a desire for material goods to be gained through such partnerships. The six FGDs included in this study are not representative of the country as a whole; thus, the findings from this research cannot be generalized to all Ugandans, particularly those in other regions or other age cohorts. Yet the views expressed in the six FGDs were reasonably consistent and may provide explanations for why risky sexual behavior is on the rise and why Uganda's HIV prevention success has been in jeopardy in recent years.

For the most part, participants believed that Ugandans' fear of AIDS and becoming infected with HIV had decreased from a generation earlier when seeing individuals sick with obvious HIV symptoms led to more cautious and restrained sexual behavior. Many observed that with the antiretroviral therapy available now, one does not know whether potential partners might be carrying the virus, suggesting that "sero-sorting" has been part of partner selection. Seeing "whole households wiped away" and great numbers of orphaned children were constant reminders of the deadly nature of AIDS, for which no cure existed a generation ago. The spread of HIV was perceived as being less in the past when individuals were more likely to "control themselves."

Participants believed that HIV rates are rising, and they offered the following explanations: diminished concern about becoming infected and wider availability of ART, a rise in

multiple and concurrent sexual partnerships, poverty and transactional sex, and wealth and increased mobility, among other reasons. Participants also perceived HIV prevention messages to have changed from advocating behavior change to focusing on condoms, testing, and drugs. Opinion was divided regarding whether being tested influences sexual behavior. In spite of the nature of current prevention messages and the discussion of behavioral trends, marital or partner faithfulness was often regarded as the best or most effective method of preventing AIDS, perhaps reflecting idealism and/or the lingering impact of Uganda's earlier national program and its emphasis on partner reduction.

The lack of mention in the FGDs of older behavior change messages such as Zero Grazing, Love Faithfully, and Stick to One Partner suggests that these phrases are no longer being used in the media, communication campaigns, or personal conversations. A USAID survey had found that these were the three most remembered AIDS prevention slogans in 1991 (Moodie et al. 1992). Our findings thus suggest that there has been a shift in emphasis away from promotion of fidelity and partner reduction (the behaviors most emphasized in Uganda's successful HIV response and possibly most critical to declining HIV rates), and toward testing and condoms, at least in this part of Uganda.

These findings are corroborated by the quantitative findings from the door-to-door household survey carried out in the same peri-urban area (Hearst et al. 2012). In the survey, respondents reported that the primary messages they heard pertained to condoms (47 percent) or getting tested (28 percent), with faithfulness (9 percent) and abstinence (6 percent) mentioned far less often. (These percentages do not sum to 100 because of occasional "other" responses and missing data.) Respondents themselves gave highest priority for AIDS prevention to getting tested (32 percent) and using condoms (30 percent), followed by faithfulness (25 percent) and abstinence (13 percent) (Hearst et al. 2012). Furthermore, these quantitative findings revealed that individuals who ranked condom use as the highest priority for AIDS prevention also reported a higher level of risk behavior, whereas the ranking of testing was not associated with riskier behaviors. These results corroborate the findings of a prospective study done several years earlier in the same areas showing that individuals to whom condoms were intensively promoted took greater sexual risks and had a greater number of sex partners (Kajubi et al. 2005). Thus, condom use, the availability of ART, and reduced fear of AIDS all may have a disinhibiting effect on behavior, as might other types of preventive interventions.

Furthermore, in the quantitative door-to-door household survey, respondents were asked to rate how severe they thought AIDS in Uganda is now. A respondent's rating of the severity of AIDS was not found to be associated with his or her reported practice of either abstinence or consistent condom use in the past six months. "Being faithful" or reporting only one partner in the past six months (70 percent of the sample), however, was more common among respondents who rated AIDS as more severe (Kajubi et al. 2011). This finding can be taken as evidence that fear of AIDS has an inhibiting effect on risky sexual behavior, and that lack of fear—or optimism about chances of not becoming HIV-infected—tends to have the opposite effect, an association also reported in Brazil and Uganda (Bateganya et al. 2005; da Silva et al. 2005).

The present study revealed a perception that extramarital sex and other forms of sexual behavior involving MCPs, especially among men, are on the rise in Uganda, which seems consistent with the previously cited data provided by national surveys. Opinion was divided by sex regarding whether MCP is on the rise or even common among women, and about whether

men or women are the customary initiators of these risky sexual relationships. Agreement was found among men and women that much lying and deceit are involved in maintaining MCP relations, and that poverty, or at least desire for material goods, encourages women to engage in such behavior.

Two of the more unexpected findings of our study were the strength and concordance of both survey and FGD findings concerning ARV availability and behavioral disinhibition, and the finding that participants themselves had clearly thought about this issue and formed opinions prior to the study. The view that ARV availability leads to behavioral disinhibition runs counter to that of some researchers who offer alternative explanations for the apparent return to sexual risk-taking. For example, Parkhurst (2010) asserts that Uganda could not remain as mobilized and as on high alert as it had been in the early years of prevention; as more has been learned about HIV, the disease may have become “normalized,” no longer inducing fear the way it did in the past (Parkhurst 2010). He writes: “wide-scale treatment may make it no longer possible to instill fear of death from AIDS to the same extent as in previous years” (page 248). Likewise, according to a report commissioned by the Uganda AIDS Commission and Ministry of Health, Ugandans were increasingly treating HIV/AIDS as something normal, rather than “an immediate threat leading to death or serious illness,” and this normalization had led to the abandonment of safer sexual behaviors by some groups (Wabwire et al. 2006: 17–18).

Some evidence suggests that ARV use is associated with diminished sexual risk-taking in Africa (Simbayi et al. 2008) and the United States (Venkatesh, Flanigan, and Mayer 2011). Yet there appears to be growing recognition that this might well be a downside to ARV provision. World Bank economists have reported that “the availability of antiretroviral therapy may induce both people being treated and the general population to engage in riskier sexual behavior—a phenomenon referred to as ‘disinhibition,’ or ‘risk compensation’ (Over et al. 2004: xix). These authors and other health economists have presented evidence from Brazil, India, Kenya, and Thailand of disinhibited behavior among both heterosexual and homosexual populations, consistently associated with the availability of ARVs (Over et al. 2004; Over et al. 2007). Modeling of Thailand’s epidemic by Revenga and colleagues (2006: 168) found that “if the availability of ART crowds out government expenditure on prevention and leads people to increase their risk behavior back to its levels in the early 1980s, government treatment expenditure will increase more than threefold.” An editorial review in the journal *AIDS* recently conceded that we do not yet have the “best strategy” with which to employ ARVs for prevention at individual and population levels while minimizing risk compensation (Cohen et al. 2012).

A return to riskier sexual behavior has been attributed to the availability of ARVs in Europe and the United States, especially among younger men who have sex with men and who have had little or no firsthand familiarity with final stage AIDS (Ostrow et al. 2002; Shan et al. 2011). A report by the UNAIDS-sponsored Monitoring the AIDS Pandemic (MAP) Network (DeLay et al. 2000: 21) observed:

In industrialized countries, there is now increasing evidence that in some populations, reductions in risk behavior during the last decade are reversing. . . . These developments may be the result of a false sense of security following the perception that HIV is now a “normal” treatable disease.

Some studies have shown that a few years after ARVs became available, condom use declined and “barebacking” (unprotected anal intercourse) became more common, giving rise to fears

of a “second wave” of epidemic, at least among MSM in the United States (Ostrow et al. 2002; Gross 2003).

Over and colleagues (2004: xix) reported that “evidence from Kenya on heterosexual behavior suggests that substantial disinhibition occurs if the availability of antiretroviral therapy is announced without strengthening prevention measures.” Yet, as noted previously, few if any of the standard prevention interventions for sexual transmission, aside from male circumcision and reductions in multiple and probably concurrent partners, have been shown to have public health impact in generalized epidemics. Therefore, the fact that not much discussion about disinhibition in the context of ARV provision has taken place is surprising, especially because a major effort is under way to promote eradication of AIDS through early ARV treatment among PLHIV and prophylactic treatment for those likely to become infected such as uninfected partners in serodiscordant couples (Dieffenbach and Fauci 2009; Granich et al. 2009; Kashuba et al. 2012). Shelton (2011) is an exception in that he has questioned the ability of pre-exposure prophylaxis to impact HIV incidence at the population level, citing disinhibition resulting from ARV availability as a factor. Yet the executive director of UNAIDS has described the use of ARVs for prevention as “game changing” (UNAIDS 2011), although little if any attention is being paid in most modeling or planning exercises to the potential role of disinhibition.

Supporting our present findings, a journalist visiting Uganda recently to gain an understanding of why infection rates may be rising there encountered views pointing to complacency and a feeling that AIDS is no longer a fatal disease (York 2011). The news article quotes a Ugandan health analyst, Joseph Matovu, who comments: “People don’t take it as seriously as before.... It is a disease that does not kill you fast.... People look at HIV as a cough. You get it and then you are cured.” The journalist further observes: “With the growing availability of antiretroviral drugs, people can live with the virus for decades. And because they see fewer people dying from AIDS, they are less likely to take precautions” (York 2011). In mentioning these cautions, we are not suggesting that individuals should be deprived of ARV drugs. Rather, to best predict and respond to the potential influence of ARVs on behavior and thus HIV incidence, we are encouraging recognition that wider availability of drugs may have undesirable effects on high-risk sexual behaviors and on related HIV transmission.

“Prevention fatigue” is probably another contributor to disinhibited behavior. Ugandan leaders were able to mobilize the population against the threat of AIDS by characterizing the epidemic as an attack on the country, or as a “lion entering our village” (Kirby 2008; Green and Ruark 2011). Of course, no country can remain on high alert indefinitely, and without constant reinforcement the determination to avoid premarital and extramarital sex probably erodes with time. Yet journalists, scientists, and activists tend to blame insufficient condom use and/or availability, US government support for abstinence during the Bush presidency, or not enough money for ARVs as the cause of Uganda’s fall from the global model for AIDS prevention (Cohen, Schleifer, and Tate 2005; Kinsman 2010; York 2011). Few analysts or commentators have pointed to growing trends in multiple and concurrent sexual partnerships, changes in Uganda’s AIDS prevention policy, or behavioral disinhibition from availability of ARVs as possible causes. In the current funding climate, in which mobilization and fundraising are increasingly directed toward expanding resources to be allocated for treatment and “treatment-as-prevention” (Dieffenbach and Fauci 2009), few are willing to even consider the effects that disinhibition may have on prevention, and behavioral prevention strategies have fallen out of favor.

## STUDY LIMITATIONS

This study draws primarily upon data from six focus group discussions: four conducted in a peri-urban area and two in a rural area not far from Kampala, Uganda. The small sample size limits the generalizability of these findings to other parts of the country, as does the potential bias resulting from the sampling method (identification of participants by chairpersons of local governing councils, selecting according to prospective participants' perceived knowledge concerning the research topic). The findings from the focus group discussions were, however, in line with those from our random-sample, door-to-door household survey conducted around the same time and in the general vicinity. Nonetheless, interpretation of qualitative data requires subjective assessments, which can introduce bias in the analyses and interpretations. Our use of qualitative-analysis software helps to minimize bias by identifying recurring themes. We should also note that our qualitative findings pointed to a number of potential factors contributing to increased sexual risk taking, such as economic considerations, changes in cultural norms, and so forth, not all of which fit neatly into our interpretation that the decline in behavior-change communication campaigns and the availability of ARVs may be important determinants of Uganda's recent rise in HIV prevalence.

## CONCLUSION

During the early stages of Uganda's AIDS prevention program, Ugandans were made to fear contracting AIDS and to feel personally at risk of dying from a new, poorly understood disease. They believed that their survival depended on their behavior, and behavior was something within their control. In this period, Uganda became the only country in the world to reverse a generalized HIV epidemic. In recent years, Uganda's HIV prevalence has turned upward. Our study finds evidence that in a population of adult Ugandans, AIDS has come to be seen as a treatable, chronic disease not unlike malaria. If this view is more widespread beyond our research participants, it represents a dramatic change in the perception of the danger of the illness, compared with a generation ago. Many participants concluded that this change is the result of the availability of treatment. Ugandans no longer see visible signs of AIDS such as alarming weight loss, and AIDS may no longer be feared as it once was. Use of "fear appeals" has been documented as a deliberate, preventive AIDS prevention strategy that was carried out a generation ago (Okware et al. 2001; Wilson 2004; Okware et al. 2005; Green and Witte 2006; Kirby 2008), yet according to our research this approach no longer seems to be a noticeable component of prevention campaigns.

Our qualitative findings presented here, combined with our survey results published elsewhere (Kajubi et al. 2011; Hearst et al. 2012), suggest that Uganda's earlier emphasis on sexual behavior change may have been central to its success in reducing HIV prevalence and incidence. Thus, Uganda may benefit from refocusing on discouraging multiple and concurrent sexual partnerships. This would involve returning to messages such as "Stick to One Partner" or "Zero Grazing." Ideally these messages would not be recycled verbatim, but rather, newly introduced, field-tested locally, and incorporating the latest evidence concerning the added risk of maintaining concurrent multiple partners. Other countries in Africa have started campaigns to reduce multiple and concurrent partners. The regional "OneLove" campaign, which

operates in ten countries in eastern and southern Africa (Soul City 2008), and Swaziland's earlier "Secret Lovers Kill" campaigns (Spina 2009) provide examples of such messages.

Since the time this research was conducted, USAID and other donors have launched campaigns in Uganda to discourage MCP, such as a campaign proffering the message: "One Love: Get off the Sexual Network." Billboards in Kampala and a few urban areas have been erected asking: "Who are you really sleeping with?" Although the campaign was launched in 2009, around the time when our focus groups took place, the participants in our study never mentioned it. We presume that our FGD participants had not yet been exposed to this new campaign; in fact, our Ugandan researchers had not yet heard about this.

Our findings illustrate the challenge of encouraging individuals to adopt and maintain more restrained sexual behaviors while at the same time telling them that effective AIDS treatments are readily available. This challenge, which is urgent in Uganda and other settings, must be addressed squarely if progress in the control of HIV infections is to be maintained and extended. Greater treatment coverage may result over time in decreased HIV incidence, although the promise of treatment as prevention has not yet been proved at the population level. As HIV-infected Ugandans live longer through ARV treatment, HIV prevalence may increase even in the presence of stable incidence. Yet stable incidence and a high-prevalence generalized epidemic should not be deemed success in a country that once saw dramatic declines in incidence. Based on this research and other available evidence, we urge a return to behavior-change strategies that appear to have been a central ingredient of the earlier success, particularly messages that warn of the dangers of multiple and concurrent sexual partnerships and encourage faithfulness. HIV remains a progressive and often fatal infectious disease, and we see great potential benefit and no harm in Uganda returning to an HIV prevention strategy that emphasizes the dangers of HIV and encourages Ugandans to make changes in behavior that will allow them to avoid the risk.

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