Farming with Your Hoe in a Sack: Condom Attitudes, Access, and Use in Rural Tanzania

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This study examines condom knowledge, attitudes, access, and practices in rural Mwanza, Tanzania. From 1999–2002, six researchers carried out participant observation in nine villages for a total of 158 person-weeks. Many villagers perceived condoms negatively for multiple reasons, for example, the method’s association with infection or promiscuity, reduced male sexual pleasure, and cultural understandings of meaningful sex. Men controlled the terms of sexual encounters and reported that they would use condoms only with risky partners, but few perceived their partners as such. Use of condoms appeared to be very low, primarily as a result of limited demand, although barriers to access also existed. These qualitative findings contrast with inconsistent survey reports of relatively high condom use in the same population. Intervention efforts should address the tradeoff between possible short- and long-term consequences of condom use, particularly for men, for example, reduced pleasure versus reduced HIV risk. If possible, surveys should assess the validity of reported condom use through comparison with other data, including qualitative findings and distribution/sales records. (STUDIES IN FAMILY PLANNING: 2006; 37[1]; 29–40)

Consistently correct condom use is one of the main ways that sexually active individuals can protect themselves from HIV infection (Davis and Weller 1999). Unfortunately, however, condom intervention efforts in sub-Saharan Africa—like those promoting abstinence or a reduction in number of partners—have had only limited success (Gallant and Maticka-Tyndale 2004; Hearst and Chen 2004; Roehr 2005). Logistical problems of condom distribution and access clearly have contributed to this situation (Lamptey and Goodridge 1991; Mehryar 1995; Meekers et al. 2001; Shelton and Johnston 2001; Myer et al. 2002). Beliefs and attitudes concerning condoms play a part as well, however. For condom intervention efforts to be successful, they must be accurately informed by and carefully designed to counter prevailing negative beliefs and attitudes.

According to previous research, negative beliefs about the male condom include that it reduces sexual pleasure, indicates infidelity or a lack of trust in a partner, is inherently dangerous, becomes lodged in the woman’s vagina, and is associated with sexually transmitted infections (STIs), casual sex, or prostitution (Taylor 1990; Lamptey and Goodridge 1991; Lindan et al. 1991; Karim et al. 1992; Mehryar 1995; Mnyika et al. 1995; Hart et al. 1999; Maharaj 2001; Kaler 2004; Marandu and Chamme 2004; Thomsen et al. 2004). Other factors that may discourage condom use include embarrassment and shyness; a lack of perceived personal risk of infection; male socioeconomic control of sexual decisionmaking; and the importance of male potency, male and female fertility, or the exchange of bodily fluids during sexual intercourse (Taylor 1990; Lamptey and Goodridge 1991; Lindan et al. 1991; Karim et al. 1992; Bond and Dover 1997; Hart et al. 1999; Kinsman et al. 2001; MacPhail and Campbell 2001; Luke 2003; Macintyre et al. 2004; Thomsen et al. 2004).

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Most of the research to date concerning condom beliefs and practices in sub-Saharan Africa, however, have been constrained by one or both of the following limitations. First, the studies have focused on urban, high-risk populations, and/or unrepresentative, relatively educated populations, although increasingly HIV is found among less literate, rural populations, whose sexual practices may be as risky as those of urban residents (Gregson et al. 2001; Voeten et al. 2004; Coffee et al. 2005). Second, most such research has depended entirely upon surveys using self-reports. Of 12 surveys that investigated the effect of reported condom use on HIV infection, only two found significant associations between the two (one positive and one negative) (Slaymaker 2004). Many factors may contribute to this general lack of association: some people may use condoms only with certain partners, for example, or may use them in other inconsistent ways, and people who suspect that they are HIV-positive may use condoms more often than others (Aral and Peterman 2002; Hearst and Chen 2004). Another important factor may be that self-reports of condom use are inaccurate because of the sensitive nature of the topic and because respondents may wish to provide responses that they believe are desired (Goodrich et al. 1998; Geary et al. 2003; Plummer et al. 2004a and 2004b).

The potential for social desirability bias in self-reported sensitive information is not a new concern in survey research (Ross and Vaughan 1986; Catania et al. 1993). Survey interviews are generally designed to be brief, structured, and numerous, thereby reducing some forms of bias (for example, interviewer bias) while maximizing the potential representativeness of the findings. This approach allows only limited flexibility, in-depth investigation, and time to establish rapport (Smith and Morrow 1996), which may be a disadvantage when topics that are prone to social desirability bias are being explored. As a result, some researchers have attempted to increase the validity of self-reported sensitive information through qualitative means, such as semistructured and unstructured interviews (Geary et al. 2003). Such interviews may be conducted in a formal setting or informally, as in the case of participant observation.

During participant observation, researchers live and work among participants, sharing in daily activities while carefully documenting informal interviews and observations. In light of the private nature of sexual behavior, participant observation in the literal sense has rarely been used as a research method. Participant observation can, nonetheless, be useful in understanding sexual behavior; researchers may observe or overhear related activities, such as sexual negotiation or condom procurement. For example, in a study conducted in rural Ghana, Bleek (1987) learned a great deal about induced abortion from what he observed before and after abortion procedures although he did not observe the procedures. Similarly, in a study conducted by Pickering (1994) in the Gambia, interviewers used their daily contacts with sex workers in bars to observe the women’s behavior, enabling the researchers to question reports that were obviously at odds with what they had observed.

This study draws upon participant-observation data collected in 1999–2002 to examine knowledge, attitudes, and practices concerning condoms in four rural districts of Mwanza, Tanzania. The study compares the findings from participant observation with survey reports of condom use collected from the same population and discusses problems with the validity of condom-use data in general.

Background

This qualitative study was designed to complement a 1999–2001 community randomized trial of the adolescent sexual and reproductive health program, MEMA kwa Vijana (MkV), in rural Mwanza (Hayes et al. 2005). A 1998 survey in rural Mwanza found that 5 percent of 19-year-old women and 1 percent of 19-year-old men were HIV-positive (Obasi et al. 2001). The MkV trial sought to develop and rigorously evaluate a multifaceted intervention, using biological endpoints and quantitative and qualitative measures of knowledge, attitudes, and behavior. The trial cohort consisted of 9,645 adolescents who were enrolled in primary school at baseline. Surveys were conducted at the trial baseline, at the midpoint (1.5 years), and at the end (three years), using both a face-to-face questionnaire (FFQ) and an assisted self-completion questionnaire (ASCQ) each time.

During the research period, three sources of condoms were available in the study area. Condoms were provided free of charge at all government health facilities. In addition, Population Services International (PSI) marketed subsidized, high-quality condoms in commercial outlets under the brand name Salama (Swahili for “safety”) at a recommended retail price of US$0.08 per packet of three condoms (Agha and Meekers 2004; Eloudou-Enyuge et al. 2005). In rural areas, however, such condoms were often unavailable or were sold for twice the recommended price. Finally, in MkV intervention communities, a condom promotion/distribution initiative for young people was introduced in the second year of the trial. This initiative proved inefficient and unsustainable, however, and was discontinued at the end of the trial.
In the baseline (1998) assisted self-completion questionnaire survey with male and female pupils of median age 15, 12 percent of boys and 14 percent of girls who reported having sex said that they had used a condom in the past, whereas 7 percent of both boys and girls reported using one at first sex (Plummer et al. 2004b). Notably, these figures do not include the 6 percent of all respondents who inconsistently reported condom use in the same questionnaire—that is, they reported both having and not having experience of condom use. Even when internally inconsistent responses were dropped from the analysis, however, longitudinal comparisons with the interim (2000) assisted self-completion questionnaire survey showed that further inconsistencies were substantial: 62 percent of those who reported in 1998 that they had used a condom reported in 2000 that they had never used one. No other questionnaire variable had such high rates of individual-level inconsistency, either cross-sectionally or longitudinally.

In the 2001–02 face-to-face questionnaire survey conducted at the end of the MkV trial, the intervention was found to have had a statistically significant impact on condom-related knowledge. Moreover, of the 75 percent of boys and 72 percent of girls who reported having had sex, condom use during the trial was reported by 38 percent of intervention participants and 28 percent of their comparison counterparts. This difference was statistically significant for both males (prevalence ratio = 1.41) and females (prevalence ratio = 1.30) (Ross et al. 2003). Similarly, roughly one-fourth of those who reported having had sex also reported using condoms the last time that they had had sex, and this response was given more frequently by those from the intervention communities for both boys (29 percent versus 20 percent) and girls (27 percent versus 22 percent), although this difference was significant only for boys. As was found in the longitudinal comparison of baseline and interim ASCQ data, however, longitudinal comparisons of general sexual behavior reported in the three FFQ surveys found substantial inconsistencies at the individual level (Tan 2005). No statistically significant difference was found between intervention and comparison participants for the two primary biological outcomes (HIV incidence and herpes simplex virus type 2 prevalence), or for the six secondary biological outcomes (the prevalence of syphilis, chlamydia, gonorrhea, Trichomonas vaginalis; pregnancy; and the incidence of reported first pregnancy during the trial) (Changalucha et al. 2003).

These inconsistencies in the self-reported survey data highlighted above indicate the need to employ alternative research methods that may elicit sensitive information more accurately.

Methodology

This study draws upon participant observation in nine villages in rural Mwanza, Tanzania from 1999–2002. Sukamas are the predominant ethnic group in Mwanza, and the participant observation was carried out by six young East African researchers. Fieldwork totalled 158 person-weeks. Villages One through Six were MkV intervention–comparison community pairs. Villages One and Two were multiethnic (although predominantly Sukuma) villages located near gold mines; villages Three and Four were poor farming villages in the hinterland, almost entirely Sukuma; and villages Five and Six were multiethnic (although predominantly Sukuma) fishing villages near Lake Victoria. Villages One through Four were visited for seven weeks per year for three years, representing 78 percent of the total participant-observation person-weeks. Villages Five and Six and one additional multiethnic, intervention-community fishing village (Seven) were visited only once each for a seven-week period, for logistical reasons. The two remaining villages (Eight and Nine, both comparison) were pilot sites, visited only for a total of one to five weeks during the three-year study period.

One critique of participant observation is that the method’s in-depth nature limits its use to a small geographic area or to a small number of participants, reducing the representativeness of its findings. In this study, the number and diversity of researchers and villages were selected to maximize the representativeness of the data. Participant observation was carried out in nine villages by six researchers of both sexes and varied ethnicity and educational level. Researchers in their early to late twenties visited each village singly or in pairs. Pairs generally consisted of a Swahili-speaking graduate researcher and a Sukuma/Swahili-speaking secondary-school graduate of the opposite sex. Researchers presented themselves as social scientists, using their affiliation with the Tanzanian National Institute for Medical Research to reduce awareness of their association with the MkV trial.

Researchers lived in the homes of MkV cohort members. Households were selected for participant observation with the assistance of village authorities after being assessed to be typical of the village in terms of size, livelihood, wealth, and other criteria. Researchers accompanied young people of the area in their daily activities (for example, fetching water, preparing meals, going to market, farming, fishing, and socializing) and at special events (for example, funerals, drumming/dancing events, video shows, and Christian and national holidays). Researchers sought to expose themselves to diverse activities and
settings in order to maximize the representativeness of their data. Their relationships were developed opportunistically, however, and those with MkV cohort members were prioritized. Researchers usually did not initiate discussions about condoms, but instead documented the spontaneous comments of villagers, sometimes following up informally with open-ended questions. The study was approved by the Tanzanian Medical Research Coordinating Committee and the London School of Hygiene and Tropical Medicine Ethics Committee.

Approximately 750,000 words of participant-observation field notes were transcribed and translated into English, and coded in the Non-numerical Unstructured Data Indexing Searching and Theorizing (NUD*IST) Programme, Version 4. Analysis was conducted in two steps. First, for the period in which the MkV condom promotion/distribution initiative was underway in the MkV intervention villages (that is, from mid-2000 onward), one researcher analyzed data coded in NUD*IST under “condom beliefs and behavior” or “condom distribution and access,” from villages One through Four. For confirmatory and complementary analysis, a second researcher analyzed all participant-observation field notes directly using key roots or words, for example, “condom.” Hypothesis generation and testing occurred at both stages. Non-English words used here are given in italics upon first use; all are Swahili except wasimbe, which is Sukuma.

Results

In the following sections on condom knowledge, attitudes, use, and access, general statements reflect findings from both intervention and comparison communities. The qualitative research found few differences between intervention and comparison arms; those that were found are noted.

Condom Knowledge and Beliefs

Many villagers in rural Mwanza had heard of condoms through radio, public meetings, or gossip; of those who had not, most tended to live in remote MkV comparison villages. People generally associated condoms with sex and knew that they were promoted by government and health authorities for the prevention of pregnancy or sexually transmitted infections, including AIDS. Many, however, did not believe that condoms are effective or safe. For example, a 16-year-old girl in an MkV comparison community said that she had heard that condoms were used during sex to protect against AIDS, but she personally did not believe they were effective. She said, “They allege that it completely protects, when it can even burst.” When the researcher asked her how she knew that condoms were promoted, the girl explained that she had heard it on the radio, and also read a “Condoms Completely Protect” decal on an MkV vehicle when it came to her school.

Few villagers had a clear understanding of what a condom was or had seen one outside of its packet. People who had some familiarity with condoms rarely referred to them by their official name (kondouma), but instead used slang terms, the most popular of which were soks (sock) and the brand name Salama. Other slang terms included zana (equipment), mzigo (load/burden), dozi (dose), pasipati (passport), kiatu (shoe), buti (boot), jezi (jersey), mpira (rubber), “General Tyre,” “Scud” (as in Scud missile), polisi (police), askari (soldier), and msaifiri (literally “traveler,” but associated with a local bus with the name Msaifiri Salama, or “Safe Traveller”). Sex without condoms was similarly referred to by slang terms, such as pekupeku (barefooted) and nyama kwa nyama (flesh-to-flesh).

In almost all the villages studied, many villagers correctly associated condoms with sex but had also heard—and believed—that new condoms might be infected with HIV or that new condoms might have minute holes in them that would allow sperm or HIV to pass through them. For example, a sexually active secondary-school student reported that she had no plans to use a condom because, she said, “It’s possible they have the AIDS virus inside.”

Sometimes such rumors were linked to reports that wazungu (white people) were harming Africans through condom promotion and distribution, either by knowingly distributing old and inferior products, or by intentionally infecting condoms with AIDS. For example, a 29-year-old woman in a polygynous marriage said that condoms protect against STIs like gonorrhoea and syphilis but not against AIDS, because wazungu made condoms and intentionally contaminated them with the AIDS virus to harm Africans. She said, “Wazungu are clever; they want us all to die so that they can take our land.”

Few primary-school students in comparison villages reported having learned about condoms in school, but their intervention counterparts consistently reported that they had been taught about them. In one discussion, for example two pupils said that they had been taught about reproductive organs, pregnancy, Salama condoms, and STIs in their weekly MkV classes. They added that using condoms prevents pregnancy and the spread of STIs and AIDS, but they said that they had never seen a condom.

MkV participants generally seemed to have a better understanding than the general public and MkV compari-
son-school pupils of HIV/AIDS, other STIs, and condoms. The participants also sometimes expressed confusion concerning these topics, however, particularly about condoms. In one village, for example, four individuals or groups reported independently that they practiced unprotected sex because they had learned in their MkV lessons that they were not yet old enough to use condoms.

**Condom Attitudes**

A few participant-observation respondents had only favorable comments to make about condoms, but most such responses were from government officials and health workers who did not discuss their own sexual activity. A few girls and women, particularly those still in school, valued condoms as contraceptives. Some MkV participants reported positive attitudes toward condoms, but usually qualified their remarks by saying that they did not believe condom use was realistic. A day laborer who had completed seven years of primary school said that as a student he had been taught to abstain completely from making love, to have one reliable lover, or to use condoms. He said that such teachings were good and useful, except that most young people ignored such teachings after completing school, himself included. He added that, in his opinion, the teachers and peer educators did not practice what they taught.

In general, condoms were perceived negatively. The vast majority of respondents reported many reasons why they would not use condoms. Their reasons included the following: their feeling that condoms reduce sexual pleasure; their not being “used to” condoms (particularly men); their not having a say in decisionmaking regarding condom use (particularly women); their not wanting to prevent conception; their willingness to leave exposure to risk to chance or to God’s will; their perception that they have no personal risk of acquiring STI/AIDS; their trust in a partner; their fear of stigma, rejection, or punishment; and their general suspicion of condoms.

The most commonly reported reason men gave for not using condoms was that they reduce pleasure during intercourse. For many men, this seemed to be the most important issue, making condom use unacceptable to them even if their other concerns about condoms were resolved. A bicycle taxi man said, for example, that he did not use condoms when having sex with his girlfriend or with his other sexual partners because condom use reduces pleasure during sex. He said, “I would rather completely stop having sex than use condoms.”

Men used numerous metaphors to describe how condoms dull sexual sensation, defeating the purpose of the sexual encounter, including such metaphors as “eating a sweet or chewing gum in its wrapper,” “eating delicious, spicy meat in a paper bag,” “staying at home and sleeping,” and “farming with your hoe in a sack.” Although a few individuals reported experiencing reduced pleasure from their own condom use, most seemed to have based their reports on rumor or assumption. Of those who reported that they had used condoms, most women said that using the method did not feel very different from unprotected intercourse. In contrast, men who had used condoms reported that use negatively delayed the onset of intercourse, changed friction, reduced sensation, and (most commonly) delayed ejaculation. In general, achievement of multiple ejaculations within one sexual rendezvous was presented as an ideal for men, both maximizing their pleasure and demonstrating their prowess. They may, therefore, have viewed prolonged intercourse with a condom negatively because they believed it would reduce the total number of ejaculations possible during one rendezvous.

As well as their sense that condoms reduce physical pleasure, some male respondents reported that if sex is to be satisfying and meaningful, it is important to ejaculate inside a partner, without a barrier. Two young carpenters said, for example, that when they used condoms during intercourse with women, they did not experience pleasure. They referred to using a condom as feeling essentially the same as having sex with oneself. One of the men added, “If I have sex with a woman, I must spill my semen into her, so that she walks about with it.”

A few respondents mentioned that when sperm is ejaculated into a woman’s body, it has the desirable effect of causing her to gain weight and become beautiful. Moreover, many male and female villagers reported that having sex without a barrier is important in order to allow the possibility of conception. Although some unmarried girls and women used traditional or biomedical methods to prevent pregnancy, sometimes they expressed ambivalence about out-of-wedlock pregnancy, because the positive value of having children can outweigh stigma or punishment. Conception was often seen as “God’s will,” a natural process, and (whether intended or not) a blessing. Therefore, some villagers viewed the use of condoms as unnatural, wasteful, and irresponsible. For example, members of one family condemned a female relative for reportedly using condoms during sex because her partner’s sperm remained inside the condom. They said that by adopting European practices she was forgetting her culture, which does not promote the prevention of conception or birth.

Outside of marriage, boys and men usually provided their partners with money or a gift in exchange for sexual encounters, particularly early in a relationship (Wight...
et al. 2006). Men dominated the cash economy; therefore, this exchange was an important source of income for many young women, and men generally set the terms of sexual encounters. A 29-year-old male cassava seller said, for example, that when a man refused to use condoms, the woman had no say. Other youths who were present when he was speaking agreed that few women asked their sexual partners to use condoms, and if they did, the men refused and demanded that their money be returned. The young men said that a woman would not give the money back, so eventually the couple would have sex without using condoms.

Most women’s attempts to shape a sexual encounter contrary to their partners’ wishes were discreet or clandestine, such as use of female-controlled contraceptive methods. In general, women were unlikely to seek out and carry condoms, or insist upon their use with a reluctant partner. Rare exceptions include commercial sex workers and wasimbe (women living largely independent of a man, for example, single mothers). One young male condom seller said that a few women, especially wasimbe, give men the option of leaving if they will not use condoms. He qualified his statement by adding that some women tried this approach and, if the man refused, they then agreed to have unprotected sex.

In several villages, women reported that they would not consider condom use because a condom might fall off during intercourse and remain lodged in a woman’s vagina, causing death in the severest cases. Many villagers also reported that they did not use condoms because they were not at risk of acquiring an STI or AIDS. Although most villagers had heard of AIDS and understood that AIDS could be acquired through having sex, few understood that an HIV-infected person could be asymptomatic and infectious for years. Many villagers associated AIDS only with people living in towns and cities or with people they believed to be sexually promiscuous. Thus, the most common circumstance in which men reported that they might use a condom was if they suspected a partner of having many other partners, or of having an STI. Even in such circumstances, however, few men appeared to use condoms. For example, a 36-year-old female immigrant who openly engaged in commercial sex said that she usually lived with each of her new sexual partners for two to three days. She reported that she kept condoms and encouraged her lovers to use them, but that none of her lovers had ever done so. Her partners told her that they enjoyed spilling their sperm into a woman’s vagina, so they would not experience happiness or pleasure if they used condoms.

Rumors of promiscuity were stigmatizing, particularly for women. The association of promiscuity with condom use may, in turn, have contributed to a fear of stigma among some potential condom users. Broaching the issue of condoms may have suggested one’s mistrust of a partner—or one’s own infidelity—potentially alienating and offending the partner. For example, when a group of married women were asked why they had thrown away free condoms that they had been given at a health facility, they replied, “Why take them home? To be beaten by our husbands? To be told that we have become prostitutes?” Similarly, a young man in his late teens said that if a man puts on a condom, his partner will be afraid of him and think that he has had STIs in the past. He added that she might see him as an mhuni (hoodlum), and she would tell other girls that he had used a condom.

One of the most common reasons given for not using condoms was trust of a prospective or current sexual partner. A single woman pregnant with her second child said, for example, that men who use condoms are those who do not trust their lovers. She reported that she had never used condoms because she and her lover trusted each other. For those rare couples who began a sexual relationship using condoms, a period of one or two weeks, or a couple of sexual encounters, seemed sufficient for them to feel that they had established mutual trust and no longer needed to use condoms.

Although condom use potentially may be stigmatizing, particularly within sexual relationships, in one village, two young men reported independently that other young men falsely claimed condom use to impress one another. One man, for example, reported that his friend claimed to use condoms, but when the friend later suffered from STIs, he confessed that he had not, in fact, been using them.

Condom Use

Almost all respondents reported that they had never used condoms. Reports of consistent condom use were extremely rare. Several men in businesses involving travel and women engaged in commercial sex reported that they occasionally used condoms. Men reported condom use if they considered their partners to be at high risk of acquiring a disease. A 20-year-old carpenter said that he started using condoms in 1998 after contracting an STI. He said that he still used them, particularly when he was with a lover “from outside,” but that he did not use them when he had sex with his wife.

Similarly, a young man who sold condoms reported that condoms reduce sexual pleasure. He explained, “The first time using condoms truly does not bring pleasure. It is necessary to get used to using them. Also, condoms
delay ejaculation, so you are delayed in finishing [reaching orgasm].” As a result, during his initial attempts to use a condom, he would remove the condom part-way through intercourse, and later he used condoms only with certain girls and women who he believed had multiple partners.

Some women who had used condoms reported that they used them at their partner’s initiative. For example, a 19-year-old single mother and kiosk worker said that she had never bought a condom on her own because her boyfriend always provided them. She said that she did not feel any difference between protected and unprotected intercourse. She added that she was confused about the issue of using condoms, however, because she had been told in church that condoms only prevented STIs and not AIDS, because the AIDS virus could pass through condoms.

The vast majority of students, recent graduates, and recent school dropouts who reported sexual activity said that they had never used condoms and that they did not believe that their sexually active classmates had ever used them. A few schoolgirls reported using condoms to prevent pregnancy so that they could complete primary school and advance to secondary school. A pupil who learned about condoms from her sister (a volunteer health educator with another project) and from her MkV classes, said that she had used a condom on two occasions. She said she greatly appreciated that her lover used condoms to prevent her from becoming pregnant while she was still in school.

A few other pupils, recent graduates, and recent school dropouts reported using condoms, and they attributed their use to their MkV school lessons. For example, a 17-year-old woman who worked at the market mentioned that when she was still in school, she never used condoms during sex. She reported that she and her current boyfriend now were using them, however. She said that she put the condom on her boyfriend’s penis because she learned at school that some men pierce condoms before using them so that their sperm will pass into their partners.

Several male respondents reported that they had used condoms on occasion because their partner had insisted that they do so. For example, a 22-year-old farmer said that he had used a condom only once. He said that he had had no intention of using a condom, but that his lover (a pupil) asked or told him to do so. He said that his sexual pleasure at the time was the same as during unprotected intercourse, except for the inconveniences of putting on the condom, which delayed their intercourse.

Numerous first- and third-person reports were given of MkV teachers and peer educators who did not use condoms, as well as occasional reports of their having tried condoms one or more times. A secondary-school student, who had been an MkV peer educator gave the following account of her sexual encounters with a local married man who had helped train the MkV peer educators. She said that when they were about to have sex for the first time, she realized that he was not wearing a condom. She told him that she could not have unprotected sex, because she feared becoming pregnant while she was still in school. She said he brought a condom when he met her the next day, but he still did not want to use it and did so only after she insisted.

Condom Availability and Access

As noted above, the three sources for condoms in rural Mwanza were shops, health facilities, and local promoter-distributors (mainly in MkV intervention communities). Gossip is common in rural areas, and some villagers believed that health workers, salespeople, and distributors would not keep requests for condoms confidential. All condom providers said that their customers were embarrassed to request condoms. For example, customers would not make eye contact or they would use slang terms to conceal from other customers what they were purchasing.

Most villages had one or a few permanent shops, some of which sold condoms. Shopkeepers reported that they sold condoms mainly to men in their twenties and thirties. In a village with a large, mobile population of fishermen, two shopkeepers estimated independently that they sold three to five packs of condoms on a normal day, and as many as eight packs per day on market days or days when a video was shown in the village. Reports of condom sales were substantially lower in other villages. Cost was rarely mentioned when people discussed the reasons why they did not use condoms, and a number of young men specifically noted that the cost of the method was not a problem.

Villagers often had to walk three to ten kilometers to reach government health facilities. This inconvenience led many people to visit such facilities only when they were seriously ill. Some respondents, particularly MkV intervention participants and women who attended health facilities for family planning or for their children’s health care, knew that condoms were available in health facilities. Sometimes these individuals were uncertain whether such condoms were free, however, and, in fact, few villagers reported that they obtained condoms from health facilities. Some villagers were suspicious of the free condoms provided at health facilities, believing that they were old or of low quality. Young people seemed
particularly reluctant to go to health facilities for matters related to sexual health for fear that the staff would be judgemental and would not respect their confidentiality. Health workers, like shopkeepers, reported that few students had ever sought to obtain condoms from them.

The lack of demand for condoms was evident also in the condom-sales component of the MkV intervention. From 2001 to 2002, the 228 MkV condom promoter-distributors (CPDs) sold a total of 57,610 condoms, averaging 11 condoms each per month. Most young people and other villagers seemed to have little or no knowledge of CPDs at the time of the participant observation. Apparently, most CPDs established a small clientele that consisted mainly of their male friends in their twenties and early thirties. They also occasionally sold condoms to single women and, less frequently, to students. Sales may have been affected detrimentally by rumors that the CPDs did not use condoms themselves, and this belief was largely confirmed by the CPDs’ reports during participant observations. Most CPDs were disappointed by the income-generating aspect of the initiative; they had difficulty selling even a small number of condoms. MkV-intervention staff found, in turn, that even with the help of a middle-level distributor, supplying rural areas and monitoring condom sales required a disproportionate amount of time and was not cost-effective. For example, although the Salama condoms used for the intervention were subsidized by PSI, the cost for each condom distributed was $1.54 (Terris-Prestholt et al. forthcoming).

Discussion

At the time of the present study, misinformation and hostile attitudes toward condom use were widespread in rural Mwanza. Condom use appeared to be rare, and consistent condom use exceedingly rare. A number of factors are likely to have contributed to this situation: the dynamics of gender and power; cultural values concerning meaningful, decent, or natural sex and reproduction; the alien nature of condoms; the association of condoms with infection, promiscuity, and reduced sexual pleasure; and the difficulty of accessing condoms due to embarrassment or distance.

The single strong belief that was unvaryingly reported by the study participants was that condoms reduce sexual pleasure, particularly for men. Indeed, many of the other reported concerns about condoms (for example, that they are contaminated, old, ineffective, or prohibited) may have been secondary rationalizations fueled by this fundamental male concern. Sexual health interventions may address such attitudes by explaining correct condom use, ways to eroticize it, and how pleasure may be increased with experience. Many men who expressed concerns about pleasure had never participated in a condom intervention, nor tried condoms themselves, so such explanations may be valuable. Promoting condom use as enjoyable or erotic can be controversial, however, particularly in work with adolescents. Any such efforts must also take cultural differences into consideration. For example, although delayed ejaculation may be promoted as a desirable aspect of condom use elsewhere (Khan et al. 2004), it showed much less promise in this study. Many respondents rejected the idea that any additional information or assistance would make condom use as pleasurable as “flesh-to-flesh” intercourse. In a context where condoms and condom interventions are widely distrusted, intervention implementers must acknowledge that, for some people, sexual pleasure may be somewhat reduced during condom use. Such acknowledgment would address the reality of participants’ beliefs or experiences and might help gain their trust and confidence. Whether other forms of risk reduction (for example, a reduced number of partners) might be more culturally appropriate is a question worth exploring.

An acknowledgment of possibly negative short-term consequences of condom use should be presented hand in hand with a realistic evaluation of the potential long-term consequences of engaging in unprotected sex. Many villagers knew that AIDS was more prevalent among city dwellers and people with many partners, and they believed that if they avoided unprotected sex with such people, they were safe. In evaluating risk, such individuals may neither have understood the long period in which HIV infection can remain asymptomatic (Mshana et al. forthcoming) nor considered that the largely secretive nature of out-of-wedlock sexual liaisons meant that many people had more partners than were publicly recognized (Wight et al. 2006). Instead, many villagers believed that their trust in a current partner’s monogamy over a period of days, weeks, or months was sufficient to ensure their own safety. Further interventions could particularly target men’s perception of personal risk and their desire for self-preservation, because men reportedly controlled condom use.

Although the study’s findings suggest that men generally set the terms of sexual encounters, some of the few first-person reports of condom use involved women (or schoolgirls) who insisted upon it, a promising finding. Girls and women in rural Mwanza routinely negotiate money or gifts prior to a sexual encounter, so potential may exist for reorienting such skills toward condom-use negotiation as well.
Any source of condom-use data can have problems of validity and generalizability. To arrive at sound conclusions, a helpful approach is to integrate and evaluate results from several sources simultaneously, for example, behavioral surveys, qualitative studies, sales reports, service records, and biological markers such as STIs (Goodrich et al. 1998). Although convergence of findings from different sources may suggest that results are valid, divergence can be more difficult to interpret. In this study, the qualitative finding that only a small proportion of intervention participants—like other rural young people—had ever used condoms contrasts with the self-reported information from the MkV surveys mentioned above.

Other surveys of rural young people in Tanzania have elicited condom-use reports similar to those of the MkV survey. For example, a mid-1990s cross-sectional survey of 892 semiurban primary-school students in Mwanza region found that 80 percent of boys and 68 percent of girls reported having had sexual experience, of whom 31 percent and 25 percent reported experience of condom use, respectively (Matasha et al. 1998). Nationally, in a 2003–04 survey of 4,197 rural households, 50 percent of males and 37 percent of females aged 15–24 who had never married reported that they had had sex; of those, 41 percent of males and 30 percent of females who had had sex in the last year reported using condoms at last sex (TACAIDS et al. 2005). These published studies did not provide information about the internal validity of self-reported condom use, however, nor, as cross-sectional surveys, were they able to provide longitudinal comparisons. Providing both kinds of information is the preferred practice in attempts to measure condom use (Sheeran and Abraham 1994).

In our study, discrepancies between quantitative and qualitative findings may reflect that the participant-observation data were more accurate but less representative of the region than the survey data. Participant observation as used in this study had the potential to be unusually representative for a qualitative method, however, because it took place over three years in nine villages selected for their representativeness, and because it involved six young researchers of both sexes and different ethnicities. Alternatively, the stigma associated with condom use in villages may have led to underreporting of use during the participant observation. Although this methodology does not rule out the possibility of bias through underreporting of condom use, the low condom-distribution estimates from kiosks, health centers, and CPDs argue for the validity of the participant-observation data.

The participant-observation data may have been of greater validity than the survey data because they were collected informally and over a long period in the course of daily life. The researchers had the opportunity to develop trusting relationships, to observe people in informal settings, and to conduct unstructured in-depth interviews with them (Plummer et al. 2004a). In contrast, condom use may have been overreported in survey interviews as a result of intentionally false answers. This possibility might explain the substantial inconsistencies in the survey self-reports of condom use and the lack of significant impact on biological markers in the course of the trial. Some survey respondents may have falsely reported what they believed the interviewer or the project approved or wanted to hear (Bleek 1987; Herdt and Boxer 1991; Cowan et al. 2002; Zaba et al. 2004). For example, Geary and her colleagues (2003) conducted semistructured interviews with 40 of approximately 1,250 women surveyed as part of a Nonoxynyl-9 gel trial in Cameroon in order to explore their comprehension of questions, how they remembered their condom use, and their sensitivity to the expectations of the interviewer. The authors found evidence of some measurement error in the survey’s condom-use data and concluded that most of the error related to social desirability bias. In sexual behavior research, most such bias is generally believed to result in underreporting, but the reporting of condom use may provide an exception to this pattern, for example, if respondents wish to affirm a promoted behavior change (Catania et al. 1990; Agnew and Loving 1998; Geary et al. 2003; Devine and Aral 2004).

In another example, in a study conducted in the United States of high-risk individuals who were recruited through a clinic that promoted condom use, Zenilman and his colleagues (1995) found no association between reports of always using condoms and a lower incidence of gonorrhea, chlamydia, syphilis, or Trichomonas vaginalis. They concluded that relying on reports of consistent condom use may be inappropriate in evaluating HIV risk-reduction interventions because a number of factors may contribute to inaccuracy of the data, including incorrect condom use, poor recall, and self-presentation bias. Researchers who analyzed Zenilman and his colleagues’ data independently concluded similarly that fallible self-reports were the most likely cause of their problematic findings (Turner and Miller 1997). Biased self-reports can occur in any survey setting, but they may be of particular concern in cultures where greater value is placed on courtesy and—in the case of students—deference than is placed on accuracy (Bulmer 2000).

During the MkV surveys, efforts were made to foster a nonjudgmental, honest atmosphere and to distinguish the research from the intervention, but the two were inevitably linked, both abstractly (for example, a
shared name) and concretely (for example, shared cars, some of which carried condom-promotion decals). Many intervention participants may have falsely reported condom use because they knew it to be a promoted behavior. Such reporting may have occurred to a lesser extent in comparison communities as well, because condoms were known to be promoted by government and health professionals who were concerned about HIV/AIDS transmission. In contrast, although participant-observation researchers were occasionally asked if they were health educators or condom promoters, they identified themselves as social science researchers, and they were not directly associated with the MKV intervention. Therefore, the validity of the qualitative data on condom attitudes and practices was likely increased.

**Conclusion**

Our qualitative findings reveal that condoms were negatively perceived in rural Mwanza for multiple reasons, resulting in very low demand for and use of the method. These findings suggest that intervention efforts should address clearly the possible short- and long-term consequences of condom use, particularly for men—for example, reduced pleasure versus the risk of acquiring HIV/AIDS. Our findings stand in contrast to relatively high but less reliable self-reported condom use in surveys. That condom use was the least reliable of all the survey variables suggests that it may be particularly prone to social desirability bias. To maximize the accuracy of condom-use estimates in the region, researchers should gather data that may be less susceptible to social desirability bias, such as information gleaned from participant observation, and should integrate data from multiple sources when possible.

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