Published in final edited form as:

Soc Sci Med. 2009 September ; 69(6): 877–884. doi:10.1016/j.socscimed.2009.07.003.

Gender and HIV testing in Burkina Faso: An exploratory study

Carla Makhlouf Obermeyer^{a,*}, Augustin Sankara^b, Vincent Bastien^b, and Michelle Parsons^c

^aDepartment of HIV AIDS, World Health Organization, 20 Avenue Appia, 1211 Geneva, Switzerland ^bAssociation KASABATI, Ouagadougou, Burkina Faso ^cDepartment of Anthropology, Emory University, Atlanta, USA

Abstract

This study investigated the utilization of services around HIV testing in Burkina Faso through a survey that combined quantitative and qualitative data from 14 selected sites and 299 questionnaires. While some attitudes and behaviors towards HIV testing were similar for women and men, we found lower use of services by men, greater concerns about testing and disclosure on the part of women, and differences between men and women in motivations to test, and the experience of testing and its consequences. The results are discussed in the context of Burkina Faso and in terms of their implications for efforts to improve access to services around HIV.

Keywords

HIV; Gender; HIV testing; Counseling; Burkina Faso; Use of services

Introduction

The need to rapidly scale-up HIV testing as the "gateway" to treatment and prevention is widely recognized, but the uptake of HIV testing has been uneven globally, and many individuals find out their HIV status long after they are infected (De Cock, Bunnell, & Mermin, 2006; UNAIDS/WHO, 2008). While the spread of rapid tests and efforts to increase access have reduced practical obstacles, the uptake of testing is still slow and insufficient (WHO, 2008). Recent data from Africa indicate that although testing has increased, women are less likely than men to access voluntary counseling and testing (VCT), as documented in Kenya, Uganda, Zambia, and elsewhere (Fylkesnes & Siziya, 2004; Matovu & Makumbi, 2007; Taegtmeier, Kilonzo, Mung'ala, Morgan, & Theobald, 2005). Global discourse draws attention to gender as an obstacle to HIV testing, treatment and care, and calls for protecting individual rights when HIV testing becomes routinized.

There are few gender analyses that systematically compare testing among women and men, and much of the research comes from prenatal care settings (Antelman, Smith Fawzi, Kaaya, et al., 2001; Coulibaly, Msellati, Dedy, Welffens-Ekra, & Dabis, 1998; Gaillard, Melis,

Mwanyumba, et al., 2002; Gielen, McDonnell, Wu, O'Campo, & Faden, 2001) studies show that women report. Women report more fears of ill-treatment than men, and their attitudes and motivations are influenced by different factors, including family and children (Laver, 2001; Sahl, Kassa, Agonafer, et al., 1999; Stein & Nyamathi, 2000). Studies in Burkina Faso show that, as elsewhere, pregnant women tested as part of prenatal care often did not return to get their test results, that they feared stigma if their HIV status became known, and that only 18% disclosed to their partners (Cartoux, Msellati, Meda, et al., 1998; Nebie, Meda, Leroy, et al., 2001; Sombe et al., 2001). But none of these studies compared women and men, and all were conducted before anti-retrovirals became accessible. Hence the importance of a gender analysis of testing in the context of improved access to care.

HIV testing and counseling (T&C) in Burkina Faso began in 1994 at the initiative of non-governmental organizations. In 2003, UNDP and bilateral donors supported the initiation of the PAMAC (Programme d'Appui au Monde Associatif et Communautaire), which created a network of NGOs involved in HIV testing, treatment, care and support, and provided standards for HIV tests. The number of T&C sites tripled between 2003 and 2006, and they now cover about two-thirds of the country (PAMAC, 2005; Some, 2003). The remarkable expansion of T&C highlights the success of partnerships among NGOs, the government, and international organizations. The program has sought to reach across urban and rural areas and different subpopulations, through centers integrated in health facilities, stand-alone centers, national and school-based campaigns, and mobile teams in rural areas. As in other countries however, coverage does not increase evenly across groups, and higher risk populations are hard to reach (PAMAC, 2005; Some, 2003). Gender differences are also apparent: greater proportions of men are tested in the course of campaigns, yet prevalence is higher among women (11%), compared to men (6%) (CNLS, 2007), suggesting that the risks of transmission and the use of testing services are influenced by gender.

The study on which this article is based was part of a broader effort to explore the socio-cultural dimension of HIV in the context of scaling up HIV treatment and prevention. The project was defined as exploratory, and its goal was to investigate the factors that influence behaviors towards key health services, namely HIV testing and the use of antiretrovirals. We did not formulate a specific set of hypotheses, nor seek to obtain nationally representative results. Rather, the goal was twofold: to gain insights into those sociobehavioral factors that are frequently discussed as determinants of utilization, including gender, and to gather enough information from the field in order to inform the development of data collection tools that could be used in multiple settings. In parallel with the survey in Burkina Faso, reviews of the public health and social science literature were conducted on T&C, adherence to ARVs, stigma, and preventive behavior, and instruments used by various research groups were compiled, in order to identify major themes and approaches to investigating them (WHO, in press). In this analysis, we focus on services around T&C, and examine the extent to which women and men differ in their knowledge, behaviors, attitudes, and the experience of using HIV T&C services.

Data and methods

The study was conducted in Burkina Faso, in January-February 2006, in collaboration with Kasabati, a Burkinabé NGO (Kasabati, 2008). It was designed as a pilot for a larger study of health care for HIV, and hence the goal was to obtain information about diverse patterns of use of health services around HIV. Given the importance of NGOs in the provision of HIV testing in Burkina Faso, using NGOs as a starting point for the selection of respondents was deemed an acceptable strategy, since the goal was not to have a nationally representative sample, but one that would reflect the diversity of users of services around HIV. The selection of facilities was made by Kasabati on the basis of the inventory conducted by PAMAC (PAMAC, SP-CNLS, & Kasabati, 2003), with the goal of including different types of NGOs and their approaches to HIV care. The 14 selected sites (9 in Ouagadougou, 5 in the towns of Tenkodogo, Ouahigouya and Yako, in Bobo Dioulasso province) include smaller and larger NGOs, urban and rural, more or less resourced, providing treatment or only psychosocial support.

The sample size was set on the basis of considerations of statistics and feasibility. We needed a sample large enough to examine differences across sex, ARV use and capital/province location, but small enough to make it possible to gather and analyze qualitative responses. We also considered the volume of clients that are seen at different facilities, geographical location, and logistics issues, and set the sample size at 300; we then defined the expected number of respondents per facility on the basis of the number of clients they attract. Thus, we have a sample of convenience, that provides enough variability to explore the factors of interest. As a pilot for a larger project, the study was not subject to formal ethical review, though with its considerable experience in the conduct of participatory action-research and its close links with NGOs of HIV-positive individuals, Kasabati ensured that ethical practices were followed in the recruitment of participants and in the confidentiality of the data. During the pilot study, interest in the topic on the part of collaborators and the need to rotate the administration of the questionnaire resulted in a larger and richer set of data than was anticipated, and also led to the development of instruments for wider use. The project that subsequently built on this study received ethical approval from the Burkina ethics committee in 2006.

Kasabati contacted the person in charge of each facility. Once agreement was obtained, she informed clients that a study would be undertaken and made clear that clients would be free to accept or decline participation. Those clients who were at the facility on the appointed days were invited to participate and their informed consent was obtained; during training and pre-testing, it became apparent based on interviewers' feedback, that respondents would have been intimidated if they had to sign a document, so in keeping with local practice, consent was obtained verbally. In those facilities that were not overly busy, interviewers spoke to all the clients; in busier facilities, interviewers spent time in the waiting room and invited clients to participate, until they reached the number that was set in the sampling plan. There were no refusals, as the person in charge had announced the days when interviewers would visit, and those who did not wish to participate simply came on other days. A total of 299 questionnaires were administered by 6 Burkinabé interviewers. The three women and

three men had some social science background, and they received training on HIV/AIDS and ART in Burkina Faso, field testing of the questionnaires, role play, and data analyses.

The instrument was designed on the basis of a compilation of similar instruments from other studies. It included closed-ended questions to collect quantifiable data, and open-ended questions to explore respondents' perceptions. It was modular and could be adapted according to the responses given by the client about whether they had ever been tested, revealed that they were HIV-positive, or had ever taken antiretrovirals. Module A could be administered to any client, and included questions about knowledge and attitudes towards HIV, as well as measures of stigma towards HIV-positive persons, in particular whether respondents thought it was acceptable to forcibly test certain people or to disclose someone's HIV status without their consent. Module B was for those who had been tested and asked about motivations to test and the experience of testing and disclosing. Module C was for HIV-positive clients and asked about living with HIV, including the experience of stigma and discrimination. Module D on anti-retroviral therapy is not included in this analysis. Because administering the whole questionnaire could result in a lengthy interview, we tried to avoid the potential fatigue and discomfort through a rotation strategy: interviewers were instructed to systematically administer combinations of modules according to a pre-set schedule; the goal was to obtain similar subtotals for the modules. The mean duration of the interview was about an hour, with considerable variation around this mean.

Interviewers recorded responses to closed-ended questions and wrote down responses to open-ended questions as faithfully as possible; these texts were transcribed and coded. Statistical analyses using Stata/SE 9.2 (StataCorp, 2006) were conducted on quantifiable responses; Fisher's exact test was used to assess statistical significance. Textual analyses through word searches and coding were done on respondents' statements.

Results

Characteristics of the sample

Based on information provided voluntarily in the course of the interviews, we estimate that HIV prevalence among those who responded to different combinations of modules A, B, and C is more than 50% (prevalence for the whole sample is higher, since modules C and D were only administered to HIV-positive respondents). The average age of respondents is 34 years. Two-thirds of respondents are Mossi, the largest ethnic group; 40% have not completed primary school. More than one-third are widowed, and less than one-third live with a partner, reflecting the disrupted family relations of those living with HIV. The limited means at the disposal of respondents are highlighted by the low frequencies of respondents' households with electricity, running water, means of transportation, or a telephone. The multiple sources of income reported by respondents show both the precariousness of their living conditions and their networks of help and support. A striking statistic about the sample is that more than three-quarters are female. This predominance reflects the reality of the use of these facilities, and we return to it later.

Other statistically significant (Fisher's exact test, $p < .05$) gender differences are apparent in the higher proportion of widowed respondents among women (41%, compared to 8% among men, $p = .000$) and the higher proportion living with children (69%, compared to 46% for men, $p = .001$). Women are more likely to have lower levels of education ($p = .023$), less likely to have a mobile phone (33% compared to 48%, $p = .041$), or a bicycle or motorcycle (24% and 16% respectively, compared to 40% and 35% for men, $p = .000$). Complete respondent characteristics are shown in Table 1.

Knowledge and attitudes about HIV

Quantitative responses to questions regarding knowledge about, and attitudes surrounding, HIV show that overall, respondents are relatively well informed about HIV (see Table 2). Almost all respondents know that it cannot be transmitted by sharing food/drink, and are aware that blood transfusion, injections, sexual relations and mother-to-child are the main means of transmission; 88% know that it is not possible to tell if someone is infected by looking at them, and two-thirds know that the virus cannot disappear completely. Gender differences in knowledge are small and non-significant.

Women and men appear to hold similar attitudes towards testing. Textual responses to this section of the interview show that more than three-quarters of respondents (43 women and 12 men) believe that everyone should know their HIV status; both women and men refer to the importance of not infecting others and getting care and treatment; an equally frequent response to the question about who should be tested is that people should test if they or their partners are ill or have risk behaviors. Textual responses to the question about whether some people should be forced to test refer to commercial sex workers, men who "run around," and those who are sick for a long time; there is no reference to men who have sex with men or intravenous drug users, who represent risk groups in other settings.

Some attitudes are differentiated along gender lines. More men than women (35% compared to 8%, Fisher's exact test, $p = .007$) think that certain people should be forced to get an HIV test and condone forced disclosure of HIV status (29% compared to 8%, $p = .031$). Forced disclosure is explained as a way of protecting those close to an HIV-positive person from infection and of getting care for those who are infected. While textual answers do not appear to differ by sex, it is interesting that in response to the question about whether they encourage others to be tested, 12 of 66 women state that they do not, for fear that they would be thought as being HIV-positive; by comparison, only one out of 18 male respondents mentioned this concern.

Use of services around HIV testing

Most respondents are regular users of the facility, with 29% of both sexes saying they are there every day or once a week, and an additional 41% of women and 23% of men at least once a month. About half the respondents travel to the NGO in 30–60 mins. Respondents walk (32%), ride a bicycle (31%), or a motorcycle (25%). Reported reasons for visiting are HIV tests, attendance at a support group, collecting free goods, making a request, communicating with members of the NGO, or accompanying friends or family members.

Table 3 presents respondents' use of services around HIV testing and provides clues about the quality of these services. About half the respondents report having tested more than once. Approximately two-thirds report that before the test, their consent was sought, providers told them that results would be confidential and gave them advice about preventing transmission; around half report being given explanations about the test and its results. Around four out of five report that post-test counseling covered transmission, protection, condom use, and support groups, and about two-thirds report discussions of disclosure and safe sex and actual referral to a support group; 55% report referrals of partner for testing. Overall, a majority of respondents report being satisfied: four out of five find the waiting time acceptable and think they are involved in decisions about their health; nearly all report having enough time to talk about their concerns, and four out of five would encourage others to be tested. Sex differences are not significant.

Talking about HIV tests

Table 4 shows that just under half of respondents spoke to someone about their test; about two-thirds expected their test results; and although three-quarters indicated that they generally kept their serological status secret and thought that most PLWHA also keep their status secret, more than four out of five indicated that they had disclosed their status to someone.

Some gender differences were statistically significant ($p < .05$): twice as many men as women (two-thirds compared to one-third) report having disclosed to their most recent sexual partners; more men (73%) than women (41%) report having discussed HIV testing with their partner, and nearly three times as many men (60%) as women (22%) report knowing the HIV status of their most recent partner. These differences are partly, though not fully explained by the higher proportion of widowed among female respondents.

Fears of negative reactions

In general, all respondents expected negative reactions of rejection, criticism, or insult when they disclosed their HIV-positive status. Among the 60 textual responses to this question, the following quotes (two by females, and the third by a male) are illustrative of these worries:

"I really don't want to be taken for a woman who sleeps around (*dévergondée*), I don't want people's behavior towards me to change"

"I don't really know how they would have reacted, but when I hear them say that it is a disease of prostitutes, that when you have it, it is a death sentence, I really don't feel like telling them"

"I thought it would tear my family apart. I thought all my friends would abandon me, I had even thought of committing suicide to avoid it"

By contrast, some respondents try to "normalize" HIV and talk about it as any other illness, as illustrated here:

"I don't want people to take pity on me"

“I think AIDS is like any other illness. If you do not hide malaria or another disease, why would you hide HIV?”

Both male and female respondents fear abandonment by partners, friends, or families, but women in addition speak of their fear of losing means of livelihood. Several female respondents reported being expelled from their living place because of HIV. One woman said that her deceased husband's brother expelled her and her children from their courtyard, and later asked her to vacate the compound altogether. Another said that since the death of her husband, “some people” want to take away her living quarters and she has no ownership papers. Yet another was asked to move out of her father's courtyard and was worried about paying rent, and whether she could eat at her father's, since her stepmother manages the household. Another said:

“I kept [my HIV-positive status] a secret so that I am not kicked out of my in-law's family; I have 3 children, my husband is dead, and if I take a chance and tell someone, people will talk, and it is I and the children who will be done for”

Men's textual responses also refer to fears of rejection,

“I [...] did not know how my family could accept me with this disease. I did not want [my wife] to know that I am positive, for fear that she would leave me. As for my friends, I thought that if I informed them about my status, all of them would abandon me, because at the time that I was tested, people were not well informed about HIV”

but there are no references to fears of being expelled or loss of livelihood, and some explicitly state that their wage-earning abilities protect them

“[...]I was afraid how my family and friends would look at me [...] But no one is going to reject me, as I am the main source of support for my family”

Fears and hesitations about testing

Similar proportions of women (36%) and men (39%) found it hard to be tested, because of limited access to treatment and fears of rejection. The most frequently reported motivations to test are being sick and wanting to know their status; among women, another frequently mentioned reason (second to being sick) is the death of their partner, followed by wanting to know their status and doubting their partner's faithfulness.

In textual responses (66 women and 18 men) about the experience of testing, both women and men talk about their hesitations and fears towards testing and mention children; the following quotes illustrate a man's guilt about infecting his daughter

“It took a lot of courage to get tested, I hesitated a lot, and it was even harder to get the results, because to discover you are infected is a weight on your conscience, especially that my daughter was infected and I thought that if I am positive, it is perhaps I who have harmed my daughter”

and a woman's fears for her children's future

“I was afraid to die and leave children behind”

“It was very hard for me, I was afraid of finding out that I had AIDS, both my co-wives have died along with our husband [...] and if I go, then what would become of the children?”

For both women and men, test results make explicit the likelihood of dying from the disease, and by spelling it out, make it even more real, as illustrated here:

“Some people think that if they are positive, death is already at their door. Others [...] no longer have the courage to do anything, they keep thinking about this result; they can no longer sleep, eat, or work [...] the thought of death is already there and they think they can do nothing” (female respondent) “People are afraid of the result. They prefer not to know if they are positive or negative. Some people say that if [your test] is positive and you get your result, it is your death certificate that you are holding” (male respondent)

Disclosure and stigma

The proportions of respondents who report hearing about HIV-positive people being mistreated are similar among women (54%) and men (59%); the proportions of HIV-positive persons who report that they themselves were hurt by the words or behaviors of others because of their status are also similar (28% of women and 27% of men).

The stories told by respondents (17 women and 2 men) exemplify negative reactions to disclosure, that they have heard about

“I heard about a woman who was kicked out when she revealed her status. For [her husband], there was no reason to keep this woman who would cause him so many expenses in medicines and who would contaminate him with her illness.”

“I know an HIV+ person who was in the hospital. When she came out, she told one person, who told everyone. So one day in the street she was accosted by someone who said: here is the AIDS person. She went home and told her mother she was stopping treatment. She died two weeks ago”

They also describe their experience with insult and exclusion:

“They say that I am going to die/that people with AIDS should die”

“They insult me”

“They don’t consider AIDS patients as human beings”

“I was staying with a friend and when he found out I had AIDS, he did not allow me to drink in his cup. Two days later he told me to find another place to stay. But I don’t know anyone in Ouagadougou, and I have no money to go home to Niger, so I asked for some space [in the hospital yard] and that is where I have been living for two years”

Some statements illustrate the breakup of social ties after illness:

“Some people tell us that they have nothing to say to us, nothing to do with us, that I am a walking corpse [...] that I am no longer considered a human being”

“When I don’t get along with someone from around here, or when some people let their herds graze my field, and I try to object, they say: ‘I am not going to talk to you, you are here today and gone tomorrow’”

Others are about the effect of disclosure on respondents’ relations to their partners and families, with both women and men reporting negative and positive responses, as illustrated here:

“My husband had a bad reaction, he did not want to be tested, and to this day he hasn’t. But my family and friends are proud of me for my courage and my ability to remain serene. They say they couldn’t do it”

“When I spoke to [my husband] he said: ‘Is this why you are so down? I will not abandon you in any way’ He took me in his arms and said: ‘I will always be with you whatever happens’.”

In general then, no gender differences are observed in reactions to HIV-positive status. There is, however, an interesting gender difference in respondents’ own reactions to their test results. Women’s responses suggest that they were unaware of having been exposed and unprepared for positive results, a point that is consistent with our result regarding motivations to test - men because of their own risky behaviors, women because of partner’s illness or death. This is illustrated in the following quotes by female respondents:

“My husband and co-wife were ill. They had pimples all over their bodies, [his] hair was falling. I had heard that these were signs of AIDS, that is why I made up my mind to be tested [...]” “I had heard about AIDS when my husband was ill. He was ill for a while, his doctors knew it was AIDS, but they did not tell him, even though he wanted to be tested. After he died, I decided to be tested”

“It is the illness of my husband [now dead] which worried me. He was often ill, had diarrhea, his lips were red, his hair looked as if it had been straightened. All these signs had convinced me that he had AIDS, but I did not say anything and he said nothing either. It was after his death that I resolved to do my test to know where I stand”

“I did not expect this [positive result] because I was faithful to my partner [...] They say that it is those who don’t ‘stay still’ who get ill, but this was not the case for me”

“When I was with my husband, I was faithful, whereas they say that it is the disease of those who are not faithful, so I thought it could not be AIDS. You cannot trust men, it is they who [...] contaminate their wives”

There were no comparable quotes from men about being surprised to be HIV-positive, suggesting that men may have greater awareness about risk-taking.

Discussion

This study documents relatively good levels of knowledge and awareness of HIV, and shows that in the facilities studied, information, counseling and referral services are

provided. Most respondents report that they were informed about tests, their consent was sought, explanations were given for test results, they were advised about preventive measures, and referred to support groups. In addition, the frequent and regular attendance, and the diverse reasons for visiting the facilities testify to the multiple functions of such NGOs, both as providers of care services for HIV and as community centers. The validity of these high levels of satisfaction may be limited by the fact that interviewing took place at the facilities themselves, but it is consistent with the situation in Burkina Faso, where NGOs mobilized early on to increase awareness and campaign for better care for HIV-positive persons (PAMAC et al., 2003)

Results from the textual analysis illustrate a number of themes that are frequently reported in the literature, including the reasons that motivate people to get tested, the fears of stigma that still surround HIV, the complexity of disclosure, the negative reactions and breakdown of social relations that follow disclosure (Cusick, 1999; Fylkesnes & Siziya, 2004; Klitzman & Bayer, 2003; Manzi, Zachariah, Teck, et al., 2005; Obermeyer & Osborn, 2007; Sliep, Poggenpoel, & Gmeiner, 2001; Sobo, 1994,1997).

The persistence of difficulties with testing is not surprising, given the seriousness of the illness and the fact that until recently, treatment was unavailable and discrimination was high. But the quantifiable results of this analysis—just over half of respondents have heard about stigma due to HIV, and about one quarter have experienced it—also suggest that stigma is not inevitable, that attitudes may be changing, and that tolerance is greater; supportive reactions were also noted by Kouanda, Bila, Bocum Yaya, et al. (2008) in their national sample.

This analysis suggests that the influence of gender on HIV testing in Burkina Faso is manifested in two main areas: first, in patterns of utilization of HIV services, secondly, in motivations to test, patterns of disclosure and anticipated consequences of disclosure.

Out of 299 respondents included in the study, four-fifths were women. This sex ratio is unlikely to be a result of bias in sampling, as we took care to select diverse NGOs that serve the general population. That this finding represents a real pattern in Burkinabé society rather than an artifact of data collection is supported by the results of other surveys. Bila and Egrot (in this issue) also observed skewed sex ratios in their study conducted at 6 NGOs and in government and private facilities. Kouanda et al. (2008) report that women represented 80% of 740 respondents in a nationally representative study of public and NGO facilities. The evidence confirms that the biased sex ratios we found here are typical of the situation in the country, regardless of type of facility.

Women's greater use of HIV treatment and care facilities is consistent with the literature on health care utilization around the world, showing that women are more likely than men to report health problems, use health services, and take medications (Obermeyer & Schulein, 2002). It is also consistent with recent data on HIV treatment. In the ART-line study, which brings together data from 29 treatment centers in 13 sub-Saharan Africa countries, women represent 60% of 33,164 treated patients, more than would have been predicted based on estimates of HIV-infected women (Braitstein, Boulle, Nash, et al., 2008). In Burkina Faso

more than 2/3 of patients on ARV at 3 of the main treatment centers are women (Guiard-Schmid, 2008), and their CD4 counts are similar to men's (Kouanda et al., 2008) suggesting that delays in seeking treatment are similar for women and men. It is possible that women have greater motivations to use services around HIV, or easier access through prenatal care, or both; what the results of this study suggest in addition, is that men may have greater difficulties of access and/or greater reluctance to use services around HIV.

Women's greater use of HIV treatment and care services has been attributed to the cultural construction of masculinity and femininity in Burkinabé society. At the risk of simplifying elaborate ethnographic analyses (Bila, Egrot, & Desclaux, 2007; Bonnet, 1996), it is possible to say that in the dominant patrilineal virilocal system, women are accorded status based primarily on their reproductive capacities, and men on their ability to provide for their families. The traditional construction of gender roles emphasizes women's dependence on their husband's lineage and the dishonor that results from a man's inability to provide for his family. Bila and Egrot (in this issue) argue that men cannot easily admit that they have failed to support their family, and it is difficult for them to seek assistance outside the kinship sphere, from NGOs who provide health services and free goods; it is less shameful for women to seek help as mothers and wives. As a result, men may be at an even greater disadvantage than women. This point has implications for outreach services that provide health care and other support.

A second major result of this analysis is the gendered nature of attitudes, motivations, and consequences of HIV testing. While women's and men's responses were generally similar, women were significantly more reluctant than men to condone forceful testing and disclosure, and less likely to disclose their status or discuss HIV with their partner. This underscores women's perceived vulnerability to possible stigma and discrimination. The textual data also provide insights beyond the results of the quantifiable analyses and illustrate the emotional dimension of HIV testing, the fears of negative consequences, and the different motivations for testing. Our finding that women more often test because of their partner's illness or death, whereas men tend to test because of their own risks fits with evidence from other settings, including a study of gender differences in risk perceptions (Bajos, Ducot, Spencer, Spira, & ACSF Group, 1997) and a 4-country study showing that men were more likely to test if they had HIV-related symptoms, and women if their partner tested positive (Paxton, Gonzales, Uppakaew, et al., 2005).

Women's expressed surprise at positive test results comes through in the textual data, and this underscores the value of open-ended questions and the verbatim recording of responses for textual analyses. This finding also suggests a possible problem with HIV slogans about faithfulness as a way to protect against HIV. As the analysis of Taverne (1999) demonstrates, the notions of fidelity underlying international slogans do not resonate with the moral values surrounding fidelity that prevail in Burkina Faso, and which are broader than sexual behavior. In addition, traditional norms in Burkina are more permissive for men regarding extramarital relations. General slogans about faithfulness may have different meanings for women and men. Respondents' statements illustrate these inconsistencies and suggest that international discourse may need to be reframed in light of local values.

The analysis also suggests that the consequences of testing are differentiated along gender lines in Burkina, as they are in other settings. While we found that both women and men report insults and exclusion, we noted that women's fears articulated more directly around abandonment and being expelled from their living places. This is consistent with the emphasis in the literature on the adverse consequences of HIV-positive diagnosis for women (Desclaux & Desgrée du Lou, 2006; Gaillard et al., 2002; Gielen et al., 2001; Maman, Mbawambo, Hogan, Kilonzo, & Sweat, 2001; Medley, Garcia-Moreno, McGill, & Maman, 2004;). But the picture is mixed, and some of the tolerant responses we found fit with those studies that found no negative outcomes, or even positive outcomes (Passin, Kim, Hutchinson, et al, 2006).

The quantifiable and qualitative data gathered here have obvious limitations. Some are due to the small sample size and the fact that clients at the selected NGO facilities are not fully representative; the small number of men in the sample, while reflecting the reality of patterns of utilization, further limited our ability to test statistical associations. The statistical analyses presented here are also limited to simple tests of association and do not attempt to control for other factors, such as rural vs. urban residence, which may confound reported gender differences. Given the exploratory nature of this study, more complicated regression analyses were deemed inappropriate, and the results are suggestive rather than conclusive.

Other limitations are a function of the methodology, which was designed to collect standardized information through closed-ended questions, and at the same time to elicit respondents' views through open-ended statements. While such an approach cannot compete with larger surveys for quantifiable data, nor with ethnographies for in-depth understanding, it does make it possible to combine some breadth and some depth. By piecing together closed- and open-ended responses, we can distinguish statistically significant patterns that can be ascertained more clearly in the future by selecting larger samples, and we can see a picture emerge about trajectories, people, and the human context of HIV testing; these can be used for further investigations of the cultural understandings through which notions of HIV risks and ways to deal with the illness are mediated. The exploration conducted here suggests that quantitative and qualitative methods can be combined to define an integrative approach research, one that is especially useful for behavioral studies on HIV (Obermeyer, 2005).

Conclusion

This study has investigated the provision of services around HIV testing in facilities managed by NGOs in Burkina Faso. While some of the results are similar for women and men, gender differences were documented in attitudes and behaviors towards HIV testing, with men less likely to use services, women having greater concerns about testing and disclosure, and differences in motivations to test and the experience of testing. These results show the multiple ways in which gender influences behaviors, which translates into different forms of disadvantage for women and men, and calls for more nuanced discourse about gender and HIV.

The results indicate that special efforts have to be expended to reach the men who are not accessing information and counseling services at NGOs and to protect women against exposure to HIV; and they suggest that prevalent exhortations about testing and fidelity do not always fit with the construction of gender in Burkinabé society.

Despite its limitations, the methodology used in this analysis, which combined quantifiable and qualitative data, has made it possible to capture significant patterns and gain insights into the multiple ways that gender influences HIV testing attitudes and behaviors. Results from the study were incorporated into a national study of the use of health services around HIV in Burkina Faso (Kouanda et al., 2008) and in efforts to develop data collection tools on HIV testing and counseling (WHO, in press).

Acknowledgements

This analysis was conducted with support from the Department of HIV, World Health Organization.

References

- Antelman G, Smith Fawzi MC, Kaaya S, Mwambo J, Msamanga G, Hunter D, et al. Predictors of HIV-1 serostatus disclosure: a prospective study among HIV-infected pregnant women in Dar es Salaam, Tanzania. *AIDS*. 2001; 15:1865–1874. [PubMed: 11579250]
- Bajos N, Ducot B, Spencer A, Spira, Brkinkhof M, Dabis V, Laurent C. Sexual risk-taking, socio-sexual biographies and sexual interaction: elements of the French national survey on sexual behavior. *Social Science & Medicine*. 1997; 44(1):25–40.
- Bila B, Egrot M. Genre et asymétrie de fréquentation des lieux de prise en charge des personnes vivant avec le VIH en Afrique (Burkina Faso). Responsabilité maternelle et empowerment des femmes, submitted to *Social Science & Medicine*. doi:10.1016/j.socscimed.2009.05.035.
- Bila, B.; Egrot, M.; Desclaux, A. The perception of HIV and men's attendance in health-care facilities in Burkina Faso; *AidsImpact 2007*, 8th International Conference on biopsychosocial aspects of HIV infection, Marseille; France. 1st–4th July (2007);
- Bonnet, D. Être femme au Burkina Faso: de la construction du genre en pays Mossi. In: EPHESIA.. , editor. *La place des femmes. Les enjeux de l'identité et de l'égalité au regard des sciences sociales*. La découverte; Paris: 1996.
- Braitstein P, Boule A, Nash D, Brkinkhof M, Dabis V, Laurent C, et al. Gender and the use of antiretroviral treatment in resource-constrained settings: findings from a multicenter collaboration. *Journal of Women's Health*. 2008; 17(1):47–55.
- Cartoux M, Msellati P, Meda N, Van de Perre P, Newell M, deVincenzi I, et al. Attitude of pregnant women towards HIV testing in Abidjan, Cote d'Ivoire and Bobo-Dioulasso, Burkina Faso. *AIDS*. 1998; 12:2337–2344. [PubMed: 9863877]
- CNLS (Conseil National de Lutte Contre le Sida). Rapport du Programme d'Appui au Monde Associatif et Communautaire à la 6e session du Secrétaire Permanent. Conseil National de Lutte Contre le Sida; Ouagadougou: 2007. Situation de la promotion du Conseil Dépistage Volontaire au Burkina Faso: de 2004 à 2006. unpublished report
- Coulibaly D, Msellati P, Dedy S, Welffens-Ekra C, Dabis F. Attitudes and behavior of pregnant women towards HIV screening in Abidjan (Ivory Coast) in 1995 and 1996. *Sante*. 1998; 8(3):234–238. [PubMed: 9690325]
- Cusick L. The process of disclosing positive HIV status: findings from qualitative research. *Culture, Health and Sexuality*. 1999; 1:3–18.
- De Cock KM, Bunnell R, Mermin J. Unfinished business—expanding HIV testing in developing countries. *The New England Journal of Medicine*. 2006; 354:440–442. [PubMed: 16452554]
- Desclaux A, Desgrées du Loû A. Les femmes africaines face à l'épidémie de sida. *Population et Sociétés*. 2006; 428:1–4.

- Fylkesnes K, Siziya S. A randomized trial on acceptability of voluntary HIV counselling and testing. *Tropical Medicine and International Health*. 2004; 9:566–572. [PubMed: 15117300]
- Gaillard P, Melis R, Mwanyumba F, Claeys P, Muigai E, Madaliyak, et al. Vulnerability of women in an African setting: lessons for mother-to-child HIV transmission prevention programmes. *AIDS*. 2002; 16:937–939. [PubMed: 11919501]
- Gielen AC, McDonnell KA, Wu A, O'Campo P, Faden RR. Quality of life among women living with HIV: the importance of violence, social support, and self care behaviors. *Social Science & Medicine*. 2001; 52:315–322. [PubMed: 11144787]
- Guiard-Schmid, J-B. Accès des femmes infectées par le VIH à la prise en charge de leur affection; Presentation at the SWAA 11th International Conference; Ouagadougou. February 2008;
- Kasabati. 2008. <http://ethikasabati.blog4ever.com/blog/index-132661.html>
- Klitzman, R.; Bayer, R. *Mortal secrets: Truth and lies in the age of AIDS*. Johns Hopkins University Press; Baltimore, MD: 2003.
- Kouanda, S.; Bila, B.; Bocum Yaya; Doulougou, B.; Yameogo, M.; Sanou, M., et al. *Pratiques de prise en charge des personnes vivant avec le VIH-SIDA au Burkina Faso*. Ouagadougou: Feb. 2008 Unpublished report
- Laver S. Voluntary testing and counselling for HIV: are adults in rural communities ready to test? *The Central African Journal of Medicine*. 2001; 47(4):92–97. [PubMed: 11921677]
- Maman S, Mbwapo J, Hogan NM, Kilonzo GP, Sweat M. Women's barriers to HIV-1 testing and disclosure: challenges for HIV-1 voluntary counselling and testing. *AIDS Care*. 2001; 13:595–603. [PubMed: 11571006]
- Manzi M, Zachariah R, Teck R, Bukendwa L, Kazima J, Makali E, et al. High acceptability of voluntary counselling and HIV-testing but unacceptable loss to follow up in a prevention of mother-to-child transmission programme in rural Malawi: scaling-up requires a different way of acting. *Tropical Medicine and International Health*. 2005; 10:1242. [PubMed: 16359404]
- Matovu J, Makumbi F. Expanding access to voluntary HIV counselling and testing in Sub-Saharan Africa: alternative approaches for improving uptake 2001–2007. *Tropical Medicine and International Health*. 2007; 12(11):1315–1322. [PubMed: 17949401]
- Medley A, Garcia-Moreno C, McGill S, Maman S. Rates, barriers and outcomes of HIV serostatus disclosure among women in developing countries: implications for prevention of mother-to-child transmission programmes. *Bulletin of the World Health Organization*. 2004; 82(4):299–307. [PubMed: 15259260]
- Nebie Y, Meda N, Leroy V, Mandelbrot L, Yaro S, Sombie I, et al. Sexual and reproductive life of women informed of their HIV seropositivity: a prospective cohort study in Burkina Faso. *Journal of Acquired Immune Deficiency Syndromes*. 2001; 28(4):367–372. [PubMed: 11707674]
- Obermeyer, C.; Schulein, M. *Gender and medication use: A review of the literature*. WHO, Department of Gender and Women's Health; 2002. working paper
- Obermeyer CM. Reframing research on sexual behavior and HIV. *Studies in Family Planning*. 2005; 36:1–12. [PubMed: 15828521]
- Obermeyer CM, Osborn M. The utilization of testing and counseling for HIV: a review of the evidence. *American Journal of Public Health*. 2007; 97:1762–1774. [PubMed: 17761565]
- PAMAC. *Le Conseil/Dépistage Volontaire au Burkina Faso en 2004: Rapport d'activités*. Ouagadougou: 2005.
- PAMAC. SP-CNLS. Kasabati. *Typologie des structures associatives de lutte contre le sida au Burkina Faso*. Rapport. PAMAC/SP-CNLS; Ouagadougou: 2003.
- Passin WF, Kim AS, Hutchinson AB, Crepaz N, Herbst J, Lyles C, et al. A systematic review of HIV partner counseling and referral services: client and provider attitudes, preferences, practices, and experiences. *Sexually Transmitted Diseases*. 2006; 33(2):1–9.
- Paxton S, Gonzales G, Uppakaew K, Abraham K, Okta S, Graenk K, et al. AIDS-related discrimination in Asia. *AIDS Care*. 2005; 17:413–424. [PubMed: 16036226]
- Sahlu T, Kassa E, Agonafer T, Rinke de wit T, Gebremariam H, Doorly R, et al. Sexual behaviours, perception of risk of HIV infection, and factors associated with attending HIV post-test counselling in Ethiopia. *AIDS*. 1999; 13:1263–1272. [PubMed: 10416532]

- Sliep Y, Poggenpoel M, Gmeiner A. The experience of HIV reactive patients in rural Malawi—part I. *Curationis*. 2001; 3:56–65. [PubMed: 11971604]
- Sobo EJ. Attitudes toward HIV testing among impoverished inner-city African-American women. *Medical Anthropology*. 1994; 16:17–38. [PubMed: 7877462]
- Sobo EJ. Self-disclosure and self-construction among HIV-positive people: the rhetorical uses of stereotypes and sex. *Anthropology & Medicine*. 1997; 4:67–87.
- Sombe IM, Cartoux O, Ky-Zerbo S, Tiendrebeogo N, Meda FD, Van de Perre P. Living with HIV: women's experience in Burkina Faso, West Africa. *AIDS Care*. 2001; 13:123–128. [PubMed: 11177469]
- Some, J-F. Statistics on the activities of voluntary counseling and testing in Burkina Faso in 2002. Burkina Faso: Programme d'Appui au Monde Associatif et Communautaire; Ouagadougou: 2003. in French
- StataCorp. Stata statistical software: Release 9.2. Stata Corporation; College Station, TX: 2006.
- Stein JA, Nyamathi A. Gender differences in behavioral and psychosocial predictors of HIV testing and return for test results in a high-risk population. *AIDS Care*. 2000; 12:343–356. [PubMed: 10928212]
- Taegtmeyer M, Kilonzo N, Mung'ala L, Morgan G, Theobald S. Using gender analysis to build voluntary counseling and testing responses in Kenya. *Transactions of the Royal Society of Tropical Medicine and Hygiene*. 2005; 100:305–311. [PubMed: 16214191]
- Taverne, B. Valeurs morales et messages de prévention: la “fidélité” contre le sida au Burkina Faso. In: Becker, C.; Dozon, JP.; Obbo, C.; Touré, M., editors. *Experiencing and understanding AIDS in Africa*. Codesria-Karthala-IRD; Paris: 1999. p. 509-525.
- UNAIDS (Joint United Nations Program on HIV AIDS). WHO (World Health Organization). AIDS epidemic update. UNAIDS and WHO; Geneva: 2008.
- World Health Organization. Towards universal access: Scaling up priority HIV/AIDS interventions in the health sector. Progress report. World Health Organization; Geneva, Switzerland: 2008.
- World Health Organization. Generic tools to facilitate operational research on HIV. WHO; Geneva: 2009. <<http://www.who.int/hiv/topics/operational/generic/en/>>

Table 1Socio-demographic characteristics of the sample by sex, Burkina Faso 2006 ($n = 299$).

Respondent characteristic ($n = 299$, except where noted)	Percent females ($n = 236$)	Percent males ($n = 63$)	Percent total
Mean age	34	36	34
Place of residence			
Ouagadougou	61	78	65
Bobo Dioulasso province	39	*22	35
Ethnicity			
Mossi	70	52	67
other: (Bissa, Gourounsi, Samo, Dagara, Bobo, Dafing, Gourmantche, Lobi, Peulh, Turka, etc.)	21	*30	22
missing	9	18	11
Marital status			
widowed	*41	8	34
single	23	35	25
married, monogamous	11	41	17
cohabiting	11	5	10
separated/divorced	10	8	10
married, polygamous	4	3	4
Live with children	*69	46	65
Level of education ($n = 296$)			
none	*43	27	39
primary/koranic	27	25	27
any secondary or higher	30	48	34
Means of transportation			
none	*59	22	51
bicycle	24	40	28
scooter/motorcycle	16	35	20
Possessions *			
television	42	51	44
electricity	44	40	43
mobile telephone	*33	48	36
land ($n = 266$)	34	38	35
running water	26	22	25
home telephone	16	14	16
well	16	11	15
goats, sheep, cattle ($n = 266$)	14	13	14
Source of income *			
family	40	33	39
marketplace	*33	14	29
support from church or NGO	25	21	24

Respondent characteristic (<i>n</i> = 299, except where noted)	Percent females (<i>n</i> = 236)	Percent males (<i>n</i> = 63)	Percent total
friends	15	24	17
agriculture	15	14	15
salary	* ₇	29	12
other	33	25	31
Occupation			
homemaker	* ₄₆	0	36
skilled/semi-skilled	21	40	25
marketplace	17	17	17
unskilled	2	21	6
student/apprentice	7	11	8
none	8	11	8

*multiple responses possible.

* $p < .05$, Fisher's exact test;

Table 2Knowledge and attitudes about HIV by sex, Burkina Faso 2006 ($n = 80$).

	Percent females ($n = 63$)	Percent males ($n = 17$)	Percent total
Should certain people get an HIV test **			
no	30	35	31
yes	68	53	65
don't know	2	12	4
Should certain people be forced to get an HIV test ($n = 79$)			
no	92	63	86
yes	8	*37	14
If someone is HIV+ should their friends be informed ($n = 79$)			
no	69	47	65
yes	31	53	35
If someone is HIV+ should their family be informed			
no	27	41	30
yes	73	59	70
If someone is HIV+ are there reasons others be informed, even if the person does not want their status revealed			
no	92	71	88
yes	8	*29	13

* $p < 0.05$, Fisher's exact test

** "Don't know" option was provided for all questions.

Table 3Services around HIV testing, Burkina Faso 2006 ($n = 84$).

	Percent total
Tested more than once	52
Received the results from most recent test	86
Did the health provider do the following before the test?	
ask your consent or explain that the test was voluntary	60
explain that confidentiality would be respected	68
discuss the risks of transmission that you have been exposed to	62
explained the testing process	46
explain the significance of a positive or negative results	54
explained the serological window	36
give advice for the prevention of HIV transmission	65
gave time for questions	56
When you received the results did the health provider do the following? ^a	
explained the meaning of the result	72
suggest you talk to someone about your status	57
suggest that your sexual partner(s) do the test	61
discuss the use of preventive measures	79
Understood explanations about the result given by the health provider ^a	88
Discussed at most recent visit to this health facility ^b	
transmission	82
protection	86
disclosure	63
safe sex	66
condom use	88
support groups	79
Partner referral for HIV test	55
Referral for support group ^b	67
Would encourage others to get tested	82
Waiting time here is acceptable ^b	83
Given enough time to talk and receive advice about health ^b	99
Feel involved in decisions about health ^b	84

^a $n = 72$.^b $n = 76$.

Table 4

HIV testing, and disclosure by sex, Burkina Faso 2006.

	Percent females	Percent males	Percent total
Spoke to someone before testing the first time (<i>n</i> = 84)	41	61	45
Expected test result (<i>n</i> = 72)	66	54	64
Keep status secret (<i>n</i> = 76)	74	80	75
Think that most PLWHA keep their status secret (<i>n</i> = 80)	75	71	74
Have disclosed status (<i>n</i> = 76)	85	73	83
Disclosed HIV status to most recent sexual partners (<i>n</i> = 70)	33	67*	40
Ever discussed HIV testing with most recent sexual partner (<i>n</i> = 73)	41	73*	48
Know if most recent sexual partner has taken an HIV test (<i>n</i> = 73)	33	67*	40
Know HIV status of most recent sexual partner (<i>n</i> = 73)	22	60*	30

* $p < .05$, Fisher's exact test.