HHS Public Access

Author manuscript

*AIDS Behav*. Author manuscript; available in PMC 2016 March 01.

Published in final edited form as:

*AIDS Behav*. 2015 March ; 19(3): 561–574. doi:10.1007/s10461-014-0843-7.

# HIV testing practices of South African township MSM in the era of expanded access to ART

**Theo G. M. Sandfort**[1], **Justin Knox**[1,2], **Kate L. Collier**[1], **Tim Lane**[3], and **Vasu Reddy**[4]

[1]HIV Center for Clinical and Behavioral Studies, Department of Psychiatry, Columbia University and New York State Psychiatric Institute, New York, New York, USA

[2]Columbia University Mailman School of Public Health, Epidemiology, New York, New York, USA

[3]Center for AIDS Prevention Studies, University of California San Francisco, California, USA

[4]Human and Social Development, Human Sciences Research Council, and the University of KwaZulu-Natal, South Africa

## Abstract

While men who have sex with men (MSM) in Africa are at high risk for HIV infection, few of those already infected know their status. Effectively promoting frequent HIV testing—of increasing importance with the expanding accessibility of antiretroviral treatment—requires an understanding of the testing practices in this population. To understand men's HIV testing practices, including their behavior, experiences, and perceptions, we conducted in-depth interviews with 81 black South African MSM (ages 20–39), purposively recruited from four townships. Many men in the sample had tested for HIV. While ever having tested seemed to facilitate repeat testing, men still expressed a high level of discomfort with testing. It was common to test after having engaged in risky behavior, thus increasing anxiety about testing that was already present. Fear that they might test HIV positive caused some men to avoid testing until they were clearly sick, and others to avoid testing completely. HIV testing may increase in this population if it becomes a routine practice, instead of being driven by anxiety-inducing incidents. Mobilization through social support might facilitate frequent testing while education about current treatment options is needed.

### Keywords

HIV testing; MSM; South Africa; sexual risk

## INTRODUCTION

Men who have sex with men (MSM) in sub-Saharan Africa are increasingly recognized as a population at risk of HIV infection. Although sub-Saharan Africa was long believed to have an epidemic exclusively driven by heterosexual transmission, research conducted in the past decade strongly indicates that the odds of being infected with HIV in this region are higher

Corresponding Author: Theo Sandfort, PhD New York State Psychiatric Institute, 1051 Riverside Drive, Unit 15, New York, NY 10032, Phone: + 1 646 774 6946, Fax: + 1 212 543 6003, tgs2001@columbia.edu.

among MSM than among men in general. Beyrer and colleagues (1) estimated these odds to be 3.8. HIV prevalence of up to 50% has been found in some samples of African MSM (2–14). HIV incidence among sub-Saharan African MSM has rarely been reported; one study among 449 MSM in Kenya estimated an incidence of 8.6 per 100-person years (14).

High HIV prevalence has also been observed among MSM in South Africa. In a study among 378 Black MSM in Soweto who were recruited using respondent-driven sampling (RDS), it was estimated that 13.2% of all MSM and 33.9% of gay-identified men were HIV-positive. HIV prevalence among young MSM (20–24 years of age) was 38.5% – higher than national estimates for men or women in this age group (15). Among Soweto MSM, 41.0% reported unprotected anal intercourse (UAI) with men. Concurrent sexual partnerships were frequent (73.0%) and in more than half of these cases included at least one female partner. Other studies using snowball sampling among Black MSM in township communities have also shown prevalence rates that are higher than national estimates for men in the general population (16–18).

Despite these high levels of HIV risk, available data suggest that MSM in South Africa and other sub-Saharan African countries often do not know their HIV status. The proportion of HIV positive MSM in South Africa who do not know their status has been found to be between 88% and 94% (15, 19). In a study that included Black and White South African MSM, ever having tested for HIV was associated with being Black, living in a township, and lacking social support (20). Lower income, greater internalized homophobia, and more experience with discrimination – all more prevalent among Black township MSM than non-township MSM – were associated with a reduced likelihood of recently having been tested (20). In another study, only 28% of MSM had been tested for HIV within the last six months, and, among those who newly tested HIV-positive, 40% elected not to receive their results (15). However, these findings date back to when access to HIV treatment was much more limited.

Increased exposure to and frequency of HIV testing is important because of its individual as well as public health benefits. HIV testing is associated with increased sexual health communication among community members and sexual partners and reduced sexual risk (21), and periodic HIV testing is viewed as a gateway behavior for other HIV prevention actions (22). On a population level, HIV testing is a key part of a scientifically proven approach to reducing HIV transmission. Persons who become aware of their HIV infection tend to reduce their sexual risk practices (23–34). Conversely, persons unaware of their HIV infection are the source of a disproportionate share of new infections (35): a recent modeling study conducted in the US estimated that undiagnosed persons have an onward transmission rate that is 3.6 times greater than persons aware of their status (36). Early identification of new infections also facilitates secondary prevention, and can minimize onward HIV transmission during the acute period when viral load tends to be high and an individual would otherwise have been unaware that he or she may be transmitting virus (37–41). Knowing one’s HIV status allows the infected person to maximize the benefits of early HIV treatment in an era of increased access to antiretroviral treatment (42).

For a test-and-treat strategy to be effective, persons in high-risk groups must test regularly and frequently. Frequent testing is particularly important among high-incidence populations (29), such as MSM, because it reduces the time from infection to diagnosis (43–48). The CDC advises persons in high-risk groups for instance to test once every three to six months (49). Increasing the testing frequency in MSM is likely to be effective in increasing viral suppression and reducing onward transmission in this population, as suggested by mathematical modeling (50, 51).

South Africa is exceptional in that it offers Constitutional protection for sexual minorities while homosexuality remains illegal in most other African countries. In its most current National Strategic Plan (52) the South African National AIDS Council (SANAC) recommends yearly testing for each South African and acknowledges that MSM are at higher risk of acquiring HIV than heterosexual males of the same age and recommends that MSM test more than once a year. OUT Well-being, a community-based organization in Pretoria focused on lesbian, gay, bisexual and transgender health that also houses a clinic and is involved in HIV prevention targeting gay men and other MSM, advises all MSM to test every three months.

In order to be able to promote frequent and periodic testing among African MSM, it is important to understand from the perspective of the men themselves what their current testing practices are and which factors facilitate and hinder testing. In order to achieve this, we conducted semi-structured interviews with MSM residing in townships in Tshwane, the metropolitan area that has Pretoria as its capital city. Townships are peri-urban or rural residential areas that, under Apartheid, were reserved for non-Whites (i.e., Blacks, currently 79.5% of the South African population; Coloured persons; and Indians). Although legalized racial segregation ended in 1994, townships are still residential communities for millions of Black South Africans. Most of these communities are characterized by low levels of education, low socioeconomic status, high unemployment rates (53), and poor development of infrastructure that impacts on the provision, availability and access to holistic and adequate health services.

HIV testing services are available in Tshwane townships and are offered within primary care clinics in communities, HIV care clinics, hospitals, antenatal clinics, and some TB clinics (usually falling under the control of public health administrative services). HIV treatment is available in those same sites and is provided regardless of health insurance status. The availability of treatment has been shown to enable uptake of HIV testing (54). HIV testing services specifically for the lesbian, gay, bisexual, and transgender community are available in Pretoria at OUT Well-being.

In exploring the HIV testing practices of MSM, we were particularly interested in their actual testing behavior, their considerations involved in decisions to test, their actual testing experiences, their feelings about positive and negative test results, and experienced or perceived barriers and facilitators of HIV testing. In addition, we sought to understand how HIV testing figures in the social networks of MSM. In the era of expanded access to antiretroviral treatment, understanding the HIV practices in high-incidence populations such as MSM is critical to establishing frequent and regular HIV testing as a normative practice.

# METHODS

## Participants

In-depth interviews were conducted among a convenience sample of 81 Black MSM from four principal townships in Tshwane, South Africa (20 participants each from Atteridgeville, Mamelodi, and Soshanguve, and 21 from Hammanskraal). Black males who were 20–44 years old, resided in one of the four targeted townships, and reported oral, anal, or masturbatory sex with at least one male partner in the preceding year were eligible to participate. Candidates for in-depth interviews were identified by members of the study's Community Advisory Board, outreach workers at a partnering community-based organization, and by ethnographers in the course of other fieldwork. Additional referrals were made by interview participants. The Project Manager conducted an initial phone screening with each interested candidate to ensure that he met the eligibility criteria. Purposive selection was used to ensure a diverse sample in terms of age, sexual orientation, gender presentation, and choice of sexual partners (i.e., exclusively men or both men and women).

The final sample consisted of men ranging in age from 20 to 39 (M = 25.16 years). Most participants identified as gay; smaller numbers of participants identified as bisexual, straight, or did not adopt a label for their sexual identity. The sample also included biologically male participants who self-identified as "drag queen," woman or transgender. A small number of the participants (about one in six men) had some kind of medical insurance, allowing them to see private doctors instead of having to make use of public health clinics. Fifteen participants were currently studying, either for matric, a diploma, or a degree. The majority of men (36) who completed their education had matric; eight men had less than matric. The remaining 22 men had either diploma, occupational certificate, or a degree. Of the 66 men who completed education, 32 men were unemployed. Men who were employed reported monthly incomes ranging from below 1500 up to 16.000 ZAR.

## Procedure

Interviewers were conducted by six trained male and female interviewers, using a semi-structured guide. On average, interviews lasted approximately 90 minutes. Interviews were audio-recorded and conducted in private areas at the central Pretoria offices of the collaborating agencies or in a private and secure space in one of the four townships, depending on the participants' preference. Participants were offered the choice of conducting the interview in English, Tswana (Setswana), or Northern Sotho (Sepedi). While the majority of interviews (75%) were conducted in English, most others were conducted in more than one language, as is common among South Africans who live in township communities. A few interviews were conducted completely in Tswana or Northern Sotho. All interviews were transcribed in full and translated into English as necessary.

Men were interviewed about a variety of topics including gender identity, sexual practices, social stigma and acceptance, alcohol use, and social support. The current paper focuses on the men's HIV testing practices and experiences. These were elicited with several questions that addressed: factors that make testing easy or difficult, friends' testing practices, reasons

to test or not to test, where to get tested and why, actual testing practices and experiences, and test results (Table I). Interviewers were instructed to follow the questionnaire and to probe for more in depth information. Probing questions were rehearsed with interviewers but not standardized.

All study procedures were approved by the Ethical Committee of the Human Sciences research Council and the Institutional Review Board of the New York State Psychiatric Institute.

### Analysis

Coding of the in-depth interview transcripts was completed in two stages in which concept-driven coding was followed by data driven coding (55). In the first stage, three coders independently applied a set of a priori codes to the interview transcripts. Concept-driven codes used in this stage were developed from the study's main research questions and the interview guide. The codebook for interviews was tested on a small batch of transcripts and refinements were made as needed. Initially, each transcript was coded by two coders, who met to reach consensus on the coding and produce reconciled, coded transcripts (37 of the 81 interview transcripts). After consensus about the coding process was reached, the remaining 44 transcripts were coded by one of three coders. The concept-driven code relevant to the present investigation was "HIV and STI testing" and included motivations, barriers, access to, experiences of, and habits around HIV and STI testing.

For purposes of this study, a second stage of data-driven coding was undertaken in order to organize all the material related to HIV testing into subcategories. Codes were deduced from the data, discussed and agreed upon by all authors. Codes used included "Perceptions of HIV testing," "Knowing HIV testing sites and considerations," "Thoughts and feelings about potentially being HIV positive," "Experiences with HIV testing," "Role of HIV testing in relationship formation," "Responses to testing HIV positive," "Responses to testing HIV negative," "Peers' HIV testing practices" and "Talking about HIV testing." In this second phase all materials were coded by two independent coders. In the few cases where there was discrepancy between the coding, these coders discussed the relevant information and arrived at consensus. ATLAS.ti was used for all coding and data processing. Names included in the text are pseudonyms; participants' ages are included in parentheses. Main characteristics of men quoted in this paper are presented in Table II.

## RESULTS

To understand the social context of HIV testing, we first discuss what the men knew about their peers' perspectives on HIV testing and their actual testing practices. Because they affect responses to other issues, we then discuss the testing practices of the study participants themselves, including testing frequencies and places men would go to get tested. We subsequently describe reasons why men would get tested, and, regardless of intentions, what men saw as facilitators or barriers to HIV testing. We conclude with men's responses to HIV-negative and HIV-positive test results.

### Peers' HIV testing practices

The majority of men knew how their friends felt about testing for HIV and whether they actually had tested. Most men said they had discussed HIV testing with friends and some provided specific examples of such conversations.

A topic most often discussed among friends was fear about testing HIV positive. For example, Kefentse (26) stated: "Sometimes we talk about it and you will have these negative views that 'I don't want to go there', 'I don't want to find out, because if you know, you are going to die from worry'. So they have that fear." Almost half of the men reported that their friends are afraid to get tested for HIV. The unanimous reason given was fear of being diagnosed as HIV positive. A smaller proportion of men had friends that were comfortable with testing, willing to do it, and open about it.

Many men said that most of their friends had tested. The few men who cited a reason for testing indicated that their friends got tested because they were sick or because they feared that they were HIV positive. Tsie (22) stated that his friends tested because: "They've been doing very, very bad things which compel you to go test. This is the only way to know that what you've done yesterday, the consequences thereof." About a quarter of the men indicated that most of their friends had not tested, citing fear of a positive result as the primary reason why they had not. A few men were not aware of their friends' feelings about testing and did not know whether their friends had tested, because they did not talk about it.

Some men reported that they and their friends were supportive of each other and encouraged each other to get tested. A few men indicated that they had gotten tested with their friends; a couple of participants said that they served as role models for HIV testing and that they accompanied their friends to get tested, while others had examples of friends bringing them to a clinic.

### Participants' HIV testing practices and testing sites

Although most of the 81 men interviewed had tested for HIV, actual testing frequency varied. Some men had tested only once while other men had tested several times, and some tested on a regular basis (e.g., annually or every three months). Several participants had not tested in more than five years. Fifty-five men reported that their most recent HIV test result was negative. Ten men reported that they were HIV positive. Three men had tested but did not want to disclose their HIV status. One man's HIV status was not ascertained. Twelve men said that they had never tested for HIV.

Almost all men knew where they could test for HIV and where they would or would not go. Local clinics were the most frequently mentioned site to get tested. The reasons that men mentioned for going to local clinics were that they are practical and convenient, often located close to home or work. Other reasons for going to a nearby clinic were that men knew the site and the people who work there; that men get other services there; that services were experienced as confidential; and that support and counseling were offered. Some men mentioned going to local clinics but not necessarily ones nearest to one to where they live. A few men did not mention specific places where they would test, but made clear that because of concerns about confidentiality they would get tested outside of their township or far from

home, where clinic staff would not know them. For example, Thuso (30) said that he would go to a clinic, but because of concerns about confidentiality, he would never pick a clinic nearby.

Another place where men would get tested is at public hospitals. One reason for going there was anonymity. Conflating confidentiality with anonymity, Lutendo (20) said about the hospital: "I think it is confidential. Like we've been hearing that people are telling other people their statuses. So I would go to [the hospital] because nobody that works there knows me." Dingani (22) explained why he would go to the hospital:

> "The people that work there don't know me and I don't know them… (…) Yes, you have to catch a taxi to go there and I know the people at our [nearby] clinic and they know me and sometimes I party with them and they will know. Even if the person is not supposed to expose your status, a person will remain a person. So one person will tell another, until it gets to me."

Another reason that men gave for going to a hospital is that the hospital does confirmatory HIV testing. Tumelo (20) mentioned a bad experience that he had in a clinic where he received discordant positive and negative test results on one occasion. He said that the next time he would go straight to the hospital:

> "Ja, because one day in 2008, I went to the clinic to get tested and those things, one said positive and the other one said negative, and I was becoming stressed, and then they take my blood and referred [me] to hospital, and then I waited for the results to come back. So that's why now I prefer to go to [the hospital]."

Private doctors were another place where men said they got tested. Positive aspects of testing with a doctor were privacy, confidentiality, and trust. Men who preferred to see a doctor for an HIV test also made negative comments about clinics as a testing site: nurses in clinics seem to talk too much, there are long waiting times, and the staff lack professionalism.

Several men said they had tested at OUT Well-Being, the LGBT community center in central Pretoria. A main reason for using this service was that men would not feel judged because the service is focused on lesbian, gay, bisexual and transgender persons. Men also liked that it is free and private.

### Reasons to test for HIV

The men mentioned several reasons why and when they would get tested, and why they do or would test frequently. Several men explained that it is important for them to know their HIV status. For Khutala (26) this was the most important reason: "It will be stupid not knowing your status. It's stupid in this day and age." Knowing one's HIV status was seen as taking care of oneself, and knowing where one stands or where one is going. Knowing your status "frees" you, said some men; it is a "nice feeling" said Sizwe (25), who was proud to be HIV negative. Knowing your HIV status will make it possible to start treatment on time, explained some other men, especially men who were HIV positive. Thandiwe (25) said: "If you don't get tested it kills you because you can have HIV or an STD and not knowing about it, then you realize at a later stage when nobody can do anything about it." Asked what

reasons there were to get tested, Sizwe (25) answered: “To know where I am standing. If I am sick I will get treatment very fast before I get sick. (…) I need to know my status. If I am HIV positive, I want to know, that I have to get treatment on the right time.” Similarly, Kabelo (39) said: “I want to know where I stand, even if I am positive I want to know, so that I can take care of myself before I get sick, because we normally leave it until we can’t get out of bed and we suspect it is this thing.”

By stressing the importance of HIV testing, men implicitly acknowledged being at risk for HIV infection and several men explicitly mentioned incidental or ongoing risk behavior as the reason to get tested. Despite good intentions, risk behavior does occur, as Sizwe (25) explained: “I am a very careful person and I am very strict, but as life goes on you get to a point whereby you get a man, and stuff start to change. Sometimes the guy may not bring a condom today and the condom tears, whatever.” Lenka (30), who tested regularly, said, “every single time you engage in sexual activity and you think of something that, you know, might have slipped, that’s when I would go. (…) Knowing that I’m clean, knowing that I’ve not done anything to put me at risk.” Lerato (30) got tested because, even though he had used a condom, “There was blood.” Other men mentioned the breaking of condoms as a reason to get tested.

It was not necessarily one’s own behavior that motivated HIV testing. A few men referred to their partner’s risk behavior as a motivation to test. Tlotliso (21) for instance mentioned that one of his partners, with whom he was having unprotected sex, had sex with a man who was HIV positive. Kabelo (39) said “We are human and we have sex and even with your partner you don’t always use condoms and you don’t know what he gets up to even though you are faithful.”

Not all men felt that a risk event was a reason to get tested. Some men said they got tested or would only get tested if they felt sick. Mamello (23), who had never tested, said that the most important reason for getting tested was, “Like if I get really sick. (…) I would go. Otherwise it is a no-no.” A few men mentioned concrete physical symptoms, such as a rash, feeling sore, a cough, “a runny stomach,” or a fever as reasons to get tested for HIV. Kabelo (39) said he got tested when “me and my boyfriend stopped using condoms and I felt sick after that.” However, feeling sick would not always lead to getting tested. Probably unaware of symptoms of acute HIV infection, Danisa (25), who had never tested, said in response to the question whether there ever had been an instance that made him think that he must go test:

> “There was a time that I was sick with flu for more than three weeks, then I thought ‘I need to go and test’ and suddenly my mind was changed.”
>
> So you didn’t do it?
>
> “I didn’t do it.”
>
> But then this flu disappeared?
>
> “And the flu disappeared and my mind was okay.”

While most men who got tested seemed to have done so on their own initiative, a few men tested because of advice and support from others. In a few cases, men's mothers encouraged them to get tested. Siphelele (25) referred to his family but also to a friend who happened to be a counselor. Tshediso (36) had a friend who was a doctor who would advise him to get tested.

HIV testing appeared to play an important role in some intimate relationships and in men's thinking about such relationships. Several men mentioned that the start of a new relationship would be a reason for them to get tested. Mamello (23) for instance said that he would test "if I was going to engage myself in a serious relationship, like commit myself to someone." Similarly, Masopha (29) said:

> "The next step that I would take, like I told you… There is a Coloured or Indian guy that I am seeing, so it is like, he is a kind of a person who wants to settle and also, not only settle but like with everything like moving in together, going to the clinic walking hand in hand going to do our tests… If I was at that stage of feeling that I am going on with my life, then I would do it, but not now."

Testing also played a role within intimate relationships that were ongoing. Amose (24) said that he had an agreement with his partner not to use condoms and to get tested every three months. Intimate relationships could, however, also be a reason not to test. Lesedi (24) explained: "Maybe I would be in a relationship, then I don't want to test because if I am HIV, then I would have to tell my partner and where will I start if I want to tell him that I am HIV positive? Where did I get it from?"

Men provided a few other reasons for getting tested for HIV. For some, testing was part of the policy at work. Other reasons for testing included: as a part of acquiring insurance, proving one's faithfulness to a partner, having found out that a boyfriend was positive, demonstrating to concerned parents that one takes care of himself, and setting an example as part of an HIV prevention activity.

Some men said that it is a norm for them to test regularly and that having such a routine actually makes testing easy. Bandile (35), who tests once a year, said that he had made testing "my every year thing." Other regular testers said that they tested more frequently. Amose (24), who tests every three months, compared it to going to work: "It is something that is there." Asked what would be an important reason to get tested, Dingani (22) responded:

> "I usually don't have a reason, I just go. Sometimes it happens that you are carrier of the disease and you don't know it because the symptoms don't show at that time and you think you are healthy. So that's why I go, so I can know where I stand in terms of status and my body doesn't explain anything to me so far."

A few men also practice regular testing because of the window period—the time after infection with HIV and before antibodies produced by the body will be detected by an HIV test. Tumelo (20), who was in a relationship with a man, said: "We are not using the protection so I must go and get tested and there is also the window period. In three months they can occur, so I must go in three months' time to check." A few men indicated that a

testing counselor had instructed them to come back to get re-tested because of the window period.

### Facilitators and barriers to HIV testing

A large group of men felt that it would be easy to test for HIV, although there was also a substantial group of men who said that it would be hard. Men gave several reasons for why testing would be easy. Some said that it would be easy because, not having engaged in risky sexual practices, they would not have to fear a positive test result. Some other men felt that testing was easy because they were informed about testing and knew what testing involves. Having been tested several times before and having received negative test results also made it easy for some men. Moeketsi (24) said that testing would be easy for him because he would not disclose his sexuality and thus avoid a difficult conversation with the testing counselor. Saying that it would be easy to test did however not necessarily imply that men had no doubts, concerns, or anxieties about testing or being HIV positive.

Men who felt that it would be hard to get tested were, not surprisingly, most likely to have never tested. The most prominent reason why participants would find HIV testing difficult was that they might find themselves to be HIV infected, with the associated consequences of becoming sick. Men thought that their friends would find it hard to get tested for the same reason. A few men were concerned about social consequences. Tumelo (20), for instance, said that he worried about negative things that people might say if he would get sick. For several men this fear of finding oneself to be HIV positive was informed by their past unsafe sexual behavior; “I know how I have behaved,” said Masopha (29). Testing and the associated counseling could also be “confrontational,” as Banele (25) mentioned, because it would force him to review his behavior. Nku (32), who had tested before, said he would never go back because of the way he was counseled:

> “Because of the questions they ask you there, like even before they could take your blood you are already scared… I told myself that I would never go there again… The counseling is so stressful, because, eish, they ask the questions there and you start to be scared.”

Fear of learning one’s positive HIV status was also the most important reason why men would avoid testing. For instance, several men mentioned not knowing how they would handle the outcome, being unable to cope, or not being ready to find out they were HIV positive as decisive reasons for not getting tested. Qukeza (24) was scared of HIV testing and said, “If I got tested and find out I have HIV, it would kill me, because stress is the thing that kills you (…). The minute you know that you are sick it is totally different.” Wushe (25) said that he would be scared to test because his life would be over. In fact, a few men said that they felt that it was better not to know their status. “[I’d] rather die not knowing what is killing me,” said Rendi (24). However, several men also said that they did not see any reason not to test and some men were of the opinion that everybody should get tested.

### Responses to negative and positive HIV test results

Responses to having received negative or positive HIV test results varied, as did responses to the hypothetical question posed to HIV-negative and untested men of what a positive HIV

test would mean to them. Most men who had received negative test results described their experiences as positive. They used terms such as: “felt good,” “happy,” “excited,” and “relieved” or “relaxed.” Some men mentioned publicly sharing or celebrating their HIV-negative status. Tlotliso (21) said: “When I got home I showed [my results] to my mother and put them on the fridge.” Dingani (22) said, “I was so happy, I took out money and me and my friends went to go celebrate.” Another small group of participants described feeling that they had been given an opportunity to make affirmative changes in their lives. For example, Ntsumi (22) who had tested only once, several years prior, and who had more female than male sexual partners, said, “I was happy. I started reducing the number of girlfriends I had, taking care of myself.” Sizwe (25), who reported to test annually, said of learning about his negative status: “I was happy, relieved, and like I learned a lot of lessons. I have to stop making mistakes and deliberately making excuses of not using condoms.”

Despite being HIV negative, receiving results was clearly a stressful experience for a significant minority of men. These participants described the process of receiving their results as “scary” and “nerve-wracking”. As Tumelo (20) explained: “My heart, my heart was pumping… I became nervous and was just praying *please God help me*.” The feelings of stress and fear did not subside for all participants once they learned their results. For some, feelings of relief were undercut by their perceived need to test regularly and the counseling they had received related to the window period. Similarly, Sizwe (25) said: “It is a relief to know you are negative, but you have to go back after three months and go check again, then is it a positive, and it goes on and on…” A small number of men reported that they had been avoiding returning to get tested, with some even saying they would never test again. These participants did not wish to relive the stressful experience of HIV testing, even though some suspected they were HIV-positive.

Men who did not know their HIV status or who thought they were negative were asked what it would mean to them if they found out they were HIV positive. For many of these men, being HIV-positive would be terrifying. Mosegi (22) said for instance that he would feel that “my life is over.” Other men had different perspectives. Playing down the impact, Amose (24) said for instance that he would “take it like flu” and Masopha (27) said that because there is medication, he did not view it as a death sentence. Kabelo (39) said he would be able to handle having HIV. HIV is not too much of a problem, he explained, because there is treatment; he was more concerned about dismissive responses from people, especially because the infection was through same-sex behavior: “People will say, ‘We have been telling him that sleeping with men is nonsense’.” Several men said that testing HIV positive would motivate them to lead a healthier lifestyle. Baruti (28) said for instance that if he were to find out he was HIV positive, he would change his “lifestyle, live healthy and stop things that I was doing wrong.” Unathi (21) said that if he tested positive, he would stop partying because he would not want to infect others.

The men who had received an HIV positive test result had more similar responses. Specifically, learning that they were HIV-positive was difficult and required that they adjust psychologically to this new reality. Social support was crucial to this adjustment process. These participants reported receiving beneficial support from family, counselors and support groups, and HIV-positive friends.

## DISCUSSION

Our analysis of the accounts of MSM in South African townships regarding their HIV testing practices in the era of expanded access to ART provides a number of important insights. HIV testing seems to be a topic that men discuss with each other, with fear about being positive as a dominant theme. Support from friends and others also seems to facilitate testing practices. Most men in the study had tested for HIV, with several men having tested only once and a few others having tested with regular frequency. Men's preferences for specific testing sites varied, with confidentiality or anonymity, and to a lesser extent convenience, as determining factors. In terms of the reasons that men gave for seeking HIV testing: Many men said that knowing their HIV status was an important reason to get tested, especially because it would facilitate the timely start treatment that has become increasingly accessible. Some men tested preventively in order to know their status and protect themselves. However, it was more common for men to test after engaging in risky behavior or experiencing condom breakage, and thus the anxiety they already felt about testing was further increased by the circumstances. None of the men explicitly mentioned avoiding potentially infecting others as a reason for getting tested. Starting a new relationship was mentioned by some men as a reason to seek testing. In the context of ongoing intimate relationships, testing seemed to be used by some men to justify foregoing condom use, which because of the limited duration of relationships and sexual involvement with third parties, might be of limited effectiveness. Other men in intimate relationships saw the need to test as a consequence of not using condoms with their intimate partner and the associated risk of transmission.

The participants also described several facilitators and barriers to testing as well as their reactions to previous testing experiences. While testing was seen by many men as easy, especially among men who were informed about testing and men who had ever tested or tested regularly, there was a high level of discomfort around testing among most men. For some men, the fear of testing HIV positive caused them to delay seeking testing until they were clearly sick or to avoid testing completely. Concerns about the physical consequences of becoming sick and having to give up certain aspects of one's lifestyle seemed to play a prominent role. Actually getting tested could be a stressful and confrontational process, deterring some men from getting tested again. Receiving a negative test result was generally a positive experience and for some men an opportunity to make positive changes in their lives. Imagining a potential positive test result, however, was devastating for most men, especially for men aware of having been at risk for HIV infection because of their sexual behavior. Other men, referring to available medication, said that they would manage. Finding oneself to be HIV positive would motivate some men to adopt a healthier lifestyle. Men who actually received a positive test result explained that adjustment was difficult, but was facilitated by social support.

These findings are in line with what has been found in other studies about testing conducted among MSM and African populations in general and there are also a few differences. In terms of testing site, most participants said they would get tested in a clinic or with a private doctor; in contrast to findings reported by Rispel and colleagues (56), the preference for a specific LGBT community site was less pronounced. Although convenience seemed to play

a role for some men, confidentiality at the testing site, which has been identified in other studies as a facilitator of testing (54, 57), was stressed as critical by the participants. This stress on confidentiality is an indicator of their apprehension about the potential social consequences of being HIV positive or outed as gay. Several men expressed that actual or anticipated stigma and discrimination from health care workers, which other studies have identified as a major barrier to testing (56, 58, 59), stopped them from getting tested. Other men have found a way to deal with issues of confidentiality by choosing to test in places that are less convenient. This, in turn, makes it more difficult to test regularly. Having to pay in order to get tested creates a barrier as well. Ensuring that public testing facilities honor confidentiality and anonymity is essential to creating an environment where MSM can get tested regularly. The onus should not be on the men to locate such sites.

As in various other studies (54, 56, 60–63), the fear of finding oneself to be HIV positive was a major barrier to getting tested. Although men focused in their answers on the physical consequences of being positive, concerns about stigmatization of same-sex sexuality and being HIV positive came through as well. Concerns about stigmatization were expressed in relation to the men's preferences for testing sites and came up in discussions about the social networks of which these men were a part. As such, stigma was a barrier to testing, as was found in other studies (54, 63–66). Deterioration of health encouraged testing in some of the men (54, 63, 67), because they would be able to access medical treatment if needed. In others it resulted in avoidance of testing. Testing as a strategy to find peace of mind (66) was expressed by men who stated that knowing their status was important to them; some other men, though, tried to find peace of mind by not knowing their status (65) and avoiding HIV testing.

Not being at risk or being at low risk for HIV infection has been reported before as a reason not to get tested (54, 62, 68). The awareness of risk of infection would indeed facilitate testing for some men, but for others it would stop them from getting tested; as has been found in other studies, perceived risk and testing are not associated (65). The perception of being at risk seems to matter to a specific group of MSM but not to all. The relationship between perceiving oneself as at risk and HIV testing practices needs to be further explored to understand how perceived risk might have different effects on men and to be able to effectively support frequent and regular testing.

A new theme that emerged during the interviews is the perception some men have that testing HIV positive would threaten their current lifestyle, which involves pleasure and, from time to time, anxieties because of the risks associated with that lifestyle. These anxieties may prompt some men to test and others to avoid testing. For some of these men, a healthy lifestyle would only become opportune once they test HIV positive. In contrast, there were also men for whom regular testing was part of taking care of oneself and living a healthy lifestyle. These diverging findings suggest the importance of exploring men's ideas around pleasure and health.

There are several limitations that have to be taken into account in considering the study outcomes. First of all, a significant number of participants were engaged in HIV outreach work, potentially influencing our interpretation that most men know where to test and

actually have tested. The fact that fear of HIV testing was still a prominent theme in this data suggests, however, that fear is a critical barrier to testing among township MSM, more generally. Secondly, what men shared with us is their subjective experience that might be affected by how they want to see and present themselves; statements about changed sexual practices might be affected, for instance, by the men's awareness of what is desirable and do not necessarily reflect their true point of view. Another limitation for this study is that not all topics were addressed systematically with each participant. This results from the semi-structured nature of the interview, with probing dependent upon the information that participants volunteered. A more comprehensive approach to studying testing practices could have furthered our insights. Furthermore, despite their training, the interviewers' skill level in eliciting information varied. Consequently, we do not have information about specific topics from all participants, making it difficult to draw conclusions for the whole group. For instance, although some men made clear that the treatment they received at an HIV testing site discouraged testing, we are not able to conclusively say for how many men this was an issue. We also did not systematically assess whether participants were aware of available HIV treatment and whether they had access to it, nor did we talk with HIV positive participants about their experiences with linkage to care or whether they were on treatment. On the other hand, our approach facilitated elaboration on issues that were most important to the men themselves, which might not have come up in a more structured approach.

Despite these limitations, our findings have important practical implications for promoting frequent and periodic testing. While a few men seem to test frequently and regularly, MSM should be made aware of the relevance of this strategy for men as individuals and as members of gay or MSM communities. Behavior change communication efforts focused on the current meaning of a positive HIV status and the good health prospects and importance of timely treatment initiation may help to address some of the men's anxieties that result from misinformation about being HIV-positive or taking antiretroviral medication. Campaigns that characterize HIV testing as a routine practice, instead of anxiety-inducing incident-driven, may help increase regular testing and timely diagnosis of HIV infection. HIV testing counselors might capitalize on anxieties about being positive to promote safer sex behaviors. Men who test for HIV in the context of an intimate relationship should be counseled about the associated risks of foregoing condoms with intimate partners. Since none of the men mentioned preventing future transmission to potential partners as a reason for getting tested, this needs to be communicated more effectively as a benefit of knowing one's status. Given that MSM discuss HIV testing, educational efforts might target existing networks of MSM, which can also be capacitated to provide emotional support and address fear of HIV testing. Mobilization through social support might facilitate frequent testing.

Furthermore, it appears that MSM's awareness of having a choice between diverse testing sites and men's awareness of the advantages and disadvantages of such options might contribute to more optimal testing practices. Men should for instance know that rapid testing at a clinic reduces the time that they have to wait for results (68). For those who may feel more comfortable with HIV testing procedures that involve the collection of a whole blood specimen, testing at hospitals sites is a viable option that may also enhance linkage to care for those testing HIV-positive. While offering multiple options for where to test provides a means for men to select a preferred site for getting tested, continued efforts are needed to

ensure confidentiality around testing and the rights of MSM to test in an stigma-free environment. The perception that the onus is on MSM to find a testing site where stigma is not an issue suggests a need for systematic training for healthcare workers on clinical encounters with MSM, as well as for ongoing vigilance against stigma and discriminatory attitudes in the clinical environment: if unaddressed, stigma will remain a significant barrier to implementing a successful test and treat strategy among this key affected population. The findings also suggest that just expanding treatment alone will be insufficient to address HIV transmission and disease burden in the population; rather, efforts to expand testing and treatment need to consider the social context of HIV risk behavior and HIV testing. More generally, there seems to be an interest among MSM in living healthy lives, albeit for some men only after receiving a positive diagnosis. Being already receptive to the idea of behavior change and resulting positive health effects could be exploited to engage men in prevention discussions, explore how pleasure and healthy lifestyles can be integrated, and thus promote health in MSM more generally.

## ACKNOWLEDGMENTS

This research was supported by a grant from the National Institute of Mental Health (R01-MH083557; Principal Investigator: Theo Sandfort, Ph.D.). The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institute of Mental Health or the National Institutes of Health. The HIV Center for Clinical and Behavioral Studies is supported by a center grant from the National Institute of Mental Health, P30 MH43520 (Principal Investigator: Robert Remien, Ph.D.). We wish to thank OUT Well-being, the communities that partnered with us in conducting this research, and the study participants for their contributions. We also thank study staff at all participating institutions for their work and dedication.

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**Table I**

Interview Questions Regarding HIV Testing

| |
|---|
| 1. Imagine that you want to get tested for HIV, would that be easy for you to do? |
| IF NOT: What makes it difficult? |
| 2. Would you know where you should go to get tested? |
| Where would you go to get tested? Why there? |
| 3. How do you think your friends feel about getting tested for HIV? |
| 4. Do you think that most of your friends have been tested for HIV? |
| Can you say why you think that is? |
| 5. What would be the most important reason for you to get tested for HIV? |
| 6. What would be the most important reason for you **not** to get tested for HIV? |
| 7. Have you yourself ever been tested for HIV? |
| IF NO: Have you ever considered getting tested? What is your most important reason for not getting tested?<br>IF YES: How many times would you say that you have been tested for HIV in total?<br>IF MORE THAN ONCE: Can you say why you have tested that many times?<br>Do you test on any kind of regular schedule, e.g. every six months or every year?<br>Can you say why you do this? |
| 8. You are not required to tell me, but would you share your last test result with me? |

**Table II**

Characteristic of Study Participants*

| Name | Age | Sexual identification | Gender orientation | Preferred role in anal sex | Relationship status | Testing practice | HIV status at latest test | Testing: hard or easy? | Friends feelings about testing | Have most friends tested? |
|---|---|---|---|---|---|---|---|---|---|---|
| Amose | 24 | Gay | Masculine | Receptive | Single | Every three months | Negative | Easy | Mixed | Yes |
| Bandile | 35 | Gay | Feminine | Receptive | Long-term with man who has female partner | Annually | Negative | | Scared | No |
| Banele | 25 | | Masculine & feminine | Receptive | Single | Tested three times | Negative | Hard | Scared | Does not know |
| Baruti | 28 | Gay | Masculine & feminine | Insertive | Single | Every three months | Negative | Easy | Mixed | Yes |
| Danisa | 25 | Gay | Feminine | Versatile | Single | Never tested | Not known | | | |
| Dingani | 22 | Gay | Feminine | Receptive | Regular male partner and casual partners | Last test nine months ago | Negative | Easy | Scared | Some |
| Kabelo | 39 | Gay | Masculine | Receptive | Single | Last test five years ago | Negative | Hard | Scared | No |
| Kefentse | 26 | Gay | Feminine | Receptive | Single | Last test five years ago | Negative | Easy | Scared | No |
| Khutala | 26 | Gay | Masculine & feminine | | Single | Tested twice | Negative | Hard | Scared | Some |
| Lenka | 30 | Gay | Masculine | Insertive | Engaged to male partner | “As often as I can” | Negative | Easy | Scared | No |
| Lerato | 30 | Transgender/gay | Feminine | Receptive | Single | Tested recently | Positive | Hard | | |
| Lesedi | 24 | Gay, “homosexual” | More feminine | Versatile | Regular male partner | Tested twice | Positive | Easy | | No |
| Lutendo | 20 | Gay | More feminine | Receptive | Single | Tested once | Negative | Hard | Scared | No |
| Mamello | 23 | | Feminine | Receptive | Single | Last test in high school | Negative | Hard | | Some |
| Masopha | 29 | Gay | Masculine and feminine | | Single | Tested twice | Negative | Hard | Okay | Yes |
| Moeketsi | 24 | “On the down low” | Masculine | Insertive | Regular female partner | Annually | Negative | | Scared | Some |

| Name | Age | Sexual identification | Gender orientation | Preferred role in anal sex | Relationship status | Testing practice | HIV status at latest test | Testing: hard or easy? | Friends feelings about testing | Have most friends tested? |
|---|---|---|---|---|---|---|---|---|---|---|
| Mosegi | 22 | | Feminine | Receptive | Beginning relationship with straight-identified man | Never tested | Not known | Hard | | Does not know |
| Nku | 32 | | More masculine | Insertive | Regular female partner | Negative | Negative | Hard | Scared | No |
| Ntsumi | 20 | Bisexual | Masculine | Insertive | Regular female partner and casual male partners | Last test five years ago | Negative | Hard | Scared | No |
| Qukeza | 24 | Bisexual | Masculine | Insertive | Two regular female partners and regular male partner | Never tested | Not known | Hard | Scared | No |
| Rendi | 24 | Gay | More feminine | Receptive | Single | Never tested | Not known | Hard | Scared | No |
| Sanele | 29 | Gay | Masculine | Insertive | Single | Tested three times | Negative | Easy | Mixed | |
| Siphelele | 25 | “Drag queen” | Feminine | Receptive | Relationship with straight man (long-distance) | Last test three years ago | Negative | Easy | | |
| Sizwe | 25 | Gay | Feminine | Receptive | Regular male partner who has female partner | Annually | Negative | Easy | Scared | |
| Thandiwe | 25 | Gay | Masculine and feminine | Versatile | Regular male partner | Tested five times | Positive | Easy | Scared | Yes |
| Thuso | 30 | Gay, “drag queen” | Feminine | Receptive | Single | Never tested | Not known | Easy | Scared | Yes |
| Tlotliso | 21 | “Homosexual” | Feminine | Receptive | Ongoing open relationship with man | Tested twice | Negative | | Scared | Some |
| Tshediso | 36 | Gay | More feminine | Receptive | Regular male partner and casual partners | Tested once | Negative | Easy | Mixed | |
| Tsie | 22 | Gay | More feminine | Receptive | Regular male partner | Every three months | Negative | Easy | Scared | Yes |
| Tumelo | 20 | | Masculine | Receptive | Regular male partner and casual partners | Tested twelve to sixteen times | Negative | Now easy | Scared | No |

| Name | Age | Sexual identification | Gender orientation | Preferred role in anal sex | Relationship status | Testing practice | HIV status at latest test | Testing: hard or easy? | Friends feelings about testing | Have most friends tested? |
|---|---|---|---|---|---|---|---|---|---|---|
| Unathi | 21 | Gay | More feminine | Receptive | Regular male partner and casual partners | Every three months | Negative | Easy | Scared | |
| Wushe | 25 | Gay | More feminine | Receptive | Single | Never tested | Not known | Hard | Mixed | Some |

*Of all 81 participants, only participants quoted in the text are included. Empty cells mean that information is not available.