

EXECUTIVE SUMMARY

Background

In order to manage the South African HIV epidemic, government and civil society must not only respond to HIV within the general population but must also develop focused programmes that address the needs of key populations such as men who have sex with men (MSM).¹ In fact, the *National Strategic Plan on HIV, STIs and TB 2012–2016* (SANAC 2011) calls for the inclusion, in the national response to the HIV epidemic in South Africa, of all key populations at higher risk of HIV exposure. Without considering key populations such as MSM, any response to HIV in South Africa will prove inadequate and fruitless. To date, there has been a lack of up-to-date surveillance data, collected from several sites using the same sampling approach, on the prevalence of HIV and associated risk behaviours among MSM in South Africa; and hence this study was undertaken to fill this information gap. The study, called the Marang² Men's Project, was implemented among MSM in the three largest cities of South Africa: Cape Town in the Western Cape, Durban in KwaZulu-Natal and Johannesburg in Gauteng. The primary objectives of this study were to achieve the following:

- Provide baseline data on HIV prevalence among MSM in each of the three cities.
- Provide baseline data on HIV risk behaviours among MSM in each of the three cities.
- Establish a protocol for an implementable national HIV bio-behavioural surveillance programme for MSM.

Methodology

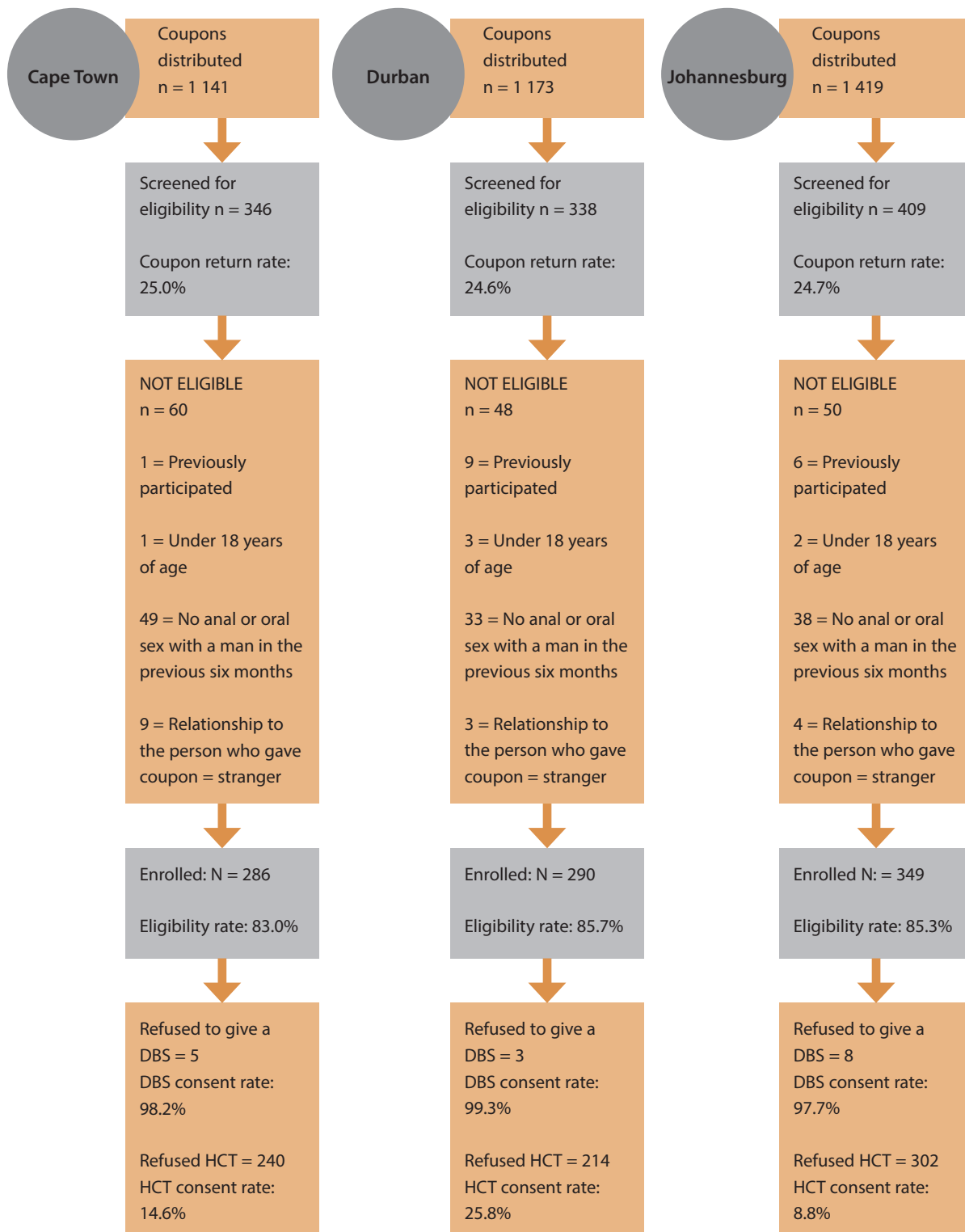
The Marang Men's Project was conducted in two phases. In Phase 1, pre-surveillance formative research was conducted in the three study cities in order to inform the implementation of the HIV bio-behavioural survey. In Phase 2, the HIV bio-behavioural survey included a quantitative questionnaire to assess HIV risk behaviours, and dried blood spot (DBS) specimens were collected as a biomarker test for the prevalence of HIV among MSM. Respondent-driven sampling (RDS)³ was used to recruit MSM into our study. In total, 925 MSM were eligible for survey participation and were included in our analysis (Cape Town: N = 286, Durban: N = 290 and Johannesburg: N = 349) (see Figure i). Crude and adjusted HIV and behavioural risk-factor prevalence were estimated, and weights that adjusted for personal network size and biases in recruitment were generated using the respondent-driven sampling analysis tool (RDSAT) version 7.1.38.

1 The term 'men who have sex with men' (MSM) refers to a form of sexual behaviour. It is not limited to individuals with any one sexual orientation or gender expression or identity. For the purpose of this study, MSM refers to all biological males who have sex with other biological males, irrespective of the person's sexual orientation and gender expression.

2 All Human Sciences Research Council (HSRC) projects funded by PEPFAR through the CDC Cooperative Agreement U2GPS000570 were given the prefix Marang as part of the project name. *Marang* is a Sesotho word meaning rays of the sun, representing hope.

3 RDS is a form of chain-referral sampling where members of the subpopulation of interest are accessed through their social networks. (For a more detailed description, see Chapter 2: Methodology in this volume.)

Figure i: Recruitment flow diagram of the Marang Men's Project, 2012–2013



Results

Socio-demographic characteristics

In Cape Town, Durban and Johannesburg, survey respondents were predominantly young, with a median age of 24 years (age range: 18–64 years), black (except in Cape Town, with 51.3% of the study sample describing themselves as ‘coloured’), and self-identified as gay, and for the most part reported a single marital status. Although certain socio-demographic similarities are apparent across all three study cities, an over-representation of particular subcategories of MSM was also apparent. For example, in Durban, almost half (48.9%) of the respondents were students, while the majority of respondents in both Cape Town and Johannesburg reported that they were unemployed.

We also measured the prevalence of self-reported sexually transmitted infections (STIs). Having an STI or a history of STIs suggests that someone is also at risk of HIV infection. In Cape Town, 28.1% of our study sample reported diagnosis of an STI in the previous 12 months. The comparable proportions were 42.7% in Durban and 39.2% in Johannesburg.

Finally, estimates of ever having been in prison differed in each of the three study cities. For example, adjusted estimates for being in prison were high among respondents in Cape Town (68.7%), followed by 42.6% in Johannesburg and 8.7% in Durban. Thus, with regard to previous incarceration, the study sample in Cape Town was an over-representation of a particular subcategory of MSM.

HIV prevalence

In adjusted analysis, HIV-prevalence estimates were high among MSM, and results indicate that MSM are disproportionately affected by HIV in each of the three study cities. In Cape Town, the overall HIV prevalence among MSM was 22.3% (CI 95%, 14.7–30.1), while the overall HIV prevalence among MSM sampled in Johannesburg was 26.8% (CI 95%, 20.4–35.6). HIV prevalence was unusually high among respondents in Durban (48.2%; CI 95%, 37.9–55.4).

HIV prevalence was found to increase with age in each of the three study cities. In each city, HIV prevalence was higher among MSM aged 25 years and older than among MSM in the 18–24 years age category. Concerning the association between HIV prevalence and sexual orientation, results demonstrated that self-identified gay men were more likely to be HIV positive than those who identified as bisexual or straight among MSM sampled in each of the three study cities. For instance, in Cape Town, self-identified gay MSM were three times more likely to be living with HIV than their bisexual counterparts were. The statistical difference between the two was significant. Survey respondents in Durban who identified as gay had higher HIV prevalence (47.7%) than those who identified as bisexual (41.0%), although the difference was not significant. In Johannesburg, the HIV prevalence found for those who identified as gay was significantly higher (43.7%) than for respondents who identified as bisexual (17.9%) or straight (9.8%).

Among respondents in Cape Town, those who were more educated were 1.5 times more likely to be HIV positive than those with lower educational attainment. Among MSM sampled in Durban, students had the highest HIV prevalence (31.0%), followed by those who were unemployed (23.9%), and HIV prevalence was lowest among those who were employed (17.0%). In Johannesburg, employed men had the highest HIV prevalence (47.7%), followed by those who were unemployed (25.8%), while students had the lowest HIV prevalence (13.8%).

Married and/or cohabiting respondents had a higher HIV prevalence (31.1%) than their single counterparts (18.9%) among respondents in Cape Town. Similarly, in Durban, married and/or cohabiting respondents had a higher HIV prevalence (51.0%) and non-significant increased risk of HIV infection than those who were single. The opposite was, however, the case in Johannesburg, where married and/or cohabiting respondents had a lower HIV prevalence (14.4%) than respondents who were single (31.6%).

Behavioural risks

Condom use at last sex with a male partner

Correct and consistent condom use is one of the most effective prevention strategies available in the AIDS response. Overall, self-reported condom use at last sex with a male partner was high (>80.0%) in all three of the study cities, with no significant differences reported on any of the socio-demographic characteristics.

HIV-testing history

HIV testing is an entry point for HIV prevention as well as for both treatment and care of people living with HIV. MSM are often reluctant to access health care services such as HIV counselling and testing (HCT) services because of real or perceived experiences of discrimination. However, the majority of respondents in each of the three cities self-reported ever having tested for HIV (>80.0%), and had tested for HIV in the previous 12 months (Cape Town: 71.7%, Durban: 72.3% and Johannesburg: 61.0%).

Sexual practices in the previous six months

Unprotected anal intercourse (UAI)⁴ puts MSM at increased risk of HIV infection. In the three study cities, the majority of the survey respondents reported preferring insertive anal intercourse in the previous six months (Cape Town: 59.0%, Durban: 56.8% and Johannesburg: 51.3%). Concerning self-reported vaginal sex, 28.4% of respondents in Cape Town and 23.0% in Johannesburg reported having engaged in vaginal sex in the previous six months, with 8.0% of MSM reporting the same in Durban.

Number of male sex partners and regular male/female sex partners in the previous six months

Having more than one sex partner is associated with an increased risk of HIV infection. One of the strategies used to prevent HIV infection is to promote fidelity to one sex partner. We found that in each of the three cities, more than half of all respondents reported that they had had three or more male sex partners in the previous six months. Concerning regular male/female sex partnerships, two-thirds of respondents in each of the three study cities reported having a regular male partner in the previous six months. In all, 16.0% of respondents in Cape Town, 2.8% in Durban and 38.7% in Johannesburg reported having a regular female sex partner in the previous six months.

Transactional sex with men in the previous six months

Engaging in either selling or buying sex (transactional sex) is a risk for HIV infection, especially when condoms are not used correctly and consistently during sex. In Cape Town, adjusted estimates indicated that 28.8% of the respondents had 'bought sex from other men' while over half of the sample (52.6%) had 'sold sex to men' in the previous

⁴ Having anal intercourse without the use of male or female condoms is referred to as unprotected anal intercourse. 'Barebacking' is used to describe the practice of unprotected anal intercourse among MSM.

six months. Hence, the study sample in Cape Town appears to be an over-representation of a social network of MSM sex workers. In Durban, the overwhelming majority (90.3%) of MSM reported not 'buying sex from men'; but 11.4% reported 'selling sex to men' in the previous six months. In adjusted analysis, 18.5% of MSM sampled in Johannesburg reported 'buying sex' and 23.1% reported 'selling sex' to men in the previous six months.

Alcohol use and sexual intercourse

The association between alcohol use before sex and HIV infection has been highlighted by various studies conducted among men and women in the general population. For MSM, however, research has been scant in terms of examining the role that alcohol plays in HIV risk-taking behaviours. In the Marang Men's Project, 54.9% and 53.6% of respondents in Cape Town and Durban, respectively, indicated that they 'sometimes' had sex after drinking alcohol, while 72.3% of respondents in Johannesburg indicated the same. A few of the respondents (7.0%–16.0%) in each of the three study cities reported 'always' engaging in sexual intercourse after consuming alcohol.

Use of health care services

Public health care services in South Africa could be termed heteronormative – that is, they assume heterosexuality and are thus generally not inclusive of MSM. This inevitably deters MSM from seeking out appropriate health care services and disclosing sexual practices to health care workers. In the Marang Men's Project, the majority of respondents in the three study cities self-reported having used public health care services such as public hospitals (>65.0%) and a community health centre (>55.0%) in the last 12 months. In terms of the place of their most recent HIV test, respondents indicated that they were tested at gay-friendly health centres (29.0% in Cape Town, 25.7% in Durban and 39.9% in Johannesburg) the most, and had also accessed public hospitals (21.6% in Cape Town, 25.8% in Durban and 26.2% in Johannesburg) for HIV testing in the last 12 months. In Durban, of note and in contrast to the other study cities, almost a quarter of the respondents (23.8%) indicated that their most recent HIV test had been done by a traditional healer.

Knowledge of HIV information

Correct knowledge about both HIV transmission and prevention is a prerequisite for informed decision-making leading to behavioural change among those who engage in risky behaviour, or for maintenance of protective behaviour. Knowledge indicators included both correctly identifying ways of preventing the sexual transmission of HIV and rejecting major misconceptions about HIV transmission. When individual items were considered, the majority of respondents had high levels of HIV knowledge. However, when levels of knowledge about HIV transmission were measured as a composite score based on how many respondents had correctly answered all five questions, as recommended by the Joint United Nations Programme on HIV/AIDS (UNAIDS 2013), the levels of knowledge were found to be moderate in all three study cities (40.0% in Cape Town, 42.3% in Durban and 48.7% in Johannesburg).

Sources of useful HIV information

We asked respondents to identify the most useful sources of HIV information that they had received in the previous 12 months. The majority of respondents in each of the three study cities reported having received the most useful HIV information from their friends (72.1% in Cape Town, 61.9% in Durban and 79.6% in Johannesburg). Following this were: clinic/hospital/doctor's office (69.5% in Cape Town, 62.4% in Durban and

74.6% in Johannesburg), parent/family (59.0% in Cape Town, 56.4% in Durban and 79.0% in Johannesburg) and child/learner (46.7% in Cape Town, 57.4% in Durban and 60.4% in Johannesburg). Sources of useful HIV information that were least popular, according to respondents in each of the three study cities, included the following: place of work (37.9% in Cape Town, 43.8% in Durban and 47.8% in Johannesburg), the Treatment Action Campaign (TAC) (37.3% in Cape Town, 35.8% in Durban and 41.1% in Johannesburg), telephone hotlines (22.4% in Cape Town, 27.2% in Durban and 36.8% in Johannesburg) and traditional healers (20.9% in Cape Town, 31.2% in Durban and 27.1% in Johannesburg).

Experiences of police discrimination due to sexual orientation

South African legislation guarantees the right to sexual choice but often the very structures that are in place to protect those rights instil fear and mistrust among those who are socially marginalised. The Marang Men's Project found unusually high estimates of police discrimination due to sexual orientation among respondents in Cape Town, with 37.1% reporting police discrimination, while smaller proportions of respondents in Durban and Johannesburg reported the same (26.2% and 20.8%, respectively).

Ever been in prison and reported unprotected anal intercourse (UAI) (forced or consensual)

In the prison context, there is considerable coercion and sexual violence rather than gender-scripted roles.⁵ In addition, cramped single-sex living conditions as well as prolonged periods of imprisonment in overcrowded cells promote casual or forced same-sex sexual relations among men, mostly involving anal sex.

In Cape Town, 4.9% of 178 respondents who had ever been in prison self-reported forced UAI, with forced UAI being higher among respondents aged 18–24 years than among those aged 25 years and older. Of those who reported consensual UAI, in Cape Town, 4.6% were HIV positive.

In Johannesburg, of 144 MSM who reported having been in prison, 16.1% reported having engaged in consensual UAI in prison, while 10.9% indicated that they had experienced forced UAI. Of those who reported forced UAI in prison, 11.9% were aged 18–24 years, with 9.7% in the 25 and older age category. Those who reported forced UAI tended to be more educated (had completed Grade 12 and higher) and single. Of those who reported consensual UAI in prison, 15.9% were HIV positive.⁶

Recommendations

It is hoped that the information collected in the Marang Men's Project will enable better planning for an appropriate response to the HIV epidemic among MSM in the three study cities. We hope that the following recommendations will inform the national HIV-research and service-implementation agenda for MSM:

5 'Gender-scripted roles' in this instance refers to traditional gender roles of female submissiveness and male dominance.

6 With regard to the MSM sampled in Durban, we did not perform computations for the item 'ever been in prison and reported UAI' as the proportion that reported this was very low.

1. Taking into consideration the high HIV prevalence among MSM in each of the three study cities, we advocate for a comprehensive, national combination HIV-prevention programme for MSM. This would entail targeted HIV-prevention, care, treatment and counselling services for this key population.
2. Given the high HIV-prevalence estimates for MSM in each of the three study cities, MSM-specific health care services that currently provide services such as antiretroviral (ARV) treatment to this key population might find it challenging to continue to carry this burden. Hence we recommend that MSM-friendly health care services be mainstreamed into public health care systems.
3. Our study revealed the persistence of discrimination due to same-sex sexual orientation. Thus it is also important to address issues of human rights and the persistence of discrimination within structures that are supposed to provide protection of these rights.
4. Furthermore, we make an urgent call for more comprehensive service provision for key populations such as prison populations. HIV greatly affects prison populations and, proportional to the size of these populations, accounts for a disproportionate number of new HIV infections – indicating that HIV preventions to date have not reached and benefited these individuals.
5. HIV-prevention messaging should also be ‘mainstreamed’ to address not only HIV prevention for gay-identified MSM but also messaging for men who do not necessarily identify as openly gay but who engage in MSM behaviours during their lifetimes.
6. Despite the socio-cultural differences in each of the three study cities, similarities are apparent across the cities in the Marang Men’s Project regarding HIV risk behaviours of MSM. This should be borne in mind in the development of a national HIV-prevention programme for MSM.

The following recommendations are not necessarily informed by the results of the Marang Men’s Project but rather identify gaps regarding HIV research among MSM while also making recommendations for future research studies.

Firstly, it is recommended that an MSM population-size estimate be implemented, since the size of the MSM population in South Africa is not currently known. Size estimation is important for this key population in order to guide planning of HIV-prevention services in the areas where such services are most needed.

Secondly, it is recommended that surveillance of STIs among MSM be implemented, as the prevalence of STIs among MSM in South Africa is also not currently known. This is critical, since prevalence of STIs represents an important biomarker closely associated with HIV infection.

Thirdly, it is recommended that, at the next level of analysis, ethnographic modes of inquiry be used to shed light on the personal, social and structural contexts that frame sex and decision-making for MSM. This is because there is currently a lack of information on the social and sexual contexts in which sex and relationships between men occur in South Africa.

Finally, the high HIV-prevalence estimates found in our study among MSM in each of the three study cities highlight a need to implement a national HIV bio-behavioural surveillance programme for MSM. Hence, a key recommendation is to maintain linkages with the MSM community and other service providers for MSM throughout the implementation of a national HIV bio-behavioural surveillance programme.

In conclusion, the Marang Men's Project has demonstrated that there is an urgent need for interventions that respond not only to the heterosexual HIV epidemic but also to the HIV epidemic(s) among MSM in South Africa. The current survey therefore provides valuable information to SANAC, the national and provincial Departments of Health, and lesbian, gay, bisexual, transgender and intersex (LGBTI) organisations to both implement and advocate for improved programmes for the health of MSM.

Points for consideration

RDS does not sample a population directly, but via a connected social network. Hence, each network selected in the three study cities sampled different sectors of the population category 'MSM'. In Cape Town, for example, half of the respondents reported having engaged in transactional sex in the previous six months. This is an over-representation of a particular subcategory of MSM. In Durban, 48.9% of the study sample reported being a student. Given that the majority of the respondents in Durban consisted of students, the study in this city was probably biased towards a focus on younger MSM. In addition, MSM sampled in each of the three study cities were overwhelmingly urban, young (median age: 24 years), black, self-identified as gay, and unemployed. Furthermore, unfortunately recruitment of respondents was interrupted intermittently in Durban and Johannesburg for reasons beyond our control. This break in continuity negatively affected our recruitment rates in both study cities. Finally, the study also relied on self-reported information, and consequently under- and over-reporting on sensitive topics such as sexual behaviours, drug use, alcohol use and sexual intercourse, and experiences of sexual violence might have occurred. In particular, given the high HIV-prevalence estimates in each of the three cities, there might, due to social desirability bias, be significant over-reporting of condom use at last sex.