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The South African Marang Men's Project: HIV bio-behavioural surveys conducted among men who have sex with men in Cape Town, Durban and Johannesburg using respondent driven sampling

Allanise Cloete
Sean Jooste
Dr Musawenkosi Mabaso
Prof Leickness Simbayi
Prof Thomas Rehle
Prof Pamela Naidoo
On behalf of the
The South African Marang Men's Project Team

Launch of the South African Marang Men's Project, 11 November 2014, Human Sciences Research Council (HSRC), Pretoria, South Africa

Embracing positive living for our people

Outline

- Introduction
- Methodology
- Results
- Strengths and limitations of the study
- Recommendations
- Conclusions
- Acknowledgements

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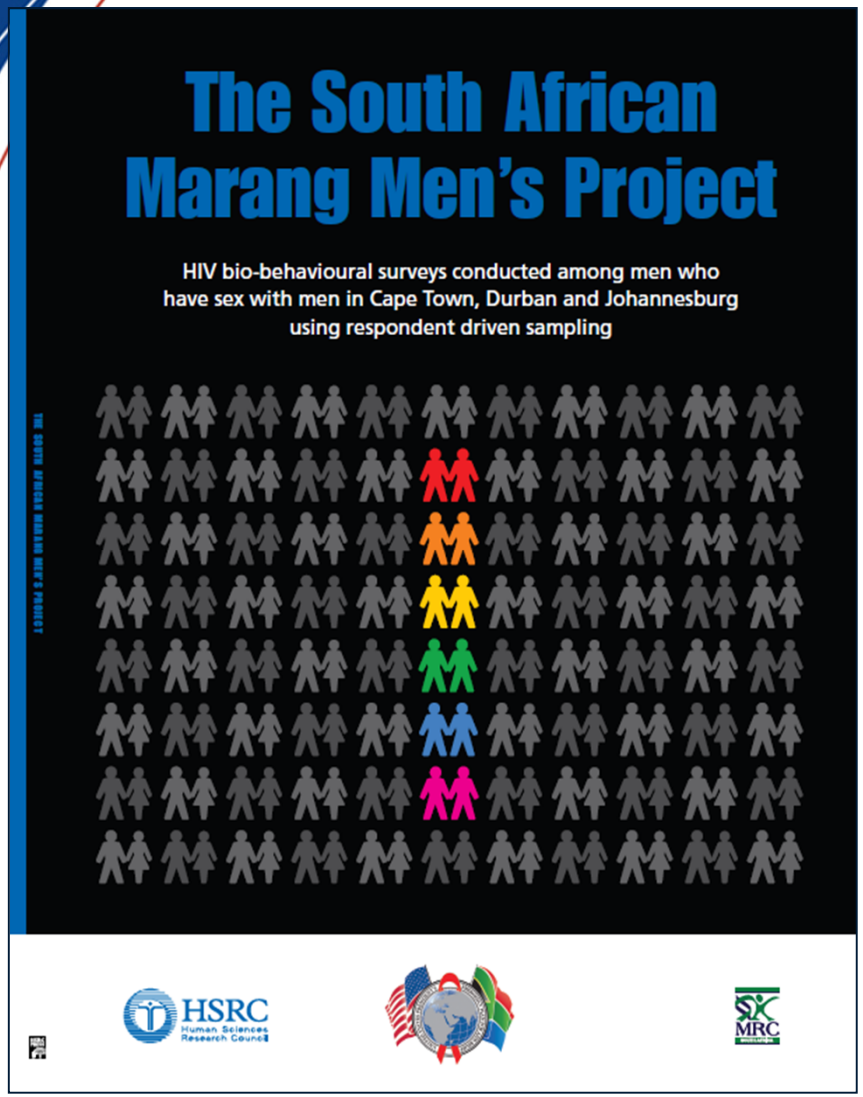
Introduction



Overall Aim

- To provide baseline regional data on HIV prevalence and risk behaviours among MSM as well as to establish a protocol for an implementable national HIV behavioural surveillance program for MSM

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Methodology

- Respondent driven sampling (RDS) was used to recruit MSM into our study
  - RDS is a form of chain - referral sampling that assumes that those best able to access members of a 'hard-to-reach' (no sampling frame exists for them) and 'hidden' (behaviours that they engage in are often illicit or socially unacceptable) population are their own peers.
  - MSM are both 'hard-to-reach' and often (still) 'hidden'
- RDS starts with initial respondents recruiting additional respondents from their network of friends
- Limiting the number of peers that any one participant can recruit helps to eliminate the effects of differing peer network sizes

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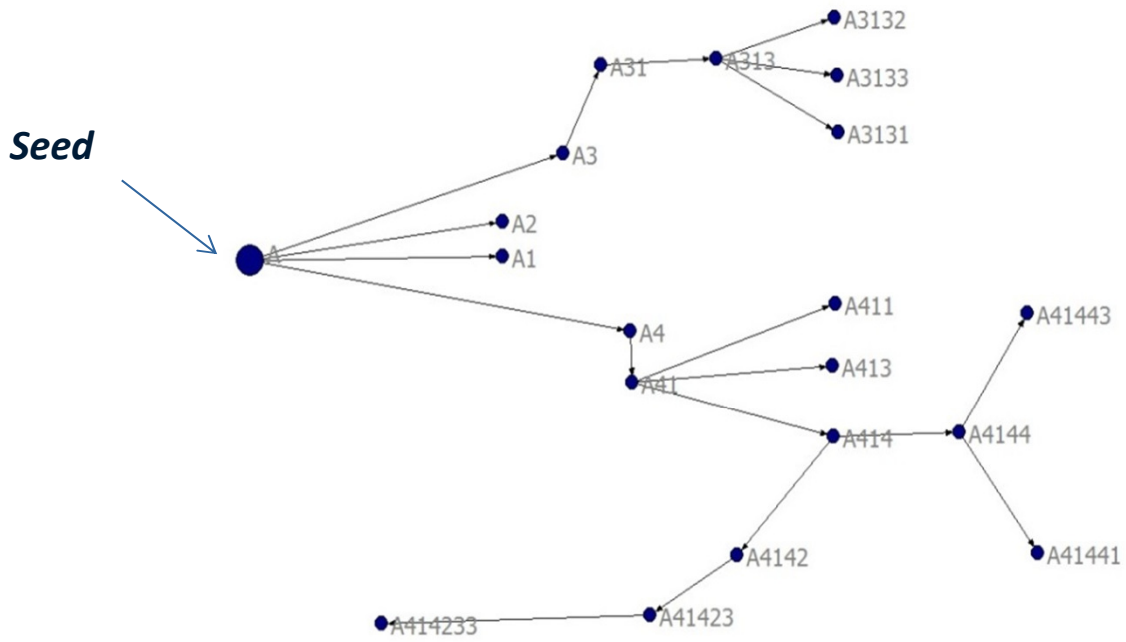
Survey procedures (1)

- BRYANT Research Systems © was used to manage and monitor data collection
  - Creates unique automated serial numbering system, linking members from a social network via a unique serial number



Survey procedures (2)

- Behavioural survey using audio computer-assisted self-interview (ACASI) or (computer-assisted personal interview) CAPI software

- HIV testing
  - Blood specimens were collected as a biomarker test for the prevalence of HIV among MSM

  - Survey respondents who chose to be informed about their HIV status or who requested risk-reduction counselling (with or without HIV testing) were referred to the HIV Counselling and Testing (HCT) counsellor available at each site.

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Inclusion criteria for survey participants

- The inclusion criteria for the survey were:
  1. Biologically male
  2. Aged 18 years or older
  3. (Self-reported) consensual sex with another man within the last 6 months
  4. Live in Cape Town, Durban or Johannesburg

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The study sample

- In total, 925 MSM participated in our study:
  - Cape Town: N=286
  - Durban: N=290
  - Johannesburg: N=349

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Data analysis

- 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 Respondent Driven Sampling Analysis Tool (RDSAT) Version: 7.1.38.

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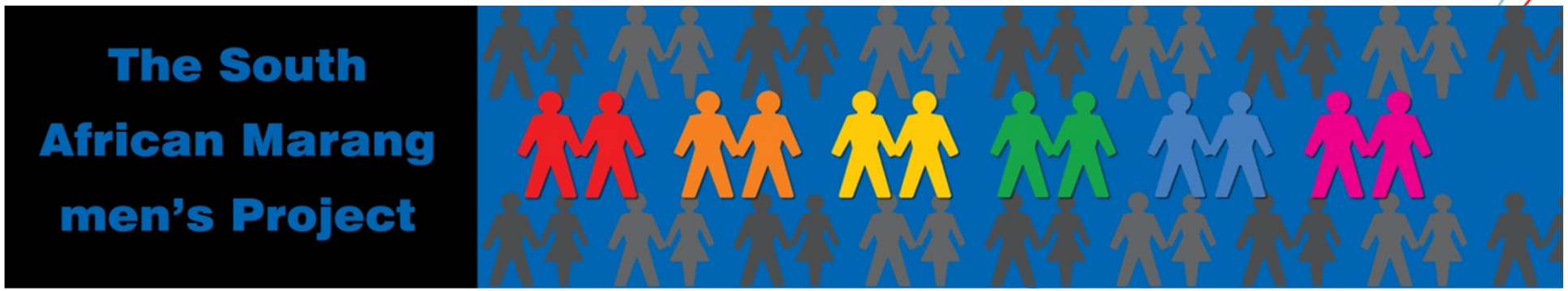
RESULTS OF THE SOUTH AFRICAN MARANG MEN'S PROJECT (2012-2013)

Socio-demographic characteristics of MSM sampled in Cape Town, Durban and Johannesburg



Socio-demographic characteristics (1)

- In each of the three study cities, survey respondents were predominantly:
  - Age
    - Young (median age: 24 years);
    - Age range
      - Cape Town and Johannesburg: 18-64 and;
      - Durban: 18-47
  - Race
    - Black South African (Durban and Johannesburg)
    - 51.3% Coloured (Cape Town)
  - Employment status
    - In Cape Town and Johannesburg, most MSM sampled reported being unemployed; with
    - 48.9% of MSM in Durban reported being a student
  - Marital status
    - The majority of MSM sampled in each study city reported a single marital status

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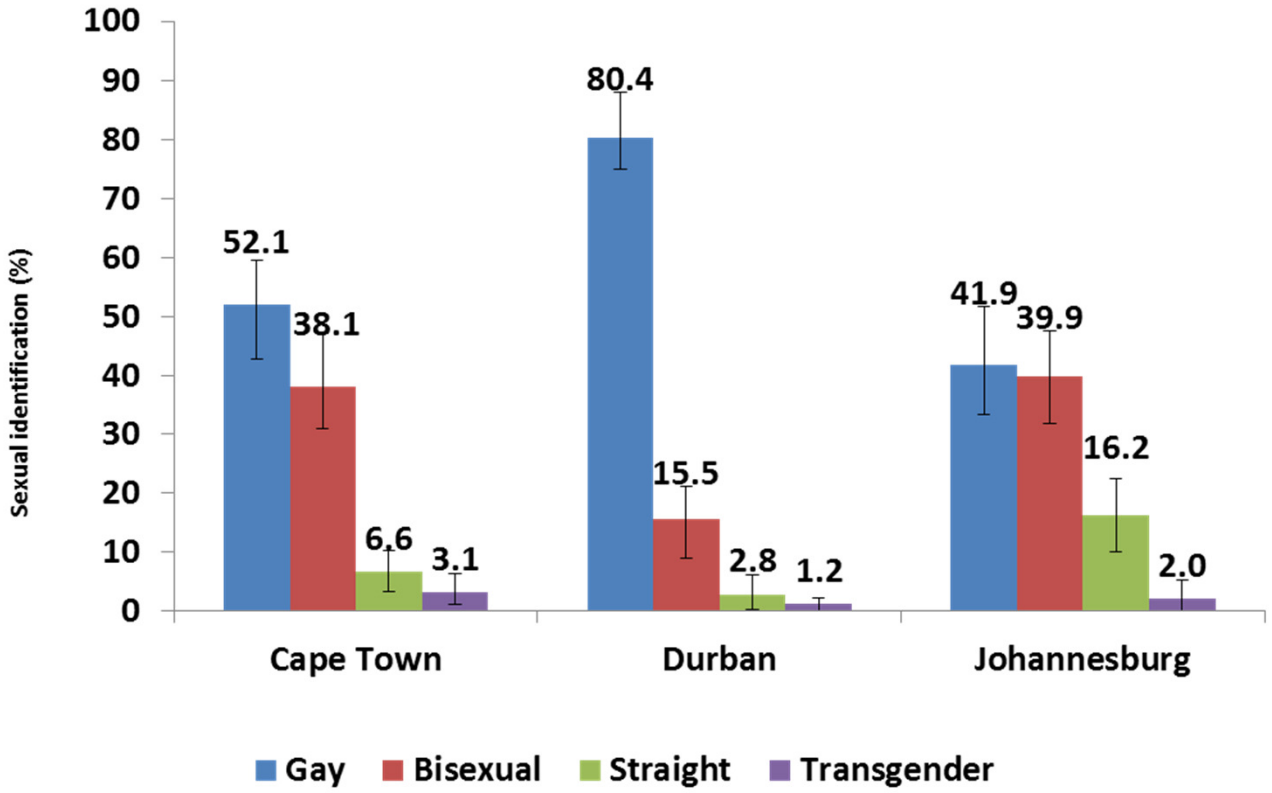
Socio-demographic characteristics (2)



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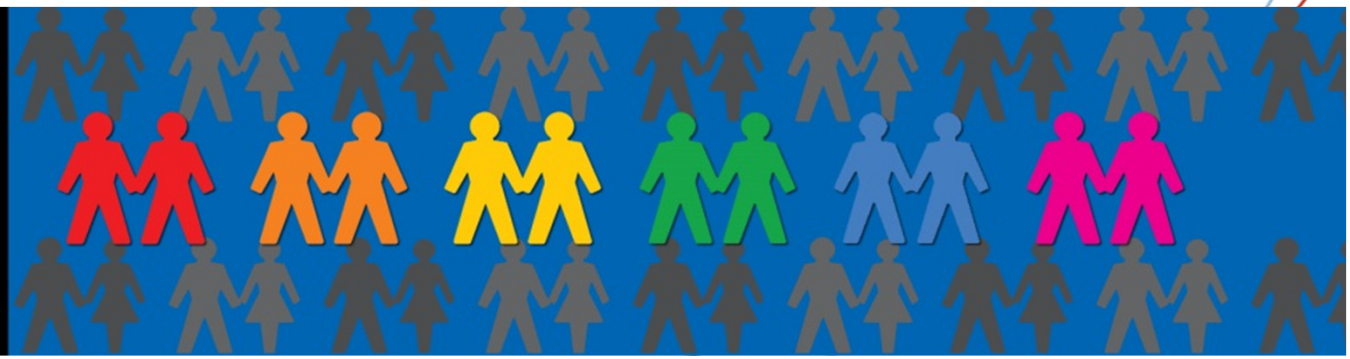
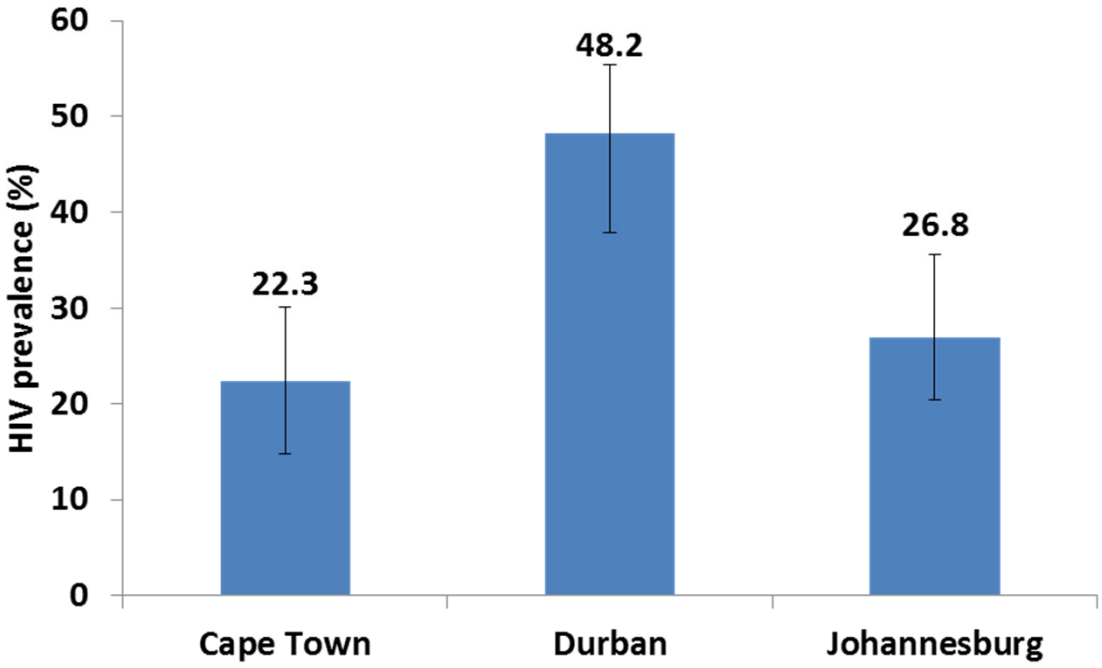
HIV prevalence among MSM sampled in the three largest cities of South Africa, 2012-2013

The South African Marang men's Project



HIV prevalence



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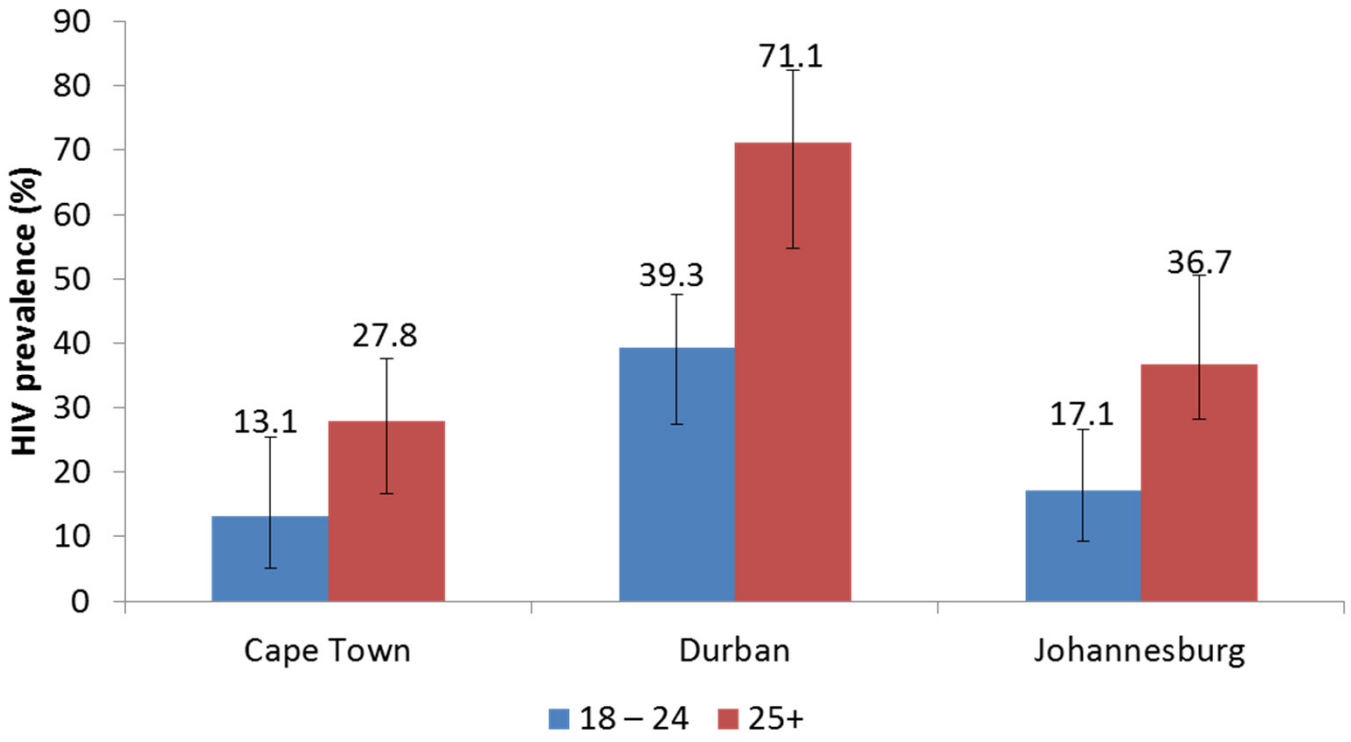
HIV prevalence by age



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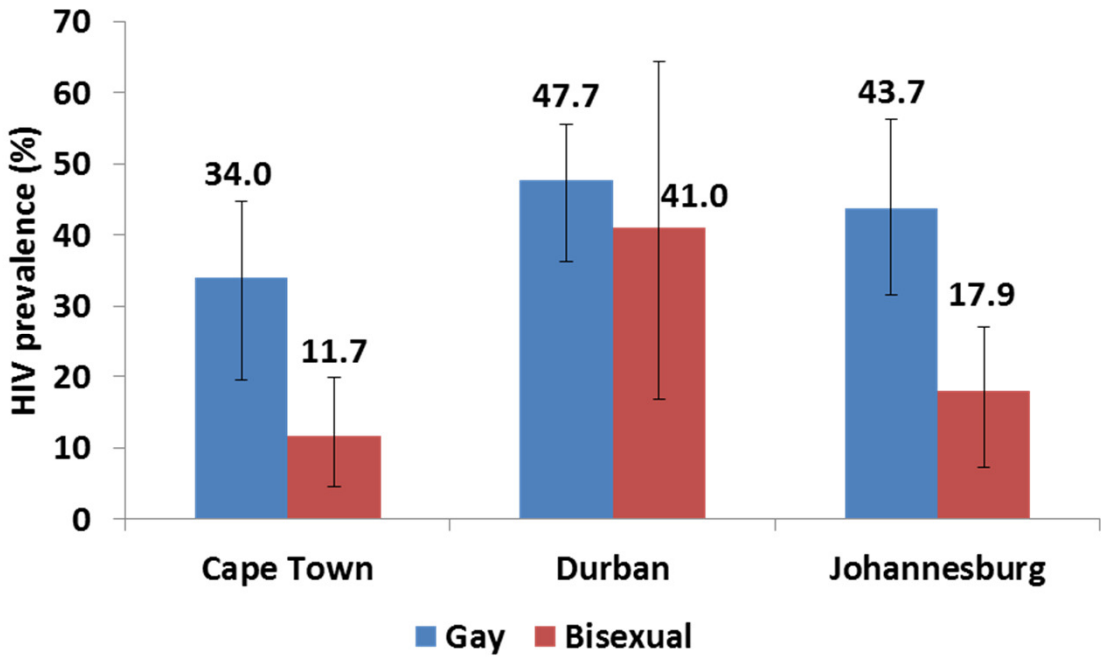
HIV prevalence by sexual identification



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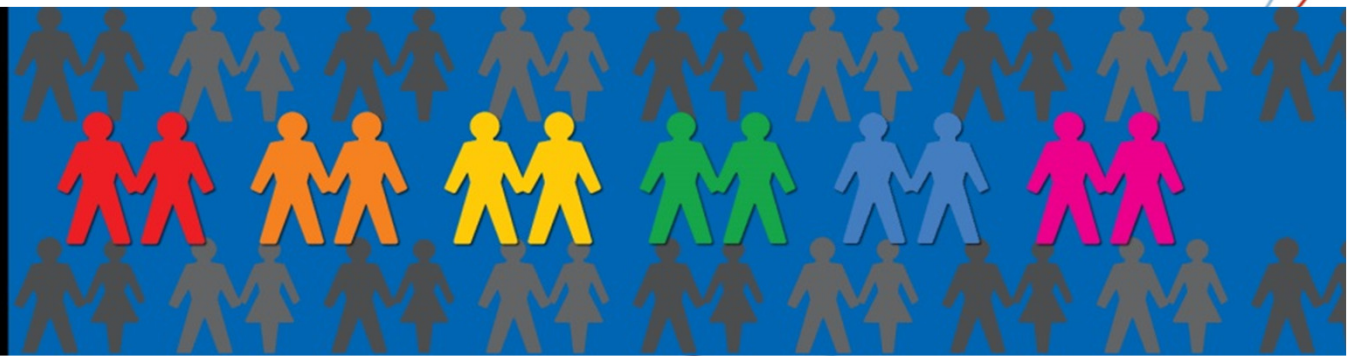
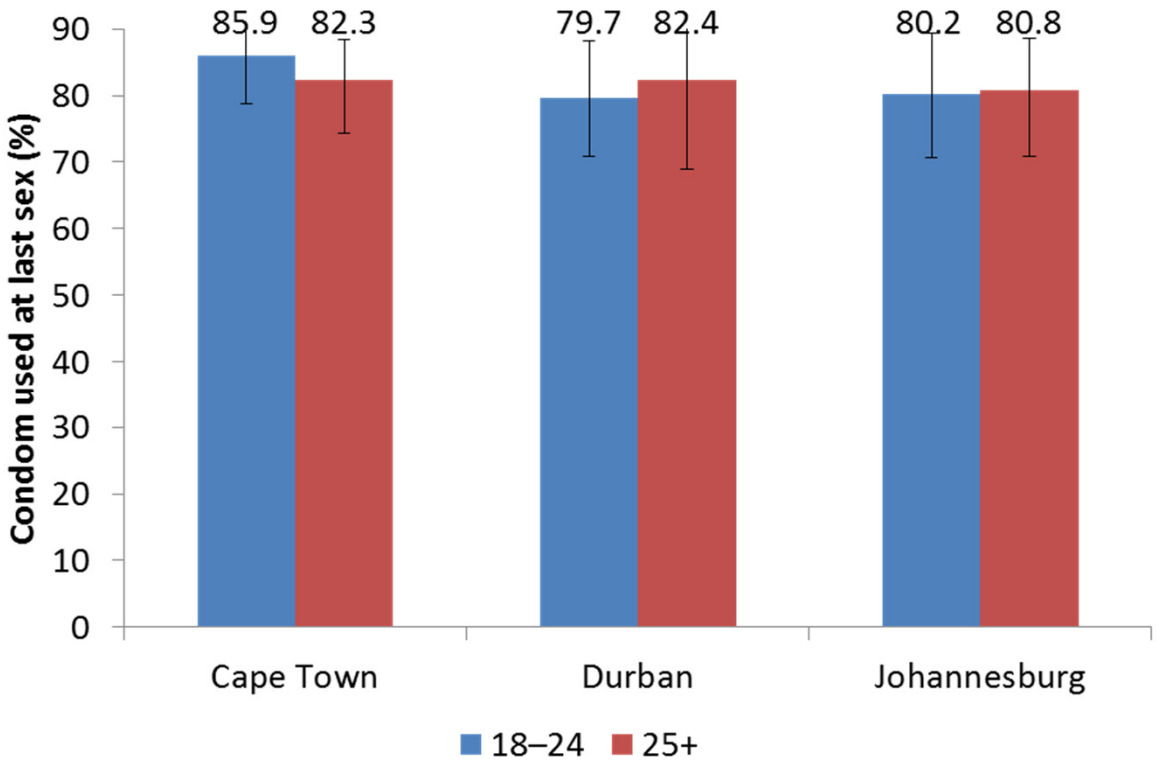
BEHAVIOURAL RISKS

The South African Marang men's Project



Condom use at last sex with a man by age



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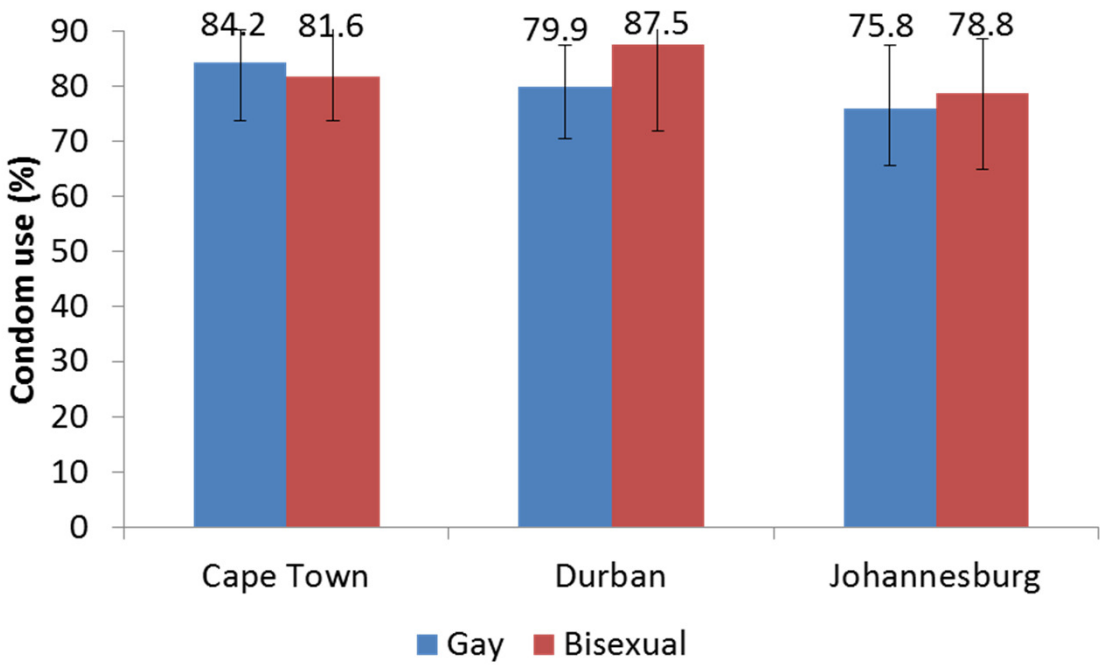
Condom use at last sex with a man by sexual identification



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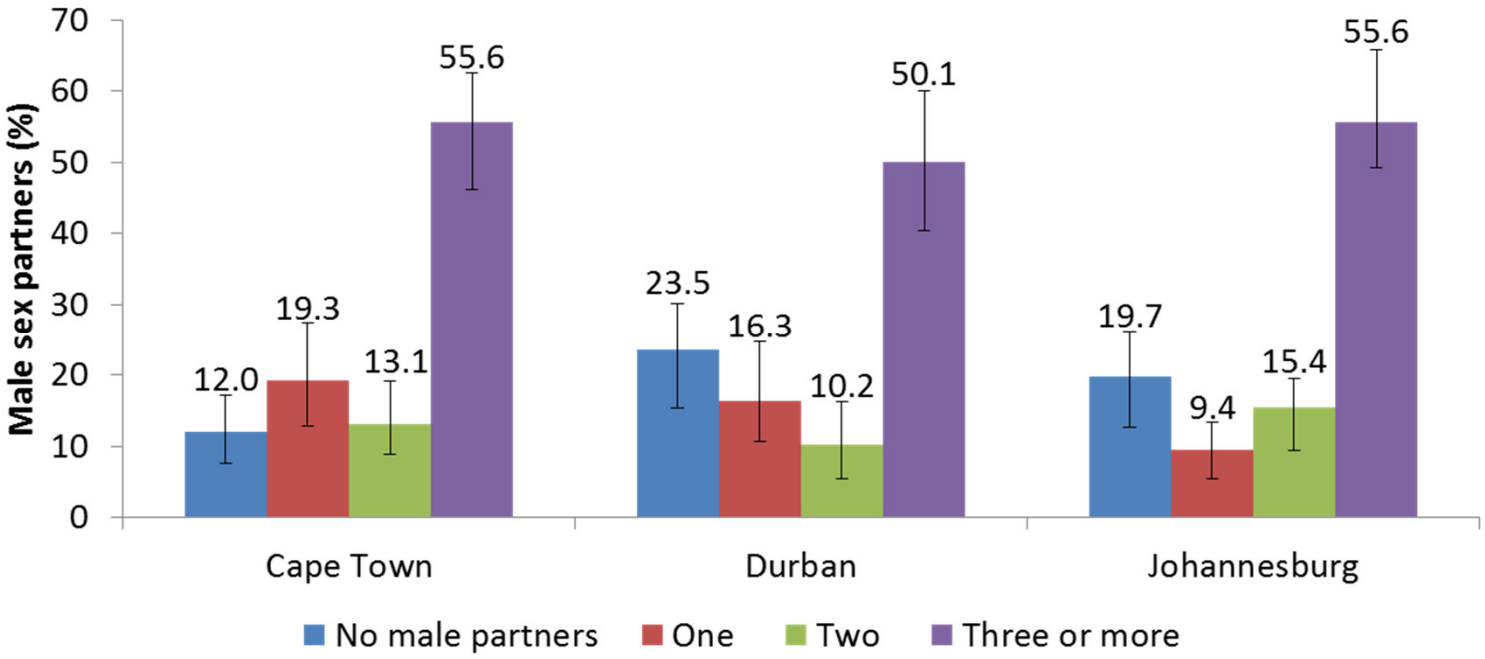
Number of male sex partners in the previous six months



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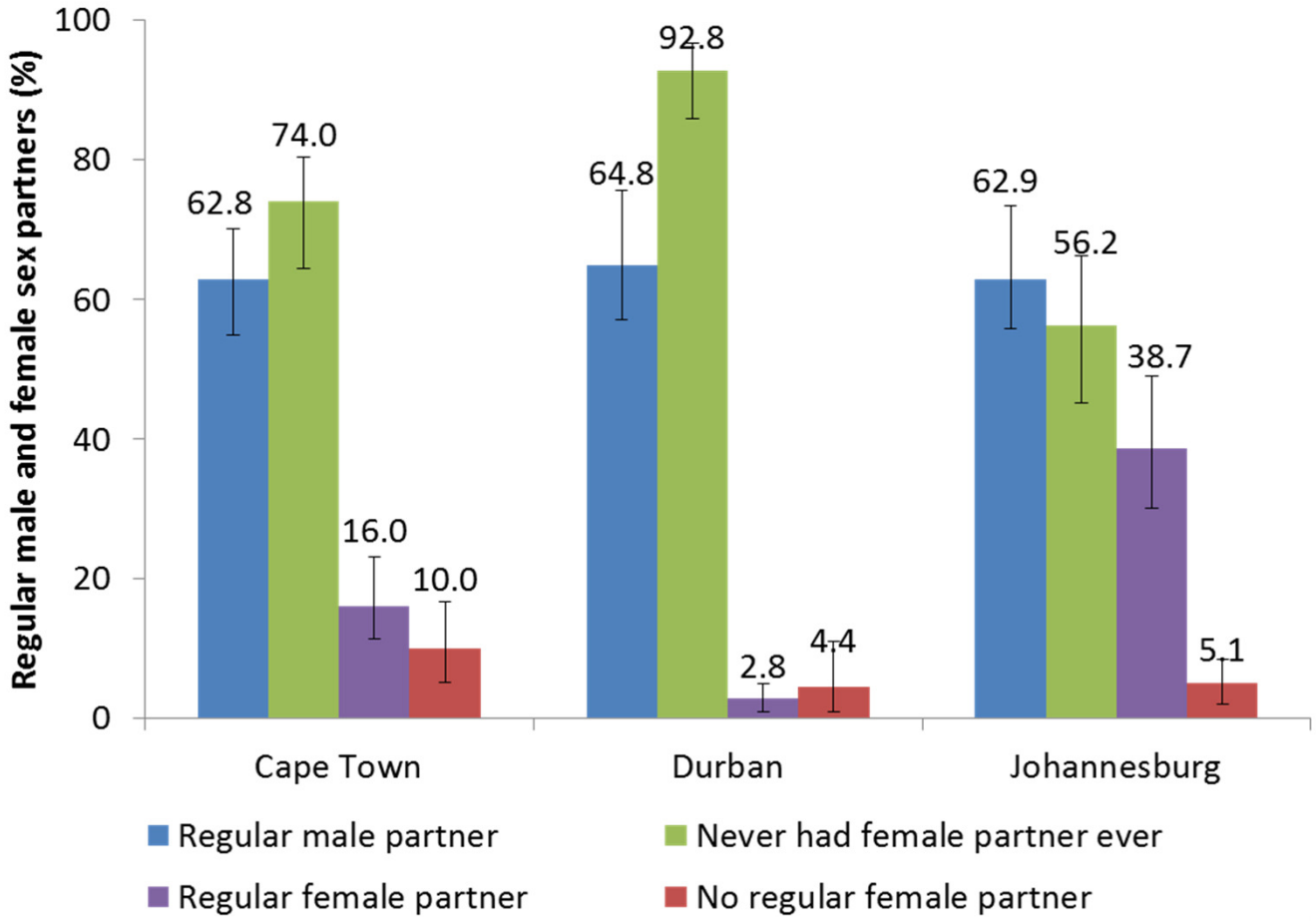
Number of regular male/female sex partners in the previous six months



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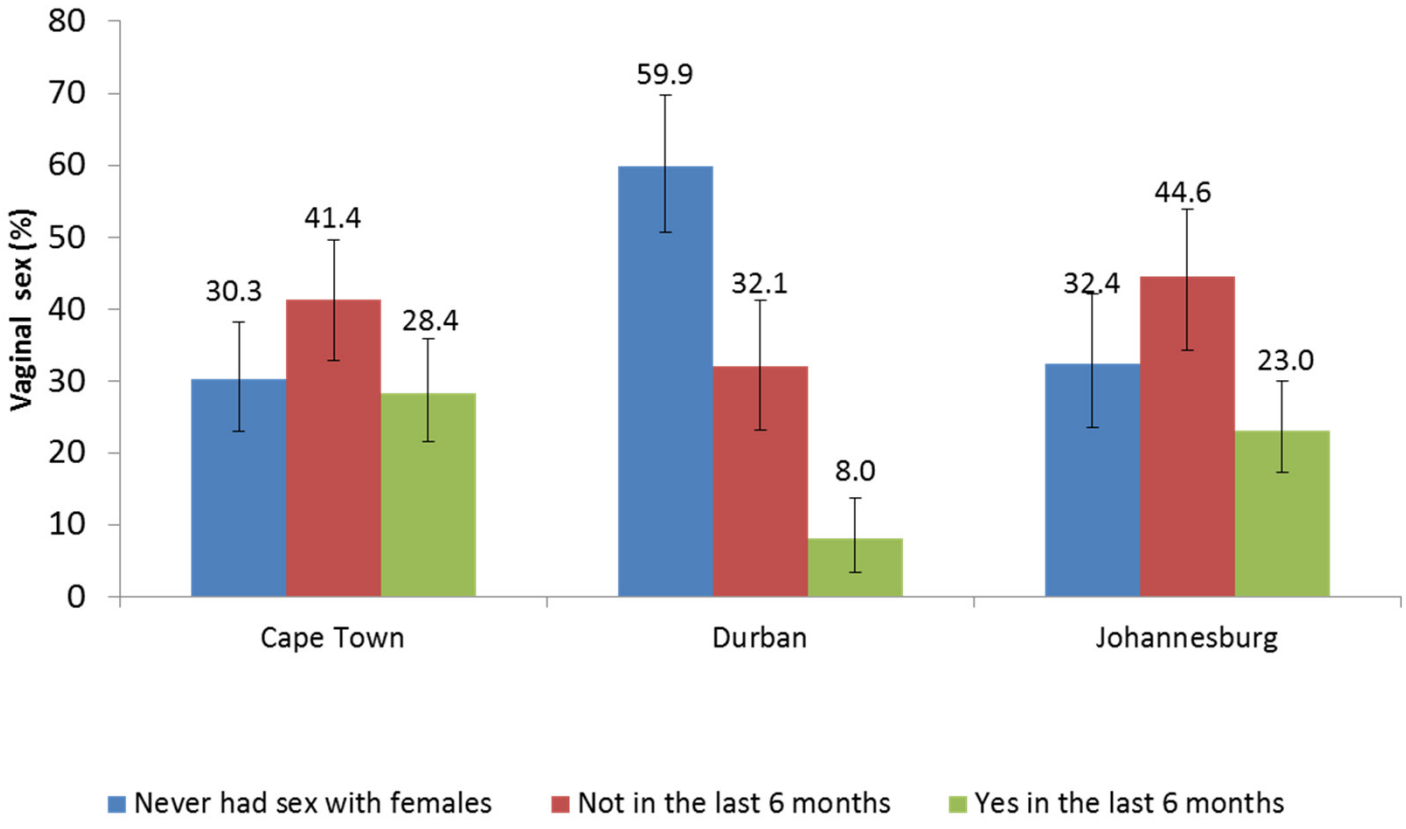
Vaginal sex in the previous six months



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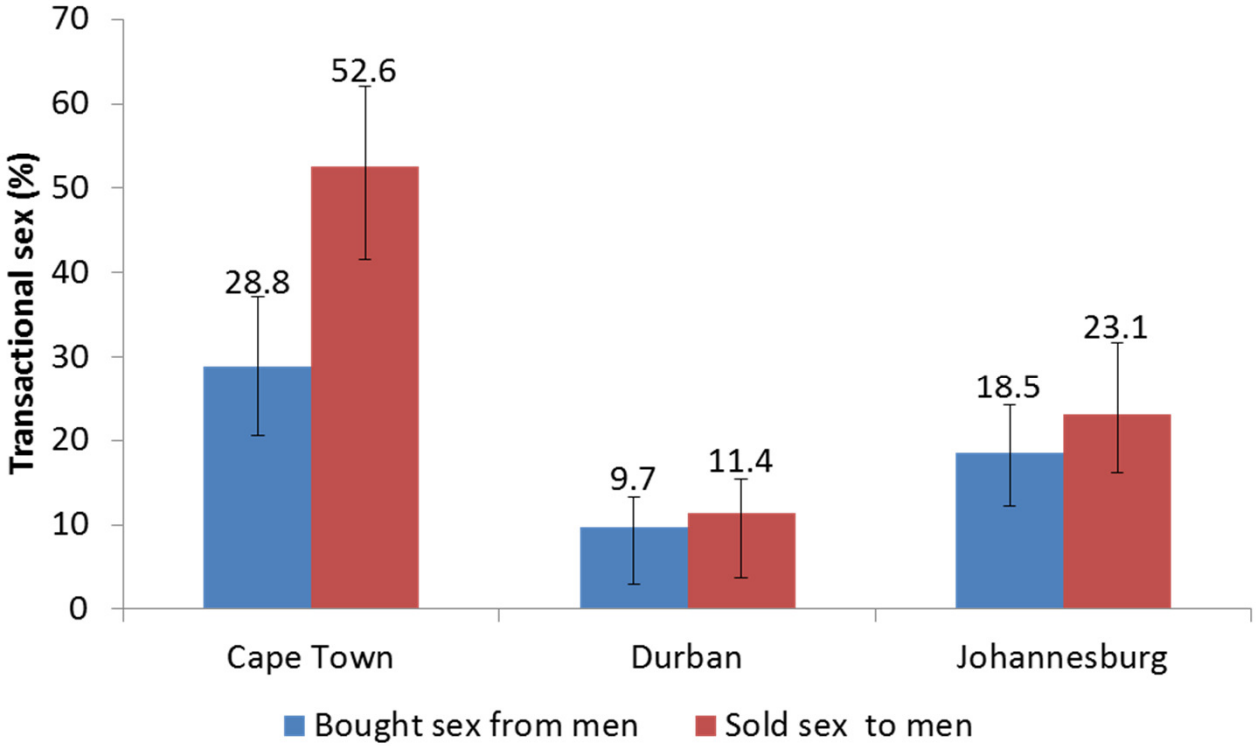
Transactional sex with men in the previous six months



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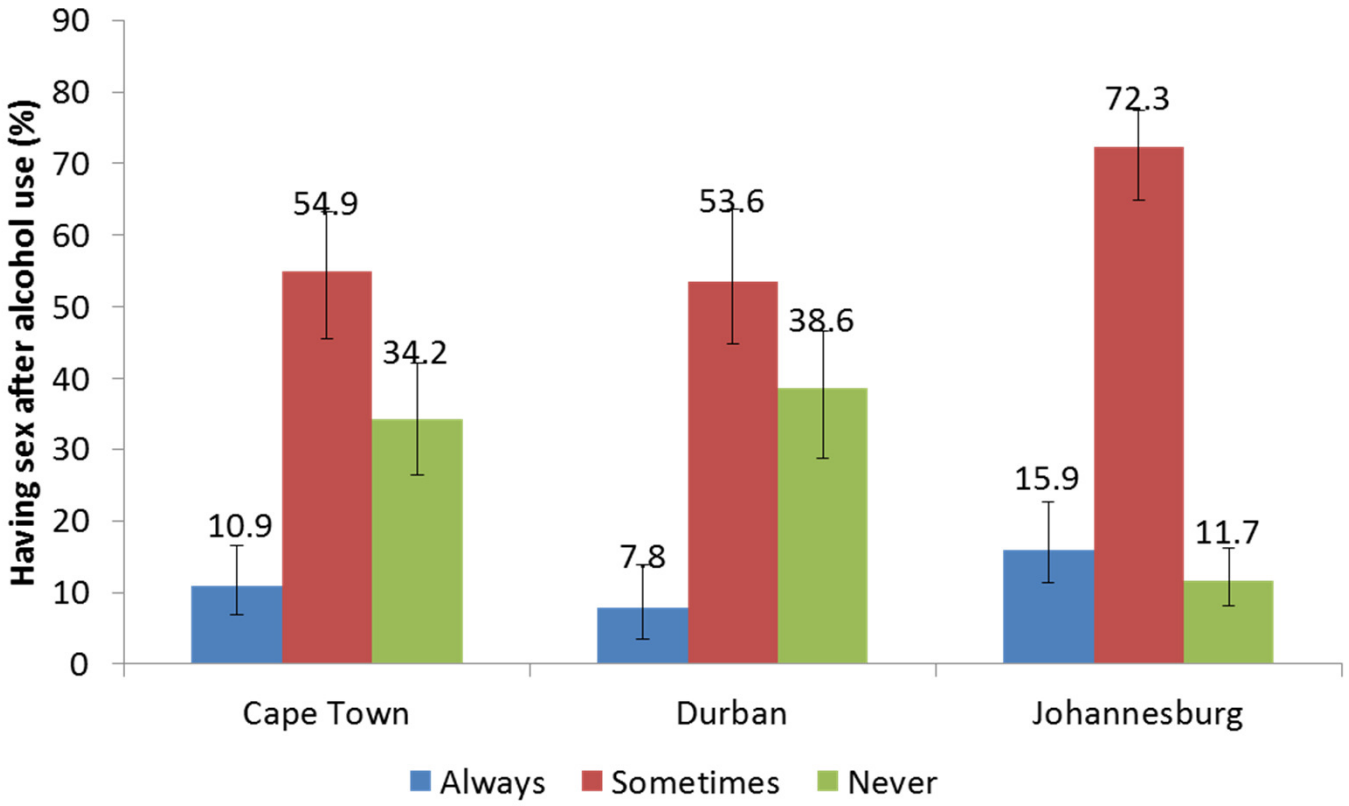
Alcohol use and sexual intercourse



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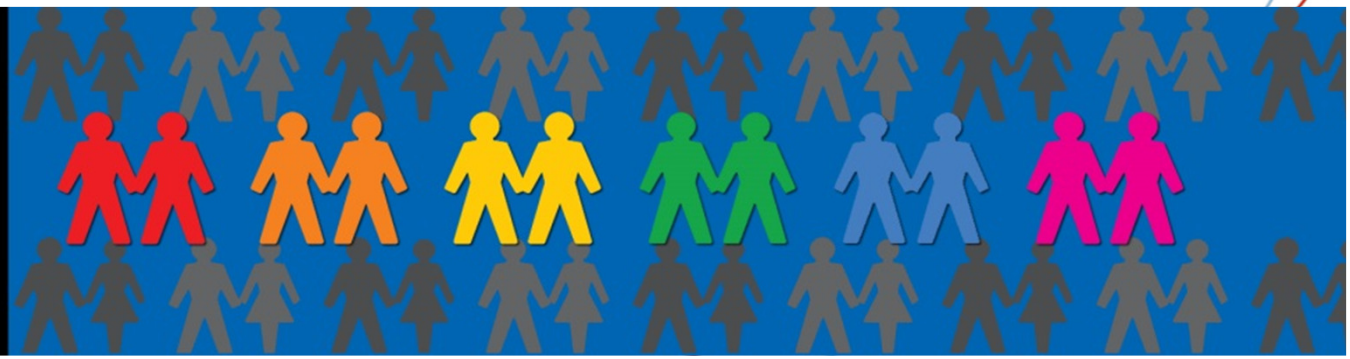
USE OF HEALTH CARE SERVICES

The South African Marang men's Project



Use of health care services

Variable	Cape Town		Durban		Johannesburg	
	Adjusted Estimates		Adjusted Estimates		Adjusted Estimates	
	%	95% CI	%	95% CI	%	95% CI
Used public hospital	72.9	[66.6-80.2]	65.8	[58.8-73.6]	67.1	[59.8-74.6]
Used community health centre	57.3	[49.7-65.4]	65.2	[53.9-73.2]	55.3	[48.4-64.1]
Used private hospital	57.1	[50.7-66.6]	46.9	[36.9-57.2]	53.3	[46.2-61.8]
Used HCT clinic	36.2	[27.7-43.7]	32.5	[24.9-42.8]	34.6	[26.1-41.9]

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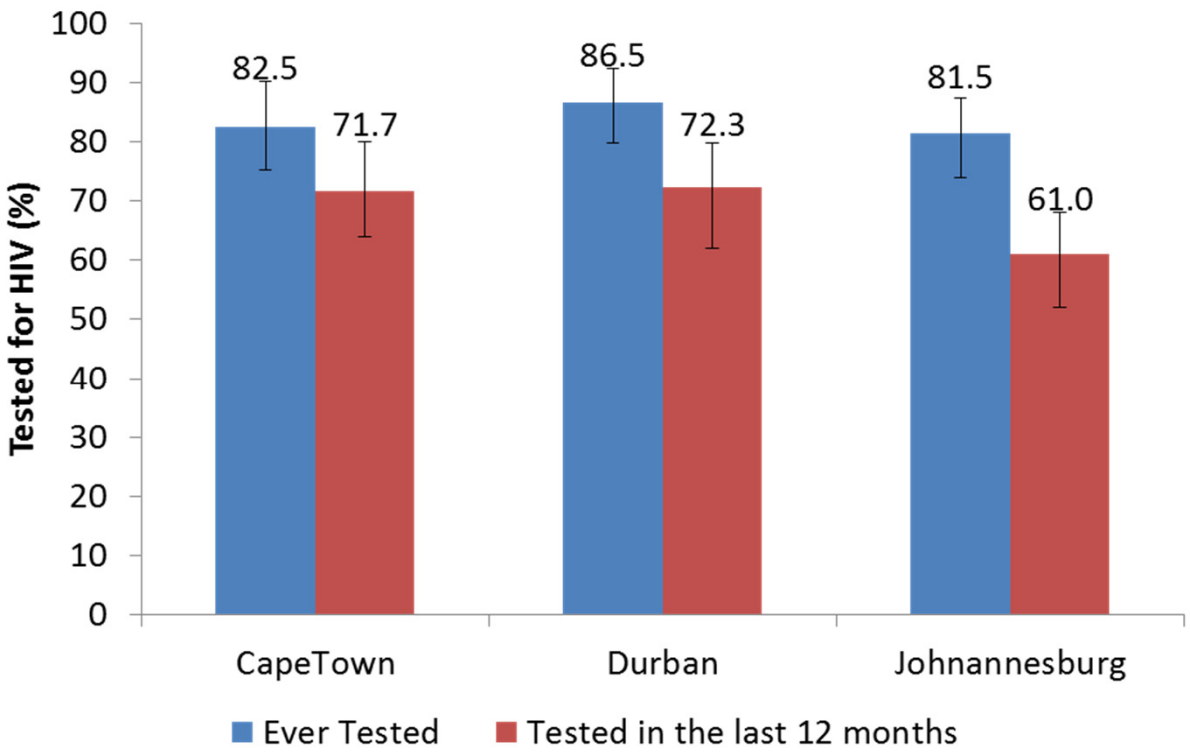
HIV testing history



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Place of most recent HIV test among MSM

Variable	Cape Town		Durban		Johannesburg	
	Adjusted Estimates		Adjusted Estimates		Adjusted Estimates	
	%	95% CI	%	95% CI	%	95% CI
Gay friendly health centre	29.0	[21.1-37.1]	25.7	[18.9-36.7]	39.9	[32.7-49.0]
Public hospital	21.6	[15.6-28.1]	25.8	[17.4-35.2]	26.2	[17.5-32.5]
Traditional healer	12.5	[8.4-17.6]	23.8	[14.9-32.1]	12.8	[8.2-17.4]

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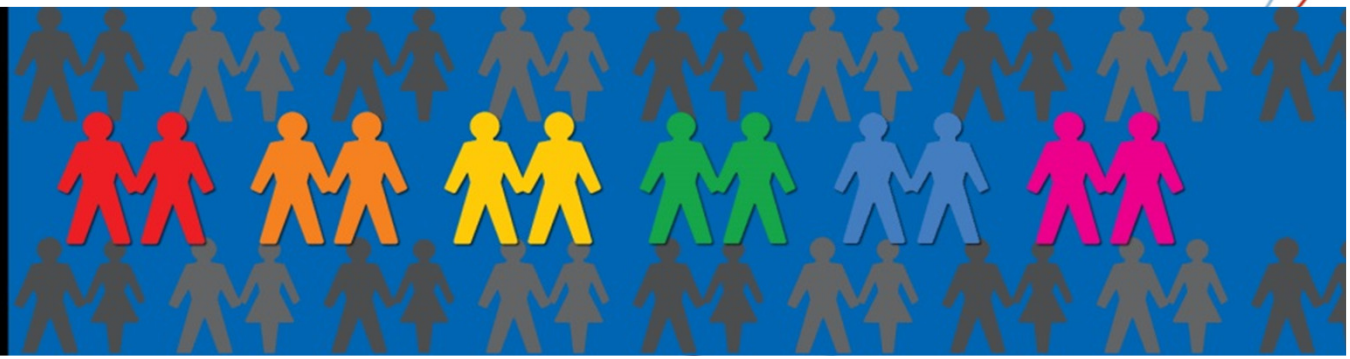
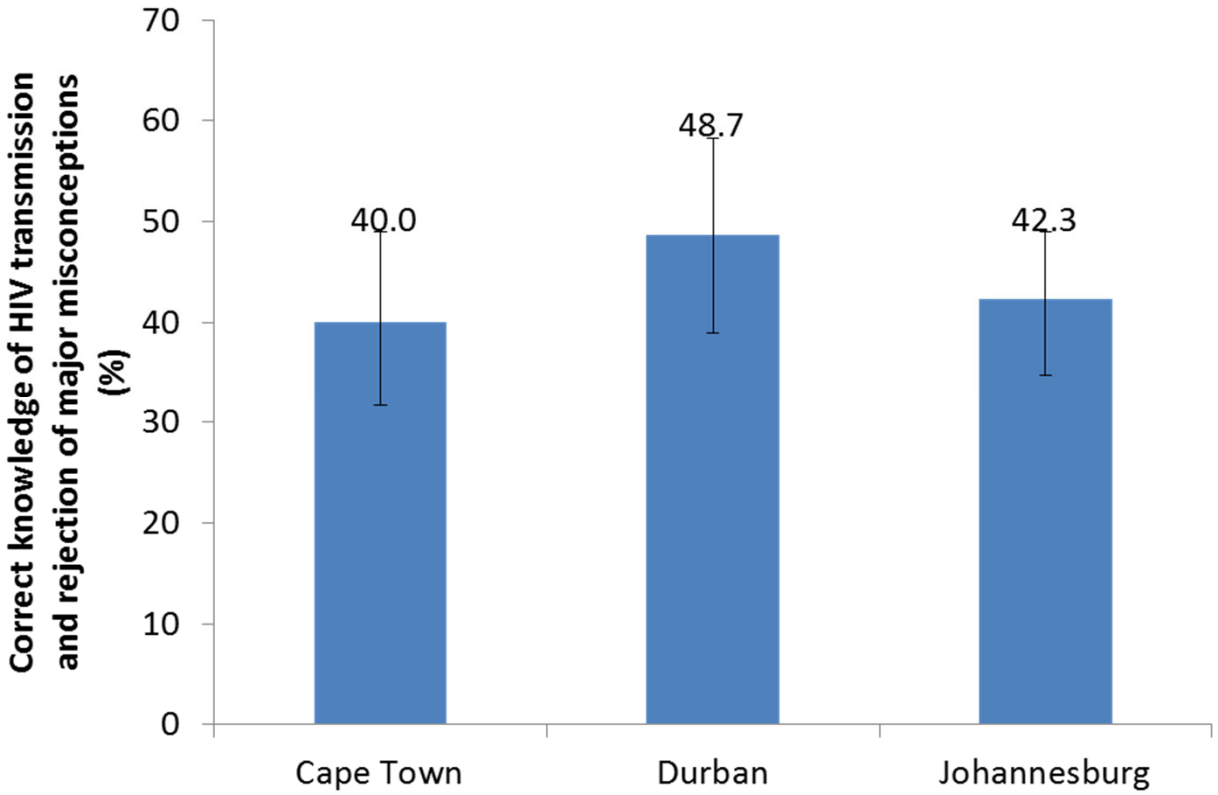
KNOWLEDGE OF HIV INFORMATION

The South African Marang men's Project



Knowledge of HIV information



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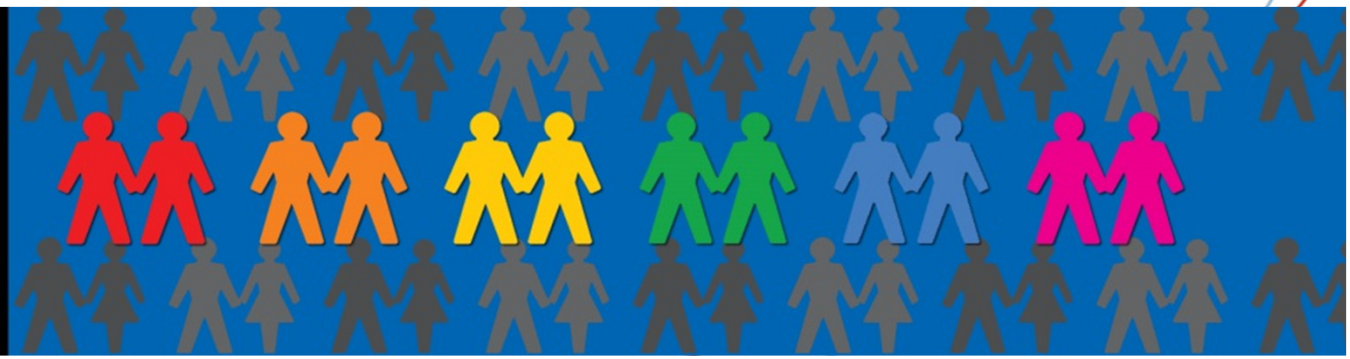
PREVIOUS INCARCERATION

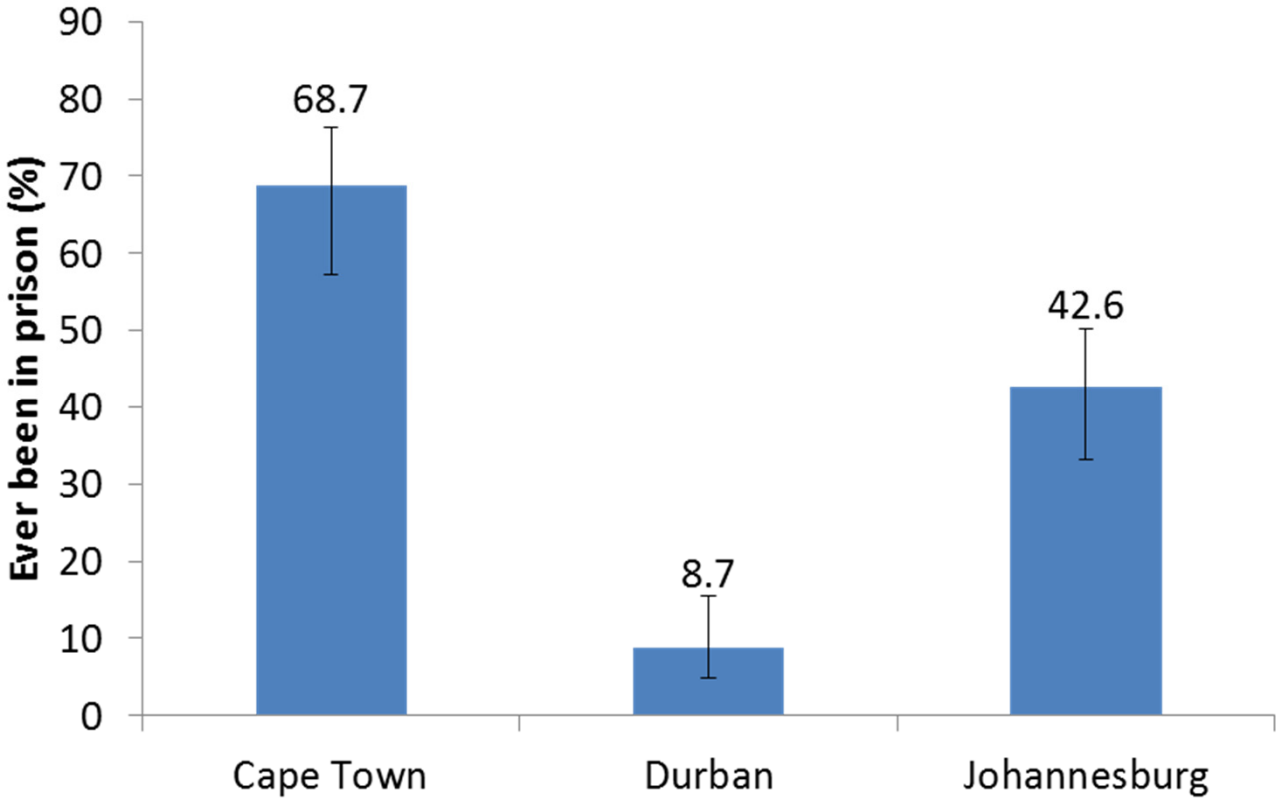
AND

EXPERIENCES OF POLICE DISCRIMINATION

The South African Marang men's Project



Previous incarceration



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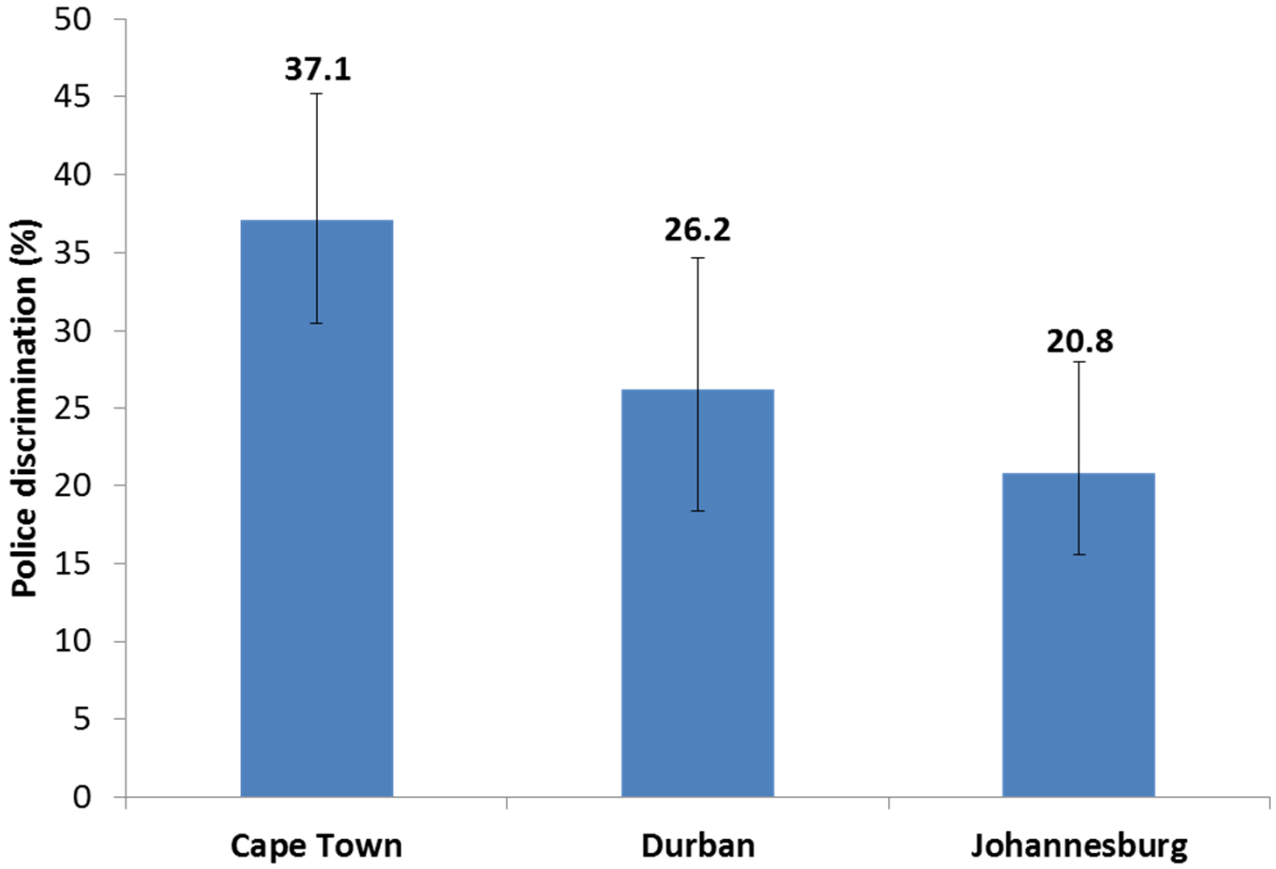
Experiences of police discrimination due to sexual identification



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Summary of the main findings of the Marang Men's Project (1)

To date, the Marang Men's Project is the largest HIV prevalence study conducted among MSM in South Africa. The main findings of the study were as follows:

- HIV prevalence was high among MSM sampled in each of the three study cities.
- Self-reported condom use at last sex with a man was high in each of the three cities.
- The majority of MSM in each of the three studied cities reported having three or more male sex partners in the last six months.

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Summary of the main findings of the Marang Men's Project (2)

- About two-thirds of respondents in each of the three study cities reported that they had a regular male sex partner in the last six months

- In each of the three study cities a substantial proportion of MSM reported having had a regular female sex partner in the last six months

- The largest proportions had used gay-friendly health centres for their most recent HIV test

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Recommendations (1)

1. Advocate for a comprehensive national combination HIV-prevention programme for MSM

2. MSM-friendly health care services be mainstreamed into public health care systems. In particular, sensitization of health care workers to provide non-judgemental care, counselling and treatment to MSM

3. 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

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Recommendations (2)

3. An urgent call for more comprehensive service provision for key populations such as prison populations

4. 'Mainstreaming' of HIV-prevention messaging

5. Lastly, in the Marang Men's Project similarities are apparent regarding HIV risk behaviours of MSM. This should be taken into consideration in the development of a national HIV-prevention programme for MSM.

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Strengths and limitations of the study (1)

- RDS does not sample a population directly, but via a connected social network
  - Hence, each network selected in the three cities sampled different sectors of the population category MSM
- Crude samples in each of our three study cities were an over-representation of particular subcategories or social networks of MSM.
  - Cape Town: High estimates of "selling sex" AND high estimates of previous incarceration
  - Durban: Students
- Self-reported information: Under-and over reporting on sensitive topics such as sexual behaviours (i.e. condom use at last sex with a man) and alcohol use

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Strengths and limitations of the study (2)

- The key advantage: Allows researchers to access traditionally 'hard to reach' target populations

- In many cases, RDS has been shown to be faster and less expensive than other sampling methods (i.e. time location sampling)

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In conclusion…

- Better planning of the response to MSM and HIV in the three cities
  - Although there might be some differences in the social and structural contexts of MSM in the three study cities where the Marang Men's Project was implemented
  - We believe that the Marang Men's Project provides valuable data and recommendations to inform the national HIV research and service implementation agenda for MSM
- the Marang Men's Project has demonstrated that there is an urgent need for interventions, which respond, not only to the heterosexual HIV epidemic but also to HIV among MSM in South Africa

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Funders

This research has been supported mainly

by the President's Emergency Plan for AIDS Relief (PEPFAR) through Centres for Disease Control and Prevention (CDC) under the terms of Cooperative Agreement Numbers 5U2GPS000570-05 and 5U2GGH000258-02

CDC for their consistent support of research in South Africa and for this study in particular.

Dr Carlos Toledo

Marina Rifkin

Prof Ehimario Igumbo

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Acknowledgements (1)

The men who consented to take part in this study.

- Without their voluntary participation, this study would not have been possible.

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  - Susie Welty and
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  - Alexander Marr and Dr Roberta Horth (Training in RDSAT)

- ICAP-SA for sensitization training

- The South African Medical Research Council (MRC)
  - Dr Loraine Townsend

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Acknowledgements (2)

- Lesbian, gay, bisexual, transgender and intersex (LGBTI) organisations and service providers for key populations in each of the three cities:
  - Cape Town: Sex Workers Education and Advocacy Taskforce (SWEAT);
  - Durban: the National LGBTI organization and the Durban Lesbian and Gay Community & Health Centre, in particular Nonhlanhla Mkhize "MC"
  - Johannesburg: The Anova Health Institute, in particular Glenn de Swart; United Community Projects and Sisonke Gender Justice; Dawie Nel (OUT), Anthony Manion at the Gay and Lesbian Archives (GALA) and the Forum for the Empowerment of Women (FEW)
- Global Clinical & Viral Laboratory in Durban, in particular Dr Lorna Madurai and Rumallen Naicker
- Bryan Hansen and Anthony Bull for data management system
- Reviewers: Prof Tim Lane (UCSF); Prof James McIntyre (The Anova Health Institute); Prof John Imrie (FuturesGroup); Prof Ehimario Igumbo (CDC-SA); Dr Carlos Toledo (CDC); Dr Batanayi Muzah (RightToCare); Pierre Brouard (Centre for the Study of AIDS); Eva Kiwango (UNAIDS) and Alasdair Reid (UNAIDS)
- Last, but by no means least: Fieldwork teams in each of the three study cities, HSRC staff and project administrators

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The 2012–2016 NSP on HIV, STIs and TB (SANAC 2011) acknowledged MSM as a key population for the HIV and tuberculosis (TB) response, in the following statement:

- *"MSM are at higher risk of acquiring HIV than heterosexual males of the same age, with older men (>30 years) having the highest prevalence (Burrell et al. 2010; Rispel & Metcalf 2009(a), (b); Shisana et al. 2009). It is estimated that 9.2% of new HIV infections are related to MSM"* (SANAC, 2011: 26)

Thank you for your attention