

# Population-based Estimates of MSM Male Sex Workers in South Africa

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# Rationale of the Study

- Existence of MSM male sex work is not known as prostitution remain highly stigmatized within society and government.
- Both MSM and sex workers are usually not targeted by HIV prevention and treatment programs and other health services
- High prevalence of HIV among the general MSM population in sub-Saharan Africa

# Background MSM survey conducted in Pretoria

- Of the total 339 MSM, 18% (95% CI: 13-25%) reported having received payment in exchange for sex in the past 6 months.
- Ten percent of those who were paid for sex had at least 10 paying partners in the past 6 months.
- MSM sex workers were less likely to self-identify as homosexual (37% versus 64%) compared to non-MSM sex workers.

# Background MSM survey conducted in Pretoria Cont....

- MSM sex workers were more likely to have had sex with a female partner in the past 2 months compared to MSM not selling sex (45% versus 19%); about half did not use condoms with female partners.
- MSM sex workers were more likely to have unprotected anal sex with another man (41% versus 21%)

**Source: RDS cross-sectional survey of MSM in Pretoria, 2009**

# Objectives

- Document the existence of MSM sex workers through this research so that appropriate HIV prevention interventions can be developed and ultimately implemented.
- Provide a platform on which to advocate for such services.

# Definition of MSM Male Sex Workers

- For the purposes of this research, MSM male sex worker is defined as any man actively seeking male clients, or currently willing to exchange sex for money or goods with other men

# Location of the research

- Inner-city Johannesburg ( Hillbrow, Berea, Yeoville, and Braamfontein) in May 2009.
- These areas were targeted because:  
vibrant female sex work trade, and  
high proportion of economic migrants.

# Research Methodologies

- **Primary qualitative and formative research**
  - buy in , consultation
  - key informant interviews
  - observations
- **Mapping**
- **Capture recapture**

# Overview

## Capture-recapture (CR)

- Used to sample and identify individuals, from a population and then resample the population to see what fraction of individuals in the second sample were identified in the first sample.
- This method has been found useful in estimating the sizes of hard-to-reach and stigmatized human populations.

# Procedure: Capture-Recapture

- Trained enumerators identified and ‘captured’, or ‘tag’ MSM male sex workers on a given night in a pre-determined geographical area.
- The same enumerators went back to the same area 1 - 2 weeks later and repeated the process, counting both previously ‘tagged’ and new ‘untagged’ SW.
- Counts were verified and analyzed using the following formula to estimate population size....

# CR Calculation

- $C_1$ =SW captured in first count
- $C_2$ =SW captured in second count
- $m$ =Matches (MSW captured in both counts)
- $n$ =Estimated population size

$$\frac{C_1}{n} = \frac{m}{C_2}$$



$$n = \frac{C_1 * C_2}{m}$$

# Confidence intervals

$$95\% \text{ CI} = n \pm 1.96 * \sqrt{\text{Var}(n)}$$

**where:**

$$\text{Var}(n) = \frac{c_1 * c_2 * (c_1 - m) * (c_2 - m)}{m^3}$$

# Example

- First Count: Enumerators identify 125 SW.  
25 refuse to be 'tagged', therefore only 100 'new captures' (c1) are counted.
- Second Count: Enumerators identify 180 SW. Of these:
  - 30 refuse to be 'tagged',
  - 150 are 'captured' (c2),
  - Of the 150, 75 are 'matches' or SW 'tagged' in both Rounds 1 and 2 (m)

# Assumptions of CR

1. Population is relatively closed.
2. All members of population have same probability of being captured.
3. Capture history of each member is accurate.

# Components of CR method

- Selection of suitable enumerators with variety of backgrounds e.g. gay, MSM, straight, or MSM sex workers
- Training – interactive and participatory with role playing to allow comfort in identifying, approaching and interacting with MSM sex workers in the field
- Social mapping of SW sites - venues and locations with sex work activities, peak days and times of MSM sex worker activity, safety concerns

# Organization of MSM SW Industry in the Inner City of Johannesburg

- Both female and male sex workers are more likely to operate from the same venues/spaces
- No competition between the two as both are targeting different clientele—MSM for MSM male sex workers and heterosexual men for female sex workers
- MSM male sex workers are more secretive and are not as visible as female sex workers

*Observations during data collection*

# Why MSM engage in MSM male sex work

- Conscious decision to make a living  
*“ I was working a security guard and they were paying me peanuts.....I decided to try this and the money was good ”*

*Illustrative information from MSM male sex worker during training*

# What is known about men who use MSM male sex workers

- Clientele for MSM male sex workers include :
  - MSM that are not 'openly gay'
  - Bisexual men
  - Homosexual men

Illustrative information from MSM male sex worker during training

# Enumeration

- **Identification** of suspected cases
- **Introduction** of enumerator
- **Confirmation** of MSM SW status
- MSM SW assured enumeration will be **confidential**:
  - No names recorded
  - No blood tests or samples taken
  - Must accept 'tag' (keychain/card/brochure)

# Population Council's CR work on MSM SW

During the first capture (week one) 174 MSM sex workers were enumerated.

In addition, 24 men self identified as MSM sex workers but refused to be tagged.

During the recapture (week two), 161 MSM sex workers were “captured.

An additional 87 men were “recaptured & 21 refused to be tagged

# Population Council's CR work on MSM SW

Total of 496 (95% CI, 437-555) were actively working in the suburbs of Berea, Yeoville, Braamfontein and Hillbrow, Johannesburg

The activity occurred in two consecutive Saturdays

Most MSM sex workers were found in bars, night clubs and taverns, or around cruising spots in area streets and parks that were identified during the mapping exercises

# Strengths & Limitations of CR

- Relatively inexpensive
  - Quick (6-8 wks)
  - Accurate when population is relatively closed
- BUT*
- Less accurate in settings with high mobility
  - Under-estimate if SW work is done in private homes, internet, brothels
  - Provides little more than a baseline number, no behavioural data
  - Also, construct of willing to sell is very different from selling it

# Policy and Program Implications

- MSM SW exist, have legitimate needs, and cannot be swept under the carpet
- MSM community is diverse, with varying characteristics and needs
- MSM Male sex workers have high risk profile and present a risk to both their female and male partners

# Policy and Program Implications Cont....

- MSM SW may not be reached through outreach or NGOs that are targeting gay men as many may not identify as gay
- Findings from this research will be used to engage donors to design appropriate HIV prevention approaches and more research on MSM SW

# Lessons learned

- Include members of the SW population in the process (buy-in, mapping, enumeration, etc)
- Be aware of legal context
- Check enumeration forms at end of each evening
- Enumerators:
  - Selection process is key, comfortable , non judgmental
  - Work in pairs, not alone for safety of enumerators
  - Code of conduct in cases where enumeration is conducted in clubs with access to alcohol & entertainment

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# Current work with Most at Risk Populations

- Increase access to post exposure prophylaxis following sexual assault for most at risk populations (MSM, migrants and incarcerated populations)
- Improving Health Service-Delivery for Migrants in the Inner City of Johannesburg