

HIV risk perception and risk management among men who have sex with men and transgender women in sub-Saharan Africa

HPTN 075

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Introduction

- There is limited knowledge of modes of HIV transmission, perception of risk, and sexual practices that facilitate acquisition and transmission of HIV and other sexually transmitted infections, among men who have sex with men (MSM) in Africa. (Golub et al, 2013; White and Stephenson 2016)
- Perceptions of risk are an inherent part of the decision-making process (William & Noyes 2007) and an important precursor to health-related behaviors for either dealing with or preventing risks. (Paek & Hove 2017)

Rationale and Objectives

By understanding risk perception, attitudes, knowledge and sexual practices of MSM & TGW in Africa, we can support health providers, program developers, and policy-makers to address unmet sexual health needs of this underserved population.

Primary (Aim 1)

- To explore how MSM & TGW perceive and manage the risk of HIV acquisition and transmission in their sexual interactions.

Secondary (Aim 2)

- To explore barriers and facilitators to accessing preventive measures against HIV acquisition.

HPTN 075 (2015-17)

- Multi-country prospective cohort study to determine feasibility of recruiting and retaining MSM in SSA to inform future HIV prevention studies.
- Sites: Kenya (1), Malawi (1), South Africa (2)
- 401 MSM & TGW enrolled
- HIV-uninfected MSM & TGW, aged 18-44 years



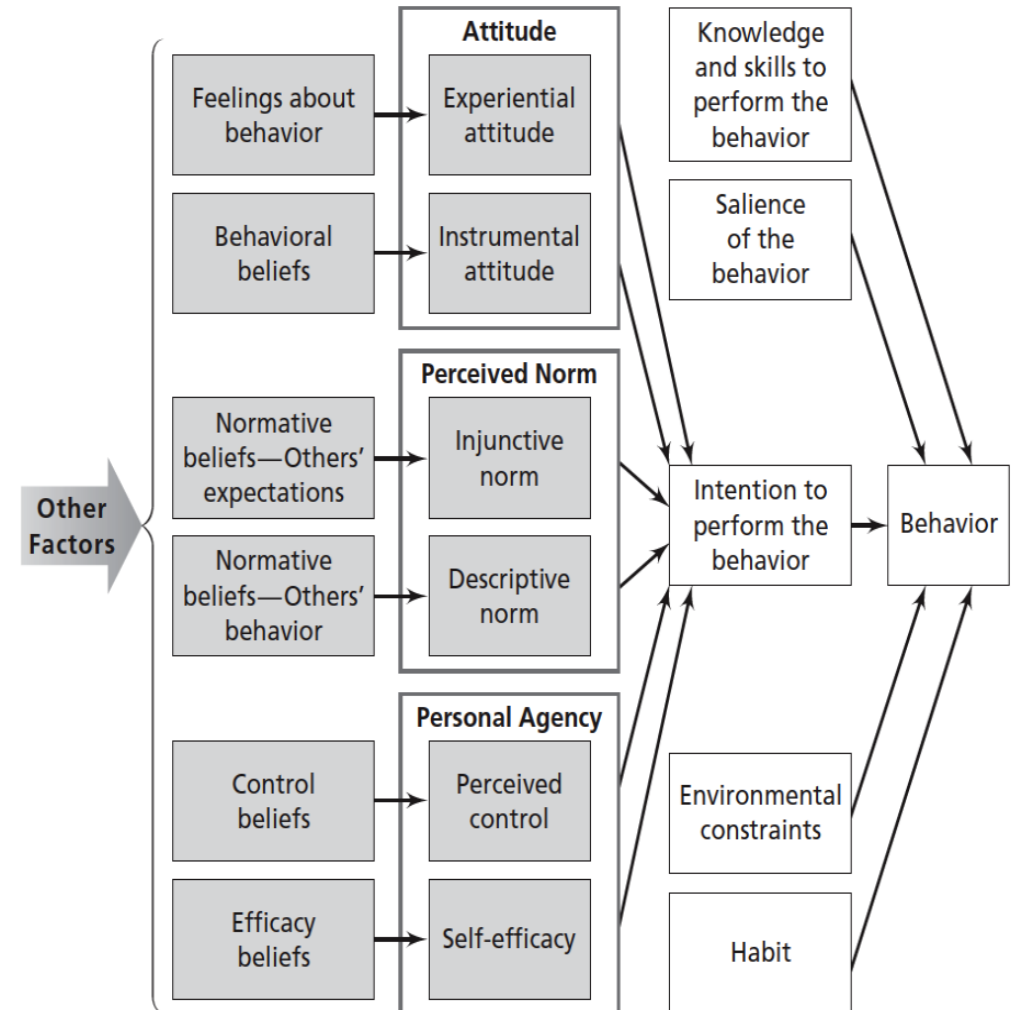
Methods

- HPTN 075 qualitative sub-study
 - 80 interviews
 - One-time, semi-structured in-depth interviews
- Data collection
 - June 2015 – August 2017
 - IDs recorded in local language, transcribed and subsequently translated in English
- Data coding and thematic analysis
 - Concept-driven coding based on primary constructs of the IBM
 - 16 codes → Codebook – double coding done by two coders in initial sample, until there was a consensus.
 - Dedoose (version 8.1.9)

Methods

- Concept-driven coding based on primary constructs of Integrated Behavior Model (IBM) to identify significant theory-based determinants of HIV risk perception and risk management among MSM & TGW from HPTN 075 study
- IBM posits that behavioral intentions are strongest predictor of human behavior; intentions can be predicted by behavioral attitudes, perceived norms and perceived behavioral control.

Figure 1. Integrated Behavior Model.



Codebook – 4 themes, 16 codes

1. Knowledge (2 codes)

- Correct knowledge
- Misperceptions

2. Perception of HIV risk (5 codes)

- Perceived own HIV risk
- Perceived MSM HIV risk
- Perceived control in protecting oneself
- Perceived control of MSM to protect themselves
- Perceived norms of MSM about HIV risk and use of protection

3. Attitude codes (4 codes)

- Attitude to HIV risk
 - Personal
 - MSM
- Attitude to protective measures
 - Personal
 - MSM

4. Management of HIV risk (5 codes)

- Protective behaviors to avoid HIV
 - Personal protective behaviors
 - MSM protective behaviors
- Risky behaviors that lead to HIV acquisition/transmission
 - Personal risky behaviors
 - MSM risky behaviors
- Strategy

Results – Study population

Table 1. Demographic characteristics (n=80)

Characteristics	N	%
Age		
18-25	55	68.8
26-44	25	31.2
Education		
High	26	32.5
Middle	28	35.0
Low	23	28.8
Employment		
FT/PT	26	32.5
Self-employed	12	15.0
Unemployed/Student	38	47.5
Marital status		
Married	7	8.8
Not married	71	88.8

Table 2. Behavioral characteristics (n=80)

Characteristic	N	%
Ongoing same-sex relationship		
Yes	66	82.5
No	12	15.0
Gender identity		
Male	60	75.0
Transgender	15	18.8
Sexual identity		
Bisexual and other	27	33.8
Gay	51	63.8
Sexual attraction		
Men and women	43	53.8
Men only	35	43.8
Preferred sexual position		
Top	39	48.8
Bottom	28	35.0
No preference	11	13.8

Results

Theme 1: Knowledge of HIV acquisition

- **Most participants had adequate knowledge of HIV transmission**
 - Unprotected sex
 - Multiple sex partners
 - Sharing contaminated sharp objects (razors, syringes)

Theme 1: Knowledge of HIV transmission

- **Some had misperceptions about how HIV is transmitted**

*“It could be during accidents, and you didn’t know you had blood contacts, you could be in the same house and **share a toothbrush**. And maybe they are identical toothbrushes, and another person uses it unknowingly, you can pass the virus.”*

Participant, Malawi

*“Personally, I think that for you to get that disease easily, is when when you have **vaginal sex with a woman**.”*

Participant, Kenya

Theme 2: Perception of HIV risk

- **Common perception of being at risk**

- Majority perceived themselves to be at risk of HIV
- Most at risk:
 - when under the influence of alcohol (self/partner);
 - no access to condoms before sex;
 - unaware of partner HIV status

*“...well **I’m a bottom**... And obviously the act of having sex with a man, the biological and the anatomical ... [the] equipment... yeah, isn’t really designed for that....So that’s the risk on its own like there’s... there could be **tearing**, there could be **scarring**, there could be all sort of things that could happen there, just in the act of having sex, so I think that’s why I see myself being at risk.....”*

Participant, Soweto

Theme 3: Attitude to HIV risk & protective measures

- **Negative attitude towards protective measures against HIV**
 - Condoms are unreliable; “breakage”; don’t like the way they feel; pleasure is more of a priority than safety

"It's difficult because one thinks it's not the same way you feel when you are not using the condom. So sometimes you just think of removing the condom so that you do without it and feel great. The condom will not bring out the real pleasure"

Participant, Malawi

Theme 4: Management of HIV risk

Protective behavior

- Abstinence
- Masturbation instead of sex
- Self-control when taking alcohol
- Condom use
- Sex with those whose HIV status is known
- Only one sex partner

Risky behavior

- Sex for money
- Casual sex at entertainment joints
- Condomless anal sex
- Spontaneous sex
- Forced sex
- Sex under the influence of alcohol
- Sex for attention

Sex for money

“What makes people to get infected is just how they behave; they just move about without considering which people they are moving about with and you realize that *majority of us are after money these days*. So, in as much as you know someone and you go with him and maybe you have not known if he is HIV positive or HIV negative....*as long as you have been given money, you will just go with him without protection* and so there are people who forget to protect themselves.... now *money makes you to misbehave and at the same time forget that we should protect our lives.*”

Participant, Kenya

Spontaneous sex

“Mostly by *sleeping with prostitutes*, let’s say that *someone new has just come in the community* some people get lured to try it with that one.”

Participant, Malawi

Drug use

*“I think out of my friends it is about may **be 3 or 4% who don’t do drugs.**”*

Participant, Kenya

Group sex

*“**MSM like group sex** and by the time someone does **group sex, you don’t know all [these] people you are having sex with** person A, person B, person C, and [there] are 4 of you in the same room and you are having sex.”*

Participant, Kenya

Condomless anal sex

“There is a guy that I dated who was [HIV]positive, but he was scared to say he was positive....I said that I will not leave you I will support you. Then his viral load became undetected, the CD4 count got high and he changed his lifestyle.....after that when we came to using protection then he was bottom I am top then, his viral load when it was undetectable then we stopped using protection for a year....when we went to go test I was still negative and his viral load is still okay.”

Participant, Soweto

Summary

- Self-reported sexual practices that participants understand to put them at increased risk of HIV
- While accurate knowledge about HIV is generally high, there are notable gaps.
- More efforts are needed to support MSM and TGW in decreasing their risk of HIV acquisition.
 - Making oral PrEP more widely-available in SSA to MSM and TGW could make a critical contribution.

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