

# HIV Testing Behaviors of Female Sex Workers and Policemen in Kenya

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## INTRODUCTION

Sub-Saharan Africa has felt the full effects of the HIV/AIDS pandemic, as it is home to the majority of people living with AIDS. The HIV pandemic is estimated to have caused the death of more than 25 million people since it was first recognized in 1981<sup>1</sup>. Approximately 40 million people are currently living with HIV in the world today and to date, HIV/AIDS is considered to be the “deadliest epidemic in contemporary history”<sup>2</sup>. Sub-Saharan Africa is the most affected region in the world. This region contains only 10% of the world’s population, but is home to approximately 65% of people living with HIV/AIDS<sup>3,4</sup>. In sub-Saharan Africa, people are more likely to die from HIV/AIDS-related illnesses than from any other cause of death<sup>5</sup>. Worldwide most people who are living with HIV are uninformed about their status and overall very few people have been tested for HIV<sup>2</sup>.

Approximately 1.5 million Kenyans have died from HIV/AIDS and 300 to 400 Kenyans die of AIDS and AIDS-related complications every day<sup>6</sup>. Kenya currently ranks 4<sup>th</sup> in the world in terms of the number of people who are infected, with only South Africa, India, and Nigeria reporting more<sup>6</sup>. Estimates indicate that approximately three million people out of the Kenyan population of 35 million live with HIV/AIDS<sup>6,7</sup>. Heterosexual sexual relations is the primary mode of HIV transmission in Kenya. HIV infections are increasing faster for women than for men, and, according to some estimates, women in Kenya currently make up the majority of reported HIV/AIDS cases<sup>8</sup>. Many people unknowingly put themselves at risk of contracting this disease because most people do not know their spouse or sexual partner’s serostatus. In fact, women are more likely to be HIV positive than are men, and in many cases, these women are infected by their husbands or partners<sup>9</sup>.

## THEORETICAL FRAMEWORK

There are many difficulties associated with the promotion of serostatus (HIV status) knowledge, and many of these are located at the societal level. In order to fully understand why some individuals accept HIV testing as a preventive method and others reject it, it is necessary to use the health belief model (HBM)<sup>10</sup> in conjunction with gender and power theory<sup>11</sup>. This allows for the evaluation of the barriers to HIV testing for members of at-risk populations, with interpretations of the differences between men and women occurring through a gendered powered lens.

Theorists posit that individuals are ultimately responsible for their actions, therefore prevention efforts need to be directed towards individual behavior<sup>12,13</sup>. They argue that the transmission of HIV is driven by behavioral factors<sup>13</sup>. As there is not cure or vaccine for HIV/AIDS, the main strategy of prevention has been through behavioral changes. One such theory is the health belief model (HBM). The health belief model posits that the likelihood of someone taking preventative action against a disease or illness is based on: (1) their perceived susceptibility to the illness; (2) perceived severity of the illness; (3) perceived barriers (or costs) of taking preventative actions; (4) perceived benefits; and (5) cues (motivation) to action<sup>10,14</sup>. Redding et al. (2000) points out that HBM fails to account for broader cultural aspects of society. Thus, it generally ignores the interaction between social, cultural, and environmental factors with individual issues.

Scholars have argue for a structural understanding of a society, noting that sexual practices are embedded within wider networks of economic, political, and cultural barriers and facilitators<sup>15</sup>. The gendered power theory describes a gendered division of society in which gender roles are maintained through social mechanisms that preserve the status quo for what is acceptable for men and women<sup>11,15</sup>. Thus, because of the societal dominance of masculinity, to fully comprehend the reasons for the sexual practices of men and women, research needs to be conscious of the innate

gender inequalities in society. This gendered power is rooted in the social, political, and historical aspects of society in which social mechanisms that reproduce gender inequalities in the daily lives of women are preserved. An understanding of the gendered relationship and the inequalities that arise from it would add to our ability to determine the dynamics of HIV testing by introducing the ideas of power and stigmatization of who gets tested and why.

Research needs to continue focusing efforts on the general population, who are at low risk of transmitting HIV. However, understanding the testing behaviors of those at risk populations who consider driving this epidemic is absolutely critical. The lack of information on marginalized populations' openness to testing as a preventive measure, actual HIV testing behavior, and status knowledge only serves to help the spread of HIV infections.

At-risk populations are those groups known or perceived to engage in objectively high risk health behaviors (i.e., multiple sex partners, intravenous drug use, etc.). In the case of Kenya, these high risk behaviors often occur in the contexts of highly mobile, transient sub-populations marked by striking gender inequalities. Members of these sub-populations are at an elevated risk of obtaining and transmitting HIV and are often resistant to public health education campaigns. Thus, for a more complete picture of at-risk populations' assessments of risk, and motivations and ability to reduce risk, researchers must focus on the wider social context of their risk taking behaviors.

Female sex workers (FSWs) are reflections of the social conditions associated with African life, especially with the proliferation of the HIV/AIDS pandemic. Their high risk of acquiring HIV is not only due to having multiple sex partners but also because of their position in society<sup>16, 8</sup>. The lives of these women serve as indicators of the widespread poverty, high migrant labor, social stigma, and the lack of female empowerment<sup>16, 8</sup>. Extreme economic disadvantage and the inability to make ends meet in traditional legitimate means are the primary reason given for entering into sex work, and often times it is last-ditch effort of survival for themselves and their families<sup>17, 18</sup>. This specific group of women rapidly moves from one sexual partner to another and because of their economic needs, they are generally unable to negotiate condom use with their patrons<sup>19, 20</sup>. Female sex workers are one of the most stigmatized and underprivileged populations.

Policemen routinely work with marginalized members of society (i.e., female sex workers)<sup>21</sup>, during which they are to uphold and enforce the laws set up by the government. However, due to their position of power and patriarchal ideologies, they can insist on sexual favors in return for not arresting members of the high risk populations<sup>22, 23, 24, 20, 25, 26</sup>. Thus, policemen are often clients of female sex workers, during which their behaviors are not viewed as being high risk. Instead policemen perceive their sexual behaviors as legitimate, culturally-endorsed perk of their occupation<sup>27</sup>. These behaviors of the policemen are not only legitimated by their occupation but also by their position as men in a society which is accepting of male infidelity.

This project addresses three major research questions. What are the factors influencing the decision to be tested for HIV? What are the unique ways that these factors vary between female sex workers and policemen? Conditional on HIV testing has occurred, which factors influence getting the acquisition of test results?

## **METHODS**

### *Sample*

The data used in this project are from the 2002 Kenya Behavioral Surveillance Survey (BSS), which is a cross-sectional study of target population adults aged 15 – 45 years. The BSS was conducted by the National AIDS and Sexually Transmitted Infection Control Program (NASCO) of the Kenya Ministry of Health in collaboration with Family Health International (FHI). These data are useful because the BSS is designed to be a tool for monitoring and evaluating trends in HIV/AIDS related attitudes, behaviors, and knowledge of at-risk populations<sup>28</sup>. The BSS

investigates the following primary topic areas: socio-demographic characteristics, HIV/AIDS knowledge and attitudes, HIV testing, STIs, accepting attitudes and stigma, condom usage and sources, and exposure to HIV/AIDS intervention (including voluntary counseling and testing). These data are unique because they focus specifically on populations especially vulnerable to acquiring HIV/AIDS. In this project, the target populations are female sex workers and policemen.

Informed verbal consent was obtained before the interviews were collected. A BSS was collected from five cities in five of Kenya's eight provinces for 1,754 female sex workers. Interviews of 592 policemen were conducted in five cities in five provinces of Kenya. The final analytic sample consists of 1,752 female sex workers and 568 policemen. The final sample is restricted to only those who have heard of HIV/AIDS therefore 2 female sex workers (0.1%) and 24 policemen (4%) are excluded from the analyses.

## DATA

Due to page limit constraints, I will only be able to briefly list the variables that are used in the analyses of this project.

### *Dependent Variables*

**HIV Testing.** Respondents were asked whether they had ever had an HIV test. For those respondents that were tested for HIV, they were asked whether they had received their test results

### *Independent Variables*

Respondents were asked to report on a variety of socio-demographic variables. These variables include age, education (primary, secondary, post secondary), ever married, living situation (married/cohabiting: partner present, married: spouse not present, living alone), presence of child and adult dependents, alcohol use, intravenous drug use, age at first sex, type of sexual partners (regular, non-regular, commercial sex worker), and condom use with each partnership type.

#### *Perceived Severity*

False notions about AIDS are assessed as the sum of responses to six questions. The items assess having an inaccurate understanding of how people can or cannot be infected with the HIV infection.

#### *Perceived Susceptibility*

Respondents were asked to indicate his or her perceived risk for contracting HIV/AIDS. Respondents were also asked about ways in which people can lower their chances of spreading HIV: having one faithful partner, abstaining from sex, and consistent condom use.

#### *Perceived Barriers*

Through a series of 6 questions, respondents were asked to indicate their level of non-accepting attitudes towards people living with HIV. They were also asked about the availability of confidential testing and if they knew where a Voluntary Counseling and Testing facility was located.

#### *Perceived Benefits*

Responses were perceived utility of VCT was gauged by summing respondents' answers to how beneficial they think VCT would be to them if they found out that they were 1) HIV-negative and 2) HIV-positive.

#### *Cues to Action*

Respondents were asked if they had attended a demonstration by peer or health educators or if they had actively participated in peer education of HIV. Respondents were also asked to report if they knew some with HIV.

#### *Gendered Culture: Female Sex Workers*

Respondents were asked if they had ever been forced to have sex with a regular or non-regular sexual partner. Female sex workers were asked to report their age first received money for sex.

Respondents were asked the reason for sex work profession. They were also asked to report the average amount of money received for sex with condom and money received for sex without condom.

*Gendered Culture: Policemen*

Policemen were asked to report if they had multiple wives or sex partners. Income towards family measures of how much of a paycheck is generally given to the respondent's family

**DATA ANALYSIS**

Both bivariate and multivariate (logistic) analyses were employed. The bivariate analyses were used to examine the differences between those who reported prior HIV testing and those who did not. To understand the relationship among all of the variables and HIV testing behaviors, I employed a logistic model to analyze HIV testing utilization through two separate processes. Firstly, I estimated what factors influence the decision to be tested for HIV. And for respondents that were tested for HIV, I estimated which factors influence the receiving of test results. The analyses were conducted separately for female sex workers and policemen.

**BIVARIATE RESULTS**

**Descriptive Summary of the Dependent and Independent Variables**

	Female Sex Workers	Policemen
	Mean/%	Mean/%
<b>Dependent Variables</b>		
Ever Tested	34.73%	24.82%
Serostatus knowledge	93.23%	23.24%
<b>Independent Variables</b>		
<i>Perceived Severity</i>		
False Notions (scale)*	10.55	8.05
<i>Perceived Susceptibility</i>		
Chance of contracting HIV		
No Chance	32.55%	29.75%
Low Chance	28.19%	48.42%
Moderate Chance	21.15%	13.38%
High Chance	18.11%	8.45%
<i>Protective Behaviors</i>		
Faithful Partner	85.27%	91.36%
Abstaining from Sex	88.82%	88.56%
Consistent Condom Use	90.60%	72.31%
<i>Perceived Barriers</i>		
Non-Accepting Attitudes (scale)	2.96	2.01
Confidential Testing is Available	91.81%	91.20%
<i>Perceived Benefits</i>		
VCT Benefit if HIV-Negative (scale)**	3.94	5.30
VCT Benefit if HIV-Positive (scale)**	4.79	2.63
<i>Cues to Action</i>		
Demonstration by Health Educator	55.24%	41.02%
Participated in Peer Education	33.24%	24.12%
Know Someone Living with HIV	87.85%	85.04%
<i>Gendered Culture</i>		
<b>FSW</b>		
Forced Sex	32.44%	***
Age First Received \$ for Sex (years)	19.84	***
Reason for Sex Work		
Financial	84.58%	***
Parents Forced	6.25%	***
Personal Choice	19.43%	***
No Other Skills	17.08%	***
<b>Policemen</b>		
Multiple Wives/Partners	***	13.38%
Income Towards Family	***	
None	***	3.35%
Less than Half	***	13.03%
Half	***	19.01%
More than Half	***	54.05%
All	***	10.56%

\* higher values indicate more false notions

\*\*higher values indicate more benefits--7 points total available for negative an 9 total for positive

The results show that approximately 10% more of the female sex worker respondents were tested than were the policemen, however due to the varying sample sizes (1745 and 568 respectively) this result should be viewed with caution. What is striking is that only 23% of the policemen who had been tested received their test results compared to 93% of the tested female sex workers. This is even more interesting since over 91% of members from both groups state that confidential testing is available. Overall, respondents felt as though they had low to no chance of acquiring the HIV virus, which may be part of the reason for not being tested for HIV.

## REFERENCES:

1. UNAIDS and WHO (2006) *Report on the global AIDS epidemic*. Geneva: Joint United Nations Programme on HIV/AIDS and World Health Organization.
2. UNAIDS (2003). *Report on the Global HIV/AIDS epidemic*. Geneva: Joint United Nations Programme on HIV/AIDS.
3. UNAIDS (2001). *Report on the global AIDS epidemic*. Geneva: Joint United Nations Programme on HIV/AIDS.
4. UNAIDS (2005). *Report on the global AIDS epidemic*. Geneva: Joint United Nations Programme on HIV/AIDS.
5. Lamptey, P., Wigley, M., Carr, D., & Collymore, Y. (2002). Facing the AIDS pandemic. *Population Bulletin*, 57(3), 3-38.
6. Kenya Ministry of Health and NASCOP. (2006). *Kenya AIDS newsletter*.
7. CIA (2006). The World Factbook: Kenya. Central Intelligence Agency (CIA).
8. UNAIDS Inter-Agency Task Team on Gender and HIV/AIDS. (2006). Fact sheet: HIV/AIDS, gender and sex work. *HIV/AIDS and Gender*.
9. Kapiga, S. H., Lwihula, G. K., Shao, J. I., & Hunter, D. J. (1995). Predictors of AIDS knowledge, condom use and high-risk sexual behaviour among women in Dar-es-Salaam, Tanzania. *International Journal of STD & AIDS*, 6, 175-183.
10. Becker, M. H. (1974). The health belief model and personal health behavior. *Health Education Monographs*, 2, 324-473.
11. Connell, R. W. (1987). *Gender and Power*. Stanford, CA: Stanford University Press.
12. Campbell, C. A. (1995). Male gender roles and sexuality: implications for women's AIDS risk and prevention. *Social Science & Medicine*, 41(2), 197-210.
13. Harvey, S. M. (2000). New kinds of data, new options for HIV prevention among women: a public health challenge. *Health Education & Behavior*, 27(5), 566-569.
14. Redding, C. A., Rossi, J. S., Rossi, S. R., Velicer, W. F., & Prochaska, J. O. (2000). Health behavior models. *Journal of Health Education*, 3 (special issue), 180-193.
15. Wingood, G. M., & DiClemente, R. J. (2000) Application of the theory of gender and power to examine HIV-related exposures, risk factors, and effective interventions for women. *Health Education & Behavior*, 27(5), 539-565.
16. Serpa, E. (2002). AIDS in Africa: the socio-cultural roots of a disease. *Africa Insight*, 32(3), 43-50.
17. Bassett, M. T. (2002). Ensuring a public health impact of programs to reduce HIV transmission from mothers to infants: The place of Voluntary Counseling and Testing. *American Journal of Public Health*, 92(3), 347-351.
18. Singhal, A. & Rogers, E. M. (2003) *Combating AIDS: Communication strategies in action*. New Delhi: Sage Publications.
19. Karim, Q. A., Karim, S. S., Soldan, K. & Zondi, M. (1995). Reducing the risk of HIV infection among South African sex workers: socioeconomic and gender barriers. *American Journal of Public Health*, 85, 1521-1525.
20. Pettifor, A. E., Beksinska, M. E. & Rees, H. V. (2000). High knowledge and high risk behaviour: a profile of hotel-based sex workers in inner-city Johannesburg. *African Journal of Reproductive Health / La Revue Africaine de la Santé Reproductive*, 4(2), 35-43.
21. National AIDS Control Council (2000). *The Kenya National HIV/AIDS Strategic Plan 2000-2005, Popular Version*. Nairobi, Kenya. December.

22. Alexander, H. (2001). The impact of violence on HIV prevention and health promotion: The case of South Africa. *Research for Sex Work*, 4, <http://www.med.vu.nl/hcc/artikelen/halexander.htm>.
23. Distiller, N. (2001). Advocating for the right to sell sex. *Agenda*, 47, 35-42.
24. Pauw, I. & Brener, L. (1997). Naming the dangers of working on the street. *Agenda*, 36, 80-83.
25. World Health Organization. (2005). Violence against women and HIV/AIDS: Critical intersections: Violence against sex workers and HIV prevention. *Information Bulletin Series*, 3, 1-6.
26. Wojcicki, J. (1999). Race, class and sex: The politics of decriminalization of sex work. *Agenda*, 42, 94-105.
27. Lloyd-Roberts, S. (2002). Boys will be boys. *BBC News: BBC Tw*.
28. Kenya. Ministry of Health. *Behavioural Surveillance Survey 2002: summary report, HIV/AIDS and sexually transmitted infection in Kenya*. Nairobi: National AIDS/ STI Control Program, Ministry of Health; 2005.