



HIV Prevalence and Sexual Behaviors Among Transgender Women in Tehran, Iran

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Abstract

To date, no study has looked at the prevalence of HIV and the high-risk behaviors among transgender women in Iran. Between May 2013 and February 2014, 104 transgender women were recruited for participation in this study. Inclusion criteria consisted of having an official letter from the Tehran Psychiatric Institute, or a well-known psychiatrist, that showed a diagnosis of gender dysphoria and/or completed Gender-Affirming Surgery at least 6 months prior to this study. Of the 104 participants, 2 were diagnosed with HIV, which translates to a HIV prevalence of 1.9%. Condom use with a non-paying partner, casual partner, and paying partner was respectively 39.7%, 34.6%, and 53.3%. A high percentage of transgender women in Tehran engage in high-risk sexual behaviors including condomless receptive anal sex, which is of particular concern given the low rates of HIV testing. Targeted public intervention programs and research are desperately needed for this high-risk group.

Keywords Transgender women · Transwomen · HIV · Sexual behaviors · Gender-Affirming Surgery

Resumen

El objetivo de nuestro estudio fue de determinar la prevalencia del VIH y las conductas de alto riesgo en esta población. Reclutamos 104 mujeres transgénero entre 2013 y 2014. Incluimos participantes con una carta oficial del Instituto Psiquiátrico de Teherán, un diagnóstico de Disforia de Género por un psiquiatra reconocido y/o Cirugía de Afirmación de Género completa al menos seis meses antes de este estudio. De los 104 participantes, 2 fueron diagnosticados con VIH, con una prevalencia de VIH de 1.9%. El uso de condón con una pareja que no paga, una pareja ocasional y una pareja que paga, respectivamente, fue de 39.7%, 34.6% y 53.3%. Un alto porcentaje de mujeres transgénero en Teherán se involucra en conductas sexuales de alto riesgo, lo cual es de particular preocupación debido a las bajas tasas de pruebas de VIH. Para este grupo, se necesitan programas de intervención pública e investigación.

Introduction

Transgender people were not officially recognized in Iran until the 1980s when the leader of the Islamic revolution, Ayatollah Khomeini, reissued his fatwa (religious decree) in response to a transgender woman's plea. As a result of this plea, transgender women, a woman (women) who was (were) assigned male at birth, were granted the right to have sexual reassignment surgery and obtain all official documents that acknowledges their new gender [1]. In other words, gender dysphoria (GD), the condition of feeling that one's emotional and physical identify to be the opposite of one's biological sex, became classified as a legitimate disease that required hormonal treatment and Gender-Affirming Surgery [2].

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Based on published data, the prevalence of transgender women in Iran was 1 in 145,000 between 2002 and 2009 [3], yet Iran performs the highest number of Gender-Affirming Surgery (GAS) in the world after Thailand [4, 5]. This could be due to the government partially, if not fully, funding the procedure to encourage more transgender people to undergo the surgery. Moreover, GAS-which is completed by vaginoplasty (the creation of a vagina)-opens the door to name change, new national identity papers, military exemption, and numerous other new opportunities for Iranian transgender women.

Despite GD being acknowledged by Iranian government, there continues to be a great deal of stigma and discrimination attached to transgenderism in Iranian society [2] which negatively impacts transgender people to seek professional and emotional help or turn to their families for support. This stigma and discrimination puts transgender individuals at a higher risk of developing mental health disorders [3, 6] and increases high-risk behaviors such as sex work. Such behaviors dramatically increase their risk of contracting HIV [7, 8] and other sexually transmitted diseases (STDs) [9].

To our knowledge, no published data exists on the prevalence of HIV and high-risk behaviors in Iranian transgender women. This study aims at evaluating this prevalence as well as related high risk behaviors.

Method

Between May 2013 and February 2014, Iranian transgender women were recruited to this study from the Tehran Psychiatric Institute, the Ministry of Welfare and Social Security, and private clinics. To be included in the study, subjects must have been diagnosed with GD by the Tehran Psychiatric Institute or an expert psychiatrist and/or completed GAS at least 6 months prior to this study. 6 months was chosen to make sure participants passed all post-surgery care and resumed sexual activity.

Those who fulfilled eligibility criteria and agreed to participate in this study by signing the informed consent form were asked to complete a questionnaire assessing their demographic data, history of marriage (temporary and permanent), family support status, sexual activity (type, condom use, frequency of sex during the past year and last instance of sex), history of sex work, drug and alcohol use, and history of STDs. Following completion of the questionnaire, coded dried blood spots (DBS) were collected to test for HIV infection by Microelisa (BIOMERIEUX, France). 19 eligible transgender women removed themselves from the study.

Table 1 Socio-demographic characteristics of participants (N = 104)

Characteristics	n (%)
Age (mean \pm SD)	27.9 \pm 7.4
Education level	
High school diploma or higher degree	83 (79.8)
Marital status	
Unmarried	92 (88.5)
Completed GAS	34 (32.7)
Had history of sexual contact in their lifetime	88 (84.6)
Had HIV testing in their lifetime	49 (47.1)
Had HIV testing in the 12 months prior to this study and know their results	24 (23.1)
Used illicit drug in lifetime	9 (8.7)
Consumed alcohol in lifetime	38 (36.5)

Table 2 Sexual history of participants 12 months prior to this study (N = 73)

Characteristics	n (%)
Types of sex	
Receptive anal intercourse	48 (65.8)
Other	25 (34.2)
Used condom	
Always or most of the time	29 (39.7)
Never or rarely	41 (56.2)
Types of sexual partners	
Had non-paying partner (husband or boyfriend)	59 (80.8)
Had casual partners	35 (47.9)
Had paying partners (clients)	11 (15.1)
Had non-paying partner and casual partners at the same time	23 (31.5)
Had experienced sexual abuse	18 (24.7)
Had group sex	10 (13.7)

Result

Of the 104 participants, two were diagnosed with HIV (1.9%). Table 1 summarizes socio-demographic characteristics of participants.

Most participants (88 of 104) reported having at least one sexual experience in their lifetime. The mean age of first sexual encounter was 16.3 years (SD \pm 5.3) with the youngest encounter at 5 years old and the oldest at 30 years old. In the 12 months prior to this study, more than three quarters of participants with sexual experience (73 of 88) had been sexually active. Table 2 shows the sexual history of these participants in the 12 months prior to this study.

Of the transgender women who completed GAS and had been sexually active in the previous 12 months, 42.3%

(11 of 26) had vaginal intercourse and 63.6% (7 of 11) reported never or rarely using condoms during that time.

Receptive anal intercourse with either a non-paying partner, casual partner, and/or paying partner was the most common sexual practice in their recent sexual encounter. The prevalence of condom use in this most recent sexual contact with a non-paying partner, casual partner, and paying partner were respectively 39.7%, 34.6%, and 53.3%. The lack of condom use was due to either trusting non-paying partners or opposition from casual and paying partners.

Among participants who were sexually active in the prior 12 months, 13.7% participated in group sex, a sexual encounter that involved at least 3 people.

Discussion

In this study we found a 1.9% prevalence of HIV among transgender women. Similar to other studies [3, 10, 11], we found Iranian transgender women to be young, educated and sexually active. Yet, despite their active sexual lifestyles, this population uses little, if any, protection and very few have been tested for HIV.

Data collected from this study is essential in understanding sexual behaviors and HIV status in the transgender population of Iran. With a nearly three-fold increase in sexual transmission of HIV, rising from around 13% to 40% during the past decade [12], it is essential to continuously collect data on this key population. This data magnifies the crucial need for public intervention programs in a country like Iran with growing HIV epidemics and limited HIV education [13, 14].

To date, there is no published data assessing HIV prevalence among transgender persons in Iran. Despite our small sample size, our findings suggest an HIV prevalence (1.9%) in this population which is higher than the general population (0.1%). According to the Iran AIDS Progress Report of 2016, the general population consisted of HIV prevalence among adults aged 15 to 49 [15].

This study did not set out to explain the relatively low rate (<50%) of vaginal sexual intercourse in transgender women after completing GAS, but based on unofficial sources (i.e. speaking with participants and a recent systematic review and meta-analysis) [16], it could be due to a high rate of neo-vagina complications which may lead participants to have anal intercourse more frequently than vaginal intercourse.

Condom use among transgender women is low. The reasons reported for lack of condom use included trust in their non-paying partners or “lover” and opposition to condom use from casual and paying partners. A similar trend has been seen among female sex workers in Tehran, who are traditionally viewed as the most marginalized and stigmatized group, with an HIV prevalence of 5% [17]. Jalali et al.

[18] found that only 8.6% of transgenders considered themselves to be at risk for HIV infection. This could be due to the lack of knowledge about HIV and its route of transmission. This contradicts findings by Moshtagh-Bidokhti et al. [19] which reported that 86% of participants (transgenders and homosexuals aged 18–28 who referred to a private sex clinic in Tehran) had discussed HIV with their partners and concluded that most of them have enough knowledge about this virus and are worried about the chance of getting infection. These conflicting studies provide examples as to why more studies need to be conducted on this population in Iran, especially if the Iran national AIDS program is planning to reach UNAIDS targets (i.e. 90% of key populations, including transgender people, to have access to HIV prevention services) and end the AIDS epidemics by 2030 [20].

The main limitation of this study is the cross-sectional design which makes it difficult to establish temporality or causal inference. Moreover, there is a risk of social desirability bias which could be displayed during interviews and due to stigma and discrimination which are associated not only with transgenderism, but also with “anti-Islamic behaviors” such as alcohol consumption, illicit drug use, and sexual intercourse before marriage.

Conclusion

A high percentage of transgender women in Tehran engage in high-risk sexual behaviors including condomless receptive anal sex, which is of particular concern given the low rates of HIV testing. Targeted public intervention programs and research are desperately needed for this high-risk group.

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Compliance with Ethical Standards

Ethical Approval This study was approved by Tehran University of Medical Sciences ethical committee and the Iranian Research Center for HIV/AIDS (IRCHA) and was performed in accordance with the 1964 Helsinki declaration.

Informed Consent Informed consent was obtained from all individual participants included in the study.

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