ABSTRACT: Objective: To compare social characteristics, risk behaviors, and sexually transmitted infections among travestis and transsexual women. Methodology: A cross-sectional study was carried out in three cities in Goiás, Central Brazil. Trans women were interviewed on sociodemographic characteristics, discrimination, prejudice, sexual behavior, illicit drugs, and previous testing for HIV and syphilis between April 2018 and August 2019. Results: A total of 166 travestis and 249 transsexual women were investigated. Although sexual, physical, and verbal violence were common to both groups, sexual behavior, use of illicit drugs, prison, and previous positive HIV and syphilis testing were more frequent among travestis than in transsexual women. Conclusion: The present findings confirm that Brazilian travestis are at greater risk for sexually transmitted infections (STI), indicating that health services should take this imbalance into account in terms of health intervention proportions. Keywords: Travestism. Transgender people. Social vulnerability. Sexually transmitted diseases. HIV.
INTRODUCTION

Travestis and transsexual women are political identities of the trans movement in Brazil\(^1\). Travestis present ambiguity of gender, a complex mixture of masculine and feminine identities. In general, they invest in clothes, hormonal therapies, and some surgeries, but do not experience discomfort with their genitalia. Transsexual women are individuals who were designated male at birth, but who identify themselves as female, regardless of having performed sex reassignment surgery or not, and they demand social and legal recognition as women\(^2\).

Trans women have been disproportionally affected by the HIV epidemic. A systematic review and meta-analysis involving 15 countries showed a pooled HIV prevalence of 19.1\% (95\%CI 17.4 – 20.7) and 48.8 greater chance of being HIV-infected compared to adults at the reproductive age\(^3\).

In Brazil, a biobehavioral survey carried out in 12 cities estimated HIV prevalence ranging from 19.7\% (95\%CI 7.4 – 31.9) in Curitiba to 65.3\% (95\%CI 52.3 – 78.3) in Porto Alegre\(^4,5\).

Some Brazilian authors have suggested social and risk behavioral differences between travestis and transsexual women. The former was evidenced as a segment of the trans population with greater social inequity and at higher risk for sexually transmitted infections (STI)\(^1\). In order to ascertain this assumption, we compared risk behaviors for sexual infections among travestis and transsexual women in Central Brazil.

METHODS

The population sample was comprised of travestis and transsexual women from the metropolitan region of Goiânia City (2,518,775 inhabitants) and two smaller cities; Jataí (100,882 residents) and Itumbiara (104,742 residents), in Central Brazil, between April 2018 and August 2019.
The respondent driven sampling (RDS) was utilized for data collection. This method is recommended for hard-to-reach populations. The study included people who declared themselves as travestis or transsexual women. An open-ended self-identification question was asked: “With regard to your gender identity, how do you self-declare”? Participants who self-defined themselves as “women” or “transsexual women” or “trans women” were grouped as transsexual women.

All respondents were interviewed face-to-face on sociodemographic characteristics, discrimination and prejudice, sexual behaviors, and illicit drug use and previous self-report of HIV and syphilis testing. The reference locations for data collection were the premises of Universidade Federal de Goiás (Goiânia City), Universidade Estadual de Goiás (Itumbiara city), and Counseling and Testing Center (Jataí city).

Mann-Whitney and $\chi^2$ tests were applied to compare continuous and categorical variables, respectively. 95% confidence intervals were used, and $p < 0.05$ was considered statistically significant. The statistical Package for the Social Sciences (SPSS) program was chosen for research. This study was approved by the Research Ethics Committee of Universidade Federal de Goiás, under protocol number 2332210.

RESULTS

A total of 166 travestis and 249 transsexual women participated in the study (Table 1). Both groups included young women. Transsexual women showed more years of education than travestis (12 versus 10 years of formal study). In addition, sex work was more frequent in travestis (78.9%) compared to transsexual women (47.8%). Violence was a common experience in both groups, though physical violence was more common among travestis than in transsexual women (47.3 versus 3.1%, $p = 0.04$).

Although both gender categories reported a high frequency of STI risk behaviors, such as inconsistent use of condom, travestis reported having a greater number of sexual partners in the last week (median: 25 versus 19); a greater proportion of non-injectable (83.6 versus 67.5%) and/or injectable (5.5 versus 1.2%) illicit drugs; previous incarceration (32.7 versus 18.8%); other positive syphilis testing (67.5 versus 39.3%); and positive HIV testing (27.6 versus 15.7%).

DISCUSSION

Globally, trans people experience discrimination and prejudice that prevent them from exercising basic rights, such as growing old, to having health care and safety. In this study, discrimination and prejudices were very frequent in both groups and contribute to the violence that these women experience in Brazil, which is the country that kills the greatest number of trans people worldwide and 11 trans people are beaten everyday.
Condom use during sexual intercourse is the cornerstone of STI prevention. In fact, we found a low frequency of condom use during sexual intercourse and high rates of previous HIV-positive and syphilis-positive testing in the present investigation. However, it is noteworthy that travestis reported almost twice the positivity for both outcomes compared to transsexual women. Therefore, besides not using a condom, travestis showed more intense vulnerability layers compared to transsexuals, which put them at higher risk of STI.

Indeed, lower educational level, prostitution, consumption of illicit drugs, and legal problems were frequent in both groups, but they were more intense among travestis (almost 80% were sex workers). For some Brazilian authors, when compared to transsexual women,

Table 1. Characteristics of travestis (n = 166) and transsexual women (n = 249) in Central Brazil, 2018–2019.

| Variables                              | Total        | Travest | Transsexual women | p-value |
|----------------------------------------|--------------|---------|-------------------|---------|
| **Sociodemographic characteristics**   |              |         |                   |         |
| Age (years), median (IQR)              | 25 (9)       | 24 (7)  | 25 (9)            | 0.054   |
| Years of formal education (IQR)        | 11 (3)       | 10 (3)  | 12 (3)            | 0.001   |
| Non-white (self-report) (%)            | 331 (79.8)   | 139 (83.7) | 192 (77.1)            | 0.128   |
| **Discrimination/prejudice (%)**       |              |         |                   |         |
| Sexual violence§ (n = 413)             | 204 (49.4)   | 82 (49.7) | 122 (49.2)            | 0.920   |
| Verbal violence§ (n = 410)             | 262 (63.9)   | 107 (64.8) | 155 (63.3)            | 0.469   |
| Physical violence§ (n = 410)           | 169 (41.2)   | 78 (47.3)  | 91 (37.1)            | 0.041   |
| **Sexual behavior**                    |              |         |                   |         |
| Sex worker (%)                         | 250 (60.2)   | 131 (78.9) | 119 (47.8)            | < 0.001 |
| Number of sexual partners in the last seven days, median (IQR) | 10 (29) | 15 (25) | 4 (19) | < 0.001 |
| Condom use in the last sexual date (%) (n = 406) | 127 (31.3) | 45 (28.1) | 82 (33.3) | 0.269 |
| Non-injectable illicit drug use§ (%) (n = 414) | 306 (73.9) | 138 (83.6) | 168 (67.5) | < 0.001 |
| Injectable illicit drugs§ (%) (n = 413) | 12 (2.9) | 9 (5.5) | 3 (1.2) | 0.011 |
| Daily alcohol use (%)§ (n = 410)       | 54 (13.2)    | 27 (16.5) | 27 (11.0)            | 0.107   |
| Previous incarceration§ (%) (n = 410)   | 100 (24.4)   | 54 (32.7) | 46 (18.8)            | 0.002   |
| Report of positive syphilis testing (%) (n = 406) | 160 (50.5) | 85 (67.5) | 75 (39.3) | < 0.001 |
| Report of positive HIV testing (%) (n = 361) | 74 (20.5) | 40 (27.6) | 34 (15.7) | 0.006 |

IQR: interquartile range; †previous six months; ‡lifetime.
in general travestis come from lower social classes and are more likely to be excluded from the family environment. Therefore, without family support, these women miss educational opportunities, and since they need to survive, they end up taking on sex work oftentimes as the only alternative for survival1.

Illicit drug consumption and its consequences, such as physical violence and legal problems, are experiences that permeate prostitution10 and contribute to the higher frequency of these variables among travestis. Therefore, their amplified risk behaviors are not necessarily due to gender characteristics, but due to missed social opportunities that create inequity gradients in these vulnerable populations, which in turn contribute to the acquisition and transmission of STI.

This study has limitations. It was carried out in cities in Goiás State, Central Brazil, a region in the industrialization process that does not represent Brazil as a whole. In addition, all data collected were based on self-reporting (including HIV and syphilis conditions); therefore, response bias should not be discarded. Despite these facts, our findings are in accordance with the literature and contribute to the body of knowledge of these two trans female categories.

In conclusion, travestis and transsexual women present intersections in their social and individual vulnerabilities; however, they seem to be more exacerbated in travestis, highlighting that health care managers must take account this imbalance when proposing health intervention measures.

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REFERENCES

1. Carvalho M. “Travesti”, “mulher transexual”, “homem trans” e “não binário”: interseccionalidades de classe e geração na produção de identidades políticas. Cad Pagu 2018; (52): 185-211. https://doi.org/10.1590/1809444920100520011
2. World Health Organization. Policy brief: Transgender people and hiv. Geneve: World Health Organization; 2015.
3. Baral SD, Poteat T, Strömdahl S, Wirtz AL, Guadamuz TE, Beyrer C. Worldwide burden of HIV in transgender women: a systematic review and meta-analysis. Lancet Infect Dis 2013; 13(3):214-22. https://doi.org/10.1016/S1473-3099(12)70315-8
4. Bastos FI, Bastos LS, Coutinho C, Toledo L, Mota JC, Velascode-Castro CA, et al. HIV, HCV, HBV, and syphilis among transgender women from Brazil. Medicine 2018; 97(Suppl. 1):S16-S24. https://doi.org/10.1097/MD.0000000000009447
5. Brasil. Estudo de abrangência nacional de comportamentos, atitudes, práticas e prevalências de HIV, sífilis e hepatite B e C entre travestis nos municípios de Belém/PA, Belo Horizonte/MG, Brasília/DF, Campo Grande/MS, Curitiba/PR, Fortaleza/CE, Manaus/AM, Porto Alegre/RS, Recife/PE, Rio de Janeiro/RJ, Salvador/BA e São Paulo/SP [Internet]. Brasil: Departamento de Doenças de Condições Crônicas e Infecções Sexualmente Transmissíveis; 2015 [cited on 19 Dec 2020]. Available at: http://www.aids.gov.br/pt-br/ct/na

6. Heckathorn DD. Respondent-Driven Sampling: A New Approach to the Study of Hidden Populations. Soc Probl 1997; 44(2): 174-99. https://doi.org/10.2307/3096941

7. Transgender Europe. Trans Murder Monitoring [Internet]. 2020 [cited on 21 Dec 2020]. Available at: https://transrespect.org/en/map/trans-murder-monitoring/?submap=tmm_2019

8. Gênero Número. Transfobia: 11 pessoas trans são agredidas a cada dia no Brasil [Internet]. Gênero Número; 2019 [cited on 21 Dec 2020]. Available at: http://www.generonumero.media/transfobia-11-pessoas-trans-sao-agredidas-a-cada-dia-no-brasil-2/

9. Holmes KK, Levine R, Weaver M. Effectiveness of condoms in preventing sexually transmitted infections. Bull World Health Organization 2004 [cited on 27 Oct 2020]; 82(6): 454-61. Available at: https://www.who.int/bulletin/volumes/82/6/en/454.pdf

10. Rocha RMG, Pereira DL, Dias TM. The context of drug use among transvestite sex workers. Saúde Soc 2013; 22(2): 554-65. https://doi.org/10.1590/S0104-12902013000200024

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