

HIV-Related Knowledge and Health Care Seeking Barriers among Transgender Individuals in a Megacity of Bangladesh: A Cross-sectional Study

Mantaka Rahman¹, Ummul Khair Alam², Ciptasari Prabawanti³, Sathi Dastider⁴, Ajmari Sharmin⁴, Afroza Tamanna Shimu⁵

Email: drmantaka.icddrb@gmail.com

¹International Centre for Diarrhoeal Disease Research, Bangladesh

²National Institute of Preventive and Social Medicine (NIPSOM), Dhaka, Bangladesh

³Magister of Science, Faculty of Psychology, Universitas Ahmad Dahlan, Yogyakarta, Indonesia

⁴National Institute of Preventive and Social Medicine (NIPSOM), Dhaka, Bangladesh

⁵Rangpur Medical College Hospital, Rangpur

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Abstract

The prevalence of HIV among Transgender is 1% in Bangladesh while only 0.9% in Dhaka City. Being minority group barriers faced by transgenders for healthcare-seeking are major public health concerns. Thus, the study aims to find out the HIV-related knowledge and health care seeking barriers among transgender individuals in dhaka city. This was a cross-sectional study purposively selecting 135 transgender from Drop-in-center and three Hijra pollis of Dhaka City. Data was collected using a semi-structured questionnaire containing a Likert scale regarding HIV-related knowledge. Majority were professional sex sellers including 54.10% having irregular sexual clients while 48.9% had been engaged in sex work for more than 10 years. Although more than half (57%) had good HIV-related knowledge. Only one-third (37.30%) sometimes used barrier method and more than half (58%) had knowledge of HIV symptoms. The barriers were negligence (16%), inconvenient location (12.43%), shame (13.45%), judgment (11.68%), fear (7.60%) and long waiting time (8.10%). Transgenders from Drop-in-center had higher HIV-related knowledge compared to ones from hijra pollis [t (95% CI)=.168, p<.001]. Those having HIV-related higher knowledge did not feel the necessity of isolated health corners [t (95% CI)= -3.799, p<.001]. Although DIC provides healthcare services, but existing facilities barriers need to be addressed to extend health services.

Keywords: Transgender, HIV-related Knowledge, Health Care Seeking, Barriers, Dhaka

Introduction

Transgender (TG) defines individuals with a gender identity that is incongruent with the gender identity accorded to them at birth (Burdge, 2007). A transgender individual may have many characteristics that are normally associated with a particular gender and identify elsewhere on the traditional gender continuum or exist outside of it as other, agender, gender-neutral, genderqueer, non-binary, third gender etc. The transgender community has been global as one of the highest-risk groups for HIV transmission and a prime target of interventions (Reback et al., 2021). The global pool prevalence of HIV among transgender women was 19.90% and transmasculine was 2.56 % in low and middle-income countries and 21.60% in high-income countries (Stutterheim et al., 2021). This means transgender women were about 13 times more likely to be infected with HIV than the general adult population (Reback et al., 2021). In addition, transgender women face many health and non-health issues, including poor sexual

and reproductive health, and barriers in accessing health services due to stigma and discrimination (Khan et al., 2009).

The global trends of the high prevalence of HIV and the myriad challenges facing transgender women have also been observed in Bangladesh. The country has successfully brought down the HIV prevalence among the general population (<0.01%) over the years since the identification of the first case in 1989 and among the transgender (key population) its 1% while only 0.90% in Dhaka City. Lack of knowledge and negative attitude regarding HIV/AIDS are risk factors for HIV infection among transsexuals. But there is very limited research and data on the transgender population when it comes to the evaluation of HIV/AIDS education programs (Samsul et al., 2016). Despite their needs, systematic interventions to address these issues among transgender women in most parts of the world remain inadequate. The lack of inclusion as a separate target group in national policy response and the limited application of comprehensive prevention programs are two telling examples, firstly an essential step towards the HIV care continuum using limited resources and secondly HIV testing frequency. Given that HIV risk among transgender individuals is a dynamic phenomenon, it is important to regularly monitor and update our knowledge of HIV prevalence and burden, such that we can identify trends that can inform policy-making and interventions for the betterment of this marginalized group at all. Even if transgender people experience a disproportionately heavy burden of HIV and continue to be an underserved community. In addition to social and structural challenges, transgender people face barriers to obtaining and mainstreaming medical care. Thus, the study aims to find out the HIV-related knowledge and healthcare-seeking barriers of the transgender community.

Methods

Study Design, participants, and procedure

A cross-sectional face-to-face survey was conducted from January 2022 to December 2022, comprising of 135 respondents at DIC, “Badhon Hijra Songho” Uttar Badda and “Hijra Polli” at Kamalapur Railway Field center, Mohakhali Railgate Field Center, Rampura Bridge Field Center. Both masculine and feminine transgender over 18 and registered with or received benefits from a DIC were considered as a sampling unit in a convenient sampling technique. A semi-structured questionnaire and HIV-KQ-18 questionnaire were used which include various information. Pre-testing was carried out on 10 respondents in DIC (Kuril Bisso-road, Uttara) to finalize the procedure and evaluate the research instruments' effectiveness. The study's inclusion criteria included individuals who registered / beneficiaries of the DIC excluding HIV/AIDS Positive respondents.

Measures

Sampling Procedure

The sample size was determined by using a 95% confidence level and the allowable error, degree of accuracy required to set at 10% (0.10) due to minority group with the prevalence of HIV testing accessibility among transgender in Dhaka City is 0.76 (Khan et al., 2009).

Thus, the calculated sample size is 70.07. During the data collection period, fortunately, 135 transgender people were found from the DIC & field (Hijra Pollis) and collected data from all of them.

Socio-demographic and sexual risk behavior

The survey included both close and open-ended questions to gather socio-demographic and sexual risk behavior data, such as sexual identity (masculine or feminine), age, educational

background, source of income, professional sex selling (yes or no), sex partner (regular, irregular, both), mode of sex (vaginal, anal, oral), place of sexual activity, duration of sex selling. Additionally, questions about substance abuse, sexual abuse, frequency of HIV testing, and sexual attraction (male or female or both) were asked.

HIV-KQ-18

HIV-KQ-18 instrument is reliable (excellent internal consistency, Cronbach's alpha at 0.75–0.89), stable, sensitive, and suitable for all persons, even low-literacy groups. *HIV knowledge* was measured using the 18-item HIV Knowledge Questionnaire-18 (HIV-KQ-18) (Carey & Schroder, 2002), which includes questions such as “A woman can get HIV if she has anal sex with a man.” Responses are in a “true, false, and don’t know” format and are summed; higher scores indicate higher levels of HIV knowledge. “Don’t know” or “refused to respond” were counted as incorrect responses.

Statistical analysis

Descriptive statistics were utilized in the current study using frequency, percentage, means and standard deviations. To examine the relationship between variables, the Chi-Square test, and t-test, were done. To demonstrate the greatest impact of the result, we first performed a bivariate analysis with chi-square and t-test incorporated. The analysis was carried out with the SPSS version 26.0.0 (Statistical Package for Social Science) windows (mac OS) software program.

Ethics

From National Institute of Preventive and Social Medicine (NIPSOM) Institutional Review Board (IRB), the study received formal permission (Memo No- NIPSOM/IRB/2017/09). Each responder or participant was informed about the study before it began, and their informed written agreement was obtained. The decision to participate in this study was entirely voluntary. The responders' working hours remained unchanged. They received the respect deserved in acknowledging their involvement and work. After these steps were completed, the surveys were given to them with their permission.

Results and Discussion

Descriptive characteristics of the study

A total number of 135 transgender aging between 18-50 years had been interviewed. Among them, 52.60% were taken from DIC (Badhon Hijra Songho) & the next 26.70%, 17.00% & 3.70%, were taken from Kamlapur rail gate, Mohakhali rail gate, Rampura Bridge Hijra pollis respectively. This study found that among the respondents, the mean age was 27.56 years \pm SD 7.889, mostly Muslims 92.60% & Hindus 4.40%. In this study self-identified sexual or gender identity was done among them 63.70% were masculine appearing and 36.30% were feminine appearing. Of the 135 Transgender people, more than one-fourth completed higher secondary education, nearly one-fourth completed their primary education and 14.80% completed graduation while a significant 16.30% still had no formal education yet. In this study among the transgender, most of them said that they involved themselves in the collection (Cholla tola) 27.50%, entertaining (Bandhigiri) activities 0.40% and at the same time almost half of the community 50.90% involved in commercial sex selling activities. Only 15.50% involved in services, another 8% in business and 2.60% still get financial help from their family. Among the sample population majority, 97.80% are professional sex sellers, and almost half of them selling sex for more than 10 years while almost one-third have for less than 5 years continuing this profession. The study also showed most of the TG 79.30% were unmarried while 20.70% were married. The study showed that more than one-third of the TG 33.30% performed their

sexual activity in their own residence, 26% at a client's house, 22.70% at a floating street while only 15.30% have their sexual activity in a hotel. This study also found the mode of sex among the respondents, 45.90% by anal sex, 41.20% by oral sex, and 12.90% by vaginal sex. Of the 135-transgender people, 37.80% had experienced sexual assault, 22.70% faced physical assault, 22.20% had verbal harassment, and 6.20% had no history of any sexual assault. Detailed results including sociodemographic characteristics and sexual risk behaviors among the transgenders is allocated in Table-1.

By HIV-KQ-18 scoring the average score of the 135 subjects' answers was 8.54 (SD = 3.90) out of 18, ranging from 0 to 18. When the scores were categorized into "Good knowledge" and "Poor knowledge" with the cut-off point of 47.44% where 77 (57%) of the subjects had Good knowledge, and 58 (43%) had poor knowledge. Most of the Participants (91.90%) were aware that having multiple sex partners can increase a person's chance of getting HIV (item 14). The majority of them (86.70%) were aware that anal sex could be a way of transmitting HIV (item 4). However, more than half (59.30%) believed that the withdrawal method before ejaculation could prevent HIV infection (item 3) and most of the respondents (71.10%) still believed that showering or washing the genitals after sex could prevent HIV infection (item 5). About one-fourth (25.20%) still believed that deep kissing is a mode of HIV transmission (item 9). About one-fourth (24.40%) also believed that vaccines could prevent HIV infection (item 8). Detailed results, including a breakdown of HIV-related knowledge according to HIV-KQ-18 scale is shown in Table-2 and Figure-2.

Regarding the barriers and challenges toward health care-seeking were 16% negligence of physicians, 13.45% shame, 12.43% inconvenient location, 11.68% judgmental attitude, 16% lack of confidentiality, 8.10% long waiting time, 8.90% lack of money and 5.80% don't know where to go reported by the respondents. In our study out of 135 transgender 92.6% felt the necessity of transgender-friendly health corners in hospitals. Nearly half of the TGs reported governmental activities, 21.20% non-governmental initiatives, 16.30% forced mass media initiatives, and 14% people initiatives for the development of transgender-friendly healthcare initiatives. Relevant statistics are visualized using a pie chart in Figure-1.

In Chi-square test, HIV-related knowledge is statistically significant with sexual activity in the floating street ($p < .001$) and always use of barrier method ($p < .000$). In independent sample t-test shows, among the respondents who didn't felt the necessity of a transgender-friendly health corner had higher knowledge and the difference was statistically significant $t [95\% \text{ CI, } -0.21940 - (-0.06282)] = -3.799, p < .001$. It also implies transgenders from DIC had higher HIV-related knowledge than the transgenders of the hijra pollis the difference was statistically significant $t [95\% \text{ CI, } .1001 - .236] = .168, p < .001$ All the inferential statistical tests are visualized in a tabular format in Table-3 and Table-4.

Comparison with other studies

57% of transgender respondents in our survey showed strong awareness about HIV, compared to 43% who had low understanding. Negligence (16%), humiliation (13.45%), difficult location (12.43%), and judgment (11.68%) were shown to be barriers to obtaining treatment. These results highlight the difficulties transgender people encounter while trying to get healthcare. Our results are consistent with those of the previous study, which found that transgender groups showed comparable trends in HIV awareness (Prabawanti et al., 2015; Budhwani et al., 2017; Jebin, 2018). However, in the study more than half transgenders were found having irregular sexual clients in spite of having good knowledge regarding HIV. The transgender with regular contact with DIC were more knowledgeable in comparison to others. Still HIV-related healthcare seeking was found challengeable for them to some extent.

Transgender women lack basic human rights, such as access to health care, and are marginalized (Storm et al., 2020). The study findings of this study are very much congruent with earlier studies that how stigma and discrimination, abuse, and societal barrier limit the employment option of TGs forcing them to take up traditional occupations to meet their basic need mostly through sex work in Bangladesh (Rahman & Alam, 2023).

Strengths, Limitations, and Recommendations

The convenience sample strategy utilized to pick transgender persons from specific regions in Dhaka City is one of the main drawbacks of our study. Although we were able to collect data from this difficult-to-reach demographic using this method, selection bias could have been introduced. It's possible that not all transgender people in the city are represented by those who visit the Drop-in Center or Hijra pollis. Therefore, it's possible that not all transgender people in Dhaka City may benefit equally from our findings.

Secondly, we ran across some language hurdles collecting the data since we were not familiar with the "Ulti Vasha" language. The complexity of the interviews and the caliber of the replies could have been impacted by this language barrier. Even while we worked hard to reduce this restriction by thorough training and piloting, it's crucial to understand that some subtleties in the experiences of the participants might not have been properly recorded.

Thirdly, participants in our research had to recollect information across time in order to answer questions on sexual risk behaviors and the length of time spent working in the sex industry. Recall bias may have arisen because participants may not have correctly remembered certain aspects. Although we made an effort to address this by cross-referencing replies with other data, it's crucial to recognize that recall bias may have an impact on the accuracy of some conclusions.

However, what transgender people in Bangladesh experience is largely influenced by cultural and societal influences. The cultural setting in which our study was carried out may have had an impact on participants' views of HIV-related knowledge and healthcare-seeking behaviors. Because transgender groups exist in many cultural settings, the findings might not be directly applicable to them; this cultural specificity should be taken into account when interpreting the findings.

Notwithstanding its limitations, this study reveals significant gaps in our knowledge on HIV awareness and healthcare-seeking behaviors among transgender people in Dhaka City. Subsequent investigations may examine the efficaciousness of customized therapies and healthcare access programs for this demographic, mitigating the recognized obstacles and promoting improved health results. Studies using a longitudinal design may offer insightful information on changes over time and their consequences.

Conclusion

The current study found in spite of half of the population had good knowledge regarding HIV, one-third still practiced some risk behaviors. Although DIC provides healthcare services, existing facilities barriers need to be addressed to extend health services for Transgender. Still half of the population believed on the government's initiative for eliminating most of the barriers. Building transgender-friendly health corners is a time-demanding issue to keep pace with the other facility for ensuring health care.

Conflict of Interest

The authors state that they have no known financial or interpersonal conflicts that can be perceived as having impacted the research presented in this study.

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Author Contributions

Conceptualization, data collection, validation, and manuscript writing: MR, UKA, SD, AS, ATS. Data Analysis: MR and UKA. Editing, and critical revision of the manuscript: MR, CP, UKA, SD and AS. All authors have read and approved the manuscript

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