# Sexuality, sociability, work, and HIV prevention among vulnerable populations during the COVID-19 pandemic

Sexualidade, sociabilidade, trabalho e prevenção do HIV entre populações vulneráveis na pandemia da Covid-19

Carla Rocha Pereira <sup>1</sup> , Marly	/ Marques	da Cruz <b>1</b> ,	Vanda Lúcia	Cota <sup>1</sup>
DOI: 10.1590/0103-11042022E704I				

ABSTRACT The COVID-19 pandemic has restricted access to HIV/AIDS prevention and services, affecting individual living and health conditions. We aimed to analyze the access of Men Who Have Sex with Men (MSM) and transgender women to HIV prevention technologies, their sexual, sociability, and work practices during the COVID-19 pandemic in Curitiba (PR), Brazil. We implemented virtual semi-structured interviews and adopted the conceptual framework of vulnerability. The MaxQDA software facilitated the analysis. The results showed that many MSM managed to isolate themselves socially, restricting sexual partnerships while some lost their jobs, and income decline revolved among self-employed or freelancers. Female/trans sex workers had to stop social distancing to return to sex work, exposing themselves to the coronavirus. Pre-Exposure Prophylaxis (PrEP) was adopted by those already using it. The of PrEP and Post-Exposure Prophylaxis (PEP) offer was preserved but modified. Specialized services adapted the attendance but generated users' exposure and serological status disclosure. In conclusion, we highlight the need for continuous HIV services in public health emergencies, a State-guaranteed right.

KEYWORDS Disease prevention. HIV. Vulnerability analysis. Sexual and gender minorities. COVID-19.

RESUMO O advento da pandemia da Covid-19 restringiu o acesso à prevenção e aos serviços de HIV/AIDS, ocasionando efeitos nas condições de vida e saúde dos indivíduos. O objetivo foi analisar o acesso de Homens que fazem Sexo com Homens (HSH) e mulheres trans/travestis às tecnologias de prevenção do HIV, suas práticas sexuais, de sociabilidade e de trabalho no contexto da Covid-19 em Curitiba/PR. Foram realizadas entrevistas semiestruturadas virtuais, e utilizado o referencial conceitual da vulnerabilidade. A análise foi viabilizada pelo software MaxQDA. Os resultados apontaram que muitos HSH conseguiram se isolar socialmente, restringindo as parcerias sexuais, alguns perderam o emprego, e a diminuição da renda girou entre os autônomos ou profissionais liberais. As mulheres trans/travestis profissionais do sexo tiveram que interromper o isolamento social para retornarem ao trabalho sexual, expondo-se ao novo coronavírus. A Profilaxia Pré-Exposição (PrEP) foi utilizada entre aqueles(as) que já estavam em uso. A oferta da PrEP e da Profilaxia Pós-Exposição (PEP) foram mantidas, mas sofreram mudanças. Os serviços especializados adequaram o atendimento, mas geraram exposição dos(as) usuários(as) e revelação do status sorológico. Como conclusão, destaca-se a necessidade de serviços de HIV contínuos em emergências de saúde pública, entendidos como um direito que deve ser garantido pelo Estado.

aldo Cruz PALAVRAS-CHAVE Prevenção de doenças. HIV. Análise de vulnerabilidade. Minorias sexuais e de gênero.

Covid-19.

Covid-19.

¹Fundação Oswaldo Cruz (Fiocruz), Escola Nacional de Saúde Pública Sergio Arouca (Ensp) - Rio de Janeiro (RJ), Brasil. carlaperei@gmail.com



#### Introduction

In Brazil, the HIV/AIDS epidemic has followed international guidelines for prevention, detection, and treatment for People Living with HIV/AIDS (PLWHA) or populations vulnerable to infection. Prevention technologies, such as Pre-Exposure Prophylaxis (PreP) and Sexual Post-Exposure Prophylaxis (PEP), have been incorporated into the so-called 'combined prevention', whose principle is adopting different methods to prevent HIV infection, encouraged by the government for so-called 'key and priority populations' given the higher prevalence of HIV<sup>1,2</sup>.

We highlight the importance of the right to access such technologies, especially with the potential impact on reducing the incidence of new HIV cases in Brazilian municipalities and more vulnerable groups, such as in the youngest<sup>3</sup> and critical populations, for example, Men who have Sex with Men (MSM), trans/transgender women, sex workers and injectable-drug users. PrEP and PEP policies are central to the fight against HIV within the Unified Health System (SUS), a priority agenda for the Ministry of Health concerning Sexually Transmitted Infections (STIs). However, despite the availability of new technologies, restricting access to HIV prevention and treatment during the COVID-19 pandemic can impact individuals' living conditions and health4.

COVID-19 is a severe acute respiratory syndrome caused by the SARS-CoV-2<sup>5</sup> virus and engendered the suffering of the LGBTQIA+ population due to the enhanced vulnerability and invisibility that already exist in the country<sup>6,7</sup>. Social and gender inequalities were intensified in this stage, exacerbating inequalities and increasing violence and suicides among young trans people<sup>8</sup>.

The new pandemic also caused this population to experience income loss or decrease, suspension of medication use (such as hormone therapy), increase in sex-formoney sessions with more exposure, lack of medical appointments, access barriers to health services (moving house and difficulty in providing proof of residence), poor access to government financial aid, among other difficulties during this period<sup>8</sup>.

This context brought, once again, stigmatizing concepts, such as 'risk group', 'dangerous' people or people who are 'victims', and vulnerabilities must be considered in COVID-19 and HIV for their confrontation and solidarity with the most excluded<sup>9</sup>. Thus, social inequalities during COVID-19 adversely affected the fight against HIV in Brazil and globally, bringing about the intersection of several factors.

The new reality brought about by COVID-19 made people experience other sexual practices. Among them, there were indications that sexuality could be explored through video meetings, sexting (exchange of text messages with sexual content), chat rooms, and sex parties via Zoom, among other virtual interaction forms. Ways to reduce the possibility of infection of the new coronavirus during sexual intercourse were also disclosed, emphasizing avoiding sex parties, limiting sexual partners, avoiding kissing people outside your 'social bubble', wearing a mask during sex, jointly masturbating using a mask, and adopting sexual positions and physical barriers to avoid direct contact10,11.

Moreover, some practices were indicated, such as solutions and problems faced by health teams that worked with HIV and STI prevention and treatment during the COVID-19 pandemic, as indicated in a document released in 2020 addressing experiences in Australia and New Zealand<sup>12</sup>. The following were cited: change in service opening hours; screening of asymptomatic people and care for people with STI symptoms; use of telehealth to limit face-to-face appointments; face-to-face and telehealth services for PLWHA; staff relocation; lack

of Personal Protective Equipment (PPE) due to changes in the team; clinics using peer educators suspended point-of-care HIV testing to protect patients and health workers; increase in PrEP supply and STI service delivery in some places, with a declining PrEP and PEP offer in others<sup>12</sup>.

The impact on access to health services, such as HIV testing and prevention technologies, was felt by populations most vulnerable to HIV and the new coronavirus, mainly due to imposed restrictive sexual practices. Thus, COVID-19 generated for the LGBTQIA+ population greater exposure to the denial of rights, violence, and discrimination, producing health inequalities<sup>13</sup>.

According to data from the Joint United Nations Program on HIV/AIDS (UNAIDS), key populations and their sexual partners account for 65% of new HIV infections worldwide, and this possibility is 34 times greater among transgender women14. The last Brazilian Epidemiological Bulletin, with data referring to 2020, pointed to a drop in HIV diagnoses in the country, with 29,917 notifications<sup>15</sup>, compared to 41,909 new HIV cases in 2019<sup>16</sup>. COVID-19 impacted notifications of HIV infection in Brazil, mainly the feed in the Notifiable Diseases Information System (SINAN)<sup>15</sup>, which may also have negatively reflected on the search for HIV testing, prevention, and treatment.

Given this setting, this paper aims to analyze the access of MSM and trans/transgender women to HIV prevention technologies (in particular, PEP and PrEP), their sexual, sociability, and work practices during the COVID-19 pandemic in Curitiba, Paraná, Brazil. This research was carried out within the 'Projeto A Hora é Agora' (PAHA) started in the municipality in 2014, expanding its activities to other Brazilian capitals from the work of various strategies to expand access to HIV testing, early treatment and prevention for young gay men/MSM¹7 and, more recently, for trans/transgender women, sex workers, and injectable-drug users.

#### **Methods**

This qualitative study adopted methods from the so-called social sciences for data collection and analysis. The paper is nested in the post-doctoral research 'Stigma and discrimination in the context of HIV prevention: access of vulnerable populations to testing and pre- and post-exposure prophylaxis in the metropolitan region of Rio de Janeiro and Curitiba/Paraná', developed at the Sergio Arouca National School of Public Health (ENSP/FIOCRUZ) and funded by FIOCRUZ Inova Program.

The authors performed a document analysis of available data on HIV testing, other STIs, linkage with care in Curitiba, and a research report on the PAHA assessment. Semi-structured interviews were conducted with MSM and trans/transgender women virtually (via Google Meet, phone call, or WhatsApp). Virtual interviews were adopted because this research stage was conducted in the first year of the COVID-19 pandemic (2020/2021). Vaccines were yet to be available to the Brazilian population, only partially to health professionals.

The respondents were recruited with the support of linkers<sup>18</sup> of the Guidance and Counseling Center (COA) and the e-COA, a night service that worked as an arm of the strategy and focused on serving the critical population. Linkers are professionals who help users with a positive HIV diagnosis or who started PrEP to begin treatment and 'browse' the health network.

The interviews in Curitiba covered 11 MSM and five trans/transgender women who were or have been PEP and PrEP users and a leader of trans/transgender in the city, totaling 17 interviews. Only audio was recorded, and each received a code to ensure confidentiality. The interviews were transcribed, and the excerpts were separated into 11 principal categories and some subcategories, but the article will analyze the 'COVID-19 and its implications' category (*figure 1*).

Creation of the virtual invitation, addressing the main points of the research and the researcher's contacts (email and telephone), sent by the linkers via WhatsApp to those who agreed to participate SELECTION OF RESPONDENTS in the research. Sending e-mails or phone numbers of potential respondents via the linkers to the researcher, who would start negotiating the best day and time for the interview. Informed Consent Form (ICF): · Sending the ICF to the respondents by email or via Conducting interviews in virtual format: WhatsApp; 11 MSM and 6 trans/transgender women ICF read to all before the interviews, and the consent. = total of 17 interviews. recorded and given by voice, as provided for in the ICF. Interview code consisting of: • Interview number; initials of the group to which he/she Transcription and separation of excerpts from belongs (G for gav people and T for trans/ the interviews into 11 major analysis categories transgender people); fictitious name; and age; (use of the MaxQDA Program). • Term 'Nu' placed before the code of an interviewed CATEGORIES - ANALYSIS activist, as she had never used PrEP and PEP. Selection of the category 'COVID-19 and its Analysis subcategories: implications': choice based on the excerpts • Psychological and personal implications; reflecting the respondents' experiences around Sexual intercourse implications; • Work and financial implications; COVID-19 in Curitiba/PR. · Health services implications. Analysis of the categories.

Figure 1. Flowchart of the selection of respondents and analysis categories

Source: Own elaboration.

Regarding the sociodemographic profile of the respondents, shown in *table 1*, we can affirm a similar profile of Brazilian PrEP users<sup>19</sup>, especially among MSM, as access to COA and COA occurred among those from the middle-class and with higher education. Among sex workers, access to COA occurred among those with repeated use of PEP. Therefore, health professionals recommended PrEP and a broader awareness of self-health care.

Table 1. Sociodemographic profile of the 17 people interviewed for the survey. Curitiba, 2020-2021

#### Gay men/MSM

- 11 respondents;
- Age between 25 and 49 years old;
- All considered themselves gay and some had boyfriends (few indicated the possibility of getting involved with women):
- Most respondents from the middle class and with higher income among white men accessed the COA:
- Most accessed the e-COA and had a lower income among Black respondents;
- All respondents had a higher education, and some had a postgraduate degree;
- Those with the lowest monthly income among whites still lived with or had financial support from their parents, especially during the COVID-19 pandemic.

## Trans/transgender women

- Six respondents;
- Age between 21 and 54 years old;
- All considered themselves heterosexual;
- All were sex workers, with two being activists with side jobs;
- Only one had a higher education;
- All accessed the COA:
- Three considered themselves white and three identified themselves as brown;
- Two had low income (older), and among those with higher income: two lived alone, one lived in a boarding house (worked on the street), and another shared an apartment with a girlfriend.

Source: Own elaboration.

Data were analyzed by MaxQDA software, which enabled the systematization of the developed categories within the project from the conceptual field of vulnerability<sup>20,21</sup>. The Research Ethics Committee of ENSP/FIOCRUZ (CAAE: 25761719.6.0000.5240) and Municipal Health Secretariat of Curitiba (CAAE: 25761719.6.3001.0101) approved the research.

#### **Results and discussion**

# Psychological and personal implications

Regarding the COVID-19 implications in the lives of the gay men/MSM interviewed, many were isolated in the first months of the pandemic, either alone, with roommates, or with their partners/boyfriends. Meetings with friends were rare; some performed activities only in open spaces, such as city parks. Some respondents revealed mood swings due to social distancing, but they were aware of their need to avoid infection with the new coronavirus.

[...] when the pandemic started, I handled it all very well, as it was a short period. As time passed, I started to get very anxious because I didn't have the option to see the people I like [...], and I was concerned about the number of deaths, the severity of the cases, and the ICU beds starting to fill up. Now, I'm fine again, accepting the situation [...]. (1GEduardo25).

Some studies indicated that gay, bisexual, and transgender mental, social, sexual, and physical health was adversely impacted during the COVID-19 pandemic, which is troubling because this population has high rates of anxiety, depression, and loneliness, which are health challenges. A survey carried out in Canada during the first year of COVID-19 indicated that 57% of the respondent LGBTQIA+ population required help with mental health problems, and this was of concern among those with suicidal thoughts<sup>22</sup>.

Regarding the vulnerability of the LGBTQIA+ population during the COVID-19 pandemic in Brazil, some studies indicated converging points related to work and income, physical and mental health (including violence), and solidarity - linked to support networks and community belonging6. One solution found in the country to help the mental health of the LGBTQIA+ population was to provide services to psychologists and therapists via videoconference, supported by several Non-Governmental Organizations (NGOs) that facilitated social networks and telephone contacts to assist and receive inputs<sup>6</sup>, including providing staple food baskets and protective supplies for the new coronavirus.

For some respondents, performing a minimum routine of activities was also a way to preserve physical and mental health. Taking care of their diet, exercising, keeping a wake-up call time, and even setting aside specific time for work helped MSM during the first months of confinement.

So, I started to bring my previous routine back into my house. I started to wake up early again. I started doing my workouts at home in the morning and repeating my whole previous routine indoors [...]. (4GNino34).

#### Sexual and work implications

Regarding PrEP use, only one respondent had stopped using it because he missed an appointment with the infectologist shortly before the onset of social distancing, repeatedly seeking PEP due to unprotected sexual intercourse. Others even thought about stopping PrEP use but continued with its adoption, as they believed they would return to taking prophylaxis quickly.

[...] because I thought, 'Damn! I'm not going to have sex. I'm going to be here during the pandemic, in prison. So, I'm going to take this medication here'.
[...] However, then I thought, 'Damn! It's going to

be over in a little while. Then I'll have to resume. So, I'll continue taking it [...]. (2GDanel49).

After the first few months, some MSM eased their isolation and had sexual intercourse with people they already knew or reduced the number of casual encounters (through a 'cruising' app, such as Grindr). Knowing the sexual partner or their health and confinement situation was also a way of selecting those with whom they could have sexual intercourse.

[...] He said it was hard for him. I said it's hard for me too. 'Ah, let's meet, then, ok?'. He does not work with health directly, but ecology, something like that. So, he's connected to the protocols and everything. (8GAdriano29).

This finding corroborates international suggestions for HIV protection during COVID-19, considering that selecting sexual partners among acquaintances and knowing about health status and confinement in 2020 was essential to reduce the possibilities of infection with the new coronavirus, as recommended by international bodies, especially in a reality of lack of vaccines for immunization11. Virtual relationships were the solution for preventing COVID-19 and, consequently, HIV. The use of sexting and camming (video sex) was a safe form of sexual activity during social distancing performed by the LGBTQIA+ population<sup>22</sup>. Cruising apps like Tinder saw hits increase by 15% in the US and 25% in Italy and Spain, and chat conversations grew 30% longer. This application offers means for romantic, sexual, or interpersonal relationships and has also been used to discuss various topics, such as mental health issues<sup>22</sup>. As a result, we could think that using applications and internet tools was an outlet for the LGBTQIA+ population to engage in sexual intercourse.

In Brazil, there was a lack of information on prevention methods around safe sexual practices in COVID-19<sup>23</sup>, which was the responsibility of the AIDS NGOs, which organized live and online chats and developed

educational material. As an example, we underscore the booklet developed by the Brazilian Interdisciplinary AIDS Association (ABIA), which passed on important information on the prevention of COVID-19 and indicated measures to reduce the risk of the new coronavirus during sexual intercourse<sup>24</sup>.

Most respondents worked remotely, although some remained with face-to-face jobs, and the self-employed had a deteriorated financial situation. One respondent shut down his company, and another was fired, but both found new jobs in the market. Some changes were also observed in the labor market, adversely impacting those whose salary depended on commission (model agent) or who were self-employed, with a decreased clientele or even a break from work (such as psychologists, dentists, and architects). Formal employees or civil servants worked from home, and few worked face-to-face. This finding is confirmed by a survey that indicated that 52% of LGBTQIA+ families suffered from layoffs or reduced workloads due to the pandemic<sup>22</sup>.

Understanding individual and social vulnerability20 related to HIV and the new coronavirus - exposure to viruses - depended on each respondent's understanding of preventive methods, such as the intersection of factors that encompassed economic, social exclusion, and gender relationships, which could or could not provide social distancing from social disparities21. When approaching social sciences in the analysis of COVID-19, Carrara<sup>25</sup> discussed how confinement was not the same for different populations. In his paper, he recalled some NGOs, activists, and researchers who worked on the 'embodiment' of statistics at the onset of the AIDS epidemic and who thought beyond the number of people infected with HIV, the importance of guiding human rights by the need to respect individual dignity, and the 'promotion of social responsibility in the face of disease' is emphasized, relevant in the discussion of epidemics<sup>25</sup>.

Since the onset of the COVID-19 pandemic, studies have indicated that people in low- and

middle-income countries have suffered adversity during this period, with increasing health inequalities and infection of the new coronavirus among older adults and vulnerable groups, with the need to track socioeconomic and gender status among the most affected people. They also indicated the higher inequalities and that the wealthiest countries would prioritize the vaccination of their people – which happened – and lessons from the response to HIV could be used in the fight against COVID-19, such as community mobilization, protection, and the provision of health care<sup>26</sup>.

Trans/transgender women also interrupted their sociability activities. One respondent spent 15 days in isolation at her mother's house, many stayed at home, and another did not even consider staying in her hometown with her family, fearing that she would lack care if the new coronavirus infected her. However, they spent a few days or months in isolation due to sex work, and all reported financial loss due to decreased clientele. They depended on the programs to support themselves, and when they stopped for a month or two, debts accumulated, so returning to sex work was the option. The respondent who worked on the street was the only one who did not stop with the programs and did not do any COVID-19 prevention when prostituting herself, such as wearing masks.

[...] I already got it and was cured. I don't wear a mask on the street, you know. Only when I go out to solve something. Then, I have to use it. However, I don't use it on the street [...] They sometimes stop, and then, when we go to have sex, they take it off [the mask]. (3TBruna21).

Some reports from national surveys underscored the decline of clients who sought out trans/transgender sex workers due to social distancing, reflecting on the financial helplessness of this population and the potential extreme vulnerability situations impacting their survival. One way out would be the Brazilian government

launching strategies to facilitate trans/ transgender women's access to emergency income and specific COVID-19 protocols for sex workers<sup>7</sup>, which did not happen. The federal government hindered some workers' access to emergency care, increasing social vulnerability<sup>13</sup>.

UNAIDS drew attention to the attempt by some countries to increase criminal penalties regarding HIV transmission and the use of police power to target sex workers, drug users, PLWHA, and the LGBTQIA+ population. Criminalization is generally used on vulnerable and stigmatized people in the community, especially with limited rights, such as during a public health emergency, which does not help respond to COVID-19. Rights related to non-discrimination based on HIV status, gender, reproductive health, and gender identity must be ensured<sup>27</sup>.

Some respondents selected clients and preferred old clients/acquaintances to protect against COVID-19, besides taking certain precautions such as using gel alcohol and putting clients' shoes outside the house. One even worked wearing a mask. Some asked customers about quarantine status and health conditions as if it were a kind of investigation to consider whether or not they could book the sex session, especially at the onset of the COVID-19 pandemic. There were several testimonials regarding COVID-19 prevention methods in the sexfor-money sessions.

[...] first, gel alcohol at the entrance and shoes outside the apartment. People enter barefoot. Then, all that care, don't take off your mask, I don't take mine off, and all that care. Nobody talks. We don't dialogue. Nothing. He only comes to satisfy his needs and leaves. (2TCarmem41).

In my house, with great care, everything, alcohol gel at the entrance, and a mask. I often avoid having contact through kissing. I always have sex with a condom, with complete safety. It is something that I value a lot as well. (Nu5TAline47).

These reports are similar to the practices adopted by the MSM interviewed, as they selected sexual partners based on their health status, such as carrying out safety protocols to reduce the possibility of infection with the new coronavirus. In 2021, more than 38 million informal workers in the country did not access national income policies<sup>27</sup>. Therefore, a large portion of the population had to be exposed to SARS-CoV-2, with the possible illness and transmission of the virus, to survive. The maxim 'we are in the same boat', echoed in Brazilian society, did not apply to everyone since the pandemic exposed inequalities and structural discrimination leaving health and social needs in Brazil wide open<sup>28</sup>.

ABIA's material mentioned above adapted the recommendations indicated by Australia and New Zealand to the Brazilian reality. It indicated more suitable sexual positions to avoid the new coronavirus and to use a mask, besides bathing before and after sex, promoting online meetings (webcam and apps), having short encounters with contact directions, limiting the number of partners, avoiding group sex, restricting sex to trusted networks, and avoiding kissing and sharing objects with saliva and body fluids. Specifically for sex workers, the recommendation was linked to harm reduction strategies, such as avoiding clients with COVID-19 symptoms and 'face-to-face' sexual positions<sup>24</sup>.

Not all respondents used PrEP during the interview, but most had already used PEP when having sex without condoms. Those who were on PrEP continued to use it, mainly due to the brief break from sex work and because many had already informed their clients about the continued use of PrEP.

All this within that thing: no, I trust, I know that the person is in quarantine like me, he knows my attitudes towards self-care. Because of that, you see that I am using [PrEP]. (1TAdriana54).

#### Implications in the health services

Concerning COA and e-COA, new PrEP users were not allowed in the first six months of the pandemic. The team was reorganized, spacing out the appointment months, and some were performed remotely or when a doctor in the service analyzed the tests to dispense PrEP. Truvada (PrEP medication) was dispensed for two, three, or four months. Users were kept apart in the waiting room, among other ways to reduce the probability of infection with the new coronavirus in these services. However, some reported care provided in the halls, which failed to ensure appointment confidentiality. MSM did not report embarrassment in this service but expressed that some might be uncomfortable with the non-private visit.

I agree. They could have called me into the room, which they could because the space was ample and broad. However, they attended to me in the hall, 'here are your medicine vials; here's the guide to take the test', but standing in the hall. Could it have been done in a room? It could have. Did it embarrass me? No. So, let's separate things. (2GDanel49).

There were many people around. However, she didn't mention anything personal about me that could embarrass me. However, some people could feel embarrassed. I also understand her not wanting to take people into the office room because you must avoid human contact in this pandemic. (1GEduardo25).

One can think of the barriers and difficulties of the LGBTQIA+ population accessing counseling and antiretroviral therapy services during the COVID-19 pandemic in the world, as they were not deemed 'essential' and some were closed or restricted<sup>4,22</sup>. Dispensing several months of PrEP and efforts to stop overcrowding in HIV services<sup>4</sup> were encouraged. In other Brazilian cities, Telehealth was used during the COVID-19 pandemic to ensure the care of people using PrEP, as in Rio de Janeiro, performing rapid

HIV tests and complementary tests among those without COVID-19 symptoms, with telephone assessment, remote monitoring, and digital prescription, as in FIOCRUZ<sup>29</sup>. These accounts are similar to what happened in the COA and e-COA, which also implemented good practices reported by Australia and New Zealand<sup>12</sup>, but experienced problems at the onset of adapting services due to COVID-19.

The National Aids Articulation (ANAIDS) announced a 30% reduction in PrEP services in Brazil at the onset of the COVID-19 pandemic, varying between states, and smaller and less developed cities were the most affected<sup>23</sup>. Studies have revealed that emergency room crowding may have hampered access to PEP, such as the PrEP slowdown as an HIV prevention strategy in countries, especially in the implementation stage. At the same time, they also indicated research and services that used protocols similar to those employed by the COA and e-COA, such as telehealth, peer support, and browsing via text message or online social media<sup>30</sup>.

Also, in the COA, there was a breach of confidentiality regarding the HIV diagnosis at the pharmacy because the entry was not allowed, as one respondent saw the different medication that another user was taking for HIV. Also, a service nurse was rude, which, according to one respondent, had been caused by the onset of the pandemic and the fear of working in an environment with the possibility of infection with the new coronavirus.

A lack of knowledge of how the COA was working at the beginning of the pandemic was also reported, with one respondent taking his partner's PrEP for a while. However, a linker passed the necessary information over the phone so that he could re-access the service. However, he did not perform tests or talk to a doctor, which another respondent also highlighted.

Due to the pandemic, they [the appointments] actually became shorter [...] I only talk to the receptionist. The doctor analyzes my tests and passes

them on to the pharmacist. The pharmacist passes on all the information the doctor passed on to him, and I already take the medication with him, and everything is fine. (7GCarlos33).

At the e-COA, besides the same measures adopted at the COA to prevent COVID-19, there were problems accessing the site due to the lack of space in the waiting room. For some MSM, it was fine to wait outside the e-COA, on the street, a type of care. Others feared being recognized in a queue on a busy street, with the strategy sign on the house, and being mugged.

It was much more restricted. Before, my boyfriend could go with me, wait for me at the e-COA. Now I can only go alone. I can't take a companion. The number of people entering the e-COA is limited, so much so that I could not enter on my last visit. I entered, filled out the registration form, waited outside, and entered. It's really restricted. It's a very excellent care. (7GCarlos33).

[...] Now that I've returned, they said, 'we can't have everyone inside at the same time'. So, there are people out there waiting. Then I arrived for my appointment, and I had to wait outside. It was during peak hours: many cars passed by. [...] You say, 'wow, people will pass by. If, for example, someone from my work passes by [...] and says, 'wow, why is he there?'. (10GAlan29).

Among trans/transgender women, the perception of care at the COA was similar to that of MSM. The pandemic benefited from a greater distribution of PrEP, reducing the monthly visit to the COA. Once again, there was a breach of secrecy due to limited access to the pharmacy, mainly due to care adjustments at the onset of the COVID-19 pandemic.

[...] you arrived and showed your identity card. They would bring your medication. However, then it became more exposed. You could see who took a single pill and who took several pills. (1TAdriana54).

Even with the access restriction at the COA and e-COA, there was concern about not stopping the delivery of PrEP to those in use. Regarding programmatic vulnerability19,20, those accessing the e-COA were exposed, which could generate stigma and discrimination if recognized, such as breaking the confidentiality of the diagnosis of PLWHA protected by Law N° 14.289/2022, which guarantees confidentiality in health services. The impediment of new PrEP users at the onset of the COVID-19 pandemic was an obstacle to HIV prevention in Brazil. The lockdown and the fear of entering a medical environment due to the new coronavirus were evidenced by the fear of accessing HIV services in the world<sup>31</sup>.

#### **Final considerations**

COVID-19 brought a new perspective on several possibilities for exercising sexuality without physical contact, allowing respondents to engage in desires and pleasures. However, it also showed the insecurity caused by the lack of PrEP, impacting the repeated use of PEP. HIV prevention technologies continue to be desired and used, even with the restructuring of the specialized service in Curitiba and the challenges in providing care in the first months of the pandemic. Vulnerability remained for trans/transgender women, mainly due to the need to quickly return to sex work and the impossibility of carrying out social distancing for survival. The disparity between the two populations' social markers underscored how social and health inequalities increased during COVID-19, particularly for trans/transgender women.

We should point out as one of the study limitations that the COVID-19 pandemic delayed the semi-structured interviews, which were readjusted to consider their realization in the virtual format. Moreover, the PAHA linkers facilitated the choice of research participants through the bond established with the users, who may have chosen those who had a better

relationship with the COA and the e-COA. Even so, some respondents criticized the health services in Curitiba.

Finally, studies addressing sexual, social, and HIV prevention practices among MSM and trans/transgender women are needed in future research during the COVID-19 pandemic, mainly so that vulnerabilities can be analyzed, and even possible interventions considered to mitigate the inequalities that escalated in this period. The right to HIV prevention, such as testing and prevention technologies, and treatment for PLWHA must be ensured during health emergencies, reducing the impact of the programmatic vulnerability. The reorganization of services during the pandemic, such as the COA and e-COA, and probably other services of the SUS, meant that, in future public health emergencies, the teams could speed up adjustments to ensure the services provided around the HIV and, thus, allow continuous access to the right to

prevention, which must be of good quality and assured by the State.

### Acknowledgments

We are grateful to linkers of the COA e e-COA for facilitating the virtual interviews.

#### **Collaborators**

Pereira CR (0000-0003-4692-0665)\* was the researcher responsible for designing, analyzing, and interpreting data. Cruz MM (0000-0002-4061-474X)\* was the research supervisor, contributing to developing the study and critically reviewing the text. Cota VL (0000-0002-6823-9304)\* participated in the critical review of the text and final approval of the paper. ■

<sup>\*</sup>Orcid (Open Researcher and Contributor ID)

#### References

- Brasil. Agenda Estratégica para ampliação do acesso e cuidado integral das populações-chave em HIV, hepatites virais e outras infecções sexualmente transmissíveis. Brasília, DF: Ministério da Saúde; 2018.
- Ferraz D. Prevenção combinada baseada nos direitos humanos: por uma ampliação dos significados e da ação no Brasil. Boletim ABIA. 2016; (6):9-12.
- Lima GDF, Santos MVF. HIV virus prevention difficulties in the young population and the importance of combined prevention. Research, Society and Develop. 2021; 10(13):e360101321440.
- Stover J, Kelly SL, Mudimu E, et al. The Risks and Benefits of Providing HIV Services during the CO-VID-19 Pandemic. PLoS ONE. 2021 [acesso em 2022 mar 20]; 16(12):e0260820. Disponível em: https://doi. org/10.1371/journal.pone.0260820.
- Singhal T. A Review of Coronavirus Disease-2019 (COVID-19). Indian j. pediatr. 2020; 87(4):281-286.
- Miranda MHG, Grangeão FN, Montenegro FFPA. A Pandemia do Covid-19 e o Descortinamento das Vulnerabilidades da População LGBTQI+ Brasileira. Rev. Interd. em Cult. e Soc. 2020; 6(2):102-119.
- Santana ADS, Melo LP. Pandemia de covid-19 e população LGBTI+. (In)visibilidades dos impactos sociais. Sexualidad, Salud y Sociedad - Revista Latinoamericana. 2021; (37):e21202.
- Santos MA, Oliveira WA, Oliveira-Cardoso EA. Inconfidências de Abril: Impacto do Isolamento Social na Comunidade Trans em Tempos de Pandemia de COVID-19. Psicol. & Soc. 2020 [acesso em 2022 fev 5]; (32):e020018. Disponível em: http://dx.doi.org/10.1590/1807-0310/2020v32240339.
- Raxach JC. Repensando a prevenção. Rio das Prevenções. In: Pereira CR, Faulhaber C, Terto Jr V, relatores. Relatoria Seminário Repensando a Prevenção. Rio de Janeiro: ABIA; 2021. p. 21-23.

- Rios LF. Sexualidade e prevenção entre homens que fazem sexo com homens nos contextos das pandemias de AIDS e da Covid-19. Ciênc. Saúde Colet. 2021; 26(5):1853-1862.
- NYC Health. Safer Sex and COVID-19. New York: NYC Health; 2020. [acesso em 2022 mar 19]. Disponível em: https://wwwl.nyc.gov/assets/doh/downloads/pdf/imm/covid-sex-guidance.pdf.
- Ashm COVID-19. Taskforce report on sexual health services in Australia and New Zealand during the COVID-19 pandemic. Sydney: ASHM; 2020. [acesso em 2022 mar 19]. Disponível em: https://ashm.org. au/covid-19/clinical-care/ashm-covid-19-taskforce--report-on-sexual-health-services/.
- Sousa AR, Cerqueira CF, Porcino C, et al. Pessoas LGBTI+ e a COVID-19: Para pensarmos questões sobre saúde. Rev. baiana enferm. 2021; (35):e36952.
- UNAIDS. Relatório Informativo Dia Mundial da AIDS 2021. Genebra: UNAIDS; 2021.
- Brasil. Ministério da Saúde, Secretaria de Vigilância em Saúde. Boletim Epidemiológico. 2021 dez; (esp). Brasília, DF: Ministério da Saúde; 2021.
- Brasil. Ministério da Saúde, Secretaria de Vigilância em Saúde. Boletim Epidemiológico. 2020 dez; (esp). Brasília, DF: Ministério da Saúde; 2020.
- Cruz MM, Cota V, Lentini N. et al. Comprehensive approach to HIV/AIDS testing and linkage to treatment among men who have sex with men in Curitiba, Brazil. PLoS ONE. 2021; 16(5):e0249877.
- Cota V, Cruz, MM. Barreiras de acesso para Homens que fazem Sexo com Homens à testagem e tratamento do HIV no município de Curitiba (PR). Saúde debate. 2021; 45(129):393-405.
- Pimenta MC, Bermúdez XP, Godoi AMM, et al. Barreiras e facilitadores do acesso de populações vulneráveis à PrEP no Brasil: Estudo ImPrEP Stakehol-

- ders. Cad. Saúde Pública. 2022 [acesso em 2022 mar 23]; 38(1):e00290620. Disponível em: http://dx.doi.org/10.1590/0102-311X00290620.
- 20. Ayres JRCM, França Júnior I, Saletti Filho HC. O conceito de vulnerabilidade e as práticas de saúde: novas perspectivas e desafios. In: Czeresnia D, organizador. Promoção da saúde: conceitos, reflexões, tendências. Rio de Janeiro: Editora Fiocruz; 2009. p. 121-144
- 21. Paiva V, Ayres JRCM, Buchalla CM. Direitos humanos e vulnerabilidade na prevenção e promoção da saúde: uma introdução. In: Paiva V, Ayres JRCM, Buchalla CM, organizadores. Vulnerabilidade e Direitos humanos. Prevenção e Promoção da Saúde. Livro I. Curitiba: Juruá; 2012. p. 9-22.
- 22. Brennan D, Card KG, Collict D, et al. How Might Social Distancing Impact Gay, Bisexual, Queer, Trans and Two-Spirit Men in Canada? AIDS and Behavior. 2020 [acesso em 2022 mar 19]; (24):2480-2482. Disponível em: https://doi.org/10.1007/s10461-020-02891-5.
- 23. Parker R, Terto Jr V, Raxach JC, et al. AIDS e CO-VID-19: O impacto do novo coronavírus na resposta ao HIV. In: Dossiê ABIA: HIV/AIDS e COVID-19 no Brasil. Rio de Janeiro: ABIA; 2020. p. 22-24.
- 24. Raxach JC, Terto Jr V, Faulhaber C. Combinando a Prevenção à COVID-19: dimensões comportamentais, biomédicas e estruturais. Rio de Janeiro: ABIA; 2021.
- Carrara S. As ciências humanas e sociais entre múltiplas epidemias. Physis: Rev. Saúde Colet. 2020; 30(2):e300201.
- 26. Hargreaves J, Davey C, Group for lessons from pandemic HIV prevention for the COVID-19 response. Three lessons for the COVID-19 response from

- pandemic HIV. The Lancet. 2020 [acesso em 2022 mar 20]; 7(5):e309-311. Disponível em: https://doi.org/10.1016/S2352-3018(20)30110-7.
- UNAIDS. UNAIDS condemns misuse and abuse of emergency powers to target marginalized and vulnerable populations. Genebra: UNAIDS; 2020.
- Marques ALM, Sorrentino IS, Rodrigues JL, et al. O impacto da Covid-19 em grupos marginalizados: contribuições da interseccionalidade como perspectiva teórico-política. Interface (Botucatu). 2021; 25(supl1):e200712.
- Hoagland B, Torres T, Bezerra DRB, et al. Telemedicine as a tool for PrEP delivery during the COVID-19 pandemic in a large HIV prevention service in Rio de Janeiro-Brazil. Braz. j. infect. dis. 2020; 24(4):360-364.
- Parente JS, Azevedo SL, Moreira LFA, et al. O impacto do isolamento social na pandemia de CO-VID-19 no acesso ao tratamento e aos serviços de prevenção do HIV. Research, Soc. Develop. 2021; 10(01):e28110111692.
- UNAIDS. Direitos em uma pandemia: Lockdowns, direitos e lições do HIV na resposta inicial à COVID-19. Genebra: UNAIDS; 2020.

Received on 04/21/2022 Approved on 14/09/2022 Conflict of interests: non-existent Financial support: Inova Fiocruz/Oswaldo Cruz Foundation (n° 6331633123)