

PROFILE OF USERS OF PRE-EXPOSURE PROPHYLAXIS TO HIV IN THE HEALTH SYSTEM IN MATO GROSSO, BRAZIL

PERFIL DOS USUÁRIOS DA PROFILAXIA PRÉ-EXPOSIÇÃO (PREP) AO HIV DO SISTEMA ÚNICO DE SAÚDE (SUS) NO MATO GROSSO

Maryah Héllen de Azevedo Oliveira¹
Academic of Medical School
PIBIC/ICETI scholarship holder – UniCesumar
University Cesumar (UniCesumar) – Maringá, Paraná, Brazil.
E-mail: maryahhao@gmail.com

João Paulo Marques Adamo
Academic of Medical School
University Cesumar (UniCesumar) – Maringá, Paraná, Brazil
E-mail: ra-22055179-2@alunos.unicesumar.edu.br

Cátia Virgínia Weber de Oliveira
Master's student in the Graduate Program in Health Promotion,
University Cesumar (UniCesumar)
University Cesumar (UniCesumar) – Maringá, Paraná, Brazil.
E-mail: tata_enf@hotmail.com

Mirian Ueda Yamaguchi
Advisor of the Postgraduate Program in Health Promotion (PPGPS) of University Cesumar (UniCesumar). Researcher of Instituto Cesumar de Ciência, Tecnologia e Inovação – ICETI.
University Cesumar (UniCesumar) – Maringá, Paraná, Brazil
E-mail: mirianueda@gmail.com

¹ Corresponding Author: maryahhao@gmail.com

ABSTRACT: This article seeks to identify the profile of users of HIV pre-exposure prophylaxis (PrEP) in the national health system (Sistema Único de Saúde - SUS) in Brazil. **Methodology:** this is a cross-sectional epidemiological study with a quantitative observational analytical nature, which analyzes the SUS-PrEP user registration form collected in Cáceres-MT. **Results:** Among the 76 users studied, the majority were male (76%), aged between 20 and 69 years old, all identified with their biological sex, with a predominance of homosexuals (56.6%) and people of mixed race (53.9%), with 12 years of education or more (52%). In addition, 64 individuals use alcohol or other drugs. **Conclusion:** The study found that the population with the highest incidence of HIV infection is not being covered by the use of PrEP and, therefore, an obstacle to health promotion is identified. Strategies are suggested focusing on dissemination to the key population in combating the epidemic.

KEYWORDS: HIV virus; Health promotion; PrEP (Pre-Exposure Prophylaxis); Specialized Assistance Service.

RESUMO: Neste artigo, busca-se identificar o perfil dos usuários da profilaxia de pré-exposição (PrEP) ao HIV do sistema único de saúde. **Metodologia:** trata-se de uma pesquisa epidemiológica com corte transversal de caráter analítico observacional quantitativo, que analisou o formulário de cadastramento de usuário SUS- PrEP coletados em Cáceres-MT. **Resultados:** Entre os 76 usuários estudados, foram predominantes indivíduos do sexo masculino (76%), com idade entre 20 e 69 anos, todos identificavam-se com seu sexo biológico, com predomínio de homossexuais (56,6%) e pessoas pardas (53,9%), com escolaridade igual ou superior a 12 anos (52%). Além disso, 64 indivíduos fazem uso de álcool ou outras drogas. **Conclusão:** O estudo evidenciou que a população de maior incidência para a infecção do HIV não está sendo contemplada com o uso do PrEP, logo identifica-se um empecilho na promoção da saúde. Sugerem-se estratégias com foco na divulgação para a população chave no combate à epidemia.

PALAVRAS-CHAVE: Vírus HIV; Promoção da saúde; PrEP (Profilaxia Pré-Exposição); Serviço de Assistência Especializada.

1. INTRODUCTION

The HIV virus spread rapidly in sub-Saharan Africa in the 1980s, in which, in a short period of time, it evolved into a pandemic that affects more than just vulnerable populations, with worrying infection rates. In the current situation, despite the great extent of research into understanding HIV, many questions remain unanswered, precisely because it is considered a relatively new infection, which is often stigmatized within the socio-politics of countries affected (TAN,2020). For this reason, there must be a perspective beyond statistical data, which also includes the discussion of the vulnerabilities of populations exposed.

Based on this premise, it is necessary to focus on prevention and to understand the involvement of this disease in age groups from the youngest between 15 and 29 years old, as well as in the population aged 60 and over (FERNANDES, 2021). PrEP against the virus emerged from research focused on combating the HIV pandemic, using a combination of oral antiretrovirals, which seek to reduce the risk of HIV infection.

It is worth highlighting that the offering of PrEP in Brazil began in 2013, when five PrEP demonstration projects were funded separately to better understand the operational challenges in service provision, and in December 2017 it was officially implemented. It has demonstrated many benefits over the years (VIDA, 2019), and it is clear that this strategy is effective and safe for people at increased risk of acquiring the infection, consequently, the fight against the epidemic is improved considering the effect of prophylactic premise (CALABRSE et al., 2019).

Furthermore, oral PrEP should be offered as an additional choice for people at substantial risk of acquiring HIV as part of combined prevention approaches. It is a public-health people-centered strategy to offer prophylaxis to individuals at potential risk of exposure to the virus. Therefore, the issues of universal health coverage, gender equality and optimization of PrEP services are a priority (SPINNER et al., 2015). Furthermore, it is evident that people with recent risk exposure, especially in the last 30 days, should be advised regarding the possibility of infection, even with negative results in the tests carried out and in the presence of signs and symptoms of acute viral infection, if a viral load test for HIV is performed. Therefore, if the infection is confirmed, PrEP is no longer considered for that individual. However, if the patient is called for treatment, an active assessment is recommended in all PrEP consultations, the presence or report of the last four weeks of signs and symptoms, which may present a viral infection corresponding to HIV (BRAZIL, 2022).

Furthermore, PrEP users are usually stereotyped as sexually irresponsible, indecent and immoral. This prejudice, associated with people's ideals, manifests itself in various behaviors and discourages interest in and acceptance of PrEP. In this way, individuals interrupt adherence and are motivated, even indirectly, to discontinue the pharmacological measure (CALABRESE et al., 2019). The impact of discrimination towards the main vulnerable social groups makes it difficult to adhere to prophylaxis monitoring. Currently, PrEP implementation strategies that focus strictly on stigmatized groups with a high incidence of HIV have had limited success and are counterproductive as they consider stigma as a harmful factor (CALABRESE, 2018; NEWMAN et al., 2019).

However, despite the discriminatory implication being concentrated in key populations, it must also be considered that simply belonging to one of these groups is not enough to validate and characterize individuals, as often shown in situations in which they can contract HIV. Furthermore, it is necessary to consider sexual practices, partnerships or

specific contexts that determine increased chances of exposure to the virus. When evaluating the current scenario, young people are considered one of the priority populations, with a significant increase in the infection rate, especially those belonging to key populations. Therefore, PrEP aims to reduce HIV transmission and contribute to achieving goals related to ending the epidemic. However, in order to be efficient in coping, it is necessary to expand these populations' access to services, welcoming them in their entirety and guaranteeing their rights to health (FONNER et al., 2016).

Therefore, it is expected to identify the profile of PrEP users in the Brazilian Public Health System (SUS) (age, sex, sexual orientation, gender identity, race, education, homelessness) and determine the conduct of the PrEP user in the SUS (type of exam used for HIV, motivation for seeking PrEP, type of care service used, PrEP medication schedule, reasons why they stopped taking the medication and number of HIV self-tests taken for partners). In addition to the results discussed, it is expected that with the analysis of these data and the discussion about them, the State and the health community, based on knowledge about the target audience, will present subsidies to develop more effective campaigns to guarantee greater success in health promotion related to PrEP.

2. METHODOLOGY

This is cross-sectional epidemiological research with a quantitative observational analytical nature, whose focus was to determine the profile of PrEP users. It was decided to analyze the data present in the "PrEP Service Form" and the "SUS user registration form - PrEP" and use the theoretical framework of vulnerabilities to discuss the data obtained.

The location of the study was the city of Cáceres, a medium-sized municipality in the interior of the state of Mato Grosso, Brazil (IBGE, 2006), which has approximately 89,681 inhabitants, according to the last census carried out in 2022 (IBGE, 2023). The study population were people who sought out the SUS to use prophylaxis. The data were obtained through the collection of the Specialized HIV/AIDS Assistance Service (SAE) registration database in Cáceres-MT, present in the forms (both filled out by the user when adhering to PrEP), and refer to the period from the 8th to the 12th of May 2023. With a final sample of 76 individuals.

The information, relevant to the study, that was collected is: are they homeless people, have they ever exchanged sex for money, used drugs or alcohol, date of the last HIV test, reason for using PrEP, whether they took the HIV vaccine, type of care service and adherence to PrEP medication use. After collection, the data was analyzed and the literature sought to explain the results obtained, emphasizing the search for data that shed light on the determinants and conditions of the results.

This study was approved by the Research Ethics Committee (CEP) of Unicesumar, number 5616649, 08/31/22 and an authorization letter was received from the SAE of Cáceres-MT.

3. RESULTS

Among the 76 users studied, the majority were male (76%), aged between 20 and 69 years old. The majority of individuals identified with their biological sex, therefore 75 cisgender people (98.68%), and only 01 trans woman (1.32%) aged 26. Regarding sexuality, there was a predominance of homosexual people (56.6%). There is a predominance of mixed-race people (53.9%), with 12 years of education or more (52%).

None of the users declared themselves to be homeless. For data regarding lifestyle habits, 64 individuals claimed to use alcohol or other drugs. There was a higher prevalence of the use of rapid tests (93.37%) and regarding the care service, there was homogeneity in the SAE Service (100%).

Table 01 - Distribution of participants, according to data collected in questionnaires carried out when adhering to PrEP in Cáceres-MT.

Variable	Absolute frequency	%
Age group		
Up to 20 years	1	1,32
From 21 to 30 years old	36	47,40
From 31 to 40 years old	23	30,30
From 41 to 50 years old	13	17,10
From 51 to 60 years old	2	2,69
From 61 to 70 years old	1	1,32
Sex		
Female	18	23,70
Male	58	76,30
Gender		
Woman CIS	17	22,40
Man CIS	58	76,30
Trans Woman	1	1,32
Sexual Orientation		
Straight	22	28,90
Homosexual / Gay / Lesbian	43	56,60
Bisexual	11	14,50
Race/Color		
White	25	32,90
Black	9	11,80
Yellow	1	1,32
Brown	41	53,90
Education		
From 1 to 3 years	1	1,32
From 4 to 7 years old	10	13,20
From 8 to 11 years old	24	31,60
From 12 to over 40 years old	40	52,60
Did not respond	1	1,32
Homeless person		
Yes	0	0

No	76	100
Exchanges sex for money, valuables, drugs, housing or services		
Yes	8	10,53
No	68	89,47
Drug and alcohol use in the last 3 months		
Yes	64	84,21
No	12	15,79
Type of exam used		
Self-test	0	0
Quick test	74	97,37
Serology	2	2,63
Reason for using		
Reproductive Planning	0	0
Pregnancy	0	0
Breastfeeding	0	0
Not applicable	76	100
HIV vaccine study participant		
Yes	0	0
No	76	100
Customer service		
Primary Care	0	0
Specialized Service	76	100
CTA	0	0
Private Service	0	0
How did you use PrEP		
Daily scheme	76	100
Schema on demand	0	0
Both	0	0
I didn't take it	0	0
What is the main reason you stopped taking PrEP pills?		
Oblivion	0	0
Travel/away from home	0	0
The medicine has run out	0	0
Adverse effects	0	0
Abuse of alcohol and/or other drugs	0	0
Not applicable	76	0
Number of HIV self-tests for partners		
0 (zero)	73	96,10
01 (one)	0	0

02 (two)	0	0
03 (three)	2	2,63
04 (four)	0	0
05 (five)	0	0
Did not respond	1	1,32

Source: Authors, 2024

4. DISCUSSION

4.1 Age Group

To understand the age range of PrEP users, it is important to have a broad view of the problem. This way, the main target audience for the use of the medicines coincides with the age range with the highest incidence of HIV contamination. According to the Ministry of Health, the increase in HIV infection in the age group from 15 to 29 years old is very noticeable. Data collected in Cáceres indicates that cases are concentrated in the age group between 21 and 30 years old.

According to data from the December 2022 Epidemiological Bulletin on HIV/Aids, HIV cases reported in the Notification Disease Information System (SINAN) are higher in the age group between 25 and 29 years old for both males and females (males: 64,315 cases, 21.1% and females: 19,257 cases, 14.9%). Therefore, in Cáceres there are few reports of HIV cases in minors, which raises the question: are young people and adolescents not sexually active, or are they not being effectively cared for by the health service?

4.1.2 Sexually active population

The sexually active age group in Brazil can vary, but in general, it refers to people who have already reached the legal age of consent for sexual activity, which is 14 years old in Brazil, according to the Penal Code. Therefore, the average age at which people become sexually active in Brazil is 14 years old (Vieira et al, 2021). As for the end of sexual activity, there is no exact age in the literature, but it is extremely important to understand sexuality in old age. In theory, society tends to see the elderly as an asexual population, this also affects the health sector. Health professionals fail to offer preventive approaches to sexually transmitted infections, directly implying self-recognition as a population at substantial risk for HIV infection (Andrade et al, 2017).

Additionally, emotional maturity and readiness for sexual activity may vary between individuals. Sexuality education and counseling are important to ensure adequate preparation to make responsible and informed decisions about sexual activity.

4.2 Gender

Gender is relevant when it comes to adherence to PrEP monitoring, and it is clear that there are frequent barriers regarding this topic, since despite everything being discovered about the virus, HIV still carries with it many taboos that are rooted in society. These consequently, can also appear in health services, as the literature points to great stigma coming from health professionals, which in turn, often ends up discouraging the search for prevention measures (HOAGLAND et al., 2016). Firstly, it is worth highlighting that transgender women, despite representing a smaller population than men who have

sex with men, still have a high risk of HIV infection and are considered to have a greater degree of vulnerability, as they are exposed to different levels of possible infections. According to the data collected, transgender women who sought care represented only 1.32%.

Furthermore, there is little knowledge among the transgender population regarding the existence of this treatment, but there is a high interest in PrEP, when correctly informed (HOAGLAND et al., 2016). There are factors that contribute to interest and adequate adherence, such as the perception of a substantial reduction in HIV risk and the inherent fear of being infected. Therefore, the importance of focusing on different groups of individuals is highlighted to reduce the incidence of HIV infections (PACÍFICO et al., 2019).

Furthermore, cisgender women are associated with multiple factors that shape HIV-related risk, yet they still have lower adherence to PrEP in Cáceres-MT. Therefore, barriers were identified relating to the main factors that affect the potential use of pharmacological measures by women, including the assessment of HIV risk, relationship dynamics and anticipated stigma. Women who consider their risk to be low, may ignore the complexity involved in infection and the need for prevention. It is still determined that the partners' reaction to the use of medications contributes to non-adherence, similarly there is fear and concern regarding the stigma, which can noticeably contribute to the lack of interest in PrEP. Therefore, the importance of public health professionals in normalizing PrEP as a strategy for preventing HIV in women and in making decisions about sexual health can be seen. Education, screening and clear communication strategies about HIV and PrEP are needed, which allow reflection on their unique risk context (O'MALLEY et al., 2022).

4.3 Sexual orientation

Currently, despite careful procedures and diagnostic methods being widely available, one of the factors that predispose to a higher incidence of cases is stigma, related to higher priority populations such as homosexuals and gays, who, together with lesbian women, are the group with the highest incidence. However bisexuals who also fit into the risk population, corresponded to lower adherence, according to data from Cáceres-MT. However, the acceptability of this medication approach remains slow, as prejudice is often experienced at the level of the community in which the potential subject exposed to the virus is inserted, a factor that affects disadvantaged groups and, consequently, implies adherence to and knowledge of the prophylaxis (GOLUB, 2018). Furthermore, the impact of internalized homonegativity on the use of PrEP in Brazil negatively affects potential users, as there are high levels of discrimination based on sexual orientation, sexual behavior and HIV status, which disproportionately affects disadvantaged groups and prevents adequate dissemination and information, influencing the behavior of both patients and service providers (BLAIR et al., 2022).

Furthermore, it is worth highlighting that heterosexual people represent 23% of new HIV infections, but there is a low focus on campaigns and awareness about PrEP aimed at this audience, and it is important to consider the specific context of each individual (ROTH et al., 2019). However, there are also gaps in knowledge on the part of serodifferent couples, with regard to it being an option for the general prevention of HIV, with a greater interest on the part of men for this use than women. The main concerns regard PrEP efficacy and side effects, with the support of partners in adherence to treatment also being extremely important. Therefore, there is an urgent need to reduce the negative perspective

of PrEP users, so that there is correct clarification by professionals and, thus, reduce the negative impact that the HIV epidemic causes, requiring significant changes in language and programs (FALCÃO et al., 2016).

4.4 Race

Regarding ethnicity and race, no specific data was found for this distribution in the municipality of Cáceres, so the discussion will be based on this information. According to the 2010 census released by the Senate, the state's total population is 3,035,122 inhabitants, of which 225,627 (52.75%) are classified as mixed race, with the results of this study indicating a greater participation of people of mixed race.

4.5 Education

Education highlights how much information a person has, contributing to the understanding of their conduct and the demand factor for certain care. Therefore, it is clear that the increase in the dissemination of accurate information about HIV prevention could facilitate the increase in demand for HIV PrEP and other forms of prevention offered in specialized health services. Individuals who have a substantial risk of contracting the disease, such as people with a low level of education who are not covered by prevention policies, had 12 years less schooling than people who, for the most part, adhered to the prophylactic measure in Cáceres.

Furthermore, it is stated that the majority of the population who knows about PrEP learned about it via the Internet, rather than from a doctor, which emphasizes the importance of providing accurate information in accessible language about prophylaxis and medications, given that most demand has been from the population with a high level of education. Therefore, it is suggested that Internet advertising can be a promising channel for disseminating a greater amount of content. In line with the above, the use of PrEP and associated monitoring require involvement with the health system, highlighting once again the importance of addressing structural barriers to access to prevention services in Brazil (BLAIR et al., 2022).

4.6 Use of drugs and alcohol

The use of drugs and alcohol is relevant to combating the current epidemic, as its users are part of the key population at substantial risk of contact with the virus and it was shown that a significant portion of individuals who adhered to PrEP used drugs and alcohol in the 3 months before filling out the questionnaire. It is well known that drug users, in addition to sharing syringes, interact with each other and with other vulnerable populations, where the prevalence is high and present a risk of HIV transmission, socially and sexually with members of other groups at high risk of contracting HIV. HIV risk groups include sex workers, transgender people and men who have sex with men. These interconnections between individuals who inject drugs and other key stigmatized populations are important for spreading prevention knowledge to other vulnerable populations. Although often overlooked, drug users can be considered a critical resource for HIV prevention if they are supported, especially in emerging locations, so that there is damage limitation. Furthermore, professional prevention efforts can benefit from due support and the development of health promotion actions in the local communities where drug users are

located; therefore, facilitating, encouraging and expanding these measures can have rapid effects on slowing down of the spread of HIV (MATEU-GELABERT et al., 2018).

4.7 Quick test

The rapid test is the standard procedure when users arrive at health care facilities, as a negative test is necessary to show adherence to PrEP. In addition, the prophylaxis user also performs the rapid test when returning to the service for monitoring and medication withdrawal, as, in order to continue monitoring, the possibility of being HIV positive must be excluded (BRASIL, 2022). This data is confirmed by the results collected, in which the rapid test predominated as the type of test used.

4.8 Reason for using PREP

The incidence of HIV cases is concentrated in key populations, which would be men who have sex with men, transgender people and sex workers (BRASIL, 2022). This is a well-known reality, so, as the national health body itself has knowledge about this, why do the registration forms not include this public?

In the topic that asks about the reasons for using PrEP, the answer options include questions such as: reproductive planning, pregnancy, breastfeeding and 'not applicable'. There is no topic about being part of the population at substantially increased risk of contracting HIV. Furthermore, in a more direct analysis, the questions point to issues related to the female sex, which demonstrates that even when it comes to health, the at-risk population is not being considered. This lack of a response that accommodates this target audience is notable because the results obtained indicate that 100% of participants chose the 'not applicable' option.

4.9 Customer service

The results of the present study indicate that all PrEP users started the protocol through the Specialized Service. This data demonstrates a contradictory positioning of the SUS regarding HIV prophylaxis, since Primary Health Care (PHC) should be the user's gateway, as its focus is prevention and health promotion actions (BRASIL, 2022). If users are not accessing PrEP through PHC, this may indicate that, despite the Ministry of Health being aware of the public at greater risk of exposure to HIV, the dissemination of public prevention policies are flawed and are not being effective; i.e., campaigns may not be targeting the target audience. Therefore, it is evident that in reality the lack of knowledge on the part of Brazilians who are constantly at risk of becoming infected with HIV is a problem in combating the epidemic.

5. CONCLUSION

Therefore, the profile of PrEP users found in Cáceres-MT was: male, cisgender, homosexual/gay, aged between 21 and 30 years old, of mixed race, with an education level equal to or greater than 12 years, who does not have sex for money and is also not homeless. They have used drugs and alcohol in the last 3 months, reached the health system through the Specialized Service, used the rapid test and are not participating in an HIV vaccine study.

Although the users in Cáceres differ from the target audience for HIV prophylaxis, this study does agree with the profile of PrEP users established by the SUS in its protocol. However, a gap stands out: the strategy is not reaching key populations in an adequate

and effective manner. This suggests a failure in health promotion and prevention strategies. The lack of targeted outreach to PrEP's target audience, especially those at higher risk of exposure to HIV, is evident.

It is crucial to note that, although the typical PrEP user profile was not observed in the results of this study, this does not change the reality of individuals most likely to contract HIV. An alternative is that the problem lies in the apparent helplessness of this population (associated with HIV stigma) by society and consequently by the SUS, which results in a reduced visibility of these users and the prevalence of a different group that is not the initial focus of the SUS as a key population for HIV prevention.

Therefore, it is undeniable that it is essential to rethink and adjust the SUS approach in relation to the promotion of PrEP, ensuring more comprehensive and efficient dissemination, especially among those most susceptible to HIV, in order to correct the gap identified in this study and promote prevention in a more inclusive and effective way.

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