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KNOWLEDGE AND ATTITUDES OF PEOPLE LIVING WITH HIV/AIDS FOLLOWED IN A SPECIALIZED CARE SERVICE

Conhecimentos e atitudes de pessoas vivendo com hiv/aids acompanhadas em um serviço de atendimento especializado

Conocimientos y actitudes de personas que viven con vih/sida atendidas en un servicio de atención especializada

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RESUMO

Objetivo: avaliar os conhecimentos e comportamentos de risco das pessoas vivendo com HIV/Aids de um serviço de referência. **Método:** estudo transversal e descritivo. Utilizou-se um questionário online para a coleta de dados. A análise estatística foi realizada no software Jamovi, versão 1.8, pelo teste de Shapiro-Wilk, média e desvio-padrão e frequência absoluta e relativa. **Resultados:** foram analisados os dados de 105 participantes com perfil predominantemente do sexo feminino (54,3%), idade média de 43,4 anos, de cor preta (70%), heterossexuais (81,89%) e baixa escolaridade. Aproximadamente 85,7% não conhece a profilaxia pré e 86,7% a pós exposição. Cerca de 64,8% não informa que tem HIV aos parceiros. **Conclusão:** existem lacunas de conhecimento entre os usuários sobre a profilaxia pré e pós exposição e comportamentos de risco ao não informar ou perguntar o estado sorológico dos parceiros sexuais, sugerindo a necessidade de intensificação da educação em saúde para as pessoas com a doença.

DESCRITORES: Síndrome da imunodeficiência adquirida; Qualidade de vida; Comportamentos de risco à saúde.

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ABSTRACT

Objective: to assess the knowledge and risk behaviors of people living with HIV/AIDS receiving care at a referral service. **Method:** cross-sectional and descriptive study. Data were collected using an online questionnaire. Statistical analysis was performed using Jamovi software, version 1.8, with the Shapiro-Wilk test, mean and standard deviation, and absolute and relative frequency. **Results:** data from 105 participants were analyzed, with a predominantly female profile (54.3%), mean age of 43.4 years, Black ethnicity (70%), heterosexual orientation (81.89%), and low education level. Approximately 85.7% were unaware of pre-exposure prophylaxis and 86.7% of post-exposure prophylaxis. About 64.8% did not disclose their HIV status to partners. **Conclusion:** knowledge gaps regarding pre- and post-exposure prophylaxis and risky behaviors such as not disclosing or inquiring about the serological status of sexual partners suggest the need to intensify health education for people living with the disease.

DESCRIPTORS: Acquired immunodeficiency syndrome; Quality of life; Risk taking behavior.

RESUMEN

Objetivo: evaluar los conocimientos y comportamientos de riesgo de personas que viven con VIH/sida atendidas en un servicio de referencia. **Método:** estudio transversal y descriptivo. Se utilizó un cuestionario en línea para la recolección de datos. El análisis estadístico se realizó con el software Jamovi, versión 1.8, mediante la prueba de Shapiro-Wilk, media y desviación estándar, y frecuencia absoluta y relativa. **Resultados:** se analizaron los datos de 105 participantes con un perfil predominantemente femenino (54,3%), edad media de 43,4 años, de raza negra (70%), orientación heterosexual (81,89%) y bajo nivel educativo. Aproximadamente el 85,7% no conoce la profilaxis previa a la exposición y el 86,7% la posterior a la exposición. Alrededor del 64,8% no informa a sus parejas sobre su estado serológico. **Conclusión:** existen lagunas de conocimiento sobre la profilaxis pre y post exposición y comportamientos de riesgo al no informar o preguntar sobre el estado serológico de las parejas sexuales, lo que sugiere la necesidad de intensificar la educación en salud dirigida a personas que viven con la enfermedad.

DESCRIPTORES: Síndrome de inmunodeficiencia adquirida; Calidad de vida; Conductas de riesgo para la salud.

INTRODUCTION

The pandemic caused by the Human Immunodeficiency Virus (HIV), which causes Acquired Immunodeficiency Syndrome (AIDS), began about 40 years ago and arrived in Brazil in an already challenging social and political context. The first reported cases were among homosexuals, associating HIV with this community and causing stigma and prejudice for a long time, which was perpetuated due to a lack of knowledge about HIV and AIDS.¹

From this perspective, the fight against HIV in Brazil has progressed gradually since the 1980s, when science and technology evolved in the knowledge of the virus, its forms of transmission, and treatment. Among the strategies to combat the disease, the Brazilian government launched radio and television campaigns and distributed pamphlets and condoms, with a view to reducing the spread of the epidemic in the country.² However, these campaigns did not reach the entire population, and later, the diversification of communication channels and the use of social media allowed for a larger audience to be reached.²

During the course of the pandemic, an important change was observed in the profile of those infected, with

the feminization of the disease and an increase in cases among heterosexuals.²

Furthermore, despite a better understanding of the situation, risky habits and behaviors are still observed among the population, including those living with HIV/AIDS (PLHIV), sustained by the complexity of information about aspects of the disease or by the sense of security derived from advances in antiretroviral therapy (ART), combined prevention, and the extension of Pre-Exposure Prophylaxis (PrEP) and Post-Exposure Prophylaxis (PEP), in addition to the misconception of protection derived from monogamous relationships.^{3,4} Exposure (PrEP) and Post-Exposure Prophylaxis (PEP), as well as the misconception of protection from monogamous relationships.^{3,4}

This study is justified by the importance of identifying knowledge gaps and risky habits and behaviors for HIV transmission among PLHIV monitored by health services in Brazil, given that there are gaps in the scientific literature on this topic with this specific audience, since these people are an important part of the process of eliminating the pandemic, within the World Health Organization's 2030 goal. In addition, this article allows for reflection on updating information about the disease for the entire Brazilian population.

In view of the above, the present study aims to assess the knowledge and risk behaviors for HIV transmission among people living with HIV/AIDS among users being monitored at the Day Hospital of the Professor Alberto Antunes University Hospital (HUPAA) in Maceió, Alagoas.

METHOD

This was a cross-sectional, descriptive, quantitative study. Data collection was carried out between June and August 2023 at the Day Hospital of the Professor Alberto Antunes University Hospital (HUPAA) of the Federal University of Alagoas, when users attended follow-up appointments at the service. The research location was chosen because it is a referral service and serves users from all over the state of Alagoas.

An anonymous online questionnaire created in Google Forms was used as a data collection tool, which was completed by researchers during individual, private interviews with users.

People living with HIV/AIDS over the age of 18 were included in the study, while those with clinical and/or cognitive conditions that prevented them from responding to the questionnaire were excluded. The sample size was calculated using an online calculator [<https://comentto.com/calculadora-amostal/>], using a 95% confidence interval and a 3% margin of error as parameters. The sample was calculated based on information on the number of HIV/AIDS patients monitored at the service, provided by the hospital management, totaling a minimum of 174 participants. The results were transferred to an Excel® spreadsheet.

The research complies with the principles of National Health Council (CNS) Resolution No. 510/2016 and Resolution No. 674, of May 6, 2022, of CEP/CONEP, and was approved by the Research Ethics Committee (CEP) of the Professor Alberto Antunes University Hospital, filed under CAAE No. 69973423.5.0000.5013, Opinion Number: 6,217,680, on August 3, 2023.

Statistical analysis was performed using Jamovi software, version 1.8. The age variable, whose Shapiro-Wilk test suggests an approximately normal distribution, was described using mean and standard deviation. The other variables were described using absolute and relative frequency.

RESULTS

A total of 174 individuals responded to the questionnaire; however, 69 were excluded for not completing all questions, leaving a total of 105 people. The results were organized into three components: characterization of study participants, knowledge about HIV/AIDS, and habits and behaviors of PLHIV.

Characterization of participants

The profile of the 105 participants is shown in Table 1. Age, according to the Shapiro-Wilk test, has an approximately normal distribution ($p = 0.15$), with a mean = 43.4 years and SD = 12.34 years.

Table 1 – Description of socioeconomic variables (n = 105) of PLHIV/AIDS. Maceió, AL, Brazil, 2025

Variables	n	%
Gender		
Men	48	45,7
Women	57	54,3
Sexual Behavior		
Bisexual	8	7,6
Heterossexual	86	81,9
Homossexual	11	10,5
Color/Race Black/brown		
Yes	81	77,1
No	24	22,9

Variables	n	%
Marital Status		
Single	70	66,7
Married	23	21,9
Widower	12	11,4
Study time		
Up to 9 years old	76	72,4
More than 9 years	29	27,6
Do you have children?		
Yes	81	77,1
No	24	22,9
Religion		
Catholic/Christian	76	72,4
Evangelical	14	13,3
Others ¹	15	14,3
Do you have internet access?		
Yes	75	69,5
Yes, but only on mobile phones.	16	15,2
No	14	13,3
Monthly Income		
Up to 1 MW	80	76,2
Between 1 and 3 MW	25	23,8
Current work situation		
Active	45	42,9
Inactive	60	57,1

n – sample size

MW – minimum wage

Source: authors, 2025

Knowledge about HIV/AIDS

Knowledge about HIV/AIDS is described in Table 2 and shows that most study participants demonstrated knowledge of

important aspects of the virus. Regarding the question related to the possibility of PLHIV/AIDS donating blood, 100% of responses were “no.”

Table 2 – Description of variables related to knowledge of PLHIV/AIDS. Maceió, AL, Brazil, 2025

Variables	n	%
Do you think condoms work to protect against HIV/AIDS?		
Yes	101	96,2
No	4	3,8
Have you heard of PEP?		
Yes	15	14,3
No	90	85,7
Have you heard of PrEP?		
Yes	14	13,3
No	91	86,7
Do you know your viral load?		
Yes	43	41,0
No	62	59,0
Do you think that a person taking medication for HIV/AIDS treatment is less likely to transmit the virus to someone else?		
Yes	77	73,3
No	28	26,7
Do you think it is necessary to use condoms during sexual intercourse between two HIV-positive people?		
No	16	15,2
Condom use should be a constant in sexual relations between individuals because there is an immune response with antibody production.	81	77,1
Only when one of the partners has ulcerated genital diseases that can cause an inflammatory response that increases the number of lymphocytes, or when both are carriers of the virus.	8	7,6
How long does it take for the HIV virus to be detected?		
In most cases, the virus can be identified within 5 days after infection.	25	23,8
In most cases, the virus can be identified within 30 to 60 days after infection.	35	33,3
In most cases, the virus can be identified within 120 days after infection.	45	42,9
When can a mother transmit HIV to her baby?		
If the virus can be identified within 30 to 60 days after infection, there is up to a 97% chance that the baby will not contract the virus, in addition to a normal delivery.	18	17,1
During normal childbirth, through breastfeeding, and during pregnancy, if the infected woman does not receive adequate medical care involving medication.	87	82,9

Source: authors, 2025.

Risk habits and behaviors of PLHIV

Regarding their lifestyle habits and risk behaviors related to HIV transmission, Table 3 shows that in the last 12 months, 34 (32.4%) users of this service reported having had more than

one sexual partner, and 29 (27.6%) reported not using condoms during sexual intercourse during this period. In addition, most do not disclose that they are PLHIV (64.8%) and do not ask about their partners' serological status (69.5%).

Table 3 – Description of variables related to HIV/AIDS risk habits and behaviors among PLHIV/AIDS. Maceió, AL, Brazil, 2025

Variables	n	%
Have you had more than one sexual partner in the last 12 months?		
Yes	34	32,4
No	71	67,6
Have you had sex without a condom in the last 12 months?		
Yes	29	27,6
No	76	72,4
Do you inform your sexual partners that you are living with HIV/AIDS?		
Yes	37	35,2
No	68	64,8
Do you usually ask your sexual partners if they have been diagnosed with HIV/AIDS or another sexually transmitted infection?		
Yes	32	30,5
No	73	69,5

Source: authors, 2025.

DISCUSSION

In the present study, the frequency of HIV/AIDS cases was higher among women, similar to other results that prove the feminization of the disease⁵ and in line with data from the latest Ministry of Health Bulletin published in 2023, which shows that the sex ratio went from 14 men for every ten women in 2007 to 28 in 2020.³

Despite the universal distribution of the virus throughout the population, in this study, black color/race stood out. However, other studies point to brown-skinned people as the most prevalent, suggesting that black and brown-skinned populations, commonly associated with unfavorable living conditions, are the most affected.

Education is a very important variable because it is directly associated with people's level of knowledge about the virus and the disease and can directly interfere with risk behaviors and adherence to treatment.⁴ The largest number of participants in this study have up to nine years of complete schooling, data that corroborate the profile presented by the Ministry of Health, published in the last bulletin in 2023.³

The average age identified in this study was young adults, similar to other studies conducted in Brazil.⁷ Given that the manifestation of the virus can be delayed, some studies indicate that younger people neglect prevention.

Religion is also an important factor in the approach to STIs, as research shows that serodiscordant Catholics and Evangelicals are less likely to use condoms than those of other religions.⁸ The majority of participants in this study are Christians. In this context, one study indicates that religious people are more vulnerable to STIs due to the strong influence of religious leaders, which can be an additional barrier to adherence to forms of prophylaxis.^{7,8} This attitude directly impacts their quality of life, as they do not get tested regularly, hindering health promotion and intimate personal care.

Low income is directly associated with the level of education and, consequently, knowledge about the infection and low adherence to treatment. In this study, most participants have an income of up to one minimum wage, data that corroborates other studies that point out that an unfavorable economic situation makes individuals vulnerable.⁹

Having multiple sexual partners is known to expose individuals to STIs. Currently, after much work, research shows that people with 2 to 4 partners had greater knowledge about the effectiveness of treatment as prevention compared to those who had only one partner.^{10,3} In this study, some of the individuals reported having had more than one sexual partner in the last 12 months, and some of them practiced unprotected sex.

Regarding knowledge related to some forms of transmission, most are aware of the reduced risk of transmission in those who

adhere well to treatment (73.3%) and the possibility of vertical transmission in cases where the mother has no previous diagnosis or does not adhere well to ART (82.9%). According to the Ministry of Health, among individuals under 13 years of age, in 2022, the majority of cases (84.2%) were infected through vertical transmission, and in the population between 13 and 19 years of age, this rate is 5.8%, falling to 2.6% in the 20 to 29 age group, demonstrating the importance of this knowledge in preventing cases. This data is inversely proportional to education level.³

In the population studied, most report using condoms, including in relationships between HIV-positive individuals (77.1%), but those who do not use them report that they do so due to low viral load and monogamy, corroborating studies that point to a perspective that young people in monogamous relationships do not find it necessary to use condoms, which demonstrates the cultural interference in the behavior of individuals.⁶ In this sense, in Brazil, there are policies and programs that encourage the use of condoms within a combined prevention perspective in order to mitigate the consequences of infection.⁸ It is important to note that monogamy is not a protective factor and that outsourcing prevention can make individuals more susceptible.

PEP and PrEP are very effective strategies for combating the spread of HIV in society, but in this study, most respondents reported never having heard of them. This is a worrying situation, since making these strategies available to the entire population is important in combination prevention, leading to a significant reduction in the spread of the virus and prevention of AIDS.

Internet access can be an important tool in the search for health information. However, although more than half of the participants in this study had access to the internet, most used it for communication or entertainment. Studies show that the web can be used as a support tool for education, assisting in the knowledge, prevention, and treatment of HIV, other viruses, and diseases.

According to the Ministry of Health Guidelines, the protocol for caring for people living with HIV guarantees patients the right to monitor and know their viral load. However, studies report that some health professionals do not provide this information without the client's request.¹² According to the data from this study, most respondents know their viral load.

Regarding the exposure category, while some studies indicate that men who have sex with men (MSM) are still more affected,¹³ this study found more heterosexual users among PLHIV/AIDS, which may be related to the choice of the population studied.

This study has limitations because it was conducted in only one of the three referral services in the state of Alagoas and did not consider the population served by the private healthcare network.

FINAL CONSIDERATIONS

The research shows that, even among users receiving follow-up care at a specialized referral service, there are significant gaps that could affect the elimination of the pandemic. Among these are a lack of knowledge about PrEP and PEP, which are currently among the most important prevention strategies, and the importance of knowing one's viral load.

Thus, it is believed that the results presented in this study can guide improvements in health education actions, in addition to enabling assertive decision-making by local managers and professionals assisting PLHIV, leading to changes in the evolution of the disease and a reduction in new cases.

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