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RESEARCH ARTICLE

Does Sexual and Emotional Behavior Differ Between Sexual Partners That Do Not Disclose HIV Status?

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Abstract:

Objective:

The objective of the study was to analyze whether the disclosure of HIV serological status among sexual partners is associated with differences in sexual affective behavior.

Methods:

Cross-sectional study was carried out with 173 participants in a specialized assistance service on the treatment of people with the Human Immunodeficiency Virus. Data were collected through interviews.

Results:

Our results show that from the participants who did not disclose their HIV status and who were sexually active, most had multiple sexual partners (44.6%), used combined methods of prevention (75.4%), had casual partners (63.0%), used condoms (66.2%), and had sexual intercourse while under the influence of alcohol (56.9%). The variables *i.e.*, number of partners (p = 0.010) and type of relationship (p < 0.001) showed statistical differences.

Conclusion:

Sexual affective behavior variables influenced the decision about disclosing HIV seropositivity to sexual partners that establish different forms of sexual partnerships.

Keywords: HIV, Disclosing, Acquired immunodeficiency syndrome, Sexual behavior, Serological status, Seropositivity,

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1. INTRODUCTION

Disclosing HIV serological status involves the condition of sharing your HIV status with others. Communicating the diagnosis has been characterized as a dynamic and complex process that involves feelings such as anguish, anxiety, and suffering. On the other hand, a positive aspect is the couples' access to the available HIV treatment and prevention options [1].

The possibility of experiencing onerous conditions such as violence, abandonment, judgment, guilt, discrimination, and loss of economic support are factors that hinder the process of disclosing the diagnosis to sexual partners. Insecurity and fear continue to impact decision-making on whether or not to disclose HIV seropositivity [2].

The historical-cultural constructions of prejudice related to living with HIV/AIDS make it difficult for the HIV-positive partners to reveal their diagnosis to the HIV-negative partners or unknown people. Disclosure in this context may have a sense of communicating hidden secrets of extramarital relationships or belonging to particular minority social

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identities, seen by society as "promiscuous" [3].

In this sense, many people living with HIV/AIDS (PLWHA) are silent about HIV seropositivity and adopt a "life in duplicity," facing, then, embarrassing situations, such as lying to go to the doctor and hiding or dissimulating to take the drugs. Facing the fear of being identified as HIV positive creates a clandestine idea of self, affecting these people's lives in several aspects: emotional, professional, social, and even in how they conduct their treatment [4].

Living with a sexually transmitted infection implies difficulty in telling partners about the disease. Negotiating the best prevention strategy with sexual partners involves several pillars, and the lack of knowledge about their real situation is characterized as an impasse. A possible hypothesis of this finding is that the absence of disclosure represents a barrier to effective engagement in HIV transmission risk management [5].

Strategies to limit or even eliminate the transmission of HIV are one of the goals outlined by the goals of sustainable development, embedded in health and well-being indicators. UNAIDS established target 95-95-95, which states that by 2030, 95% of people living with HIV must be aware of their health situation. In first-world countries like the USA, the intention is to reduce this infection by 75% at the national level by 2025 and by 90% by 2030 [6].

Despite the importance of unveiling the factors related to disclosing HIV status to sexual partners, few studies have explored this issue. The results of this study can help to understand better attitudes related to patients' sexual and emotional behavior and guide the development of precise interventions to encourage patients to disclose their HIV serological status. From this perspective, this study aims to analyze whether the disclosure of HIV serological status among sexual partners is associated with differences in sexual and emotional behavior.

2. METHODS

This research is a cross-sectional, analytical study carried out in a specialized assistance service of an Integrated Health Center in the State of Piauí, the northeastern region of Brazil.

2.1. Population and Sample

We did a sample calculation for finite populations, adopting a sampling error of 0.08 and a confidence level of 95.0%, which resulted in a sample of 173 users, considering a population of 715 people. The inclusion criteria were: individuals who had a diagnostic test that confirmed the

presence of HIV (whether or not having developed the syndrome), of both genders, were 18 years or older, had been in a permanent or casual relationship in the past 30 days, and were at the SAE at the time of data collection.

Exclusion criteria were: being pregnant and in deprivation of liberty due to the specificities inherent to the clinical management of these populations and the organization of the local care services. Also, the study excluded those who had access to medication through the program but were getting a follow-up in a private service.

2.2. Data Collection

The recruitment of participants was done as they arrived at the assistance; we conducted the interview in a private place, before or after consultations with an infectious disease specialist.

The data were collected from November 2016 to March 2017 through a semi-structured interview, derived from a macro-project entitled "Risk management of HIV transmission between sexual relationships of people living with HIV/AIDS."

2.3. Data Analysis

The data were analyzed using the software *Statistical Package for Social Science* (SPSS®) version 22.0. Descriptive analyses were performed using univariate tests to characterize the study population. The chi-square test and Fisher's exact test were used for the association analysis between disclosure status and categorized sexuality factors, with a significance level of 0.05. The data were analyzed using the software *Statistical Package for Social Science* (SPSS®) version 22.0.

3. RESULTS

The final sample of the study comprised 173 PLWHA, of whom 62.4% were sexually active and disclosed their HIV status to their sexual partners. Moreover, 78% were male, 39.3% were between 30 and 39 years old, 31.2% completed higher education, 2.3% had no education, 57.8% were brown, and 54.3% were single. A significant majority (78.0%) had an undetectable viral load (Table 1).

Regarding the sexual and emotional behavior of PLWHA who did not disclose their HIV status, we found that 44.6% of them had multiple sexual partners (Table 2), 1.5% had no prevention strategy for sexually transmitted infections, 23.1% had only one prevention strategy, 63% (n = 41) had casual sexual relationships, 33.8% (n = 22) did not use condoms consistently, and 56.9% (n = 37) had sexual intercourse under the influence of alcohol.

Table 1. Distribution of sociodemographic and clinical characteristics of people living with HIV/AIDS. Teresina (PI), Brazil, 2021 (n = 173).

Variables	n	%
Gender	-	-
Female	38	22.0
Male	135	78.0
Age (Years)	-	-

(Table 1) contd.....

Variables	n	%
18-29	54	31.2
30-39	68	39.3
40-49	27	15.6
50-59	19	11.0
<60	5	2.9
Education	-	-
No education	4	2.3
Primary Education	50	28.9
Secondary education	72	41.6
Higher education	47	27.2
Color	-	-
White	24	13.9
Black	38	22.0
Asian descendent (yellow)	9	5.2
Parda (brown)	100	57.8
Indigenous	2	1.2
Marital Status	-	-
Single	94	54.3
Married	77	44.5
Divorced	1	0.6
Widow/widower	1	0.6
Viral Load	-	-
Undetectable	135	78.0
Detectable	38	22.0

Table 2. Association between the disclosure of serological status and sexual and emotional behavior of sexually active **PLWHA.** Teresina (PI), Brazil, 2021 (n = 173).

-	Disclosure of Serological Status		
Variables	Yes	No	p-value
	n (%)	n (%)	
Number of Partners			0.010
Single	81 (75.0)	36 (55.4)	
Multiple	27 (25.0)	51 (44.6)	
Prevention Strategy			0.127
One	29 (26.9)	15 (23.1)	
Combined Prevention	70 (64.7)	49 (75.4)	
None	9 (8.3)	1 (1.5)	
Type of Sexual Partnership			< 0.001
Permanent	93 (86.1)	24 (37.0)	
Casual	15 (13.9)	41 (63.0)	
Consistent Condom Use			0.521
Yes	66 (61.1)	43(66.2)	
No	43(66.2)	22 (33.8)	
Alcohol Consumption During Sexual Intercourse			0.272
Yes	55 (51.0)	37 (56,9)	
No	53 (49.0)	28 (43,1)	

The next table shows the bivariate analysis of the factors associated with the differences in sexual and emotional behavior of sexually active PLWHA, according to the disclosure of their serological status. The association with the outcome of the study showed statistical differences for the following factors: Number of partners (p = 0.010); Type of relationship (p < 0.001) (Table 1).

4. DISCUSSION

The current investigation points out that there are statistical differences between the variables of sexual and emotional behavior and the disclosure of the serological status among PLWHA who are sexually active. Whether or not to disclose the HIV-positive status is still one of the main obstacles of this population.

This decision differs when comparing telling it to a sexual partner or closer people, like family or friends. That is because, in the couple's relationship, risks and benefits must be balanced, as the disclosure involves emotions and trust. Within a sexual and emotional relationship, disclosure may be associated with a closer and more confident relationship with more substantial social support [7].

It is essential to highlight that despite the biomedical advances in the treatment and prevention of HIV infection, managing the psychosocial aspects is still a challenge in these patients' care. The stigma of living with this infection is still a barrier when it comes to interpersonal relationships [5].

Our results showed that the type of sexual relationship was statistically associated with disclosure. Therefore, disclosing their serological status is still a challenge among couples and may provoke behavioral changes. Serodiscordant partners can show difficulties in accepting this new serological condition. Many PLWHA choose to break the relationship instead of sharing this information with their partners.

In addition to the fear of breaking the relationship, the stigma, the undue disclosure of positive status, and the loss of social support, difficulties in revealing their serological condition cause psychological suffering for PLWHA, such as anguish, fear of violent actions, and social discrimination. This population feels insecure due to the possibility of society's repression [6 - 8].

Although literature points out that undetectable viral load decreases the risk of HIV transmission among serodiscordant couples, authors still emphasize the urgency in focusing on condom use and combined prevention, mainly because the presence of another sexual infection, that is, from a coinfection, increases the viral load, consequently increasing the risk of sexual transmission [5].

A cross-sectional study conducted in Ethiopia with 742 patients, which aimed at determining the rate, processes, results, and correlates of disclosing HIV status to sexual partners, found that participants who reported HIV positivity to their sexual partners were six times more likely to use condoms regularly with them [9].

We highlight that in the study mentioned above and our results, the participants were admitted to a health service, which facilitates their acceptance of the diagnosis and strengthens them to develop strategies and tools to reveal their status. Also, the disclosure has implications for preventing new infections, as the dialogue about HIV serology can stimulate self-care actions in the serodifferent partner, but silence can be harmful to the care of the other.

From this perspective, we emphasize that the disclosure of HIV status provides benefits inherent to the risk management process of the transmission of this infection, such as better adherence to medication, the participation of sexual partners in deciding the best prevention strategy to be implemented by the couple, the reduction of high-risk sexual behaviors, improving self-esteem and CD4 cell count [10].

Establishing HIV/AIDS prevention strategies has, over the

years, been a serious concern of national and international authorities. Furthermore, the non-disclosure of PWLAH serological status to their partners implies higher risks to the prevention achievements established so far, and some variables are cited as barriers, such as multiple sexual partners, use of alcohol or drugs, sex by drugs or money, and psychosocial factors.

According to our findings, the number of partners showed a statistical association with the disclosure variable. The presence of this sexual practice among PLWHA opens the door to two strands of discussion. The first is the difficulty of establishing a single partnership due to the struggle of disclosing the HIV status, and the second is that having multiple partners increases exposure to vulnerabilities.

The follow-up of couples within primary health care services is crucial. In addition to clarifying doubts about the transmissibility of this infection, it provides guidance on more current prevention strategies, expanding the range of options and enabling recruitment, prevention, and rapid testing. These aspects constitute an important intervention mainly due to early detection of the infection and reaching the goal 90-90-90 established by UNAIDS [11, 12].

In several parts of the world, not disclosing the serological status causes legal problems. In at least 61 countries, PLWHA were prosecuted for not disclosing their HIV status to the partner and for issues related to exposure and transmission of the infection [13]. In high-income countries like Canada, non-disclosure of HIV, especially those with a detectable viral load, can lead to criminal charges [14].

Recent studies have discussed how other tools can assist in the disclosure of serological status. Studies in the United Kingdom [15] and Brazil [16] address how the impersonality of dating apps works as a mediator between the serodifferent partner, enabling indirect but effective communication.

It is important to demystify the concepts of HIV infection to minimize problems related to stigma, prejudice, social isolation, and the mental health of PLWHA. Raising awareness of the importance of disclosure in sexual relationships favors the reduction of HIV transmission between serodifferent sexual partners as well as proposes subsidies for social and institutional support in health services, favors the use of combined prevention strategies, decreases risky sexual behavior, and enables future family planning [17].

Our study had some limitations. Firstly, because it was a cross-sectional study, contact with the patient was limited to one meeting. Secondly, this was a survey conducted through an interview; therefore, there may be response bias due to the embarrassment of answering some questions. To minimize this problem, the researchers conducted the interview in a private room after the participant understood the survey and felt comfortable answering the questions.

CONCLUSION

The variables of sexual and emotional behavior influenced decision-making about disclosing HIV seropositivity among people living with HIV who are sexually active. One of the main impasses in living with HIV and having a sexual partnership involves, among other interfaces, the decision to

share a health condition that sometimes comes loaded with prejudice and misinformation. Identifying the variables that can interfere in the prevention strategies of this infection favors health services subsidy for interventions aimed at this problem, enabling more specific and efficient intervention goals.

ETHICAL APPROVAL AND CONSENT TO PARTICIPATE

The study was approved by the Research Ethics Committee under opinion no. 59293316.6.0000.5393/2016.

HUMAN AND ANIMAL RIGHTS

The fundamental ethical and scientific requirements for research involving human beings were met, according to Resolution 466/12 of the Brazilian National Health Council.

CONSENT FOR PUBLICATION

The participants read the free and informed consent form online and then signed it, indicating their agreement with the proposed objectives and willingness to participate in the study.

STANDARDS OF REPORTING

STROBE guidelines and methodologies were followed.

AVAILABILITY OF DATA AND MATERIALS

Not applicable.

FUNDING

None

CONFLICT OF INTEREST

The authors declare no conflict of interest, financial or otherwise.

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REFERENCES

- [1] Bhatia DS, Harrison AD, Kubeka M, et al. The role of relationship dynamics and gender inequalities as barriers to HIV-serostatus disclosure: Qualitative study among women and men living with HIV in Durban, South Africa. Front Public Health 2017; 5: 188. [http://dx.doi.org/10.3389/fpubh.2017.00188] [PMID: 28824897]
- [2] Odiachi A, Erekaha S, Cornelius LJ, et al. HIV status disclosure to male partners among rural Nigerian women along the prevention of mother-to-child transmission of HIV cascade: A mixed methods study. Reprod Health 2018; 15(1): 36. [http://dx.doi.org/10.1186/s12978-018-0474-y] [PMID: 29499704]
- [3] Maeri I, El Ayadi A, Getahun M, et al. "How can I tell?"
 Consequences of HIV status disclosure among couples in eastern
 African communities in the context of an ongoing HIV "test-and-treat"
 trial. AIDS Care 2016; 28(Suppl. 3): 59-66.
 [http://dx.doi.org/10.1080/09540121.2016.1168917] [PMID:

- 27421052]
- [4] Ndayala P, Ngige L. Influence of social cultural factors on HIV seropositivity disclosure to sexual partners in Kenya. East African J Health Sci 2020; 2(1): 62-74. [http://dx.doi.org/10.37284/eajhs.2.1.224]
- [5] Oliveira LB, Costa CRB, Sena IVO, Borges PTM, Araújo TME, Reis RK. The care provided to the sexual partners of people living with the human immunodeficiency virus. Rev Rene 2020; 21: e43567. [http://dx.doi.org/10.15253/2175-6783.20202143567]
- [6] Chamie G, Napierala S, Agot K, Thirumurthy H. HIV testing approaches to reach the first UNAIDS 95% target in sub-Saharan Africa. Lancet HIV 2021; 8(4): e225-36. [http://dx.doi.org/10.1016/S2352-3018(21)00023-0] [PMID: 22744182]
- [7] Daskalopoulou M, Lampe FC, Sherr L, et al. Non-disclosure of HIV status and associations with psychological factors, ART non-adherence, and viral load non-suppression among people living with HIV in the UK. AIDS Behav 2017; 21(1): 184-95.
 [http://dx.doi.org/10.1007/s10461-016-1541-4] [PMID: 27586375]
- [8] Zgambo M, Arabiat D, Ireson D. It cannot happen, never: A qualitative study exploring youth views on disclosure of HIV diagnosis to their sexual partners in Southern Malawi. J Assoc Nurses AIDS Care: JANAC 2021. [http://dx.doi.org/10.1097/JNC.000000000000238] [PMID: 33481465]
- [9] Dessalegn NG, Hailemichael RG, Shewa-Amare A, et al. HIV Disclosure: HIV-positive status disclosure to sexual partners among individuals receiving HIV care in Addis Ababa, Ethiopia. PLoS One 2019; 14(2): e0211967. [http://dx.doi.org/10.1371/journal.pone.0211967] [PMID: 30768642]
- [10] Ngero B, Waruru A, Inwani I, et al. Disclosure and clinical outcomes among young adolescents living with HIV in Kenya. J Adol Health 2019: 64(2): 242-9.

[http://dx.doi.org/10.1016/j.jadohealth.2018.08.013]

- [11] Sousa AFL, Queiroz AAFLN, Fronteira I, Lapão L, Mendes IAC, Brignol S. HIV testing among middle-aged and older men who have sex with men (MSM): A blind spot? Am J Men Health 2019; 13(4): 1557988319863542.
 - [http://dx.doi.org/10.1177/1557988319863542] [PMID: 31288596]
- [12] Krishnamoorthy Y, Rehman T, Sakthivel M. Effectiveness of financial incentives in achieving unaid fast-track 90-90-90 and 95-95-95 target of HIV care continuum: A systematic review and meta-analysis of randomized controlled trials. AIDS Behav 2020. [http://dx.doi.org/10.1007/s10461-020-03038-2] [PMID: 32968885]
- [13] Bernard SE. Cameron Advancing HIV justice 2: Building momentum in global advocacy against HIV criminalisation 2016. Available from: http://www.hivjustice.net/advancing2/-sthash.DtZWnLZ9.dpuf
- [14] Patterson S, Kaida A, Ogilvie G, et al. Awareness and understanding of HIV non-disclosure case law among people living with HIV who use illicit drugs in a Canadian setting. Int J Drug Policy 2017; 43: 113-21.
 - [http://dx.doi.org/10.1016/j.drugpo.2017.02.003] [PMID: 28363120]
- [15] Warner M, Gutmann A, Sasse MA, Blandford A. Privacy unraveling around explicit HIV status disclosure fields in the online geosocial hookup app Grindr. Proceedings of the ACM on Human-computer Interaction. 1-22. [http://dx.doi.org/10.1145/3274450]
- [16] Queiroz AAFLN, Sousa ÁFL, Matos MCB, Araújo TME, Reis RK, Moura MEB. Knowledge about HIV/AIDS and implications of establishing partnerships among Hornet® users. Rev Bras Enferm 2018; 71(4): 1949-55.
 [http://dx.doi.org/10.1590/0034-7167-2017-0409] [PMID: 30156682]
- [17] Hallberg D, Kimario TD, Mtuya C, Mtuya M. G. Factors affecting HIV disclosure among partners in Morongo, Tanzania. Factors affecting HIV disclosure among partners in Morongo, Tanzania. Int J Afr Nurs Sci 2019; 10: 49-54. [http://dx.doi.org/10.1016/j.ijans.2019.01.006]

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