

The care provided to the sexual partners of people living with the human immunodeficiency virus*

Cuidados prestados a parceiros sexuais de pessoas que vivem com o vírus da imunodeficiência humana

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ABSTRACT

Objective: to analyze the care provided to sexual partners of people living with the human immunodeficiency virus. **Methods:** cross-sectional study with 173 participants, carried out in a service specialized in the treatment of people with the human immunodeficiency virus, submitted to a statistical analysis (chi-square test and Fisher's exact test). **Results:** having the partner invited to attend the health service ($p < 0.001$), receiving guidance on prevention in the health service ($p < 0.001$), and being seen at the specialized service as a couple for counseling on sexual practices and preventive strategies ($p < 0.001$) showed statistical differences. **Conclusion:** there are gaps in the care provided to sexual partners on strategies for preventing infection by the human immunodeficiency virus.

Descriptors: HIV; Acquired Immunodeficiency Syndrome; Patient Care.

RESUMO

Objetivo: analisar os cuidados prestados aos parceiros sexuais de pessoas que vivem com o vírus da imunodeficiência humana. **Métodos:** estudo transversal com 173 participantes, realizado em um serviço especializado no tratamento de pessoas com o vírus da imunodeficiência humana. Os dados foram submetidos à análise estatística (qui-quadrado e teste exato de Fisher). **Resultados:** ter o parceiro convidado a frequentar o serviço de saúde, receber orientações sobre prevenção no serviço de saúde e ser atendido no serviço especializado com o parceiro para aconselhamento sobre práticas sexuais e estratégias preventivas apresentaram significância estatística ($p < 0,001$). **Conclusão:** existem lacunas nos cuidados prestados aos parceiros sexuais, relacionadas às estratégias de prevenção da infecção pelo vírus.

Descritores: HIV; Síndrome de Imunodeficiência Adquirida; Assistência ao Paciente.

Introduction

The Human Immunodeficiency Virus (HIV) infection, with its manifestation through the Acquired Immunodeficiency Syndrome (AIDS), is a disease with unique features that lead it to reach large numbers of people. Being chronic, it has become a public health problem that affects all countries⁽¹⁾.

According to the Brazilian Epidemiological Bulletin of the Ministry of Health, from 2007 to June 2018, 247,795 cases of HIV infection in Brazil were reported in the Information System and Notification Act, from which 117,415 (47.4 %) were in the Southeast region, 50,890 (20.5%) in the South region and 42,215 (17.0%) in the Northeast region⁽²⁾.

The main goal proposed by the Joint United Nations Program on HIV/AIDS is that, by 2020, 90% of people with this virus from any country should be diagnosed, 90% should start treatment early, and 90% should reach suppression levels and reduce HIV transmission⁽³⁾.

The magnitude of this infection reaches high proportions in the different regions of Brazil. Despite being an incurable infection, it still brings with it unique characteristics, both due to the increase in life expectancy and the improvement in the quality of life, which made possible, over time, for sexual partnerships to form between people with HIV, whether serodiscordant, meaning that only one is infected by HIV, or seroconcordant, meaning both are infected by the virus⁽⁴⁾.

Studies indicate that, when patients have an undetectable viral load, they have an extremely low risk of transmitting this infection if both sexual partners are HIV negative, with an emphasis on the campaign that states that undetectable is equal to non-transmissible (I = I). Results from the Partners of People on ART-A New Evaluation of the Risks (PARTNER)⁽⁵⁾, and from Opposites Attract⁽⁶⁾ point out the low risk of virus transmission in patients who are on regular use of antiretroviral therapy (ART) and have undetectable virus loads for at least six months.

Despite the level of recent evidence that suppression of viral load significantly decreases the risk of HIV transmission, it is important to highlight the possibility of co-infections, especially in competing partnerships. The presence of another sexually transmitted infection favors the increase of viral load, increasing the risk of the spread of the virus⁽⁷⁾.

This new and increasingly frequent reality requires a professional with skills and abilities to deal with this public and a service and committed to acting in the different aspects of care, contemplating the biopsychosocial aspects of the patient in a holistic way. This performance should be based on effective prevention of virus transmission, protection against discrimination, reduction of stigma, leadership, greater access to routine HIV screenings and, more importantly, quality patient care and treatment⁽⁸⁻⁹⁾.

Therefore, there is a concern about the different dimensions also affected by this disease, and as a result, this study aims to analyze the care given to sexual partners of people living with the human immunodeficiency virus.

Methods

Cross-sectional study, developed in the specialized care service of an Integrated Health Center in the State of Piauí, in the northeast of Brazil.

The unit that was the study site has a structure for the ambulatory care of several specialties. The service has a team composed of three infectologists, two nurses and two nursing technicians, to better organize the flow of care, and is linked to the unified health system, which is the health system in force in Brazil, providing universal and free healthcare. During the year 2017, 996 patients with HIV/AIDS were treated in the center.

For the definition of the sample, we used a sample calculation for finite populations adopting a sample error of 0.08 and a confidence level of 95.0%, resulting in a sample of 173 users, from a population of 715 people. The inclusion criteria of the study were:

age greater than or equal to 18 years; having a fixed or casual relationship in the last 30 days, with the result of an HIV serological test, whether or not the syndrome developed; and being at the specialized care service at the time of data collection.

Exclusion criteria were: being deprived of freedom, due to the inherent specificities of the clinical management of these populations and the organization of the local health care network. Those who gained access to medication from the program but have follow-up in private services were also excluded.

The recruitment of the participants was carried out as they sought the health care service, and occurred in a private place, before or after consultations with infectologists. The data were collected through an interview, from November 2016 to March 2017, with the application of a questionnaire with possibilities of dichotomous or multiple responses.

The data were obtained through a semi-structured questionnaire, derived from a macro project titled "Risk management of HIV transmission among sexual partners of people living with HIV/aids", which was submitted to theoretical face validation and content examination by two nurse researchers with expertise in the subject, and a psychologist with experience in the assistance and research of serodiscordant couples, who analyzed the comprehension and relevance of the items, the clarity of the essay, the presence of ambiguities, and the study objectives.

Sociodemographic variables, clinical variables related to the stage of the HIV infection, as well as variables related to the affective-sexual life and to the offer and actions of the health service were analyzed. The partner's serology was determined as a dependent variable. Our hypothesis is that individuals with serodifferent partnerships receive different service support. The aim of this analysis is to seek evidence of the care provided to these patients and their serodiscordant sexual partnerships and its possible repercussions.

To characterize the study population, univariate tests (chi-square test and Fisher's exact test) were

performed. The data were analyzed using the software Statistical Package for the Social Sciences, version 20.0.

The research project was approved by the ethics committee of the Ribeirão Preto School of Nursing (Certificate of Presentation for Ethical Appreciation: 59293316,6,0000,5393 and protocol: 1,873,863/2016) and the study met national and international standards of research ethics involving human subjects.

Results

Of the 715 individuals enrolled in the health service, 173 were invited and agreed to participate. From these, 133 (76.9%) participants were male, aged between 30 and 39 years (38.9%), from the capital of the state, Teresina 118 (68.2%), 4 (2.3%) did not have any schooling, 50 (28.9) had finished school, 100 (57.1%) were brown, and 96 (55.5%) were not married.

With regard to income, 116 (70.3%) reported receiving up to three minimum wages at the time of the interview and 21 (12.7%) had no income. Approximately 83 (48.0%) patients had been diagnosed for less than 2 years and 56 (32.4%) were seropositive for 3-5 years. Regarding the clinical aspects related to the HIV infection, 121 (69.1%) presented T-CD4 higher than 500 cel/mm³ and 11 (6.3%) had T-CD4 lower than 200 cel/mm³, with a predominance of patients with undetectable viral load 135 (78.0%).

According to the affective-sexual characteristics, in relation to the serology of the sexual partner 73 (42.2%) established a serodiscordant partnership, 46 (26.6%) were seroconcordant, 54 (31.2%) were unaware of the serological situation of their partner, and 89 (51.4%) of the partnerships were in a homosexual relationship, with a predominance of stable partners 117 (67.6%). The use of the male condom was consistent for 80 (46.2%) patients and, with regard to other sexually transmitted infections, 79 (47.7%) had a coinfection to HIV in the previous year.

Regarding substance use, 92 (53.1%) patients reported having sexual intercourse under the influence of alcohol. The disclosure of the HIV status to the partner was performed by 108 (62.4%) of the participants and 100 (57.8%) patients considered that it is important to disclose their HIV status to their sexual partner.

Regarding the provision of information on sexual HIV prevention in health services, 71 (41.0%) patients have never received information by health professionals on HIV prevention strategies; 21 (12.1%) of them were serodiscordant. It was identified that the service provided a limited amount of information on biomedical interventions to serodiscordant couples, among whom 41 (23.7%) indicated that they did not receive information about post-exposure prophylaxis

and 46 (26.6%) did not receive any information about pre-exposure prophylaxis (Table 1).

Among serodiscordant partnerships, 23 (13.3%) were not invited to attend the health service, 24 (13.9%) did not receive information on HIV prevention strategies and 34 (19.7%) were not attended as a couple for counseling. Statistical analyses (chi-square test and Fisher's exact test) showed scientific evidence between the partner's serology and the variables "partner has already been invited to attend the health service" (p<0.001), "partner received guidance on preventing sexual transmission of HIV in the health service" (p<0.001), and "you and your partner have already been seen at the SAE as a couple for advice on sexual practices and preventive strategies" (p<0.001).

Table 1 – Characterization of actions offered in health services for sexual partnerships between people living with HIV/aids, according to sexual orientation. Teresina, PI, Brazil, 2017 (n=173)

Variables	Sexual orientation				p-value
	Serodis-	Serocon-	Unknown	Total	
	cordant	cordant			
	n(%)	n(%)	n(%)	n(%)	
Have you received information from health professionals about HIV prevention strategies among sexual partners?					0.756*
Yes	44(25.4)	25(14.5)	33(19.1)	102 (59.0)	
No	29(16.8)	21(12.1)	21(12.1)	71(41.0)	
Have you received information from health professionals about post-exposure prophylaxis?					0.830†
Yes	7(4.0)	5(2.9)	4(2.3)	16(9.2)	
No	66(38.2)	41(23.7)	50(28.9)	157(90.8)	
Have you received information from health professionals about pre-exposure prophylaxis?					-
Yes	-	-	-	-	
No	73(42.2)	46(26.6)	54(31.2)	173(100)	
Has your partner been invited to attend the health service?					<0,001†
Yes	14(8.1)	23(13.3)	4(2.3)	41(23.7)	
No	59(34.1)	23(13.3)	50(28.9)	132(76.3)	
Has your partner received guidance on prevention of sexual transmission of HIV in the health service?					<0,001†
Yes	21(12.1)	20(11,6)	4(2.3)	45(26,0)	
No	50(28.9)	24(13.9)	41(23.7)	115(66,5)	
Not applicable	2(1.2)	2(1.2)	9(5.2)	13(7,5)	
Have you and your partner ever been seen at the service as a couple for advice on sexual practices and preventive strategies?					<0,001†
Yes	12(6.9)	12(6.9)	3(1.7)	27(15.6)	
No	61(35.3)	34(19.7)	51(29.5)	146(84.4)	

*Chi-square test; †Fisher's exact test

Discussion

The limitation of this study involves its first recruitment of participants, since no type of randomization was performed and patients were asked about practices they had prior to the time of the interview, which may represent a memory bias.

The results provide support to understand the main characteristics of partnerships between people living with HIV and the way care is provided for patients who have an active sex life. From this perspective, it is pertinent to identify which prevention strategies are offered to couples, how the service articulates with these patients, and whether there is a difference in the provision of care for people with different serologies of HIV, in order to identify possible vulnerabilities.

In this research, the actions offered by health professionals in a specialized care service to people with HIV present negative aspects. A significant number of patients with active sexual lives who did not receive information on biomedical interventions, such as pre-exposure and post-exposure prophylaxis, were identified. The recruitment of the sexual partner for the provision of care to the couple and of guidelines on prevention strategies is not part of the routine of the service, and the guidance to heterosexual couples on reproductive planning is still incipient.

There was scientific evidence that care for sexual partnerships was different between serodiscordant and seroconcordant couples, as well as for unknown partnerships. Structural support is flawed and the care provided to patients and their sexual partnerships still has gaps limiting the reach of the United Nations Programme on HIV/aids (UNAIDS) goal of reducing the number of cases⁽¹⁰⁾.

It is important for specialized services to provide HIV information, involving heterosexual and non-heterosexual, seroconcordant and discordant partnerships. The empowerment of the health service user contributes to changes in the epidemiological landscape of the current global situation of this infec-

tion, especially so that it can reach the 90-90-90 goal stipulated by UNAIDS^(3,10).

Behavioral, biomedical, and structural interventions play a strategic role in HIV prevention. In the context of new biomedical prevention technologies, post-exposure prophylaxis is an emergency method used mainly when all other resources have failed or have not been used. Post-exposure prophylaxis is characterized as a strategic damage-control tool, serving as a barrier to the introduction of the HIV into the human organism⁽¹¹⁾.

However, in addition to the difficulties highlighted by the literature in the use of post-exposure prophylaxis, related to its side effects, low adherence, and toxicity, the lack of dissemination of this method of prevention by specialized care services further complicates the management of HIV transmission between sexual partners. According to our results, the operation of this specialized service is not active, and it can be inferred that there are gaps in the performance of the triad formed by service, professional, and user. The offering of services is often guided by bureaucratic dynamics linked to technological organization, and the demands of these users are not taken into account⁽¹²⁾.

Even though it was not implemented in the service, the absence of guidelines on pre-exposure was unanimous; there was no immersion in this possibility of intervention. The distribution and its implementation was not equal among the different Brazilian regions, and although widely implemented today, the states experience problems for the dissemination and orientation of this intervention by the health services, limiting their use by the target population⁽¹³⁾.

It is pertinent to note the changes in the setting of this infection, from the beginning of the first case to the present day. Initially, the HIV virus represented a destructive process, leading to death and poor survival rates; but over the years, the needs of those living with this infection have changed, but the service has not yet fully adapted to this new reality⁽¹⁾.

Brazil is a populous country with an expressive

number of patients living with HIV, who need a quality service, but the performance of these services in the different Brazilian states still worries national and international authorities, since the failure in these services can have repercussions in several psychosocial and transmission-related aspects^(2,14).

The interactive communication of health professionals, in order to deal with doubts and to establish links with users, have weaknesses. The preparation of the professionals involves disposing of medications without the concern of giving support to other important aspects of attending and follow-up or of having a closer contact with patients. The professional plays a crucial role for good prospects to be had in disrupting the transmission chain of the virus between sexual partners and improving the quality of life of these patients.

Good, multiprofessional care practices, embedded in specialized services, should involve the identification of couples' sexual practices, communication on viral load with partners, and follow-up on conducting rapid Sexually Transmissible Infection tests to facilitate discussion of different prevention strategies, depending on the risk levels⁽¹⁵⁾.

From this perspective, it is important to secure a health service that goes beyond the estimates expected by HIV control programs, with a multidisciplinary and interdisciplinary approach, building an integrated, proactive, continuous and focused system on the promotion and maintenance of health⁽¹⁶⁾.

In addition to identifying gaps in individual patient care, recruiting the couple for guidance is not part of the routine of the service, it is inferred that the patient is not considered to exist as a sexually active person, and the difficulties faced by people living with HIV who have a sexual partner may sometimes not receive support from the service.

Specialized care departments for HIV patients in the United States and in some European countries routinely provide newly diagnosed people with HIV with an articulated service for sexual partnerships.

The main impacts of this intervention are increased case detection among sexual partners, decreased HIV transmission, provision of comprehensive care to all involved, and initiation of antiretroviral therapies among infected people⁽¹⁷⁾.

Couple-based interventions have been shown to be a promising strategy in HIV prevention, especially when building communication skills and relationship dynamics in different partnerships, improving adherence, involvement in care, and viral suppression⁽¹⁴⁾.

From this perspective, this service should be linked to the recognition of the importance of couple care for multiprofessional counseling and interventions, with crucial information about HIV transmission and the new biomedical technologies available to these couples. It has been conjectured that researches demonstrating service efficiency with this service setting enables health actions to be implemented that are in accordance to the need of these couples⁽¹⁷⁾.

Despite the level of evidence that drug therapy provides HIV protection, the success of such intervention depends on an articulated performance, since it is imperative that HIV-negative partners have up-to-date viral load information from their partners and accurate data on viral load variability, HIV drug resistant strains, and factors that may interfere with the suppressive effect of antiretroviral therapy⁽¹⁴⁾.

Since our results demonstrate that there is no statistical evidence in the care for people with HIV who have heterosexual and non-heterosexual partners, we can state that care is incipient regardless of sexual orientation. The negative points identified in the present study still hinders the reach of the 90-90-90 goal stipulated by UNAIDS and prevents the empowerment of users with the knowledge about the best choice of prevention strategy and health promotion for sexual partnerships⁽¹⁶⁾.

Although it does not appear in our results, health education is an essential tool that aims to expand alternatives for a better prevention strategy, especially among serodiscordant sexual partnerships. The

use of information technologies provides support for the development of the educational process in the different population segments⁽¹⁸⁾.

The service must be imbued with incorporating and promoting the development of this health care in order to promote a positive impact in the affective, cognitive, and behavioral domains. Educational strategies represent one of the pillars in the prevention against the spread of this infection, of the adherence to treatment, and of the proposals of a subsidy for quality of life for HIV patients.

Conclusion

This study found significant differences between serodiscordant couples, seroconcordant couples, and couples with unknown sexual orientation in relation to the care provided to them in a health center. Specifically, differences were found between the variables “partner has already been invited to attend the health service”, “partner received guidance on preventing sexual transmission of HIV in the health service”, and “you and your partner have already been seen at the service as a couple for advice on sexual practices and preventive strategies”.

Collaborations

Oliveira LB, Costa CRB, Sena IVO, Borges PTM, Araújo TME and Reis RK participated in the conception of the project, in data analysis and interpretation, in writing of the article and in the critically relevant review of the intellectual content, as well as in the final approval of the version to be published.

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