



ORIGINALES

Sexual partnerships of people living with HIV / Aids: sexual orientation, sociodemographic, clinical and behavioral aspects

Parcerias sexuais de pessoas vivendo com HIV/Aids: orientação sexual, aspectos sociodemográficos, clínicos e comportamentais

Parejas sexuales de personas que viven con VIH / sida: orientación sexual, aspectos sociodemográficos, clínicos y comportamentales

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ABSTRACT:

Objective: To analyze the influence of sexual orientation on sociodemographic, clinical and behavioral variables among sexual partners of people living with Human immunodeficiency virus/Acquired immunodeficiency syndrome.

Methods: A cross-sectional study carried out in a medical assistance service specialized in the treatment of people with Human Immunodeficiency Virus, with 173 participants. Pearson's Chi-square or Fisher's exact test was used to analyze the results.

Results: We identified an association between sexual orientation and variables such as gender, age, marital status, age, education, income, type of exposure, type of birth, consistent condom use, presence of infection, sexual practice, partner in routine consultations, disclosure of HIV to the partner and considers disclosure of their condition to the partner.

Conclusion: Establishing a sexual partnership in the context of HIV and having a non-heterosexual orientation presented statistical differences between sociodemographic and behavioral variables.

Key Words: HIV; Acquired Immunodeficiency Syndrome; Patient Care; Sexual Behavior

RESUMO:

Objetivo: Analisar a influência da orientação sexual sobre as variáveis sociodemográficas, clínicas e comportamentais entre parcerias sexuais de pessoas que vivem com vírus da imunodeficiência humana/Síndrome da imunodeficiência adquirida.

Métodos: Estudo transversal realizado em um serviço de assistência médica especializada no tratamento de pessoas com o Vírus da Imunodeficiência Humana, com 173 participantes. Na análise dos resultados utilizou-se o teste Qui-quadrado de Pearson ou exato de Fisher.

Resultados: Identificou-se associação entre a orientação sexual e as variáveis: sexo, idade, estado civil, faixa etária, escolaridade, renda, forma de exposição, tipo de parceria, uso consistente do preservativo, presença de infecção, prática sexual, acompanhamento do parceiro nas consultas de rotina, divulgação do HIV para o parceiro e considerar importante a divulgação da sua condição sorológica para o parceiro.

Conclusão: Estabelecer uma parceria sexual no contexto do HIV e ter uma orientação não-heterossexual apresentou diferenças estatísticas entre as variáveis sociodemográficas e comportamentais.

Palavras-chave: HIV; Síndrome de Imunodeficiência Adquirida; Assistência ao Paciente; Comportamento Sexual.

RESUMEN:

Objetivo: Analizar la influencia de la orientación sexual de las variables socio-demográficas, clínicas y de comportamiento entre las parejas sexuales de las personas que viven con el Virus de la inmunodeficiencia humana/Síndrome de inmunodeficiencia adquirida.

Métodos: Estudio transversal realizado en un servicio de asistencia médica especializada en el tratamiento de personas con el Virus de la Inmunodeficiencia Humana, con 173 participantes. En el análisis de los resultados se utilizó el test Chi-cuadrado de Pearson o exacto de Fisher.

Resultados: Se identificó asociación entre la orientación sexual y las variables: sexo, edad, estado civil, grupo de edad, escolaridad, renta, forma de exposición, tipo de asociación, uso consistente del preservativo, presencia de infección, práctica sexual, presencia del compañero en las consultas de rutina, divulgación del VIH al compañero y considerar importante la divulgación de su condición serológica para el compañero.

Conclusión: Establecer un emparejamiento sexual en el contexto del VIH y tener una orientación no heterosexual presentó diferencias estadísticas entre las variables sociodemográficas y comportamentales..

Palabras claves: VIH; Síndrome de Inmunodeficiencia Adquirida; Atención al Paciente; Conducta Sexual.

INTRODUCTION

There are approximately 38.8 million people living with HIV / AIDS (PLHA) worldwide⁽¹⁾. In Brazil, by 2015, there were 830,000 cases of people living with HIV infection (PLWHA), of who only about 450,000 use antiretroviral therapy.⁽²⁾

Increased availability and ease of access to diagnostic tests, coupled with advances in drug therapy, have led to changes in patterns of HIV infection, which gradually became chronic disease^(3,4). This new panorama provided an increase in survival, improvement in quality of life and consequent opening of spaces for social interactions, which favored the emergence of conjugal relationships between PLWHA, including the generation of seroconcordant couples (in which both are infected by the virus) and serodiscordant (in which only one of them is infected)⁽⁵⁾.

In serodiscordant couples, the main challenge in their sexual health is the risk of HIV transmission, especially in long-term relationships. The chance for transmission is unequal among different population groups, standing out in vulnerable populations. This fact was reinforced by the significant percentages of this infection among homosexual couples⁽⁶⁾.

In developed countries, such as the United States, the HIV diagnosis among the gay, lesbian, bisexual, transvestite and transsexual population (LGBTT) has increased

considerably since the 1990s, and although in the past five years this infection has shown a stable behavior, the number of HIV diagnoses attributed to heterosexual contact decreased by about 40% from 2003 to 2014, in contrast to 5% among LGBT people⁽⁷⁻⁹⁾.

Men who have sex with men (MSM) have specific vulnerabilities that may increase their chances of exposure to HIV and other Sexually Transmitted Infections (STIs) when compared to other segments of the population. This is due to a set of vulnerabilities, as well as the interaction between them, which permeates this group. The literature points to a number of individual aspects that contribute to this scenario, such as: drug use, socioeconomic characteristics, knowledge about the serological status of the sexual partner and mental health problems⁽¹⁰⁾. However, there are still incipient analyzes that discuss social aspects (personal and professional relationships, community representativeness and openness regarding sexual orientation) or structural aspects (access to health service, policies that guarantee security and equity) of these vulnerabilities.

In this perspective, the present study aims to analyze the influence of sexual orientation on sociodemographic, clinical and behavioral variables among sexual partners of people living with HIV/aids.

METHODS

Cross-sectional, epidemiological study developed at a Specialized Care Service of an Integrated Health Center in the State of Piauí, Northeastern Region of Brazil.

The unit studied has a structure for outpatient care of various specialties. The service has a team composed of three infectologists, two nurses and two nursing technicians, to better organize the flow of care. Permanent patients with Sexually Transmitted Infections (STI), including HIV/aids, are being treated at this center. Medications are available free of charge to patients living with HIV who are accompanied by this service⁽¹¹⁾.

The study sample consisted of 173 people living with HIV, selected by the simple random sampling method, from a universe of 715 people. For the definition of the sample we used a sample calculation for finite populations adopting sample error of 8% and confidence level of 95%. The inclusion criteria of the study were: individuals aged ≥ 18 years; who was in a fixed or casual relationship in the last 30 days, with the result of a serological test reactive for HIV and having developed or not the syndrome. Exclusion criteria were: being pregnant and deprived of liberty, due to the inherent specificities of the clinical management of these populations and the organization of the local health care network. Also excluded were those who gained access to medication by the Program, but with follow-up in private service.

Recruitment of the participants occurred as they appeared in the service for medical care, and occurred in a private place, before or after consultation with an infectologist. The data were collected from November 2016 to March 2017, with the application of a questionnaire previously prepared by the study authors for sociodemographic, clinical and behavioral evaluation of participants such as gender, age, marital status, education, income, viral load, partner status, exposure category, type of exposure, type of partnership, consistent condom use, presence of infection, sexual practice,

frequency with which they talk about HIV, accompanying partner in consultations, discloses HIV to partner and consider important to disclose HIV to the sexual partner, with possibilities for dichotomous or multiple responses.

The data were analyzed using the Statistical Package for Social Sciences Software version 20.0. In the univariate analysis, descriptive statistics were used. In the bivariate, Pearson's chi-square test or Fisher's exact test was used to associate qualitative variables and dichotomized sexual orientation into heterosexuals and non-heterosexuals (homosexuals and bisexuals). The level of significance was set at $p < 0.05^{(12)}$.

The study complied with the national and international standards of research ethics involving human subjects, and was approved by the Ethics Committee of the Ribeirão Preto School of Nursing - ERRP (protocol nº 59293316.6.0000.5393/16). Participants signed the Free and Informed Consent Term (TCLE), and anonymity was guaranteed.

RESULTS

Of the 173 study participants, 135 (77.1%) were men. Of the total number of participants, 68 were in the age group of 30 to 39 (38.9%), unmarried 94 (53.7%) and with education compatible with secondary education 72 (41.1%). Regarding the financial situation, 116 (66.3%) reported receiving up to three minimum wages.

Regarding sexual orientation, 89 (65.9%) of the men reported being non-heterosexual (homosexual or bisexual) and 38 (100%) of the women reported being heterosexual ($p < 0.001$).

Sexual orientation statistical difference between gender ($p < 0.001$), age ($p < 0.001$), marital status ($p < 0.001$), education ($p < 0.001$), income ($p = 0.001$) and the form of exposure ($p = 0.040$) (Table 1).

Table 1. Sociodemographic characterization of PLHA according to sexual orientation. Teresina (PI), Brasil, 2017 (n=173).

Variables	Sexual orientation				Total		p-valor**
	Heterosexual		Non-Heterosexual		n	%	
	N	%	n	%			
Sex							<0,001
Female	38	100	-	-	38	21,7	
Male	46	34,1	89	65,9	135	78,0	
Age (year)							<0,001
18 — 29	18	33,3	36	66,7	54	31,2	
30 — 39	29	42,6	39	57,4	68	39,3	
40 — 49	17	63,0	10	37,0	27	15,6	
50 — 59	15	78,9	4	21,1	19	11,0	
≥60	5	100,0	-	-	5	2,9	
Civil Status							0,001
Single	28	29,8	66	70,2	94	54,3	
Married	55	71,4	22	28,6	77	44,5	
Divorced	1	100,0	-	-	1	0,6	
Widow	-	-	1	100,0	1	0,6	

Education							0,001
No study	2	50,0	2	50,0	4	2,3	
Primary School	39	78,0	11	22,0	50	28,9	
High School	31	43,1	41	56,9	72	41,6	
Higher Education	12	27,9	31	72,1	43	24,9	
Post Graduation	-	-	4	100	4	2,3	
Income (in MW*)							0,001
Less than one	18	85,7	3	14,3	21	12,1	
One to three	55	47,4	61	52,6	116	67,1	
Three to five	9	32,1	19	67,9	28	16,2	
More than five	2	25,0	6	75,0	8	4,6	

* MW = Minimum Wage ** Pearson's Chi-square test or Fisher's exact test

Regarding clinical and behavioral variables (Table 2), 135 (78.0%) of the patients had an undetectable viral load, and the number of patients with detectable viral load remained the same regardless of sexual orientation 19 (50, 0%). Regarding the behavioral variables, 150 (86.7%) of the patients reported having been exposed to HIV through unprotected sexual intercourse, regarding the form of exposure 75 (43.4%) reported having been infected in one heterosexual relationship, 70 (40.5%) in a homosexual relationship and 22 (12.7%) did not know the form of exposure, 73 (42.2%) were serodiscordant to HIV and 54 (31.1%) did not know inform the partner's serology.

Regarding the type of sexual partnerships, 117 (67.7%) had a fixed partnership, 109 (63.0%) declared to use condoms consistently, and 64 (37.0%) of the participants had a lower adherence rate. Approximately half of the participants had HIV-related co-infection, of which the most prevalent was syphilis 42 (24.3%).

In analyzing sexual practices strongly related to sexual orientation, we can confirm the gender roles identified in our society, in a clear division of vaginal sexual practices between heterosexual women and anal sex among MSM.

With regard to health care, it is worth noting that 105 (60.7%) of the couples never talk about HIV prevention among them, 104 (60.1%) do not take their partner in routine consultations, 65 (37.6%) did not disclose their serological condition to the sexual partner and 73 (42.2%) did not consider it important to reveal their serological situation.

Table 2. Clinical and behavioral characterization of PLHA according to sexual orientation. Teresina (PI), Brasil, 2017(n=173)

Variables	Sexual orientation				Total		p-valor*
	Heterosexual		Nã- Heterosexual				
	N	%	N	%	n	%	
Viral load							0,840
Undetectable	65	48,1	70	51,9	135	78,0	
Detectable	19	50,0	19	50,0	38	22,0	
Exposition category							0,079
Blood	1	100,0	-	-	1	0,6	
Sexual	68	45,3	82	54,7	150	86,7	
Do not know	15	68,2	7	31,8	22	12,7	

Form of exposure							0,001
Heterosexual	65	86,7	10	13,3	75	43,4	
Homosexual	2	2,9	68	97,1	70	40,5	
Bisexual	-	-	4	100,0	4	2,3	
Transfusion	2	100	-	-	2	1,2	
Do not know	15	77,3	7	22,7	22	12,7	
Partnet serology							0,111
Discordant	38	52,1	35	47,9	73	42,2	
Concordant	26	56,5	20	43,5	46	26,5	
Unkown	20	37,0	34	63,0	54	31,1	
Partnership							0,003
Stable	66	56,4	51	43,6	117	67,7	
Casual	18	32,1	38	67,9	56	32,3	
Consistent use of condoms							0,029
Yes	46	42,2	63	57,8	109	63,0	
No	38	59,4	26	40,6	64	37,0	
Presence of Infection							0,002
HPV	1	25,0	3	75,0	4	2,3	
Trichomoniasis	1	33,3	2	66,7	3	1,7	
Gonorrhea	6	54,5	5	45,5	11	6,3	
Sifilis	9	21,4	33	78,6	42	24,3	
Genital Herpes	2	28,6	5	71,4	7	4,0	
Hepatitis C	4	50,0	4	50,0	8	4,6	
HPV e Sifilis	2	50,0	2	50,0	4	2,3	
No	59	62,8	35	37,2	94	53,7	
Prática sexual							
<u>Oral sex</u>							<0,001
Yes	31	35,2	57	64,8	88	50,9	
No	53	62,4	32	37,6	85	49,1	
<u>Receptive Vaginal</u>							<0,001
Yes	34	94,4	2	5,6	36	20,8	
No	50	36,5	87	63,5	137	79,2	
<u>Insertive Vaginal</u>							<0,001
Yes	43	76,8	13	23,2	56	32,4	
No	41	35,0	76	65,0	117	67,6	
<u>Receptive Anal</u>							<0,001
Yes	11	13,4	71	86,6	82	47,4	
No	73	80,2	18	19,8	91	52,6	
<u>Insertive Anal</u>							<0,001
Yes	15	19,2	63	80,8	78	45,1	
No	69	72,6	26	27,4	95	54,9	
Frequency with which they talk about HIV transmission							0,522
Daily	6	40,0	9	60,0	15	8,7	
Frequently	12	48,0	13	52,0	25	14,4	
Occasionally	17	60,7	11	39,3	28	16,2	
Never	49	46,7	56	53,3	105	60,7	
Partner accompanies in inquiries							0,020
Yes	41	59,4	28	40,6	69	39,9	
No	43	41,3	61	58,7	104	60,1	
Disclosure of HIV to the							0,018

partner							
Yes	60	55,6	48	44,4	108	62,4	
No	24	36,9	41	63,1	65	37,6	
Considers it important to disclose HIV to the partner							0,022
Yes	56	56,0	44	44,0	100	57,8	
No	28	38,4	45	61,6	73	42,2	

* Pearson's Chi-square test or Fisher's exact test

Sexual orientation was statistically different between the variables form of exposure (0.001), type of partnership (0.003), consistent condom use ($p = 0.029$), presence of STI ($p = 0.002$), sexual practice ($p < 0.001$), ($p = 0.020$), to divulge HIV infection to the sexual partner ($p = 0.018$) and to consider this disclosure as important ($p = 0.022$) (Tabela 2)

DISCUSSION

The profile of the participants showed a prevalence of males, non-heterosexuals and young adults. Non-heterosexual men are disproportionately affected by HIV and other STIs, especially among younger people. A study conducted in the United States also showed similar reality and pointed out that in younger men, as the age of the sexual partner increases, the likelihood of unsafe sex also increases⁽¹³⁾.

The male gender presents a specific set of vulnerability to STIs, mainly due to the cultural roots that favor the involvement in diverse sexual practices of risk, strengthened by the idea that the men have more need of sex, playing in this way a primordial role in its exhibition vulnerable situations for acquiring HIV⁽¹⁴⁾.

In general, new HIV infections among MSM occur due to unprotected sex in the presence of detectable viral load, especially when the serological situation is not known. Transmission of this infection often occurs prior to establishing a fixed partnership, or as a result of having sex with other partners during the relationship^(15,16).

When it comes to the form of exposure, a significant percentage reported having acquired HIV in a homosexual relationship. MSM present distinct vulnerabilities to HIV, which may relate to both sexual attitudes and behaviors (anal sex without condom), presence of multiple partners, use of lawful and illicit drugs, use of the Internet to find sexual partners and group sex,⁽¹⁷⁾ as well as the incipient strategies of the health services in proposing recruitment and qualified assistance to this profile of sexual partnerships.

In couples living in the context of HIV the greatest concern involves the risk of transmitting this infection among serodiscordant sexual partners with detectable viral load. The reality of this study indicates a significant percentage of patients with detectable viral load, but without distinct differences between sexual orientation.

The data on the serology of the partner also draw attention, mainly by the percentage of participants who are not aware of the serology of their partner, signaling the lack of ability to deal with this condition. It is inferred that the absence of the knowledge of the

serology of the partner can interfere in the decision making on the choice of a more efficient method of prevention for the couple ⁽¹⁸⁾.

The literature points out the importance of the implementation of combined strategies, articulating primarily the use of condoms in all sexual relations linked to the introduction of early antiretroviral therapies (ART), favoring the reduction of blood plasma viral load and allowing a reduction in sexual transmission of HIV^(19,20).

Consistent condom use in all sexual relationships is still not a commonly performed practice among a significant number of couples. Despite the provisions of synergistic strategies for the prevention of HIV transmission and health promotion, the complexity of interpersonal relationships still weakens decision-making by preventive measures, with a major influence on STI vulnerabilities. Dealing with different expressions of sexuality has been a major challenge for society and health service, still very supported by a biomedical and heterosexist model⁽²¹⁾.

Although condom use is the most mentioned measure in the literature and is available free of charge by health services, there is still an inconsistency in the use of this method. Negotiating the use of condoms represents an obstacle between couples, since, not using this method in many relationships, it is characterized as a sign of trust and intimacy, which strengthens their commitment and satisfaction in the relationship, becoming one of the main barriers to its use⁽²²⁾.

Among the unprotected sexual practices stands out anal sex, which presents a risk ten times higher for HIV transmission, when equated to vaginal sex without a condom. In many situations, unprotected sex may be a conscious and desired choice, which can be observed in bareback sexual practices, in which MSM practice anal sex without the use of condoms intentionally because it is considered more pleasurable ⁽²³⁾.

Although the adherence to ART reduces considerably the risk of sexual transmission of HIV, inconsistent condom use in PLHA predisposes the acquisition of HIV co-infections associated with other STIs, as in the present study, where the percentage of these co-infections was significant, mainly in syphilis⁽²⁴⁾.

Inconsistent use of the condom becomes a cyclical chain, since the presence of other STIs facilitates the risk of HIV transmission due to the interruption of protective barriers and the recruitment of immune cells susceptible to the site of infection. Among STIs, syphilis stands out due to the increase in HIV viral load in the patient's blood plasma and a decrease in the TCD4 cell count, which may contribute to the progression of AIDS infection ⁽²⁵⁾.

Sexual partnerships, especially of LGBT people living in the context of HIV, need a network of care that offers holistic care, so as to not only offer the offer of diagnosis and treatment, but to transpose this approach by providing sustainable care through the use of appropriate strategies.

Although studies point to the increase in the formation of sexual partnerships among PLHA, SAE, in general, still does not provide support to serve this clientele, especially non - heterosexual couples, providing a barrier in the care of the user ^(5,11,19). The performance of this service is one of the pillars for the management of HIV transmission among sexual partnerships, however what is observed is a gap between

the performance of SAE and the promotion of health among patients who have active sexual life.

The present study identified that non-disclosure of HIV to the partner and the fact that it does not consider it important to reveal the diagnosis is strongly associated with differences in sexual orientation. Living with HIV in today's society maintains strong relationships with the stigma of living with the virus.

Punitive opinion and incipient knowledge of society affects the well-being of those who live with this infection and hinders interactions in the social, family and marital environment, predisposing to social isolation and risky sexual practices. In this way, the service should focus on the needs of MSM, involving the vulnerabilities of sexual relations, proposing interventions to demystify the stigma of being carriers of the HIV virus and having a sexual partnership.

Revealing the serological condition to the partner involves feelings such as fear of discrimination and stigma or an unfavorable reaction. The emotional impact of disclosure among serodiscordant partnerships increases the pressure for a relationship in terms of anxiety, involves high psychic distress, guilt and fears of transmission, and can be emotionally exhausting⁽²⁶⁻²⁷⁾. Homophobia, part of the structure of present-day society, is perceived more strongly by PLWHA, since it adds prejudice to these individuals, making it even more difficult for them to disclose their status, although to an intimate partner.

Heterosexuals considered it less important to disclose status to their partner. By analyzing the social and historical context of heterosexual and homosexual couples, it can be seen that HIV infection has been part of the LGBT community since its discovery, forcing its members to live with the possibility of becoming infected. Infection among heterosexual couples is becoming more frequent, however, discomfort, especially among women, of talking openly about sexuality may make it difficult to seek treatment, disseminate results and drug adherence⁽²⁸⁾.

One strategy used by MSM is serosorting, or seropositioning, which means behavior to reduce the risk of HIV transmission. This strategy takes HIV serostatus into account for the choice of sexual practice among sexual partnerships such as unsafe receptive anal sex with only HIV-negative sexual partners and insertive anal intercourse with strangers or HIV-positive partners⁽²⁹⁾.

CONCLUSION

Non-heterosexual people living with HIV have a number of factors with statistical differences for individual vulnerabilities (high income, schooling) and yet are embedded in a context of high social and programmatic vulnerability (absence of partner during consultations, information insufficient on the use of PEP, received service information) when compared to heterosexual couples.

Sexual orientation was not associated with relevant clinical aspects such as viral load or the configuration of serodiscordant or concordant relationships. These data should be considered when developing strategies for intervention and reception in specialized services.

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