









Sociodemographic profile of elderly persons with the human immunodeficiency virus in a state in the northeast of Brazil

Itamara Barbosa Souza¹ 
Hulda Alves de Araújo Tenório² 
Everaldo de Lima Gomes Junior¹ 
Emilly Souza Marques² 
Ramon de Assis Fonseca da Cruz¹ 
Rodrigo Galvão Moreira da Silva¹ 

Abstract

Objective: To describe the sociodemographic profile of elderly persons with human immunodeficiency virus (HIV) in the state of Alagoas, Brazil. *Method:* An ecological study with a descriptive and quantitative approach was carried out. Data was used from elderly patients with HIV reported in the Notification Disease Information System (or SINAN), from 2012 to 2016. *Results:* A total of 41 cases of HIV, with a continuous progression of cases, predominantly male, with self-described brown skin, low education and reported heterosexual sexual orientation. *Conclusion:* It was found that it is necessary to demystify that only sex workers, drug users and homosexual men are vulnerable to the virus and that the elderly are not susceptible to HIV. In this scenario it is essential that the elderly are inserted in environments that approach the theme openly, free of prejudice, essentially starting from the recognition of sexuality, providing greater security and quality of life.

Keywords: HIV. Health of the Elderly. Epidemiology. Public Health Nursing.

¹ Faculdade Estácio de Alagoas, Programa de Graduação em Enfermagem. Maceió, AL, Brasil.

² Universidade Federal de Alagoas, Faculdade de Medicina, Programa de Pós-graduação em Ensino na Saúde. Maceió, AL, Brasil.

The authors declare that there are no conflicts of interest in relation to this study.

No funding was provided for this study.

Correspondence
Itamara Barbosa Souza
itamara28pa@hotmail.com

Received: February 07, 2019
Approved: August 19, 2019

INTRODUCTION

Aging and longevity are topics of global concern, the concepts or notions of which focus on similar problems throughout the world. Progressive and expressive aging has resulted in the worsening of social and economic inequalities in Brazil. Until the early 1960s the country was considered a nation of young people, but this perspective has changed, and there are currently concerns regarding the elaboration of public policies aimed at the aging population, in order to ensure the comprehensive health care of this group. In this context, debates include themes related to the sex life of such individuals, making the adoption and implementation of protection policies a challenge¹⁻³.

Drugs that inhibit sexual impotence and favor hormone replacement make older people more sexually active. This is a worrying factor however, as it can make this population more susceptible to sexually transmitted infections (STIs), including the human immunodeficiency virus (HIV). It is noteworthy that, in the cultural context, the idea that the elderly are not vulnerable to sexual diseases is embellished, as these are diseases that belong to other specific groups, and the use of preventive methods is therefore not required^{4,5}.

Individuals with HIV may progress to Acquired Immunodeficiency Syndrome (AIDS), where their immune system is constantly attacked. In this case, individuals with AIDS present signs and symptoms of the disease characterized by the externalization of opportunistic diseases⁶.

One way to slow the chain of virus transmission is by detecting infected (seropositive) people, for which purpose rapid tests (RTs) have been developed. The methodology of such tests allows the detection of antibodies in less than 30 minutes, and they boast low operating costs, are highly sensitive, specific, and simple to apply and interpret⁷. Rapid tests are recommended for the population treated in health services, such as pregnant women; parturients; patients with STI or suspected cases; people diagnosed with active or latent infection tuberculosis (LITB); the prison population; indigenous populations; patients

in emergency services (urgency and emergency); homeless populations; drug users; persons at risk of sexual exposure or sexual violence; health professionals accidentally exposed to potentially contaminated biological materials, and source patients⁸.

Even following the creation of public policies such as Ministry of Health Ordinance No. 236 dated May 1985, which established the first guidelines for the AIDS Program, as well as resources available to combat HIV, such as the distribution of drugs to already diagnosed individuals, early detection of the disease through RT, and the provision of condoms; in relation to the health of the elderly, the theme of HIV infection is considered taboo or something outside their life context. For some older people, HIV is still a disease of homosexuals, and unrelated to behavioral risk factors such as having sex without a condom⁹.

Thus, in the context of aging-related sexuality, there is a progressive increase in the number of cases of STIs in the elderly, especially HIV, justifying the need to identify the sociodemographic profile of such individuals. This information can support the development of health promotion actions, assisting in orientation and information about the disease and its treatments, enabling better therapeutic acceptability, increased quality of life, and combatting the virus transmission chain¹⁰.

Based on this profile, health professionals should look at the sexual aspects that permeate the life of the elderly, making such actions a routine and permanent feature in services that assist this population, considering each meeting as an opportunity to intervene and act in health promotion, considering aspects of sexuality fundamental to the practice of integral care.

Given the above, the present study aimed to describe the sociodemographic profile of elderly persons with human immunodeficiency virus (HIV) in the state of Alagoas, Brazil.

METHOD

An ecological study with a descriptive and quantitative approach was performed. It is ecological

in nature as the 102 municipal regions of the state of Alagoas, Brazil, which are operationalized through the actions of the State Program for the Control of STIs/AIDS of the Disease Information Notification System (or SINAN), were used as units of analysis.

The use of the quantitative method foresees the adoption of a systematic and objective strategy, employing the measurement of pre-established variables, and also enables the use of mechanisms to control the research situation in order to reduce biases and enhance accuracy and validity¹¹.

The inclusion criteria were data from elderly patients with HIV included in SINAN between 2012 and 2016, and the census sample. This system is available throughout the healthcare network and in all spheres of governance of the Brazilian health sector, within the epidemiological surveillance services, where professionals use the standard forms of the Ministry of Health to provide notification of the incidence of certain diseases. The inclusion of this form in the referred system may be able to produce analyzes and measures of intervention and control.

In order to elaborate the sociodemographic profile, the dependent variable was the number of elderly persons with HIV in Alagoas by age group (60-69; 70-79; 80 years old and over), and the independent variables were: gender, education (illiterate, 1st to 4th grade incomplete elementary school, complete 4th grade of elementary school, complete elementary school, complete high school, complete higher education, ignored), skin color/ethnicity (white, black, yellow (Asian-Brazilian), brown, ignored) and sexual orientation (homosexual, bisexual, heterosexual, ignored).

Descriptive statistics were applied for data analysis, with tabulation in a spreadsheet. The data were presented in table form, with notification of frequency and percentage.

The study began following authorization from the management of the State STI/AIDS program of the Alagoas State Health Department (or SESAU) to access the SESAU-AL SINAN databases. According to Resolution No. 510/2016 of the National Health Council, as this is a public domain system and not subject to the identification of subjects, submission to the Research Ethics Committee, as well as the need for a Free and Informed Consent Form, were waived.

RESULTS

During the analyzed period, 41 cases of HIV were registered, with a continuous increasing progression, as shown in Table 1.

Of this total, 7.3% were white; 19.5% were black; 2.4% yellow or Asian-Brazilian; 61.0% were mixed race and 9.8% did not respond to the question of skin color/ethnicity (Table 2).

Table 3 shows the percentage of individuals with HIV who reported their sexual orientation; in which 51.2% said they were heterosexual, 4.9% homosexual, 4.9% bisexual and 39.0% ignored the question.

It was observed that, according to level of education, there was a predominance of those who are illiterate or who did not report their education, with 29.3% of the population being illiterate and 34.1% ignoring the question (Table 4), representing underreporting.

Table 1. Percentage of HIV in elderly persons, per year, in the state of Alagoas, 2012 to 2016.

Year of Diagnosis	Male	Female	n
2012	1	0	1
2013	2	1	3
2014	6	2	8
2015	10	1	11
2016	11	7	18
Total	30	11	41
F (%)	73.2	26.8	100

Source: SINAN, 2017.

Table 2. Percentage of HIV in the elderly in relation to skin color/ethnicity in the state of Alagoas, 2012 to 2016.

Year of diagnosis	White	Black	Yellow	Brown	Ignored	n
2012	0	1	0	0	0	1
2013	1	1	0	1	0	3
2014	0	2	0	4	2	8
2015	1	2	0	7	1	11
2016	1	2	1	13	1	18
Total	3	8	1	25	4	41
F (%)	7.3	19.5	2.4	61.0	9.8	100

Source: SINAN, 2017.

Table 3. Percentage of HIV in the elderly in relation to sexual orientation in the state of Alagoas, 2012 to 2016.

Sexual orientation	2012	2013	2014	2015	2016	F (%)
Ignored	0	1	3	6	6	16 (39.0)
Homosexual	1	0	1	0	0	2 (4.9)
Bisexual	0	0	1	0	1	2 (4.9)
Heterosexual	0	2	3	5	11	21 (51.2)
Total	1	3	8	11	18	41 (100.0)

Source: SINAN, 2017.

Table 4. Percentage of HIV in the elderly and educational level in the state of Alagoas, 2012 to 2016.

Schooling	2012	2013	2014	2015	2016	F (%)
Ignored	0	1	2	5	6	14 (34.1)
Illiterate	0	1	3	3	5	12 (29.3)
1st to 4th grade of elementary school incomplete	0	1	2	0	4	7 (17.1)
4th grade of elementary school complete	0	0	1	2	1	4 (9.8)
Complete primary education	0	0	0	0	1	1 (2.4)
Complete high school education	0	0	0	0	1	1 (2.4)
Complete higher education	1	0	0	1	0	2 (4.9)
Total	1	3	8	11	18	41 (100.0)

Source: SINAN, 2017.

DISCUSSION

Any reflection on HIV and its relationship with the elderly population involves the articulation between sexuality in such individuals and the cultural, social and economic aspects of this population segment. It is noted that the majority of records on the information system are male, which is consistent with research that assessed the incidence of elderly people with HIV, where men represented 53.8% of the total number of patients¹².

This reality can be attributed to the difficulty men experience when negotiating preventive measures, which is an expression of hegemonic masculinity in the domain of sexuality. In keeping with dominance in this field is the requirement for multiple sexual partnerships, the perception of invulnerability to HIV and other STIs, affirming oneself to be heterosexual and the excessive consumption of alcohol and illicit drugs. Such situations are likely to enhance susceptibility, leaving men with higher rates of HIV infection¹³.

Cultural issues also seem to affect this reality, as they accompany the sense of a restricted or mistakenly unnecessary requirement for health professionals to investigate sexually transmitted diseases due to the concept of asexuality in the elderly. However, studies point to an increase in the sexual activity of this group, stating that of 22 men in a studied population, 16 (72.8%) said that they were sexually active and admitted that they had never used condoms^{14,15}. Given this scenario it is necessary to demystify the belief that only people belonging to the risk group (sex workers, drug users and homosexual men) are vulnerable to the virus^{15,16}.

The view that the elderly are not susceptible to the transmission of the virus should be reassessed and effective measures to prevent and break the chain of virus transmission should be developed. In the primary care setting, policies aimed at the elderly are considered, including health indicators for this population, and aspects such as functional capacity, participation and self-satisfaction should be priorities of care, with incentives for activities that promote autonomy and pleasure, including in relation to sexuality¹⁶.

The study also pointed to a growing process of feminization of infection by the virus over the years, with a progression from one case in 2013 to seven in 2016. This makes it clear that the inequality of power between the sexes and lesser female anonymity in sexual and reproductive decisions, including sexual initiation under pressure, unsafe sex, abuse and sexual exploitation, may be triggering factors of the current epidemiological trait¹⁷.

From the female perspective, there is a fear of losing the male provider, especially when doubts are raised about a partner's infidelity, and in such cases, the woman often gives in to the male imposition of having sex without a condom. In addition, studies indicate that most of this population is still uninformed about STIs and their prevention, which contributes to the significant increase in the spread of HIV among the elderly^{17,18}.

Regarding self-affirmed skin color/ethnicity, the study showed that most elderly persons considered themselves black or brown-skinned (19.5% and 61.0%, respectively) (Table 2). The race variable was introduced in SINAN in 2001 and is currently seen as a determinant of health inequalities in Brazil. Recent survey data show that the HIV epidemic is growing rapidly among the black and brown-skinned population¹⁹.

Literature dealing with HIV/AIDS describes a mortality rate in Brazil based on skin color/ethnicity in the year 2000 of 10.61/100,000 for white women and 21.49/100,000 for black women, and 22.77/100,000 for white men and 41.75/100,000 for black men. These data reflect the same skin color/ethnic disparity as the present study¹⁹.

The black population carries traces of the social marginalization that permeates Brazilian society and actions addressing this population are therefore required. Black Brazilians carry a racial stigma that can affect the treatment aimed at this group, influencing access and opportunities, creating and/or enhancing vulnerabilities by imposing barriers to access to rights or the neglecting of needs of all kinds²⁰.

The guiding questions of health have long had a serious impact on the black population. The absence,

until now, of a racial and ethnic background category in official statistics on the HIV/AIDS epidemic makes it difficult to identify the expansion of the epidemic in this population segment. However, if the idea of vulnerability is understood as an impossibility of exercising citizenship, it can be said that black people are those who most face problems of access to services at all levels, as this perspective exhibits the social and cultural characteristics that make them more vulnerable²¹.

Regarding the sexual orientation of elderly persons with HIV, the present study found a prevalence of heterosexual elderly persons (Table 3). Confirmation of these data breaks some paradigms, among them, the belief that homosexual individuals make up the majority of the infected population²².

Research carried out at a public hospital for infectious and toxicological diseases in the state capital of Rio Grande do Norte traced the profile of people infected with HIV. It was found that of 331 people, a total of 258, or 78%, considered themselves heterosexuals, confirming a tendency that HIV is not related to sexual orientation, but to the behavior of risk²².

HIV/AIDS and homosexuality have experienced a conflicting relationship throughout history, since same-sex sexual orientation (male) appeared to reflect on a health situation. Social, cultural, economic, religious and legal transformations has increased the visibility of different identities, such as gay, lesbian, transgender and transvestite. These changes have made the male role the subject of social debate and it can be stated, at this point, that human sexuality and behaviors related to this issue will influence the health-disease process²³.

Historical data has shown a rise in the proportion of cases of transmission in heterosexuals from the early 21st century onwards, when the third decade of the HIV epidemic began. Also at this time, there was greater contamination among lesbian women, with clinical aspects revealing that women who have sex with other women can contract HIV through contact with menstrual blood, vaginal secretions and the use of sex toys²⁴.

Vulnerability to HIV infection among homosexual women occurs through biological, social, economic, cultural, gender factors and society's consent to violence against women. Another issue is that part of the population believes in the monogamy of their partners, with this conception having a certain repercussion in their serological state²⁵.

Regarding the educational level of the infected elderly persons in the present study, 29.3% were classified as illiterate (Table 4), highlighting the significance of this factor. Schooling is an effective indicator of the socioeconomic status of an individual and its impact on health. Thus, the lower the educational level of the elderly, the lower their access to information and, consequently, the more vulnerable they will be to HIV/AIDS¹².

In a recent study on the prevalence of HIV in the population at a Health Center in the city of Rio das Ostras, in the state of Rio de Janeiro, the data agreed with the present study, as it showed that 40.9% of the population investigated had a low educational level²⁶.

Related to this issue is the difficulty that health professionals may experience when providing health education in health, meaning that information pertinent to the form of contagion and prevention measures fails to reach these individuals in a precise manner. Health education is an important tool in health promotion, which requires a combination of educational and environmental support and individual skills that aim to promote the actions and conditions necessary for such promotion²⁷.

All health professionals provide health education, but nurses have a fundamental role in this scenario, as they act in the health care of the elderly population, and during nursing consultations should go through all aspects related to this age group, including care regarding HIV prevention²⁸.

Specific campaigns addressing the issue of HIV are needed, as well as a routine aimed at consulting health professionals for the population aged 60 and over. These moments are conducive to HIV counseling and RTs, favoring early diagnosis and effective primary prevention⁴.

Possible limitations of the present study are the lack of data on the elderly population in the state, the limited reliability of the situational diagnosis of the disease in this population, and the inability to associate exposure and disease at the individual level. Given this, there is a need to make municipal regions, Basic Health Units and Family Health Units provide notifications of new cases of HIV/AIDS in this population, resulting in a more cohesive promotion of strategies to combat transmission, evolution and mortality.

CONCLUSION

The present study identified that the male gender predominates among elderly people with the HIV virus in the state of Alagoas, who define themselves as brown-skinned and have a low level of education. It is necessary to demystify the belief that only people in the risk group are vulnerable to the virus and that the elderly are not susceptible to HIV.

More investments in health agencies, their professionals and health education practices are

therefore suggested. In this scenario, the elderly should be inserted in environments that approach the theme openly, free of prejudice, essentially starting from the recognition of sexuality, providing greater security and quality of life to citizens.

Large-scale educational campaigns can achieve significant results in all sectors of society, portraying the disease as something real, which can potentially be prevented and for which possibilities of care exist, with the responsibility for the health of the population viewed as an individual attitude. This can reduce the connivance of all with the invisible perception of risk and danger of virus contamination.

In this context, it is hoped that the results of the present study may stimulate reflections that encourage changes in health care in all sectors, whether public or private, with the increased awareness and actions of multiprofessional teams in adapting care to the surveillance model of health care, optimizing support, bonding and communication for and with the elderly population and aspects of their sexuality.

Edited by: Ana Carolina Lima Cavaletti

REFERENCES

- Zanon RR, Moretto AC, Rodrigues RL. Envelhecimento populacional e mudanças no padrão de consumo e na estrutura produtiva brasileira. *Rev Bras Estud Popul.* 2013;30(supl):45-67.
- Nascimento EKS, Albuquerque LPA, Marinelli NP, Campelo MNAA, Santos FJL. História de vida de idosos com HIV/Aids. *Rev Enferm UFPE* [Internet]. 2017 [acesso em 17 jan. 2017];11(4):1716-24. Disponível em: <https://periodicos.ufpe.br/revistas/revistaenfermagem/article/view/15243/18023>
- Burigo GF, Fachini IH, Garrett B, Streicher CCI, Rosa RS. Sexualidade e comportamento de idosos vulneráveis a doenças sexualmente transmissíveis. *CuidArte Enferm.* 2015;9(2):148-53.
- Silva MM, Vasconcelos ALR, Ribeiro LKNP. Caracterização epidemiológica dos casos de Aids em pessoas com 60 anos ou mais, Pernambuco, Brasil, 1998 a 2008. *Cad Saúde Pública* [Internet]. 2013 [acesso em 25 set. 2017];29(10):2131-5. Disponível em: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0102-311X2013001000028&lng=en&nrm=iso
- Bezerra VP, Serra MAP, Cabral IPP, Moreira MASP, Almeida AS, Patrício ACFA. Práticas preventivas de idosos e a vulnerabilidade ao HIV. *Rev Gaúch Enferm.* 2015;36(4):70-6.
- Brasil. Ministério da Saúde, Secretaria de Vigilância em Saúde, departamento de DST, Aids e hepatites virais. Guia de Consulta Rápida, Protocolo Clínico e Diretrizes Terapêuticas para Manejo da Infecção pelo HIV em Adultos [Internet]. Brasília, DF: MS; 2013 [acesso em 28 maio 2018]. Disponível em: <http://www.aids.gov.br/pt-br/pub/2013/protocolo-clinico-e-diretrizes-terapeuticas-para-manejo-da-infeccao-pelo-hiv-em-adultos>
- Affeldt AB, Silveira MF, Barcelos RS. Perfil de pessoas idosas vivendo com HIV/aids em Pelotas, sul do Brasil, 1998 a 2013. *Epidemiol Serv Saúde* [Internet]. 2015 [acesso em 12 maio 2015];24(1):79-86. Disponível em: <http://www.scielo.br/pdf/ress/v24n1/2237-9622-ress-24-01-00079.pdf>

8. Brasil. Ministério da Saúde, Secretaria de Vigilância em Saúde, departamento de DST, Aids e hepatites virais. Manual técnico para o diagnóstico da infecção pelo HIV na atenção básica [Internet]. 3ª ed. Brasília, DF: MS; 2016 [acesso em 13 jan. 2018]. Disponível em: <http://www.aids.gov.br/pt-br/node/57787>
9. Araldi LM, Pelzer MT, Abreu DPG, Saioron I, Santos SSC, Ilha S. Pessoas idosas com o vírus da imunodeficiência humana: infecção, diagnóstico convivência. *Rev Min Enferm* [Internet]. 2016 [acesso em 15 out. 2017]; 20(948):1-8. Disponível em: <http://www.reme.org.br/artigo/detalhes/1081>
10. Cerqueira MBR, Rodrigues RN. Fatores associados à vulnerabilidade de idosos vivendo com HIV/Aids em Belo Horizonte (MG), Brasil. *Ciênc Saúde Colet* [Internet]. 2016 [acesso em 12 jan. 2018];21(11):3331-8. Disponível em: <http://www.scielo.br/pdf/csc/v21n11/1413-8123-csc-21-11-3331.pdf>
11. Araújo APS, Bertolini SMMG, Bertolini DA. Perfil epidemiológico e imunológico de idosos infectados pelo vírus da imunodeficiência humana. *Estud Interdiscip Envelhec* [Internet]. 2015 [acesso em 12 maio 2017];20(1):121-138. Disponível em: <http://www.seer.ufrgs.br/index.php/RevEnvelhecer/article/view/45225/34925>
12. Quadros KN, Campos CR, Soares TE, Silva FMR. Perfil epidemiológico de idosos portadores de HIV/Aids atendidos no serviço de assistência especializada. *Rev Enferm Cent.- Oeste Min.* 2016;6(2):2140-6.
13. Leal AF, Knauth DR, Couto MT. A invisibilidade da heterossexualidade na prevenção do HIV/Aids entre homens. *Rev Bras Epidemiol* [Internet]. 2015 [acesso em 30 maio 2018];18(1):143-55. Disponível em: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1415-790X2015000500143&lng=en&nrm=iso
14. Alencar RA, Ciosak SI. O diagnóstico tardio e as vulnerabilidades dos idosos vivendo com HIV/Aids. *Rev Esc Enferm USP* [Internet]. 2015 [acesso em 12 maio 2015];49(2):229-35. Disponível em: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0080-62342015000200229&lng=en&nrm=iso
15. Araújo BJ, Sales CO, Cruz LFS, Moraes Filho IM, Santos OP. Quality of life and sexuality in the population of the third age of a center of convivence. *REVISA.* 2017;6(2):85-94.
16. Brito MNI, Andrade SSC, Silva FMC, Fernandes MRCC, Brito KKG, Oliveira SHS. Idosos, infecções sexualmente transmissíveis e Aids: conhecimentos e percepção de risco. *ABCS Health Sci.* 2016;41(3):140-5.
17. Santos NJS. Mulher e negra: dupla vulnerabilidade às DST/HIV/Aids. *Saúde Soc* [Internet]. 2016 [acesso em 30 jan. 2018];25(3):602-18. Disponível em: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0104-12902016000300602&lng=en&nrm=iso
18. Jesus DS, Fernandes FP, Coelho ACL, Simões NL, Campos PRC, Ribeiro VC, et al. Nível de conhecimento sobre DST's e a influência da sexualidade na vida integral da mulher idosa. *Rev Foco* [Internet]. 2016 [acesso em 13 jul. 2019];1(25):33-45. Disponível em: <http://revistaemfoco.iespes.edu.br/index.php/Foco/article/view/96/59>
19. Fry PH, Monteiro S, Maio MC, Bastos FI, Santos RV. AIDS tem cor ou raça? Interpretação de dados e formulação de políticas de saúde no Brasil. *Cad Saúde Pública.* 2007;23(3):2497-523.
20. Gomes ICR, Damasceno RO, Nery AA, Martins Filho IE, Vilela ABA. Implementação da política nacional de atenção integral à saúde da população negra na Bahia. *Rev Baiana Enferm* [Internet]. 2017 [acesso em 13 jan. 2018];31(2):1-12. Disponível em: <https://portalseer.ufba.br/index.php/enfermagem/article/view/21500/14607>
21. Rios LF, Oliveira C, Garcia J, Parker R. Axé, práticas corporais e Aids nas religiões africanistas do Recife, Brasil. *Ciênc Saúde Colet.* 2013;18(12):3653-62.
22. Silva RAR, Silva RTS, Nascimento EGC, Gonçalves OP, Reis MM, Silva BCO. Perfil clínico-epidemiológico de adultos hiv-positivo atendidos em um hospital de Natal/RN. *Rev Pesqui Cuid Fundam* [Internet]. 2016 [acesso em 28 maio 2018];8(3):4689-96. Disponível em: <http://www.seer.unirio.br/index.php/cuidadofundamental/article/view/4294/pdf>
23. Santos RC, Schor N. As primeiras respostas à epidemia de Aids no Brasil: influências dos conceitos de gênero, masculinidade e dos movimentos sociais. *Psicol Rev* [Internet]. 2015 [acesso em 05 mar. 2018];24(1):45-59. Disponível em: <https://revistas.pucsp.br/index.php/psicorevista/article/view/24228/17438>
24. Antunes MC, Paiva VSF. Territórios do desejo e vulnerabilidade ao HIV entre homens que fazem sexo com homens: desafios para a prevenção. *Temas Psicol* [Internet]. 2013 [acesso em 30 maio 2018];21(3):1125-43. Disponível em: http://pepsic.bvsalud.org/scielo.php?script=sci_arttext&pid=S1413-389X201300030019&lng=pt&nrm=iso
25. Cabral LS, Torres RAM, Silva LMS, Rodrigues ARM, Viana AB, Almeida PC. Homossexualidades femininas no contexto dos sistemas de informação de saúde. *Rev Enferm UFPE* [Internet]. 2017 [acesso em 17 fev. 2018];11(4):1699-1707. Disponível em: <https://periodicos.ufpe.br/revistas/revistaenfermagem/article/download/15267/18069>

26. Dantas CC, Dantas FC, Monteiro BAC, Leite JL. Perfil epidemiológico dos pacientes com HIV atendidos em um Centro de Saúde da região litorânea do estado de Rio de Janeiro, Brasil, 2010-2011. *Arq Catarin Med.* 2017;46(1):22-32.
27. Salci MA, Maceno P, Rozza SG, Silva DMGV, Boehs AE, Heidemann ITSB. Educação em saúde e suas perspectivas teóricas: algumas reflexões. *Texto & Contexto Enferm.* 2013;22(1):224-30.
28. Bittencourt GKGD, Moreira MASP, Meira LCS, Nóbrega MML, Nogueira JA, Silva AO. Concepções de idosos sobre vulnerabilidade ao HIV/Aids para construção de diagnósticos de enfermagem. *Rev Bras Enferm.* 2015;68(4):579-85.