

VULNERABILITY OF THE ELDERLY FOR HIV INFECTION IN THE CONTEXT OF

VULNERABILIDADE DE IDOSOS AO CONTÁGIO PELO HIV NO CONTEXTO DE PRÁTICAS PREVENTIVAS

PREVENTIVE PRACTICES

VULNERABILIDAD DE LAS PERSONAS MAYORES DE LA INFECCIÓN POR EL VIH EN EL CONTEXTO DE LAS PRÁCTICAS PREVENTIVAS

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ABSTRACT

Objective: to analyze the vulnerability of elderly people according to their own prospects for adherence to preventive practices to HIV. **Method:** an epidemiological, cross-sectional study, conducted with 84 elderly of Living Groups in João Pessoa (Paraíba), Brazil. The data were collected from May 2011 to November 2012, using a questionnaire and the responses analyzed using the Statistica 9.0, showed in figure and tables. The project was approved by the Ethics Committee in Research, Protocol 612/10. **Results:** of the 84 elderly, 75 % reported that condoms are necessary, but 52.4 % said it was not necessary in cases of steady partner. The responsibility for the use is attributed to both sexes (88,1%) and the request may cause distrust (60,7%). Sexual abstinence was shown as for prevention of HIV (78,6%). **Conclusion:** the elderly showed vulnerable to infection by HIV when showing sexual practices those do not require the use of condoms, being recommended educational actions for prevention against HIV. **Descriptors:** HIV; Elderly; Vulnerability.

RESUMO

Objetivo: analisar a vulnerabilidade de idosos segundo as próprias perspectivas de adesão às práticas preventivas ao HIV. *Método*: estudo epidemiológico, transversal, realizado com 84 idosos de Grupos de Convivência, em João Pessoa (PB), Brasil. Os dados foram coletados entre maio de 2011 a novembro de 2012, utilizando um questionário e as respostas analisadas por meio do Statistica 9.0, apresentadas em figura e tabelas. O projeto foi aprovado pelo Comitê de Ética em Pesquisa, protocolo 612/10. *Resultados*: dos 84 idosos, 75% assinalaram que o preservativo é necessário, porém 52,4% afirmaram ser dispensável em casos de parceiro fixo. A responsabilidade pelo uso é atribuída a ambos os sexos (88,1%) e a solicitação pode provocar desconfiança no casal (60,7%). A abstinência sexual foi mostrada como prevenção para o HIV (78,6%). *Conclusão*: idosos apresentam vulnerabilidade ao contágio pelo HIV ao mostrar práticas sexuais que dispensam o uso de preservativo sendo recomendadas ações educativas de prevenção frente ao HIV. *Descritores*: HIV; Idoso; Vulnerabilidade.

RESUMEN

Objetivo: analizar la vulnerabilidad de las personas mayores en función de sus propias perspectivas de adhesión a las prácticas preventivas contra el VIH. *Método*: estudio epidemiológico, transversal, realizado con 84 grupos de adultos mayores que viven en João Pessoa (Paraíba), Brasil. Se recogieron datos de mayo 2011 a noviembre 2012, mediante un cuestionario y las respuestas analizadas utilizando el Statistica 9.0, presentadas en la figura y las tablas. El proyecto fue aprobado por el Comité de Ética en Investigación, Protocolo 612/10. *Resultados:* de los 84 ancianos, 75% informó de que los condones son necesarios, pero el 52,4% dijo que no era necesario en los casos de pareja estable. La responsabilidad del uso se atribuye a ambos sexos (88,1%) y la solicitud puede causar desconfianza entre la pareja (60,7%). La abstinencia sexual ha demostrado como la prevención del VIH (78,6%). *Conclusión:* los ancianos son vulnerables a la infección por el VIH cuando muestran las prácticas sexuales que exentan el uso del condón. Se recomienda la prevención educativa contra el VIH. *Descriptores:* VIH; Mayores; Vulnerabilidad.

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INTRODUCTION

The progressive increase in morbidity and mortality from acquired immunodeficiency syndrome (AIDS) in the age group over 50 years old has been portrayed globally and acquired relevance in countries with rapidly growing aging population. The Joint United Nations Program on HIV/AIDS (UNAIDS) and World Health Organization (WHO) estimates that of the 40 million people living with worldwide, approximately HIV/AIDS million are aged above 50.1 In the United States of America (USA) between 2001 and 2005, the estimated number of AIDS cases by age at diagnosis increased by about 40% in people aged 50 years or more .2 In the year 2012 the same country reported 29 % of people with AIDS in this age group.³ In Canada, 12,4 % of reported cases of AIDS occurred in persons 50 years of age or older. The proportion of tests positive for HIV among those aged 50 or older increased from 10,6% in 1999 to 15,3% in 2008.4 The prevalence of HIV in South Africa aged 50-54 was 10, 8%, 4,5 % between 55-59 years and 3.9 % among those aged 60 and over.1

In Brazil, were reported in the Information System for Notifiable Diseases (SINAN) and declared in the System (SIM), the period from 1980 to 2010, 16.227 AIDS cases in people aged 60 or older, and, 10.546, occurred in males and 5.681 in females. In this age group the incidence rate was 4.9 cases in 1998, reaching 7,0 cases per 100 000 inhabitants in 2010. In the evaluation of incidence between the sexes is observed in this period than among men increased by 7,5 to 9,4 cases per 100 000 inhabitants, and among women, from 2,8 to 5,1 cases in 100 thousand inhabitants.⁵

In the Northeast, have been reported in the Information System for Notifiable Diseases (SINAN) and declared in the System (SIM) in the period from 1980 to 2010, 1.901 cases of AIDS in people aged 60 or older, and that there were 1.363 in males and 538 in females. The incidence rate among men increased from 2,2 to 4,4 cases per 100 thousand inhabitants between 1998 to 2010, and among women , from 0,6 to 1,5 cases per 100 thousand inhabitants in the same period.⁵

The trend suggests that, before long, the number of elderly people infected with HIV will be expanded significantly. Attributed to this increase, elements related to individual and social dimensions (cultural influences, biological, gender and generational, socioeconomic information about the disease, risk perception, values and beliefs) and programmatic (little access to health services,

difficulties in diagnosis, invisibility of this age group in projects and programs of education and prevention).⁶

Collaborates with this table design socially naturalized desexualization of old age as a period marked by inactivity and lack of sexual desire, that this group remained virtually forgotten or out of policy priorities and preventive HIV. Moreover, this generation established their sexual practices without the use of condoms as a preventive resource but as a contraceptive method. The practical results of such conceptions repercussions on the one hand, the omission of the problem in addressing the educational campaigns to prevent AIDS, and secondly, the misperception of their condition of invulnerability.

Note also that the increase in longevity comes determining a progressive socialization of the management of old age, being revisited stereotypes related to aging. The right to retirement, the rise in the consumer market, use of products and services rejuvenation, resources for leisure activities differentiated based on the prerogative of the pursuit of pleasure and personal satisfaction. They come changes in the pattern of sexual elderly men as a result of medications for treating erectile dysfunction, female sexual activity increase (HRT), encouraging socialization and interaction.

Society has encouraged the search for selfexpression, autonomy, motivating development of new capabilities for life projects. It is the process of increasing social inclusion and participation, expanding the opportunities for collective experiences, such as "university for seniors", "open schools", and "social centers". In this context of greater visibility of old age and aging is to consider that stimulating interaction in various social settings, extend the possibilities experiencing their affections and sexualities¹⁰, which in turn result in increased opportunities to become infected with HIV.¹¹

This study is guided in the dimension "individual" vulnerability, considering it as a starting point to unique aspects of the lifestyles of the people, which can contribute to expose themselves to the virus or, conversely, protect themselves. ¹² This dimension relates to the degree and quality of information that people have the ability to produce such information, incorporating them into their everyday repertoire of concern, motivating them to adopt effective practices for prevention. ¹³

So it has as objective:

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• Analyzing the vulnerability of the elderly according to their own adhesion perspectives to HIV preventive practices.

METHOD

Epidemiological study (cross), a quantitative approach, which involved three groups Living for Seniors, located in the south of João Pessoa. The study population consisted of 110 elderly individuals enrolled in the Program for the Elderly (PAPI) from the Department of Social Development (SEATS) of said municipality. The selection of groups is justified by the accessibility and because they are in cultural and recreational activity at the time of data collection.

Interest in the group Living as a research location was made because the code was considered an area of social inclusion of the elderly in performing various activities, imprint recreational, cultural, social, educational and health promotion.¹⁴

The sample was defined sample calculation for finite populations, assuming a significance level of 5% and a sampling error (d) of 0, 05 in a confidence level of 90%. We adopted the anticipated value for the proportion of elderly (P) 0, 50. Thus, the minimum number of elderly to be investigated was determined by the expression n°= (PXQ)/V(p), reaching the 80 quantitative elderly. Considering further losses in funding and other events, was used to correct for a potential loss of 5% which determined the size of the sample in 84 subjects.

Data were collected from November 2011 to May 2012, using a questionnaire with

dichotomous and multiple choice, containing demographic information (gender, age, education, marital status and occupation), knowledge on methods and adoption of preventive practices.

Data were entered and stored in a spreadsheet in Microsoft Office Excel 2003 and imported into the application software Statistica, version 9.0 from Statsoft. The variables were dichotomized or categorized according to their specific and subjected to statistical analysis by means of univariate analysis, calculating simple frequencies for categorical variables.

Given the guidelines related to the research protocol contained in Resolution 196/96 of the National Health Council, this project was submitted to the Ethics Committee of the Federal University of Paraíba-UFPB, being approved by protocol nº 612/10. The confidentiality of information contained in the questionnaires was secured and written consent was requested of all respondents.

RESULTS

In socio-demographic analysis (Table 1) it appears that the 84 subjects interviewed, 52 (61,9%) were aged 60 to 69, 80 (95,2%) were female, 48 (57,1%) were retired, 34 (40,5%) were widowed and 68 (81,0%) with no education or with up to 8 years.

Table 1. Distribution of elderly according to demographic variables. João Pessoa-PB, 2012.

Sociodemographic Variables	n	%		
Gender	<u> </u>			
Female	80	95,2		
Male	4	4,8		
Total	84	100,0		
Age		·		
60-69 years old	52	61,9		
70-79	27	32,1		
80 or older	5	6,0		
Total	84	100,0		
Level of education				
Without schooling	12	14,3		
Elementary school	56	67,7		
High school	11	13,0		
Higher education	4	4,8		
Do not remember	1	1,2		
Total	84	100,0		
Marital status				
Single	21	25,0		
Widower	34	40,5		
Married/Stable union	18	21,4		
Divorced/separated	11	13,1		
Total	84	100,0		
Occupation				
Retired	48	57,2		
Pensioner	20	23,8		
Retired and pensioners	8	9,5		
Other*	8	9,5		
Total	84	100,0		

^{*} Other: unemployed/employed/home activities

Regarding the knowledge of the means of protection to infection by HIV (Figure 1), condom use was indicated by 70 (83,3%) elderly as the primary preventative measure. There were similar percentage for the categories "abstinence" and "use of needles/syringes" (78,6%). Monogamy and/ or

sexual intercourse with a steady partner was considered by 44 (52,4%) as a protective factor for infection. Relationships that you have confidence in your partner (45,2%) continue to be seen as a condition of invulnerability to HIV.

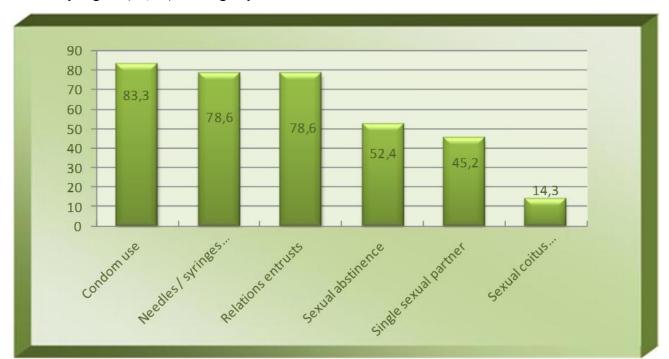


Figure 1. Distribution of elderly according to knowledge regarding HIV transmission protection. João Pessoa-PB, 2012. (n = 84)

Table 2 shows that 72 (85,7%) also recognize the use of condoms as a method of protection against disease and 63 (75,0%) as a required feature in sexual relations. The appreciation of condom use by seniors is

opposed to 51 (60,7%) believe that seniors who use causes distrust in bed and be unnecessary in cases of steady partner/stable (40,5%).

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Table 2. Distribution of elderly according to answers regarding condom use. João Pessoa-PB, 2012. (n = 84)

Types of responses	Yes		No		Don'	t know
	n	%	n	%	n	%
It is always necessary	63	75,0	15	17,9	6	7,1
Expensive to be used in all relationships	5	6,0	62	73,8	17	20,2
Unnecessary with regular partner/married	34	40,5	44	52,4	6	7,1
Causes distrust in the couple	51	60,7	24	28,6	9	10,7
Protects against diseases	72	85,7	5	8,3	7	6,0
The couple's responsibility	74	88,1	10	11,9	-	-

Regarding the implementation of HIV testing (Table 3), 67 (79,7%) elderly never performed, not if they feel at risk (47,6%) or other causes (29,6%), the example the lack of medical request. Of the 17 (20,3%) elderly

who underwent testing, 06 (7,1%) were medically indicated, 04 (4,8%) for practicing sex without condoms and 05 (6,0%) by other causes.

Table 3. Distribution of elderly according to answers about HIV testing. João Pessoa-PB, 2012. (n = 84)

HIV test	n	%
Reasons for not conducting the test		
Does not feel exposed to risk	40	47,7
Fear	2	2,4
Other causes	25	29,6
Total	67	79,7
Reasons to perform the test		
Medical indication	6	7,1
Relationship without condom	4	4,8
Surgery/hospitalization	2	2,4
Other causes	5	6,0
Total	17	20,3
Total	84	100,0

DISCUSSION

In terms of sociodemographic characteristics found in this study, it is noted that most of the elderly respondents were female, widowed, aged 60-69, with elementary school and retired.

The predominance of females in Groups Coexistence resembles other studies^{15,16}, in the growing process of feminization of the elderly population is due to higher life expectancy among women, linked to factors such as lower alcohol consumption, tobacco and differences in attitude towards pathologies.¹⁷

A smaller participation of men in living groups can join their engagement in work activities, even after retirement, with less free time for leisure activities. 16

The low educational level could be related to the type of activity offered Groups Coexistence (unattractive for older intellectually advantaged) or by geographical location, which is restricted to economically disadvantaged classes. Nevertheless, it shows the need for reflection about the strategies of prevention and educational campaigns for HIV, which should be clear and tailored to the level of understanding of people with less formal education. Educational approaches focused on information for behavior change show the need to reflect not only on the content of the information, but mainly about

how and why the information is communicated. 18

Successful interventions that actually produce resources for the protection of the elderly should be considered and evaluated in order to consider the health problems have large components and interrelated, which cannot be assessed and treated in isolation.

The predominance of elderly widowed (40,5%) and a considerable portion of singles (17,9%) in the study, may be an important factor for amorous adventures without protection, enabling an active unprotected sexual life, favoring the vulnerability to contagion by HIV.¹⁹

This reality goes against the findings in a study on the representations of HIV in the elderly, which showed that among older single women who contracted the virus, transmission occurred by the need to have a partner and by not requiring the use of condoms. In the case of widows, a "rediscovery" of sexual pleasure would be the main risk factor for increased exposure to STIs. ²⁰

According to Table 2, a significant percentage of the sample (78,6%) see abstinence as a preventive action for HIV, however, the study shows that 74 % of men and 56% of married women remain sexually active after 60 years.²¹ In connection with variable shield, a portion of the elderly has the understanding that having a single partner and/or sexual relationships with those who trust them ensure the condition of

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invulnerability, justifying as expendable by trading safe sex. This reality contrasts with the study of social representation of HIV conducted in the same county(João Pessoa) in 2011, involving 247 elderly patients in five health districts and two Centers and Counseling in HIV/AIDS, while condoms associated with sex insurance.²²

Studies show that condom use, especially among elderly, still faces resistance and is rooted in beliefs that lead him to believe that such use can interfere with the pleasure and erection, becoming also the practical use can be attributed as a synonym for infidelity in the relationship. The elderly tend to see condoms as contraceptive measure over prevention, contributing to the practice of unsafe sex.²³

A research with 510 elderly members of social groups in Vale dos Sinos, in the state of Rio Grande do Sul, showed that 80,8% of the sample acknowledged the use of condoms as a primary preventative measure of HIV transmission, but more than 80% did not use during sex. 15

It also stands out as a predisposing factor for not using condoms on the assumption that stable relationships, men and women are protected from the risk of becoming infected. This idea of immunity associated with trust, love romantic, especially among women results in lower perception of their condition of vulnerability. Turn to suggest condom use to avoid contraception can cause distrust of the partner.²⁴

This fact demonstrates the emotional dependency and fear that women have of losing the partner, resulting attitudes of submission to the decision of safe sex. Survey of HIV-infected women showed that the majority reported having been infected by their steady partners in stable, monogamous relationships .²⁵

It was evident that, in this study 74 (88,1%) of seniors say that both sexes have responsibility for the use of condoms, though the context implies to consider the influence of gender and power differences, once the decision on its use is not always bilateral.²⁶

Inequality between the sexes is the result of a historical process that reveals a submission of women relative to men, since women were diverted or private decision-making power in public life beyond the everyday violence, domestic and sexual present in your reality. These factors lead to less freedom in their sexual life and less decision-making power about protected sex. Thus, the unequal relations between the sexes

translate into greater vulnerability for women to infection by ${\rm HIV.}^{27}$

The low demand for the implementation of HIV testing among the elderly investigated reiterates the concept of immunity and announces the low visibility of preventive policies aimed at this age group. On one hand, the use of drugs and biotechnologies hormone replacement caused better sexual quality of life for this segment, on the other, is not sufficiently accompanied by strategies that promote safe sex practices.²⁸

The non-recognition by health professionals of the vulnerability of the elderly to HIV, the presence of other co-morbidities and the similarity of symptoms to those inherent in old age, often make slower screening and delay diagnosis of the disease.²⁹ One has to consider that the proposed changes, which will effectively tread the recognition of the elderly as potentially vulnerable to HIV, requires appreciation of transcultural, identification and appropriation of needs, desires, their way of life, and commitment all subjects in the construction and conduct of integrative proposal that recognizes the specifics of this age group.³⁰

CONCLUSION

The study results point to elderly vulnerable to infection with HIV when having sex with a steady partner and trust in this relationship are seen as unnecessary conditions to condom use and also be assigned their use cause distrust in the couple. These conditions are opposed to recognition by the elderly condom use as an important resource during intercourse to protect against diseases.

The data require the need for further studies in the subject when abstinence was identified by the group as a preventive action for HIV and advancing age or condition associated with widowhood genre may encourage this practice.

Given the rapid growth of the elderly population and increasing number of AIDS cases in this age group, the findings of this study reinforce the need to alert those individuals to the vulnerability to which they are exposed. Therefore, it is recommended the development of educational programs that reach audiences elderly involving these individuals in the process of knowledge regarding the protection against HIV.

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REFERENCES

- 1. Word Health Organization. UNAIDS/OMS. Global Report: UNAIDS report on the global aids epidemic, 2012. Available from: http://www.unaids.org/en/media/unaids/contentassets/documents/epidemiology/2012/gr2012/20121120_UNAIDS_Global_Report_2012_en.pdf
- 2. Centers for Disease Control and Prevention. 2006. HIV/AIDS Surveillance Report, 2005 [Internet]. [cited 2013 Jan 25]. Available from: http://www.cdc.gov/hiv/topics/surveillance/resources/reports/
- 3. University of New Mexico Health Sciences Center. AIDSinfonet. Older people and HIV. Fact Sheet Number 616, 2012 [cited 2013 Mar 22]. Available from: http://www.aidsinfonet.org/fact_sheets/view/616
- 4. Centre for Communicable Diseases and Infection Control. Public Health Agency of Canada. HIV/AIDS among older canadians. 2010 [cited 2013 Mar 15]. Available from: http://www.phac-aspc.gc.ca/aids-sida/publication/epi/2010/6-eng.php
- 5. Ministério da Saúde (Brasil). Boletim epidemiológico Aids, DST. Secretaria de vigilância em saúde. Departamento de Aids, DST e hepatites virais. Brasília: Editora do Ministério da Saúde; 2011.
- 6. Feitoza AR, Souza AR, Araujo MFM. A magnitude da infecção pelo HIV-AIDS em maiores de 50 anos no município de Fortaleza (CE). DST j bras doenças sex transm [Internet].2004 [cited 2013 Mar 15];16(4):32-7. Available from: http://www.dst.uff.br/revista16-4-2004/6.pdf
- 7. Pottes FA, Brito AM, Gouveia GC, Araújo EC, Carneiro RM. Aids e envelhecimento: características dos casos com idade igual ou maior que 50 anos em Pernambuco, de 1990 a 2000. Rev Bras Epidemiol [Internet]. 2007 Sept [cited 2013 Apr 28];10(3):338-51. Available from: http://www.scielo.br/scielo.php?pid=S1 415-790X2007000300005&script=sci_arttext
- 8. Sousa JL. Sexualidade na terceira na terceira idade: uma discussão da aids, envelhecimento e medicamentos para disfunção erétil. DST j bras doenças sex transm [Internet]. 2008 [cited 2013 Mar 05];20(1):59-64. Available from: http://www.dst.uff.br/revista20-1-

Vulnerability of the elderly for hiv infection...

- 9. Debert G, Brigeiro M. Fronteiras de gênero e a sexualidade na velhice. Rev bras Ci Soc [Internet]. 2012 Oct [cited 2013 Mar 15];27(80):37-54. Available from: http://www.scielo.br/scielo.php?script=sci_artext&pid=S010269092012000300003&nrm=iso&tlng=pt
- 10. Melo HMA, Leal MCC, Marques APO, Marino JG. O conhecimento sobre Aids de homens idosos e adultos jovens: um estudo sobre a percepção desta doença. Cien saúde coletiva [Internet]. 2012 Jan [cited 2013 Mar 02];17(1):43-53. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=\$1413-81232012000100007
- 11. Pratt G, Gascoyne K, Cunningham K, Tunbridge A. Human immunodeficiency virus (HIV) in older people. Age Ageing [Internet]. 2010 [cited 2013 Mar 02];39(1):289-94. Available from: http://www.ncbi.nlm.nih.gov/pubmed/20190
- 12. Ayres JR, Paiva V, França Júnior I, Gravato N, Lacerda R, Negra MD, et al. Vulnerability, human rights and comprehensive health care needs of young people living with HIV/AIDS. American Journal of Public Health (1971), USA [Internet]. 2006 [cited 2013 Mar 02];96(6):1001-6. Available from:

http://www.ncbi.nlm.nih.gov/pubmed/16449 593

- 13. Bertolozzi MR, Nichiata LYI, Takahashi RF, Ciosak SI, Hino P, Val LF et al. Os conceitos de vulnerabilidade e adesão na Saúde Coletiva. Rev Esc Enferm USP [Internet]. 2009 [cited 2013 Apr 02];43(2):1326-30. Available from: http://www.scielo.br/pdf/reeusp/v43nspe2/a31v43s2.pdf
- 14. Araújo LF, Coutinho M PL, Carvalho VML. Representações sociais da velhice entre idosos que participam de grupos de convivência. Psicol Ciênc Prof [Internet]. 2005 [cited 2013 Apr 07];25(1):118-31. Available from: http://cac-

php.unioeste.br/extensao/unati/arqs/UNATI_
16.pdf

- 15. Lazzarotto AR, Kramer AS, Hãdrich M, ToninM, Caputo P, Srinz E. O Conhecimento de HIV/AIDS na Terceira idade: estudo epidemiológico no Vale dos Sinos. Ciên saúde coletiva [Internet]. 2008 Nov/Dec [cited 2013 Apr 02];13(6):1833-40. Available from: http://www.scielo.br/scielo.php?pid=S141381232008000600018&script=sci_arttet
- 16. Borges PLC, Bretãs RP, Azevedo SF, Barbosa JMM. Perfil dos idosos frequentadores de grupos de convivência em Belo Horizonte, Minas Gerais, Brasil. Cad Saúde Pública [Internet]. 2010 [cited 2013 Mar

2008/9.pdf

20];24(12):2798-808. Available from: http://www.scielo.br/pdf/csp/v24n12/08.pdf
17. Duca GF, Thume E, Hallal PC. Prevalência e fatores associados ao cuidado domiciliar a idosos. Rev saúde pública [Internet]. 2011 Oct [cited 2013 Apr 05];45(1):113-20. Available from:

http://www.scielo.br/scielo.php?script=sci_ar ttext&pid=S003489102011000100013&lng=en& nrm=iso&tlng=pt

- 18. Meyer DE, Mello DF, Valadão MM, Ayres JRCM. "Você aprende. A gente ensina?": Interrogando relações entre educação e saúde desde a perspectiva da vulnerabilidade. Cad Saúde Pública [Internet]. 2006 June [cited 2013 Mar 20];22(6):1335-42. Available from: http://www.scielo.br/scielo.php?pid=s0102-311x2006000600022&script=sci_arttext
- 19. Lisboa MES. A invisibilidade da população acima de 50 anos no contexto da epidemia HIV/AIDS. In: VII Congresso Virtual HIV/AIDS: O VIH/SIDA na Criança e no Idoso. 2006 [cited 2013 Apr 18]. Available from: www.aidscongress.net/article.php?id_comunic acao=281
- 20. Fontes KS, Saldanha AAW, Araújo LF. Representações do HIV na terceira idade e vulnerabilidade no idoso. In: VII Congresso Virtual HIV/AIDS: O VIH/SIDA na Criança e no Idoso. 2006 [cited 2013 Apr 10]. Available from:

http://www.aidscongress.net/Article.php?id_ comunicacao=307

- 21. Ministério da Saúde (Brasil). Envelhecimento e saúde da pessoa idosa. Brasília: Ministério da Saúde; 2006.
- 22. Torres CC, Bezerra VP, Pedroza AP, Silva LM, Rodrigues TP, Coutinho NJM. Representação social do HIV/AIDS: buscando os sentidos construídos por idosos. Rev Pesq: cuid fund [Internet]. 2011 [cited 2013 Mar 16];3(5):121-128. Available from: http://www.seer.unirio.br/index.php/cuidadofundamental/article/view/1960/pdf_53
- 23. Delmiro RS. O que pensam os idosos sobre a AIDS: representações sociais e Práticas (Dissertação de Mestrado em Enfermagem em Saúde). Jequié: Universidade Estadual do Sudoeste da Bahia; 2011.
- 24. Silva CM, Vargens OMC. A percepção de mulheres quanto à vulnerabilidade feminina para contrair DST/HIV. Rev Esc Enferm USP [Internet]. 2009 June [cited 2013 Apr 19];43(2):401-6. Available from: http://www.scielo.br/scielo.php?pid=S0080-62342009000200020@script=sci_arttext
- 25. Maliska ICA, Souza MIC, Silva DMGV. Práticas sexuais e o uso do preservativo entre mulheres com HIV/aids. Ciênc cuid Saúde

Vulnerability of the elderly for hiv infection...

[Internet]. 2007 [cited 2013 Abr 19];6(4):471-8. Available from: http://eduem.uem.br/ojs/index.php/CiencCuidSaude/article/viewFile/3683/2685

- CMF, Dias 26. Rocha SF, Gama Conhecimentos sobre o uso de contraceptivos e prevenção de DST: a percepção de mulheres imigrantes. Cad Saúde Pública [Internet]. 2010 [cited 2013 Apr 03];26(5):1003-12. Available from: http://www.scielo.br/pdf/csp/v26n5/22.pdf 27. Maia С, Guilhem D. **Freitas** Vulnerabilidade ao HIV/Aids de pessoas
- Vulnerabilidade ao HIV/Aids de pessoas heterossexuais casadas ou em união estável. Rev Saúde Pública [Internet]. 2008 Apr [cited 2013 Mar 20];42(2):242-48. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0034-89102008000200008
- 28. Santos AFM, Assis M. Vulnerabilidade das idosas ao HIV/AIDS: despertar das políticas públicas e profissionais de saúde no contexto da atenção integral: revisão de literatura. Rev bras geriatr gerontol [Internet]. 2011 [cited 2013 Mar 04];14(1):147-57. Available from: http://revista.unati.uerj.br/pdf/rbgg/v14n1/v14n1a15.pdf
- 29. Bertoncini BZ, Moraes KS, Kulkamp IC. Comportamento sexual em adultos maiores de 50 anos infectados pelo HIV. DST j bras doenças sex transm [Internet]. 2007 [cited 2013 Apr 05];19(2):75-9. Available from: http://www.dst.uff.br//revista19-2-2007/3.pdf
- 30. Almeida SA, Nogueira JA, Lacerda SNB, Torres GV. Orientação sexual no contexto escolar: discurso oficial versus cotidiano pedagógico. J Nurs UFPE on line [Internet]. 2010 June [cited 2013 Abr 16];4(spe):1850-6. Available from: http://www.ufpe.br/revistaenfermagem/inde x.php/revista/article/view/1389/pdf_414

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