REVISTA DA ESCOLA DE ENFERMAGEM DA USP
JOURNAL OF SCHOOL OF NURSING · UNIVERSITY OF SÃO PAULO

ORIGINAL ARTICLE

DOI: http://dx.doi.org/10.1590/S1980-220X2016040903274

Factors associated with HIV prevalence in a prison population

Fatores associados a prevalência do vírus da imunodeficiência humana em população privada de liberdade

Factores asociados con la prevalencia del virus de la inmunodeficiencia humana en población privada de libertad

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How to cite this article:
Sousa KAA, Araújo TME, Teles SA, Rangel EML, Nery IS. Factors associated with HIV prevalence in a prison population. Rev Esc Enferm USP. 2017;51:e03274. DOI: http://dx.doi.org/10.1590/S1980-220X2016040903274

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ABSTRACT

Objective: To analyze HIV prevalence and associated factors in inmates in a prison in a state in the Northeast region of Brazil. **Method**: Epidemiological, cross-sectional study carried out with prisoners. Interviews were conducted using a form and a rapid test for the diagnosis. Bivariate and multivariate hypothesis testing, with a simple logistic ratio (unadjusted odds ratio) and multiple ratio (adjusted odds ratio) were applied. Significance level was set at $p \leq 0.05$. **Results**: A total of 2,131 inmates participated in the study. The HIV prevalence was 1.0%. Seropositive individuals were mostly Afro-American; their marital status was predominantly single/separated/widower. The mean age was of 31.3 years, and the mean educational level was 6.29 years. There was a link between the HIV virus and the variables: selection of partners based on physical attributes and vaginal sexual intercourse. **Conclusion**: Tackling the HIV infection represents a major challenge for prison and sanitary authorities, considering that the issues related to the HIV context inside and outside the prison environment are interconnected and, therefore, demands coordinated action.

DESCRIPTORS

HIV; Prisoners; Prisons; Health Services Accessibility; Public Health Nursing.

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Received: 10/16/2016
Approved: 07/20/2017

INTRODUCTION

Legal barriers, social marginalization, and stigma make access to health services in the prison system difficult and contribute to an increase in infectious diseases among the prison population. To confront the HIV pandemic, it is necessary to take urgent measures with the aim of overcoming the public health negligence experienced in the prison system. When it comes to the difficulty of controlling diseases, such as the HIV, because of their social and individual specificities, prioritizing the population categories that experience situations of vulnerability has been shown to be effective, since the rates of new infections have increased in "key populations"[1-2].

The prison population, therefore, is different from other specific populations and is in a situation of increased vulnerability[3]. There are several factors that contribute to this, mainly: prisons are high risk areas; more exposure to all kinds of violence; transmission of infectious diseases; stimuli for inappropriate sexual behavior due to confinement and overpopulation, including problems related to access to the health care network; precarious epidemiological surveillance; and non-prioritized public policies aimed at tackling HIV in this population[3-5].

To address the issues raised and the geospatial, socioeconomic, and cultural specificities related to the HIV pandemic in different regions of the world, investigating and learning about the risks associated with the presence of the virus in specific populations have the potential to identify trends. This could lead to the adoption of strategic measures aimed at that reality and based on knowledge of its transmission dynamics[2-5].

The lack of systematic data on the rates of HIV prevalence in prison populations and covering all Brazilian regions[3] makes the establishment of a national scenario difficult, and inhibits the proposition of more strategic preventive and control measures.

Taking into account the lack of scientific production related to HIV and other sexually transmitted infections (STI) in Brazilian prisons, especially in the Northeast region, the objective of the present study was to investigate HIV prevalence and the factors associated with it in prison inmates in Piauí.

METHOD

Epidemiological and cross-sectional study carried out in the universe of prison units in the state of Piauí (n=11), located in the Northeast region of Brazil. Three of the units were located in the capital (Teresina), and the remaining units were in the interior of the state. The prison population in the state of Piauí at the time totaled 2,839 inmates, carrying out sentences in closed and semi-open prison systems.

The inclusion criteria for selection of inmates in the prison units for participating in the study were as follows: being an inmate in the prison unit in closed or semi-open systems. Inmates were excluded if they were unable to answer the study questions, and if at the time of data collection they were held in prison units that been subject to the mutinies/riots that had occurred in some facilities of two penitentiaries. Therefore, 2,131 inmates participated.

Data collection was preceded by planning meetings with the working teams of the prison units: directors, prison guards, safety support policemen, and prison healthcare professionals. Coordination was carried out with healthcare professionals regarding referral of HIV positive cases to the specialized care network, and signing clinical management plans in accordance with the ethical, legal, and safety precepts for patients.

Participation was voluntary, and expressed by the studied population signing free informed consent forms after the invitation was extended by the data collection team in all the prisons. At that time, the prisoners were informed of the research objectives, the benefits of early diagnosis, and the minimal risks of the rapid testing procedure. Inmates who showed interest were taken from their cells in groups of up to five people, escorted by prison guards, and conducted to the place where the research was being carried out.

The data were collected in the morning and in the evening, on non-consecutive days, and following schedules fixed by the prison administration, in conformity with the routine of each facility. Data collection took place in prison yards, large spaces that allowed the setup of the structure necessary for the interviews, counseling, and execution of rapid testing for HIV diagnosis. The locations selected were considered by the administration as the most adequate for meeting the needs of the research and security planning.

The data collection took place between May and November 2014, and it was carried out by psychologists, who conducted the counseling, and nurses, who performed the testing. Both groups had been duly trained, and were skilled and experienced in these practices. The research was carried out in two consecutive stages. In the first, pretest counseling took place through interviews, ensuring the individuality and confidentiality of the information provided, using an adapted form[6]. In the second, rapid testing for detection of HIV-1 and HIV-2 antibodies was performed[7].

For carrying out the testing, two kinds of kits including the rapid tests were used. The methodology for the rapid test was immunochromatography assay for detecting HIV-1 and HIV-2 antibodies. Each kit included rapid tests, pipettes, lancets, and reagent buffer solution. The rapid tests were carried out immediately after the collection of blood samples, and the participants were instructed to wait on the spot for the results, because the medical report was issued within 30 minutes.

When the testing procedure was concluded, it was followed by post-test counseling to show the results to the inmates, individually and confidentially, with explanations of possible doubts and guidance on HIV prevention. For those with negative results, explanations and advice about the window period situation were provided. Those with positives results were offered emotional support and received explanation about treatment possibilities, the importance of preventive measures against other STI, and referral for follow-up in the health care facility closes to the prison, acknowledged and under the responsibility of the prison administration and health professionals.

The variables elicited in the interviews were: sociodemographic (age, gender, color/race, address, marital status, educational level, and personal income); patterns of consumption of alcohol and other drugs at some point in their lives (kind, frequency); parenteral exposure (blood transfusion, surgery, sharing needles, having tattoos, having piercings, use of glass syringes); sexual behavior prior to and while in prison (kind of sexual practices, number of sexual partners, if there was selection of sexual partners, use of condoms); information they had about HIV (type of transmission, source of information, previous illness by STI, forms of prevention, whether afraid to acquire STI and why).

The data were recorded and analyzed using the Statistical Package for the Social Science (SPSS), version 19.0. To determine HIV prevalence and its associated factors, inferential and descriptive statistics were applied. Inferential statistics applies bivariate and multivariate hypothesis trials. The bivariate testing of association between qualitative variables used was simple logistic regression (unadjusted odds ratio), with the aim of selecting factors that could possibly explain HIV prevalence. The variables shown by bivariate analysis to have values of p≤0.05 were submitted to the multivariate model by multiple logistic regression (adjusted odds ratio). For all the remaining analyses, a significance level of 0.05 for rejection of the null hypothesis was set[8].

The study was approved by the Research Ethics Committee of the University of Piauí under number 335.963, and was in compliance with all ethical aspects.

RESULTS

A total of 2,131 inmates participated in the study. The prevalence of HIV infection was 1% (CI 95% 0.6 – 1.4). Table 1 shows that the prevalence in men was 1%, whereas it was 1.3% in women. Seropositive individuals were mostly Afro-Americans; participants were predominantly single/separated/widowers, with mean age of 31.3 years. The mean educational level was 6.29 years, and mean personal monthly income was R$ 438.10. There were statistically significant associations between sociodemographic and economic characteristics and HIV infection (p>0.05).

Table 2 shows the distribution of the participants related to the use of psychoactive substances at some point in their lives. There was no statistically significant association of use of alcohol and other drugs with HIV infection.

Table 1 – Association of sociodemographic/economic characteristics of the studied prison population related to HIV infection – Teresina, Piauí, Brazil, 2014.

Variables	HIV		Unadjusted Odds	CI95%	p value
	Positive	Negative			
	n(%)	n(%)			
Gender					
Male	19(1.0)	1,958(99.0)	0.74	0.17-3.20	0.70
Female*	02(1.3)	152(98.7)			
Race/Color					
White*	3(0.7)	417(99.3)	1.48	0.43-5.04	0.53
Afro-American / other	18(1.1)	1,693(98.8)			
Marital Status					
Single/separated Widower	13(1.1)	1,222(98.9)	1.18	0.48-2.86	0.71
Married/living together/ stable union*	8(0.9)	888(99.1)			
Age	**Mean (sd)** 31.3 (9.7)	**Mean (sd)** 30.9 (10.1)	1.00	0.96-1.05	0.84
Years of Education	**Mean (sd)** 6.29 (4.17)	**Mean (sd)** 6.32 (3.88)	1.00	0.89-1.11	0.97
Monthly Income	**Mean (sd)** 438.10 (647.47)	**Mean (sd)** 792.55 (1720.80)	1.00	0.99-1.00	0.19

The p value was obtained by logistic regression. The monthly minimum wage at the time of the study was R$ 724.00. * Reference category. Grade: (n=2,131).

Table 2 – Association of use of alcohol and other drugs with HIV infection in the studied prison population – Teresina, Piauí, Brazil, 2014.

Variables	HIV		Unadjusted Odds	CI95%	p value
	Positive	Negative			
	n(%)	n(%)			
Use of alcohol					
Yes/used	17(1.0)	1,661(99.0)	1.15	0.38-3.43	0.80
No *	4(0.9)	449(99.1)			

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Variables	HIV		Unadjusted Odds	CI95%	p value
	Positive n(%)	Negative n(%)			
Use of illegal drugs					
Yes/used	14(1.0)	1,392(99.0)	1.03	0.41-2.57	0.95
No *	7(1.0)	718(99.0)			
Types of Drugs					
Crack					
Yes/used	9(1.4)	639(98.6)	1.72	0.72-4.11	0.21
No*	12(0.8)	1,471(99.2)			
Cocaine					
Yes/used	7(1.1)	656(98.9)	1.10	0.44-2.76	0.82
No*	14(1.0)	1,454(99.0)			
Marijuana					
Yes/used	12(1.0)	1,179(99.0)	1.05	0.44-2.51	0.90
No*	9(1.0)	931(99.0)			
Other drugs (inhaled, injected, derived from crack and marijuana)					
Yes/used	7(2.1)	327(97.9)	4.24	0.96-18.71	0.05
No*	14(0.7)	1,783(99.3)			

The p value was obtained by logistic regression. * Reference category. Grade: (n=2,131).

According to Table 3, there was a significant association of HIV infection with the following variables: sexual practice with same sex partners; selection of partners by physical attributes; non-use of condoms because they are not always available; and vaginal sexual intercourse ($p<0.05$).

Table 3 – Association of risky sexual practices of the studied prison population with HIV infection – Teresina, Piauí, Brazil, 2014.

Variables	HIV		Unadjusted Odds	CI95%	p value
	Positive n(%)	Negative n(%)			
Sexual practices					
Opposite sex*	14(0.7)	1,902(99.3)	**4.57**	**1.82-11.45**	**0.00**
Same sex	7(3.3)	208(96.7)			
Select partners					
Yes*	9(0.7)	1,332(99.3)	2.22	0.95-5.44	0.06
No	12(1.5)	778(98.5)			
Type of selection (n=1.341)					
Trust/Acquaintance	7(1.2)	609(98.8)	1.05	0.31-3.59	0.93
Physical attribute selections	2(0.3)	723(99.7)	**5.04**	**1.17-21.72**	**0.03**
Use of condoms					
Always*	7(1.4)	511(98.6)	0.64	0.25-1.59	0.33
Never/sometimes	14(0.9)	1,599(99.1)			
Reasons for not using condom (n=1,613)					
Dislike/Trust	7(0.6)	1,235(99.4)	0.22	0.03-1.65	0.14
Not always available	7(1.9)	364(98.1)	**2.79**	**1.11-6.96**	**0.02**
Drink before sexual relations					
Yes	13(0.9)	1,352(99.1)	0.94	0.39-2.29	0.90
No*	8(1.0)	758(99.0)			
Use illegal drugs before sexual relations					
Yes	11(1.1)	958(98.9)	1.22	0.51-2.89	0.64
No*	10(0.8)	1,152(99.2)			
Type of sexual intercourse					
Vaginal					
Yes	17(0.8)	2,082(99.2)	**0.57**	**0.02-0.18**	**0.00**
No*	4(12.5)	28(87.5)			
Anal					
Yes	16(1.3)	1,203(98.7)	2.41	0.88-6.61	0.08
No*	5(0.5)	907(99.5)			
Oral					
Yes	17(1.3)	1,274(98.7)	2.78	0.93-8.31	0.06
No*	4(0.5)	836(99.5)			
Sexual partners in the last 6 months (considering currently)	**Mean (sd)** 1.48(1.86)	**Mean (sd)** 1.78(3.64)	0.97	0.82-1.13	0.67
None	6(0.9)	635(99.1)			
One to ten	15(1.0)	1,475(99.0)			

The p value was obtained by logistic regression. * Reference category. Grade: (n=2,131).

Table 4 – Association of information referred by the studied prison population about HIV/STI related to HIV infection – Teresina, Piauí, Brazil, 2014.

Variables	HIV		Unadjusted Odds	CI95%	p value
	Positive	Negative			
	n(%)	n(%)			
Have information about HIV					
Yes*	16(1.0)	1,513(99)	0.79	0.29-2.17	0.65
No	5(0.8)	597(99.2)			
Know how is transmitted					
Yes*	13(1.1)	1,141(98.9)	0.77	0.29-2.04	0.60
No/partially	8(0.8)	969(99.2)			
How the HIV is transmitted					
Blood	8(1.0)	773(99.0)	0.77	0.31-1.91	0.57
Unprotected sexual intercourse	14(1.0)	1,336(99.0)			
Source of information (n=1,529)					
TV/Internet/others	15(1.7)	870(98.3)	1.30	0.52-3.23	0.57
Healthcare service	4(0.6)	640(99.4)	1.14	0.38-3.42	0.80
Have/had some STI before					
Yes	7(1.5)	468(98.5)	1.75	0.70-4.37	0.23
No*	14(0.8)	1,642(99.2)			
Know how to prevent STI					
Yes*	16(0.9)	1,692(99.1)	1.26	0.46-3.47	0.65
No/partially	5(1.2)	418(98.8)			
Forms of prevention					
Use of condom					
Yes*	16(1.0)	1,653(99.0)	1.13	0.41-3.10	0.81
No	5(1.1)	457(98.9)			
Are afraid to get STI					
Yes*	17(0.9)	1,867(99.1)	1.80	0.60-5.41	0.29
No	4(1.6)	243(98.4)			
Reason for the fear (n=1.884)					
Fall ill and die	18(1.0)	1,711(99.0)	0.66	0.28-1.57	0.35
Transmit to the family	2(1.3)	153(98.7)	0.76	0.17-3.33	0.72

The p value was obtained by logistic regression. * Reference category. Grade: (n=2,131).

Table 4 shows that none of the variables showed statistically significant associations (p>0.05).

When the multiple logistic regression was carried out in relation to the risk factors associated with HIV infection in the studied prison population, it was noticed that the variables selection of partners based on physical attributes and vaginal sexual intercourse showed statistically significant associations with HIV infection (p≤0.05). The vaginal sexual intercourse variable was associated, showing a 92% lower risk when compared to other sexual practices (Table 5).

DISCUSSION

The study results followed the trend assessed and published in a WHO comprehensive report, in which HIV prevalence is estimated to be two to ten times higher in the prison population[9]. In Brazil, the overall HIV estimate in

Table 5 – Multiple logistic regressions of risk factors associated with HIV infection in the studied prison population – Teresina, Piauí, Brazil, 2014.

Risk factors	Adjusted Odds	p value	CI95%
Use of other drugs	3.81	0.08	0.82-17.66
Having sexual intercourse with same-sex people	2.66	0.05	0.97-7.24
Selecting partners by physical attributes	**4.57**	**0.04**	1.04-19.99
Not using condoms because they are not always available	2.22	0.10	0.85-5.76
Vaginal sexual intercourse	**0.08**	**0.00**	0.02-0.28

The p value was obtained by logistic regression. The statistical significance was set at p≤0.05.
Grade: (n=2,131).

this population is 0.3% to 0.4%[10], a value that could change and be influenced by personal and behavioral characteristics related to local and regional specificities. The prison population may be distributed in a heterogeneous fashion, following local prevalence; however, due to countless vulnerabilities of the specific population, it is expected that it will remain above the estimated average for the overall Brazilian population, as shown by this research.

Overall, it is noteworthy that the health of inmates is neglected, mainly because of social stigma involving prisoners, taking into account that the condition of prisoners reveals the practice of infractions, reflecting moral judgements made about prisoners by society, which in turn boost marginality stereotype. The result of low investment in care and little political will to implement efforts to try to solve existing problems is clear. Health care in prisons is solely the responsibility of prison administration, and is disconnected from the recommendations laid down in the protocols of public health programs[11-14].

Although international organizations have shown a decline in the rate of HIV prevalence among prisoners, reaching an average of 3.0% a year[15], official data indicate that it is still higher than in the general population, demonstrating that it is a public health problem that is difficult to tackle.

The determinant risk factors that affect the health needs of prison populations include: overpopulation; unsafe sexual practices, especially those involving violence; use of drugs; and sharing sharp objects[12-14].

Regarding drug use, more than half of those infected with HIV reported using or having used drugs at some point in their lives. As for alcohol consumption, although it had no statistical association with HIV prevalence, most seropositive individuals reported consuming alcohol before their incarceration. The use of alcohol alters the capacity for judgment, hindering perception of health risks, which could prevent the adoption of safe behaviors for HIV prevention, increasing potential vulnerability to infection[16].

Other drugs showed significant associations with positivity for HIV. Those reported by the inmates were: inhaled substances (poppers, solvents); substances injected and derived from crack cocaine; and marijuana (paste, honey). Marijuana-based substances are considered to be lower-quality sub-products that are cheaper and have a higher probability of favoring continuation of the addiction to which they lead.

A significant proportion of the inmates reported consumption of illegal drugs before sexual intercourse. This pattern deserves attention, because the vasoconstrictor effects of the drugs could reduce rectovaginal discharge, thus increasing the possibility of fissures and tissue excoriations, which could lead to bleeding and, consequently, to the possibility of HIV transmission[17]. Regarding alcohol, more than half of those diagnosed with HIV reported consuming it before sexual intercourse, and this group also referred to low adherence to the use of condoms.

A systematic review[18] linked drug abuse with criminality, indicating that illegal drug users are involved in illegal activities and are often exposed to violence. It is also necessary to take into account that the resources needed to maintain chemical addiction drain the financial means of users, leading them to engage in criminal activities.

Variables related to sexual behavior, such as selecting partners by physical attributes and non-vaginal sexual intercourse, stand out in the present study as risk factors for HIV. In Brazil, from the beginning of the AIDS epidemic up to the present, sexual exposure is responsible for 80.9% of the recorded cases of AIDS, 26.6% through homosexual intercourse and 13.2% through bisexual activity. In 2013, sexual exposure was responsible for 94.9% of new infections, indicating the need for public policies focused on this issue. Sexual exposure is still the major transmission route for HIV, including prison inmates in Brazil, who are commonly ignored by preventive campaigns[19].

Studies have confirmed that receptive anal sexual intercourse has an increased risk of 1.4%, 18 times more in comparison with other practices[20-21]. This practice is associated with homosexual relationships, but is also not rare in heterosexual relationships.

This present study also points out that vaginal sexual intercourse has a 92% lower risk when compared to other practices. Receptive (passive) anal and vaginal sexual intercourse presents higher risk of HIV infection. For insertives (actives), anal intercourse presents higher risk than vaginal intercourse[20].

An notable proportion of the participants did not engage in any partner selection before engaging in sexual relations. Among those who reported making selections, most did so based on trust and attractive physical appearance, which was statistically associated with HIV infection. In this form of selection, participants trusted that people they knew did not have STI, as though attractive physical appearance meant protection or exemption from disease, or that the physical appearance of partners in that moment was more important than protection of their own health[21].

Most seropositive individuals did not use condoms or only used them sometimes, suggesting that their current serological status may have had a direct link with these practices. It is also important to point out that non-use of condoms because of "not having them" suggests weaknesses in the penal system and in the state and municipal health care networks, which do not have strategies for making these supplies properly available, since they did not experience shortages. Government institutions related to public health recommend and provide guidance on the importance of condom access in the prison environment, which constitutes one of the main activities for HIV/AIDS prevention and is essential to effectively meeting local demands[7,22].

More than half of the HIV positive individuals reported they were afraid of acquiring STI, referring to becoming seriously ill and dying as their major fear. The main factors involving fear of HIV were: the guilt of infecting partners; the anguish of learning of the diagnosis; the fear of becoming ill from the infection; and associations with death. In addition, fear has an influence on avoiding HIV testing, preventing early diagnosis.

Dealing with HIV/AIDS represents a major challenge for prison and public health authorities, given that issues related to the HIV/AIDS context, inside and outside the prison environment, are interconnected and demand coordinated actions.

Studies conducted in the prison environment, especially those utilizing samples of inmates, can lead to biased information related to self-reporting regarding variables culturally subject to prejudice and stigma, such as sexual practices, sharing of objects, and use of drugs. Therefore, several factors induce prisoners to change their answers for fear of moral judgement and repression.

The prison environment has characteristics that limit the operation of planning, and it is subject to setbacks and unforeseen circumstances. To make a study of this nature viable, it was necessary to deploy an additional contingent of security human resources. An additional requirement was the rigors of complying with the rules, schedules, routines of the prison environment, which often affected the rhythm of data collection for the research.

Another consideration was the stigmatization of HIV/AIDS in the prison environment, provoking fear of the diagnosis. This made it difficult for the research team to engage in reflection on and awareness of already fixed opinions in a single meeting. It is known that HIV infection is associated with changes in the lifestyle of individuals, incurring emotional and financial costs and losses that have implications for their futures. However, it was possible to align educational health activity with the research objectives in a short time period, through information on follow-up and management of people living with HIV/AIDS, which allows good prognoses and quality of life, demystifying taboos and favoring reflections on prejudice.

CONCLUSION

The present study found an overall prevalence of HIV infection in prison inmates in the state of Piauí of 1.0% (CI 95%: 0.6 – 1.4); that figure was 1% for men and 1.3% for women. The variables "select partners by physical attributes" and "vaginal sexual intercourse" were statistically associated with HIV infection (p≤0.05). These data point to sexual transmission as an important factor in HIV transmission in the studied sample.

The fight against HIV infection represents a major challenge for prison and sanitary authorities, given that the issues related to the HIV context, inside and outside the prison environment, are interconnected and demand coordinated action.

To promote the care turned over to the public health, incarceration may represent the appropriate time for intervention and tackling social inequalities in this specific population. It is also important to emphasize that the conflict in the health context in the prison environment can have an impact on society at large and contribute to the spread of STI/HIV. It can also place burden on Brazilian society, since the cost of prevention is lower than that of treatment, which is very expensive.

Considering that the risk factors associated with HIV are not generally isolated, it is interesting that the strategies for HIV control interact through coordination among the health and justice sectors, and that these actions should be aimed at the local situational context, particularly taking into account individual vulnerability and the human rights, in order to obtain better results in the prison health scenario.

RESUMO

Objetivo: Analisar a prevalência do vírus da imunodeficiência humana e fatores associados em internos de presídios de um estado do Nordeste brasileiro. **Método:** Estudo epidemiológico, transversal desenvolvido com presidiários. Realizou-se entrevista com uso de formulário e testes rápidos para o diagnóstico. Utilizou-se de testes de hipóteses bivariados e multivariados, com regressão logística simples (*Odds ratio* não ajustado) e múltipla (*Odds ratio* ajustado). O nível de significância foi fixado em p≤0,05. **Resultados:** Participaram do estudo 2.131 internos. A prevalência do vírus da imunodeficiência humana foi 1,0%. Os soropositivos são maioritariamente negros, em situação conjugal de solteiros/separados/viúvos, com média de idade de 31,3 anos e de escolaridade de 6,29 anos. Houve associação entre o vírus da imunodeficiência humana e as variáveis: selecionar parceiros por atributos físicos e praticar sexo por via vaginal. **Conclusão:** O enfrentamento da infecção pelo HIV representa desafio significativo para as autoridades penitenciárias e sanitárias, considerando-se que questões relacionadas ao contexto do vírus da imunodeficiência humana dentro e fora de ambientes prisionais estão interligadas e, portanto, demandam ação coordenada.

DESCRIT ORES

HIV; Prisioneiros; Prisões; Acesso aos Serviços de Saúde; Enfermagem em Saúde Pública.

RESUMEN

Objetivo: Analizar la prevalencia del virus de la inmunodeficiencia humana y factores asociados en internos de presidios de un Estado del Nordeste brasileño. **Método:** Estudio epidemiológico, transversal, desarrollado con presidiarios. Se realizó entrevista con empleo de formulario y pruebas rápidas para el diagnóstico. Se utilizaron pruebas de hipótesis bivariadas y multivariadas, con regresión logística simple (*Odds ratio* no ajustado) y múltiple (*Odds ratio* ajustado). Se fijó el nivel de significación en p≤0,05. **Resultados:** Participaron en el estudio 2.131 internos. La prevalencia del virus de la inmunodeficiencia humana fue del 1,0%. Los seropositivos son mayoritariamente negros, en situación conyugal de solteros/separados/viudos, con promedio de edad de 31,3 años y de escolaridad de 6,29 años. Hubo asociación entre el virus de la inmunodeficiencia humana y las variables: seleccionar parejas por atributos físicos y practicar sexo por vía vaginal. **Conclusión:** El enfrentamiento de la infección por el VIH representa un reto significativo para las autoridades penitenciarias y sanitarias, considerándose que los temas relacionados con el marco del virus de la inmunodeficiencia humana dentro y fuera de ambientes carcelarios están interconectados, por lo que demandan acción coordinada.

DESCRIPTORES

VIH; Prisioneros; Prisiones; Accesibilidad a los Servicíos de Salud; Enfermería en Salud Pública.

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