SEROLOGÍA POSITIVA PARA EL VIH: ESTUDIO EPIDEMIOLÓGICO DE SERIE HISTÓRICA

Resultados: Se encontraron 165 registros de casos de VIH. Cuando se analizaron los registros por sexo, se encontró una diferencia estadísticamente significativa entre ser hombre homosexual/bisexual (p <0,001), teniendo dos o más pareja sexuales en los últimos tres meses (p=0,002), tener pareja fija y ocasional (p <0,001) y tener el resultado de VDRL y FTA-Abs reactiv (p <0,001 y p=0,013, respectivamente). Conclusion: hubo mayor proporción de casos VIH positivo entre hombres con orientación homosexual/bisexual, con pareja sexual fija y ocasional. Descriptores: Seropositividad para VIH; Testes Sorológicos; HIV; Doenças Sexualmente Transmissíveis.

RESUMEN
Objetivo: analizar los casos de serología positiva para el VIH en una unidad de salud de referencia. Método: estudio transversal de serie histórica. La recolección de datos fue de junio a julio de 2010, en las fichas de atendimiento de personas que buscaron realizar el test anti-VIH en el periodo de 1996 a 2009, en Fortaleza (CE), Brasil. Los datos fueron analizados por el test chi-cuadrado de Pearson con nivel de significancia de 5% e intervalo de confianza de 95%. Resultados: Se encontraron 165 registros de casos de VIH. Cuando se analizaron los datos por sexo, se encontró que hubo mayor proporción de casos VIH positivo entre hombres con orientación homosexual/bisexual, con pareja sexual fija y ocasional. Descriptores: Seropositividad para VIH; Pruebas Sorológicas; VIH; Enfermedades de Transmisión Sexual.
INTRODUCTION

According to the United Nations Program on HIV/AIDS\(^1\) there were approximately 35.3 million people infected with HIV in the world in 2012. The prevention and control of the HIV/AIDS epidemic are carried out through different strategies, such as the provision of anti-HIV testing, which should be accompanied by pre and post-test counseling. The objective is the identification of the reactive cases and the early institution of the treatment. On the other hand, the timing of counseling is timely for the development of joint prevention strategies with people whose serology is negative.

Over the years, there have been changes in the scope of HIV testing in Brazil. The test, which was initially confined to the Testing and Counseling Centers (CTA), was expanded and offered in other health services. This strategy, aimed at facilitating population access and increasing coverage for testing, not sufficient to include people vulnerable to infection.\(^2\,3\)

The primary health units should offer the test and stimulate its achievement. However, studies show that testing coverage is low in the general population and that people claim several reasons for not achieving it.\(^2\) Even with the implementation of the rapid test by the Rede Cegonha policy, in primary care, anti-HIV tests are offered as a routine only during prenatal care.\(^2\,3\) Stimulation of testing in the general population was more considered after the advent of antiretroviral therapy, considering the benefits of this therapy in the life of people with HIV/AIDS and the prevention of vertical transmission.\(^1\,4\)

The offer of HIV testing is universally recommended. However, some populations deserve priority, such as pregnant women and people diagnosed with sexually transmitted diseases (STDs). In people with STD, its achievement is more important, considering the high prevalence of HIV in this population.\(^5\,6\)

The relevance of this study is the fact that the analysis of HIV cases can contribute to the construction of prevention strategies for the control of this infection in STD patients. Thus, it aims to analyze the cases of positive serology for HIV in a health care unit of reference.

METHOD

This study is part of a larger project titled Evaluation of the demands of sexually transmitted diseases treated in the outpatient context and received approval from the Research Ethics Committee of the School of Public Health of the State of Ceará, under protocol nº 126/2008.

This is a cross-sectional historical study conducted at a reference unit for sexually transmitted diseases in Fortaleza, Brazil, which treats HIV patients. The unit attends cases for the accomplishment of the anti-HIV serology by spontaneous and referenced demand.

The data were collected in the months of June and July 2010 in the care records of people who attended the unit to perform the anti-HIV test in the period from 1996 to 2009. The serological sample is collected at the unit after informed consent, obtained during the counseling. After the collection, the material is sent to the Central Laboratory of the State of Ceará (Lacen-CE), responsible for most of the serological diagnoses for HIV in the State and following the rules recommended by the Brazilian Ministry of Health.\(^7\) Diagnosis is given by two stages: Classification by the immunoenzymatic method (ELISA) and depending on the result, the diagnosis is confirmed by indirect immunofluorescence (IFI). In Brazil, a second blood sample is recommended to confirm the diagnosis.\(^8\) For the analysis, all the reactive results already confirmed by the second sample were considered.

The variables of interest were year of the test, age group, gender, full years of study, if the patient returns to receive the result, sexual orientation, sexual partner and number of partners in the last three months, if the partner attended to the consultation, the reason for the HIV test, the achievement and outcome of the Venereal Disease Research Laboratory and FTA-Abs examinations and the use of illicit drugs.

Data were typed in a spreadsheet and analyzed in the Statistical Package for Social Science (SPSS) 15.0 program and association tests were performed between variables, using the statistic \(\chi^2\). The level of significance of 5% was considered.

RESULTS

There were 167 cases of people with HIV-positive results, two of them being excluded due to vertical transmission, totaling 165 cases analyzed for this study.

The ratio of HIV cases among men and women was 1.06:1 and most diagnoses occurred in 1997, 1999, 2009 with 19 cases (11.5%) and in 2004 with 18 cases (10.9%) (Figure 1). In 2000 and 2008, there was a significant reduction in HIV diagnoses and
there were cases predominating in the city of Fortaleza (163/98.8%).

The age of the individuals ranged from 16 to 66 years old, predominantly with the age group of 20 to 29 years old, with 88 (53.3%) cases. The mean age was 29.6 years (SD=8.5), being 28.3 for women and 30.8 for men. For the full years of study, 106 (64.2%) people were five to nine years old. The mean number of years of study was 7.8 (SD=2.6). There were 163 people who returned to receive the exam result (98.8%). There were 110 heterosexual (66.7%) and 53 homosexual/bisexual (32.1%) (Table 01).

When analyzed by gender, the variables that presented a statistically significant association were: homosexual/bisexual man (p<0.001), had two or more sexual partners in the last three months (p=0.002) 0.001) and had the result of VDRL and FTA-Abs reactive (p<0.001 and p=0.013 respectively) (Table 02).
Not shown data show that all the sexual partners of the 144 people who reported sexual partners in the last three months were notified to attend the health unit to take care of the topic of their interest (no contact information was given or revealed in case of HIV) with 53 individuals (36.8%) attending, 20 (37.7%) were male partners, and 33 (62.3%) were female.

The reasons for the test were: 70 (42.4%) people due to the complaint of genital syndrome, 32 (19.4%) were called by the unit for having had sexual intercourse with a person with or supposedly with STD or HIV, 22 (13.3%) had spontaneous demand, 21 (12.7%) had prenatal care, ten (6.1%) presented AIDS signs and symptoms, eight (4.8%) had VDRL reactive, and two (1.2%) were referred by the blood center (Data not shown in the table).

**DISCUSSION**

It can be observed that over the years, there was a variation in cases of HIV diagnosed in the unit. During this period, there were situations that may have increased or decreased the demand for testing in the unit such as implementation of sexually transmitted infections, decentralization of testing for primary care, recommendation of testing of pregnant women, availability in the network of the Unified Health System of antiretroviral therapy and also the campaigns to encourage the test.

The predominant age group of HIV cases was in people between 20 and 29 years old. Studies show that there is a divergence regarding the age range in CTAs from different regions of the country. This difference may be related to the profile of the people who sought these two services, considering that in the CTA is the highest demand by spontaneous demand and in the service studied, perhaps because it is a reference service for STDs, most people sought the test because they had genital complaints.

The highest proportion of reactive cases occurred in homosexual/bisexual men. A study carried out in the five Brazilian regions found that the epidemic remains concentrated in male homosexuals despite an increase in HIV cases among heterosexual women and men.

It was possible to observe that men have more sexual partners than women, a fact confirmed by other studies. The sexual behavior of men and women is related to social and cultural issues. In Brazil, the macho culture favors sexual activity among men, making them consider it natural to have sexual relationships with different partners.

Only 36.8% of the partners attended the consultation. The convocation and testing of sexual partners of people with HIV have been a great problem for the control of this pathology. In the case of HIV, the study shows that there are few partners who attend the convocation, a situation that is aggravated by the fact that people after receiving the positive result are afraid to tell their partner and suffer prejudice or be rejected, discriminated, abandoned and even suffer some violence.

Partner notification is an essential part of the management of cases of sexually transmitted infection, contributing to...
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reducing transmission in the population exposed to the virus.\textsuperscript{21} Notification, testing, and treatment of sexual partners of people living with HIV or AIDS always bring tension moments to the professionals and the patient. In general, professionals have difficulty approaching when the subject is coming from the partner to the unit.\textsuperscript{22}

Complaints of genital syndrome predominated as a reason to perform the test in both genders and a considerable percentage of people with VDRL and FTA-Abs reactive examination were found. This fact calls attention to the importance of valuing genital complaints in people who seek health services, considering that there is an association between STD and HIV.\textsuperscript{23}

The percentage of return to receive the result was higher than the findings of a study carried out in Rio de Janeiro\textsuperscript{24} explained by the differentiated process of attending the unit, considering that the professionals received permanent qualification to perform the counseling, condition that qualified him better, besides the accomplishment of the consented search that is carried out routinely in the unit.

**CONCLUSION**

Seroserology with HIV positive results was found in young adults with good education whose main route of infection was sexual. There was a higher proportion of cases among men with homosexual/bisexual orientation, with fixed and occasional sexual partnerships and a result of VDRL and FTA-Abs reactions.

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