

**AIDS IN PIAUÍ: AN ANALYSIS OF THE EPIDEMIOLOGICAL PROFILE****AIDS NO PIAUÍ: ANÁLISE DO PERFIL EPIDEMIOLÓGICO****SIDA EN PIAUÍ: ANÁLISIS DEL PERFIL EPIDEMIOLÓGICO**

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ABSTRACT

Objective: characterizing the epidemiological profile of AIDS in the State of Piauí. **Methodology:** an epidemiological study of a descriptive character, with public domain data analysis in Piauí, with consultations and tab with data from 2008 to 2013, at DATASUS. **Results:** it was observed that there was increase in the number of reported cases, as well as the feminization of AIDS. The age group of 20-34 years old showed more cases; and people with higher level of schooling were infected less. Blood route was the main form of infection and the Indians had fewer cases. The epidemiological profile is associated with social characteristics, for example, in the case of schooling be related to the impoverishment frame. **Conclusion:** the findings revealed that changes are taking place, although discrete, in the epidemiological profile of AIDS in the State of Piauí. **Descriptors:** AIDS; Epidemic; Infection.

RESUMO

Objetivo: caracterizar o perfil epidemiológico da AIDS no Estado do Piauí. **Metodologia:** estudo epidemiológico de caráter descritivo, com análise de dados de domínio público no Piauí, com consultas e tabulação com dados de 2008 a 2013, pelo DATASUS. **Resultados:** observou-se que houve aumento do número de casos notificados, assim como a feminização da AIDS. A faixa etária de 20 a 34 anos apresentaram mais casos e pessoas com nível de escolaridade maior se infectaram menos. A via sanguínea foi a principal forma de infecção e os indígenas apresentaram menor número de casos. O perfil epidemiológico está relacionado com características sociais, como por exemplo, no caso da escolaridade estar relacionada com o quadro de pauperização. **Conclusão:** os achados revelaram que estão ocorrendo alterações, ainda que discretas, no perfil epidemiológico da AIDS no estado do Piauí. **Descritores:** AIDS; Epidemia; Infecção.

RESUMEN

Objetivo: caracterizar el perfil epidemiológico del SIDA en el Estado de Piauí. **Metodología:** estudio epidemiológico descriptivo, con análisis de los datos de dominio público en Piauí, con consultas y ficha con los datos de 2008 a 2013, en DATASUS. **Resultados:** se observó que no hubo aumento en el número de casos reportados, así como la feminización del SIDA. El grupo de edad 20 a 34 años tenía más casos y las personas con nivel de educación más superior fueron infectadas menos. Ruta de sangre era la principal forma de infección y los indios tenían menos casos. El perfil epidemiológico asociado con características sociales, por ejemplo, en el caso de la educación estar relacionada con el cuadro de empobrecimiento. **Conclusión:** los resultados revelaron que los cambios están teniendo lugar, aunque discretamente, en el perfil epidemiológico del SIDA en el Estado de Piauí. **Descriptores:** SIDA; Epidemia; Infección.

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INTRODUCTION

The Acquired Immunodeficiency Syndrome, AIDS, is present in many countries, being more concentrated in poor countries with weak capacity to provide assistance to those infected. In most industrialized countries cases of infection tend to decrease due to prevention programs, and new treatments based on drugs that slow the development of the disease. In Brazil, it is estimated about 10 million deaths by AIDS over the next 12 years.¹⁻²

The fight against AIDS in Brazil was based on a new relationship between society and the State, as always public shares were present. After the social pressure of activists in São Paulo, began governmental activities of the AIDS epidemic confrontation. The creation of strategies for prevention and care by the State, civils and researchers also contributed to this fight.³⁻⁴

Considering the relevance of infection by Human Immunodeficiency Virus, HIV, for public health in Brazil are developed attention and political programs to prevent, treat and assist the infection. The records in Laboratory Tests Control System, SISCE, and Logistics Management System Drugs, SISCLOM reveal that in 2012, approximately 13.000 people living with AIDS receive antiretrovirals from the Unified Health System (SUS), and 46.000 people living with HIV had service for the first time in public Specialized Care Services (SAE).⁵

The AIDS epidemic, over the years, introduced new and different challenges for public policy. Thus, to face them, it is necessary to know the real situation in the nationwide general and specific in health.²⁻⁴

In Brazil, the Epidemiological Surveillance System, in 1982, was performed for the first time, when seven homo/bisexual patient men were diagnosed. One case was recognized retrospectively in Sao Paulo occurring in 1980.

It can be considered that in 1981 occurred underreporting, difficulty recognizing or not the occurrence of cases since the AIDS epidemic is still at the beginning.³

After about 30 years after the beginning of AIDS epidemic, it has been revealed a new scene, marked by heterosexualization, feminization, impoverishment, the elderly and internalization, implying the need for awareness and change the attitudes of professionals involved in assisting people that are living with the AIDS virus.⁶

Based on these and given the changes in the current profile of AIDS, in order to promote discussion on assistance for health and education services, it developed this study that aims to characterize the epidemiology of AIDS in the State of Piaui.

METHODOLOGY

The present study is descriptive, epidemiological, performed by lifting the DATASUS database, which is of public domain. Data were collected in April 2014; however, they are referred for the period 2008-2012.

After collecting there was proceeded tabulation of data. It carried out a simple descriptive analysis using Excel spreadsheet software. The most significant findings were presented in tables. A discussion of the data was based on the scientific literature about the subject. Considering that the survey was conducted from a public domain database, it was not necessary submission to the Research Ethics Committee.

RESULTS

Reported cases of AIDS in the State of Piauí, from 2008 to 2012, showed an increase over the years, except in 2011, when there was a reduction. Although the males matching the highest number of reported AIDS cases, 67,48% in the period analyzed there is an upward trend of women in infection (Table 01).

Table 1. AIDS cases in adults reported from 2008 to 2012, by sex. Piaui, 2014.

Year of Notification	Male		Female		Total	
	n	(%)	n	(%)	n	(%)
2008	73	73,00	27	27,00	100	100
2009	155	65,40	82	34,6	237	100
2010	201	66,60	101	33,4	302	100
2011	184	73,30	67	26,70	251	100
2012	246	64,23	147	35,77	383	100
Total	859	67,48	414	32,52	1273	100

Source: DATASUS. Data consolidated up to 30th June, 2013.

During the study period, the number of AIDS cases in adults was higher in the age group 20-34 years old with 42,34%. Of note is

the increase in cases over the years in adults in the age groups 35-49 and 50-64 years old, 40,93% and 12,02% respectively (Table 02).

Table 2. Cases of AIDS in adult notified from 2008 to 2012, by age group. Piaui, 2014.

Year	Age (in years)													
	<10		10-14		15-19		20-34		35-49		50-64		> 65	
	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)
2008	2	2,00	1	1,00	4	4,00	33	33,00	43	43,00	16	16,00	1	1,00
2009	1	0,42	1	0,42	4	1,69	109	45,99	95	40,08	24	10,13	3	12,66
2010	2	0,66	-	-	5	1,66	127	42,05	120	39,73	41	13,58	7	2,32
2011	1	0,40	-	-	4	1,59	110	43,82	107	42,63	25	9,96	4	1,60
2012	6	1,57	1	0,26	6	1,57	160	41,77	156	40,73	47	12,27	7	1,83
Total	12	0,94	3	0,24	23	1,80	539	42,34	521	40,93	153	12,02	22	1,73

Source: DATASUS. Data consolidated up to 30th June, 2013.

According to Table 03, the highest frequency of AIDS cases among adult was in individuals with incomplete primary education (44,87%). While, incomplete higher education showed the lowest number of reported cases, 2,75%.

Table 3. Cases of AIDS in adult notified from 2008 to 2012, according to the schooling. Piaui, 2014.

Schooling	n	(%)
Ignored/White	59	4,63
Illiterate	44	3,46
Incomplete Elementary School	571	44,87
Complete Elementary School	169	13,27
Incomplete High School	108	8,48
Complete High School	201	15,79
Incomplete Higher Education	35	2,75
Complete Higher Education	76	5,97
Unknown	10	0,78

Source: DATASUS. Data consolidated up to 30th June, 2013.

Infection through sexual relationship corresponds to 83,60% of cases, which occur in most heterosexual. Injectable drugs constitute one of the main risk factors for infection through blood (Table 4).

Table 4. Cases of AIDS in adult notified from 2008 to 2012, according to the category of exposure. Piaui, 2014.

Year	White (13,28%) n	Sexual (84,13%)			Blood way (2,59%)	
		Homosexual n	Bisexual n	Heterosexual n	Injection Drug Use n	Vertical Transmission n
2008	16	10	9	62	1	-
2009	37	24	16	156	2	1
2010	37	34	27	200	1	1
2011	32	21	22	172	3	-
2012	47	38	31	249	7	7
Total	169	127	105	839	14	19

Source: DATASUS. Data consolidated up to 30th June, 2013.

In the period 2008-2012, the highest number of reported cases was brown-skinned individuals, 71,25%, while indigenous individuals were less reported with this injury, corresponding to 0,07%, as shown in Table 05.

Table 5. Cases of AIDS in adult notified from 2008 to 2012. Piaui, 2014

Year	Ignored		White		Black		Yellow		Dark colored		Indigenous	
	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)
2008	4	4,00	15	15,00	14	14,00	2	20,00	65	65,00	0	0,00
2009	2	0,84	25	10,55	10	4,22	1	0,42	199	83,97	0	0,00
2010	1	0,33	46	15,23	34	11,26	3	0,99	218	75,18	0	0,00
2011	6	2,39	47	18,72	30	11,95	0	0,00	168	66,94	0	0,00
2012	4	1,04	75	19,59	45	11,75	1	0,26	257	67,10	1	0,26
Total	17	1,34	208	16,34	133	10,45	7	0,55	907	71,25	1	0,07

Source: DATASUS. Data consolidated up to 30th June, 2013.

DISCUSSION

There was observed predominance of reported AIDS cases in males, as well as increasing the total number of cases over the years in the State of Piaui. In the last 10 years in Brazil, the percentage of AIDS detection increased by approximately 2%. However, differences are observed between Regions.

From 2003 to 2012, there was a reduction in the Southeast Region of 18,6% and 0,3% in the South, while the other regions saw an increase of 92,7% in the North, 62,6% in the Northeast and 6,0% in the Midwest.⁷

Stand out, too, the changes in the characteristics of individuals infected; thus, requiring the need for enlightened professionals and with attention to the

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assistance to be provided. According to the Epidemiological Bulletin of Piauí, between 2007 and November 2013, there were 2.811 cases of AIDS in adults in the State.⁸

The number of women living with the AIDS virus in Piauí increased along the years. According to the Epidemiological Bulletin 2012 of the Ministry of Health, the ratio of 1,7 for men and women corresponds to feminization of the disease. Thus, it can be inferred that the phenomenon is occurring in the State considering display a ratio equal to 2,07. According to the AIDS Epidemiological Report of the State of Ceará, 2013, the feminization reflects the change in women's behavior associated with biologic vulnerability of women resulting cases in women in reproductive age.^{5,9}

The presence of more cases in the age group of 20-34 years old, makes evident that the result is associated with increased sexual activity and exposure to alcohol and/or drugs at this stage as they are vulnerability factors, while from 80 years old, that number is lower.¹⁰

The analysis of educational level is important for the description of the epidemiological profile, since the influence of education indicates the infection and disease prevention. It was found that the elementary school corresponded to the schooling rate with more cases, while those with incomplete higher education had fewer. This result is also observed at the national level followed by the full mid-level education (BRAZIL, 2013). This scenario also demonstrates the low access to higher education, data that characterize and confirm the picture of the AIDS impoverishment in the state.⁶⁻⁷

A quantitative study conducted in Minas Gerais showed that the majority of survey patients were illiterate or had only incomplete or complete primary school, and a small part had complete or incomplete higher education.¹¹

A study on people's knowledge about HIV/AIDS showed that people over the age of 45 and with less education have little knowledge about the transmission and prevention of HIV infection and other sexually transmitted diseases, STDs; what lead to incorrect practices, because they believe it to be preventing these diseases, for example, cleaning of the genitals after sex. So are most exposed, considering the social aspects of vulnerability.¹²

Regarding exposure category, the study showed that the main route of virus transmission remains sexual way, and

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heterosexual individuals in greater proportion, followed by homosexuals, this result may be related to sexual promiscuity. The Epidemiological Report of AIDS in Ceará, 2013, the main category of exposure among individuals aged 13 and over, corresponds to sexual; and the heterosexual predominate since 1997. Until 1996 the highest rate was among sex between men.¹¹⁻¹²

Regarding race/color the largest number of cases occurred in brown (dark colored) individuals, while the lowest corresponded to the Indians. Moreover, is observed the increase over the years in people who declared themselves white. In Brazil, in 2012, the majority, 47,4% of the reported cases, reported themselves of the race/color white, 41,3% of brown, 10,4% black, and yellow minority, indigenous and ignored.⁷

FINAL REMARKS

The findings of the study revealed that change is occurring in the epidemiological profile of AIDS in the State of Piauí, as well as an increase in the number of reported cases. The evolution of the epidemiological profile of AIDS requires significant changes in relation to the practice of health professionals and service offerings, as well as discussion of gender and sexuality in society.

With the study it was possible to perceive that there is still a need for further discussion and improvement in public policies, in general; to reduce the number of cases and promote better quality of life for patients living with the AIDS virus. It stands out as one of the main ways to fighting the disease the practice of health professionals seeking for ways of preventing HIV infection, attention and care to people living with HIV.

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