



AIDS EPIDEMIC IN BRAZIL: ANALYSIS OF CURRENT PROFILE

A EPIDEMIA DA AIDS NO BRASIL: ANÁLISE DO PERFIL ATUAL

LA EPIDEMIA DEL SIDA EN BRASIL: ANÁLISIS DEL PERFIL ACTUAL

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ABSTRACT

Objective: to characterize the current epidemiological profile of AIDS in Brazil and emphasize the role of Nursing in this new scenario. **Method:** it is a descriptive study of informative nature, with analysis of data reported by the Brazilian Ministry of Health from 2008 and 2012 and search in the electronic databases MEDLINE and LILACS, including articles in full version, written in Portuguese and English, published from 2000 to 2012, besides relevant sources not available on the internet. **Results:** AIDS has been advancing towards small municipalities, reaching individuals with low schooling and over 50 years old of both genders. Nowadays, it affects many women of reproductive age, with increasing incidence in heterosexual individuals and stabilization of the number of cases in homosexuals. **Conclusion:** the current and variable profile of AIDS makes clear the need for qualified nurses able to conduct effective actions in active combat against the disease at stake. **Descriptors:** Acquired Immunodeficiency Syndrome; Epidemic; Nursing.

RESUMO

Objetivo: caracterizar o atual perfil epidemiológico da AIDS no Brasil e ressaltar o papel da Enfermagem neste novo panorama. **Método:** estudo descritivo, tipo informativo, com análise dos dados notificados pelo Ministério da Saúde de 2008 e 2012 e busca nas bases eletrônicas LILACS e MEDLINE, abrangendo artigos na íntegra, em português e inglês, publicados de 2000 a 2012, além de fontes relevantes não disponíveis na internet. **Resultados:** a AIDS vem avançando para pequenos municípios, atingindo indivíduos de baixa escolaridade e acima de 50 anos de ambos os sexos. Atualmente, afeta inúmeras mulheres em idade reprodutiva, com incidência crescente em indivíduos heterossexuais e estabilização do número de casos em homossexuais. **Conclusão:** o atual e variável perfil da AIDS torna clara a necessidade de enfermeiros qualificados capazes de promover ações eficazes no combate ativo à doença em questão. **Descritores:** Síndrome da Imunodeficiência Adquirida; Epidemia; Enfermagem.

RESUMEN

Objetivo: caracterizar el actual perfil epidemiológico del SIDA en Brasil y resaltar el papel de la enfermería en este nuevo panorama. **Método:** estudio descriptivo, tipo informativo, con análisis de los datos notificados por el Ministerio de Salud de 2008 y 2012 y búsqueda en las bases electrónicas LILACS y MEDLINE, abarcando artículos en su íntegra, en portugués e inglés, publicados de 2000 a 2012, además de fuentes relevantes no disponibles en internet. **Resultados:** el SIDA viene avanzando para pequeños municipios, afectando individuos de baja escolaridad y con más de 50 años de ambos sexos. Actualmente, SIDA afecta innúmeras mujeres en edad reproductiva, con incidencia creciente individuos heterossexuales y estabilización del número de casos en homosexuales. **Conclusión:** el actual y variable perfil de SIDA torna clara la necesidad de enfermeros calificados capaces de promover acciones eficaces en el combate activo a enfermedad en cuestión. **Descriptores:** Síndrome de la Inmunodeficiencia Adquirida; Epidemia; Enfermería.

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INTRODUCTION

AIDS (Acquired Immunodeficiency Syndrome) is an emerging disease, severe, caused by the HIV retrovirus (human immunodeficiency virus), which is being spread since 1981, currently considered one of the greatest public health problems in Brazil and across the world.¹

By making a reflection on the situation of this disease in the world, it is possible to highlight some data: daily, 14 thousand people are infected with HIV and, since the beginning of the epidemic, 20 million people have died. Until 2010, the disease made 25 million children become orphans. According to projections of the World Health Organization (WHO), 70 million lives will be affected in the next 20 years, if effective actions to contain the disease are not implemented.²

In Brazil, according to the latest Epidemiological Bulletin, the SINAN have notified (National Notification System) through declarations in the SIM (Mortality Information System) and records in the SISCEL (Control System of Laboratory Tests of the National Network for Counting CD4+/CD8 Lymphocytes and Viral Load), 656.701 new AIDS cases, accumulated from 1980 to 2012, and 17 thousand of these were reported only in the period from January to June 2012.³

The first AIDS cases in Brazil were identified in the early 80's, and they were predominantly recorded among men with higher schooling level, gay adults, and/or belonging to risk groups, such as injecting drug users and hemophiliacs.⁴⁻⁵

After 30 years since the beginning of this epidemic, AIDS has unveiled a curious scenario, which is marked by the processes of heterosexualization, feminization, impoverishment and internalization.¹⁻⁶ This increase in transmission through heterosexual contacts might be causing an increase in the incidence of cases of the disease in females, which characterizes a current important phenomenon of the epidemic under study. Besides the increased number of women of childbearing age with HIV infection, the increasing values of elderly carriers of this virus also deserve attention, which characterizes the aging process of the epidemic and demonstrates another strong change in the AIDS profile in Brazil.

It is noteworthy to emphasize that this transformation in the epidemiological picture of AIDS also entails a need for awareness and change in the behavior of all those involved in healthcare shares targeted to people living with HIV/AIDS.⁷

Upon turning its gaze to nursing practice, it is essential that the nursing professional is oriented to deal with this new profile of patients, in order to promote safety in the workplace and welcome these people at all levels of care.

Thus, after the profound changes in the AIDS profile, it aroused the interest in producing an informative paper on the current profile of this epidemic in Brazil, which has surpassed the third decade of existence and deserves a emergency approach, not to be treated as a chronic disease by the population, but as a pandemic that needs continuous and immediate combat.

In light of this, this study aims at characterizing the current epidemiological profile of AIDS in Brazil and emphasizing the role of Nursing in this new scenario. It is noteworthy to highlight that the analyzes that adopt the reported AIDS cases as the basis of information comprise an essential component for assessing the temporal-spatial dynamics of the epidemic.⁶

METHOD

This is an informative paper, with sights to characterize the current AIDS profile in Brazil. We have analyzed data from the National Disease Notification System (SINAN) of the Brazilian Ministry of Health, released by the Epidemiological Bulletin AIDS/STD from 2008 to 2012, where it is possible to find the AIDS cases diagnosed throughout the Brazilian territory and reported by the State Health Departments in the period from 1980 to 2012.

The study was expanded by means of searches for bibliographical references in the online databases LILACS (Latin American and Caribbean Health Sciences) and MEDLINE (Medical Literature Analysis and Retrieval System Online), accessed through the Virtual Health Library (VHL), by using the descriptors: Acquired Immunodeficiency Syndrome, Epidemic and Nursing. The inclusion criteria for the search were: papers in Portuguese and English, available in full version and published in the period from 2000 to 2012. In addition, we conducted a search for relevant sources not available on the internet.

RESULTS AND DISCUSSION

In the period from 1980 to 2012, the SINAN of the Ministry of Health has reported 656.701 AIDS cases, being that 210.383 cases took place between 1980 and 1989 (32,1%) and 446.318 cases were discovered between 2000 and 2012 (67,9%). These data corroborate the disseminator profile still present and

continuous of this epidemic across the country.

Indeed, some government attitudes such as local production and distribution of antiretroviral drugs with no additional cost to patients since the year 1996, besides the implementation of laboratories in public health networks for diagnosing and monitoring patients, have provided better quality of life and increased survival of people with AIDS.

Before the above mentioned, it should be highlighted that the distribution of antiretroviral drugs (ARV) has allowed 50% reduction in mortality from AIDS in Brazil and leveraged by 80% the treatment for opportunistic infections⁸, thereby increasing the survival of patients that, in 1995, was 18 months after diagnosis, to 56 months, in adults, and 67, in children under 13 years old⁹. These values directly reflect in a 11,1% reduction in deaths from AIDS in Brazil in the last 10 years. ⁴ Nonetheless, despite the improvements, since 1980, the incidence rates of AIDS in Brazil are still alarming, reaching, in 2009, about 20,3 cases for every 100.000

inhabitants, jumping from 17,9/ 100.000 inhabitants in 2010 to values of 20,2/1.000.000 inhabitants in 2011.³

By analyzing changes in the AIDS profile by affected gender, it is possible to see that the ratio of cases among men and women ranged from 6,5 cases, on average, in the period from 1980 to 1990, to less than two male cases for every female case since 1999⁹, reaching, according to the Epidemiological Bulletin of the Brazilian Ministry of Health, until June 2012, a ratio of 1,7 men for every woman infected with HIV in Brazil, which characterizes the scenario of feminization of this epidemic. Added to this, one of the factors linked to women's exposure to the virus is also associated with gender-related sociocultural differences, because many women are subjected to the desires of their sexual partners, thereby facing difficulties in negotiating condom use, although they know about the extramarital affairs of their partners.¹⁰ The data will be better illustrated in figure 1.



Figure 1. Characterization of AIDS, feminization of the epidemic, Brazil, 2008-2011. Source: National Disease Notification System (SINAN), 2012.

Upon analyzing the AIDS cases by exposure category, we found that, among male AIDS cases, the population of men who have sex with men was hardest affected in the beginning of the epidemic, reaching about 50% of cases. In the 1990s, there was stabilization in this category, representing, proportionally, 18% of cases⁹, and thereby affecting 24.5% of these in 2012.³

In contrast, there is a progressive growth in cases of heterosexual transmission, given that, in 1999, they represented 32% of cases.

Nowadays, Epidemiological Bulletin data show that in 2005 it was registered the highest percentage in such category, with 44,2% of cases⁸, and, in 2012, according to the same bulletin, about 43,5% of reported AIDS cases were due to heterosexual relationships, which confirms this scenario of heterosexualization of this epidemic in Brazil. The data will be best viewed in Figure 2.

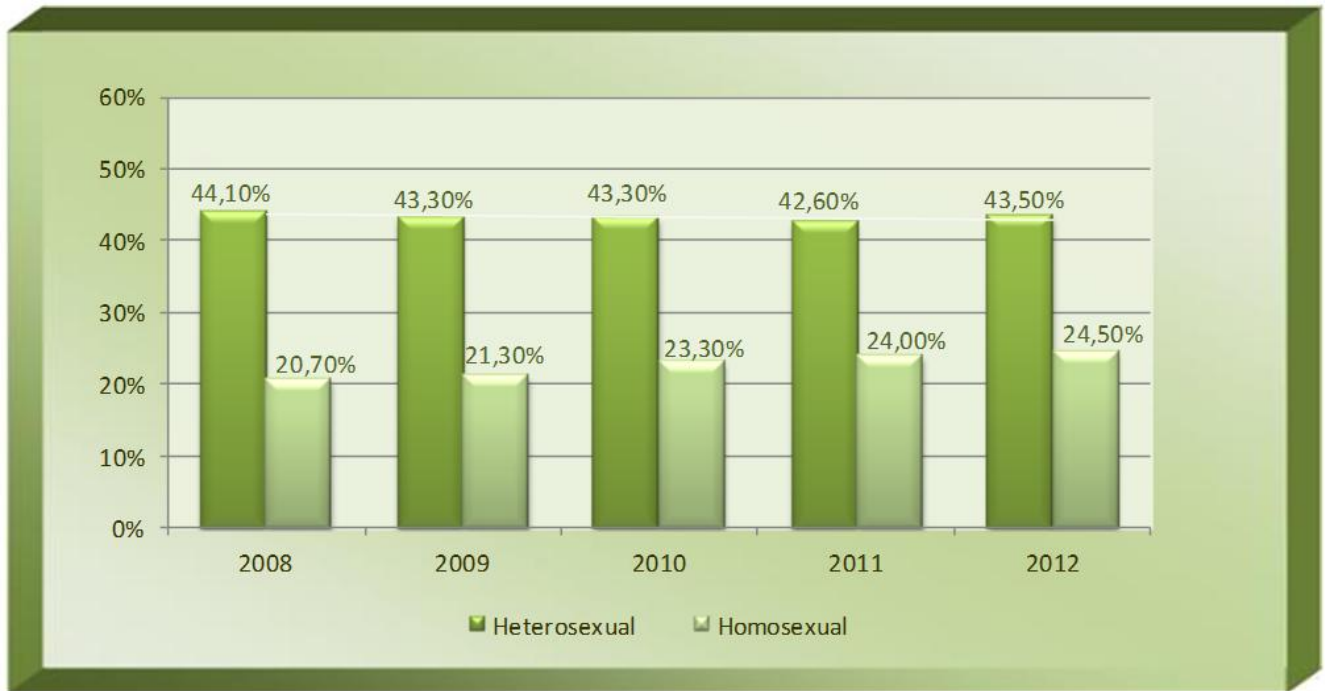


Figure 2. Characterization of AIDS, heterosexualization of the epidemic, Brazil, 2008-2012. Source: National Disease Notification System (SINAN), 2012.

Another important aspect to be considered as an epidemic trend is the internalization process. In the 1980s, the epidemic was restricted to metropolitan centers. In this decade, 70% of Brazilian municipalities have had at least one recorded AIDS case. While in big cities there is a slowdown in growth, in smaller towns the epidemic is in a stage of expansion.⁸ Between 1980 and 2010, there was a decrease in cases in the Southeast Region of 28,61%, thereby increasing proportions in other Brazilian regions.

Previous studies have shown that, despite registering the highest incidence rates, the Southeast Region currently has the lowest rhythm of growth and a greater tendency towards stability¹¹, while other regions have enhanced this incidence.³ The analysis of the spread of AIDS, according to population size of municipalities, shows that the epidemic started in large urban centers, but these hold, currently, the smallest relative increase. It was also found that the dynamics of the spatial spread of the epidemic has been

recently greatest in small cities, i.e., with less than 50 thousand inhabitants.³

By analyzing schooling as indicator variable of socioeconomic condition of AIDS cases, it is observed that the epidemic began in the population group with greater socioeconomic condition, in individuals with more than eight years of schooling, but, currently, the largest number of cases is found in individuals with less schooling.⁸ In 1985, 76% of reported cases among adults and teenagers denoted people with higher education or high school. But from the year 2000, among cases with available information about schooling, 74% were related to illiterate or people who had completed elementary school, given that only 26% had more than 11 years of schooling or university course.¹¹ In fact, this population with a college degree corresponded to only 6,7% of cases of this disease in 2012.³ These values characterize and confirm the phenomenon of impoverishment of AIDS, which will be best seen in Figure 3.

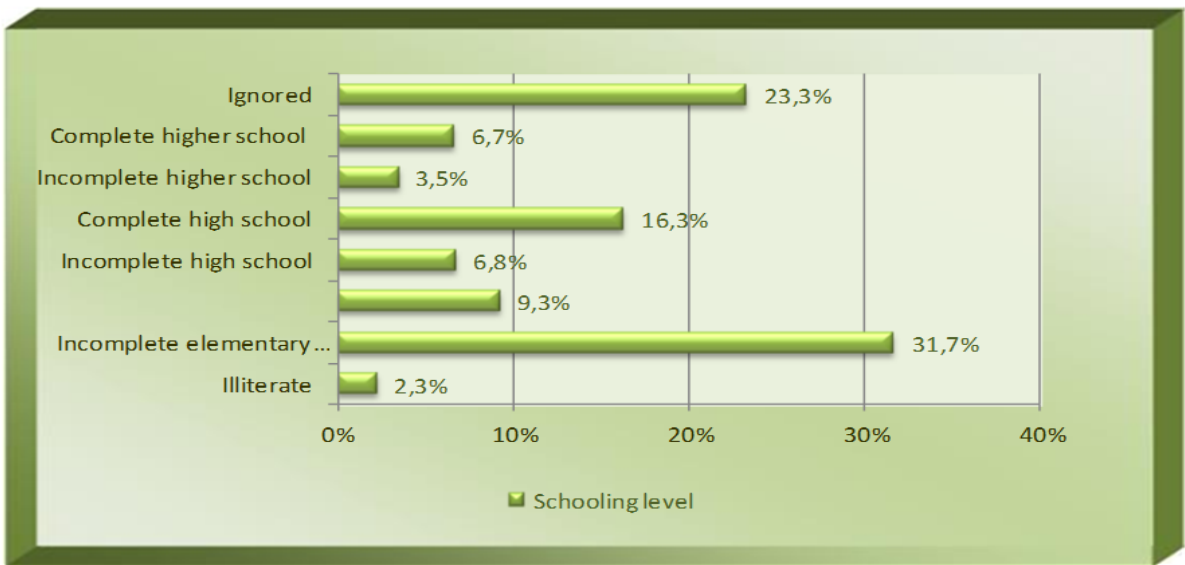


Figure 3. Schooling level of infected individuals, Brazil, 2012. Source: National Disease Notification System (SINAN), 2012.

In addition to the trends of internalization, heterosexualization, feminization and impoverishment, as earlier exposed, it is possible to perceive the increasing survival of AIDS cases in Brazil. Technological advances and better understanding of the AIDS pathogenesis have allowed the onset of new proposals for diagnostic, prophylactic and therapeutic interventions, which might be linked to the significant increase in the survival of sick people.¹¹

Recent data from the Brazilian Ministry of Health corroborate this statement: from 1980

to 2010, in Brazil, there were 241.469 deaths with AIDS as the underlying cause. In 2011, there were 12.044 deaths, with a crude mortality coefficient of 6,4/100.000 inhabitants, against values of 9,6/100.000 inhabitants in the 90s.³ Nevertheless, taking into consideration the Brazilian regions, the mortality increased in the North, Northeast and South, decreased in the Southeast, and stayed stabilized in the Midwest⁴, thereby consolidating the idea of different profiles for AIDS in different regions of this country. The data will be best shown in Figure 4.

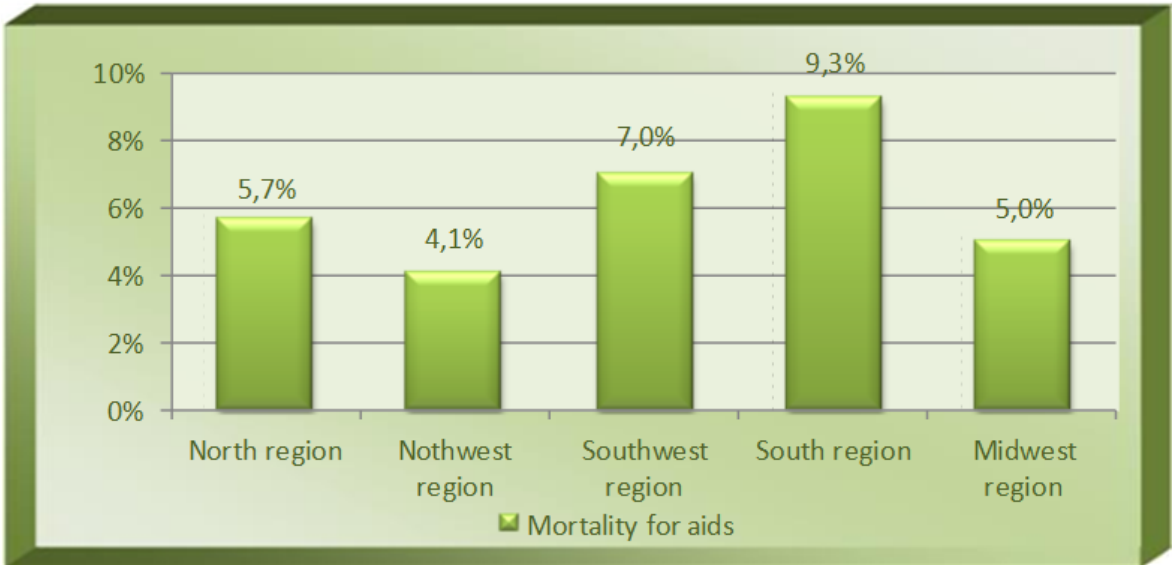


Figure 4. Crude mortality coefficient for AIDS (for every 100.000 inhabitants), according to FU, Brazil, 2011. Source: National Disease Notification System (SINAN), 2012.

By assessing the age groups between 1998 and 2010, it was observed an increase in the incidence rate of AIDS cases in the age groups from 05 to 12, from 50 to 59 and 60 years or over.⁴ In 2011, the age group that shows the highest incidence rate in the country is the one from 35 to 39 years old (43,9 cases for every 100.000 inhabitants).³

The indicator of the incidence of AIDS in children under five years is important because it is a proxy indicator that is used to monitor the progress of the control of vertical transmission of HIV, and its reduction has been agreed with states and municipalities.⁴ Regarding the AIDS cases in children less than five years, SINAN has notified, SIM has registered and SISCEL has declared, in the period from 1980 to June 2012, a total 17.539 cases. Over the last 12 years, there was a

40,7% reduction in the number of cases of this disease in children under five years, but considering the regions, the incidence has increased in the North and Northeast, and decreased in the other regions.⁴

It should be highlighted the continuous increase of cases among elderly people, over 60 years old, recorded in Brazil. In 2000, the incidence of these cases was 6,8/100.000 inhabitants. However, in 2011, this value reached 10,4 cases for every 100.000 inhabitants.³ Initially, the elderly population practically was not affected by AIDS, and in the first five years of the epidemic only four cases were diagnosed in people aged 60 years or over in Brazil.¹² At that time, people believed that elderly subjects were not sexually active. The data will be best seen in Figure 5.

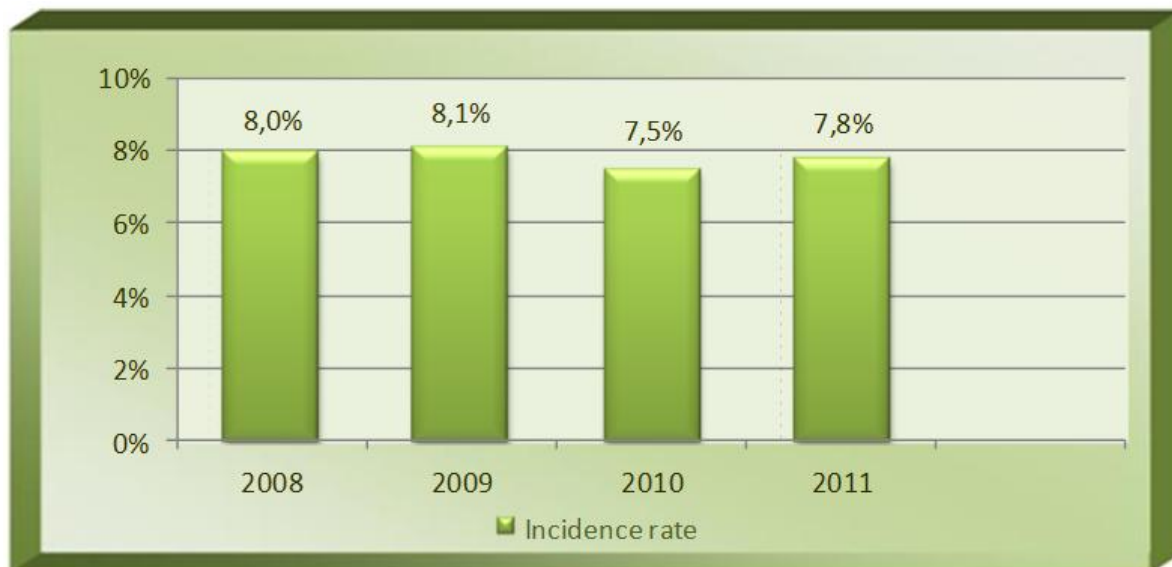


Figure 5. AIDS cases in individuals with 60 years or over (for every 100.000 inhabitants), Brazil, 2008 - 2012.
Source: National Disease Notification System (SINAN), 2012.

This significant increase in elderly people with HIV might be explained by the change in the sexual pattern of elderly men as a result of drugs for treating erectile dysfunction, which are available in the market from the 90s, giving them a more intense sexual activity. In relation to women, despite have a decreased sexual frequency during menopause, they continued with active sexual activity and have difficulty to negotiate condom use with their partners, which generates the consequent contamination.¹³ Studies show that seniors discover the virus during the onset of opportunistic diseases, thereby hindering the accomplishment of specific examinations and early diagnoses.¹⁴

Even in the face of this reality, healthcare professionals still have resistance in associating AIDS with the elderly population, as well as they are unaware of these changes in the scenario of this disease, which makes them unprepared to recognize new cases and assess the most vulnerable groups.

In light of the foregoing, it is essential that the nursing professional is prepared to assess this new HIV profile in Brazil, by using its role as an educator to promote prevention of new cases. Furthermore, it is indispensable that this professional manages to reduce contamination risks, thereby preventing accidents and mistakes in handling contaminated stuffs, getting always mindful in relation to biosecurity measures that are crucial to prevent the AIDS epidemic. Although there are constant publications on the topic under study, many professionals have demonstrated a misinterpretation of the importance of the pattern precautions¹⁵, which makes them more vulnerable to contamination.¹⁴

CONCLUSION

This study has allowed us to make evident the changing of the AIDS profile in the last few years in Brazil with regard to, initially, the increased number of infected women, which makes the ratio of male and female cases becomes gradually smaller, besides confirming the significant increase in the incidence of cases from heterosexual transmission. Furthermore, regarding the regionalization of this epidemic, it was possible to prove the internalization of AIDS, which is a fact that characterizes its expansion in regions with less than 50 thousand inhabitants, and stabilization of indexes in more populated areas such as, for example, in the Southeast Region.

It is noteworthy to highlight the recent phenomenon of impoverishment of AIDS related to the fact that this disease increasingly reaches more people with less schooling, which makes clear the need for education and awareness related to the breaking of paradigms that still surround this epidemic.

As to the affected age group, it should be considered the sizable increase in the number of older people with HIV, which reinforces the need to broaden our gaze to the vulnerability of this population parcel in relation to the infection and spread of this virus.

Thus, despite all the advances achieved after three decades of epidemic, related to the improvement of the quality of life, treatment, prognosis and decreased mortality, it is possible to realize that AIDS is still a serious and incurable illness, and that requires strong social and government actions directed its prevention.

Regarding the Nursing field and healthcare professionals in general, it is essential to develop a critical reasoning and political

consciousness towards a responsible and committed assistance, able to use awareness as the main weapon against AIDS and promote a humanized healthcare model, skilled to preserve, without discrimination, social rights of each citizen.

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