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PROFILE OF THE ELDERLY POPULATION LIVING WITH HIV/ AIDS TREATED AT A PUBLIC UNIVERSITY HOSPITAL

Perfil da população idosa vivendo com hiv/aids atendidos em um hospital universitário público

Perfil de la población anciana que vive con vih/sida atendida en un hospital universitario público

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RESUMO

Objetivo: analisar o perfil da população idosa vivendo com o vírus da imunodeficiência humana/Síndrome da Imunodeficiência Adquirida atendidos em um Hospital Público da cidade do Recife-PE. **Método:** trata-se de um estudo do tipo transversal com procedimento descritivo e abordagem quantitativa, desenvolvido por meio de dados secundários de prontuários. **Resultados:** a amostra do estudo correspondeu a 177 pacientes, onde 77 indicavam transmissão sexual. Observou-se uma taxa de incidência de Aids de aproximadamente 45,8% de 2019 a 2023. A partir do cruzamento entre as variáveis "escolaridade" e "casos Aids", demonstrou-se a visível relação entre educação e saúde. **Conclusão:** tornou-se perceptível a imprescindibilidade de estudos que contemplem a temática bem como que haja um investimento e incentivo governamental em educação de qualidade e na educação em saúde, contribuindo, assim, com os objetivos 3 e 4, "Saúde e Bem-estar" e "Educação de qualidade", da "Agenda 2030 para o Desenvolvimento Sustentável" no Brasil.

DESCRITORES: Vigilância em saúde pública; Epidemiologia; Hiv; Idoso.

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ABSTRACT

Objective: to analyze the profile of elderly population living with human immunodeficiency virus/Acquired Immunodeficiency Syndrome who are being treated at a public hospital in Recife, Pernambuco, Brazil. **Method:** this cross-sectional study employed a descriptive, quantitative approach using secondary data from medical records. **Results:** the study sample included 177 patients, 77 of whom reported sexual transmission as the mode of infection. An AIDS incidence rate of approximately 45.8% was observed from 2019 to 2023. The intersection of the variables "education" and "AIDS cases" demonstrated a visible relationship between education and health. **Conclusion:** it is clear that studies addressing this issue are essential, as well as government investment in quality education and health education. This contributes to objectives 3 and 4 of the "2030 Agenda for Sustainable Development" in Brazil: "Health and Well-being" and "Quality Education".

DESCRIPTORS: Public health surveillance; Epidemiology; Hiv; Elderly.

RESUMEN

Objetivo: analizar el perfil de la población adulta mayor que vive con el virus de la inmunodeficiencia humana/síndrome de inmunodeficiencia adquirida, atendida en un hospital público de Recife, Pernambuco. **Método:** estudio transversal con enfoque descriptivo y cuantitativo, desarrollado a partir de datos secundarios de historias clínicas. **Resultados:** la muestra del estudio estuvo compuesta por 177 pacientes, de los cuales 77 presentaron transmisión sexual. Se observó una tasa de incidencia de SIDA de aproximadamente el 45,8% entre 2019 y 2023. A partir de la intersección entre las variables "educación" y "casos de SIDA", se demostró la relación visible entre educación y salud. **Conclusión:** se evidenció la importancia de los estudios que abordan el tema, así como la inversión e incentivos gubernamentales en educación de calidad y educación para la salud, contribuyendo así a los objetivos 3 y 4, "Salud y Bienestar" y "Educación de Calidad", de la "Agenda 2030 para el Desarrollo Sostenible" en Brasil.

DESCRIPTORES: Vigilancia en salud pública; Epidemiología; Vih; Anciano.

INTRODUCTION

Infection by the human immunodeficiency virus (HIV) and subsequent development of acquired immunodeficiency syndrome (AIDS) are major concerns for global public health. Despite many achievements and advances, the fight against AIDS remains challenging. Transmission is predominantly sexual, though other forms of exposure exist, such as blood and vertical transmission.[1]

In Brazil, 434,803 new HIV infections were reported in the Notifiable Diseases Information System (SINAN) between January 2007 and June 2022, 40,880 of which occurred in 2021 alone. The detection rate specifically related to HIV/AIDS was 21.9 cases per 100,000 inhabitants in 2020.[1]

Since the discovery of HIV and AIDS as an epidemic, changes have been observed throughout history. There has been a transition in the epidemiological profile. Although the prevalence of cases is still higher among younger people, there has been a significant increase among older people in recent years.[2-4]

Nevertheless, the stereotypical view of HIV/AIDS in the elderly impacts the way the disease is perceived when a diagnosis is made. Elderly people do not consider the possibility of being infected by the virus, so after receiving a positive diagnosis, they have countless questions, uncertainties, and anxieties about the finitude of life. Furthermore, it evokes feelings of fear, insecurity, and social rejection. Prejudice hinders the acceptance process of the elderly and can disrupt family relationships initially.[2]

In view of this, HIV/AIDS in the elderly population is strongly linked to the stigmatization process, which has significant repercussions on mental health, identity, and social relationships. This is in addition to the biological alterations associated with health and illness. Late seropositive diagnosis, difficulty accessing care, and prejudice can initially have a significant impact on the lives of the elderly, evoking feelings of disorientation that require support to address the fears and distress generated by the disease. Prejudice after diagnosis and a lack of information about the pathology must be addressed in therapy so that the elderly can develop coping mechanisms to overcome these adversities.[5-6]

Considering this, it is crucial to understand the current profile of the elderly population living with HIV/AIDS to grasp the expansion and diversity of this age group. This will help achieve goal 3, "Health and Well-Being," of the United Nations' Sustainable Development Goals, which aims to achieve the "2030 Agenda for Sustainable Development" in Brazil. The

present study aimed to analyze the profile of the elderly population living with HIV/AIDS and receiving treatment at a public hospital in Recife, Pernambuco, Brazil.

METHOD

This cross-sectional study employed a descriptive procedure and a quantitative approach. Given the institution's significant role in combating HIV/AIDS, the study was conducted at the Public University Hospital, a state-level reference center for HIV care. It is the largest day-hospital in Pernambuco, offering outpatient services to people living with HIV/AIDS (PLWHA), as well as an intensive care unit for infectious and parasitic diseases with beds for individuals with AIDS.

The study population consisted of individuals aged 60 years or older with HIV/AIDS who were treated at the hospital between 2019 and 2023. Cases of HIV/AIDS in individuals aged 60 years or older with incomplete medical records were excluded. Initially, 1,560 medical records were collected. After applying the inclusion and exclusion criteria, a sample of 177 medical records of elderly individuals was obtained.

The data collection instrument was based on information contained in the hospital records and included the following variables: age, sex, education level, race/color, epidemiological history of probable transmission (sexual, vertical, or blood), HIV diagnostic laboratory data obtained through screening and confirmation testing, the Rio de Janeiro/Caracas and CDC criteria adapted for defining AIDS cases, and the death criterion obtained through a death certificate mentioning AIDS or HIV and a cause of death associated with immunodeficiency without classification by any other criterion after investigation.

The Rio de Janeiro/Caracas criterion is an AIDS diagnostic standard that combines HIV detection through serological or virological testing with the presence of at least ten points on a scale of signs, symptoms, or diseases that define the pathology. The adapted CDC is based on the US Centers for Disease Control and Prevention's classification adapted to the Brazilian context. It defines an AIDS case as one accompanied by severe immunosuppression and/or illness indicative of AIDS, confirmed by HIV infection.

Data collection began in December 2023 after the Research Ethics Committee of the HUOC/PROCAPE Hospital Complex approved it under opinion 658052 and issued the Certificate of Presentation for Ethical Appreciation (CAAE) 76208423.3.0000.5192. It continued until January 2024 following Resolution 466/2012 of the Brazilian Ministry of Health's National Health Council for research involving human beings.

The data was tabulated and analyzed with the support of Excel software, version 2911, from Microsoft. This involved investigating and conducting a sociodemographic analysis of the population based on the collected variables, evaluating the incidence of AIDS cases among the selected sample, and crossing variables to better visualize the profile and vulnerabilities of the patients involved in the study.

RESULTS

The study sample included 177 medical records of patients aged 60 years or older with HIV/AIDS. Of these patients, 115 were male and 62 were female. They were characterized according to Chart 1.

Chart 1- Demographic characterization of the sample

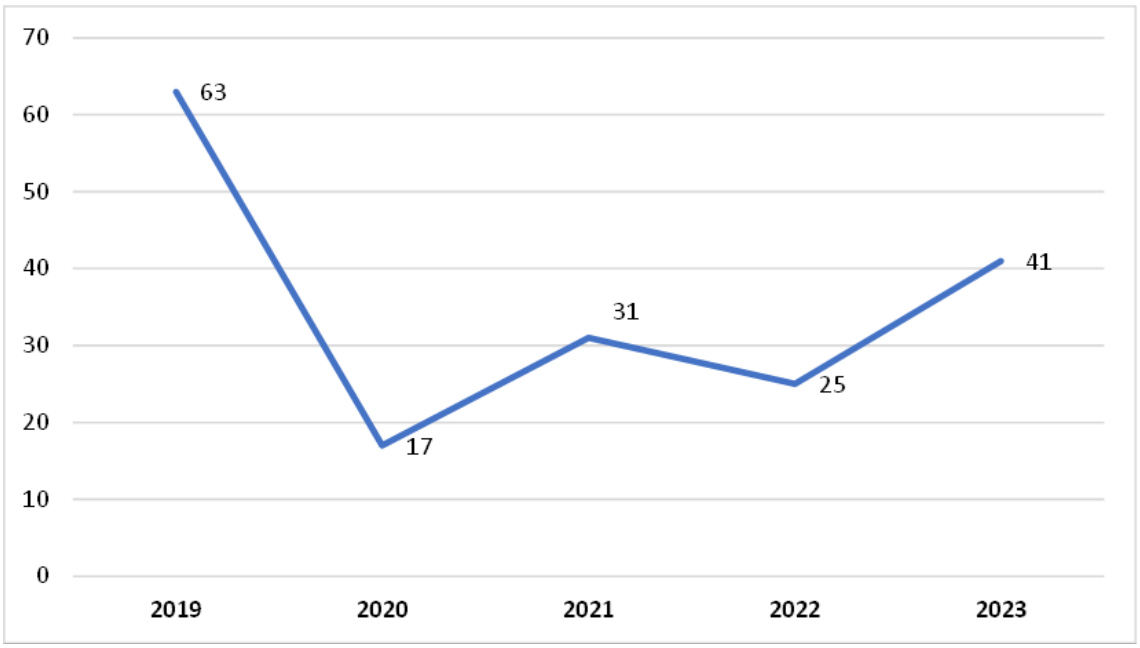
Age	**N (177)**	**%**
60 to 65 years old	107	60,5
66 to 70 years old	40	22,6
71 to 75 years old	18	10,2
76 to 80 years old	8	4,5
>80 years old	4	2,2
Education (years of study)	**N (177)**	**%**
Illiterate	2	1,1
1 to 4	11	6,2

Age	**N (177)**	**%**
5 to 8	44	24,9
>/= 9	58	32,8
Ignored	62	35
Race/Color	**N (177)**	**%**
White	38	21,5
Black	13	7,3
Yellow	1	0,6
Brown	114	64,4
Ignored	11	6,2

Source: The Authors, 2024.

By evaluating the epidemiological antecedents reported in the patients' medical records, we were able to gain some insight into the risk practices associated with the probable ways of HIV transmission experienced by the participants. Of the 177 medical records, 77 indicated sexual transmission. The form of transmission was marked as "unknown" in the remaining records, which may indicate the patient's refusal, denial, or discomfort in reporting their experience. Regarding the number of new HIV/AIDS cases from 2019 to 2023, a significant decrease in notifications occurred in 2020, as illustrated in Figure 1.

Figure 1 - Notification of new cases of HIV/AIDS in individuals aged 60 years or older, from 2019 to 2023



Source: The Authors, 2024.

Additionally, data processing provided information about the criteria for defining cases and demonstrated the evolution of cases. It also provided information about patients who developed AIDS or died (Chart 2). Based on this information, we calculated an AIDS incidence rate of approximately 45.8% (n = 81) among the samples studied from 2019 to 2023.

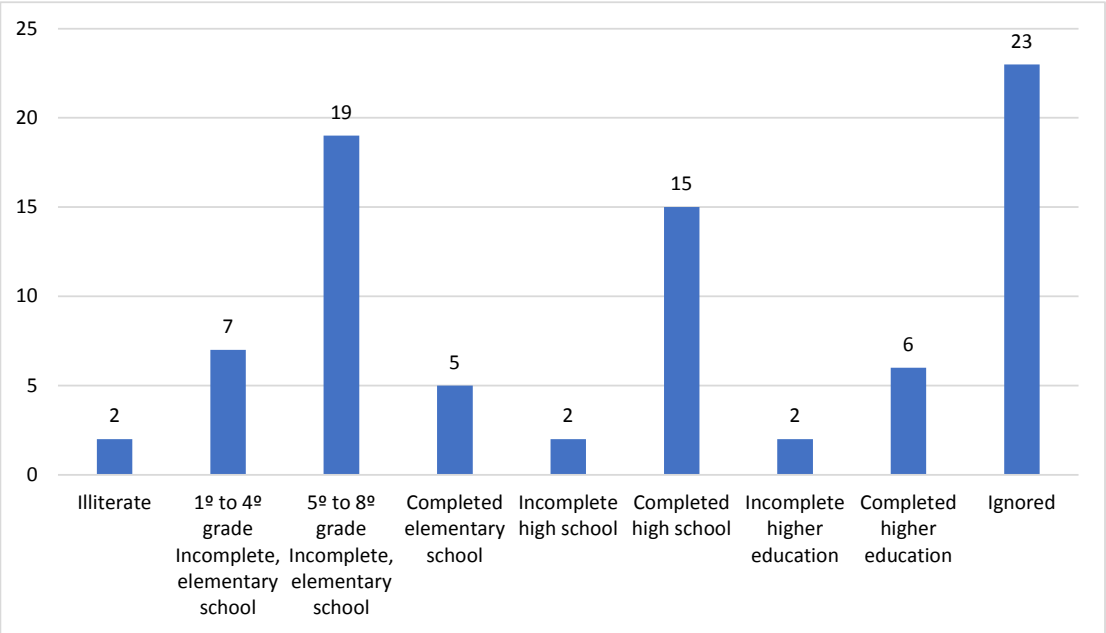
Chart 2- Evolution of the cases of the study participants

Evolution of cases	Number of patients
HIV+ cases	89
AIDS Cases According to the Adapted CDC Criterion	71
AIDS Cases According to the Rio de Janeiro/Caracas Criterion	10
Death Criterion	7

Source: The Authors, 2024.

Given the high incidence rate of AIDS cases, a correlation was found between the variables "education level" and "AIDS cases." Among the 81 AIDS cases, 40.7% (n = 33) were people with low education levels (Figure 2), demonstrating the clear relationship between education and health. Additionally, 17 of the AIDS cases resulted in death, further emphasizing the need for a scientific and humane approach to the issue.

Figure 2 - Education level of patients classified as AIDS cases



Source: The Authors, 2024.

DISCUSSION

The profile of the elderly population living with HIV/AIDS and receiving treatment at a public hospital in Recife, Pernambuco, Brazil, was analyzed. The analysis revealed that most cases of HIV/AIDS were contracted through sexual contact, and that a significant percentage of AIDS cases occurred from 2019 to 2023 (45.8%, n = 81).

It is important to acknowledge that sexuality is a fundamental human need and should be experienced fully and integrally throughout life. Therefore, sexuality does not cease with advancing age. The growing number of elderly infected with HIV underscores the urgent need to address this issue. Until the 1980s, blood transmission was the main cause of HIV infection in the elderly. However, nowadays, sexual contact is the predominant cause, as proven by the data collected in this study. This reveals the importance of breaking the process of infantilizing the elderly and starting to see them as human beings in their entirety.

Despite being sexually active and engaging in risky behaviors like those of young adults, elderly people are less likely to be tested for HIV, which leads to late diagnoses, increased AIDS cases, and subsequent AIDS-related deaths, as reflected in the data: of the 81 AIDS cases, 17 resulted in death. This brings to light the importance of screening PLWHA and welcoming them to effectively adhere to treatment.

Although the disease is considered stable, Brazil is one of the countries with the highest incidence of HIV/AIDS. According to the Ministry of Health, there are approximately 920,000 people living with HIV in Brazil, representing a wide range of demographic profiles. However, there has been a recent decrease in HIV/AIDS cases throughout Brazil, possibly due to underreporting, particularly in 2020 (Figure 1), due to the Covid-19 pandemic.[9]

Thus, it can be suggested that the decrease in HIV testing, diagnosis, and treatment during the pandemic could have led to inadequate care for AIDS patients. This could have predisposed them to illness from opportunistic infections and silently increased the risk of a condition that had been under control for years. Additionally, there was a reduction in educational activities related to STIs, which hindered the dissemination of information to the population.[10] This is evident in Figure 1, which shows a drop in the number of diagnosed cases during the pandemic.

In general, Brazil has public policies regarding the HIV/AIDS epidemic that enable prevention and treatment through the public health system. These initiatives have had positive results; however, they are not equally exercised in all regions of the country, as there are various indices of social vulnerability that provide an environment of misinformation about prevention methods and hinder access to them.[9]

It is well-known that a higher prevalence of HIV/AIDS is directly related to a lack of education and knowledge. Conversely, the higher the level of education, the greater the access to and understanding of information about health risks and disease transmission. The population with low schooling has a mistaken understanding of the causality and forms of transmission of STIs, which means they have a low perception of the risk of becoming infected. Perhaps for this reason, they represent the largest portion of those diagnosed.[11-12]

As shown in Figure 2, 40.7% of HIV cases that progressed to AIDS were people with low education, indicating an association between low education and misinformation about STI transmission and diagnosis, especially HIV. Many do not know they are carriers because they have no symptoms, or the symptoms go unnoticed. This has caused high rates of infection and easy spread of the disease.[11-12] Reinforcing the need to implement an individualized therapeutic plan for patients to promote treatment adherence. Simply prescribing medication without paying attention to the client's particularities and limitations will not result in beneficial outcomes. On the contrary, it will act as an obstacle.

Additionally, this study revealed possible patient refusal, denial, or discomfort in reporting their experience when approached by health professionals. This is proven by the presence of many "unknown" responses to the question, "Transmission mode." This results in the loss of valuable information and the consequent inadequate and ineffective completion of the SINAN.

This study demonstrates the importance of actively searching for new HIV cases in the elderly population, which is linked to patient reception and bonding, as well as government investment in population education and health education dissemination. This study aims to contribute to goals 3 and 4 of the "2030 Agenda for Sustainable Development" of the UN in Brazil: "Health and Well-being" and "Quality Education".

CONCLUSION

Remarkably, the predominance of HIV transmission through sexual contact has increased, as has the incidence rate of AIDS cases, reaching 45.8% (n = 81). Furthermore, analyzing the education level of patients classified as having AIDS revealed a close relationship between low education and the degree of AIDS incidence among the sample studied. This finding further emphasizes the relationship

between education and health. Additionally, some of these patients died from AIDS, further emphasizing the need for educational interventions and a scientific and compassionate approach to the issue.

Limitations of the study include the possible underreporting of HIV/AIDS cases during the pandemic and the presence of many "unknown" responses in the "mode of transmission" and "education level" categories. This highlights the need to understand the expansion and diversity of the PLWHA age group today so that they can receive humanized care with qualified, effective support. This is necessary to break stigmas and promote early diagnosis, treatment, and the quality of life necessary for these patients.

In view of this, it is clear that studies contemplating HIV/AIDS among the elderly population are essential, as well as government investment in quality education and health education about HIV and its particularities.

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REFERENCES

1. Matos SL, Meller FO, Quadra MR, Mendes JVS, Schäfer AA. Casos de HIV/AIDS durante uma década em uma cidade na região metropolitana de Porto Alegre (RS). Revista Saúde e Pesquisa. [Internet]. 2023 [cited 2024 dec 20];16(1). Available from: https://doi.org/10.17765/2176-9206.2023v16n1.e11375.
2. Santos NPS, Souza LS, Lima PV, Oliveira AS, Reis LA. Pessoas idosas vivendo com HIV/AIDS: avaliação da funcionalidade. Revista Saúde. [Internet]. 2022 [cited 2023 dec 20];48(2). Available from: https://doi.org/10.5902/2236583463872.
3. Carvalho AP, Aragão IPB. Epidemia de HIV/AIDS entre a população idosa do Brasil de 2008 a 2018: uma análise epidemiológica. HU Revista. [Internet]. 2022 [cited 2024 dec 20];48. Available from: https://doi.org/10.34019/1982-8047.2022.v48.37626.
4. Castro SS, Scatena LM, Miranzi A, Miranzi A, Nunes AA. Tendência temporal dos casos de HIV/Aids no estado de Minas Gerais, 2007 a 2016. Rev. Epidemiologia e Serviços de Saúde. [Internet]. 2020 [cited 2024 jan 19];29(1). Available from: https://doi.org/10.5123/S1679-49742020000100016.
5. Aguiar R B, Leal MCC, Marques APO, Torres KMS, Tavares MTDB. Elderly people living with HIV - behavior and knowledge about sexuality: an integrative review. Revista Ciência & Saúde Coletiva. [Internet]. 2020 [cited 2024 dec 20];25(2). Available from: https://doi.org/10.1590/1413-81232020252.12052018.
6. Nicaretta RJ, Ferretti F, Portella MR, Ferraz L. Therapeutic Itinerary of Elderly Living with HIV/Aids: Oral History Perspectives. Revista de Saúde Coletiva. [Internet]. 2022 [cited 2023 dec 23];33. Available from: https://doi.org/10.1590/S0103-7331202333013.
7. Gebremeskel AT, Gunawardena N, Omonaiye O, Yaya S. Sex Differences in HIV Testing among Older Adults in Sub-Saharan Africa: A Systematic Review. BioMed Research International. [Internet]. 2021. [cited 2024 jan 14]. Available from: https://doi.org/10.1155/2021/5599588.
8. Ferreira MVM, Siqueira FAM, Francisco FS. Idosos portadores de HIV/AIDS: uma revisão sobre o diagnóstico tardio nesta população. Rev. ULAKES Journal of Medicine. [Internet]. 2023 [cited 2024 dec 20];3(1). Available from: https://revistas.unilago.edu.br/index.php/ulakes/article/view/.
9. Santos CM, Nunes GM, Braga MMA, Chaves SL, Maués FCJ, Almeida ACG. Perfil epidemiológico de HIV no período de pandemia da Covid-19 no município de Manaus, no estado do Amazonas. Revista Contemporânea. [Internet]. 2023 [cited 2024 jan 19];3(12). Available from: https://doi.org/10.56083/RCV3N12-246.
10. Maia IM, Soares ACF, Siqueira JMMT, Oliveira LP, Martins IRR. A pandemia da COVID-19 como limitador do rastreio das infecções sexualmente transmissíveis no semiárido do Piauí. Research, Society and Development. [Internet]. 2023 [cited 2024 jan 19];12(2). Available from: http://dx.doi.org/10.33448/rsd-v12i2.40101.
11. Lima MS, Raniere JC, Paes CJO, Gonçalves LHT, Cunha CLF, Ferreira GRON, Botelho EP. Associação entre conhecimento sobre HIV e fatores de risco em jovens amazônidas. Rev Bras Enferm. [Internet]. 2019. [cited 2024 jan 19];3(5). Available from: http://dx.doi.org/10.1590/0034-7167-2019-0453.
12. Pereira AL, Silva LR, Palma LM, Moura LCL, Moura MA, Pereira LL. Impacto da escolaridade na transmissão do HIV e da sífilis. Revista Interdisciplinar Ciências Médicas. [Internet]. 2022. [cited 2024 jan 19];6(1). Available from: https://revista.fcmmg.br/index.php/RICM/article/view/139.