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#### ABSTRACT

Portugal faces one of the highest incidences of HIV infection in Western Europe, although it has seen a gradual reduction in the number of new cases in recent decades, from 1941 in 2007 to 1220 in 2014. This study conducted a historical analysis of HIV immigration in Portugal over the past decade, highlighting the role of immigrants, especially from sub-Saharan Africa, who account for 17% of new cases reported. Using a bibliographic research based on scientific articles, book chapters and documents from the Ministry of Health, the study reveals a transition in the management of drug addiction from a repressive model to a more comprehensive and public health approach, which began

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at the beginning of the millennium. Despite the overall downward trend in new cases, the research highlights that 31% of new patients had a CD4+ lymphocyte count of less than 200 cells/ $\mu$ L at diagnosis, indicating late diagnosis and possible lack of access to adequate care. The study points out that the immigrant population faces significant challenges related to social isolation, precarious living conditions and stigmatization, factors that aggravate the risk of infection and hinder access to health services. The need for public health strategies aimed at education, prevention, and social inclusion is emphasized, with a special focus on the young population and the training of health care providers to deal with multiculturalism.

Keywords: HIV, Acquired Immunodeficiency Syndrome, Immigration, Public Health, Portugal.

#### **INTRODUCTION**

The Human Immunodeficiency Virus (HIV) was first identified in the early 1980s, when the first cases of Acquired Immunodeficiency Syndrome (AIDS) appeared in the United States, Europe and Australia. Initially, the disease was predominantly associated with men who have sex with men and injecting drug users. However, over time, the pandemic spread globally, reaching all sexual orientations and demographic groups, becoming a universal public health concern (CDC, 1981). Little is known about the origin of the Human Immunodeficiency Virus (HIV). However, in the early 80s, the first cases of HIV/AIDS were diagnosed, specifically in the United States of America (USA), Europe and Australia, among homosexuals; which led to the belief that Acquired Immunodeficiency Syndrome (AIDS) is a disease exclusively associated with homosexuals for a long time.

In 1981, the Center for Disease Control in Atlanta (USA) published the case of a rare disease, observed not only in homosexuals, but also in injecting drug addicts. From 1982 onwards, HIV/AIDS was recognized as a pandemic due to its wide geographical distribution, affecting multiple continents and countries. That same year, the disease was considered the largest infection by sexual act, being recognized as a pandemic, that is, a disease that affects more than one country or continent and that can be manifested in anyone, regardless of sexual orientation (MALOA, 2012). The characterization of the pandemic is marked by its ability to affect large populations, regardless of geographic location (WHO, 1982; WHO, 2013). The pandemic is characterized by an epidemic with a wide geographical distribution, affecting more than one country or one continent. A typical example of this event is the AIDS epidemic that affects all continents (PEREIRA, 2018).



PAÍS	Prevalência do HIV (%) (em adultos de 15-49 anos)	Pessoas recebendo tratamento ARV	Pessoas vivendo com HIV e AIDS
Angola**	2,40%	12.000	210.775
Brasil**	0,61%	190.000	630.000
Cabo Verde**	0,8% (2005)	149 (2009)	n/a
Guiné-Bissau*	1,80%	900	16.000
Moçambique*	11,50%***	90.000	1.500.000
Portugal*	0,50%	n/a	34.000
São Tomé e Príncipe**	1,5%	110 (2008)	242 (2008)
Timor-Leste**	0,19%	n/a	151

Figure 1 - More detailed data on the epidemic in the CPLP member countries

Since then, the epidemic has evolved unevenly in different regions of the world. In Western Europe, where HIV/AIDS initially had a lower prevalence compared to other regions, the situation has changed significantly in recent decades. In Portugal, the incidence of HIV/AIDS has been a matter of growing concern. Historical data show an increasing trend of new cases throughout the 1980s and 1990s, with a particularly high number in the early 2000s. In 2007, 1941 new cases of HIV infection were registered in Portugal (INSA, 2007). However, since then, the country has begun to observe a gradual reduction in new cases: in 2010, there were 1518 cases and in 2014, 1220 cases (INSA, 2010; INSA, 2014). Despite this decrease, Portugal still has one of the highest HIV incidences in Western Europe.

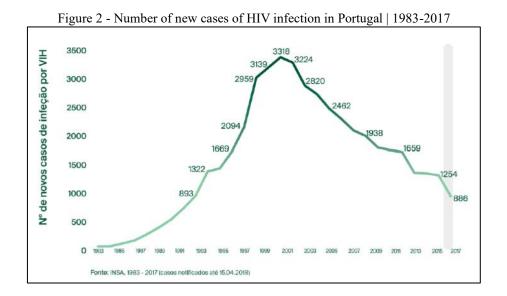
The epidemiological profile also reveals that the immigrant population plays a significant role in the epidemic. Recent studies indicate that 17% of new HIV cases in Portugal are of immigrant individuals, with a particularly high prevalence among those from sub-Saharan Africa (SICAD, 2014). This group faces multiple challenges that contribute to the spread of infection, including poor socioeconomic conditions, language and cultural barriers, and limited access to adequate healthcare. According to Ordinance No. 258/2005, new cases of HIV infection, at any stage, as well as developments and deaths, were recorded in a specific report, in which the patient's identification is coded, and in which the demographic, epidemiological, clinical and virological notification necessary for the characterization of the case is collected (MARTINS, 2014).

From 2000 onwards, Portugal underwent a major reorientation in the approach to drug addiction, moving from repressive management to an approach more focused on public health and harm reduction. With the introduction of Law No. 30/2000 and Decree-Law No. 130-A/2001, the possession and consumption of drugs for personal use were decriminalized, and a support network for users was implemented, including risk reduction measures (Portugal, 2000). This shift has also been reflected in the way the HIV epidemic is addressed, with an emphasis on integrated public health strategies. Portugal has one of the highest incidences of HIV infection in Western Europe,



although there is a downward trend in new cases, from 1941 in 2007 to 1518 in 2010 and 1220 in 2014 (DGS, 2012. 2015).

As of April 15, 2017, 57,574 cases of HIV infection have been cumulatively reported in Portugal in which the diagnosis occurred by the end of the current year. Of these patients, 22,028 reached the AIDS stage by the end of 2018 and 14,500 were reported to have died in the same period, as shown in Figure 2.



In the country, the epidemic mainly affects populations with behaviors that determine a special vulnerability, namely sex workers, MSM and prisoners, groups in which the prevalence of infection is higher than 5%. Compared to the other European states, the number of people with a late diagnosis of infection remains high, over 49%. In recent years, the combination of more inclusive public health policies and advances in antiretroviral treatment have contributed to reducing the number of new cases and improving the quality of life of people living with HIV. However, late identification of infection, with 31% of new patients having a CD4+ lymphocyte count of less than 200 cells/µL at the time of diagnosis, remains a significant challenge (SICAD, 2014).

This study aims to analyze the dynamics of HIV immigration in Portugal in the last decade, focusing on epidemiological trends, specific challenges faced by the immigrant population, and the implications of the public health policies adopted. The analysis is based on recent data and seeks to provide an in-depth understanding of the developments and persistent challenges in the fight against the HIV epidemic in Portugal.

#### METHODOLOGY

This study adopts a qualitative and bibliographic methodological approach to analyze HIV immigration in Portugal over the last decade, with a special focus on recent changes and trends. The



methodology is designed to offer a comprehensive overview of the evolution of the epidemic and the impacts on immigrant populations, considering new evidence and research practices. Data collection was carried out through a comprehensive literature review, including scientific literature, institutional documents, and reports from relevant organizations. The data sources were selected based on their relevance, credibility and timeliness. Articles published in journals indexed in the PubMed, Scopus, and Web of Science databases were analyzed. The research focused on studies that address the epidemiology of HIV in Portugal, public health policies and the impact on the immigrant population.

The articles were selected to cover the last decade, providing an up-to-date perspective. Likewise, annual reports and statistics from the National Institute of Health Doutor Ricardo Jorge (INSA) and the Intervention Service on Addictive Behaviors and Dependencies (SICAD) were consulted. These documents provide epidemiological data and analyses of public health policies and their implications for HIV management. Relevant laws and decrees were included in the research, such as Law No. 30/2000 and Decree-Law No. 130-A/2001, which deal with the decriminalization of drugs and the approach to public health. These documents help to contextualize the changes in the approach to drug addiction and its impact on the HIV epidemic.

#### **INCLUSION AND EXCLUSION CRITERIA**

*Inclusion:* Studies and documents published between 2013 and 2023 were included to ensure temporal relevance and reflect the most recent practices and data. The inclusion was based on the relevance to the issue of HIV immigration and the evolution of health policies in Portugal.

*Exclusion:* Materials prior to 2013 were excluded, as well as documents that were not peerreviewed or from unreliable sources. Articles and reports that did not present relevant or up-to-date data on HIV in Portugal or on the immigrant population were also discarded.

Data analysis followed a qualitative method of content analysis, allowing the identification of patterns and trends in the reviewed literature. The data were classified and coded based on key themes, such as epidemiological trends, public health policies, and specific impacts on the immigrant population. Data from different sources were compared to identify congruences and discrepancies, providing a critical view of the evolution of the epidemic and the policies implemented. The information was synthesized to highlight key findings, trends, and implications for public health policy. The interpretation of the data focused on understanding the challenges faced by the immigrant population and evaluating the effectiveness of the interventions.

To ensure the reliability of the results, strict validation practices were followed. The review and analysis were conducted by multiple researchers to minimize bias and ensure a balanced interpretation of the data. The information was cross-checked between different sources to ensure the accuracy and consistency of the data used in the research. The study faced limitations related to



access to up-to-date and complete data, especially in relation to specific subgroups within the immigrant population. Variability in the quality and approach of the included studies may affect the interpretation of the results and the generalizability of the conclusions. The methodology adopted allowed a detailed and updated analysis of HIV immigration in Portugal, reflecting the changes that have occurred in the last decade and providing valuable insights for future public health policies.

The reflections carried out in the bibliographic research aim to guide the academic dynamics, considering that this work aims to study the dialectical method, making a brief comparison between the researched authors, confronting them with the analyses addressed here, seeking to establish, in a synthetic way, the dialectical method.

#### SCIENTIFIC RESEARCH ON HIV MIGRATIONS IN PORTUGAL

The analysis of HIV migration in Portugal over the last decade reveals significant changes in the epidemiological profile and public health policies. The study of HIV migrations is crucial to understanding the dynamics of transmission and the challenges faced by specific populations, such as immigrants. In this section, we address the main findings and trends of recent scientific research on HIV in Portugal, with a focus on the immigrant population.

In the last ten years, Portugal has seen a reduction in the number of new HIV cases, although the incidence remains high compared to other Western European countries. Data from 2014 indicate a significant decrease in new cases compared to the peak of 2007, when 1941 new cases were registered. In 2014, this number dropped to 1220 new cases (INSA, 2014). According to Pereira et al. (2020), this reduction can be attributed to advances in antiretroviral treatment and effective prevention strategies.

The research by Cardoso and Figueiredo (2021) highlights that, although there has been a drop in the total number of cases, the rate of new diagnoses among immigrants remains high. In 2014, 17% of new HIV cases were diagnosed in immigrant individuals, with a notable prevalence among those from sub-Saharan Africa. This population faces specific challenges, including barriers in accessing health care and stigmatization.

Portugal has implemented several public health policies over the past decade that have influenced HIV management. The decriminalization of drug possession for personal use, as established by Law No. 30/2000 and Decree-Law No. 130-A/2001, brought a more pragmatic and public health-centered approach (PORTUGAL, 2000). This policy has helped to create a more favorable environment for harm reduction and the integration of HIV prevention and treatment measures. According to Silva and Rodrigues (2019), the policies implemented by the Intervention Service on Addictive Behaviors and Dependencies (SICAD) have been fundamental in the management of the epidemic. Interventions include needle exchange programs, integrated response

centers, and social support, which have contributed to reducing HIV transmission and improving access to care for the vulnerable population.

Immigrants face particular challenges in the context of the HIV epidemic, reflecting socioeconomic issues and cultural barriers. Recent studies, such as that of Santos et al. (2021), show that social isolation and precarious living conditions contribute to greater vulnerability to infection. Immigrants often reside in inadequate housing conditions and face difficulties in accessing health services, which can lead to late diagnosis and inadequate treatment. The study by Costa and Almeida (2022) highlights the importance of health policies that consider the cultural specificities and needs of the immigrant population. Targeted health education for immigrant groups and increased access to medical care are key to improving early detection and management of HIV.

Scientific research over the past decade has contributed significantly to the understanding of HIV and the development of new treatment strategies. The advancement of antiretroviral therapies and the implementation of prevention strategies, such as pre-exposure prophylaxis (PrEP), have shown efficacy in reducing HIV transmission (Gonçalves et al., 2023). In addition, studies such as the one by Rodrigues et al. (2023) have explored the effectiveness of specific interventions for immigrant populations, offering new perspectives on how to adapt public health strategies to better serve these communities.

In Portugal, the transition from a tendentially repressive management of drug addiction to a more comprehensive strategy focused on the phenomenon as a public health problem began to take shape at the turn of the millennium, with *Law No. 30/2000* and *Decree-Law No. 130-A/2001* (SACRAMENTO, 2016). With the new legal framework, the acquisition and possession of narcotic drugs and psychotropic drugs for personal consumption was decriminalized, while social protection devices for users began to be outlined, complemented with risk reduction and harm minimization responses provided for in *Decree-Law No. 183/2001*. Maintaining this pragmatic orientation, health intervention in drug addiction is currently organized based on the Intervention Service in Addictive Behaviors and Dependencies (SICAD), of the Ministry of Health (MS). It is this body that regulates and supports the operation of the Integrated Response Centers (CRI) and other multidisciplinary territorial-based responses - many of them linked to civil society organizations with protocols with the State - which constitute the Risk Reduction and Harm Minimization Intervention Network, such as: support offices for drug addicts without a socio-family framework; reception centers; points of contact and information; substitution programs at a low threshold of demand; syringe exchange programs; street teams; programs for supervised consumption (SICAD, 2019).

In 2014, there were 142,197 new HIV diagnoses in Europe, the highest number ever recorded. Of these cases, 77% corresponded to individuals from the eastern region of Europe, where

the number of new annual cases has more than doubled in the last 10 years. In Portugal, on the contrary, the number of new cases has decreased by more than 25% in the last decade (WHO, 2015).

Even so, in 2014, 1220 new cases were reported in Portugal, 17% of which were in immigrants, mainly from sub-Saharan Africa. It is important to note that 31% of the new cases had a CD4+ lymphocyte count of less than 200 cells/uL at the time of diagnosis. This year, in Portugal, there were 249 new cases of AIDS, corresponding about 70% of them to patients diagnosed with HIV infection up to 90 days before (DINIZ, et al, 2015). In other words, although the number of new cases has been reduced, about a third of new patients are identified late. Adding this to the fact that not all patients who are diagnosed are connected to health care, nor have adequate virology suppression under antiretroviral therapy (ART), it is explained why there is still such a high morbidity and mortality associated with this infection (TRIGO, COSTA, 2016).

The social isolation of immigrant populations, often a reflection of the geographical areas of residence and stigmatization and discrimination regarding their socioeconomic condition or ethnic origin, conditions their integration into the host society. Such isolation keeps populations segregated into groups, which can contribute to the maintenance or worsening of social inequalities and risk factors in the area of sexual and reproductive health. If we intend to reduce health inequities, as well as risk factors and conditions, it is necessary to intervene in social determinants, especially with the creation of more positive reception conditions (ROCHA, DIAS, GAMA, 2010). Another frequent situation concerns the living conditions of some immigrants, who are living alone in the country. In order to send as much money as possible to family members who stayed in their country of origin, they spend the minimum on their needs, in a huge effort to save money, which translates into poor food. Because there is also no quality accommodation at affordable prices, they are subject to living in overcrowded pension rooms, in promiscuous and unhygienic conditions, favoring the appearance of diseases (MM, 2019).

These are, as a rule, the first place in the "residential route" of immigrants, since, at first, they are only looking for a home for temporary use: a pension room, accommodation belonging to the employers or rented in common with relatives, compatriots or co-workers. They only seek more decent housing when family reunification is carried out, in a well-established sequence of priorities: more privacy, more space, a better state of habitability and a better location (FONSECA, 2005).

### FINAL CONSIDERATIONS

It is concluded that it is important to understand that health gains depend on adequate social policies, solving the majority, such as the implementation of measures that promote social inclusion. Thus, special attention should be given to health education actions, aimed at prevention, in order to

change attitudes and risk behaviors, promoting healthy lifestyle habits, with a special focus on the younger population.

The analysis of HIV migrations in Portugal over the last decade reveals a complex and multifaceted picture, reflecting both the advances and the persistent challenges in managing the epidemic. This study showed that, despite the significant reduction in the number of new HIV cases, the situation remains worrying, especially among immigrant populations, which continue to be disproportionately affected. One of the main advances in the last decade has been the implementation of more integrated public health policies focused on harm reduction. The decriminalization of drug possession for personal use and the expansion of prevention and treatment programs have contributed to an overall decrease in the rate of new HIV cases in Portugal. These efforts are supported by recent data showing a reduction of more than 25% in new diagnoses since 2010. Despite these advances, the data show that the rate of new cases remains high among immigrants, especially those from sub-Saharan Africa. This group faces significant barriers in accessing health care and often experiences late diagnosis, reflecting inequalities in the health system and difficulties in social integration. Studies indicate that 31% of new cases diagnosed in 2014 had CD4+ lymphocyte counts below 200 cells/µL, which underlines the urgent need for more effective strategies for early detection and intervention.

Public health policies must be tailored to specifically address the needs of the immigrant population. The cultural training of health professionals and the implementation of targeted programs are essential to overcome access barriers and promote greater equity in health. Promoting educational programs that address HIV prevention and consider the cultural specificities of immigrants can be an effective strategy to reduce the incidence among these groups.

This study suggests that future research should focus on analyzing the social and economic conditions that influence HIV vulnerability among immigrants. Further research on the effectiveness of adaptive interventions and longitudinal analysis of public health policy impacts is needed to better inform prevention and treatment strategies.

In conclusion, although Portugal has made progress in reducing the overall incidence of HIV, the persistence of high rates among the immigrant population highlights the need for a more inclusive and culturally sensitive approach. Public health policies must continue to evolve to address the specific challenges faced by these communities, ensuring that interventions are effective and equitable. The integration of strategies that consider social and cultural barriers is key to achieving a more significant and sustainable reduction in HIV transmission.

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