

# Pre-exposure prophylaxis (prep) to acquired human immunodeficiency virus (HIV) among men who have sex with men (MSM): contributions of modern nursing to the elderly population

## Abstract

**Goal:** expose and analyze the knowledge of the elderly about Pre-Exposure Prophylaxis to HIV.

**Method:** This is a bibliographical review article carried out through an electronic search in two online databases: Scientific Electronic Library Online (Sistema Scielo) and Lilacs. For this, the following Health Sciences Descriptors were used (DeCS): Pre-Exposure Prophylaxis AND HIV AND Health of the Elderly AND Nursing.

**Results and discussion:** In these bases, 10 articles were found and none responded to the objectives. The analysis showed that it is necessary for the elderly to know about pre-exposure prophylaxis to HIV, as this age group is also part of a key population vulnerable to infection. The analysis showed that in the next 20 years, Brazil will be the sixth largest population of elderly people in the world, it is important to emphasize that with the passage of time the number of people infected by the AIDS virus has only been increasing and in this it has shown a new facet of the epidemic in the age group. age 59 years of age or older.

**Conclusion:** It was observed that there is a need to create preventive and normative resources regarding the use of PreP in the elderly, as well as therapy, adherence, availability and purpose of the medication, in order to involve these individuals in the knowledge process.

**Keywords:** pre exposure prophylaxis, HIV, health of the elderly, nursing

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## Introduction

The Acquired Immunodeficiency Syndrome - AIDS, was identified in the 80s, as a disease that attacks the immune system due to the destruction of white blood cells (CD4+ T lymphocytes). It is known that the lack of these lymphocytes decreases the body's ability to defend itself against opportunistic diseases caused by microorganisms. In view of this, AIDS is considered one of the biggest problems of today due to its epidemic character, whose form of occurrence occurs in different regions of the world.<sup>1</sup>

Over the years, the number of people infected with the AIDS virus has increased. By analyzing national epidemiological data, in Brazil, until June 2022 since the first record of the disease in the national territory, 1,088,536 new cases of AIDS were diagnosed. The numbers have increased in both sexes, specifically in the age group of 59 years or older, which may be an indication of a new characteristic of the epidemic.<sup>1</sup>

According to data from the Diseases and Notifications Information System - SINAN, in Brazil the AIDS detection rate in the elderly was 32.4% for men and 17.7% for women in 2017. the incidence of AIDS in the elderly, men and women, is very present, thus demonstrating that they are not preventing themselves against STDs/AIDS. This fact happens as a result of advances in the pharmaceutical industry and medicine, which allow for the extension of an active sex life,

in association with the demystification of sex, which makes elderly people vulnerable to STDs, especially HIV/AIDS.<sup>2-4</sup>

From this perspective, Pre-Exposure Prophylaxis (PrEP) to the Acquired Immunodeficiency Virus is a new method of preventing HIV infection offered by the Ministry of Health. It is within this context that the Unified Health System (SUS) offers the "pill", and consists of taking a pill daily that prevents the virus that causes AIDS from infecting the body, before the person has contact with the virus. It works through the combination of two drugs (tenofovir + emtricitabine) that block some "paths" that HIV uses to infect the body, its indication is for people vulnerable to this virus.<sup>2-4</sup>

The National Policy for the Elderly was instituted through Law No. 8842, of 11/04/94, and regulated through Decree No. 1948, of July 3, 1996, with the aim of clarifying the doubts of the elderly population. In this sense, the Statute for the Elderly has been institutionalizing a social policy that values elderly people in Brazil, striving for an improvement in the quality of life.<sup>5</sup>

Questions have been asked about the elderly, they are increasingly the object of interest of researchers in the areas of health, education and social sciences, putting on the agenda questions of interest about the prevention and control of HIV/AIDS.<sup>6</sup>

Some AIDS prevention campaigns for the elderly have been organized in compliance with Article 10 of Chapter IV, which aims to

guarantee health care to the elderly at the different levels of care in the Unified Health System (SUS), in addition to preventing, promoting, protect and recover the health of the elderly in Brazil. In addition to the campaigns, the Ministry of Health has been using as a resource to combat HIV/AIDS in the elderly, the distribution of condoms and lectures on their correct use.<sup>5,6</sup>

These authors believe that STD/HIV/AIDS prevention campaigns aimed at the elderly are worrying, since, despite the profile of enlightened people with access to the means of information, there are still those who are unaware of the existence of campaigns aimed at the elderly.

Amid advances in technology and health, elderly people live a new reality never before experienced in other times. However, people over 60 years of age and with low education, when infected with the HIV virus, are more likely to acquire the effects of immunosuppression more quickly than young people, due to opportunistic diseases that can enter into old age.<sup>7</sup>

Despite the campaigns and media on television, the health professional is of paramount importance in the adoption of educational and preventive measures, for the promotion and prevention of health in the elderly. It is noticed that the nursing professional is working intensively and jointly with the multidisciplinary team in primary care programs, specifically in the family health strategy, being able to disseminate information and educate this population about Pre-Exposure Prophylaxis to HIV/AIDS.<sup>6,7</sup>

Therefore, the guiding question of this research is: What is the knowledge of the Elderly about Pre-Exposure Prophylaxis to HIV/AIDS? **Goal:** expose and analyze the knowledge of the elderly about Pre-Exposure Prophylaxis to HIV. The relevance of this study is due to the increase in longevity observed in stages of Elderly Health. With the sexually active life, with the optimization of medications and better quality of life of this population, we realize that the knowledge, interest and lack of information about Pre-Exposure Prophylaxis to HIV/AIDS makes this age group a group potentially susceptible to sexually transmitted diseases.

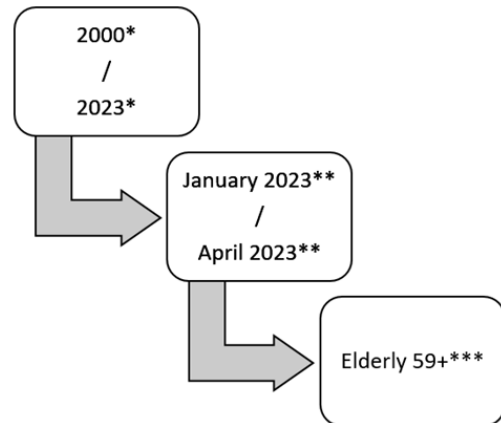
## Method

It refers to a bibliographic review carried out through the methodological path: choice of theme; elaboration of the work plan; identification; location; compilation; filing; analysis and interpretation; and writing. Also define that a bibliographical review is a survey of certain subjects that brought cultural or scientific contributions from the past to new approaches.<sup>8,9</sup>

The electronic search was performed in two online databases: Scientific Electronic Library Online (Sistema Scielo) e Lilacs. For this, the following Health Sciences Descriptors were used (DeCS): Pre-Exposure Prophylaxis AND HIV AND Health of the Elderly AND Nursing. It is important to point out that Lilacs is a main bibliographic index of the Virtual Health Library (BVS), which is a cooperative base of the Scielo system, comprising the literature related to Health Sciences published in the countries of the region.

It contains articles from renowned journals and other documents (theses, books, book chapters, congress or conference proceedings and technical-scientific reports), thus justifying the relevance of this database and its choice for the present study. Since this research focused exclusively on journal articles, textbooks. The articles found were read and selected, covering national and international publications from 2000 to 2023\*.

Data collection was carried out from January 2023\*\* to April 2023\*\*. The age group of elderly people studied was between 59 and 81\*\*\* years of age and elderly vulnerable to HIV infection. After data collection, a category was evidenced that was analyzed based on the theoretical framework and discussion of the selected articles (Figure 1).



**Figure 1** Shows the time period of the findings in the literature, the collection period and the age group of the study population time period of the findings in the literature, the collection period and the age group of the study population.

## Results and discussion

Aging is a universal process that is understood by a reduction in functional activities and has some trends in relation to illnesses that continuously lead to the construction of public policies for the elderly, both internationally and mainly in Brazil. These policies are aimed not only at the elderly but also at health professionals, aiming at their dissemination and implementation.<sup>10</sup>

In this way, an increase in the population contingent of the elderly is verified due to the low birth rate, increased life expectancy, development of new technologies that envisioned treatments that until a few years ago were unthinkable, a perspective and a favorable life prognosis for some diseases.<sup>11</sup>

It can be seen in tangible projections that in the last census in 2000 by the Brazilian Institute of Geography and Statistics, the elderly population increased from 2 million in 1950 to 15.4 million in 2002, an increase of 70%. Projections indicate that, in 2025, Brazil will have the sixth largest elderly population in the world, corresponding to approximately 15% of the Brazilian population, that is, approximately 30 million people.<sup>12</sup>

Indeed, population aging, the result of achievements in the scientific, technological and social spheres, has become a major challenge for public policies and social sectors, generating a major impact on health costs. The National Health Promotion Policy, inscribed in the Pact for Health, ratifies the commitment of the Brazilian Ministry of Health with the expansion and qualification of health promotion actions in the services and management of the Unified Health System (SUS). The Pact for Life, which is contained in the Pact for Health, contains, among its objectives and priority goals, care for the elderly.<sup>12</sup>

As researchers, we believe that health policies regarding the elderly began in the 1980s, during the reformulation process of the Unified Health System (SUS). From that moment on, the expansion to the health of the elderly began, however, in a work organization predominantly centered on individual medical care and directed towards infectious, contagious and chronic-degenerative diseases. In

this scenario, with the advancement of medicine associated with new preventive therapy techniques for infectious diseases, Pre-Exposure Prophylaxis (PrEP) for HIV appears.

This therapy increases optimism about the control of the epidemic globally, characterized by the daily use of the combination of two antiretrovirals (tenofovir associated with emtricitabine - TDF/FTC) before sexual practices, with a degree of protection of 96%. This availability of different preventive methods has greater potential to cover different social groups, allowing preventive choices according to contexts, needs and preferences.<sup>13</sup>

In Brazil, in 2017, guidelines from the Ministry of Health prioritized four segments: gays; transgender people; sex workers; and serodifferent partners, as long as they have had, in the last six months, anal or vaginal intercourse without a condom, episodes of recurrent sexually transmitted infections or repeated use of exposure prophylaxis, it is clear that PrEP is also an alternative for people who are unable or don't want to use the classic methods. The benefits of PrEP may be greater depending on the contextual aspects, the circumstances surrounding sexual practices and the concrete possibilities of adopting preventive strategies. It should also be noted that situations of exposure to HIV are transient throughout life, defining moments when Pre-Exposure Prophylaxis is necessary and others when not, depending on the individual's practice.<sup>13</sup>

This requires continuous assessments by health professionals in order to appropriately provide opportunities or propose the suspension of PrEP use, which inserts user care into a dynamic and continuous process that must be based, primarily, on dialogue about adequacy to needs of self-care that this preventive method offers in the context of the individual's sexual practices.<sup>13</sup>

It should be noted that it is important to draw attention to the fact that, regardless of the possibility of transience in individual practices, a portion of the population may present a frequency of potential exposure that does not motivate the individual to want prolonged use or even justify it. fully continue prescribing PrEP. In these cases, it is necessary to discuss the possibility of consistent use of other preventive methods.

Adherence is crucial to the effectiveness of PrEP. The frequency of tenofovir/entrecitabine use at least four days a week has been higher in real life than in clinical efficacy studies, likely because users choose this method and know it is proven to be effective. Therefore, special attention is paid to adherence, both in the sense of developing strategies to increase the bond with the services, and to identify individuals who are more vulnerable to non-adherence and support them in the daily use of the medication.<sup>14</sup>

The organization of services, the type of preventive approach carried out by training professionals is essential to expand access and promote the retention of PrEP users. In this regard, the predominance of the normative and prescriptive nature of preventive actions in services, with technical approaches that do not allow apprehending the contextual and practical dimensions that characterize the way individuals live their relationships, their sexuality and health care is a challenge to be faced in the implementation of this therapy.<sup>13,14</sup>

It is noticed that in the case of PrEP, the choice and adherence to the method may be associated with objective aspects, such as those related to the safety of the method and availability for periodic visits to the service, but can also be permeated by subjectivity, such as the expectation to reduce the fear of becoming infected and the willingness to deal with possible adverse effects and the stigma associated with antiretroviral drugs.

It is noted that although pre-exposure prophylaxis serves a group of people vulnerable to HIV, its adherence rate is still high, which reinforces the need for complementary health measures in the health of the elderly in order to propagate and clarify all doubts relevant to this therapy in promotion and prevention campaigns.

We cannot rule out that the attitude of health professionals directly influences the choice of pre-exposure prophylaxis, facilitating or hindering access, that the groups with the greatest potential to use it do not usually attend health services and that they attend them irregularly, even when they are linked.

Technical rationality, referring to the instrumental sense of action based on knowledge and scientific artifacts, is indispensable to action in health for the elderly. However, the symbolic, relational and material implications of health care must also be considered in it, instead of treating them as something external to the technicality of the action, thus allowing the understanding of the meanings that prevention methods assume in the daily lives of individuals.

## Conclusion

In the study, it is observed that it is necessary for the elderly to know about pre-exposure prophylaxis to HIV, as this age group also fits into a vulnerable risk group for infection. It is important to emphasize that knowledge of this prophylaxis does not rule out the use of other means of prevention, for example, the condom that prevents other sexually transmitted infections, PrEP must be used as a technology in combination.

Therefore, there is a need to create preventive and normative resources regarding the use of PrEP in the elderly, as well as therapy, adherence, availability and purpose of the medication, in order to involve these individuals in the process of knowledge about preventive technology in a combined way.

It is hoped that this research draws attention to the need for adequate training of professionals in the health area, especially nurses, who deal directly with this population segment, who can carry out actions to develop preventive behaviors, understanding the elderly as being sexually active. in the entirety of your sphere as a complete human being.

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## Conflicts of interest

The author declares that they have no direct or indirect conflicts.

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