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HIV health education practices for vulnerable populations in Brazil: integrative review

Práticas de educação em saúde sobre HIV para populações vulneráveis no Brasil: revisão integrativa

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ABSTRACT
Health education is a learning process that aims to make people aware of the importance of health promotion and disease prevention. Health education practices about human immunodeficiency virus (HIV) infection in vulnerable populations in Brazil have been implemented with challenges. This study aims to present scientific productions about health education practices on HIV in vulnerable populations in Brazil. It is an integrative literature review in BVS, Scielo, and Pubmed electronic databases. Two articles were selected through the inclusion, exclusion, and eligibility criteria. Both were published in 2018 and showed quantitative interventional research with 55 older adults in Sobral, Ceará, and an integrative literature review between 2000 and 2014. It was evidenced that there is a scarcity of variety and innovation in health educational practices and in conducting studies focused on vulnerable populations in Brazil..

Keywords: Health education. HIV prevention. Vulnerable populations.

RESUMO
Educação em saúde é um processo que visa o reconhecimento da importância da promoção da saúde e da prevenção de doenças. As práticas de educação em saúde sobre a infecção pelo vírus da imunodeficiência humana (HIV) com populações vulneráveis, no Brasil, têm sido implementadas frente a desafios. Este estudo objetiva apresentar produções científicas acerca das práticas de educação em saúde sobre HIV para populações vulneráveis brasileiras. Trata-se de uma revisão integrativa da literatura nas bases eletrônicas BVS, Scielo e Pubmed. Por meio dos critérios de inclusão, exclusão e elegibilidade, selecionou-se dois artigos para discussão. Ambos publicados em 2018, apresentam uma pesquisa quantitativa intervencionista com 55 idosos na cidade de Sobral, Ceará, e uma revisão integrativa da literatura entre os anos de 2000 e 2014. Evidenciou-se que existe escassez de variedade e inovação tanto nas práticas educativas em saúde, como na realização de estudos voltados para as populações vulneráveis do Brasil.

Palavras-chave: Educação em saúde. Prevenção do HIV. Populações vulneráveis.

INTRODUCTION

Populations considered vulnerable face difficulties and social limitations that interfere with their health conditions, access to essential services, contemplation of rights, and acquisition of material resources[1]. In the Brazilian case, homeless people, black people, indigenous people, LGBTQIA+, people deprived of liberty, older adults, pregnant women in situations of poverty, and others can be mentioned as examples. In this context, according to Oswaldo Cruz Fundation[2], health education actions aimed at the most vulnerable groups contribute significantly to the protection and promotion of health since, in most cases, such subjects experience possibilities of reduced access to other socio-educational resources and other rights.

The World Health Organization (WHO)[3] defines health education as any combination of information and educational activities that empower individuals and communities to improve their health indices, prevent diseases, and develop behaviors and healthier lifestyles. To this end, educational practices must be part of continuous processes and integrated into international and national health policies and programs, involving the active participation of communities and aiming to promote health at all levels, from the individual to the collective.

Falkenberg et al.[4], in line with the precepts of the Ministry of Health, highlight that health education must be understood as a broad and holistic dynamic, which includes not only information on disease prevention but also approaches that consider cultural, social and environmental factors that influence the health of people living in different contexts and conditions. From this perspective, the authors reinforce that the field is not limited to transmitting information about diseases and health but comprehensively aims to promote subjects' autonomy based on skills and competencies for health promotion, problem-solving, and decision-making through critical and transformative thinking. Health education, therefore, when aiming at people's autonomy, based on reflections on their health demands and rights, also operates as a device that strengthens democratic principles, as it aims to allow diverse communities to participate in decisions related to public health policies[5].

Considering the context of infectious diseases, the human immunodeficiency virus (HIV) disproportionately affects vulnerable populations around the world, mainly due to the fragility of knowledge about its dynamics and the living conditions of these people[6]. In Brazil, given this reality, both HIV infection and AIDS became part of the National List of Compulsory Notification of Diseases (Ordinance nº 542, of December 22, 1986). The rule has been valid for AIDS since 1986, for HIV infection in pregnant, parturient, or postpartum women and children exposed to the risk of vertical transmission of HIV since 2000 (Ordinance No. 993, of September 4, 2000), and for HIV infection in any person, since 2014 (Ordinance No. 1,271, of June 6, 2014)[7-8-9].

Given this, it is essential to highlight that, from 1980 until June 2022, 1,088,536 cases of AIDS were detected in the country, with the detection rate decreasing from 26.5 to 16.5 cases/100 thousand inhabitants in 2021[10]. Between 2011 and 2021, a total of 52,513 young people with HIV, aged 15 to 24, of both sexes developed AIDS, showing the importance of paying attention to the development of the disease in this age group and the need to make efforts to link to health services and adherence to antiretroviral therapy (ART). AIDS cases in children under five years of age have remained stable over the last two years, currently standing at 1.2 cases/100,000 children under five years of age. In the period from 2000 to June 2022, 149,591 HIV-infected pregnant/parturient/postpartum women were reported, with a detection rate of 3.0 pregnant women/thousand live births. Also, in 2021, there are records of 11,238 deaths due to the primary cause "of AIDS," with a mortality rate of 4.2 deaths/per

100 thousand inhabitants. Access to antiretroviral treatment has contributed to reducing mortality. The mortality rate decreased by 26.4% between 2014 and 2021[10].

Based on these data, health education practices on HIV and AIDS have been considered and indicated by various actors and institutions - non-governmental organizations, state agencies, health professionals, and community groups - as fundamental tools for the improvement of the living conditions of thousands of people. Investment in educational practices aimed at preventing HIV infections and increasing the quality of life of HIV-positive people helps to reduce infections while promoting the strengthening and social inclusion of people living with the virus[11].

It is observed, however, that the most significant number of educational actions on HIV and AIDS are based primarily on public awareness campaigns through social media, television, radio, posters, and other means of communication, followed by interventions in specific groups, training of health professionals and testing and counseling programs, including the provision of preventive medicines. In this sense, it can be thought that there is a mix between what is understood as health education[4] – a vertical model of "transmission" of information – and what is proposed as health education practices, which aim to contemplate different ways of life towards increasing quality of life in different situations[5]. However, there are still many challenges to ensure that vulnerable populations, the majority of them, have adequate and meaningful health education dynamics about HIV and AIDS.

Internationally, HIV health education practices for vulnerable populations vary depending on the social, cultural, economic, and political context of each country. Since 2012, in the United States of America, they have focused on offering preventive medicines, especially the so-called Pre-Exposure Prophylaxis (PrEP). Other countries followed this practice until it was introduced in Brazil in 2017. Kerr et al.[12] showed in their study that in the USA, young African-American adults can significantly benefit from approaches that are culturally adapted and informed by the community (print, digital, radio, website, social media). The use of PrEP for HIV prevention can reduce racial/ethnic disparities in HIV in the US. However, the benefits of PrEP have not been equally distributed in an educational and informative manner across races.

Based on this, this study aims to understand how health education practices about HIV are happening - and ultimately being recorded - among vulnerable populations in Brazil, based on scientific publications from the last five years. To this end, an integrative literature review was developed using electronic databases, the methodological procedures described in the next section. The results, discussion, and, finally, the study's conclusion are presented.

METHODOLOGY

Integrative review study[13-14], whose search was carried out in the electronic databases Biblioteca Virtual em Saúde (BVS), Scielo, and Pubmed, in the first half of 2023. The research question used for the bibliographic survey was: "How are the health education practices about HIV among vulnerable populations in Brazil?" For this, the following descriptors and their combinations in Portuguese and English were used: "educational practices," "HIV prevention," and "vulnerable populations."

The inclusion criteria for selecting articles were the following: articles that portray the theme in Brazil; articles published in Portuguese and English; full articles that portray the theme of health education practice about HIV among vulnerable populations; articles published and indexed in the databases above in the last five years (2018-2022). Thus, the exclusion criteria

considered were dissertations, theses, books, book chapters, conference proceedings, technical and scientific reports, ministerial documents, and duplicate articles. In addition, articles whose themes do not apply to the research problem and articles carried out in other countries were excluded.

After carrying out the search filter in the databases above, one hundred eighty-nine publications were found using the inclusion criteria. From a prior reading of the titles and abstracts, 187 publications that did not correspond to the proposed criteria were excluded, totaling two articles in the final sample. (FIGURE 1)

A simplified data collection instrument consisting of the following variables was used to tabulate scientific articles: article title, journal title, authors, language, year of publication, host institution of the study, type of publication, objective or issue of investigation, study population, and results[15].

Content analysis and interpretation of results were carried out, relating them to available and updated literature. Ethical precepts were maintained, respecting copyright by citing the authors.

RESULTS

One hundred seventy articles were found in the Pubmed database, 7 in Scielo and 12 in the BVS, totaling 189 initial articles. When the exclusion and duplication criteria were analyzed, seven references remained and were studied. However, only two articles were eligible (FIGURE 1) for the discussion.

The two articles selected, based on the established methodology (Chart 1), report studies carried out in Brazil and published in Portuguese. The year of publication of both is 2018. Regarding the types of studies, Bastos et al.[16] carried out quantitative interventionist research with 55 older adults in the city of Sobral, Ceará. In contrast, Lima et al.[17] carried out an integrative review of the literature on educational technologies and practices related to vertical transmission of HIV between 2000 and 2014.

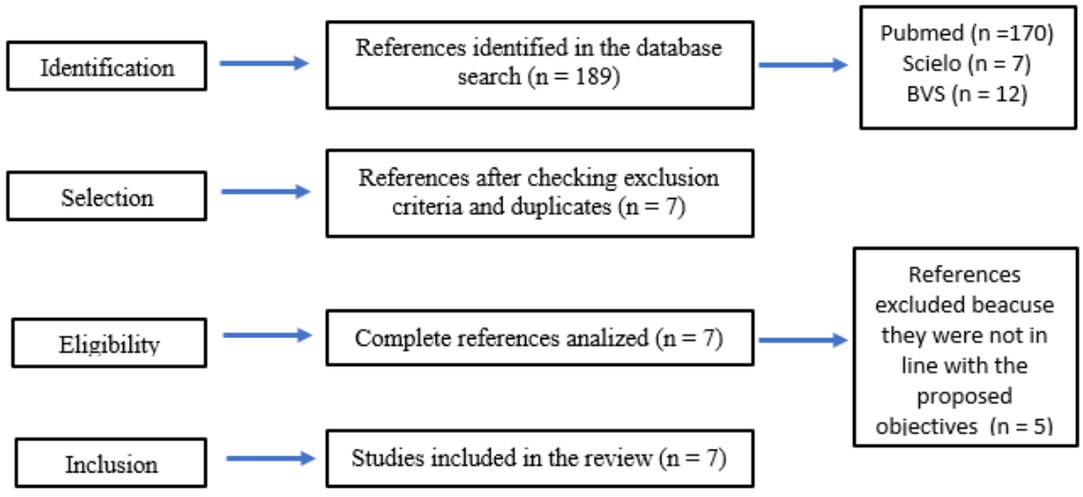

Figure 1. Article selection flowchart.
Source: repared by the authors..

Chart 1. Articles selected for the Integrative Review

Article Title	Periodical title	Authors	Study Population	Study Type
Assessment of the level of knowledge regarding AIDS and syphilis among elderly people in the interior of Ceará, Brazil.	Ciência e Saúde Coletiva	Bastos et al.	55 older adults	Quantitative interventionist
Educational technologies and practices to prevent HIV vertical transmission.	Revista Brasileira de Enfermagem	Lima et al.	-	Integrative literature review

Source: prepared by the authors.

DISCUSSION

Health education practices about HIV, aimed at vulnerable populations in Brazil, are considered fundamental strategies to prevent transmission and infection of the virus, as well as improving the quality of life of HIV-positive people. Here, health promotion emerges as a fundamental pillar of these educational practices, not limited to disseminating information about prevention but seeking to empower subjects. Guedes and Souza[18] state that educational actions, in this context, must promote critical positions, which means expanding strategies so that actions do not become dynamics of transmission and capture of information. As the authors state, such practices should be considered opportunities to build knowledge based on popular and scientific knowledge.

In this sense, it is highlighted that educational practices in the health field must consistently articulate knowledge from health and education to provide opportunities for dialogued, innovative dynamics that strengthen the democratization of information, knowledge, and different cultures[19]. Therefore, these practices must be adapted to the specific needs of vulnerable populations, considering cultural, socioeconomic, and access to health services factors.

Based on this, it is noted that the article by Lima et al.[17] addresses the importance of using educational technologies to prevent vertical transmission of HIV. Vertical transmission occurs when a pregnant woman living with HIV transmits the disease to her fetus during pregnancy, childbirth, or breastfeeding. This transmission type can be avoided by using antiretroviral medications, adequate medical monitoring, and adopting preventive practices. The article provides an integrative review of studies investigating educational technologies, such as educational videos, interactive games, and other digital media, to prevent vertical transmission of HIV. The authors emphasize that these technologies have proven effective in promoting adherence to preventive practices, especially among pregnant and postpartum women. Furthermore, the article also highlights the importance of training health professionals to use technologies and the need to adapt educational materials to different cultural and social contexts. Barreto et al.[20] carried out a study in 2020 with high school students between 15 and 19 years old to understand the nuances surrounding the target audience's vulnerability to HIV infection. From the activities carried out with schoolchildren, it was possible to see little knowledge about the vertical transmission of HIV among adolescents, including inadequate guidance provided.

In health education practices, technology must favor the subject's participation in the educational process, contributing to the construction of citizenship and increasing the autonomy of those involved. Therefore, the types of technologies that professionals can make use of in the health field are hard technologies, when using instruments, standards, and technological equipment; soft-hard technology, when using structured knowledge (theories, care models,

work process); and light technologies, through which it is seen that the implementation of care requires the establishment of relationships (bond, service management, and reception)[21].

Given this, it is observed that, by the principles of health education, the use of hard technologies, as indicated in the study discussed[18], becomes relevant to be articulated with dialogical practices and necessary adaptations according to the profiles of the groups covered. In this direction, the centrality of so-called soft-hard and soft technologies emerges to make the information shared between vulnerable populations and health professionals meaningful, transforming it into valuable and applicable knowledge. It is also worth highlighting that these dynamics are not limited to the construction of knowledge by users but also operate in the expansion of technical knowledge that is dear to professionals and can help in different situations.

The article by Bastos et al.[16] presents quantitative and interventionist research, which addressed the knowledge of older adults about HIV before and after carrying out educational actions. In the municipality of Sobral, Ceará, 55 people over 60 years of age, of both sexes, were recruited and responded to an adapted questionnaire on HIV for seniors (QHIV3)[16] before and immediately after educational workshops. The workshops were held weekly by PET-Saúde monitors and academics from Medicine, Dentistry, and Psychology courses who acted as facilitators. Playful and didactic resources were used, such as slides and illustrative plates made by the monitors and illustrative notebooks on AIDS and syphilis, made available by the Ministry of Health. In the workshops, issues related to the participants' knowledge about forms of transmission, group risk, prevention, and treatment of AIDS and syphilis. Participants' doubts that arose throughout the activity were also clarified.

From the study, it was identified that about HIV prevention, 61.8% of older adults said they knew how to protect themselves. Of this total, before the educational action, 90.24% indicated condoms as a means of prevention, while 60.97% referred to the use of vaccines. After the educational intervention, 100% indicated only the use of condoms as a means of prevention, demonstrating, despite the limitations of the study, that holding educational workshops can be an effective intervention for the assimilation of knowledge by the longevity community[15].

The increase in life expectancy and quality of life, as well as advances in medicine, the pharmaceutical industry, and the availability of medicines that allow the prolongation of sexual life, have caused changes in the sexual behavior of senior citizens, making this age group more vulnerable to sexually transmitted infections[22]. Among the associated factors, resistance to the use of condoms and the older generation's lack of knowledge about safe sex practices stand out. Furthermore, HIV preventive campaigns are usually aimed at younger audiences[23].

Given this, it can be seen that discussions associated with HIV with vulnerable populations, when conducted through different focuses, taking into account the experiences, knowledge, and demands of different audiences, are capable of achieving better results in comparison to mass information movements, given that, in the case of the older individuals, preventive campaigns do not reach them due to the age group that involves them, primarily. In this sense, the importance of dialogued and innovative dynamics that consider different realities of life is reinforced[24].

Concerning the diversity of profiles of populations considered vulnerable in Brazil, a lack of studies and initiatives on the subject of educational practices related to HIV can be observed, especially in the last five years. This situation indicates the need for more significant incursions into the field to strengthen a set of actions that are considered fundamental based on public policies and epidemiological studies. Furthermore, it is essential to highlight that health

education practices developed with vulnerable populations tend to invest heavily in prevention movements, often leaving aside the perspective of quality of life and strengthening of people living with HIV. This situation can be observed based on the arguments of the studies presented, as both deal with prevention practices rather than reflections and strategies involving HIV-positive people.

In this sense, Rodriguez et al.[11] argue that, in the context of health education, it is essential to cover knowledge about HIV and AIDS that enhances the lifestyles of people living with the virus. It is noteworthy, from this, that given the diversity of realities that can emerge from dialogues between professionals and subjects who live under different possibilities of vulnerable situations, prevention practices need to be revised to guarantee positive health indices. Seropositivity must also be seen as a condition that requires care, attention, and educational investments. Furthermore, some demands emerge from these people's emotional and social circles, which need to be addressed.

In addition to the theoretical reflections and insights offered by the reviewed studies, it is crucial to consider the practical implications of these findings for implementing public health programs and policies. Developing specific educational programs adapted to the characteristics of different populations to ensure an adequate understanding of HIV/AIDS and promote effective prevention practices is essential. Furthermore, it is crucial to train health professionals, especially in the use of educational technologies and in addressing sensitive issues related to HIV/AIDS. Integrating innovative technologies into health programs, such as educational videos and interactive games, can increase engagement and adherence to preventive practices. Establishing continuous monitoring and evaluation mechanisms is essential to ensure the effectiveness and sustainability of programs over time. Finally, active community involvement is essential to the success of public health programs, allowing members to actively participate in planning, implementing, and evaluating health interventions.

CONCLUSION

Although the investigation contains only two studies on health education practices about HIV among vulnerable populations in Brazil, it can be concluded, taking into account the supporting references, that they are fundamental for the control of HIV-related infections and to increase the quality of life of HIV-positive people in these groups. In this sense, the need for more studies that more closely address the context of the different populations in vulnerable situations in a country like Brazil is highlighted. The urgency for more research in this area is notable, mainly focusing on the most vulnerable populations, such as homeless people, sex workers, and the LGBTQIA+ population, for example.

The studies also demonstrate the need for more practices used, even today, in health education for these populations. They are limited to lectures, distribution of educational materials, and expository activities. These practices can effectively promote awareness and the adoption of safer behaviors, but more innovation is needed in such different social contexts.

Furthermore, there is an emerging need to develop more effective actions, especially about approaches considering people already living with the virus. From the supporting theoretical framework to the selected studies, the vast majority are concerned with disease prevention rather than health promotion. Furthermore, health education actions must be built in partnership with populations, respecting their cultures and specific needs, to make them more effective and capable of reaching as many people as possible.

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