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EDUCATIONAL TECHNOLOGIES ON PROPHYLAXIS HIV PRE-EXPOSURE FOR USERS AND HEALTH PROFESSIONALS: SCOPE REVIEW PROTOCOL

TECNOLOGÍAS EDUCATIVAS SOBRE LA PROFILAXIS PREEXPOSICIÓN AL VIH PARA USUARIOS Y PROFESIONALES DE LA SALUD: PROTOCOLO DE REVISIÓN DE ALCANCE

TECNOLOGIAS EDUCACIONAIS SOBRE A PROFILAXIA PRÉ-EXPOSIÇÃO AO HIV PARA USUÁRIOS E PROFISSIONAIS DA SAÚDE: PROTOCOLO DE REVISÃO DE ESCOPO

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Submissão: 24-11-2024
Aprovado: 05-05-2025

ABSTRACT
Objective: To map educational technologies on HIV Pre-Exposure Prophylaxis aimed at users and health professionals. **Method:** scope review protocol according to the Joanna Briggs Institute methodology, guided by the manual for Evidence Synthesis and presented according to the Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews. The search will be carried out in the search engines in the databases MEDLINE/PubMed, SCOPUS and EMBASE/Elsevier, LILACS, IBECS, BDENF (BVS), Scielo, Core Collection (Clarivate Analytics), CINAHL, Academic Search Premier (EBSCO) and in the academic search engines: Google Scholar and World Wide Science, the Portuguese, Spanish and English languages will be considered the time frame of studies from 2013, theoretical framework defined from the WHO regulations. Studies with nurses, doctors and pharmacists will be included, as well as with users of post-exposure prophylaxis, whose object of study is the educational technologies aimed at these users and health professionals, carried out in any health service or from them. **Conclusion**: the mapping of the available evidence about ET for professionals and users of existing PrEP will contribute to the dissemination of available evidence about the theme.
Keywords: Pre-Exposure Prophylaxis; HIV; Health Personnel; Educational Technology.

RESUMEN
Objetivo: mapear tecnologías educativas sobre la profilaxis previa a la exposición al VIH dirigidas a usuarios y profesionales de la salud. **Método:** protocolo de revisión de alcance según la metodología del Instituto Joanna Briggs, guiado por el Manual de Síntesis de Evidencia y presentado de acuerdo con los Elementos de Informes Preferidos para revisiones sistemáticas y la extensión de Metaanálisis para Revisiones de Alcance. La búsqueda se realizará en los buscadores en las bases de datos MEDLINE/PubMed, SCOPUS y EMBASE/Elsevier, LILACS, IBECS, BDENF (BVS), Scielo, Core Collection (Clarivate Analytics), CINAHL, Academic Search Premier (EBSCO) y en los buscadores académicos: Google Scholar y World Wide Science, se considerarán los idiomas portugués, español e inglés el recorte temporal de estudios a partir de 2013, marco teórico definido a partir de las normativas de la OMS. Se incluirán estudios con enfermeros, médicos y farmacéuticos, así como con usuarios de la profilaxis posterior a la exposición, cuyo objeto de estudio son las tecnologías educativas dirigidas a estos usuarios y profesionales de la salud, realizadas en cualquier servicio de salud o desde ellos. **Conclusión:** el mapeo de la evidencia disponible sobre las TE para los profesionales y usuarios de la PrEP existente contribuirá a la difusión de la evidencia disponible sobre el tema.
Palabras clave: Profilaxis Pre-Exposición; HIV; Personal de Salud; Tecnología Educacional.

RESUMO
Objetivo: mapear as tecnologias educacionais sobre a Profilaxia Pré-Exposição ao HIV direcionadas a usuários e profissionais da saúde. **Método**: protocolo de revisão de escopo conforme a metodologia Joanna Briggs Institute, orientado pelo manual for Evidence Synthesis e apresentado segundo o Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews. A busca será realizada nos buscadores nas bases de dados MEDLINE/PubMed, SCOPUS e EMBASE/Elsevier, LILACS, IBECS, BDENF (BVS), Scielo, Core Collection (Clarivate Analytics), CINAHL, Academic Search Premier (EBSCO) e nos buscadores acadêmicos: Google Scholar e World Wide Science, serão considerados os idiomas português, espanhol e inglês o recorte temporal de estudos a partir do 2013, marco teórico definido a partir das normativas da OMS. Serão incluídos estudos com enfermeiros, médicos e farmacêuticos, bem como com usuários da profilaxia pós-exposição, cujo objeto de estudo sejam as tecnologias educacionais voltadas para esses usuários e profissionais da saúde, realizadas em qualquer serviço de saúde ou a partir deles. **Conclusão**: o mapeamento da evidência disponível acerca das TE para profissionais e usuários da PrEP existente irá contribuir para a disseminação de evidências disponíveis acerca da temática.
Palavras-chave: Profilaxia Pré-Exposição; HIV; Profissional de Saúde; Tecnologia Educacional.

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INTRODUCTION

Since the emergence of Acquired Immunodeficiency Syndrome (AIDS) in 1981, millions of people have been infected with the Human Immunodeficiency Virus (HIV) worldwide, totaling approximately 1.3 million cases[1]. Given this scenario, it is essential to plan, develop and implement prevention actions that are effective, safe and accessible to the entire population, in order to minimize the impacts caused by HIV. Furthermore, it is important to highlight that any sexually active adult or adolescent is at greater risk of contracting the virus, regardless of social class, cultural aspects or gender[2].

In this context, Pre-Exposure Prophylaxis (PrEP) emerged, which consists of the use of antiretrovirals (ARV), specifically the combination of tenofovir (TDF) with emtricitabine (FTC), with the aim of reducing the risk of HIV infection[2]. PrEP can be administered in two ways: daily or on-demand. The daily regimen is independent of the frequency of exposure to risk and should be maintained continuously. The on-demand, or event-driven, regimen is linked to sexual activity, followed by a daily dose for up to two days after the last sexual exposure[3].

PrEP has stood out as a highly effective biomedical technology that, combined with behavioral and structural approaches, is part of the most effective combined prevention strategies against HIV. Recommended by the Ministry of Health (MS), this tool has demonstrated great potential to strengthen the prevention of HIV infection, by expanding the possibilities of both individual and collective responses to the various situations of vulnerability to risk experienced by different populations[4].

When analyzing the indicators related to PrEP, it is noted that this prevention strategy has been widely disseminated, with approximately 845 thousand people in at least 54 countries using prophylaxis in 2020, an increase of 43% compared to 2019 and 18% compared to 2018[5]. However, despite the expansion of use, significant obstacles to its availability and adherence persist. A worrying fact is that only 28% of the people who used PrEP in 2020 did so for the specific purpose. This scenario is alarming, considering that the target for that year predicted that three million people in low- and middle-income countries would be using PrEP. This number represents only 8% of the new global target set for 2025[5].

When analyzing prophylaxis indicators in Brazil, it can be seen that, between 2018 and 2022, in the first five years of the PrEP policy in the country, 452,100 medication dispensings were carried out for 78,434 users, in 645 dispensing services across the 27 Brazilian states. This panorama reveals a gradual increase in the number of people starting PrEP since its implementation. However, a sharp drop in dispensings stands out in 2020, especially between the months of April and May, a direct reflection of the beginning of the COVID-19 pandemic[6]. Fortunately, starting in 2021, with the expansion of the supply of PrEP to private

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practices and the authorization for nurses and pharmacists to prescribe it, the number of users began to grow again, reaching 3,627 new beginners in August 2022 alone[6]. When analyzing the profile of people with access to PrEP, a significant change in patterns can be seen over time. Initially, prophylaxis was recommended exclusively for gay men and other men who have sex with men, trans people and sex workers. However, this direction was questioned, since a large part of the population at risk of HIV infection does not fall into these groups and, therefore, was not covered by the strategy. After intense debates and studies, it was concluded that there should not be a pre-determined profile for the indication of PrEP, but rather an assessment of exposure to the virus, which is defined by sexual practices, types of partnerships or specific contexts that increase the risk. Thus, PrEP began to be indicated for all sexually active adults and adolescents with an increased risk of HIV infection, over the age of 15 and weighing more than 35 kilos[2].

In light of these advances, a North American study compiled the scientific literature and identified PrEP as the most effective prevention strategy against HIV[7]. Furthermore, as previously mentioned, it is reaffirmed that PrEP is an effective, evidence-based tool with the potential to significantly transform the scenario of the HIV epidemic at a national and global level[8]. However, even with such promising results, adherence to the medication is still limited, covering only a fraction of the population that could benefit from PrEP. Furthermore, it is observed that the profile of current users is associated with people with a higher level of education, high monthly income and white skin color, revealing a possible elitization of access to PrEP[9].

Another obstacle identified to the use of PrEP is stigma, a point that deserves special attention, as it constitutes a critical factor for adherence to the medication. This stigma is directly related to the lack of interest, low acceptance and discontinuation of PrEP use by users. In the context of PrEP, stigma manifests itself as an expression of social power, whereby people who use PrEP are still commonly associated with negative stereotypes, prejudiced beliefs about its users, discrimination, promiscuity and even HIV infection itself[9].

Based on the available literature, it is possible to identify that the services responsible for offering PrEP also represent a significant challenge for its implementation, adherence and expansion of interest in the use of the medication. This is because, for the most part, these services are located in specialized centers and concentrated in certain territories, which limits access for a significant portion of the population[10]. In view of this, it has become essential to formulate strategies that promote greater accessibility to PrEP, such as the development of platforms that help users locate distribution points, as well as the training of health professionals regarding the care necessary to monitor the use of the medication[11].

In this context, the importance of involving Primary Health Care (PHC)

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professionals is highlighted, especially considering that, according to the most recent regulations of the Ministry of Health, PrEP prescriptions can be performed by duly qualified nurses, doctors and pharmacists[12]. However, a study identified that one of the main current barriers to prescribing PrEP in PHC is related to the lack of knowledge and information on the part of these professionals, combined with the scarcity of specific training and the absence of continuing education strategies on the subject[13].

A study indicates that one of the factors that contribute to the unfavorable indicators for prescribing PrEP is the fact that many health professionals do not feel prepared to address the topic, especially given the lack of training on sexuality and the various forms of combined prevention[14]. In addition, another study revealed that some professionals fail to prescribe the medication because they associate PrEP with subjective concepts, such as the belief that, with its implementation, users would stop using condoms[15].

In a challenging scenario, within a universal health system in which PrEP is still mostly accessed by a more privileged segment of the population, it is essential to propose strategies that expand the reach of this form of HIV prevention. In this sense, it is proposed to develop a technology aimed at training health professionals, which can also contribute to the appropriate prescription and continuous monitoring of people using PrEP.

Information and Communication Technologies (ICT) have been used as instruments capable of aggregating, connecting, operating and disseminating health information. In addition, ICTs are strongly associated with the practice of health education, as they are used to encourage the involvement of subjects in the educational process, contributing to the construction of citizenship and to the increase of the autonomy of those involved. In both education and health, it is essential that educators understand technologies as facilitators of the processes of knowledge construction, within a creative, transformative and critical perspective[16,17].

Furthermore, ICTs contribute significantly to teaching-learning processes, especially in the context of HIV. This is because the topic has specific characteristics that, when combined with the use of technology, can favor both adherence and strengthening of strategies to prevent the virus. ICTs offer a safe and accessible space, reaching a large portion of the population, which enhances their impact on health education actions[18].

This protocol is justified by the need to improve HIV strategies by creating an educational technology that can act as a support tool for both health professionals and PrEP users. Considering the challenges faced in care and adherence to PrEP, especially in contexts of social vulnerability, it is essential to invest in innovative solutions that promote access to information in a clear, accessible and safe manner. Thus, the proposal of this study contributes directly to strengthening prevention practices and reducing the risk of HIV infection,

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promoting comprehensive care and increasing the autonomy of individuals regarding their sexual and reproductive health.

Furthermore, the study has the potential to promote an effective strategy for the safe and protective use of PrEP, directly contributing to the development of health services and to improving the flow of medication prescriptions. Such improvements may favor the increase in the supply and adherence to PrEP among populations at greater risk for infection. It is also worth noting that the topic addressed in this study has high relevance in public health, being aligned with the Health Research Priorities established by the National Agenda of Health Research Priorities (ANPPS) of the Ministry of Health[19]. Specifically, this topic is included in Axis 6, which includes communicable diseases, reinforcing the importance of investments in studies that seek innovative and effective solutions to confront the HIV epidemic in Brazil.

Therefore, the study aims to map educational technologies on HIV Pre-Exposure Prophylaxis aimed at users and health professionals.

PRELIMINARY SEARCH

In the search for primary studies on the proposed theme, no relevant publications were identified. In order to map existing protocols and scoping and/or systematic reviews, a preliminary search was conducted in the following databases and registries: International Prospective Register of Systematic Reviews (PROSPERO), JBI Evidence Synthesis, Open Science Framework (OSF), Cochrane Database of Systematic Reviews and Medical Literature Analysis and Retrieval System Online (MEDLINE/PubMed).

In the PubMed database, a scoping review was located whose objective was to map educational technologies aimed at HIV prevention in the black population; however, the study did not fully address the specific theme of this proposal. In the JBI Evidence Synthesis and PROSPERO databases, no studies in progress or concluded that addressed the same approach were found.

Therefore, it is clear that there are no scoping or systematic reviews that specifically cover the proposal of this protocol. Therefore, the present scoping review is justified, considering the gap in the scientific literature on the topic and its relevance to support evidence-based practices, guide public policies and promote the development of new educational technologies aimed at HIV prevention.

METHODS

This manuscript is a scoping review protocol, prepared according to the methodology proposed by the Joanna Briggs Institute (JBI). The preparation and reporting follow the guidelines of the PRISMA-ScR checklist (Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews)[20,21], which ensures transparency and standardization of the methodological process. The protocol was registered on the Open Science Framework (OSF) platform and is available through the

following DOI indicator: https://doi.org/10.17605/OSF.IO/97YZQ.

This scoping review was structured in five stages, as recommended by the JBI: (1) formulation of the research question; (2) identification of relevant studies; (3) selection of evidence; (4) extraction and organization of data; and (5) synthesis and presentation of results. However, as it is a protocol, this manuscript only covers the initial stages of the process, and does not address the analysis and synthesis of data, which will be carried out later, during the execution of the review.

Research question

The acronym PCC (Population, Concept, Context) was used to structure the research question, aiming to establish the eligibility criteria for this review. For better understanding, Figure 1 illustrates the PCC strategy that will be used to conduct this scoping review.

Thus, the guiding research question was: "What are the educational technologies on HIV Pre-Exposure Prophylaxis (PrEP) for users and professionals?" Furthermore, in order to further expand the results of this study, the following secondary questions were also asked: "What are the educational technologies on HIV Pre-Exposure Prophylaxis for health professionals?" and "What are the educational technologies on HIV Pre-Exposure Prophylaxis for users?"

Figure 1 - Research question, defined element and reference concept according to PCC - Participants (P), Concept (C) and Context (C). Santa Maria, RS, Brazil, 2024.

PPC-Based Research Question	What are the educational technologies for HIV Pre-Exposure Therapy (PrEP)? - What are the educational technologies for health professionals about HIV Pre-Exposure Therapy (PrEP)? -What are the educational technologies for HIV Pre-Exposure Therapy (PrEP) users?	
Mnemonic	**Defined element**	**Reference concept**
P (Population)	Healthcare professionals and users of Pre-Exposure Prophylaxis (PrEP) for HIV	Studies with a target population consisting of healthcare professionals, such as nurses, doctors and pharmacists, will be included. These are professionals currently regulated by their respective professional boards to prescribe medication[12]. As for users, individuals over the age of 15 will be considered, as this is the age range recommended for the use of PrEP "an antiretroviral medication for HIV-negative individuals to reduce the risk of acquiring HIV", who are sexually active and have an increased risk of HIV infection[2].
	Educational technologies	Educational technology is a concept that materializes in different formats, such as folders, booklets, and simulators, but is not limited to these. This review will consider independent and dependent TEs, with dependent TEs being those technologies that require electronic resources for their use and/or production,

C (Concept)		such as cell phones, videos, computers, television, the Internet, and their tools. Independent TEs are those that do not depend on electronic resources for their use and/or production, such as posters, albums, TV series, comic books, manuals, and booklets[22]. Furthermore, it is important to note that the study will consider technologies that have or have not undergone a validation process.
C (Context)	Health services (all levels)	All studies conducted in health services that make up the health care and prevention network for people with HIV or at risk of contracting the virus will be included. These services include specialized care, testing and counseling centers, primary health care services, hospital units and outpatient clinics. However, if studies are found in other contexts, their inclusion or exclusion will be assessed based on their permanence.

Eligibility criteria and source types:

Thus, the study eligibility criteria consider the reference concepts presented in Figure 1. Studies that focus on educational technologies on PrEP, both for users and health professionals, will be included. The sources of evidence will include primary studies with qualitative, quantitative or mixed methods approaches, including experimental and quasi-experimental studies (randomized and non-randomized clinical trials, before-and-after studies), interrupted time series studies and analytical studies, such as cohorts (prospective and retrospective) and case-control studies.

In addition, systematic reviews will be included, as well as publications from theses and dissertations. Editorials, letters to the reader and abstracts of scientific events will be excluded.

Research strategy

The initial search was conducted based on the PCC (Population, Concept and Context) strategy and the use of standardized descriptors from the Health Sciences Descriptors (DeCS), Medical Subject Headings (MeSH) and Embase Subject Headings (Emtree). This preliminary search was applied to the MEDLINE/PubMed, JBI Evidence Synthesis, OSF, PROSPERO and Cochrane databases, with the aim of identifying existing studies and ensuring the originality of this review.

To compose this stage, the methodological guidelines proposed by the JBI[20] were followed, including the following phases: identification of keywords and index terms. In a second stage, the identified terms were used to develop an amplified search strategy, later adapted for each database and information source selected.

The initial search strategy was performed using the PCC reference and the standardized terms of the Health Sciences Descriptors (DeCS), Medical Subject Headings (MeSH), and Embase Subject Headings (Emtree). The preliminary search was applied to the MEDLINE/PUBMED, JBI Synthesis, OSF, Prospero and Cochrane databases with the aim of identifying articles related to the topic and

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seeking to ensure the pioneering nature of the study in question. After analyzing the preliminary search, the words contained in the titles and abstracts of the relevant articles, as well as the indexing terms used to describe them, were incorporated to compose the definitive search strategy, Figure 2, which will be applied to the following databases: Latin American and Caribbean Literature in Health Sciences (LILACS), Nursing Database (BDENF), Spanish Bibliographic Index in Health Sciences (IBECS), PAHOIRIS and WHOLIS of the Regional Portal of the Virtual Health Library (BVS), MEDLINE/Pubmed, CINAHL, ASP, SocINDEX, Academic Source/EBSCO, EMBASE and SCOPUS/Elsevier, Pubmed Central/NLM and Scientific Electronic Library Online (SCIELO), PMC Central/NLM and gray literature source SCIENCE.GOV and Worldwidescience.

Google Scholar and the Catalog of Theses and Dissertations of the Coordination for the Improvement of Higher Education Personnel (CAPES) will also be considered. Regarding the search filters, studies published in Portuguese, English or Spanish will be included and the time frame will be from 2013 onwards, based on the World Health Organization's regulations on Health Technology Assessment, which establishes the main facts as of September 2012[23]. In the third stage, the references of all included studies will be reviewed, seeking to identify additional studies to compose the final sample of the scoping review.

Figure 2 - Search strategy carried out on October 7, 2024 in the following databases. Santa Maria, RS, Brazil, 2024.

Mnemonic	Search strategy	Result
P	HIV[mh] OR "Acquired Immune Deficiency Syndrome Virus"[tiab] OR "Acquired Immunodeficiency Syndrome Virus"[tiab] OR AIDS Virus*[tiab] OR HTLV-III[tiab] OR Human Immunodeficiency Virus*[tiab] OR "Human T Cell Leukemia Virus Type III"[tiab] OR "Human T Cell Lymphotropic Virus Type III"[tiab] OR "Human T Lymphotropic Virus Type III"[tiab] OR "Human T-Cell Leukemia Virus Type III"[tiab] OR "Human T-Cell Lymphotropic Virus Type III"[tiab] OR "Human T-Lymphotropic Virus Type III"[tiab] OR LAV-HTLV-III[tiab] OR Lymphadenopathy Associated Virus[tiab] OR Lymphadenopathy-Associated Virus*[tiab] OR "HIV Infections"[mh] OR HIV Coinfection*[tiab] OR HIV Infection[tiab] OR HTLV III Infection*[tiab] OR HTLV III LAV Infection*[tiab] OR HTLV-III Infection*[tiab] OR HTLV-III-LAV Infection*[tiab] OR "AIDS Serodiagnosis"[mh] OR AIDS Serodiagnos*[tiab] OR AIDS Serology*[tiab] OR HIV Serodiagnosi*[tiab] OR HTLV III Serodiagnos*[tiab] OR HTLV III Serolog*[tiab] OR HTLV-III Serodiagnos*[tiab] OR HTLV-III Serolog*[tiab]	399.728
C	"Pre-Exposure Prophylaxis"[mh] OR Pre Exposure Prophylaxi*[tiab] OR Pre-Exposure Prophylaxi*[tiab] OR PrEP[tiab] OR Pre-Exposure Prophylaxi*[tiab] Sort by: Publication Date	12.176
C	"Health Education"[mh] OR "Health Education"[tiab] OR Educac*[tiab] OR "Educational Technology"[mh] OR Educational Technolog*[tiab] OR Instructional Technolog*[tiab] OR "health fairs"[tiab] OR health science* education[tiab] OR Pamphlets[mh] OR Booklet*[tiab] OR Brochure*[tiab] OR Pamphlet* Instructional[tiab] OR Instructional Film[tiab] OR Instructional Video[tiab] OR Instruction[tiab] OR Audiovisual	1.132.959

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	Demonstration[tiab] OR Audio-Video Demonstration[tiab] OR Audiovisual Demonstration[tiab] OR Instruction[tiab] OR Instructional Films[tiab] OR Instructional Videos[tiab] OR Video-Audio Demonstration[tiab] OR "Audiovisual Aids"[mh] OR Audio Visual Aid*[tiab] OR Audio-Visual Aid*[tiab] OR Audiovisual Aid[tiab] OR Visual Aid*[tiab] OR "Teaching Materials"[mh] OR "Teaching Material"[tiab] OR booklet[tiab] OR Teaching[mh] OR training[tiab] OR Educational Technic Educational Techni*[tiab] OR Pedagogies[tiab] OR Pedagogy[tiab] OR "Social Media"[mh] OR TikTok[tiab] OR Social Medium[tiab] OR Social Tagging*[tiab] OR Twitter[tiab] OR Web 2.0[tiab] OR "Social Media"	
TOTAL		604

Evidence selection

All identified references will be grouped in EndNote 21/2024 to remove duplicate references. The references will then be exported to the Intelligent Systematic Review Software (Rayyan) for selection management.

As for the review of the articles, it will be carried out by four reviewers, of whom three will be divided into a second reviewer of the total number and the main reviewer will evaluate all articles independently. The evaluation will be carried out by reading the titles and abstracts, as well as following the previously established eligibility criteria. It is important to note that any disagreements that arise between the reviewers at each stage of the selection process will be resolved through discussion or by a fifth reviewer with expertise in the topic of ET on PrEP.

After this process, all potentially relevant references will be read in full and the full text will be analyzed in detail, and the reasons for exclusion of the full text will be recorded and reported in the scoping review. The results of the search and study inclusion process will be reported in full in the final review and presented in a PRISMA-ScR flowchart[21].

Data extraction

To extract the data, a data extraction spreadsheet will be created using the Excel software tool developed by the main reviewer to help extract and organize the data of interest from the selected studies. The tool will undergo a pilot test to train the reviewers and may undergo modifications throughout the process to meet the objectives of the study. If there are any changes, these will be detailed in the final review report.

After careful evaluation by the reviewers, the data of interest to the study will be extracted by two independent reviewers. If appropriate and necessary, the authors of the articles will be contacted to request missing or additional data. The extracted data will include specific details on the characterization of the studies, information on the title, authors, country, population, starting with data on the concept, including information relevant to the ET described by the studies and, finally, the context in which they were developed and applied, as illustrated in Figure 3.

Figure 3 - Instrument for data extraction. Santa Maria, RS, Brazil, 2024.

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Details and characteristics of the evidence source			
Title, author/s, year			
Journal, country of publication			
Document type			
Objective of the study			
Method/design			
Population: ( ) professionals and/or ( ) users			
Concept – educational technologies on PrEP			
TE Type	**TE Objective**	**Duration**	
Instructional content	**Contributions**	**Development**	
Usability	**Study suggestions**	**Resource**	
Knowledge before and after	**Validated or not validated**		
Context – Health services			
Service location			
Study reference			

The tool was developed by the principal investigator to obtain the results of the scoping review. It will also be pilot tested to identify any necessary adjustments. Any discrepancies will be addressed in research team meetings. Changes may be made to the data extraction tool and these will be detailed in the scoping review. Any discrepancies in data extraction will be resolved through discussion or by involving a third reviewer. If necessary, authors of articles and papers will be contacted to request missing or additional data, if applicable. The extracted data

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will include specific details characterizing the evidence and participants, design, context, study methods, and findings of interest relevant to the review questions presented in this protocol.

The data extraction tool describes the objectives of the review; questions; inclusion/exclusion criteria (population, design, context, types of evidence source); details and characteristics of the evidence source (citation details - author(s), year, title, journal, volume, country; document type, study objective, method/design, participant, country, gender, age, outcome, associated factors, comorbidities results extracted from the evidence source - in relation to the concept of the scoping review, as explained in figure 3.

Presentation of results

The extracted data will be analyzed and presented descriptively, using tables, graphs and/or diagrams that facilitate the visualization of the results found in this study. A narrative summary will accompany the data and describe how the results are associated with the objective and the question of the review. It is expected that, through mapping and consequent knowledge of educational technologies, we will obtain the necessary basis for the development of future research in the area, as well as guidance on a possible adaptation or incorporation of technologies that promote health education about PrEP for health professionals and users, contributing to the development of the health care network for people who use this medication.

CONCLUSION

Mapping the available evidence on ET aimed at health professionals and PrEP users will contribute significantly to the dissemination of knowledge on the subject. This review will be essential to support the development of reliable ET, capable of qualifying care related to adherence, maintenance and follow-up of PrEP use in health services.

In addition, the review aims to identify gaps in the supply and access to prophylaxis, as well as highlight the limitations of knowledge on the part of health professionals about PrEP. Finally, it is expected that the results will be able to indicate the most promising technologies for this context, enabling their replication, adaptation and application by researchers, managers and health professionals.

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Funding and Acknowledgements:

Nothing to declare.

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Declaration of conflict of interest

Nothing to declare

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