OBJN
Online Brazilian Journal of Nursing
ISSN: 1676 - 4285 | www.objnursing.uff.br

Submission: 12-Sep-2024
Approved: 07-May-2025

ADHERENCE TO ANTIRETROVIRAL THERAPY AMONG ADOLESCENTS AND YOUNG PEOPLE LIVING WITH HIV: PROTOCOL FOR A SCOPING REVIEW

ADESÃO À TERAPIA ANTIRRETROVIRAL ENTRE ADOLESCENTES E JOVENS VIVENDO COM HIV: PROTOCOLO DE REVISÃO DE ESCOPO

Camila Moraes Garollo Piran[1] ORCID: 0000-0002-9111-9992
Mariana Martire Mori[1] ORCID: 0000-0003-1744-3580
Alana Vitoria Escritori Cargnin[1] ORCID: 0000-0002-7733-2420
Bianca Machado Cruz Shibukawa[2] ORCID: 0000-0002-7739-7881
Beatriz Sousa da Fonseca[1] ORCID: 0000-0002-3469-2231
Eliane Rodrigues dos Santos[3] ORCID: 0009-0009-0134-8678
Maria de Fátima Garcia Lopes Merino[1] ORCID: 0000-0001-6483-7625
Marcela Demitto Furtado[1] ORCID: 0000-0003-1427-4478

[1] State University of Maringá, Maringá, Paraná, Brazil
[2] Federal University of Mato Grosso do Sul, Três Lagoas, Mato Grosso do Sul, Brazil
[3] Fatecie University Center, Paranavaí, Paraná, Brazil

How to cite: Piran CMG, Mori MM, Cargnin AVE, Shibukawa BMC, Fonseca BS, Santos ER, et al. Adherence to antiretroviral therapy among adolescents and young people living with HIV: protocol for a scoping review. Online Braz J Nurs. 2025;24(Suppl 1):e20256844. https://doi.org/10.17665/1676-4285.20256844

RESUMO

Objetivo: Mapear as evidências científicas relacionadas à adesão à terapia antirretroviral entre adolescentes e jovens vivendo com HIV. **Método:** Trata-se de um protocolo de revisão de escopo, elaborado conforme as diretrizes do JBI. A pergunta norteadora da pesquisa é: "Quais são as evidências científicas sobre a adesão à terapia antirretroviral entre adolescentes e jovens vivendo com HIV?". Serão incluídos estudos observacionais analíticos e descritivos, abordagens qualitativas, estudos experimentais e quase-experimentais, revisões sistemáticas e metanálises. Também serão consideradas teses, dissertações, capítulos de livros, resumos de conferências e outras fontes de literatura cinzenta. Não haverá restrição quanto ao idioma ou ao período de publicação. Serão excluídos os estudos que não atenderem ao objetivo da pesquisa, os indisponíveis na íntegra e os duplicados. A busca será realizada em 21 bases de dados. Os resultados serão apresentados em forma de fluxogramas e quadros. O protocolo está registrado na plataforma Open Science Framework sob o número 10.17605/OSF.IO/EM5TB.

Descritores: HIV; Adolescente; Adesão ao Tratamento.

ABSTRACT

Objective: To map the scientific evidence related to adherence to antiretroviral therapy among adolescents and young people living with HIV. **Method:** This is a protocol for a scoping review developed according to the methodological guidelines of the JBI. The guiding research question is: "What scientific evidence exists regarding adherence to antiretroviral therapy among adolescents and young people living with HIV?". Eligible sources will include analytical and descriptive observational studies, qualitative studies, experimental and quasi-experimental studies, systematic reviews, and meta-analyses. Grey literature, such as theses, dissertations, book chapters, and conference abstracts, will also be included. There will be no restrictions regarding publication date or language. Studies that do not meet the objective, are unavailable in full text, or are duplicates will be excluded. A total of 21 databases will be searched. Results will be presented using flowcharts and summary tables. This protocol is registered in the Open Science Framework under registry number 10.17605/OSF.IO/EM5TB.

Descriptors: HIV; Adolescent; Treatment Adherence.

Corresponding author:
Camila Moraes Garollo Piran
Email: camilagarollo@gmail.com

Publisher:
Escola de Enfermagem Aurora de Afonso Costa – UFF
Rua Dr. Celestino, 74 – Centro, CEP: 24020-091 – Niterói, RJ, Brazil
Journal email: objn.cme@id.uff.br

INTRODUCTION

In 2022, approximately 39 million people worldwide were living with the Human Immunodeficiency Virus (HIV), with about 1.5 million of these cases occurring in children aged 0 to 14 years. Of the total, roughly 1.3 million new infections were recorded in that year alone, reaffirming HIV as a major global public health concern[1].

Early initiation of sexual activity significantly increases the risk of HIV infection due to high-risk behaviors such as having multiple sexual partners and inconsistent condom use[2]. A study conducted in Spain found that the most frequent modes of HIV transmission among adolescents and young people were sexual transmission, followed by vertical transmission, transfusion of blood products, and injectable drug use[3]. HIV infection has a profound emotional impact on adolescents and young adults, often leading to psychological distress and difficulties in social relationships[4].

Stigma and discrimination related to HIV persist both in society and within healthcare settings, contributing to delays in seeking treatment and inadequate adherence to therapy[5]. Antiretroviral therapy aims to suppress viral replication to undetectable levels, restore immune function, and improve quality of life[6]. Poor adherence to antiretroviral therapy not only increases morbidity and mortality risks in this population but also facilitates ongoing transmission of the virus, leading to new infections[7].

Although some studies have already addressed the topic, literature still lacks a comprehensive mapping of evidence using multiple databases. Identifying research that addresses antiretroviral therapy adherence among adolescents and young people across different healthcare settings allows for the recognition of associated factors and a broader understanding of the scale of this global public health issue. Accordingly, this study aims to map scientific evidence related to adherence to antiretroviral therapy among adolescents and young people living with HIV.

METHOD

Study design

This is a protocol for a scoping review, to be conducted following the methodological recommendations of the JBI[8].

Search strategy

The review question was developed using the Population, Concept, and Context (PCC) framework: P (Population) – adolescents and young people; C (Concept) – adherence to antiretroviral therapy; C (Context) – HIV.

Based on this framework, the following guiding question was defined: "What scientific evidence exists regarding adherence to antiretroviral therapy among adolescents and young people living with HIV?".

Eligibility criteria

The review will include publications focusing on antiretroviral therapy adherence among adolescents and young people aged 10 to 24 years living with HIV. Eligible sources will include analytical and descriptive observational studies, qualitative studies, experimental and quasi-experimental studies, systematic reviews, and meta-analyses. Relevant gray literature, such as theses, dissertations, book chapters, and conference abstracts, will also be included.

No restrictions will be applied regarding publication date or language. Studies will be excluded if they do not meet the objective based on title and abstract screening, are unavailable in full even after contacting the corresponding author, or are duplicate entries.

Study selection

The search will be conducted in three stages to capture both published and unpublished studies, including grey literature. The first stage involved an initial search in PubMed and Web of Science to identify relevant studies and extract keywords and indexed terms from titles, abstracts, MeSH (Medical Subject Headings), DeCS (Health Sciences Descriptors), and Emtree vocabularies to build the final search strategy[9].

The second stage consisted of a pilot test of the finalized search strategy in two databases — PubMed/MEDLINE and Embase. An example of the search terms used includes: (((((“Adolescent”) OR (“Young Adult”)) AND ((“adherence to antiretroviral therapy”) OR (“Medication Adherence”) OR (“Cooperation and Adherence to Treatment”) OR (“Patient Cooperation”) OR (“antiretroviral therapy highly active”))) AND ((“HIV Infections”) OR (“HIV”) OR (“acquired immunodeficiency syndrome”)))))

The final search will be conducted by two independent reviewers across the following databases: Web of Science, PubMed, ScienceDirect, Scopus, Excerpta Medica Database (Embase), Scientific Electronic Library Online (SciELO), Cochrane Library, Latin American and Caribbean Health Sciences Literature (LILACS), Spanish Health Sciences Bibliographic Index (IBECS), Nursing Database (BDENF), Western Pacific Region Index Medicus (WPRIM), Peruvian Health Sciences Literature (LIPECS), WHO IRIS, and Brazilian Dentistry Bibliography (BBO), via the Virtual Health Library.

To identify grey literature, the following platforms will be consulted: Cybertesis, Open Thesis, PeerJ Preprints, MedRxiv, OpenGrey, bioRxiv Preprints, and the Catalog of Theses and Dissertations. Data collection and extraction are scheduled to begin in July 2024.

Data extraction and synthesis

Citations retrieved will be exported to Rayyan software for study selection[10]. Two independent review authors will assess the scientific evidence based on the previously defined inclusion criteria. In case of disagreement, a third review author will be consulted to solve the conflict.

Subsequently, the full texts of the selected studies will be thoroughly reviewed, with eligibility criteria maintained throughout. After finalizing the list of included articles, the reference lists of these studies will be examined to identify additional relevant publications and ensure comprehensive literature coverage. All reasons for study exclusion will be documented in detail.

To extract data from the studies included in the final sample of the scoping review, a data extraction tool will be developed in Microsoft Excel, adapted in accordance with JBI methodology[8]. This tool will include the following fields: authors, title, year, language, journal, source of infor-

mation, country, objective, institution responsible for the study, methodology, population (age range), adherence measurement, and main findings — categorized as facilitators and barriers to adherence to antiretroviral therapy. This stage will enable the identification of literature's contributions as well as its limitations, gaps, emerging trends, and implications for health practices related to antiretroviral treatment adherence among adolescents and young people[11].

For data analysis, basic qualitative content analysis will be employed — a method recognized and widely used in scoping reviews. Extracted data will be presented descriptively and organized into summary tables, in accordance with JBI guidelines[9].

The presentation of results will follow the recommendations of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR), including detailed reporting of the search strategy and the study selection process using the PRISMA-ScR flow diagram[12].

This protocol has been registered on the Open Science Framework under registry number 10.17605/OSF.IO/EM5TB.

Expected limitations

The main anticipated limitation is the heterogeneity among the included studies, particularly regarding the sociocultural contexts that influence adherence — or lack thereof — to antiretroviral therapy among adolescents and young people living with HIV. These variations may pose challenges to comparing and synthesizing the findings across studies.

CONFLICTS OF INTEREST

The authors declare no conflicts of interest.

FUNDING

This study was financed in part by the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES) – Brazil – Finance Code 001.

REFERENCES

1. UNAIDS. Fact sheet: Global HIV statistics. Geneva: UNAIDS; 2023 [cited 29 Jun 2024]. Available from: https://www.aidsdatahub.org/sites/default/files/resource/unaids-factsheet-en.pdf
2. He J, Flaxman A, Imai-Eaton JW, Aravkin A, Zheng P, Sorensen R, et al. Association Between Early Sexual Debut and New HIV Infections Among Adolescents and Young Adults in 11 African Countries. AIDS Behav. 2024;28(7):2444-2453. https://doi.org/10.1007/s10461-024-04343-w
3. Epalza C, Domínguez-Rodríguez S, Cervantes E, Ory SJ, Frick MA, Fortuny C, et al. Factors associated with late presentation for HIV care in adolescents in Spain. HIV Med. 2022;23(11):1195-1201. https://doi.org/10.1111/hiv.13407
4. Aurpibul L, Detsakunathiwatchara C, Khampun R, Wongnum N, Chotecharoentanan T, Sudjaritruk T. Quality of life and HIV adherence self-efficacy in adolescents and young adults living with perinatal HIV in Chiang Mai, Thailand. AIDS Care. 2023;35(3):406-410. https://doi.org/10.1080/09540121.2022.2075537
5. Low A, Teasdale C, Brown K, Barradas DT, Mugurungi O, Sachathep K, et al. Human Immunodeficiency Virus Infection in Adolescents and Mode of Transmission in Southern Africa: A Multinational Analysis of Population-Based Survey Data. Clin Infect Dis. 2021;73(4):594-604. https://doi.org/10.1093/cid/ciab031
6. Baumann U, Schulze Sturm U, Königs C. HIV-Infektion und -Exposition bei Kindern und Jugendlichen: 25 Jahre antiretrovirale Prophylaxe und Therapie: Was ist erreicht? Gynäkologie. 2023;56(1):47-57. https://doi.org/10.1007/s00129-022-05046-w
7. Taverne B, Laborde-Balen G, Sow K, Ndiaye NB, Diop K. Treatment success or failure in children and adolescents born with HIV in rural Senegal: An anthropological perspective. Soc Sci Med. 2023;317:115628. https://doi.org/10.1016/j.socscimed.2022.115628
8. Peters MDJ, Godfrey C, McInerney P, Munn Z, Tricco AC, Khalil, H. Scoping Reviews (2020). Aromataris E, Lockwood C, Porritt K, Pilla B, Jordan Z, editors. JBI Manual for Evidence Synthesis. Adelaide: JBI; 2024. https://doi.org/10.46658/JBIMES-24-09
9. Pollock D, Peters MDJ, Khalil H, McInerney P, Alexander L, Tricco AC, et al. Recommendations for the extraction, analysis, and presentation of results in scoping reviews. JBI Evid Synth. 2023;21(3):520-532. https://doi.org/10.11124/JBIES-22-00123
10. Ouzzani M, Hammady H, Fedorowicz Z, Elmagarmid A. Rayyan—a web and mobile app for systematic reviews. Syst Rev. 2016;5(1):210. https://doi.org/10.1186/s13643-016-0384-4
11. Peters MDJ, Godfrey C, McInerney P, Khalil H, Larsen P, Marnie C, et al. Best practice guidance and reporting items for the development of scoping review protocols. JBI Evid Synth. 2022;20(4):953-968. https://doi.org/10.11124/JBIES-21-00242
12. Tricco AC, Lillie E, Zarin W, O'Brien KK, Colquhoun H, Levac D, et al. PRISMA Extension for Scoping Reviews (PRISMA-ScR): Checklist and Explanation. Ann Intern Med. 2018;169(7):467-473. https://doi.org/10.7326/M18-0850

AUTHORSHIP CONTRIBUTIONS

Project design: Piran CMG, Mori MM, Cargnin AVE, Shibukawa BMC, Fonseca BS, Santos ER, Merino MFGL, Furtado MD.
Data collection: Não se aplica.
Data analysis and interpretation: Não se aplica.
Writing and/or critical review of the intellectual content: Piran CMG, Mori MM, Cargnin AVE, Shibukawa BMC, Fonseca BS, Santos ER, Merino MFGL, Furtado MD.
Final approval of the version to be published: Piran CMG, Mori MM, Cargnin AVE, Shibukawa BMC, Fonseca BS, Santos ER, Merino MFGL, Furtado MD.
Responsibility for the text in ensuring the accuracy and completeness of any part of the paper: Piran CMG, Mori MM, Cargnin AVE, Shibukawa BMC, Fonseca BS, Santos ER, Merino MFGL, Furtado MD.