

BMJ Open Domestic violence and older women in Latin American countries: a scoping review protocol

Marilyn Macdonald ^{1,2} Patrick Albert Palmieri ³
 Karen A Dominguez-Cancino ^{3,4} Lori E Weeks ^{2,5} Allyson Gallant ⁶
 Alexa R Yakubovich,⁷ Erin Langman ⁸ Melissa Ignaczak ²
 Arezoo Mojbafan,^{1,2} Ali Hammoud,² Paulina Carrasco Salazar^{1,2}

To cite: Macdonald M, Palmieri PA, Dominguez-Cancino KA, *et al.* Domestic violence and older women in Latin American countries: a scoping review protocol. *BMJ Open* 2025;**15**:e091212. doi:10.1136/bmjopen-2024-091212

► Prepublication history and additional supplemental material for this paper are available online. To view these files, please visit the journal online (<https://doi.org/10.1136/bmjopen-2024-091212>).

Received 15 July 2024

Accepted 05 February 2025



© Author(s) (or their employer(s)) 2025. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by BMJ Group.

For numbered affiliations see end of article.

Correspondence to

Dr Marilyn Macdonald;
 marilyn.macdonald@dal.ca

ABSTRACT

Introduction Domestic violence (DV) is a major public health problem for women around the world, and more commonly for women in Latin American countries (LACs). DV poses a threat to women's health and can have more severe effects in women at midlife and older (aged 50 and above), including a decline in physical and mental abilities leading to a reduced independence. Low- and middle-income countries, including LACs, are projected to experience the greatest population growth in women at midlife and older worldwide over the next few decades. Current LAC literature about DV in relation to women at midlife and older is predominantly prevalence focused. The objective of this review is to identify what is known about DV among women at midlife and older in LACs.

Methods and analysis This review will be conducted in accordance with JBI scoping review methodology. This includes a three-step search strategy: first, a search to identify articles from databases in MEDLINE, Scopus and LILACS; then, a second search using all key words and index terms identified from the articles in step one across select databases; and third, screening the reference lists of included studies and reports for additional studies. All studies which focus on DV in LACs among women at midlife and older will be eligible for inclusion, including those related to definitions, frameworks, cultural norms, risk factors, interventions, evaluations, measurement tools, and health and social consequences. Titles, abstracts and full texts will be assessed by two independent reviewers. A data extraction tool will be used, and findings will be presented in a narrative accompanied by diagrams and tables that address the review questions.

Ethics and dissemination Ethics approval is not required for this review. Findings will be disseminated through a range of traditional approaches, including publication in a peer-reviewed publication and conference presentations.

Trial registration This review has been registered with Open Science Framework <https://doi.org/10.17605/OSF.IO/SZMF7>.

INTRODUCTION

Domestic violence (DV) is defined by the United Nations as ‘a pattern of behaviour in any relationship that is used to gain or maintain power and control over an intimate partner’ and may be

STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ Inter-rater exercises were conducted with reviewers prior to starting text and opinion and full text reviews and data extraction.
- ⇒ A strength of this review is the inclusion of multiple English and non-English electronic databases to ensure we obtain literature relevant to domestic violence in Latin American countries published in English, Spanish, Portuguese and French. Our team is multilingual.
- ⇒ Our search strategy has been peer-reviewed using the Peer Review of Electronic Search Strategies by a health sciences librarian.
- ⇒ The review title was registered with the Open Science Framework.
- ⇒ Inclusion/exclusion criteria may limit the studies ultimately included in the review.

used interchangeably with the terms ‘intimate partner violence (IPV)’ or ‘domestic abuse’.¹ ‘The term ‘domestic violence’ is used in many countries to refer to partner violence, but the term can also encompass child or elder abuse, or abuse by any member of a household’.² The abuse or aggression involved with DV can include physical violence, sexual violence, stalking, and/or psychological aggression, and may be perpetrated by both current and former spouses and partners.^{1,3} DV is widely recognised as a human rights violation, as well as a major public health problem and a gender equity issue. DV is most often reported by men against women.³

DV in Latin American countries

More than a decade ago, the WHO reported that approximately one-third (27%) of women worldwide experience DV.³ High-income countries, including Europe, report DV rates of 22%.³ In Latin American countries (LACs), lifetime prevalence rates are higher than the global average, reaching

almost 35% of women between 15 and 49 years of age in Colombia, 40% in Ecuador and 60% in Bolivia.^{4 5} In the context of the pandemic, LACs experienced an exponential rise in rates of DV across women of all ages.⁶ Calls to local COVID-19 hotlines reported violence against women increased by 97% in Mexico, 101% in Peru and 145% in Argentina.⁷

Despite the recognition of DV as a pervasive public health problem, the Latin American region lacks evidence-based approaches aimed at alleviating the impact of DV.⁷ A major challenge is the prevailing cultural tolerance and societal norms that perpetuate gender-based violence. Deep-rooted patriarchal beliefs normalise violence within intimate relationships, making it difficult for women to seek help or report violence.^{3 8} These norms play a significant role in help-seeking behaviours of women, acceptability of a husband beating their wife and whether bystanders should intervene.^{3 7} Among countries such as Ecuador, Haiti, Bolivia, Paraguay and Nicaragua, rates of acceptance or belief that wife-beating is justified for women who do not have a history of experiencing DV in the last 12 months ranged from 13.2 to 37.0%.⁷ Among women who have experienced DV in the last 12 months, rates of acceptance were higher, ranging from 20 to 43.9%.⁷ It is also important to note that DV incidents are typically underreported,¹ so in reality, these values may be higher. The focus of this review is on women in midlife and older experiencing DV, as this is a rapidly ageing population and there has been limited focus on this population in the literature to date.

Midlife and older women and DV in LACs

Globally, prevalence rates of violence against midlife and older women (ie, those aged 50 and older) range from 16.5 to 54.5%.⁹ Older women are among the fastest growing population subgroup globally.⁹ Over the next few decades, the population of older adults is expected to significantly increase across the world.¹⁰ Low- and middle-income countries are projected to experience the greatest increases, with two-thirds of the world's population aged 60 years and older living in these countries by 2050.¹⁰ Between 1960 and 2020, life expectancy of women in LACs has risen from 59 to 76 years of age, where older women currently represent 14% of the population and is predicted to double to 27% by 2050.¹⁰ Many LACs are categorised as low- and middle-income countries and will see direct effects of this population shift. For example, the Andean region population of adults over the age of 60 is expected to increase from 12.42% in 2022 to 22.4% in 2050.¹¹ As the proportion of women at midlife and older increases in LACs, it is logical to surmise a corresponding rise in DV rates.

While there is less research evidence about midlife and older women and DV, there is prevalence data about older women in LACs. For example, in 2016 a city in Brazil reported DV rates of 12.4% among older people,¹² meanwhile a 2019 Colombian study of people aged 60 years and older reported DV rates of 15.1%.¹³ A 2020

prevalence study in Mexico reported a DV prevalence rate of 16.3% in women over age 64.¹⁴ The same year the city of Sao Paulo, Brazil reported a DV rate of 10%.⁶

Existing guidelines on DV focus on younger women, leaving midlife and older women underserved and their particular needs unaddressed.⁸ Societal norms influence healthcare professionals' (HCPs) perceptions and responses to DV, posing a threat to providing appropriate care and support for older women,¹⁵ and the lack of HCP training in relation to the intersection of ageing, gender and DV poses a greater threat to addressing DV effectively.⁸ These threats, coupled with the absence of standardised protocols and guidelines for the identification and management of DV, undermine the overall health and social well-being of this vulnerable population.

Midlife and older women's health and domestic violence in LACs

As the population of midlife and older women increases, it is important to consider the health challenges that come with biological ageing, such as increased frailty, decreased physical and mental capacity, increased vulnerability associated with prolonged abuse, and/or dependency on their abuser.^{5 6 8} Untoward health effects experienced by older women in LACs include headaches, musculoskeletal pain, anxiety, stress, hopelessness and suicidal ideation.³ Furthermore, ageing changes the dynamic between victim and perpetrator, which may lead to different patterns of violence requiring prevention and intervention strategies relevant to women at midlife and older.⁹ For example, as older women experience decline in physical and/or cognitive abilities traditionally relied on, they may become more financially dependent on the abuser.^{8 9}

Considering the rates of DV in LACs, the predicted population increase of older persons in these countries, the absence of systematic reviews of studies of midlife and older women and DV, and the untoward health consequences, a scoping review to explore and map what is known is of high importance. A search of Open Science Framework, MEDLINE, CINAHL and JBI Evidence Synthesis was conducted, and no existing or in-progress reviews on the topic were found. Several previous reviews related to IPV were located searching standard Western-centric databases where the term IPV is ubiquitous. This review is a partnership with the South America EBHC entity in Lima, Peru, and the terms violence or DV predominate in the literature from LACs. Initial searches located six reviews, two that were qualitative and four quantitative.^{8 16–20} None of these reviews were focused on LACs, or women at midlife and older. A subsequent search of databases inclusive of studies from LACs located two integrative reviews.^{21 22} Both focused on older adults, not women at midlife and older, one involving Brazil, Ecuador, Mexico and Colombia with the aim of determining prevalence, victim profile and risk factors, with data from 2015 to 2019 that included only quantitative data and excluded theses and dissertations.²¹ The

second focused on prevalence in Brazil.²² Evidence about DV experienced by midlife and older women in LACs is limited in the literature to date; a scoping review will allow for an exploration and mapping of the knowledge on this topic. A focus on this stage of the life cycle was chosen because most of the literature published about DV is focused on women aged 15–49 years.

The proposed scoping review will examine peer-reviewed and grey literature (theses and dissertations) to describe what is known about DV among women at midlife and older in LACs. For example, descriptive studies about how DV is measured and reported, aetiological studies that address risk factors, measurement tools and implementation evaluations. In addition, data related to DV definitions, social supports, frameworks used by researchers and the consequences of DV will be examined where available. We anticipate generating information from this review that is relevant to older women, HCPs and decision-makers.

Review questions

What is known about DV among women at midlife and older in LACs?

Sub-questions include:

- ▶ How is DV defined in the literature from LACs?
- ▶ What is known about cultural tolerance and risk factors for DV in LACs?
- ▶ What DV supports or interventions exist and how are they evaluated?
- ▶ How is DV measured and reported?
- ▶ What frameworks have been used to guide DV research in LACs?
- ▶ What DV-related health consequences are reported?

METHODS

The proposed scoping review will be conducted in accordance with the JBI methodology for scoping reviews.²³ Screening is currently underway, with data analysis planned for September to December 2024. Findings will be reported using the Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) reporting guidelines.²⁴

Patient and public involvement

This scoping review was developed without the involvement of patients or members of the public.

SEARCH STRATEGY

The search strategy will aim to locate both published and unpublished studies. A three-step search strategy will be used in this review. An initial limited search of MEDLINE (Ovid), Scopus (Elsevier), and LILACS was undertaken by a health sciences librarian to identify articles on the topic. The text words contained in the titles and abstracts, where available, and the index terms used to describe the articles were used to develop a full search strategy for MEDLINE (Ovid) (online supplemental additional file

1). Text words in English were identified using WordFreq, the word frequency tool in Systematic Review Accelerator (Institute for Evidence Based Healthcare and Bond University). The original English-only search strategy was peer-reviewed by a second health sciences librarian using Peer Review of Electronic Search Strategies (PRESS)²⁵ and translated to Spanish by a third librarian fluent in the language. The search strategy, including all identified keywords and index terms, will be adapted for each included database and/or information source. The reference list of all included sources of evidence will be manually screened for additional studies.

The databases to be searched include MEDLINE (Ovid), Scopus (Elsevier), Embase (Elsevier), PsycInfo (EBSCO) and CINAHL (EBSCO); Region-specific databases: LILACS, SciELO, Redalyc and CAPES Periodicals Portal; and Spanish databases to access literature in Spanish and Portuguese from journals in Europe: Dialnet, Cuidatge, Cuiden and Enfispo. Sources of unpublished studies and grey literature to be searched include Open Access Theses and Dissertations and ProQuest Dissertations and Theses.

INCLUSION CRITERIA

Participants

This scoping review will consider studies focused on DV conducted in LACs involving women at midlife and older (ie, women aged 50 and older). Studies including women under the age of 50 years will be excluded unless they included women aged 50 and above and reported results by age group.

Concept

The concept of focus for this review is DV at the individual level in community dwelling older women. Studies that include evidence related to the origins of DV, definitions, frameworks, measuring and reporting, risk factors, culture in relation to DV, interventions, evaluations and measurement tools will be examined. Study outcomes, such as participant experiences, quality of life and outcome domains of described measures will be included.

Context

The review will consider studies focused on women at midlife and older living in LACs who have experienced DV. There are 21 LACs: Mexico in North America; Guatemala, Honduras, El Salvador, Nicaragua, and Costa Rica and Panama in Central America; Colombia, Venezuela, Ecuador, Peru, Bolivia, Brazil, Paraguay, Chile, Argentina and Uruguay in South America; and Cuba, Haiti, the Dominican Republic and Puerto Rico in the Caribbean. Studies that have a combination of LACs and non-LACs will be considered for inclusion if the findings are reported separately for LACs. Studies about DV in non-LACs will be excluded.

Types of sources

Studies which address our main review question or any/all of the subquestions will be eligible for inclusion. This

review will include quantitative and qualitative studies about DV in LACs that used designs such as randomised control trials, non-randomised controlled trials, quasi-experimental, before and after studies, prospective and retrospective cohort studies, case-control studies, analytical cross-sectional studies, phenomenology, grounded theory, ethnography, qualitative description, action research and feminist research. Grey literature (theses and dissertations) about DV in LACs will be included. Pilot studies, single case studies and evidence syntheses (eg, scoping or systematic reviews) will be excluded. Our research has translation capacity for studies published in Portuguese, Spanish and French. Studies published in other languages will be included and translated as needed using DeepL (<https://www.deepl.com/en/translator>).

STUDY SELECTION

Following the search, all identified citations will be collated and uploaded into Covidence (Veritas Health Innovation, Melbourne, Australia) and duplicates removed. Following a pilot test, titles and abstracts will then be screened by two independent reviewers for assessment against the inclusion criteria for the review. Potentially relevant studies will be retrieved in full, and their citation details imported into Covidence. The full texts of selected citations will be assessed in detail against the inclusion criteria by two independent reviewers. Reasons for exclusion of papers at full text that do not meet the inclusion criteria will be recorded and reported in the scoping review. Any disagreements that arise between the reviewers at each stage of the selection process will be resolved through discussion or with an additional reviewer/s. The results of the search and the study inclusion process will be reported in full in the final scoping review and presented in a PRISMA-ScR flow diagram.²⁴

DATA EXTRACTION

Data will be extracted from papers included in the scoping review by two independent reviewers using a data extraction tool developed by the reviewers (see online supplemental file 2). The data extracted will include specific details about the participants, concept, context, study methods and key findings relevant to the review question and subquestions. A data extraction form was developed and will be piloted among reviewers, with each completing extractions from three data sources and comparing results. The data extraction tool will be modified and revised as necessary during the process of extracting data from each included evidence source. Modifications will be detailed in the scoping review report. Any disagreements that arise between the reviewers will be resolved through discussion or with an additional reviewer/s. If necessary, authors of papers will be contacted to request missing or additional data.

DATA ANALYSIS AND PRESENTATION

Review data will undergo qualitative content analysis²⁶ and be presented in diagrammatic or tabular form that

addresses the review question and sub-questions. A narrative summary will accompany the visuals of the findings describing what is known about DV among women at midlife and older in LACs including gaps found in the literature. The categories anticipated for data extraction include authors, year of publication, citation information, country, type of literature, purpose, design/methods, DV definitions, prevalence, population, cultural norms, risk factors, frameworks, intervention information, evaluation, measurement tools and outcomes measured relevant to the review question. These categories may be modified based on what is identified during the review process.

Ethics and dissemination

Review findings can be used to provide a sense of DV prevalence among women at midlife and older across LACs, and to inform critical interventions, programmes and policies to support health and social outcomes among this high-risk population. As this review is conducting a synthesis of existing peer-reviewed and grey literature, ethics approval is not required. Findings from the review will be disseminated using a range of traditional approaches, including producing a peer-reviewed journal article and presentations at national and international conferences. Given the international scope of the research team, findings may be presented in English, French, Spanish, Portuguese and/or additional languages to maximise the reach of this work to relevant stakeholders and knowledge users.

Glossary

Abbreviations of key terms as they are used in this scoping review protocol. Domestic violence (DV), Healthcare Professionals (HCP), Intimate partner violence (IPV), Latin American countries (LACs), Peer Review of Electronic Search Strategies (PRESS) and Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR). The Joanna Briggs Institute no longer exists since being rebranded as JBI.

Author affiliations

¹School of Nursing, Dalhousie University, Halifax, Nova Scotia, Canada

²Aligning Health Needs and Evidence for Transformative Change (AH-NET-C): A JBI Centre of Excellence, Dalhousie University, Halifax, Nova Scotia, Canada

³South America EBHC, Universidad Norbert Wiener, Lima, Lima, Peru

⁴School of Nursing, Universidad San Sebastian, Los Rios, Chile

⁵School of Health Administration, Dalhousie University, Halifax, Nova Scotia, Canada

⁶Public Health & Primary Care, Trinity College Dublin, Dublin, Ireland

⁷Faculty of Medicine, Dalhousie University, Halifax, Nova Scotia, Canada

⁸University Library, University of Saskatchewan, Saskatoon, Saskatchewan, Canada

X Patrick Albert Palmieri @tweetpalmieri, Allyson Gallant @allyjgallant and Ali Hammoud @Alihammoud_LB

Acknowledgements Tamara Navarro (Library Scientist, McMaster University) for translation of the searches and Melissa A. Rothfus, PhD, MLIS (Dalhousie University Libraries) for peer review of the search strategy.

Contributors PAP, KDC, LEW and MM devised the study. MM, PAP, KDC, LEW, AG, ARY, EL, MI, AM, AH and PCS contributed to the decision on the review type. AM and MI prepared the first draft of the protocol. EL prepared the search strategies and search methods. AG reviewed and revised the manuscript. MM, PAP, KDC, LEW, AG, ARY, EL, MI, AM, AH and PCS reviewed and approved the manuscript for submission. MM is the corresponding author and guarantor for this work.

Funding This work is supported by a JBI Brighter Futures grant (JBI University Page 14 of Adelaide K0634463) and by the School of Nursing Research Fund (Dalhousie University, no associated grant number).

Competing interests None declared.

Patient and public involvement Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

Patient consent for publication Not applicable.

Provenance and peer review Not commissioned; externally peer reviewed.

Supplemental material This content has been supplied by the author(s). It has not been vetted by BMJ Publishing Group Limited (BMJ) and may not have been peer-reviewed. Any opinions or recommendations discussed are solely those of the author(s) and are not endorsed by BMJ. BMJ disclaims all liability and responsibility arising from any reliance placed on the content. Where the content includes any translated material, BMJ does not warrant the accuracy and reliability of the translations (including but not limited to local regulations, clinical guidelines, terminology, drug names and drug dosages), and is not responsible for any error and/or omissions arising from translation and adaptation or otherwise.

Open access This is an open access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited, appropriate credit is given, any changes made indicated, and the use is non-commercial. See: <http://creativecommons.org/licenses/by-nc/4.0/>.

ORCID iDs

Marilyn Macdonald <http://orcid.org/0000-0002-0204-6278>

Patrick Albert Palmieri <http://orcid.org/0000-0002-0765-0239>

Karen A Dominguez-Cancino <http://orcid.org/0000-0002-4264-8476>

Lori E Weeks <http://orcid.org/0000-0001-5334-3320>

Allyson Gallant <http://orcid.org/0000-0002-2933-7470>

Erin Langman <http://orcid.org/0000-0002-3324-7152>

Melissa Ignaczak <http://orcid.org/0000-0001-6829-9051>

REFERENCES

- United Nations. What is domestic abuse. 2023. Available: <https://www.un.org/en/coronavirus/what-is-domestic-abuse>
- Understanding and addressing violence against women. World Health Organization; 2012. Available: https://iris.who.int/bitstream/handle/10665/77432/WHO_RHR_12.36_eng.pdf?sequence=1
- Violence against women. World Health Organization; 2021. Available: <https://www.who.int/news-room/fact-sheets/detail/violence-against-women>
- Bott S, Guedes A, Ruiz-Celis AP, et al. Intimate partner violence in the Americas: a systematic review and reanalysis of national prevalence estimates. *Revista Panamericana de Salud Pública* 2019;43:1.
- Bott S, Guedes A, Goodwin M, et al. Violencia contra las mujeres: en américa latina y el caribe: análisis comparativo de datos poblacionales de 12 países. Organización Panamericana de la Salud, Organización Mundial de la Salud, & Centers for Disease Control and Prevention; 2014. Available: https://oig.cepal.org/sites/default/files/violenciaespanol_2.4-web_0.pdf
- Machado DR, Kimura M, Duarte YAO, et al. Violence perpetrated against the elderly and health related quality of life: a population study in the city of Sao Paulo. *Brazil* 2020;25:1119.
- Gonçalves Júnior J, Maia MAG, Moreira JL de S, et al. Domestic violence against Latin American women and female mental health during the new coronavirus (SARS-CoV-2) outbreak. *Int J Inj Contr Saf Promot* 2022;29:193–6.
- Meyer SR, Lasater ME, García-Moreno C. Violence against older women: A systematic review of qualitative literature. *PLoS ONE* 2020;15:e0239560.
- Pathak N, Dhairyan R, Tariq S. The experience of intimate partner violence among older women: A narrative review. *Maturitas* 2019;121:63–75.
- World population ageing. New York: United Nations; 2019. Available: <https://www.un.org/en/development/desa/population/publications/pdf/ageing/WorldPopulationAgeing2019-Highlights.pdf>
- World Health Organization. Maternal, newborn, child, and adolescent health and ageing: percentage of total population aged 60 years or over (data portal) [internet]. World Health Organization; 2023. Available: <https://platform.who.int/data/maternal-newborn-child-adolescent-ageing/indicator-explorer-new/mca/percentage-of-total-population-aged-60-years-or-over>
- Bolsoni CC, Coelho EBS, Giehl MWC, et al. n.d. Prevalence of violence against the elderly and associated factors - a population based study in Florianópolis, Santa Catarina. *Rev Bras Geriatr Gerontol*.
- Curcio C-L, Payán-Villamizar C, Jiménez A, et al. Abuse in Colombian elderly and its association with socioeconomic conditions and functionality. *Colomb Med (Cali)* 2019;50:77–88.
- Hernandez RR, Esquivel-Santovena EE. Prevalencia y factores asociados con la violencia de pareja en las adultas mayores mexicanas. *Salud colectiva*. 2020. Available: <https://revistas.unla.edu.ar/saludcolectiva/article/view/2600>
- Kaur R, Garg S. Addressing domestic violence against women: an unfinished agenda. *Indian J Community Med* 2008;33:73–6.
- McGarry J, Ali P, Hinchliff S. Older women, intimate partner violence and mental health: a consideration of the particular issues for health and healthcare practice. *J Clin Nurs* 2017;26:2177–91.
- Eggers del Campo I, Steinert JI. The Effect of Female Economic Empowerment Interventions on the Risk of Intimate Partner Violence: A Systematic Review and Meta-Analysis. *Trauma, Violence, & Abuse* 2022;23:810–26.
- Vyas S, Watts S. How does economic empowerment affect women's risk of IPV in low and middle income countries. *J Int Dev* 2009;21:577–602.
- Bourey C, Williams W, Bernstein EE, et al. Systematic review of structural interventions for intimate partner violence in low- and middle-income countries: organizing evidence for prevention. *BMC Public Health* 2015;15:1165.
- Keynejad RC, Hanlon C, Howard LM. Psychological interventions for common mental disorders in women experiencing intimate partner violence in low-income and middle-income countries: a systematic review and meta-analysis. *Lancet Psychiatry* 2020;7:173–90.
- Ribeiro MN, Santo FH, Diniz CX, et al. Scientific evidence of the violence against the older adult: an integrative review. *Acta Paul Enferm* 2021;34:eAPE00403.
- Lopes ED de S, Ferreira ÁG, Pires CG, et al. Elder abuse in Brazil: an integrative review. *Rev bras geriatr gerontol* 2018;21:628–38.
- Peters MDJ, Godfrey C, McInerney P, et al. Chapter 11: scoping reviews (2020 version). In: *JBI Manual for Evidence Synthesis* JBI. 2020.
- Tricco AC, Lillie E, Zarin W, et al. PRISMA Extension for Scoping Reviews (PRISMA-ScR): Checklist and Explanation. *Ann Intern Med* 2018;169:467–73.
- McGowan J, Sampson M, Salzwedel DM, et al. PRESS Peer Review of Electronic Search Strategies: 2015 Guideline Statement. *J Clin Epidemiol* 2016;75:40–6.
- Pollock D, Peters MDJ, Khalil H, et al. Recommendations for the extraction, analysis, and presentation of results in scoping reviews. *JBI Evid Synth* 2023;21:520–32.