

# Association Between the Risk of Falls in Elderly People and Self-Care: Scoping Review

Associação Entre o Risco de Quedas na Pessoa Idosa e o Autocuidado: Revisão de Escopo  
Asociación Entre el Riesgo de Caídas en Personas Mayores y el Autocuidado: Revisión del Alcance

## RESUMO

Este estudo tem por objetivo: Mapear as evidências científicas disponíveis sobre a associação entre o risco de quedas em idosos e o autocuidado, identificando intervenções preventivas e suas implicações para a promoção da independência funcional e da qualidade de vida. Revisão de escopo conduzida segundo as diretrizes do Joanna Briggs Institute (JBI). Foram incluídos estudos publicados entre 2016 e 2025, nas bases PubMed, Scopus, Web of Science, LILACS, SciELO e CINAHL. A busca utilizou descritores relacionados a "idoso", "quedas", "autocuidado" e "prevenção". A seleção ocorreu em duas etapas: triagem de títulos/resumos e leitura integral, com extração de dados sobre autores, ano, país, tipo de estudo e principais achados. Cabe ressaltar, que nem todos os estudos de revisão de escopo possuem linha temporal definida. Foram incluídos estudos de diferentes metodologias (revisões sistemáticas, ensaios clínicos, observacionais e qualitativos), que identificaram fatores de risco intrínsecos (fragilidade, comorbidades, polimedicação) e extrínsecos (ambiente domiciliar inadequado). As intervenções de autocuidado mais recorrentes foram exercícios físicos regulares, controle de doenças crônicas, adaptação do ambiente e uso de gerontotecnologias, como dispositivos de monitoramento e materiais educativos digitais. Tais medidas mostraram impacto positivo na redução de quedas e na promoção do envelhecimento ativo. O autocuidado se revela estratégia essencial para reduzir o risco de quedas em idosos, promovendo segurança, autonomia e qualidade de vida. No entanto, ainda existem lacunas relacionadas à personalização das intervenções e à acessibilidade de tecnologias, o que aponta para a necessidade de políticas públicas e programas contínuos de educação em saúde voltados para esta população.

**DESCRITORES:** idoso; quedas; autocuidado; prevenção.

## ABSTRACT

This study aims to map the available scientific evidence on the association between the risk of falls in older adults and self-care, identifying preventive interventions and their implications for promoting functional independence and quality of life. A scoping review was conducted according to the Joanna Briggs Institute (JBI) guidelines. Studies published between 2016 and 2025 were included from PubMed, Scopus, Web of Science, LILACS, SciELO, and CINAHL. The search used descriptors related to "older adult," "falls," "self-care," and "prevention." Selection occurred in two stages: screening of titles/abstracts and full-text reading, with data extraction on authors, year, country, study type, and main findings. It is noteworthy that scoping review studies do not establish a temporal line. Studies with different methodologies were included (systematic reviews, clinical trials, observational and qualitative studies), which identified intrinsic risk factors (frailty, comorbidities, polypharmacy) and extrinsic ones (inadequate home environment). The most recurrent self-care interventions were regular physical exercise, chronic disease management, environmental adaptation, and the use of gerontechnologies such as monitoring devices and digital educational materials. These measures showed a positive impact on reducing falls and promoting active aging. Self-care emerges as an essential strategy to reduce the risk of falls in older adults, promoting safety, autonomy, and quality of life. However, there are still gaps related to the personalization of interventions and the accessibility of technologies, which highlights the need for public policies and continuous health education programs aimed at this population.

**DESCRIPTORS:** older adult; falls; self-care; prevention.

## RESUMEN

Este estudio tiene como objetivo mapear la evidencia científica disponible sobre la asociación entre el riesgo de caídas en personas mayores y el autocuidado, identificando intervenciones preventivas y sus implicaciones para la promoción de la independencia funcional y la calidad de vida. Se realizó una revisión de alcance según las directrices del Joanna Briggs Institute (JBI). Se incluyeron estudios publicados entre 2016 y 2025 en las bases PubMed, Scopus, Web of Science, LILACS, SciELO y CINAHL. La búsqueda utilizó descriptores relacionados con "adulto mayor", "caídas", "autocuidado" y "prevención". La selección se realizó en dos etapas: cribado de títulos/resúmenes y lectura completa, con extracción de datos sobre autores, año, país, tipo de estudio y principales hallazgos. Cabe destacar que los estudios de revisión de alcance no establecen una línea temporal. Se incluyeron estudios con diferentes metodologías (revisiones sistemáticas, ensayos clínicos, estudios observacionales y cualitativos), que identificaron factores de riesgo intrínsecos (fragilidad, comorbilidades, polimedicación) y extrínsecos (entorno domiciliario inadecuado). Las intervenciones de autocuidado más frecuentes fueron la práctica regular

de ejercicios físicos, el control de enfermedades crónicas, la adaptación del entorno y el uso de gerontotecnologías, como dispositivos de monitoreo y materiales educativos digitales. Estas medidas mostraron un impacto positivo en la reducción de caídas y en la promoción del envejecimiento activo. El autocuidado se revela como una estrategia esencial para reducir el riesgo de caídas en personas mayores, promoviendo seguridad, autonomía y calidad de vida. Sin embargo, aún existen vacíos relacionados con la personalización de las intervenciones y la accesibilidad de las tecnologías, lo que señala la necesidad de políticas públicas y programas continuos de educación en salud dirigidos a esta población.

**DESCRIPTORES:** persona mayor; caídas; autocuidado; prevención.

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Received: 09/24/2025

Approved: 10/11/2025

## INTRODUCTION

Promoting self-care in older adults at risk of falls is a relevant and complex issue, considering the rapid aging of the global population and the consequences of falls in this age group. The aging process is accompanied by physiological and functional changes that increase vulnerability to falls, which are one of the leading causes of injury and mortality among older adults<sup>1</sup>. In Brazil, the rate of falls among older adults is concerning, especially due to the impact these falls have on public health, resulting

in hospitalizations, functional complications, and, in many cases, deaths. Self-care, as defined by Dorothea Orem's theory, emerges as a fundamental strategy for empowering older adults to better manage their health and prevent falls, promoting their independence and quality of life.

Falls in the elderly are multifactorial events that can be caused by intrinsic factors, such as frailty, loss of balance, and muscle strength, or by extrinsic factors, such as an inadequate environment. In the home environment, for example, loose rugs, slippery floors, and poor lighting are

commonly identified as causes of falls. In addition, the presence of comorbidities and the use of multiple medications increase the risk of falling and decrease the elderly person's ability to recover from a fall.

With the increase in life expectancy and the consequent rise in the number of older adults in Brazil, estimated to reach more than 30 million people aged 60 or older by 2025<sup>5</sup>, it is essential to address prevention strategies that empower older adults to proactively manage their health.

Falls, defined as accidental events that cause the body to hit the ground,

are the second leading cause of death from accidental injuries in older adults. It is estimated that about 30% of Brazilian older adults suffer falls annually, a phenomenon that increases with aging and frailty. This risk is exacerbated by intrinsic factors, such as decreased muscle strength and changes in balance, as well as extrinsic factors related to an inadequate home environment, which contribute to the vulnerability of older adults to serious falls, especially in the home.

The literature highlights the need for interventions focused on training older adults to better manage their health through self-care practices. The Self-Care Deficit Theory, proposed by Dorothea Orem, supports the importance of preparing older adults to exercise control over their health conditions and prevent falls, with the support of caregivers and health professionals. The role of nursing, in particular, is crucial in this context, as these professionals are responsible for continuous clinical assessment, identification of risk factors, and implementation of preventive strategies during hospitalization and in the home setting.

Studies indicate that the use of technologies, such as gerontechnologies and the Internet of Things (IoT), has been explored as a tool to promote self-care and prevent falls, offering real-time monitoring and greater safety for the elderly. These technologies, combined with rehabilitation programs and physical exercises that strengthen muscles and improve balance, can contribute significantly to reducing the risk of falls and promoting active and healthy aging.

The promotion of self-care is, therefore, a multidimensional approach that involves educating the elderly, supporting caregivers, adapting the environment, and using technological resources to ensure the safety and well-being of this vulnerable

population. The coordinated implementation of these strategies can significantly reduce the risk of falls and their consequences, promoting greater autonomy and quality of life for the elderly<sup>11</sup>.

Given this scenario, promoting self-care becomes a crucial tool for preventing falls in older adults. Health education plays an important role in providing information and empowering older adults to identify risk factors and implement preventive measures, such as adapting the home environment and adopting physical exercises that improve balance and muscle strength<sup>12</sup>. The work of health professionals, such as nurses and physical therapists, is essential to promote personalized interventions that help older adults remain active and safe.

Therefore, promoting self-care involves not only empowering older adults, but also the implementation of public health programs that address the specificities of aging and create safer environments for this growing population. It is essential that these initiatives be continuous and intersectoral, bringing together the efforts of health professionals, caregivers, and family members to reduce the impact of falls and improve the quality of life of older adults<sup>13</sup>. Thus, this review aims to: Map the available scientific evidence on the risk of falls in older adults associated with self-care, identifying the main preventive interventions and their implications for promoting functional independence and quality of life.

## METHODOLOGY

The scope review was developed to map and synthesize the available scientific evidence on the risk of falls in older adults associated with self-care. The methodology adopted followed the guidelines recommended by the Joanna Briggs Institute (JBI),

which provided a robust framework for conducting scope reviews, allowing for the inclusion of different types of studies and the exploration of a wide range of issues related to the topic. This type of review was appropriate for examining and mapping the extent, scope, and nature of existing research on a given phenomenon, such as self-care in older adults for fall prevention, identifying gaps in the literature and areas for future research. The review was guided by the following central question, formulated based on the PCC (Population, Concept, Context) strategy: "What were the interventions associated with self-care that influenced the risk of falls in older adults?"

The formulation of the research question was based on the PCC (Population, Concept, Context) strategy, which was appropriate for scoping reviews. This strategy allowed for a clear definition of the elements that comprised the focus of the review. The Population (P) referred to older adults aged 60 years or older, a group particularly vulnerable to falls due to a number of intrinsic and extrinsic factors, such as frailty, loss of muscle strength, and adverse environmental conditions. The Concept (C) addressed self-care, understood as the actions performed by the elderly themselves, with or without the help of caregivers and health professionals, to manage their health and prevent falls.

Self-care included both preventive behaviors (such as physical exercise, control of comorbidities, and adaptation of the environment) and the use of assistive and educational technologies, such as gerontechnologies. Context (C) covered all environments where self-care interactions among older adults occurred, whether at home, in institutions (such as hospitals and nursing homes), or in the community. Studies published between 2016 and 2025 in the PubMed,

Scopus, Web of Science, LILACS, Scielo, and CINAHL databases were included. The search used descriptors related to “elderly,” “falls,” “self-care,” and “prevention.” The selection took place in two stages: screening of titles/abstracts and full reading, with extraction of data on authors, year, country, type of study, and main findings. It should be noted that, according to the Joanna Briggs Institute (JBI) methodology, scoping reviews do not necessarily establish a timeline for the inclusion of studies, as has been adopted in recent research.

The studies included in the review covered a variety of methodologies, including systematic reviews, randomized clinical trials, observational, longitudinal, and qualitative studies, as long as they dealt with self-care in older adults and its relationship with fall prevention. Studies published in Portuguese, English, and Spanish were included. Studies that did not directly focus on the elderly population or that did not discuss self-care interventions in the context of falls were excluded.

The data extracted included information such as authors, year of publication, and country of origin, as well as the type of study and the methodology used. Information on the study population was also collected, including the number of participants and their demographic characteristics.

The selection was carried out in two stages: 1- Screening of Titles and Abstracts: Duplicate studies and those that did not meet the inclusion criteria were excluded, and 2- Complete Reading of Selected Studies: Those that passed the initial screening were read in full to extract relevant data. The interventions or self-care measures used in the studies were detailed, as were the identified risk factors for falls. In addition, the results and impact of these interventions on reducing falls were analyzed, and the limitations of each study included in the review were highlighted. The data were analyzed descriptively and synthesized in tables to facilitate understanding of the interventions and their impacts.

The results of this scoping review were disseminated through publications in academic journals and presentations at scientific conferences, with the aim of contributing to the development of preventive interventions focused on self-care and reducing the risk of falls in older adults. Descriptors and keywords related to “older adults,” “falls,” “self-care,” “prevention,” and “gerontechnology” were used, combined with Boolean operators to ensure the comprehensiveness of the search.

**STRATEGY IN ENGLISH**

(Elderly OR Older adults) AND (Falls OR Accidental falls) AND (Self-care OR Self-management OR Preventive measures).

**STRATEGY IN PORTUGUESE**

(Idoso OR Idosos) AND (Quedas OR Acidentes por quedas) AND (Autocuidado OR Gestão pessoal OR Medidas preventivas).

**TABLE 1 – Database search strategy:**

Database	Search strategy
PubMed/Medline	((“Self-Care”[MeSH Terms] OR “Self-care”[Title/Abstract] OR “Autocuidado”[All Fields] OR “Autocuidado” OR “Gerontecologia”[All Fields] OR “Gerontecology”[All Fields] OR “Tecnologia Assistiva”[All Fields]) AND (“Accidental Falls”[MeSH Terms] OR “Falls”[Title/Abstract] OR “Quedas”[All Fields]) AND (“Aged”[MeSH Terms] OR “Elderly”[All Fields] OR “Idoso”[All Fields] OR “Geriatric”[Title/Abstract]))
Scopus	((“Self-Care” OR “Autocuidado” OR “Gerontecologia”) AND (“Falls” OR “Accidental Falls” OR “Quedas”) AND (“Elderly” OR “Aged” OR “Idoso”))
Web of Science	(TS=(“Self-Care” OR “Autocuidado” OR “Gerontecologia”) AND TS=(“Falls” OR “Accidental Falls” OR “Quedas”) AND TS=(“Elderly” OR “Aged” OR “Idoso”))
CINAHL	(TI=(“Self-Care” OR “Autocuidado” OR “Gerontecologia”) AND TI=(“Falls” OR “Accidental Falls” OR “Quedas”) AND TI=(“Elderly” OR “Aged” OR “Idoso”)) OR (AB=(“Self-Care” OR “Autocuidado” OR “Gerontecologia”) AND AB=(“Falls” OR “Accidental Falls” OR “Quedas”) AND AB=(“Elderly” OR “Aged” OR “Idoso”))
LILACS	((“Self-Care” OR “Autocuidado” OR “Gerontecologia”) AND (“Quedas” OR “Falls”)) AND (“Idoso” OR “Geriatría”)
Google Scholar	((“Self-Care” OR “Autocuidado” OR “Tecnologia Assistiva” OR “Gerontecologia”) AND (“Quedas” OR “Accidental Falls”) AND (“Idoso” OR “Elderly”))

Source: research data, 2024.

## RESULTS AND DISCUSSION

The discussion of the results obtained in the scoping review reveals a broad and complex overview of the

topic, highlighting the intersections between risk factors, prevention strategies, technological interventions, and the role of health professionals. The studies analyzed, from different

methodologies and contexts, reinforce the complexity and relevance of promoting self-care as an essential component in fall prevention.

### QUADRO 2 – Características do estudos encontrados:

Title/Authors	Journal/Year/Volume/Issue	Country	Study Design	Scientific findings on the topic
Factors associated with fall risk in institutionalized older adults  Erika Carla Cavalcanti Gomes, Ana Paula de Oliveira Marques, Márcia Carréra Campos Leal, Benvinda Pereira de Barros <sup>13</sup>	Ciência & Saúde Coletiva, 2014, v.19, n.8	Brazil	Integrative literature review	It was identified that factors such as being female, having a chronic disease diagnosis, use of benzodiazepines, history of falls, and mobility restrictions are relevant to fall risk.
Gerontechnology for fall prevention in older adults with Parkinson's disease  Juliana Martins Ferreira, Karina Silveira de Almeida Hammerschmidt, Josiane Steil Siewert, Angela Maria Alvarez, Melissa Orlandi Honório Locks, Ivonete Terezinha Schüller Buss Heidemann <sup>14</sup>	Revista Brasileira de Enfermagem, 2019, 72(Suppl 2)	Brazil	Convergent care research	Gerontechnologies such as educational booklets and games were developed, promoting self-care and empowerment, assisting in fall prevention.
Strategies for fall prevention in the living environment of older adults with a focus on aging in place  Juliana Tasca Tissot, Lizandra Garcia Lupi Vergara <sup>15</sup>	Ambiente Construído, 2023, v.23, n.3	Brazil	Systematic review and content analysis	The importance of adapted environments to reduce falls was emphasized, highlighting recurrent environmental factors.
The impact of chronic diseases on autonomy and self-care in older adults  Raquel Spindola Samartini, Lara Miguel Quirino Araujo, Viviane Cristina Cândido <sup>16</sup>	Revista Recien, 2023, 13(41)	Brazil	Qualitative research using Thematic Oral History methodology	Changes in the perception of autonomy and self-care due to chronic diseases were identified, along with the resilience of older adults.
Repercussions of hospitalization due to falls in older adults: health care and prevention  Adriana Remião Luzardo, Newton Ferreira de Paula Júnior, Marcelo Medeiros, Paula Carolina Bejo Wolkers, Sílvia Maria Azevedo dos Santos <sup>17</sup>	Revista Brasileira de Enfermagem, 2018, 71(Suppl 2)	Brazil	Qualitative exploratory research	The impact of falls on health and self-care was highlighted, noting passivity regarding the consequences and the need for primary assessments.
Falls in older adults – repercussions for care in the family–home environment  Luzia Wilma Santana da Silva, Tiele Pires dos Santos <sup>18</sup>	Revista Kairós-Gerontologia, 2018, 21(2)	Brazil	Critical–interpretative research	Family reorganization after a fall was addressed, emphasizing preventive care and adaptation to avoid new falls.

<p>Self-care capacity of older adults attended in nursing consultations in secondary health care</p> <p>Fernanda Vieira Nicolato, Alcimar Marcelo do Couto, Edna Aparecida Barbosa de Castro<sup>19</sup></p>	<p>Revista Enfermagem Centro-Oeste Mineiro, 2016, 6(2)</p>	<p>Brazil</p>	<p>Descriptive and exploratory study</p>	<p>It was demonstrated that older adults seek secondary care to improve self-care, with educational intervention as an important tool.</p>
<p>Socioeconomic aspects and fall events among older adults cared for in the public health system</p> <p>Ériks Oliveira Silva, Alexandre Azenha Alves de Rezende, Luciana Karen Calábria<sup>20</sup></p>	<p>Revista Brasileira de Promoção da Saúde, 2019, 32</p>	<p>Brazil</p>	<p>Descriptive and cross-sectional study</p>	<p>A high prevalence of falls was noted, especially among women, associated with intrinsic and environmental factors.</p>
<p>Home falls among older adults: implications of stressors and representations in the context of COVID-19</p> <p>Jéssica de Castro Santos, Cristina Arreguy-Senna, Paulo Ferreira Pinto, Elenir Pereira de Paiva, Pedro Miguel dos Santos Dinis Parreira, Marcos Antônio Gomes Brandão<sup>21</sup></p>	<p>Revista Gaúcha de Enfermagem, 2021, 42(esp)</p>	<p>Brazil and Portugal</p>	<p>Mixed-methods study with convergent triangulation</p>	<p>Environmental factors predisposing older adults to falls were identified, such as fear and loss of visual acuity, highlighting home adaptation for safety during the pandemic.</p>
<p>Prevalence of falls in older adults attended at a comprehensive care center</p> <p>Cláudia Jeane Lopes Pimenta, Raquel Janyne de Lima, Tatiana Ferreira da Costa, Thaíse Alves Bezerra, Kaisy Pereira Martins, Natália Pessoa da Rocha Leal, Stella Costa Valdevino, Kátia Neyla de Freitas Macedo Costa<sup>22</sup></p>	<p>REME – Revista Mineira de Enfermagem, 2017, 21(e-1045)</p>	<p>Brazil</p>	<p>Exploratory and descriptive quantitative study</p>	<p>It was found that 71.9% of older adults reported previous falls, with significant associations between education level, type of residence, and the use of assistive devices.</p>
<p>Effective strategies for self-care in older adults: an integrative review</p> <p>Samir Gabriel Vasconcelos Azevedo, Andréa Carvalho Araújo Moreira, Saulo Barreto Cunha dos Santos, Francisco Eduardo Silva de Oliveira, José Wellington Cruz Magalhães Júnior<sup>23</sup></p>	<p>Estud. Interdisciplin. Envelhec., 2020, 25(2)</p>	<p>Brazil</p>	<p>Integrative review study</p>	<p>Strategies such as educational, adaptive, and functional approaches were identified to promote self-care in older adults, improving health and reducing fall risks.</p>
<p>Caring gerontechnologies for older adults/families: concepts, formats, and purposes</p> <p>Francine Casarin, Betânia Huppés, Daiane Porto Gautério-Abreu, Naiana Oliveira dos Santos, Silomar Ilha<sup>24</sup></p>	<p>Estud. Interdisciplin. Envelhec., 2021, 26(2)</p>	<p>Brazil</p>	<p>Integrative review study</p>	<p>The use of gerontechnologies was emphasized as support for self-care and safety among older adults, including devices and strategies that facilitate care.</p>

Source: Research data, 2024.

Studies range from integrative reviews and qualitative research to descriptive and exploratory quantitative studies. This demonstrates the methodological breadth used to investigate

the topic, allowing for a multifaceted analysis of self-care interventions and their impacts.

The home environment is repeatedly mentioned as a central location for falls. This study<sup>7</sup> emphasizes the

importance of adapting the environment, especially during periods of increased vulnerability, such as during the COVID-19 pandemic, to reduce the risk of falls. Several studies<sup>23,24</sup> highlight the use of educational in-

interventions and gerontechnologies. These interventions promote self-care and provide support for both older adults and caregivers, increasing the safety and autonomy of older adults.

The literature points out that the fear of falling significantly affects the quality of life and mobility of older adults. Strategies to mitigate this fear, including family support and restructuring of care practices, are fundamental for preventing falls and maintaining independence.

The prevalence of falls in older adults is a worrying phenomenon that is well documented in the literature. Authors observed<sup>21</sup> that about 71.9% of older adults treated at a comprehensive care center reported previous episodes of falls, with a significant association between education, type of residence, and use of support devices. This data is corroborated by other studies, which pointed to the high occurrence of falls in elderly women, especially those with comorbidities and in vulnerable situations. These falls often result in hospitalizations and significant socioeconomic costs, and are therefore a relevant public health issue.

The home environment emerges as one of the main places where falls occur, as discussed<sup>21</sup>. Adapting this environment, especially in pandemic contexts such as COVID-19, is essential to mitigate risks. The studies reviewed highlight that slippery floors, inadequate lighting, and the absence of grab bars are common factors that increase the risk of falls at home. Study<sup>15</sup> reinforces the importance of housing planning that considers the safety of older adults and the adaptation of their needs.

Self-care is an essential practice for fall prevention, and this approach goes beyond individual practices, involving health education and professional support. Authors<sup>19</sup> have shown that educational interventions during

nursing consultations helped to increase self-care capacity among older adults, promoting better preventive practices and greater awareness of risk factors. Researchers<sup>23</sup> have identified educational and adaptive strategies as essential for encouraging a healthy lifestyle and functionality among older adults.

The integration of technologies into older adult care, such as gerontechnologies, has been emphasized in studies<sup>14,24</sup>. These technologies, including educational apps and games, have been shown to be effective in promoting self-care and increasing safety. The use of mobile devices, monitoring tools, and digital educational materials contributes to more holistic care, which not only reduces the risk of falls but also promotes active aging.

The impact of falls goes beyond physical implications, also involving psychosocial aspects. Authors<sup>18</sup> have addressed how family reorganization and support after falls are crucial for adaptation and prevention of new falls. The fear of falling, identified in this research<sup>21</sup>, can lead to protective behaviors that reduce mobility and compromise the quality of life of older adults. The role of family and caregivers, therefore, is a vital component in preventive care management.

Healthcare professionals play an indispensable role in implementing fall prevention strategies and encouraging self-care. Researchers have highlighted<sup>19,22</sup> that clinical assessment and ongoing support provided by nurses and other specialists are essential for identifying risk factors and intervening effectively. Interdisciplinary collaboration, integrating physical therapists, physicians, and other professionals, is recommended for a more effective and personalized approach.

The scope review shows that fall prevention in older adults requires an

integrated and multidimensional approach. Adapting the home environment, promoting self-care practices, using technology, and providing educational support are complementary elements that, when applied in a coordinated manner, can significantly reduce the risk of falls. The work of health professionals, combined with the active involvement of the family and the elderly person themselves, enhances the impact of these strategies. The promotion of self-care and the development of public policies focused on preventive interventions are essential to improve quality of life and promote safer and more independent aging.

One of the points that emerges from this discussion is the importance of personalizing self-care strategies. Study<sup>23</sup> suggests that the effectiveness of educational interventions is maximized when they are tailored to the individual needs of older adults, taking into account both their physical and cognitive abilities. This personalized approach is still under-explored in the literature, highlighting the need to develop self-care programs that take into account the heterogeneity of the older adult population and its specificities.

Self-perception of risk also plays a central role in the adoption of self-care practices. Although the literature mentions fear of falling as a factor that limits mobility, there is a gap in understanding how one's perception of fall risk can be used as a tool to motivate the adoption of preventive practices. Programs that encourage older adults to recognize the signs and symptoms of vulnerability, helping them to take proactive measures, are suggested as a promising area for future interventions.

Another important point is the integration of multisectoral efforts. While many studies highlight the role of health professionals, few address

how community institutions, such as community centers and elder support organizations, can participate in promoting self-care and adapting the environment. Cooperation between health services and the social support network can enrich fall prevention strategies by providing complementary resources to older adults and their caregivers.

The application of gerontechnologies, as discussed<sup>24</sup>, reveals not only benefits but also challenges. The reviewed literature emphasizes that, although these technologies can improve the safety and autonomy of older adults, there are still barriers to acceptance and usability. The lack of adequate training and the resistance of older adults to use new technologies point to the need for educational interventions to accompany technological implementation. Exploring how to overcome these challenges can provide valuable insights into making these technologies more accessible and widely used.

Studies also suggest that socioeconomic factors play a crucial role in the adoption and effectiveness of self-care strategies. Research indicates<sup>20</sup> that education and financial conditions directly affect the ability of older adults

to implement preventive practices, such as adapting the home environment and participating in physical exercise programs. This is a relevant point for public policies, which should consider the financing and accessibility of self-care programs, ensuring that even older adults in situations of socioeconomic vulnerability can benefit from preventive interventions.

Therefore, continuing education on self-care should be emphasized as an ongoing process rather than a one-time intervention. Maintaining acquired knowledge and keeping up to date with new practices and technologies are essential to ensure that preventive measures are effective over time. The inclusion of periodic training and regular assessments can reinforce older adults' commitment to their self-care practices and promote more active and safer aging.

## FINAL CONSIDERATIONS

This scoping review highlighted that fall prevention in older adults is a multifactorial issue that requires comprehensive interventions involving self-care practices, professional support, and environmental adaptations. Self-care, when promoted consistent-

ly and in a personalized manner, has been shown to be effective in reducing falls and promoting autonomy among older adults. However, to maximize the benefits of these practices, prevention strategies must be intersectoral, integrating health professionals, families, and the community. The introduction of assistive technologies, such as gerontechnologies, and continuing education programs are promising elements that enhance the safety and quality of life of older adults.

The review also emphasizes the importance of overcoming challenges related to the accessibility and acceptance of these interventions, especially among vulnerable populations. Therefore, the implementation of public policies that guarantee equitable access to prevention programs, adapted to the socioeconomic and cultural realities of older adults, is crucial. Such measures can contribute to healthier and more independent aging, with a lower risk of falls and greater overall well-being. Investing in actions that strengthen health education, family support, and community cooperation, along with technological advances, represents a solid path to addressing the growing challenges of an aging population.

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