South American Publishing

SAP Multidisciplinary Open. 2025; 3:226
doi: 10.62486/mo2025226

BRIEF COMMUNICATION

Rehabilitation Nursing in the prevention of falls in community-dwelling elderly people with a fear of falling

Enfermería de rehabilitación en la prevención de caídas en ancianos comunitarios con miedo a caerse

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Cite as
Novo B, Ribeiro M, Bação M, Andrade M, Horta P, Sousa L, et al. Rehabilitation Nursing in the prevention of falls in community-dwelling elderly people with a fear of falling. SAP Multidisciplinary Open. 2025; 3:226. https://doi.org/10.62486/mo2025226

Publication History
Submitted: 27-06-2024
Revised: 10-10-2024
Accepted: 08-04-2025
Published: 09-04-2025

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ABSTRACT

Introduction: falls in the home represent an important public health problem due to the ageing of the population. They are associated with physical, emotional and social complications, significantly affecting the quality of life of older people.
Objective: to describe the interventions of nurses specializing in rehabilitation nursing to prevent falls in community-dwelling elderly people with a fear of falling.
Method: theoretical-reflective article based on a search of scientific literature, using descriptors related to the theme.
Results: multiple intrinsic and extrinsic risk factors were identified as predictors of falls. The interventions of rehabilitation nurses are organized into three phases: risk identification; prevention of falls and fear of falling; and reduction of associated injuries. They contribute not only to promoting independence and maximizing functionality by training remaining abilities and/or using adaptive strategies, but also to enhancing autonomy by empowering older people and their caregivers.
Conclusions: nurses specializing in rehabilitation nursing are essential in the prevention of falls in the home setting, and the importance of an individualized, community-based and transdisciplinary approach stands out. It is suggested that more scientific evidence be produced to reinforce the responsibility and specificity of intervention in this area.

Keywords: Aged; Rehabilitation Nursing; Accidental Falls; Patient Safety; Aging in Place.

RESUMEN

Introducción: las caídas en el hogar representan un importante problema de salud pública debido al envejecimiento de la población. Se asocian a complicaciones físicas, emocionales y sociales, afectando significativamente a la calidad de vida de las personas mayores.
Objetivo: describir las intervenciones de enfermeras especializadas en enfermería de rehabilitación para prevenir las caídas en ancianos residentes en la comunidad con miedo a caerse.
Método: Artículo teórico y reflexivo basado en la búsqueda de literatura científica, utilizando descriptores relacionados con el tema.
Resultados: se identificaron múltiples factores de riesgo intrínsecos y extrínsecos, predictores de caídas. Las intervenciones de las enfermeras de rehabilitación se organizan en tres fases: identificación del riesgo; prevención de las caídas y del miedo a caer; y reducción de las lesiones asociadas. Contribuyen no sólo a promover la independencia y maximizar la funcionalidad mediante el entrenamiento de las capacidades remanentes y/o el uso de estrategias adaptativas, sino también a aumentar la autonomía mediante la capacitación de las personas mayores y sus cuidadores.
Conclusiones: las enfermeras especializadas en enfermería de rehabilitación son fundamentales en la prevención de caídas en el ámbito domiciliario, destacando la importancia de un abordaje individualizado, comunitario y transdisciplinar. Se sugiere la producción de más evidencias científicas que refuercen la responsabilidad y especificidad de la intervención en este ámbito.

Palabras clave: Ancianos; Enfermería de Rehabilitación; Accidentes por Caídas; Seguridad del Paciente; Envejecimiento en Casa.

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INTRODUCTION

Falls are considered a worldwide public health problem with clear repercussions for health systems.[1] They are defined as an event that results from the person inadvertently falling to the ground or another level below their own height.[2,3,4,5]

Globally, population ageing has increased in recent decades, contributing to the rise in the prevalence of falls in the home. It is estimated that one third of the elderly population aged over 65,[3] experience one fall per year, and it is considered the second leading cause of death, due to unintentional injuries that compromise their quality of life.[1,6,9] In Portugal, falls account for more than 70 % of the mechanisms of injury in the elderly population, leading them to resort to the emergency room.[10]

This is a challenge for rehabilitation nurse specialists (RNS), who are responsible for preventing falls in community-dwelling elderly people by promoting early diagnosis and intervention, ensuring the maintenance of remaining abilities, preventing complications and promoting independence in carrying out activities of daily living (ADLs).[1] In view of the increase in aging and the consequent increase in the occurrence of falls, there is a need for transdisciplinary intervention in the prevention of these events.[11]

In this way, this article develops a reflective analysis with the main objective of describing the interventions of the RNS in the prevention of falls in community-dwelling elderly people with a fear of falling.

METHOD

It consists of a theoretical and reflective article, based on a search of scientific literature, using the selected keywords as descriptors, using the Google Schoolar platform and databases: SciELO, EBSCO Host (Medline, CINAHL and Cochrane Database of Systematic Reviews) and Pubmed. We included articles on the prevention of falls in community-dwelling older people with a fear of falling.

DISCUSSION

According to the World Health Organization, in developed countries, an elderly person is defined as a person aged 65 or over.[3] Ageing is related to the occurrence of falls, with an estimated high annual percentage in the elderly population, approximately 30 %.[12] In Portugal, 63,9 % of falls occur at home, and the RNS's intervention in the community is essential.[10] According to the literature analyzed, falls in the elderly population are attributable to intrinsic factors (related to the person) and extrinsic factors (related to the environment) - table 1.[9]

Table 1. Intrinsic and extrinsic factors

Intrinsic Factors	Extrinsic Factors
-Female gender (higher prevalence); -Older age; -Prevalence of chronic diseases; -Previous falls; -Devaluation of health; -Polymedication; -Sensory alterations (e.g. decreased visual acuity); -Changes in motor function (e.g. decreased muscle strength) muscle strength) - Changes in posture and balance; -Urinary alterations (e.g. functional incontinence); -Cognitive and behavioral changes (e.g. memory).[1,9,12,13,14,15]	-Lighting; -Architectural barriers; -Obstacles in the home (e.g. loose carpets); -Floor characteristics; -Inappropriate footwear; -Inappropriate orthotics.[1,11,13,14,16]

Numerous authors point out that ageing and consequent functional decline increase frailty, predisposing the elderly to falls.[10] Frailty in the elderly is a complex, multifactorial syndrome defined by a reduction in homeostatic reserves and the body's ability to respond to adverse events. It is characterized by a reduction in muscle strength (sarcOpenia), physical endurance, cognitive alterations and overall physiological function, substantially increasing functional dependence, predisposition to adverse events (falls and delirium), the development of chronic diseases and mortality.[6] Thus, elderly people who are considered more frail are more likely to fall at home, while performing ADLs and other tasks.[9]

In the home, falls lead to increased dependency as a result of functional incapacity related to subsequent injuries and the elderly person's fear of falling. Fear of falling is the worry related to falling, associated with feelings of anxiety and stress, which affect the performance of ADLs.[12,17] The predictors are: advanced age, reduced visual acuity, a history of falls, anxiety and depression, which can lead to social isolation and affect quality of life.[12] It is associated with the occurrence of falls, but is not a direct result of them, as elderly people with no history of falling may develop it. It is therefore essential to recognize and manage the fear of falling when implementing adaptive strategies to prevent falls.[18,19]

As this issue is a challenge for Public Health, the responsibility of the RNS in the field of fall prevention is preponderant, given that it cares for and empowers people with activity limitations and/or participation restrictions throughout the life cycle and maximizes functionality.[20] Thus, the RNS's intervention aims to identify risks, develop care plans that include preventive actions, ensure the maintenance of functional capacities, and prevent complications and disabilities. In order to ensure the safety and quality of life of older people and their caregivers, the RNS helps them to reach their full potential by empowering them and ensuring that they can perform their ADLs.[1,15,21]

According to the Registered Nurses Association of Ontario[22], fall prevention in the elderly should include programs that reflect three phases: identifying risk factors associated with falling and the fear of falling; reducing the occurrence of falls and the fear of falling; and reducing associated injuries. Numerous nursing interventions aimed at preventing falls have therefore been identified (table 2). From the analysis carried out, we found that the second and third phases are inseparable, which is why we opted to group them together.

Table 2. Nursing interventions at home to prevent falls and manage the fear of falling in community-dwelling older people

Phases	Nursing Interventions
Identifying Risk Factors for Falls and Fear of Falling	- Establish a therapeutic relationship; -Assessing the risk of falling (e.g. Timed Up and Go Test); -Assessing intrinsic and extrinsic factors that predict falls in the elderly; - Assess the potential for improving the knowledge and skills of both the elderly person and their caregiver in preventing falls; -Assess muscle strength (e.g. Modified Medical Research Council Scale); -Assessing balance (e.g. Berg Balance Scale); -Assess fear of falling (e.g. Falls Efficacy Scale-International); -Assessing the need for support products; -Carry out home visits.
Decreased Occurrence of Falls, Fear of Falling and Associated Injuries	-Promote cognitive-behavioral strategies for adhering to safe behaviors (managing the fear of falling); -Make home adaptations; -Train and supervise the adaptation of the use of support products; -Promote health education (knowledge of risk factors and prevention strategies, empowerment to prevent falls); -Optimize clothing and footwear; -Optimize the management of medication (e.g. vitamin D supplements); -Optimize the management of the diet; -Perform physical exercise training (strength training, endurance, flexibility, motor coordination, postural correction, balance, gait and others (e.g. Tai-Chi); -Perform ADL training; -Integrate the use of technology (e.g. telemonitoring); -Disseminate fall prevention programs (e.g. National Accident Prevention Program); -Support and socialization groups; - Teach, instruct and train strategies for preventing falls and managing the fear of falling, with elderly people living in the community and their caregivers; -Referral to other areas of intervention (transdisciplinary team-ex. vision screening, cardiology consultation, podiatry consultation); -Integrate fall detection devices (e.g. sensor with alarm).[1,8,16,18,22,23,24,25]

Given the vulnerability, social isolation and fragility to which this fringe of society is subject, it is essential for the RNS to intervene in the community through proximity care. It is therefore essential to coordinate efforts between existing resources in the community and the rehabilitation programs to be implemented with the elderly and their carers, as a basic strategy aimed at rehabilitation in their family and social environment.[26]

In light of the above, the RNS seeks to promote independence by training remaining skills and/or using adaptive strategies, in order to maximize the functionality of this population in a home context. To this end, it is crucial that the RNS approach has the empowerment of these elderly people at its core, as a motto for enhancing their autonomy. Through the focus on knowledge and learning, we empower older people and their caregivers in their decision-making, enabling them to deal with challenges, particularly in managing the fear of falling, promoting the training of skills for achieving ADLs.[27]

It should be noted that the fear of falling can be a positive factor in preventing falls, but the person's interpretation of the risks can influence events/threats.[28] Thus, elderly people who do not value the risk factors of falling may be more predisposed to falling.[29]

CONCLUSIONS

Based on this reflection, we can see that the RNS's intervention in fall prevention with community-dwelling elderly people and their caregivers is essential for achieving health gains, demonstrated through the elderly person's satisfaction, the promotion of their health and the prevention of complications associated with falls, boosting their functional readaptation. In this way, the RNS is central to the organization of nursing care, being a facilitating agent through functional re-education in the performance of ADLs by older people and their carers, promoting their social inclusion.

The main limitations relate to the lack of evidence demonstrating the specificity of the RNS's intervention in preventing falls in a home setting, as well as the lack of inclusion of concrete strategies for managing the fear of falling.

Finally, as future suggestions, we see the need to produce more scientific evidence that reflects the intervention of the RNS for the prevention of falls in community-dwelling elderly people, particularly those with a fear of falling.

FINANCING

The authors received no funding for this research.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

AUTHORSHIP CONTRIBUTION

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Presentation: Beatriz Novo, Márcia Ribeiro, Mariana Bação, Marta Andrade, Patrícia Horta and Sandy Severino.
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Writing - proofreading and editing: Beatriz Novo, Márcia Ribeiro, Mariana Bação, Marta Andrade, Patrícia Horta, Nelson Guerra, Luís Sousa and Sandy Severino.

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