















SHORT COMMUNICATION

## Promotion of physical activity in the aging population: a rehabilitation nursing activity in the community

### Promoción de la actividad física en la población mayor: una actividad de enfermería en rehabilitación en la comunidad

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**Cite as:** Ferreira C, Raposo S, Cardoso M, Esteves V, Guerra N, Sousa L, et al. Promotion of physical activity in the aging population: a rehabilitation nursing activity in the community. Multidisciplinar (Montevideo). 2025; 3:225. <https://doi.org/10.62486/agmu2025225>

Submitted: 26-06-2024

Revised: 10-10-2024

Accepted: 04-06-2025

Published: 05-06-2025

Editor: Prof. Dr. Javier Gonzalez-Argote 

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#### ABSTRACT

Active aging programs are fundamental for healthy aging, delaying the incapacity or dependence of older people. Promoting physical activity, especially in the community, maintains functionality, autonomy, social inclusion and interaction, and is an opportunity to live longer, healthier lives. By having the knowledge to design, implement and evaluate rehabilitation programs aimed at people's real needs, with a view to maximizing functional capacity, improving self-care performance and promoting healthy lifestyles, rehabilitation nurses are in a privileged position to be part of the response to the challenge that population ageing poses to societies, helping to ensure that getting older doesn't mean losing one's identity or giving up living in a community. The aim of this study is to reflect on the intervention of Rehabilitation Nursing in the promotion of physical activity in the elderly.

**Keywords:** Exercise; Aged; Rehabilitation Nursing.

#### RESUMEN

Los programas de envejecimiento activo son fundamentales para un envejecimiento saludable, retrasando la incapacidad o dependencia de las personas mayores. Promover la actividad física, especialmente en la comunidad, mantiene la funcionalidad, la autonomía, la inclusión social y la interacción, y es una oportunidad para vivir más tiempo y de forma más saludable. Al disponer de los conocimientos necesarios para diseñar, aplicar y evaluar programas de rehabilitación orientados a las necesidades reales de las personas, con vistas a maximizar la capacidad funcional, mejorar el rendimiento de los autocuidados y promover estilos de vida saludables, las enfermeras de rehabilitación se encuentran en una posición privilegiada para formar parte de la respuesta al reto que el envejecimiento de la población plantea a las sociedades, contribuyendo a

garantizar que envejecer no signifique perder la propia identidad o renunciar a vivir en comunidad. El objetivo de este estudio es reflexionar sobre la intervención de la Enfermería de Rehabilitación en la promoción de la actividad física en las personas mayores.

**Palabras clave:** Ejercicio Físico; Anciano; Enfermería en Rehabilitación.

## INTRODUCTION

As the average life expectancy increases and the birth rate decreases, so does the ageing of the population. Demographic indicators show that Portugal is the second country in the European Union with the highest rate of ageing <sup>(1)</sup> - in 2023, the proportion was 188,1 elderly people for every 100 young people and projections suggest that, by 2080, the rate of ageing will have risen to 317.<sup>(2,3)</sup> Like the other countries in the European Union, it has seen an increase in the population aged 60 and over, and is one of the countries where the ageing of the population over 80 is most evident.<sup>(4)</sup> There are fewer Portuguese living longer, in the final phase of the life cycle. This combination is causing a rapid and profound ageing of the population, which means we need to review the way our society works and how prepared it is to meet the needs of the older population.<sup>(5)</sup>

Ageing brings changes not only on a physical level (affecting various systems such as the musculoskeletal, cardiovascular, respiratory and nervous systems, among others), but also in the psycho-affective, cognitive and social domains.<sup>(6)</sup> The World Health Organization (WHO) and the Portuguese Directorate General of Health (DGS) define the elderly as people over 65 years of age, while the Geriatrics Societies of Japan define the elderly as people aged 75 or over, considering the increase in life expectancy.<sup>(7)</sup>

The Association of Rehabilitation Nurses (ARN) developed the role of gerontological rehabilitation to identify and clarify the role of rehabilitation nurses caring for geriatric users and their specific needs, to promote a high degree of professionalism in accordance with the established Scope and Standards of Rehabilitation Nursing Practice. The ARN categorizes the following groups: young elderly (65 to 74 years old), middle-aged elderly (75 to 84 years old) and very old or frail elderly (85 years old or more).<sup>(8)</sup>

The indicator that monitors quality of life and well-being after the age of 65 shows lower values in Portugal than in the European Union.<sup>(9)</sup> A strategy to guarantee better living conditions, maximizing longevity and increasing quality of life, with a view to active and healthy ageing, is essential. Physical activity is one of the strategies to promote health and well-being, one of the pillars of active and healthy ageing.<sup>(9)</sup> Physical activity is any movement performed by skeletal muscles that results in energy consumption; physical exercise, a subclass of physical activity, has purpose(s), is planned, repetitive and structured.<sup>(10)</sup> The WHO reiterates the practice of physical activity as a factor in the prevention and management of diseases (cardiovascular, hypertension, diabetes, some neoplasms), as well as underlining its protective role in mental health, cognitive health, healthy weight management, sleep pattern and overall sense of well-being. In people over 65, it also helps to prevent falls, as well as a decline in bone health and functional capacity.<sup>(10)</sup>

This theoretical-reflective article, based on scientific literature, aims to reflect on the intervention of rehabilitation nursing in the promotion of physical activity in the elderly, in a community context.

## DEVELOPMENT

In 2016, through Order No. 6401/2016, the government considered the promotion of physical activity to be a priority area. The National Strategy for the Promotion of Physical Activity, Health and Well-being 2016-2025 refers to the repercussions of physical inactivity as being "...one of the main risk factors for chronic non-communicable diseases".<sup>(11)</sup> Among other objectives, it lists the promotion of regular physical activity, combating sedentary lifestyles, through tools such as communication and health education, and the use of health professionals as privileged vehicles for the promotion of physical activity, both because of their proximity and knowledge of the user, and because of their articulation in the multidisciplinary team.<sup>(11)</sup>

The aging process is natural, bringing with it multiple changes that in themselves require the attention of health professionals, of which the Rehabilitation Nurse Specialist (RNS) can and should play a proactive role. By promoting physical activity adapted to the elderly, they will be contributing to healthier ageing.<sup>(12)</sup> The high level of knowledge (not only about the consequences of ageing, but also about the specific and real needs of the elderly),<sup>(13)</sup> combined with the experience of these professionals, allows them to: work to promote health, design and implement motor and cardiorespiratory rehabilitation plans adapted to the elderly, improving their functional capacity, mental health and promoting social interaction, leading to an improvement in quality of life, a reduction in sedentary lifestyles and active participation in society.<sup>(14)</sup>

In carrying out their duties in the community, the RNS is confronted with an ageing population, together with a wide range of comorbidities and polymedication, a lack of resources and accessibility, a shortage of social relationships and a low perception of health, all of which contribute to the vulnerability and fragility of

this population.<sup>(15)</sup> Hand in hand with frailty is decreased mobility, associated with reduced balance, strength, fatigue and low physical activity, with repercussions in terms of falls, hospitalizations and death.<sup>(16,15)</sup>

Neil-Sztramko et al<sup>(16)</sup>, in their review, concluded that community group interventions through global physical activity combined with aerobic, resistance and mind-body exercises can increase mobility in the elderly. Group intervention can also facilitate the promotion of active and healthy lifestyles.<sup>(13)</sup> On the other hand, Dyer et al<sup>(17)</sup> added in their study, although without sufficient evidence, the importance of physical activity/exercise as a means of preventing falls, by improving balance and muscle strength.

It is known that active aging programs can cover several areas in addition to promoting physical activity and social interaction, such as strengthening pelvic muscles, cognitive stimulation, teaching healthy eating habits, preventing and managing chronic diseases, as well as managing medication regimens.<sup>(18)</sup> The RNS has the skills to integrate and intervene in all these dimensions<sup>(14)</sup>, while respecting safety and risk issues for this age group.<sup>(19)</sup> In a study carried out by Faria et al.<sup>(18)</sup>, it was possible to prove that the intervention of the RNS, through an active aging program in the community, not only allows gains in health (from a functional, cognitive, psychological and social point of view), but also makes an important contribution to the quality of life of the elderly, promoting their autonomy and social inclusion and helping to promote economic gains, by increasing the number of healthy years of life and late dependence. But in order to delay the consequences of ageing, the RNS's intervention should be started as early as possible and last as long as possible.<sup>(13,19)</sup>

In particular, the implementation of a physical activity program in a senior population should take into account four factors: prevention, maintenance, rehabilitation and recreation and, in this sense, a set of criteria and recommendations should be taken into account, such as those of the WHO, which point to at least 150-300 minutes per week of moderate-intensity aerobic physical activity (alternatively, 75-150 minutes per week of vigorous-intensity aerobic physical activity, or an equivalent combination of both).<sup>(10,13)</sup> Moderate-intensity muscle-strengthening exercises are also recommended, including the major muscle groups (two or more days a week), as well as balance and strength training.<sup>(10)</sup> Even low levels of physical activity or low-intensity exercise, as opposed to a sedentary lifestyle, bring health benefits and can promote healthy ageing.<sup>(19,12)</sup>

In light of the RNS's competencies, which essentially aim to "promote early diagnosis and preventive rehabilitation nursing actions, in order to ensure the maintenance of clients' functional capacities, prevent complications and avoid disabilities..."<sup>(14)</sup>, it is indisputable that these professionals play an important role in promoting physical activity in the elderly, contributing to "... the promotion of quality of life, maximizing functionality, self-care and the prevention of complications, avoiding disabilities or minimizing them".<sup>(20, p.16656)</sup> By intervening in the promotion of physical activity among elderly people in the community, the RNS is based on client satisfaction, health promotion, prevention of complications, well-being and self-care, functional readaptation and re-education and the promotion of social integration.<sup>(20)</sup>

## CONCLUSIONS

RNSs have the skills and theoretical knowledge to develop and implement rehabilitation and physical activity promotion programs for the elderly, contributing to health and economic gains and delaying the consequences of ageing. In this way, rehabilitation nursing in the community plays a key role in educating, motivating, monitoring and adapting physical activities to the needs of each elderly person, making a significant contribution to healthy and active ageing.

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## FINANCING

The authors did not receive financing for the development of this research.

## CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

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