

Nordic walking and its benefits for the elderly population

Marcha nórdica y sus beneficios para la población mayor Caminhada nórdica e os benefícios para a população idosa

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Abstract

This study aimed to reflect on Nordic walking for the elderly, given that the number of elderly people worldwide has been increasing. The method of this study was critical reflection and the descriptors were: "Nordic Walking", "Public Health", "Comprehensive Health Care for the Elderly", available in the Virtual Health Library and SciELO databases, with articles in Portuguese and English, between 2019 and 2025. Nordic walking has been shown to be a beneficial practice for the elderly population, promoting improvements in physical, mental and social health. The use of poles while walking provides greater stability, avoiding the risk of falls and facilitating walking, especially for those with motor limitations. This activity contributes to strengthening muscles, improving cardiovascular capacity and increasing functional autonomy.

Descriptors: Nordic Walking; Public Health; Comprehensive Health Care for the Elderly; Collective Health; Quality of Life.

Resumen

Este estudio tuvo como objetivo reflexionar sobre la marcha nórdica para personas mayores, dado que el aumento del número de personas mayores a nivel mundial se ha intensificado. El método de este estudio fue la reflexión crítica y los descriptores fueron: "Nordic Walking", "Public Health", "Comprehensive Health Care for the Elderly", disponibles en las bases de datos de la Biblioteca Virtual en Salud y SciELO, con artículos en portugués e inglés, entre 2019 y 2025. La marcha nórdica ha demostrado ser una práctica beneficiosa para la población de edad avanzada, promoviendo mejoras en la salud física, mental y social. El uso de bastones durante la marcha proporciona una mayor estabilidad, evitando el riesgo de caídas y facilitando la marcha, especialmente para aquellos con limitaciones motoras. Esta actividad contribuye al fortalecimiento muscular, mejorando la capacidad cardiovascular y aumentando la autonomía funcional.

Descriptores: Marcha Nórdica; Salud Pública; Atención Integral de Salud al Adulto Mayor; Salud Pública; Calidad de Vida.

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Resumo

Neste estudo, objetivou-se realizar uma reflexão sobre a caminhada nórdica para os idosos, sendo que o aumento do número de pessoas idosas em todo o mundo tem se intensificado. O método deste estudo foi por reflexão crítica e os descritores foram: "Caminhada Nórdica", "Saúde Pública", "Atendimento Integral à Saúde do Idoso", disponível nas bases Biblioteca Virtual da Saúde e SciELO, com artigos em português e inglês, entre 2019 e 2025. A caminhada nórdica demonstra ser uma prática benéfica para a população idosa, promovendo melhorias na saúde física, mental e social, a utilização de bastões durante a caminhada proporciona maior estabilidade, evitando o risco de quedas e facilitando a caminhada, especialmente para aqueles com limitações motoras, essa atividade contribui para o fortalecimento muscular, melhoria da capacidade cardiovascular e aumento da autonomia funcional.

Descritores: Caminhada Nórdica; Saúde Pública; Atendimento Integral à Saúde do Idoso; Saúde Coletiva; Qualidade de Vida.

Introduction

The growth in the population's life expectancy is of great relevance in the national context. There has been a significant increase in the elderly population. In Brazil, according to data from the United Nations (UN), the population aged 60 or over will double by 2050 and triple by 2100, from 962 million in 2017 to 2.1 billion in 2050 and 3.1 billion in 2100^{1-3} .

Older people are increasingly recognized as active agents in economic and social development. However, population aging has required adaptation of public health, social security and social protection systems, generating fiscal and political challenges. Europe currently has a higher proportion of older people (25%), but other regions are also facing this growth. By 2050, all regions of the world, except Africa, will have at least a quarter of the population aged 60 or over^{3,4}.

Nordic Walking is a type of physical exercise that uses poles to assist walking, providing health and functionality benefits. It originated in Finland as part of skier training. This practice is popular due to its positive effects, especially among the elderly and individuals with specific health conditions, such as Parkinson's disease. It highlights the improvement in mobility and postural stability, the reduction in the risk of falls, muscle strengthening and the optimization of cardiovascular function, since it requires greater muscle involvement and promotes an increase in heart rate and energy expenditure compared to traditional walking. It also contributes to motor coordination, helping to maintain functional independence and the ability to move, especially in people with neuromuscular difficulties^{4,5}.

Given the above, the aim was to reflect on Nordic walking for the elderly, given that the increase in the number of elderly people worldwide has intensified.

Methodology

This study was a reflection, the descriptors used were: "Nordic Walking", "Public Health", "Comprehensive Health Care for the Elderly", available in the Virtual Health Library (VHL) and SciELO databases, with articles in Portuguese and English, between 2016 and 2025. The search took place in the VHL and SciELO databases, articles in Portuguese and English were selected, with free articles attached and indexed in the virtual platforms of academic

studies between the years 2016 and 2025. The inclusion criteria of the articles used were given by relationships in agreement and coherence of the titles and texts with the central idea of the study, being: original articles, systematic reviews, case studies and reports that address the benefits of Nordic walking for improving the mobility of the elderly in a descriptive way, publications in Portuguese and English, studies published between 2016 and 2024, articles available for free on the selected platforms, titles and abstracts that present agreement and coherence with the central theme of the research. The exclusion criteria were studies that did not present information relevant to the research.

Results and Discussion

Aerobic resistance physical exercises promote central and peripheral adaptations that contribute to the preservation of functional capacity in the elderly. The practice of recreational physical activities can result in improvements in both functionality and psychological and social aspects of the population⁵.

Exercise plays a fundamental role in maintaining and increasing levels of physical activity and functionality in older adults. Previous studies have shown the benefits of regular exercise on cardiorespiratory exhaustion and muscle strength in this age group^{6,7}.

It is observed that there are other activities that improve the quality of life of the elderly and that some, due to having to perform household tasks, were often unable to reconcile a routine of care and physical exercise in their daily lives, also in the study⁶ other limitations were found that compromised the practice of physical activities, including cognitive disorders, schizophrenia, severe depression and other mental disorders, in addition to those with a frequency of less than 75% in the experimental sessions, were excluded from the study and the interventions focusing on physical activity based on Mindfulness occurred over two months, with eight weekly meetings held in two different locations, each lasting two hours. It was pointed out that the overload resulting from domestic and family responsibilities can make it difficult for elderly women to participate in regular physical activities, and that the adoption of a continuous and disciplined practice is essential to obtain the benefits of Mindfulness associated with exercise, thus, the low adherence of this group may be related to the difficulty in

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reconciling the care routine with the performance of this context, exercise physical activities⁸⁻¹⁰. become essential, as

Authors¹¹ argue that the regular practice of physical exercise is intrinsically associated with the promotion of well-being. In the current context, it becomes important to discuss aspects related to the aging process, with the aim of promoting healthy aging and ensuring conditions that favor the quality of life of individuals. The identification of these factors can play a fundamental role in personal and social development, benefiting both the elderly and the community.

Walking is a widely recommended physical activity as it is a natural, easy-to-perform movement that provides significant results for health, fitness and leisure, the latter being especially relevant for the elderly population. It is an aerobic exercise accessible to all age groups and levels of physical restriction, providing significant health benefits. Its simplicity allows it to be performed in a variety of environments, such as gyms, homes and, preferably, outdoors, a factor that also benefits mental health. To maximize its positive effects, it is essential to maintain an adequate pace and practice it regularly, combining it with healthy eating habits¹¹.

There is emphasis on the benefits of walking, in terms of improving blood circulation, reducing edema in the legs and ankles, preventing diseases such as hypertension, obesity, type 2 diabetes and osteoporosis, strengthening muscles, correcting posture and increasing bone density. Regular practice promotes relaxation and well-being, stimulating the release of endorphins, which contributes to reducing stress and anxiety¹².

Nordic walking helps improve memory by promoting cerebral circulation. To achieve these benefits, health professionals recommend that walking be done regularly, at a moderate pace, for at least 30 minutes a day. As life expectancy increases, it is essential to develop strategies that promote healthy aging and quality of life. In

this context, exercise programs focused on locomotion become essential, as this ability provides greater freedom and autonomy to individuals¹³.

Authors¹⁴ argued, after observing residents, that the amount of time residents spend in their neighborhoods influences the relationship between neighborhood walkability and walking for transportation. Research conducted in Toronto showed that time spent in the neighborhood can moderate this relationship, with residents who spend more time in neighborhoods with high walkability tending to walk more for transportation.

Conclusion

In the psychological sphere, Nordic walking is associated with the reduction of symptoms of anxiety and depression, in addition to promoting social interaction and general well-being. Given these benefits, this practice acts as a safe and effective strategy for promoting health and quality of life, being recommended for different age groups and clinical profiles, especially in the prevention of complications associated with aging and chronic diseases.

The use of poles during the activity for the elderly provides greater postural stability, reducing the risk of falls and facilitating locomotion, especially for individuals with motor limitations. This modality contributes to strengthening muscles, also improving cardiovascular capacity and increasing functional autonomy, favoring quality of life and independence. Nordic walking is a highly beneficial activity for the elderly population, providing significant improvements in physical, mental and social health.

There is a statistically significant association between the level of physical activity, education and cognition; future research should deepen this relationship, enabling the formulation and implementation of specific public policies for the health of the elderly population.

References

- 1. Santana JO, Ramalho JRO, Firmo JOA, Lima-Costa MF, Peixoto SV. Atividade física e escore de risco de Framingham entre idosos: Projeto Bambuí. Cad. Saúde Pública. 2015;31(10). https://doi.org/10.1590/0102-311X00056915
- 2. Silva EA, Voltarelli A, Gatto RS, França CE, José EAR, Souza MJL, Miranda C, Arruda AL. Enfermagem na segurança do paciente na Atenção Primária. Glob Acad Nurs. 2022;3(1):e223. https://dx.doi.org/10.5935/2675-5602.20200223
- 3. Centro Regional de Informações das Nações Unidas (UNRIC). Envelhecimento. Centro Regional de Informaçõo para a Europa Ocidental [Internet]. Portugal; 2024 [acesso em 05 fev 2025]. Disponível em: https://unric.org/pt/envelhecimento/
- 4. Voltarelli A. Saúde mental e pandemia. Glob Clin Res. 2024;4(1):e57. https://doi.org/10.5935/2763-8847.20210057
- 5. Silva FC, lop RR, Arancibia BAV, Ferreira EG, Hernandez SSS, da Silva R. Efeitos da caminhada nórdica na doença de Parkinson: uma revisão sistemática de ensaios clínicos randomizados. Fisioter. Pesqui. 2016;23(4). https://doi.org/10.1590/1809-2950/15861023042016
- Souza RA, Ferreira AM, Alvarenga MRM, Silva ALNV. Efeitos da prática de mindfulness em idosos. Glob Acad Nurs. 2022;3(4):e302. https://dx.doi.org/10.5935/2675-5602.20200302
- 7. Silva AV, Kobayasi DY. Práticas integrativas e complementares utilizadas para manejo da dor em idosos: revisão integrativa da literatura. Glob Acad Nurs. 2021;2(Sup.3):e183. https://dx.doi.org/10.5935/2675-5602.20200183
- 8. Quevedo, J, Nardi AE, Silva AG. Depressão: teoria e clínica. 2. ed. Porto Alegre: Artmed; 2019.
- 9. Papini Junior CR. Estratégias não farmacológicas utilizadas na redução da depressão em idosos: revisão sistemática. RECOM. 2018;8:e2273. https://doi.org/10.19175/recom.v8i0.2273
- 10. Ministério da Saúde (BR). Secretaria de Atenção à Saúde. Manual de implantação de serviços de práticas integrativas e complementares no SUS [Internet]. Brasília (DF): MS; 2018 [acesso em 05 fev 2025]. Disponível em: http://189.28.128.100/dab/docs/portaldab/publicacoes/manual_implantacao_servicos_pics.pdf17



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- 11. Mendes DS, Moraes FS, Lima GO, Silva PR, Cunha TA, Crossetti MGO, Riegel F. Benefícios das práticas integrativas e complementares no cuidado de enfermagem. Journal Health NPEPS. 2019;4(1). http://dx.doi.org/10.30681/252610103452
- 12. Vegi ASF, Fernandes Filho EI, Pessoa MC, Ramos KL, Ribeiro AQ. Caminhabilidade e envelhecimento saudável: uma proposta de análise para cidades brasileiras de pequeno e médio porte. Cad Saúde Pública [Internet]. 2020;36(3):e00215218. https://doi.org/10.1590/0102-311X00215218
- 13. LUME. Caminhada Nórdica para idosos. 8ª ed. Porto Alegre: Universidade Federal do Rio Grande do Sul; 2023.
- 14. Chum A, Atkinson P, O'Campo P. Does time spent in the residential neighbourhood moderate the relationship between neighbourhood walkability and transport-related walking? A cross-sectional study from Toronto, Canada. BMJ Open 2019; 9:e023598. doi: 10.1136/bmjopen-2018-023598

