

EDITORIAL**Population Aging and Physical Performance**

One of the consequences of the demographic transition is the aging of the population, which is evidenced by changes in the age pyramid, with an increase in the proportion of elderly people in the population¹. In Latin America, the region in which Brazil is inserted, the demographic transition began later, but more accelerated than other locations, in terms of the drops in birth and mortality rates¹.

The United Nations (UN) estimates that, in 2050, there will be twice as many elderly people as there are today and, thus, they will surpass young people aged between 15 and 24 years in the general population². Thus, this phenomenon challenges social, economic, and political preparation, which provides a more dignified future and protection of the rights of the elderly, who present peculiarities resulting from the senescence process, such as physical modifications³.

The progressive decrease in flexibility, muscle mass and muscle strength are frequent alterations⁴, which impact the functionality and physical independence of the elderly. Physical performance is one of the components that maintains physical independence and can be related to lower and upper limb activities, such as Handgrip Strength (HGS). The decline of HGS with advancing chronological age is a reality^{5,6}, which has an impact on the elderly population.

The survival of the elderly is increased when physical performance is preserved, whether of the lower limbs or HGS^{7,8}. The maintenance of muscle health with advancing age is a necessary care in the population, so that it is preserved and has positive repercussions and, consequently, provides better functionality and independence⁹.

The elderly have guaranteed rights to a quality future and, therefore, they must participate effectively in the development of society². Health professionals should pay attention to the physical health of the elderly, stimulating and working on the physical performance of the general population, since the adults of today will be the elderly of tomorrow.

The practice of physical exercises, from strengthening, flexibility and physical conditioning, brings gains and/or maintenance in muscle mass and strength, positively impacting physical performance and, consequently, in the aging of the population with better quality.

REFERENCES

1. United Nations. Department of Economic and Social Affairs. Population Division. World Population Ageing 2017 - Highlights. New York: UN, 2017. 46 p. Available in: http://www.un.org/en/development/desa/population/publications/pdf/ageing/WPA2017_Highlights.pdf. Access in: 30 jul. 2023.
2. Nações Unidas. ONU News. Perspectiva Global Reportagens Humanas. Direitos Humanos. ONU: "Idosos devem poder participar ativamente e contribuir para o desenvolvimento". 2022. Available in: <https://news.un.org/pt/story/2022/04/1785752>. Access in: 20 ago. 2023.
3. Rocha MDHA, Sousa MIB, Cavalcante PAM, Rocha PFA, Santos SCC, Mariano WS. Saúde da mulher e do homem idoso na contemporaneidade: abordagens fisiológicas e sociais. J. Business Techn. 2019; 11(3):72-80. Available in: <https://jnt1.websiteseuro.com/index.php/JNT/article/view/430> Access in: 30 jul. 2023.
4. Bushatsky A, Alves LC, Duarte YAO, Lebrão ML. Factors associated with balance disorders of elderly living in the city of São Paulo in 2006: evidence of the Health, Well-being and Aging (SABE) Study. Rev Bras Epidemiol. 2018; 21 (Supl. 2). DOI: <http://dx.doi.org/10.1590/1980-549720180016.supl.2>
5. Malhotra R, Tareque MI, Tan CN, MA S. Association of baseline hand grip strength and annual change in hand grip strength with mortality among older people. Arch Gerontol Geriatr. 2020; 86:103961. DOI: [10.1016/j.archger.2019.103961](https://doi.org/10.1016/j.archger.2019.103961)
6. Martinez-Gomez D, Bandinelli S, Del-Panta V, Patel KV, Guralnik JM, Ferrucci L. Three-Year Changes in Physical Activity and Decline in Physical Performance Over 9 Years of Follow-Up in Older Adults: The Invecchiare in Chianti Study. J Am Geriatr Soc. 2017; 65 (6):1176-82. DOI: [10.1111/jgs.14788](https://doi.org/10.1111/jgs.14788)
7. Oliveira EM, Santos KT, Reis L. A. Força de preensão manual como indicador de funcionalidade em idosos. Rev. Pesqui. Fisioter. 2017; 7(3):384-92. DOI: [10.17267/2238-2704rpf.v7i3.1509](https://doi.org/10.17267/2238-2704rpf.v7i3.1509)
8. Pavasini R, Guralnik J, Brown JC, Di Bari M, Cesari M, Landi F, et al. Short Physical Performance Battery and all-cause mortality: systematic review and meta-analysis. BMC Med. 2016; 14(215):3-9. Available in: <https://pubmed.ncbi.nlm.nih.gov/28003033/>. Access in: 30 ago. 2023.
9. Souza LA, Tavares DMS. Desempenho físico e força de preensão manual como preditores de qualidade de vida de idosos. Acta Fisiatr. 2021; 28(3):149-155. Available in: <https://doi.org/10.11606/issn.2317-0190.v28i3a185905>. Access in: 15 out. 2023.

 **Lara Andrade Souza**

Physiotherapist. Physiotherapy Specialist in Gerontology - Lato Sensu Postgraduate Degree from the Multidisciplinary Integrated Residency Program in Health at the Federal University of Triângulo Mineiro (UFTM). Master in Physical Education. PhD in Health Care. Uberaba/MG, Brasil.



This is an open access article distributed under the terms of the License Creative Commons.