



## KINESIOTHERAPY WITH PROGRESSIVE LOAD APPLIED TOGETHER WITH THE INFLUENCE OF VITAMIN D AS A TREATMENT FOR THE BONE INTEGRITY OF ELDERLYE POPLE WITH OSTEOPOROSIS: A NARRATIVE REVIEW

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Osteoporosis constitutes a public health concern affecting approximately 2.5% of the elderly population globally, as reported by the World Health Organization (WHO), this condition is debilitative and is associated with various pathologies. The aim of this study is to establish a connection between outdoor progressive load kinesiotherapy and the influence of natural vitamin D intake through sun exposure on the bone health of elderly individuals with osteoporosis. A qualitative narrative review was conducted, utilizing digital databases such as the Virtual Health Library (BVS), Brazilian Institute of Geography and Statistics (IBGE), Google Scholar, Blue Book of Fractures (Mexico), Brazilian Manual of Osteoporosis, World Health Organization (WHO), National Library of Medicine (PubMed), United Nations (UN), Physiotherapy Evidence Database (PEDro), and the Brazilian Federal Government Health Ordinance. Sunlight exposure facilitates the body's absorption of crucial vitamin D, which can help regulate mineral bone deficiency. Progressive load kinesiotherapy actively contributes to bone remodeling and the generation of new bone cells. Consequently, the combination of these two treatment modalities offers more favorable prognoses compared to the combination of exercises with other methods for vitamin D supplementation. Based on the results and discussions, it is concluded that the practice of outdoor progressive load kinesiotherapy, preferably in the morning sunlight, is more advisable. This facilitates the natural absorption of vitamin D, which, in turn, has a beneficial impact on the health of elderly individuals with osteoporosis.

Keywords: Kinesiotherapy; Osteoporosis; Progressive Load; Vitamin D.

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