

THE EFFECTS OF PHYSICAL EXERCISE ON THE CONTROL OF ARTERIAL HYPERTENSION AND DIABETES MELLITUS IN THE ELDERLY

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Diabetes Mellitus (DM) and Systemic Arterial Hypertension (SAH) are chronic diseases with a high prevalence in the Brazilian population, constituting a public health issue. Therefore, preventive methods need to be studied, such as the influence of physical exercise on the control of SAH and DM. Non-communicable chronic diseases (NCDs) were not always the focus of Brazilian epidemiology, as they replaced infectious and parasitic diseases that were predominant due to unsanitary conditions and hygiene issues, which have been overcome. However, with changes in the population's lifestyle habits, characterized by a sedentary lifestyle and poor dietary choices, NCDs have become the main causes of morbidity and mortality, with the elderly being the most affected group due to the accumulation of these unhealthy habits, increasing their risk of acquiring these diseases. In this context, this research is relevant in assessing the effectiveness of physical exercise in controlling NCDs in the elderly population. Describe the impacts of physical exercise on the control of SAH and DM. This is an integrative literature review. Articles were searched in the PubMed, Scielo, and Google Scholar databases using the descriptors: "Physical exercise," "Arterial hypertension," "Diabetes mellitus," and "Elderly." Articles in the Portuguese language that met the criteria of disease and age range and were published between 2010 and 2022 were included. Articles unrelated to the topics of disease and physical exercise were excluded. Weeks of aerobic training and light to moderate-intensity physical exercise programs were implemented. These interventions resulted in a reduction in blood pressure and capillary blood glucose levels. While the reductions were not significant for immediate control, it is important to consider the long-term impact of physical exercise on patients' quality of life. Physical activity should not be seen as an isolated option but rather be associated with other factors, such as dietary choices. Studies that did not directly highlight reductions in blood pressure and capillary glucose levels mentioned improvements in flexibility and body weight reduction as factors indirectly contributing to the control of blood pressure and glucose levels. Therefore, physical exercise is one of the alternatives and should be combined with other factors, such as dietary choices, for the control of SAH and DM. Hence, further experimental studies are needed to develop effective approaches for the combined treatment of these diseases with physical exercise.

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