



Influence of cardiovascular risk factors for hereditary hypertension in the homeless population of São Paulo, Brazil

Influência de fatores de risco cardiovasculares para hipertensão arterial hereditária na população em situação de rua de São Paulo, Brazil

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ABSTRACT

Introduction: Systemic arterial hypertension (SAH) is a public health problem, affecting about 30% of Brazilians. Due to the multifactorial condition, its development, in cases of genetic predisposition, results from the association of genes and environmental factors, such as: sedentary lifestyle, stress, diet, dyslipidemia, obesity, among others. The hypertensive risk factors (RF) in the homeless population (PSR) gain relevance, due to their situation of vulnerability. **Objective:** To highlight the impact of cardiovascular RF on the development of hereditary hypertension in the homeless. **Methodology:** Exploratory, cross-sectional and quantitative study. Conducted by pre-structured questionnaire, approved by the Institutional Ethics Committee, CAAE: 21519413.40000.5511, applied between November 2021 and July 2022, in the central region of São Paulo; evaluating the lifestyle and cardiovascular RF of 119 volunteers aged 18 to 60 years, chosen for convenience. **Results and Discussion:** It was identified that 51.26% reported a family history of SAH. Of these, the average blood pressure was 154x102 mmHg, reporting that 21% suffer from stress, 44% are sedentary and 43% consume high concentrations of sodium in food. Therefore, it is possible to show that the presence of RF determines the tendency to express a hypertensive gene. Such factors play a crucial role in the activation of the sympathetic nervous system and renin-angiotensin system; leading to chemical modifications in the genome, characterizing the onset of SAH in genetically predisposed individuals. **Conclusion:** We highlight behaviors in the RSP that contribute to the development of hereditary SAH. Consequently, a multidisciplinary



approach becomes essential in an attempt to find effective ways to reintegrate this population, aiming to change lifestyle habits. Therefore, just as modifiable RFs influence the manifestation of the disease, environmental stimuli resulting from healthy habits will induce essential changes against the inheritance of the hypertensive trait. Thus, we envision new studies on this theme, strengthening existing public policies and implementing new ones, with the preventive purpose.

Keywords: Heredity, Risk factors, Hypertension, Cardiovascular diseases, Homeless people.



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