THE GROWING BURDEN OF HYPERTENSION IN IRAN: REGIONAL DISPARITIES, RISK FACTORS, AND THE IMPERATIVE FOR AN EFFECTIVE INTERVENTION

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DOI: 10.54235/27382737-2025.v5.2-13

Ներկայացվեց/Received 02.04.25: Գրախոսվեց/Reviewed 12.07.25: Ընդունվեց/Accepted 12.07.25:

Dear Editor,

I am writing to highlight the alarming increase in the prevalence of hypertension in Iran over the past decade. Hypertension, a major risk factor for cardiovascular disease, stroke, and kidney failure, has emerged as a serious public health problem in the country. The number of complications due to hypertension is increasingly rising, with evident increases in mortality and morbidity rates. Current studies indicate that the prevalence of hypertension in Iran has continually risen over the years due to lifestyle, diet, urbanization, and population aging [1]. Data from national surveys for 2015–2025 reveal that hypertension affects over 30% of Iranian adults, with a marked regional variation between rural and urban settings [2]. This trend has been driven by increased consumption of processed foods, lack of physical activity, and elevated stress levels, all of which are contributors to the increasing incidence of non-communicable diseases.

Urbanization, particularly, has played a major role in this surge. A large percentage of Iran's population now resides in urban areas, where vulnerability to poor nutrition, air pollution, and sedentary lifestyles are rampant. Prevalence of urban hypertension is more than 35%, with rates slightly lower in rural areas at approximately 28% [3]. While lower rates are reported among the rural population, access to healthcare is a major issue, and diagnosis and treatment of hypertension are consequently delayed. One of the most alarming aspects of hypertension in Iran is the large proportion of undiagnosed and uncontrolled cases. National surveys reveal that more than 40% of hypertensive patients remain unaware of their condition [4]. Among those diagnosed, only 25% are able to achieve adequate blood pressure control. Added to this are inadequate public awareness, lack of adequate healthcare infrastructure in certain regions, and poor medication adherence. Cultural attitudes, such as the perception of hypertension as a normal aspect of aging, also lead to inefficient management and prevention.

A multi-faceted solution is necessary to address this crisis. Starting with the implementation of nationwide screening programs to identify hypertension at the earlier levels, public health campaigns promoting healthier food habits, such as reducing sodium intake, are the need of the hour. Policymakers must ponder the restriction of sodium in processed foods so that the risk of hypertension at a greater level is minimized [5]. Moreover, lifestyle modification programs promoting increased physical activity and weight management can also play a vital role in controlling blood pressure levels and reducing overall cardiovascular risk. It is essential to expand coverage of primary healthcare services. In rural areas, where healthcare is limited, there is an urgent need to widen access to preventive services and immediate treatment. Select interventions, such as community awareness campaigns, can play a significant role in reaching the underserved. Further, applying digital health technologies for blood pressure monitoring can offer an easier and more accessible channel for patients to manage their condition, especially in remote locations. Given the significant healthcare and economic burden of hypertension, action is essential. Without intervention, Iran will only face mounting numbers of hypertension complications, overloading its healthcare system even more. Policymakers need to make rapid, fact-based decisions to fight this growing epidemic. Table 1 displays hypertension prevalence rates, key risk factors, access to care, and awareness and blood pressure control rates by region and population in Iran. It demonstrates extreme regional disparities between urban and rural populations, as well as hypertension awareness and control levels by age group.

In conclusion, hypertension is a serious public health issue in Iran, and the trend should be reversed through prompt action. Public health campaigns, national screening programs, and better access to healthcare in rural areas are vital components of a comprehensive strategy to address this crisis. I hope this letter will inform the discussion of hypertension prevention and encourage further research into effective intervention strategies.

Table 1. Hypertension Prevalence and Contributing Factors in Iran (2015–2025)

Region/ Population	Hypertension Prevalence, %	Risk Factors	Healthcare Access	Awareness Rate, %	Blood Pressure Control Rate, %	Additional Notes
Urban Areas	35%	High sodium diet, sedentary lifestyle, air pollution, high-stress environments	Better access to healthcare facilities, but low treatment adherence	60%	25%	Urbanization and unhealthy dietary habits are key contributors.
Rural Areas	28%	Limited physical activity, poor diet, lack of healthcare access	Limited healthcare access, delayed diagnosis	55%	20%	Limited resources and healthcare facilities affect management.
Young Adults (25–35 years old)	15%	Increased processed food consumption, reduced physical activity, high-stress jobs	Moderate access in cities, limited in rural areas	50%	20%	Rising prevalence due to lifestyle changes and urban pressures.
Older Adults (60+ years old)	55%	Age-related factors, poor diet, physical inactivity	Improved access in cities, poorer in rural areas	40%	30%	Aging population has a higher rate of hypertension.
National Average	30%	Unhealthy diet, high sodium intake, lack of exercise	Urban versus rural disparities in access	58%	25%	Significant national burden with regional differences

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