



Non-Communicable Diseases and Lifestyle in Iran: A Growing Public Health Challenge

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Dear Editor-in-Chief,

Non-communicable diseases (NCDs)—including cardiovascular diseases, diabetes, cancers, and chronic respiratory diseases—are the leading cause of premature mortality in Iran, accounting for 81% of such deaths, which exceeds the global average of approximately 71%. This increasing burden reflects a broader global trend; worldwide, NCDs are responsible for the majority of deaths, with their prevalence rising steadily, particularly in low- and middle-income countries. In Iran, factors such as lifestyle changes, urbanization, and demographic shifts have significantly contributed to escalating rates of obesity, hypertension, and diabetes. Urgent action is required through effective preventive interventions, promotion of healthy lifestyle habits, and comprehensive public health strategies aligned with successful international examples to address this critical public health challenge.

Key Words: Iran, Lifestyle, Non-Communicable Diseases, Prevalence.

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1. INTRODUCTION

Non-communicable diseases (NCDs)—including cardiovascular diseases, cancers, chronic respiratory diseases, and diabetes—have become the leading contributors to global morbidity and mortality (1, 2). In Iran, as in many other countries, the high and increasing burden of NCDs represents a major public health concern (3). Unhealthy dietary patterns, decreased physical activity, rapid urbanization, population aging, and disparities in wealth and access to healthcare have accelerated the prevalence of key NCD risk factors over recent decades (4–6). Notably, the prevalence of obesity, hypertension, diabetes, and metabolic syndrome among adults—especially in urban and older populations—has risen significantly in Iran. Consistent with global trends, the increasing multimorbidity among women and urban populations in Iran mirrors patterns observed in other developing countries (6–8).

2. Prevalence and Risk Factors in Iran and Globally

Globally, non-communicable diseases (NCDs) account for approximately 71% of all deaths, with cardiovascular diseases and cancers being the leading contributors (1, 2, 9, 10). In Iran, this burden is even greater, with NCDs responsible for about 81% of premature deaths (3). The prevalence of diabetes in Iran ranges from 8% to 9%, while hypertension affects roughly 26% of adults (5). Rates of obesity and central (abdominal) obesity are also high, at 22.3% and 53.6% respectively, with central obesity exceeding 60% in the elderly population (7, 11). Among children and adolescents, studies indicate a rising trend in NCD-related risk factors (12). Both globally and in Iran, factors such as urbanization and modern lifestyle changes have intensified these risks, with urban residents—particularly women—being more vulnerable to multimorbidity (7, 8).

3. Impact of Lifestyle and Urbanization

Lifestyle changes—including increased consumption of high-calorie, high-fat foods, sedentary behavior, and reduced physical activity—have played a pivotal role in the rise of NCDs both globally and in Iran (4, 13). Urbanization has further compounded these challenges, with urban residents in Iran exhibiting higher rates of obesity, hypertension, and metabolic syndrome (6, 8). Socioeconomic factors, food insecurity, and limited opportunities for physical activity, particularly in urban areas, further exacerbate the risk of NCDs. These patterns are observed worldwide, highlighting the universal nature of these underlying causes (8, 13).

4. Health System Response and Public Health Strategies

In recent years, the Iranian health system has begun integrating NCD prevention and control into primary healthcare, exemplified by the Ira-PEN program, which provides healthy lifestyle counseling and targeted support for high-risk groups (14). Additionally, community-based awareness campaigns and policy reforms—such as tobacco control and nutrition education—have been expanded (15). Nevertheless, the scale of the problem demands ongoing multisectoral collaboration and active community engagement to improve health outcomes (4).

5. CONCLUSION

Non-communicable diseases have become an increasingly prominent public health concern in Iran, driven by rising rates of conditions such as obesity, diabetes, and hypertension. This alarming trend is closely linked to lifestyle changes, including unhealthy dietary habits, reduced physical activity, ongoing urbanization, and population aging. The persistence of these risk factors is contributing to a substantial burden of disease and mortality. While some progress has been made through public health initiatives and increased awareness, controlling the Non-communicable disease (NCD) epidemic will require comprehensive, evidence-based interventions that promote healthy lifestyles and address socioeconomic determinants. Collaboration among the government, health sectors, and communities remains essential to effectively reduce the prevalence and impact of NCDs and to support better health outcomes for the Iranian population.

6. CONFLICT OF INTEREST: None.

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