



One Child or None: The Demographic Shift and Its Impact on Public Health

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Dear Editor-in-Chief

The global trend of decreasing fertility rates and the growing prevalence of voluntary childlessness have significant implications for population health metrics (1). In 2016, the childlessness rate among Iranian married women aged 15-49 was approximately 17.5% (2). This shift toward smaller family sizes and voluntary childlessness influences population health dynamics, including age distribution, dependency ratios, and healthcare service demand (3). Individuals opting for childlessness or having only one child may experience varying levels of social capital, socioeconomic status (SES), health-related quality of life (HRQoL), and mental health (4). These connections underscore the complex interplay between childlessness, family size, social factors, and overall wellness (3, 4).

Childlessness and having only one child are associated with decreased social integration, weaker social support networks, and limited access to community resources typically centered on family. These factors can lead to lower overall social capital, a crucial social determinant of health (SDH). The potential adverse effects of intentional childlessness on SDH highlight the need for policymakers and healthcare practitioners to consider the broader societal impact of this demographic trend (3-4). Childless women experi-

enced poorer physical and mental health during their peak reproductive years (5). The childlessness in men is an independent predictor of cardiovascular disease (CVD) and all-cause mortality, with genetic risk scores also predictive of CVD in childless men, emphasizing health risks associated with childlessness for both genders (6).

A comparative analysis of health indicators across Austria, Estonia, the Netherlands, and Poland revealed a potential association between childlessness and poorer health outcomes, particularly regarding mental health and HRQoL (7). The childlessness correlated with lower psychological health and subjective well-being in older adults. Family sizes, childlessness, and one-child families may relate to social capital, social integration, and various health outcomes, including psychological well-being and overall life satisfaction (8, 9).

The association between childlessness, having a single child, and the social factors impacting health is intricate. Individuals and couples making these choices may face reduced social integration, less robust support systems, and limited access to family-centered resources. These factors can diminish social connections, a significant element of health influencers. Furthermore, societal and cultural attitudes toward childlessness and smaller family sizes can affect community resource avail-



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ability, ultimately impacting health and well-being (1, 3, 9).

In social epidemiology, the relationship between voluntary childlessness, single-child families, and their impact on HRQoL and mental well-being presents a multifaceted pathway for investigation. Families with optional children or only one child often experience restricted social support and limited access to resources, leading to increased social isolation compared to more prominent families. Consequently, these families may struggle to build and maintain social capital (1, 4, 9). Social factors can directly affect physical and mental health, resulting in lower HRQoL and heightened vulnerability to mental health issues like depression and anxiety. Societal norms and cultural attitudes surrounding reproductive choices can exacerbate these challenges, creating barriers and stigma that worsen individual well-being. Addressing these interconnected mechanisms requires a holistic, socially informed public health approach that considers the social, cultural, and environmental factors affecting individuals in various family structures (1, 9).

The rising trend of childlessness can significantly affect population growth and structure. Increased rates of childlessness, influenced by factors such as delayed parenthood and individual decisions, may lead to decreased fertility rates and an aging population. This demographic shift can create social issues, such as supporting older individuals, managing dependency ratios, and addressing challenges linked to urbanization and gender differences (1, 10). The shifting fertility trends, characterized by decreasing birth rates and the growing prevalence of voluntary childlessness and one-child families, carry substantial implications for population health and the social determinants influencing health. The relationship between smaller family sizes, voluntary childlessness, and factors like social connections, SES, HRQoL, and mental health underscores the intricate interconnections between reproductive choices and societal welfare. As decision-makers and healthcare professionals adapt to this demographic transition, embracing a comprehensive, socially aware approach that addresses the needs

of various family structures and promotes health equity is essential. Understanding how childlessness and one-child families impact social determinants and health outcomes can inform targeted interventions, ultimately fostering improved population health and societal flourishing.

Conflict of interest

The author claims no possible conflicts of interest exist.

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