Opinion

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The Urban Environment and Non-Communicable Diseases (NCDs)

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ABSTRACT

Non-communicable diseases (NCDs) have emerged as the leading cause of death and disability globally, disproportionately affecting low- and middle-income countries. Factors such as urbanization and changing lifestyles have exacerbated the NCD epidemic, with urban environments playing a significant role in shaping health outcomes. This paper highlights the impact of urbanization on NCD prevalence and its influence on health outcomes.

Keywords: Non-communicable Diseases; Urban; Epidemic; Environment; Health

Abbreviations: CDC: Centre for Disease Control; NCDs: Non-Communicable Diseases; WHO: World Health Organization

Introduction

Non-communicable diseases are the leading cause of death and disability around the world. They are a category of illnesses primarily not caused by an acute infection but have long-term health implications and frequently necessitate long-term therapy and care (WHO [1], CDC [2]). Cancer, cardiovascular disease, diabetes, and chronic lung ailments are part of NCDs. NCDs originate from a mix of genetic, physiological, environmental, and behavioural variables (WHO [1], CDC [2]). According to the CDC and WHO, NCDs kill 41 million people a year, accounting for more than seven out of every ten deaths worldwide. Every year, 17 million individuals die from a non-communicable disease before the age of 70. In total, 86% of these premature fatalities occur in low- and middle-income nations, with 77% occurring exclusively in these countries (WHO [1], CDC [2]).

The NCD epidemic has been exacerbated by changing social, economic, and structural factors such as increased urbanization and the spread of unhealthy lifestyles CDC [2]. Urbanization, which is the increase in the proportion of people living in towns and cities, is a worldwide trend. Urban communities across the globe including Africa are growing rapidly. Urbanization may be seen as a double-edged sword, that is, while its beneficial economic effects are widely acknowledged, it is commonly alleged to produce adverse side effects for NCD-related health outcomes (Zhang [3]). The urban environment has been found to significantly impact non-communicable diseases.

This is because, the way cities are built, their density, how easy it is to get around, their building design, and overall layout have been found to have a significant impact on how much people exercise, what they eat, air quality, blood pressure, and even obesity rates. In other words, the design of cities has made it harder for people to stay healthy and avoid NCDs (Fazeli Dehkordi [4]). Research has indicated that the prevalence of non-communicable diseases (NCDs) is likely to rise in suburban and urban areas, concomitant with an increased intake of prepackaged foods and cooking ingredients (Mahawan [5]). In a study, it was reported that an increase in the death rate from coronary heart disease has been connected to the cultural shift brought about by urbanization (Tyroler & Cassel [6]). Additionally, it has been discovered that urbanization raises average body mass index and cholesterol levels especially in low- and middle-income nations and this has been linked to certain urban behavioural patterns, including altered eating habits and inactivity (Gunapala, et al. [7,8]). By 2050, two-thirds of the world's population is predicted to reside in urban regions, up from the current 50% of people who live in cities (National Geographic Society [9]). The provision of services for people living

in metropolitan areas is already a challenge for local governments. Every industry is under pressure, including the health system. The people's health demands cannot be met by the lack of adequate medical personnel and modern facilities in the cities.

Inadequate waste management and high pollution rates has resulted in poor air and water quality, which negatively impact public health by causing respiratory disorders, cardiovascular problems, and other health complications. Countries with lower living standards are seen to be more affected by urbanization's effects on public health than those with higher living standards. The primary determinants of disease are mainly economic and social; therefore its remedies must also be economic and social. To address NCD prevention and control, effective evidence-based multi-sectoral policies must be implemented, with an emphasis on the primary risk factors (Juma, et al. [10]). NCD policies must be integrated into urban planning. This includes designing and developing parks and recreational facilities such as pedestrian and cycling tracks. Zoning walkways where motorized vehicles are not permitted should also be established, and incentives for non-motorized vehicle use should be provided. Fiscal strategies and regulatory measures to prevent unhealthy eating environments in African metropolitan centers are required to limit the ever-increasing food marketing by food businesses (Juma, et al. [10]). It is also important to create awareness and sensitize people on the effects urbanization has on health and how it could predispose them to NCDs (Olowoyo, et al. [11]). This will foster a culture of responsibility towards personal and community health and empower individuals to make informed decisions about their well-being, enabling them to adopt healthier lifestyles and preventive measures [12].

Conclusion

The rise of non-communicable diseases in urban areas presents a pressing public health challenge that demands urgent action. As urbanization continues unabated, cities must prioritize interventions aimed at preventing and controlling NCDs. This necessitates a holistic approach that integrates health considerations into urban planning processes, promoting environments that support healthy lifestyles. From designing walkable neighbourhoods to regulating food marketing, policymakers have a crucial role to play in shaping urban environments conducive to health. Moreover, efforts to raise awareness and educate the public about the impact of urbanization on health are essential for fostering community engagement and promoting behaviour change. By addressing the root causes of NCDs through economic and social interventions, societies can work towards creating healthier and more equitable urban environments for all.

Conflict of Interest

There is no form of conflict of interest to declare.

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