



Medox Journal of Public Health

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Letter to the Editor

Commentary on the Prevalence and Potential Risk Factors of Hypertension Among Young Adults in Kinondoni Municipal Council, Tanzania

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Article history: Received: 25 Jun 2026 | Revised: 07 Aug 2026 | Accepted: 08 Aug 2026 | Published online: 10 Aug 2026

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Dear Editor,

The article by Kinemelo et al. on the prevalence and potential risk factors of hypertension among young adults in Tanzania's Kinondoni Municipal Council caught my attention [1]. The authors should be commended for addressing an increasingly important public health concern that has traditionally been associated with older populations but is now becoming increasingly prevalent among younger age groups. The study provides valuable evidence on the burden of hypertension and its associated risk factors among young adults in urban Tanzania. It offers important insights for policymakers, healthcare providers, and public health practitioners.

The finding that 37.0% of young adults aged 18–35 years were hypertensive is particularly alarming. This prevalence is notably high for a population generally considered to be in the most productive and economically active stage of life [2]. The results reinforce growing evidence that hypertension is no longer a disease confined to middle-aged and elderly individuals but is increasingly affecting younger populations due to rapid urbanization, changing lifestyles, and behavioral risk factors [3]. Such a trend has serious implications for Tanzania's future burden of cardiovascular disease, chronic kidney disease, stroke, and premature mortality.

One of the most important contributions of the study is its demonstration of the widespread presence of modifiable risk factors among young adults. However, the original study presented only descriptive findings and did not conduct inferential analyses to establish statistical associations between these factors and hypertension. The authors reported high levels of physical inactivity, frequent consumption of processed foods, excessive addition of salt, sugar, and oil to meals, alcohol consumption, tobacco use, and psychological stress. These findings highlight the growing influence of unhealthy lifestyle behaviors that accompany urbanization and socioeconomic transitions [4]. The coexistence of these risk factors among young adults suggests that hypertension prevention efforts should begin much earlier than is currently practiced in many healthcare systems.

Cite this letter as: Mwita S. Commentary on the Prevalence and Potential Risk Factors of Hypertension Among Young Adults in Kinondoni Municipal Council, Tanzania. *Medox J Public Health*. 2026;1(2):e6. <https://doi.org/10.66531/mjph.2026.v1i2.e6>

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Particularly concerning is the reported low level of blood pressure monitoring among participants. The study found that more than two-thirds of respondents rarely monitored their blood pressure, despite the substantial prevalence of hypertension observed. This finding points to a critical gap in awareness, screening, and preventive healthcare utilization. Hypertension is often referred to as a “silent killer” because affected individuals may remain asymptomatic for years while progressive cardiovascular damage occurs [5]. Consequently, infrequent blood pressure monitoring may contribute significantly to delayed diagnosis and treatment, thereby increasing the risk of severe complications [6]. The study also highlights an important treatment gap. Only a small proportion of participants who had been diagnosed with hypertension were receiving antihypertensive medication. This observation raises concerns regarding access to healthcare services, adherence to treatment, continuity of care, and awareness of the long-term consequences of uncontrolled hypertension.

Another noteworthy finding is the role of psychological stress and anxiety. Mental health factors are increasingly recognized as contributors to cardiovascular disease, yet they often receive limited attention within hypertension prevention programs [7]. The substantial proportion of participants reporting stress and anxiety highlights the need for a more holistic approach to cardiovascular health promotion. Public health interventions should not focus solely on diet and physical activity but should also address mental well-being, stress management, and psychosocial support, particularly among young adults living in rapidly urbanizing environments.

While the study provides valuable insights into the prevalence and risk factors of hypertension among young adults, the limitations section could have explicitly acknowledged the use of a cross-sectional study design as a methodological limitation. Cross-sectional studies are inherently limited in their ability to establish causal relationships between identified risk factors and health outcomes, including hypertension. Consequently, although associations can be identified, the temporal sequence between exposure and disease cannot be determined. The study also lacked analytical statistical methods (e.g., logistic regression or multivariable analysis), which limits the ability to identify independent risk factors. Furthermore, the authors conclude that their findings warrant urgent, multisectoral interventions to address the growing burden of hypertension among young adults in Tanzania’s urban areas. However, the study was conducted in selected wards within Kinondoni Municipal Council, which may limit the extent to which the findings can be generalized to other urban settings or the wider Tanzanian population. Therefore, limited generalizability should also have been acknowledged as a study limitation.

In conclusion, the study by Kinemelo et al. provides timely and important evidence regarding the high prevalence of hypertension and potential risk factors among young adults in Kinondoni Municipal Council. The findings emphasize the urgent need for comprehensive public health strategies that prioritize early screening, lifestyle modification, mental health promotion, and improved access to preventive and curative services. Future analytical studies using multivariable analyses and broader geographic sampling to better identify determinants of hypertension among young adults are recommended.

DECLARATIONS

Ethical Approval: Not applicable.

Informed Consent: Not applicable.

Consent for Publication: Not applicable.

Conflict of Interest: The authors declare no conflict of interest.

Funding: No external funding was received for the preparation of this letter.

Author’s Contributions: The author conceptualized, drafted, reviewed, and approved the final version of the manuscript (MS).

Data Availability: Not applicable.

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