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The role of health extension workers in combating hypertension in Ethiopia

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Editorial

Ethiopia faces a triple disease burden of communicable diseases, non-communicable diseases (NCDs), and injuries (1), with hypertension affecting nearly one in four adults (2). Hypertension is the major modifiable risk factor for cardiovascular disease (CVD) morbidity and mortality, accounting for more than half CVD-related deaths (3). Several community-based studies in Ethiopian cities revealed a high prevalence of hypertension, ranging from 25.1% to 31.9% in the Amhara region (4, 5), 25% to 32.3% in Addis Ababa (6, 7), and 19.7% to 35.2% in southern Ethiopia (8, 9). In rural areas, nearly one in five adults also suffers from hypertension (2), highlighting its growing public health significance.

Early detection and management of hypertension are critical for improving the care cascade (10), preventing complications (11), and saving lives (12). However, hypertension remains largely underdiagnosed and poorly managed, making hypertension an iceberg disease. The 2018 Ethiopian NCDI Commission summary report showed that less than 40% of hypertensive patients were diagnosed, 28% of those diagnosed patients received treatment, and only 26% of those treated had their blood pressure adequately controlled (13). A study in Ethiopia also showed that 77% of the population had never undergone blood pressure measurement (14), and 60% were unaware of their hypertension status (5). Another study in the rural districts of northwest Ethiopia also identified 84% of adults with hypertension were unaware of their condition (15), underscoring the urgent need for community-based interventions to improve early detection, treatment, and care.

Even though the Ministry of Health Ethiopia sets a goal in its second health sector transformation plan to increase the proportion of individuals with controlled blood pressure from 26% to 60% by 2025 (16), challenges such as a shortage of

health care providers and limited access to healthcare remain the most significant barriers to providing care at the primary health care level (17). One strategy to bridge the gap between the community and the health system in other contexts is task-sharing, in which specific tasks are shared from more qualified healthcare providers to a less trained cadre, such as community health workers (18). This approach reduces time and transportation costs for patients and brings healthcare services closer to the community. A study in northwest Ethiopia indicated that community-based hypertension screening led by HEWs can improve awareness, treatment, and control of hypertension in the community (19). Health extension workers-led home-based multicomponent interventions, which provided home health education, behavioural counseling, and referral to a nearby health facility, have been shown to enhance linkage to hypertension care and lead to a significant reduction of high blood pressure, with a higher proportion of patients achieving optimal blood pressure control (20).

To implement this strategy, integrating it into primary healthcare services at the village and health post level in rural areas is essential. However, successful implementation of the strategy requires scaling up of hypertension training programs for health extension workers and their supervisors, provision of standardized protocols, provision of adequate blood pressure measuring equipment, and regular supportive supervision.

Reference

1. Jung M, Jembere GB, Park YS, Muhwava W, Choi Y, Cho Y, et al. The triple burden of communicable and non-communicable diseases and injuries on sex differences in life expectancy in Ethiopia. International journal for equity in health. 2021;20(1):1-13.
2. Tiruneh SA, Bukayaw YA, Yigizaw ST, Angaw DA. Prevalence of hypertension and its determinants in Ethiopia: A systematic review and meta-analysis. PloS one. 2020;15(12):e0244642.
3. Tefera YG, Abegaz TM, Abebe TB, Mekuria AB. The changing trend of cardiovascular disease and its clinical characteristics in Ethiopia: hospital-based observational study. Vascular health risk Management. 2017;13:143.
4. Anteneh ZA, Yalew WA, Abitew DB. Prevalence and correlation of hypertension among adult population in Bahir Dar city, northwest Ethiopia: a community based cross-sectional study. International journal of general medicine. 2015;8:175.
5. Abebe SM, Berhane Y, Worku A, Getachew A. Prevalence and associated factors of hypertension: a crossectional community based study in Northwest Ethiopia. Plos ONE. 2015;10(4):e0125210.
6. Abdissa SG, Feleke Y, Awol M. Prevalence of hypertension and pre-hypertension in Addis Ababa, Ethiopia: A survey done in recognition of World Hypertension Day, 2014. The Ethiopian Journal of Health Development. 2015;29(1).
7. Bekele G, Tadesse T, Negaw R, Zewde T. Magnitude and associated factors of hypertension in Addis Ababa public health facilities, Ethiopia. MOJ Public Health. 2018;7 (6):280-6.
8. Esaiyas A, Teshome T, Kassa D. Prevalence of Hypertension and Associate Risk Factors among Workers at Hawassa University, Ethiopia: An Institution Based Cross Sectional Study. Journal of Vascular Medicine & Surgery. 2018;6(354):2.
9. Kebede B, Ayele G, Haftu D, Gebremichael G. The Prevalence and Associated Factors of Hypertension among Adults in Southern Ethiopia. International journal of chronic diseases. 2020;2020.
10. Kotwani P, Balzer L, Kwarisiima D, Clark TD, Kabami J, Byonanebye D, et al. Evaluating linkage to care for hypertension after community-based screening in rural Uganda. Tropical Medicine & International Health. 2014;19(4):459-68.
11. Benjamin EJ, Blaha MJ, Chiuve SE. American Heart Association Statistics Committee and Stroke Statistics Subcommittee. Heart disease and stroke statistics–: 2017 update a report from the American Heart Association. Circulation. 2017; 135(10).
12. Gulec S. Early diagnosis saves lives: focus on patients with hypertension. Kidney international supplements. 2013;3(4):332-4.
13. Worku K. Addressing the impact of Noncommunicable Diseases and Injuries in Ethiopia: Findings and recommendations from the Noncommunicable Diseases and Injuries (NCDI) Commision of Ethiopia: A Collaboration with the Global Lancet Commission on Reframing

NCDIs for the Poorest Billion Addis Ababa: Federal Democratic Republic of Ethiopia Minstry of Health; November 2018 [Available from: https://static1.squarespace.com/static/55d4de6de4b011a1673a40a6/t/5bfc17e24fa51a471a8399d9/1543247843790/Ethiopia+NCDI+Commission_Full+Report_Nov+2018.pdf.

14. Bekele A, Gelibo T, Amenu K, Getachew T, Defar A, Teklie H, et al. The hidden magnitude of raised blood pressure and elevated blood glucose in Ethiopia: A call for initiating community based NCDs risk factors screening program. Ethiopian Journal of Health Development. 2017;31(1):362-9.
15. Teshome DF, Balcha SA, Ayele TA, Atnafu A, Gelaye KA. Undiagnosed hypertension and its determinants among hypertensive patients in rural districts of northwest Ethiopia: a mediation analysis. BMC Health Services Research. 2023;23(1):1-13.
16. Health Sector Transformation Plan II: HSTP II 2020/21-2024/25 (2013 EFY - 2017 EFY): Minstry of Health-Ethiopia; February 2021 [Available from: https://www.moh.gov.et/ejcc/sites/default/files/2021-05/HSTP-II.pdf
17. Haileamlak A. How Can Ethiopia Mitigate the Health Workforce Gap to Meet Universal Health Coverage? Ethiopian journal of health sciences. 2018;28(3):249.
18. Joshi R, Alim M, Kengne AP, Jan S, Maulik PK, Peiris D, et al. Task shifting for non-communicable disease management in low and middle income countries–a systematic review. PloS one. 2014;9(8):e103754.
19. Teshome DF, Balcha SA, Ayele TA, Atnafu A, Sisay M, Asfaw MG, et al. Trained health extension workers correctly identify high blood pressure in rural districts of northwest Ethiopia: a diagnostic accuracy study. BMC Health Services Research. 2022;22(1):1-9.
20. Teshome DF, Alemu S, Ayele TA, Atnafu A, Gelaye KA. Effect of health extension workers-led home-based multicomponent intervention on blood pressure reduction among hypertensive patients in rural districts of northwest Ethiopia: a cluster-randomised controlled trial. BMJ open. 2024;14(8):e084029.