

Tackling the diabetes surge in sub-Saharan Africa through novel youth-centric strategies



Over the past few decades, diabetes cases in sub-Saharan Africa have shown a substantial increase. According to a recent Global Burden of Disease Study, published in *The Lancet*, the age-standardised prevalence of diabetes in sub-Saharan Africa rose by 83% between 1990 and 2021, reaching 4248 cases per 100 000 individuals.¹ Furthermore, projections predict a 57% increase in diabetes in sub-Saharan Africa from 2021 to 2050, reaching a prevalence of 6688 cases per 100 000 individuals.¹ These statistics depict a worrisome picture of an impending public health crisis that demands immediate attention.

One concerning aspect of the diabetes surge is the increase in cases among young people (<40 years of age). A 2018 study published in *The Lancet Diabetes & Endocrinology* highlighted this shifting trend, showing that the prevalence of diabetes in urban young people in Malawi was already close to 1.5%, compared with the overall prevalence of 2.4% in the total population.² The increase in diabetes prevalence in young people in sub-Saharan Africa can be attributed to several key factors. First, the region's population has rapidly grown. 60% of sub-Saharan Africa's population was under the age of 25 years in 2020;³ this increase has substantially expanded the number of young individuals who could develop diabetes. Second, there has been a notable rise in type 1 diabetes cases. There are many reasons for such a rise, including enhanced access to diagnostic methods and biological factors, such as genetics and viral infections.⁴ This rise resulted in a five-fold increase among children and teenagers between 2011 and 2021.⁵ Lastly, type 2 diabetes is emerging in young people in low and middle-income countries (LMICs), due to urbanisation, changes in lifestyle, and the growing prevalence of obesity.²

Despite the severity of the situation, levels of awareness regarding diabetes remain low within the region. A cross-sectional study conducted in multiple provinces in Kenya reported that only 29% of the participants aged between 13 years and 65 years were aware of what diabetes is.⁶ The low awareness of diabetes poses challenges in early detection and management, potentially leading to severe complications, such as cardiovascular disease and

kidney dysfunction. Addressing these knowledge gaps and improving awareness among young people is crucial.

Valuable lessons can be drawn from successful awareness campaigns for infectious diseases in sub-Saharan Africa. For instance, the loveLife campaign in South Africa effectively engaged young people aged 15–24 years through media programmes, leading to a substantial reduction in HIV infection rates.⁷ Similarly, public awareness efforts during the COVID-19 pandemic in Africa, such as the #AfricaAgainstCOVID19 campaign by the African Union and the #SafeHandsChallenge led by WHO, had pivotal roles in raising awareness and encouraging preventive measures.

Previous public awareness campaigns have evidently been successful in combating infectious diseases in the region, and these benefits should be extended to diabetes, which has also become a serious threat to the health of the region. However, compared with infectious disease campaigns, diabetes campaigns have been noticeably less common. The shortage of diabetes campaigns can be attributed to several factors, including the perception of infectious diseases as more immediate threats than diabetes, a scarcity of resources allocated to chronic conditions like diabetes, and the low inclusion of diabetes in national health policies and strategies.⁸

To address the escalating global diabetes crisis, WHO introduced the Global Diabetes Compact in 2021. This initiative aims to improve access to diabetes prevention, diagnosis, treatment, and care, particularly in LMICs. Increasing awareness of diabetes is part of the Compact, and more should be done to engage young people. To enhance diabetes awareness among young people in sub-Saharan Africa, it is important the relevant stakeholders use innovative approaches, such as the following ones that we propose in this Comment.

First, stakeholders should engage young people who have diabetes as ambassadors. These individuals can share first-hand experiences of living with the disease, which is crucial to connect with the public and increase the visibility of diabetes. Including people with lived experiences can also have a pivotal role in reducing the stigma associated with diabetes, especially in the case of type 1 diabetes, which often faces substantial societal prejudice.⁹



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Second, partnering with popular social media influencers on platforms, such as TikTok, Facebook, and Instagram can effectively reach younger audiences who might be at increased risk of diabetes. Influencers can play a crucial role in raising awareness by creating and sharing engaging and informative content about diabetes and healthy lifestyle choices. Raising awareness via influencers is especially important as the youth most at risk of developing diabetes are those in urban areas where poor lifestyle habits are prevalent, and these young people typically have high access to the internet.

Third, comprehensive diabetes education should be incorporated into the primary and secondary school curricula to ensure that everyone receives appropriate knowledge about the disease during their schooling years. Accordingly, the amount and type of information provided to school children should correspond to their educational level. This approach has been shown to be successful in raising awareness for HIV in the region.¹⁰

Fourth, a broad youth audience can be reached by co-sponsoring sports events. Football and netball, which are highly popular in the sub-Saharan African region, attract the participation and viewership of many young people. By integrating diabetes awareness messages into sports events, the popularity of the events can be used to raise diabetes awareness.

Lastly, engaging artists and musicians can be an effective way to raise diabetes awareness among young people. Afrobeats and Amapiano culture have become extremely popular in the African continent; engaging popular artists to create catchy, informative songs about diabetes, alongside music videos and live performances, can be used to raise awareness. Creative arts have a unique ability to captivate and engage audiences, making them an effective medium for delivering health messages.

We believe our suggested interventions for raising diabetes awareness in young people are promising. However, there are many barriers to their implementation related to cultural, political, and health-system considerations in the sub-Saharan African region. Political barriers include restrictions to internet access and social media, which can impede the distribution of diabetes education campaigns. Cultural barriers include the reluctance of people who have diabetes to disclose their condition in places where it is stigmatised. Health-system barriers

include a scarcity of resources for diabetes programmes, which can hinder the delivery of diabetes awareness and care in the region. Therefore, it is essential to adopt a context-specific approach and carefully choose interventions based on a thorough evaluation and understanding of local conditions.

Implementation studies are therefore urgently needed to assess the feasibility, effectiveness, and acceptability of these interventions in specific countries or communities. These studies can offer valuable insights on how to tailor interventions to align with the unique cultural, political, and health-system factors in each context. Collaborative efforts involving local communities, governments, and relevant stakeholders will be crucial in designing and implementing effective interventions. Embracing evidence-based, context-specific, and collaborative approaches makes it possible to enhance the applicability of these novel strategies to raise diabetes awareness among young people in the region.

Furthermore, it is crucial to distinguish between type 1 and type 2 diabetes when raising awareness among young people. These two conditions have distinct characteristics, causes, and treatment approaches, requiring separate focuses. Additionally, any awareness effort should include information on how to access essential care for diagnosis and treatment. Awareness campaigns should be a crucial part of a broader multifaceted approach aimed at promoting healthy lifestyles, making diabetes screening more accessible, improving the health-care system, advancing public health initiatives, supporting research, and fostering collaboration.

Raising diabetes awareness within a multifaceted approach has substantial effects at individual, national, and global levels. Increased awareness leads to early detection of diabetes, improved management of the disease, and informed patient choices. Overall, a wider awareness also relieves strain on national health-care systems, ultimately reducing costs. Globally, such strategies align with Sustainable Development Goal 3 (good health) and target 3.4 (reducing premature mortality). Promoting health education and healthier communities will bring us closer to future diabetes-free generations.

We declare no competing interests.

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- 1 GBD 2021 Diabetes Collaborators. Global, regional, and national burden of diabetes from 1990 to 2021, with projections of prevalence to 2050: a systematic analysis for the Global Burden of Disease Study 2021. *Lancet* 2023; **402**: 203–34.
- 2 Price AJ, Crampin AC, Amberbir A, et al. Prevalence of obesity, hypertension, and diabetes, and cascade of care in sub-Saharan Africa: a cross-sectional, population-based study in rural and urban Malawi. *Lancet Diabetes Endocrinol* 2018; **6**: 208–22.
- 3 Rocca C, Schultes I. Africa's youth: action needed now to support the continent's greatest asset. 2020. <https://mo.ibrahim.foundation/sites/default/files/2020-08/international-youth-day-research-brief.pdf> (accessed Sept 11, 2023)
- 4 Rewers M, Ludvigsson J. Environmental risk factors for type 1 diabetes. *Lancet* 2016; **387**: 2340–48.
- 5 WHO, Africa Region. Diabetes factsheet. <https://www.afro.who.int/health-topics/diabetes> (accessed Sept 11, 2023)
- 6 Maina WK, Ndegwa ZM, Njenga EW, Muchemi EW. Knowledge, attitude and practices related to diabetes among community members in four provinces in Kenya: a cross-sectional study. *Pan Afr Med J* 2010; **7**: 2.
- 7 Thomas K. A better life for some: the loveLife campaign and HIV/AIDS in South Africa. *Agenda* 2004; **18**: 29–35.
- 8 de-Graft Aikins A, Unwin N, Agyemang C, Allotey P, Campbell C, Arhinful D. Tackling Africa's chronic disease burden: from the local to the global. *Global Health* 2010; **6**: 5.
- 9 Hirsch JS. Stigma in type 1 diabetes: a global problem. *Lancet Diabetes Endocrinol* 2022; **10**: 698–99.
- 10 Gallant M, Maticka-Tyndale E. School-based HIV prevention programmes for African youth. *Soc Sci Med* 2004; **58**: 1337–51.