

Dire circumstances!: The need for effective cardiovascular disease education in Malawi

The state of cardiovascular disease in Malawi

The community burden of cardiovascular disease (CVD) in Malawi remains largely unknown but is assumed to be growing due to the emerging epidemiological shift and almost 20% prevalence of hypertension among adults aged 25—49¹⁻³ (figure 1). These trends, in the context of an infectious disease-oriented health system and erratic access to specialist CVD care portends a growing burden of disease with consequential increases in demand for care and clinician workload. The situation calls for a community-based approach to mitigate the socioeconomic and changeable factors that contribute to CVD development

CVD awareness and risk perception: the missing link

Risk perception is an important aspect of health promotion since it helps people frame health hazards and set health priorities. Various clinical tools are used for health and health-risk education but their utility in non-western settings has been questioned, especially in low literacy and numeracy contexts e.g. rural Malawi.⁴

A 2019 qualitative study done by MEIRU⁵ in Karonga (rural) and Lilongwe (urban) districts found that whilst people were familiar with the common presentations of CVDs, they were generally not well known and misconceived. CVDs were partly attributed to witchcraft. Thus new diagnoses were often associated with conflicts in the community, and clinical care was often an option of last resort sought by very sick people after consulting witchdoctors.

Whilst health facilities were regarded as the main source of reliable information, CVDs were mostly unaddressed in clinic health education sessions. Thus food and lifestyle preferences largely influenced by financial cost and convenience, which often favoured unhealthy foods.

The study's exploration of risk communication using common clinical approaches, even without jargon, revealed that numerical tools were not well understood.

The director of the Health Education Unit should consider:

- 1 **Educating** communities about cardiovascular health and how to avoid CVDs
- 2 **Leveraging** partnerships with relevant government agencies (such as MBC and MBS) to make healthy food more known, appealing, accessible, and affordable to all
- 3 **Partnering** with health education stakeholders to improve coverage of cardiovascular health education and make it more understandable to laymen

Implications

Reduced morbidity and mortality: A healthier population

The long-term goals of health education are likely to translate to reductions in premature mortality and the disintegration of families and other social structures that often results from death. A life-course approach to health education may, in the long-term, help to reduce incidence of CVDs.

Reduced cost to the government

Where the stated long-term goals of health education are achieved, improvements in health are likely to translate to improvements in productivity, quality of life, and life expectancy among people who have CVD. Reductions in direct care costs will allow patients to invest in other needs, and their families to focus on productive tasks. At the national level, reduced pressures on the health budget will allow redirection of funds to the development of health infrastructure.

Potential resistance

Enforcement of the suggested actions may result in pushback from industry if the consumption of their products is banned or restricted. It is also possible that some people may not adopt the suggested disease prevention measures, especially if the alternative products are considered inferior or more costly than those restricted by new policy.

Cost of inaction:

Whilst no research has been done in Malawi to demonstrate the effectiveness of the proposed actions in producing the above-mentioned implications, the opportunity cost of inaction includes a growing burden of CVDs with consequential (I) increases in direct & indirect health costs, and (II) high prevalence of declining productivity and quality of life among patients and their families. This will eventually lead to overburdening of the government health system with people having severe CVDs.

References

1. Nyirenda MJ. Non-communicable diseases in sub-Saharan Africa: understanding the drivers of the epidemic to inform intervention strategies. *Int Health*. 2016 May;8(3):157–8.
2. Malawi Nationwide STEPS Survey for non-communicable disease risk factors 2017 report. <https://extranet.who.int/ncdsmicrodata/index.php/catalog/629/download/5770>
3. Price AJ, Crampin AC, Amberbir A, Kayuni-Chihana N, Musicha C, Tafatatha T, 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 Mar;6(3):208–22.
4. Desmond N. Engaging with risk in non-Western settings: an editorial. *Health Risk Soc*. 2015 May 19;17(3–4):196–204.
5. Kasenda S, Crampin AC, Chipeta E. Conceptualizing cardiovascular disease risk in rural and urban Malawi (*forthcoming*)

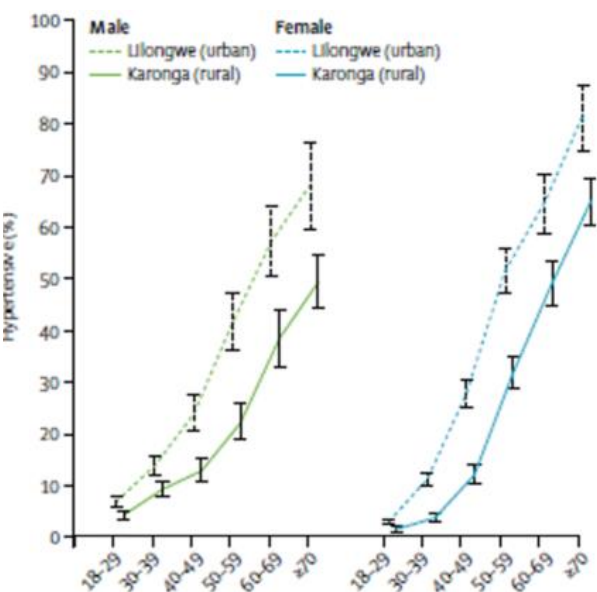


Figure 1: Age-specific and sex-specific prevalence of hypertension in the study sites³

Key Findings⁵

1 There was a general lack of awareness and misconceptions surrounding CVDs including ascription of CVDs to witchcraft, with consequential community conflicts.

2 People buy unhealthy food due to its ease of access and the high cost of healthy food.

3 Lay people do not understand the quantitative approaches often used by clinicians to explain concepts of health and disease risk

This Issue Brief was developed with support from the Center for Evidence based Health Care (CEBHC) at Stellenbosch University. Contributors include Stephen Kasenda, Effie Chipeta, Prof. Amelia Crampin and Nasreen S Jessani



Contact:
Name: Stephen Kasenda
Org: Malawi Epidemiology & Intervention Research Unit
Address: P.O. Box 148, Lilongwe, Malawi
Email: Stephen.kasenda@meiru.mw
Phone: +265995565100