

## STRATEGIES TO ADDRESS CHALLENGES ASSOCIATED WITH THE INCREASING BURDEN OF NCDs IN MALAWI

### KEY MESSAGES:

1. Malawi is facing a public health crisis due to the current unprecedented growth of non-communicable diseases (NCDs) and the emerging demands that the resource- and personnel-constrained health care system is currently not equipped to meet.
2. Raising awareness about NCDs and associated modifiable risk factors should be central to national health policy prioritization, health system strengthening, and community engagement.
3. In addition to advancing awareness and education across health care providers, active engagement and promotion of community, family and patient education about NCDs are promising strategies to address the rapidly rising burden of NCDs in Malawi.
4. Secondary prevention is key to reducing the impact of NCDs by detecting them as early as possible, slowing their progress, and encouraging personal strategies for disease management to prevent long-term complications.
5. Investments in research are necessary to better understand context-specific NCD-related risk factors, their symptoms, disease manifestation and best clinical and prevention practices, which in turn will provide essential information to policy makers to develop context-specific, cost-effective and practical policies to address the rising burden of NCDs in Malawi

### THE DOUBLE BURDEN OF DISEASE IN SUB-SAHARAN AFRICA (SSA)

**THE DOUBLE BURDEN OF DISEASE REFERS TO THE CO-EXISTENCE AND SIMULTANEOUSLY HIGH PREVALENCE OF BOTH, COMMUNICABLE AND NON-COMMUNICABLE DISEASES (NCDs).**

Infectious, neglected tropical diseases (NTDs), high maternal and child morbidity and mortality continue to be highly prevalent in the countries of sub-Saharan Africa (SSA), including Malawi. Disease patterns however have been changing rapidly in the SSA region due in part to rapid improvements in prevention and treatment options for NTDs and infectious diseases such as malaria, tuberculosis and HIV. At the same time, SSA countries including Malawi are undergoing a rapid demographic change: populations are rapidly aging with a growth rate of the population above age 60 being about three times faster than in more developed regions (Chatterji et al 2015, Kampfen et al 2018).

**THE UNPRECEDENTED GROWTH IN NCD PREVALENCE RATES CREATES DEMANDS THAT MANY HEALTH SYSTEMS IN SSA COUNTRIES ARE CURRENTLY NOT WELL EQUIPPED TO MEET.**

Improvements in longevity have led to an increasing prevalence of chronic non-communicable diseases (NCDs), especially cardio-vascular disease (CVD), hypertension, diabetes, cancers, disability and poor mental health amongst older individuals globally including those living in SSA countries (Gouda, H. et al 2019; Dalal, S. et al 2011).

Addressing the globally rising burden of NCDs is of highest priority for policy makers and health care providers. For instance, the objective of the United Nations' Sustainable Development Goals (SDGs) is to reduce premature death due to major NCDs by 30% by 2030 (UN 2019; Izutsu, Takashi, et al. 2015). This ambitious goal is hampered by the fact that the health care systems in many SSA countries are underfunded, with limited infrastructure and healthcare personnel trained in the management of NCDs, and have currently limited capacity to address the growing burden of NCDs in the region (Nyabba, G. et al 2017). Furthermore, the chronicity of NCDs, the need for long-term behavior changes and often life-long treatment plans and continuous monitoring make addressing their growing burden even more challenging.

## THE RAPIDLY RISING BURDEN OF NCDs IN MALAWI

Although infectious diseases including HIV, malaria, tuberculosis, as well as child and maternal morbidity and mortality are falling (GoM, 2023), reflecting the country's successful approaches to address these diseases, Malawi has been experiencing at the same time a rapid increase in NCDs in the last decades (Gowshall & Taylor-Robinson, 2018). Similarly to other SSA countries, Malawi faces a double disease burden that strains the resource-constrained health system. Unless timely action is taken to address the rapidly increasing NCDs burden, many mature and older adults in Malawi will have shorter, lower quality lives. Importantly, physical health conditions and associated disabilities caused by NCDs will limit the economic benefits offered by a growing share of economically active adults (Kohler et al, 2022).

## PROMISING STRATEGIES TO ADDRESS THE EMERGING BURDEN OF NCDs IN A CONTEXT WHERE THE HEALTHCARE SYSTEM IS CURRENTLY LIMITED TO DO SO

Beyond investments in medical treatments and continued care for individuals affected by NCDs, which in turn requires substantial investments in strengthening the healthcare system financially and through training and hiring of additional healthcare personnel, research evidence points towards further effective strategies to address the increasing burden of NCDs in resource constraint settings.

**RAISING AWARENESS OF MODIFIABLE RISK FACTORS ASSOCIATED WITH NCDs IS CENTRAL TO NATIONAL HEALTH POLICY PRIORITIZATION, HEALTH SYSTEM STRENGTHENING, AND COMMUNITY ENGAGEMENT.**

The implementation of the WHO 2023-2030 Global Action Plan for the Prevention and Control of NCDs (WHO, 2021) emphasizes a holistic multi-sectoral approach that is people-centred and embedded in Primary Health Care. National and local contexts matter and the role of “champions” and mobilization of political will is known to accelerate change and active NCD responses (Mungumbe, Khatia Rebeca, et al. 2021)<sup>2</sup>. National-level policy is only effective when it is context-specific, and understanding the plurality of health care provision and diverse and lay explanatory models of the rise of NCDs, as well as the gendered dimensions, are central to the recommended imperatives to co-create, develop and implement context-specific NCD responses (Somerville, C. and Mungumbe, K., 2021).

### PROMOTING COMMUNITY AWARENESS, PRACTITIONERS' AWARENESS, AND PATIENT EDUCATION ABOUT NCDs AND RELATED RISK FACTORS

An important aspect in addressing the rising burden of NCDs is educating the population about prevalent NCDs, their causes and risk factors, and promoting interventions individuals can implement so they can take ownership of advancing their health. The role of education in advancing population health while facing the double disease burden is broad, and

should take place at both the public health level and within the healthcare system. It includes integral aspects such as teaching about the importance of risk factors and health behaviors in preventing NCDs (Perez-Leon, 2018), emphasizing adherence to secondary prevention, and disseminating knowledge about NCDs, their symptoms and available treatment options to the public (Correia et al 2019, WHO, 2002).

Advancing health education about NCDs within communities can save valuable resources the strained healthcare system could allocate elsewhere. Education alone is not sufficient to change behavior (Perez-Leon, 2018). Generated evidence shows that educational efforts must be contextualized to the perspectives and experiences of the local communities (Beran, et al. 2019; Beran, et al 2018). For instance, learning from the experience with other diseases (Correia et al 2019), individuals affected by NCDs can, based on their own experience, provide valuable insights on how to recognize symptoms and manage diseases.

Integrating NCDs risk factor education within the existing system of health care provision can be a distinct approach suitable for the SSA LICs context that can build and strengthen responses to the double-burden of diseases avoiding a silo-like approach. For example, providing educational materials at all patient-system touchpoints on hypertension, risk factors and management can gradually build the capacity of the health care system to respond to the increasing burden of hypertension in Malawi.

## FAMILY AND COMMUNITY COLLABORATION

Family and community members can play an integral part in addressing NCDs and can be brought into the fold when their family and community members are burdened with these conditions. Including family members in educational and clinical efforts could be beneficial in multiple ways. For instance, evidence shows that family members' involvement can make dietary changes more socially acceptable (Perez-Leon, S. 2018) and help those burdened by NCDs build social networks that can hold them accountable in adhering to secondary prevention. Incentivizing and emphasizing family and community collaboration will give adults affected with NCDs more familial support, instead of social isolation (Correia et al 2019, WHO, 2022).

## IMPORTANCE OF SECONDARY PREVENTION FOR NCDs

Secondary prevention for NCDs is of utmost importance for their early detection and effective management. Secondary prevention aims to reduce the impact of NCDs by detecting them as early as possible and hence halt or slow their progress, and by encouraging personal strategies for disease management to prevent long-term complications (MoH, 2017).

Secondary prevention can play an important role for addressing for instance the burden of hypertension in Malawi. The high prevalence of hypertension among the adult population living in both urban and rural areas in Malawi is well documented (Kohler, et al 2022, Ciancio et al 2021) and addressing it is of utmost public health relevance since it is a leading risk factor for the onset of cardio-vascular diseases (CVDs) (Dieteren, et al 2021). Evidence from a population-based study in Malawi shows the sustained effects of health screening for hypertension: Individuals who received a referral letter to consult a healthcare provider if they had elevated blood pressure, had a reduced probability of being hypertensive four years later (Ciancio et al, 2021). These results from Malawi as well as evidence generated in other contexts suggest that increased targeted screening is needed amongst populations known to be vulnerable to the condition (Dieteren, et al 2021, Mohanty, et al 2021). The findings on hypertension screening are encouraging and can be applied to other NCDs that have high impact on quality of life and productivity of adults and for which low-cost treatment is available (e.g. experience of chronic pain (Kohler et al., 2022; Mohanty et al., 2021).

## THE STRONG NEED FOR CONTINUED RESEARCH AND MONITORING TO ADDRESS THE RISING BURDEN OF NCDs

There is a wide gap in research and available knowledge regarding risk factors, disease manifestation and best clinical and prevention practices to address the burden of NCDs in Malawi and other SSA countries (Manjomo et al., 2016). This limited research evidence hinders the ability of policymakers to draft effective and practical policies that match SSA local contexts. On the contrary, the NCD burden is globalized and affects countries across the development spectrum, creating incentives for academic, clinical, technical, and financial collaboration between policy makers and researchers from the global north and the global south (Beran, et al. 2016).

Research focus and investment must be directed to efforts that emphasize the voices, interests, and experiences of local stakeholders early on. When designed correctly, these collaborative efforts can encourage the co-creation of practical interventions that are responsive to the needs and resources of their contexts (Beran, et al 2018).

Moverover, the implementation of monitoring and evaluation systems to assess the progress made in preventing and controlling major NCDs is necessary (Robertson et al., 2015). Such surveillance and monitoring systems should be built into public health programs and integrated with prevention strategies at the national and local level so that they can effectively inform interventions to improve access to NCDs prevention and treatments (Robertson et al., 2015).



## POLICY RECOMMENDATIONS

1. Raising awareness of modifiable risk factors associated with NCDs should be central to national health policy prioritization, health system strengthening, and community engagement and should emphasize a holistic multi-sectoral approach that is people-centered and embedded in Primary Health Care.
2. Health literacy campaigns are needed to spread knowledge about NCDs: which NCDs are most prevalent in the local context, what the risk factors are, who is most susceptible to them, how to dispel myths around NCDs, and how health behaviors can prevent them. Alongside NCD awareness, creating enabling environment conditions that are adapted to local contexts would allow informed individuals to better manage and navigate their NCD-related issues and needs.
3. In addition to public education campaigns, health care workers must be trained in patient education to ensure those diagnosed with NCDs are receiving high quality information about their disease, its timeline, available treatment and management of it.
4. Family collaboration should be emphasized and incentivized during diagnosis, patient education, and throughout the process of treating those burdened by NCDs. This is important to ensure adherence to treatment and lifestyle changes that combat NCD prevalence.
5. Targeted screenings for prevalent NCDs amongst vulnerable populations are needed to diagnose those burdened by NCDs and educate them about risk factors, available treatment options and disease management. This can be achieved either by engaging health care workers in the communities to target and diagnose NCDs conditions or by screening for NCDs when individuals at risk for NCDs come into contact with the healthcare system.
6. Investment must be made to make secondary prevention more widely available in Malawi. Poor countries utilize secondary prevention less than richer countries, and poor people inside all countries utilize it less than richer people. Making secondary prevention available would improve quality of life and extend lives, but it could also entrench disparities already present if not targeted at poorer, vulnerable communities.

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