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## The rising burden of non-communicable diseases in sub-Saharan Africa



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Non-communicable diseases (NCDs) represent the leading cause of death worldwide, killing 41 million people each year—equivalent to 71% of all deaths globally. Among NCDs, the four top killers that together account for more than 80% of all premature NCD deaths include cardiovascular diseases (17.9 million deaths annually), cancers (9.0 million), respiratory diseases (3.9 million), and diabetes (1.6 million).<sup>1</sup> There has been a surge in the burden of NCDs in sub-Saharan Africa over the past two decades, driven by increasing incidence of cardiovascular risk factors such as unhealthy diets, reduced physical activity, hypertension, obesity, diabetes, dyslipidaemia, and air pollution. NCDs are set to overtake communicable, maternal, neonatal, and nutritional (CMNN) diseases combined as the leading cause of mortality in sub-Saharan Africa by 2030.<sup>2</sup> Important efforts are therefore needed to curb the burden of NCDs in the region, starting with the provision of reliable epidemiological estimates of NCDs and their drivers to appropriately inform prevention and control strategies.

In *The Lancet Global Health*, Hebe Gouda and colleagues present an in-depth analysis of the disability burden of NCDs in sub-Saharan Africa from 1990 to 2017.<sup>3</sup> Their study reveals a substantial increase in disability-adjusted life-years (DALYs) due to NCDs in sub-Saharan Africa, from 90.6 million (95% uncertainty interval 81.0–101.9) DALYs in 1990 to 151.3 million (133.4–171.8) DALYs in 2017. This 67.0% increase is partly due to population growth and ageing in sub-Saharan Africa, and brings the age-standardised DALY rate of NCDs close to that of CMNN diseases. In 2017, the leading causes of NCD burden were cardiovascular diseases (22.9 million [95% uncertainty interval 21.5–24.3] DALYs), neoplasms (16.9 million [15.7–18.3]), mental disorders (13.6 million [9.9–17.7]), and diabetes (10.4 million [9.2–11.9]), similar to the leading causes of mortality due to NCDs in sub-Saharan Africa and globally in 2015.<sup>1</sup> Although Gouda and colleagues provide data on overall disability from NCDs at the country level, specific data for each NCD per country are not shown. This is a major limitation because such data are crucial to inform national health systems to design and implement effective interventions for

specific NCDs, and for the prioritisation and allocation of resources.

Nevertheless, the study fills an important knowledge gap by providing thorough and reliable data on the magnitude of the disability burden of NCDs in sub-Saharan Africa. These data have major implications for prevention and control strategies. Primordial prevention, early detection, and appropriate treatment are key components of the response to NCDs. In the context of constrained resources and weak health-care systems that are still facing the overwhelming burden of CMNN diseases, ensuring that the target population for each NCD has access to screening and affordable treatment in sub-Saharan Africa is extremely challenging. While systematic screening or oriented diagnosis for at least the leading NCDs can be implemented in all primary health-care settings, another complementary approach would be to consider task shifting and integrated prevention campaigns including door-to-door interventions, national screening campaigns, and mobile screening strategies.<sup>4–7</sup> Following diagnosis of NCDs, linkage of patients to health care should be assured. This requires that every patient has a good understanding of their disease and has appropriate access to effective treatment.<sup>8</sup> Besides strategies to identify and manage people with NCDs, interventions for primordial prevention (ie, actions to inhibit the emergence of NCD risk factors) and primary prevention (ie, actions on existing NCD risk factors), as well as educational programmes on leading modifiable behavioural risk factors (tobacco use, physical inactivity, unhealthy diet, and the harmful use of alcohol) and metabolic risk factors (raised blood pressure, overweight and obesity, hyperglycaemia, and hyperlipidaemia), are crucial.<sup>2</sup>

Although the prevention and control of some diseases such as hypertension and diabetes have gained momentum over the past decade in most countries in sub-Saharan Africa, much work is still needed to curb the burden of NCDs in the region. NCDs, especially the leading ones, must be recognised by governments in sub-Saharan Africa as major threats to population health. Strategies against NCDs should be shaped

through a comprehensive approach addressing various sectors beyond health, including education and mass communication to promote healthy lifestyles, transport and energy to reduce outdoor and indoor air pollution, and agriculture to support healthy dietary practices such as fruit and vegetable consumption, among others. Furthermore, in the face of the double burden of communicable diseases and NCDs in sub-Saharan Africa, integration of NCDs into well established and successful programmes for diseases such HIV/AIDS has been shown to be beneficial in providing comprehensive health care to populations in sub-Saharan Africa.<sup>9,10</sup>

In brief, Gouda and colleagues have shown the increase in disability caused by NCDs in sub-Saharan Africa between 1990 and 2017. In this perspective, NCDs, which are set to overtake CMNN diseases as the leading cause of disability and mortality in the region over the next decade, must be recognised as major barriers to attaining Sustainable Development Goals 1, 2, and 3. The quality of the data used by Gouda and colleagues for their estimates is not optimal, amplifying the call for improved health information systems in sub-Saharan Africa. Including NCD indicators into routine national surveillance systems and population-based surveys in sub-Saharan Africa will substantially improve the understanding of the epidemiology of NCDs and inform the upturn of prevention and control interventions.

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We declare no competing interests.

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