



# THE CHALLENGE OF NON-COMMUNICABLE DISEASES

Non-communicable diseases – a group of medical conditions responsible for 74% of global deaths each year, killing approximately 41 million people – represent one of the most pressing health challenges of our time, particularly in low- and middle-income countries.

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## A GLOBAL PHENOMENON

Non-communicable diseases (NCDs) are the leading cause of death worldwide<sup>1</sup>. Although these conditions are typically associated with older age groups, each year 17 million people die of NCDs-related causes before the age of 70, with 86% of these premature deaths occurring in low- and middle-income countries (LMICs). Among the many alarming statistics related to NCDs, this one perhaps best illustrates how devastating the impact of NCDs is in these settings<sup>2</sup>.

## AFRICA: CAUGHT BETWEEN EMERGENCIES AND CHRONIC CONDITIONS

In LMICs, cardiovascular diseases, cancers, chronic respiratory diseases and diabetes are estimated to account for over 70% of NCDs<sup>3</sup>. In addition, a significant proportion of NCDs in these countries are classified as severe, leading to early disability and/or mortality in the absence of treatment. These include insulin-dependent or complicated diabetes mellitus, congenital and rheumatic heart disease, severe arterial hypertension, sickle cell anemia and severe persistent asthma.

However, NCDs are not the only burden weighing on the health care systems of low-income countries. Communicable (infectious) diseases also weigh very heavily on these nations, especially those in sub-Saharan Africa. This dual burden overwhelms already fragile health systems, which struggle to provide accessible and qualitatively adequate services to meet the needs of the population.

While there have been recent improvements in the capacity to prevent and treat communicable diseases at first-level and more peripheral health centers, the same cannot be said for NCDs. In fact, despite a general fall in mortality from infectious diseases like malaria, HIV and tuberculosis, recent decades have seen an increase in NCD-related deaths, primarily due to strokes and myocardial infarctions, or heart attacks (see **Figure 1**).

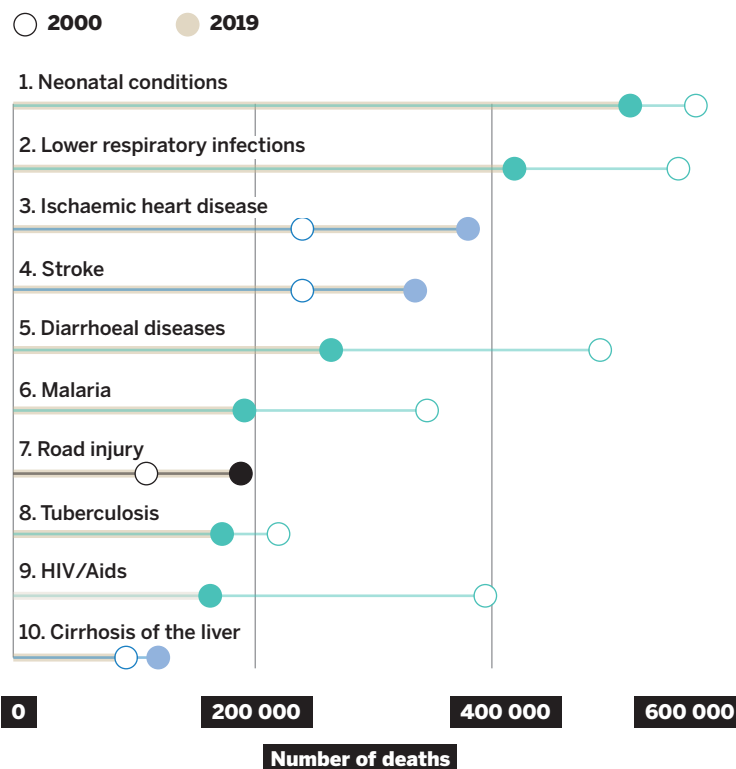
## RISK FACTORS CONTRIBUTING TO POOR HEALTH

The causes underlying deteriorating health indicators in resource-limited countries can be attributed to a range of behav-

ioral, metabolic and environmental factors. These factors are, in turn, driven by rapid and unplanned urbanization, lifestyle changes and globalization, which have increased people's exposure to risk factors such as smoking and air pollution and led to less healthy dietary habits.

For instance, the growing prevalence of diets rich in sugar, fat and ultra-processed foods, combined with more sedentary lifestyles, has increased the incidence of obesity – a well-known risk factor for diseases such as diabetes and heart disease. Similarly, higher alcohol and tobacco consumption is contributing to a rise in chronic liver disease and malignant neoplasms<sup>4</sup>. The onset of NCDs is therefore often associated with risk factors that, while

FIGURE 1 / LEADING CAUSES OF DEATH IN LOW-INCOME COUNTRIES



Source: WHO Global Health estimates. Note: World Bank 2020 income classification

modifiable and preventable, are challenging to address in low-resource countries due to barriers including limited education and awareness, poor access to healthcare, inadequate health policies, and poverty.

A lack of educational programs and awareness campaigns leaves populations without the information they need to recognize and prevent NCDs. In many low-income countries, healthcare systems also lack the resources – medications, diagnostic tools and skilled personnel – required to effectively manage these diseases. Furthermore, poverty plays a central role in increasing the risk of developing NCDs in limited-resource settings.

**POVERTY AND SOCIOECONOMIC IMPACT**

The link between poverty and disease is well documented<sup>5</sup>. According to the most recent estimate, almost 700 million people in low-income countries live in extreme poverty<sup>6</sup>, and NCDs are

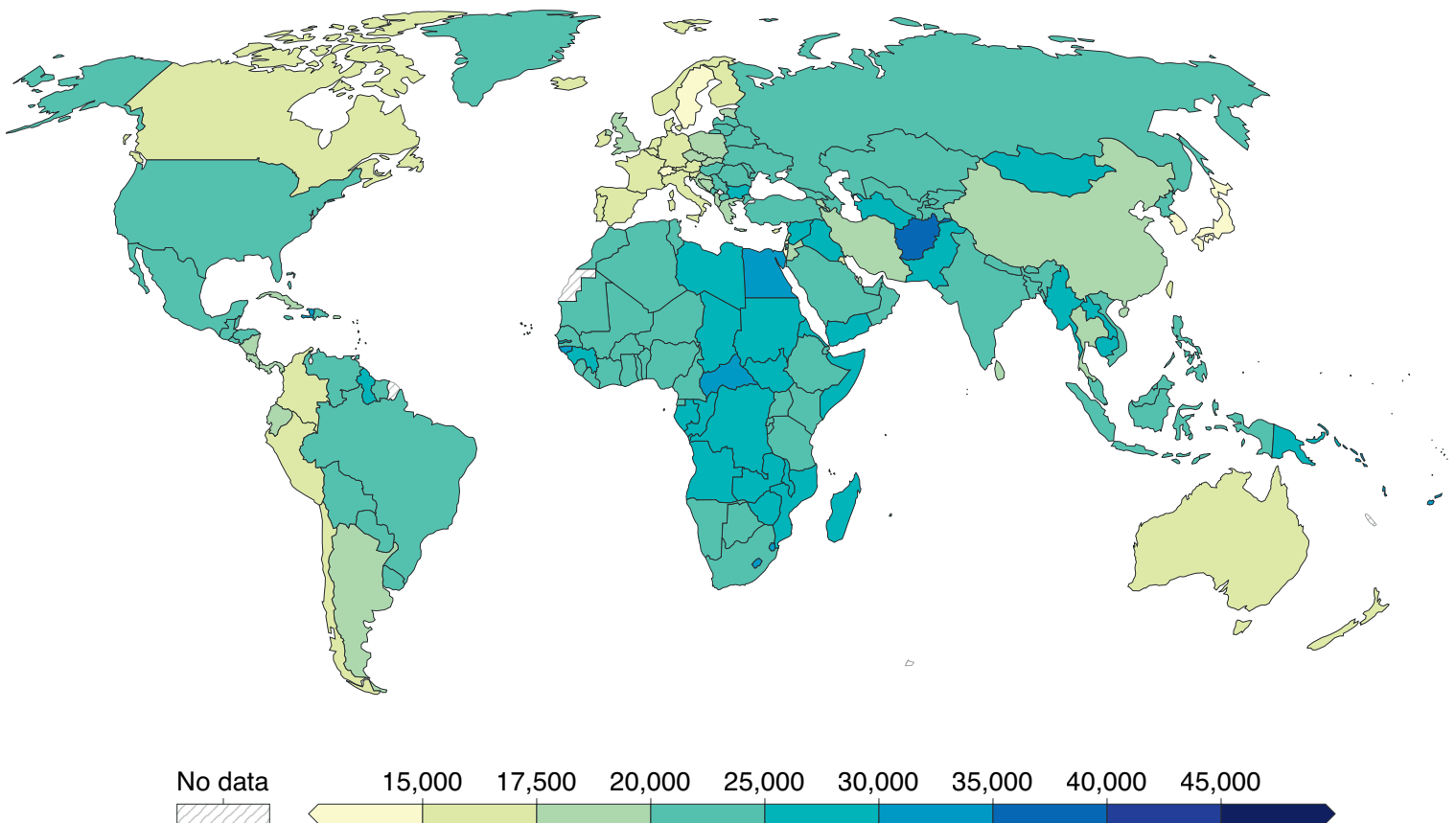
known to play a major role in increasing the incidence of mortality and morbidity among poorer populations (**Figure 2**). Thus, NCDs are part of the vicious cycle of poverty-disease-economic burden.

The poorest segment of a population is the most vulnerable, and the economic burden of illness, due to both the sick person’s lost productivity and the cost of their treatment and medicines, further exacerbates their poverty<sup>7</sup>.

In fact, economically and socially disadvantaged individuals experience more severe illnesses and die earlier than those from higher social strata, due primarily to their higher exposure to risk factors and limited access to healthcare services. Not only do those affected by NCDs experience loss of income, but their healthcare costs also quickly drain household resources. This is how these diseases intensify poverty for millions of people each year, putting a brake on development.

It is this socioeconomic impact on the poorest in resource-poor countries that prompted the United Nations to make NCDs one of the focuses of the Sustainable Development Goals (SDGs). In

**FIGURE 2 / DALY RATES FROM NON-COMMUNICABLE DISEASE (NCDs), 2021**  
 AGE-STANDARDIZED DALY (DISABILITY-ADJUSTED LIFE YEAR) RATES PER 100,000 INDIVIDUALS FROM NON-COMMUNICABLE DISEASES (NCDs). DALYS ARE USED TO MEASURE TOTAL BURDEN OF DISEASE - BOTH FROM YEARS OF LIFE LOST AND YEARS LIVED WITH A DISABILITY. ONE DALY EQUALS ONE LOST YEAR OF HEALTHY LIFE



Source: IHME, Global Burden of Disease (2024) / OurWorldinData.org/burden-of-disease / CCBY

fact, Goal 3 includes an ambitious and challenging target (3.8) for achieving universal health coverage (UHC) by 2030, i.e. to ensure access for all to quality essential healthcare services, medicines and vaccines without experiencing financial hardship.

## INTERVENTION STRATEGIES

To reduce the impact of NCDs on individuals and society and achieve the UN's SDG3 UHC-related target, a comprehensive, multi-sectoral approach will be required – one that integrates health, finance, education, transportation and planning in order to overcome barriers to care. In addition, it will be essential to establish a set of guiding principles for evidence-based, patient-centered strategies that are both accessible and sustainable. Intervention strategies should incorporate educational and training programs, public health policies for strengthening health systems, and the promotion of research and innovation. Key focuses would include:

- Communicating and disseminating information on the environmental and behavioral risk factors for NCDs;
- Training health workers on the implications of long-term NCD treatment and the management of ensuing complications;
- Decentralizing NCD services to first-level health facilities to remove the distance barrier to the greatest extent possible, thereby expanding patient access;
- Implementing protocols at the community level for disease self-management, particularly for those suffering from insulin-dependent diabetes mellitus, and setting up patient-run support groups;
- Strengthening patient referral protocols to ensure continuum of care and implementing support programs for transportation and accommodations during hospital stays;
- Ensuring the availability of essential drugs and equipment;
- Promoting research for the assessment of healthcare system preparedness; and understanding the key barriers to, and developing innovative and low-cost systems for, effective NCD management.

## NOTES

- 1 WHO. Noncommunicable Diseases; WHO: Geneva, Switzerland, 2018.
- 2 <https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases>.
- 3 Gouda HN, Charlson F, Sorsdahl K, et al. Burden of non-communicable diseases in sub-Saharan Africa, 1990–2017: results from the Global Burden of Disease Study 2017. *Lancet Glob Health*. 2019; 7: e1375–e1387.
- 4 World Health Organization. Regional Committee for Africa. Progress Report on The Regional Framework for Integrating Essential Noncommunicable Disease

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- 5 Bukhman, G.; Mocumbi, A.O.; Atun, R.; Becker, A.E.; Bhutta, Z.; Binagwaho, A. The Lancet NCDI Poverty Commission: Bridging a gap in universal health coverage for the poorest billion. *Lancet* 2020, 396, 991–1044.
- 6 The World Bank. Poverty; The World Bank: Washington, DC, USA, 2020.
- 7 Allen L et al. Socioeconomic status and non-communicable disease behavioural risk factors in low-income and lower-middle-income countries: a systematic review. *Lancet Glob Health*. 2017.