Late in 2016, The Lancet [1] released the 2015 edition of the Global Burden of Disease Study (GBD). While the report showed some progress on mortality and disability in some areas, such as some communicable diseases, it revealed concerning trends relating to NCD mortality and prevalence, and exposure to their risk factors; not least in low and middle income countries. Priya Kanayson explains how the GBD reaffirms the imperative for action to reduce the burden of NCDs globally as we pursue global NCD goals and targets.

The Global Burden of Disease Study (GBD) is a comprehensive, collaborative effort to measure the impact of health problems on people, and involves the work of over 1,800 collaborators from more than 120 countries. It assesses the global rates of mortality and disability from major diseases, injuries, and risk factors, and places an emphasis on comparability of data. In order to do this, data is often presented via the disability-adjusted life year (DALY) metric, which describes the numbers of years of healthy life lost in a given population. The report is made available by the Institute for Health Metrics and Evaluation (IHME) [2] so that governments, donors, researchers, civil society, health practitioners, and all stakeholders have the data and evidence required to make decisions about how to allocate available resources.

An alarming epidemiological transition from communicable to noncommunicable diseases

The GBD provides data and evidence that the global epidemiological transition is well underway. This transition is an established pattern that has been tied to development; as countries develop, their mortality rates due to communicable and maternal diseases decline resulting in populations living longer and being more exposed to NCD risk factors associated with additional demographic shifts such as urbanisation. This results in a shift in disease burden – from communicable to noncommunicable diseases – with DALYs due to NCDs increasing, that is, that increasing numbers of years of healthy life are lost due to NCD related disabilities.

As more and more countries move higher on the development spectrum, we can expect to see an increase in NCD prevalence and related disability within their populations.
People are spending more years of their life living with disability due to #NCDs. #GBD2015.

Why is the GBD important for NCD advocates, and how does the report impact our work?

The report, which is the most comprehensive repository of global health data, can be used to inform and build evidence-based advocacy campaigns. The 2015 GBD findings reinforce the need to act urgently on NCDs; the study’s findings show the proportion of deaths attributable to NCDs has increased from 57.6% of deaths in 1990 to 71.3% of deaths in 2015. This percentage is expected to steadily increase over the years, and is yet further evidence that the global community must step up to reduce the burden of NCDs.

One of the strengths of the report is its attention to reporting on the risk factors associated with poor health and NCDs. The report shows the rate of increase of NCD prevalence in low- and middle-income countries (LMICS) is markedly pronounced, with development transitions contributing to increased exposure to most damaging risk factors for NCDs, which include smoking, alcohol use, poor nutrition, physical inactivity, and air pollution.

The figure below shows the risk factors that contribute to the greatest burden of disease, and can be used to help prioritise interventions and policies for global health. Body mass index, high blood pressure, household air pollution, smoking, and glucose are some of the most debilitating risk factors, resulting in a higher number of DALYs. Research has shown that disability and mortality associated with these risk factors will only increase unless concerted action is taken.
Figure: Summary exposure value (SEV) is an estimate of exposure to risk factors that takes into account the severity of exposure and the size of the population exposed to risk factors.

Investing in prevention is as important as investing in treatment and quality of life

Despite the knowledge of the most prevalent risk factors, to date, improvements in NCD treatment have focused on lengthening the lives of people living with NCDs (PLWNCDS) instead of addressing risk factors and working to eliminate the diseases themselves. While it is extremely important to ensure and enhance quality of life for PLWNCDS, this GBD data clearly emphasises the equal urgency to invest in prevention measures that will have positive impacts well beyond the health sector.

Though the increasing rates of exposure to risk factors for poor health and NCDs in LMICs and the continuing trends in high-income countries (HICs) might seem rather depressing, there are still ample opportunities to stem the tide of the growing burden of disease due to NCDs. Since we recognise many of the risk factors that result in NCDs, advocates and governments in LMICs have the ability to promote and adopt policies to circumvent mistakes made by other countries to reduce the burden of disease. Adopting a prevention approach and addressing risk factors will help reduce the burden of disease, resulting in healthier populations and stimulate economies. Higher income countries must address populations already suffering from NCDs and exposure to their risk factors, but can take steps to reduce their effects by implementing policies to reduce pollution, implement taxes on tobacco, alcohol, and products high in salt and added sugars, and promote physical activity.
The data presented in the GBD 2015 report can help support and develop advocacy campaigns and public policies that are responsive to the biggest causes of disease. Investment in prevention and management of NCDs and their risk factors is, and has been, worryingly disproportionate, with access to care and technology required to support PLWNCDS not keeping up with the rapid pace of increase in NCD prevalence and the growing burden of disease.

The GBD 2015 presents clear and compelling data reinforcing that resources must be allocated to addressing NCDs and their risk factors if we are to make gains in global public health. There are ample opportunities to stem the tide of the growing burden of disease due to NCDs.

Evidence to fuel advocacy as we prepare for the years ahead

As we begin a new year, the GBD report helps provide the evidence to fuel advocacy and policy campaigns as we prepare for the 2018 High-level Meeting (HLM) on the Prevention and Control of NCDs, which will take place at the United Nations in New York. The HLM, which follows the adoption of the 2030 Agenda for Sustainable Development, provides an opportunity to conduct a comprehensive review of the progress achieved in the prevention and control of NCDs within the context of the Sustainable Development Goals, giving due attention to the cross-cutting nature of NCD risk factors and social, economic, and environmental determinants. The NCD Alliance will undertake a consultation process with its network and partners, and the data contained in the GBD report will help inform all stakeholders.

The NCD Alliance continues to pursue a vision of a world where everyone has the opportunity for a healthy life, free from preventable suffering, stigma, and death caused by NCDs, and we reiterate our call on all stakeholders, from government to academia, to civil society and relevant private sector, to recognise and act on the urgent challenges of NCD prevention and management.

Access the 2015 Global Burden Disease report here [3].

#GBD2015 strengthens the case for urgently allocating resources to address #NCDs & risk factors

About the Author

Priya Kanayson (@priyamvadak [4]) is an Advocacy Officer with the NCD Alliance, where she leads the Alliance’s advocacy efforts on integration of NCDs with HIV/AIDS and Reproductive, Maternal, Newborn, Child and Adolescent Health (RMNCAH). Based in New York City, she works closely with United Nations Permanent Country Missions, Agencies, and multistakeholder partners to advance the NCD agenda. Priya holds a Master of Public Health from New York University.

Links