

Non-communicable diseases – towards the 2025 global targets and beyond

Tashi Wangdi¹

¹*Punatshangchhu Hydroelectric Project Authority, Wangduephodrang, Bhutan*

Seventeen years ago, 193 WHO member states adopted a global strategy for the prevention and control of non-communicable diseases (NCDs). Subsequent adoptions of the Framework Convention on Tobacco Control (FCTC), the Global Strategy on Diet, Physical Activity and Health and the Global Strategy to Reduce the Harmful Use of Alcohol put all the available evidence-based tools (WHO Best Buys) in place to reduce the burden of NCDs. The adoption of a Political Declaration at the historic 2011 U.N. high level meeting put NCDs high on the global development agenda. The World Economic Forum ranked NCDs as among the top global threats to economic development, and the 2015 U.N. Development Summit included NCDs among the 17 Sustainable Goals (SDGs). Our task now is to implement the WHO 2013-20 Action Plan with its 9 voluntary targets which has among its goals a 25% relative reduction in deaths under 70 from NCDs by 2025, the so-called 25x25 goal, through targeted action on seven risk factors (tobacco use, harmful use of alcohol, physical inactivity, sodium intake, raised blood pressure, obesity, and diabetes)¹.

But why are NCDs important? To answer, the WHO model says that there are four main NCDs-cardiovascular disease, diabetes, chronic obstructive pulmonary disease and some cancers- caused by four risk factors- tobacco, poor diet, physical inactivity, and harmful use of alcohol. The United Nations has ratified the WHO's approach to addressing this epidemic. These NCDs are important because of some sobering facts: they claim an estimated 38 million lives annually, 16 million or 42% of which were premature and avoidable¹ More than 80% of all NCD deaths occur in low and middle income countries (LMIC). The poor are more vulnerable to NCDs, which perpetuate poverty. Furthermore, South East Asia now has the fastest rising NCD rates of anywhere in the world, where they account for 60-70% of the death and disease burden in the region. Local data indicates that this holds true for Bhutan as well.

How did we (LMIC) become so prone to NCDs? The simple answer is – GDP-inspired economic development. Environmental degradation, pollution of food and air, rising mental stress and widening societal inequities are current realities. After many wonderful successes in combating communicable diseases, a paradoxical situation has arisen in LMICs. The

marked improvements in health status due to economic growth are being undermined by deteriorating diets and greater exposure to NCD risks, as part of the same process of development. Rapid urbanization with its links to the so-called nutrition transition has now emerged as a key driver of NCDs in LMICs. Adequate food does not mean healthy food². Many rural-urban studies show more NCDs and their risks in urban areas. Indeed, the 2017 International Food Policy Research Institute report points to poor-quality diets as the leading cause of disease worldwide². The challenge is complex because of substantial vested financial interests, both locally and globally, in the continued consumption of unhealthy products such as alcohol, tobacco, processed foods, hydrogenated oils, and sugary soft beverages.

Tiny Bhutan is no exception to this global trend. The domestic alcohol industry is thriving in a setting of alcohol being the top killer in its hospitals³. Sugary beverages are manufactured in the country and doing brisk business. The two studies done thus far indicate that this country is fertile ground for NCDs. The 2007 WHO STEPs survey⁴ in urban Thimphu among adults revealed an 8.2% urban diabetes prevalence with 26% hypertensives, over 50% overweight, 12% obesity and high prevalence of unhealthy diet, as reflected by the fairly good proxy of low intake of fruits and vegetable servings per day. A follow up national risk factors survey in 2014 highlighted an even higher percentage (36%) of adult hypertensives, excessive sodium intake (9g/day), 29% adult men binge drinkers, 40% women and 26% men were overweight and 67% bad and unhealthy diet⁵. Physical inactivity was widely prevalent in both studies. The diabetes prevalence with rural-urban breakdown could not be clarified in this study. A more comprehensive STEPs survey in 2018 would hopefully provide a clearer picture as to the status of all the four NCDs and risk factors. Weak data is a huge drawback in many LMICs and Bhutan has to step up and ensure that its data collection, surveillance, monitoring and overall management of the NCD epidemic is up to the mark. We also know that the classic four NCDs have a “long tail” of other chronic diseases such as mental health, suicides, rheumatic and congenital heart diseases, post infectious kidney failure, accidents and injuries, etc. that are vying for attention. Bhutan, as a GNH nation, must rectify the omission and include mental health as the 5th NCD for prioritization because of concerns with increasing suicides, as well as the clear evidence of association of chronic depression with reduced life span^{6,7}. There is also the compelling case for inclusion of socioeconomic status (SES) as a modifiable NCD risk factor to be included in the 25x25 strategy, as it has been shown to impact reduced life expectancy similar to hypertension, diabetes and obesity⁸.

Corresponding author:

Tashi Wangdi

twangdi0564@gmail.com

To conclude, NCDs are now the major healthcare challenge in South East Asia and Bhutan. A sustained assault on NCDs will require strong health systems. In this area, Bhutan has successfully piloted (2009-10) and scaled up nationwide (2014) the Package of Essential NCD Interventions (WHO PEN) approach by taking advantage of its strong primary health care (PHC) infrastructure. However, a final victory in the battle with NCDs certainly goes beyond the purview of the health sector. An integrated, multi-sector partnership effort with an “all policies need health” framework together with smart technological leveraging and generous international assistance would be the panacea for containing this epidemic. Health is the wealth of a nation and, therefore, this challenge is not simply a technical one but a socioeconomic and political imperative.

REFERENCES

1. World Health Organization. Global Action Plan for Prevention and Control of Non communicable diseases. 2013. [\[Full Text\]](#)
2. International Food Policy Research Institute. 2017 Global Food Policy Report. Washington DC:International Food Policy Research Institute.2017. [\[Full Text\]](#)
3. Ministry of Health, Royal Government of Bhutan. Annual Health Bulletin. 2017. [\[Full Text\]](#)
4. Ministry of Health, Royal Government of Bhutan. Non communicable disease risk factors:STEPS survey Bhutan. 2007. [\[Full Text\]](#)
5. Ministry of Health, Royal Government of Bhutan. Non communicable disease risk factors:STEPS survey Bhutan . 2014. [\[Full Text\]](#)
6. Pratt LA, Druss BG Manderscheid RW, Walker ER. Excess mortality due to depression and anxiety in the United States: results from a nationally representative survey. *Gen Hosp Psychiatry*. 2016; 39: 39-45. [\[PubMed | Full Text | DOI\]](#)
7. Patel V, Chatterji S. Integrating mental health in care for non communicable diseases: An imperative for person centered care. *Health Aff* . 2015;34:1498-505. [\[PubMed | Full Text | DOI\]](#)
8. Silvia S, Cristian C, Markus J, Mauricio A, Peter M, Florence G, et al. Socioeconomic status and the 25X25 risk factors and the determinants of premature mortality: a multicohort study and meta-analysis of 1.7 million men and women. *The Lancet* . 2017;389:1229-37. [\[PubMed | Full Text | DOI\]](#)