

Taking action on prevention and control of noncommunicable diseases in Bhutan by strengthening gross national happiness

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ABSTRACT

Introduction: Noncommunicable diseases (NCDs) are major public health problem in Bhutan, accounting for 68% of total deaths. The growing epidemic of NCDs threatens the achievement of Gross National Happiness (GNH). NCDs are the results of complex interaction of social and economic risk factors and change in diet and lifestyle. Effective action to prevent and control these diseases requires a whole-of-government approach. In this paper we review new evidence to support political priority for NCDs in Bhutan. One third of the Bhutanese are overweight (33%) and hypertensive (35.7), and 6.4% are diabetic. The prevalence of modifiable risk factors is also very high. We also present the analysis of strategic policy opportunities for health sector to integrate the 'Multisectoral national action plan for the prevention and control of NCDs, 2015-2020' into policies across all relevant sectors. Our analysis has identified three specific opportunities for the health sector to engage strategically to strengthen action on NCDs and GNH, concurrently: 1) raising priority actions on NCDs within the existing GNH multisectoral committee, to achieve both health and happiness objectives; 2) identifying shared agenda between NCDs and GNH to achieve both health and happiness objectives; and 3) identifying shared GNH determinants between NCDs and GNH to enhance action on NCDs. Addressing NCDs aligns with the optimization of Gross National Happiness. It is imperative that the Government of Bhutan recognize that action on NCDs is an integral element for achieving GNH.

Keywords: Health policy; Global NCD action plan ;Gross national happiness; Noncommunicable diseases; Shared agenda.

INTRODUCTION

The increasing global burden of noncommunicable diseases (NCDs) is a major barrier to development and achievement of sustainable development goals¹⁻³. To strengthen national efforts of addressing the burden of NCDs, the sixty-sixth World Health Assembly endorsed the 'Global action plan for the prevention and control of noncommunicable diseases 2013-2020' (here after referred as the global NCD action plan)⁴.

Concurrent to the global momentum of fighting NCDs and the growing concern of the adverse impact of NCDs within Bhutan, the Government of Bhutan endorsed the 'national policy and strategic framework on prevention and control of NCDs' in 2009⁵, the 'National health policy' in 2011⁶ and the 'Multisectoral national action plan for the prevention and control of NCDs, 2015-2020' (here after referred as national NCD action plan) in 2015⁷. Although the national NCD action plan identified strategic action areas and implementation mechanism, it falls short of identifying a sustainable policy approach to integrate the global,

regional and the national NCD action plan into policies across all sectors to underpin actions addressing NCDs in Bhutan.

There is a global consensus that whole-of-government approach is an effective way to address NCD risk factors and the underlying social determinants of health^{8,9}. Health sector alone cannot achieve the required reduction in NCDs as it has very little control over the risk factors of the NCDs¹. Hence, strengthening policy coherence for resource mobilization, capacity building and advancing political commitment are essential to create an enabling environment to promote and support healthy behaviour and to enforce and regulate the control of alcohol, tobacco and substance abuse^{4,10}.

In this paper, we summarise new evidence on epidemiological transition in Bhutan and identify specific strategies for the health sector to strengthen its policy response for prevention and control of NCDs. In particular, how health sector can strategically engage with other sectors to strengthen action on NCDs and GNH (Figure 1).

Major NCDs and their risk factors

NCDs are the leading cause of preventable deaths and premature mortality in Bhutan. They account for 68% of all deaths¹¹ and an estimated 62% of the diseases burden^{12,13}. We found that

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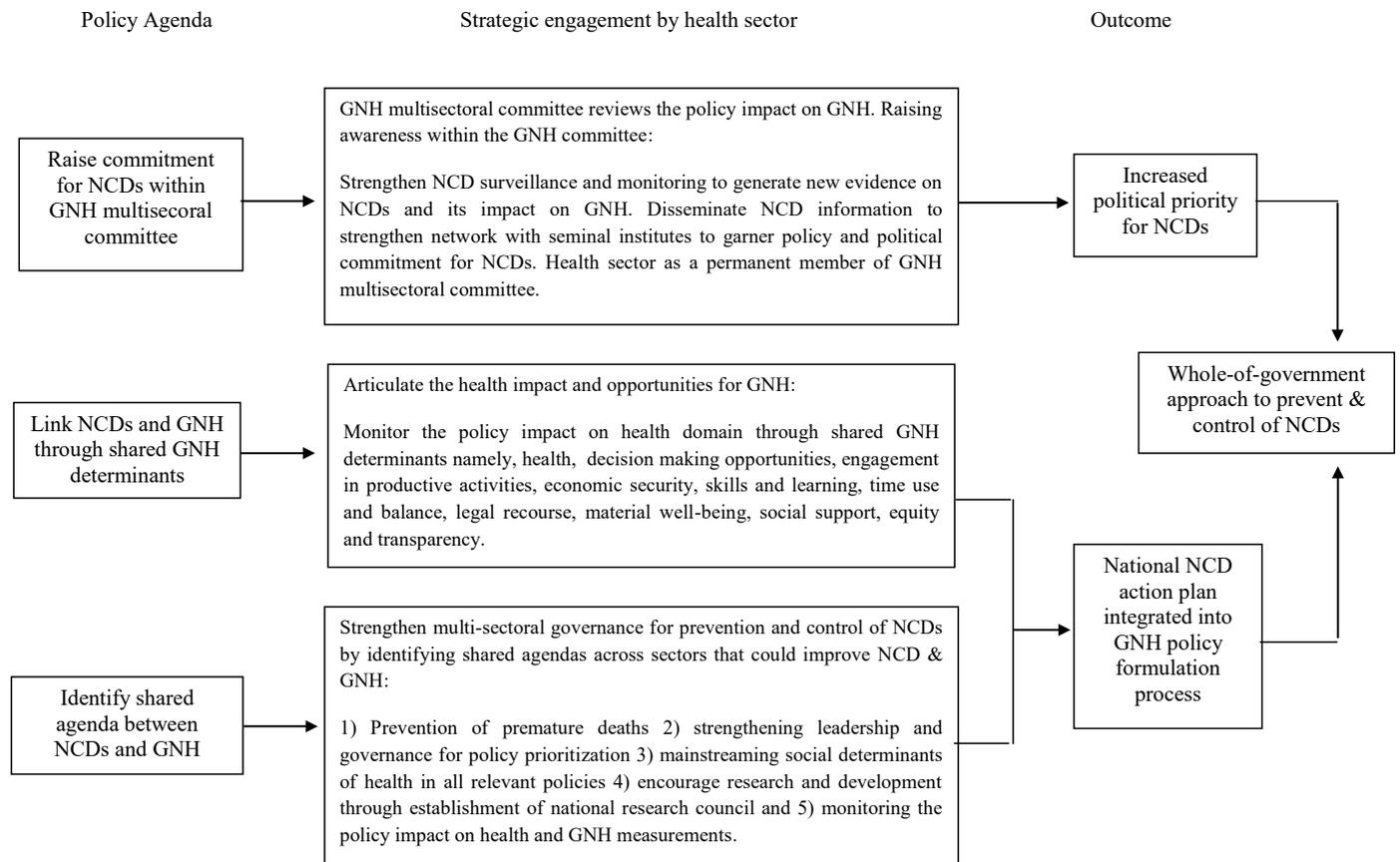


Figure 1. Strategic engagement by health sector to strengthen prevention and control of NCDs through GNH

the prevalence of modifiable risk factors namely; tobacco use, harmful use of alcohol and low fruits and vegetables intakes were 24.8%, 42.4% and 66.9% respectively. Similarly, the prevalence of overweight, hypertension and diabetes were 32.9%, 35.7% and 6.4% respectively¹⁴. According to WHO report, Bhutan has the highest age-standardised death rates per 100,000 population for NCDs and second highest prevalence of overweight in adults in the South East Asia region¹⁵.

Although these estimates provide evidence on the nature and scale of the NCD epidemic in Bhutan, there is little information on how sociodemographic factors influence NCDs in Bhutan. Mackenbach et al.,¹⁶ highlighted the impact of socioeconomic factors such as health, education and income on health status. In this regard, Sithey et al., found that overweight was significantly associated with age, gender, marital status, area, occupation, tobacco use, physical activity and dietary habits. Similarly, hypertension was significantly associated with age, tobacco use and alcohol consumption while type 2 diabetes was significantly associated with age, area of living and tobacco use. The study also suggested that commonly known NCD risk factors may not fully account for the high prevalence of NCDs in Bhutan¹⁷. This finding is in line with Dorji et al.¹⁸, who report high prevalence of modifiable risk factors with a strong tendency of clustering.

There is very limited information on mental health situation in Bhutan despite being recognized as an important risk factor for premature mortality in both industrialised, low and middle-income countries^{19,20}. Likewise, sleep duration is an emerging noncommunicable disease risk factor associated with perceived physical and mental health^{21,22} and is under-studied in Bhutan.

Sithey et al. investigated mental health and the association between sleep duration and health in Bhutan. It was found that the proportion of the population with the symptoms of common mental disorders (CMD) was (29.3%). Older age groups, being female, being divorced or widowed, illiteracy, occupation, low income, poor self-reported health status and having disability were identified as potential risk factors for CMD. Interestingly, increased spirituality and belief in karma was found to be protective factors for CMDs²³. There is a U-shape association between sleep duration and self-reported health status. People sleeping less than and above the recommended sleep duration (7-8 hours) were more likely to have poor self-reported health status in Bhutan²⁴.

The increasing burden of NCDs is expected to accelerate due to demographic transition and high prevalence of modifiable NCD risk factors. With the reduction of death rates

and increase life expectancy, the ageing population in Bhutan (65 years and older) is expected to increase from 4.4% in 2000 to 7.3% by 2025²⁵. This will result in higher burden of NCDs, since prevalence of NCDs and their risk factors increase with age²⁶⁻²⁸. In summary, overweight, hypertension, diabetes and common mental disorders are major public health problems in Bhutan. Alcohol consumption, poor diet and tobacco use are three most common modifiable risk factors. A country with high burden of NCDs cannot aspire to have a healthy and happy population.

To achieve GNH, prevention and control of NCDs must be prioritised. Priority action include 1) raising policy priority for whole-of-government approach to implement the national NCD action plan; and 2) to engage strategically with GNH through shared agendas and shared GNH determinants.

Raising the policy priority accorded to the prevention and control of NCDs

Evidence of the scale and severity of the NCDs problem in Bhutan is necessary, but not sufficient for policy change. Policy cohesion among sectors, ideas and political context are essential for realising policy priority for prevention and control of NCDs²⁹. Policy priority is defined as the degree to which national leaders, politicians and policy makers give attention to an issue, and back it up with the provision of financial, technical, and human resources²⁹.

Issues that have consensus among policy communities are more likely to get political support²⁹. Hence, the health sector can provide strategic leadership and build stronger links with seminal institutes, like the GNH Commission, National Statistic Bureau and Centre for Bhutan Studies and GNH Research, to mobilise consensus-building in addressing the NCDs.

Further NCD research, surveillance and monitoring must be strengthened to generate regular and credible information. This information must reach these policy communities, in order for health to effectively advocate NCDs as a policy priority (Figure 1).

Subsequently, the national health policy (2011), the global NCD action plan, and the national NCD action plan provide favourable political environment to engage national and international agencies in setting policy priority to address prevention and control of NCDs. Action on NCDs will also be fostered by proactive education of policy makers across sectors by the health sector, to ensure they understand and are equipped with a better understanding in developing relevant policies and response for NCDs prevention and control. For instance, health sector could provide estimates of financial implication of treating NCDs and productivity loss due to NCDs and premature deaths. Given that the Government of Bhutan has prioritised GNH, strategies to increase policy coherence for prevention and control of NCDs are most likely to succeed if they clearly show the link between NCDs and GNH. Health sector can 1) identify shared agendas between NCD and GNH, where action on one will strengthen the action on the other; and 2) identify specific GNH determinants that will enhance action on NCDs.

Identifying shared agenda between NCD and GNH

Although much of the NCDs are preventable through addressing modifiable risk factors, this will require a whole-of-government approach to tackle some of the deep-rooted social determinants of NCDs that are beyond the health sector's jurisdiction¹.

Prevention and control of NCDs and GNH policies both prioritise reduction of premature deaths and increasing population well-being. These provides the premise for health sector and GNH to identify shared agenda. The shared agendas are the common policy objectives that the health sector can draw on to show how strengthening action on NCDs will also contribute to achieving GNH policy objectives. The health sector can support this through five shared agendas: 1) prevention of premature deaths and disability due to NCDs; 2) strengthening leadership and governance for policy prioritization; 3) mainstreaming social determinants of health in all relevant policies; 4) strengthen research and development through establishment of national research council and by formulating transdisciplinary national research agenda; and 5) monitoring the policy impact on health and GNH measurements³⁰. Advocating and strengthening these shared agendas can reduce NCDs as well as achieving the national goal of GNH (Figure 1). The opportunity to integrate these shared agendas into policies is provided by the protocol for GNH policy formulation³¹.

Link NCDs and GNH through shared determinants

It is mandatory that all policies in Bhutan support the nine domains of GNH and health is one of domain. The 2010 GNH study showed that health domain contributes the most (14%) to happiness and that happy people enjoy highest sufficiency in disability and mental health³². Therefore improving health will increase GNH.

Bhutan has developed 22 GNH determinants for monitoring and evaluating the likely impact of policies on the 9 GNH domains³². 11 of these GNH determinants were identified as shared determinants between NCD and GNH³⁰. These are specific determinants of GNH that will also enhance action on NCDs. They are health, decision making opportunities, engagement in productive activities, economic security, skills and learning, time use and balance, legal recourse, material well-being, social support, equity and transparency³⁰. The health sector can review and monitor the policy impact on these shared determinants during the implementation of the GNH policy screening tool. This will strengthen the policy coherence for prevention and control of NCDs (Figure 1).

Therefore, identifying, monitoring and strengthening the shared determinants will ensure the integration of NCDs into policies across all relevant sectors (Figure 1).

Integrating NCDs into policies across sectors

The protocol for GNH policy formulation (Box 1) provides the opportunity to advocate and embed the shared agenda into policies across all relevant sectors and to review the policy

impact on shared determinants³⁰.

However, to assess the policy impact on NCDs and to embed NCD policy priorities into all relevant policies, the health sector has to be a member of the GNH Multisectoral Committee. This is important because, the GNH Multisectoral Committee provides an institutional arrangement and legitimate platform to participate in the GNH policy formulation process. Further, the GNH Multisectoral Committee's primary task is to review the policy impact on GNH domains. At present, the health sector's involvement in the GNH policy formulation process is not clear and is arbitrarily decided by the GNH Commission.

CONCLUSIONS

In conclusion, NCDs are major public health problem that can adversely impact on the health and happiness. First, strengthening NCDs surveillance for generating actionable evidence and advocating this measurable information to policy makers will raise policy priority for prevention and control of NCDs. Second, advocating and promoting the shared agenda and determinants will strengthen health sectors engagement with GNH Commission, the GNH Multisectoral Committee and the GNH policy formulation process. Third, the opportunity to address NCDs as a whole-of-government approach is embedded in the protocol for GNH policy formulation and the GNH policy screening tool. This analysis also suggests that other ministries can also identify shared agenda with GNH to bring their policy priorities into an existing policy development mechanism that support 'win-win' outcomes.

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