



Addressing wider determinants of health

Introduction

The wider determinants of health are the factors influencing health outcomes including the socio-economic and environmental factors (1). There are several factors that are broadly classified as modifiable and non-modifiable factors accountable for this burden of disease. There is limited evidence on the magnitude of relative contributions of risk factors to health (2). Nepal is experiencing a triple burden of diseases (i) communicable, (ii) non-communicable diseases (NCDs), and (iii) injury-violence and disaster. There is also a shifting pattern of diseases, from communicable to non-communicable diseases, over the decades (3). In addition, the living and working conditions are influenced by the social, environmental, economic, psychological, material, and behavioral pathways (3,4). However, there is limited data available to establish proportionate causality. Based on the review of evidences and experiences, this policy brief provides recommendations for policymakers to address wider determinants of health and have interventions at an individual level, health system, and multiple sectors (1-4).

Methods

This policy brief has been prepared based on the extensive review of the literatures (1-25), mid-term and rapid review of Nepal Health Sector Strategy(2015-2020), national joint annual review reports, scientific publications, expert consultation, and evidence gathered from discussion at the national and sub national levels.

Policy issues and evidence analysis

In the last 30 years, the life expectancy increased by 12.7 years and reached 71.1 years in Nepal in 2021; however, the healthy life expectancy remains only 61.5 years (6). With this increment in life expectancy, the burden of diseases is rapidly changing over the years. The burden of disease shifted from communicable, maternal, neo-natal, and nutritional (CMNN) problems to noncommunicable diseases (NCDs) between 1990 and 2019. In 1990, CMNN problems were the number one cause of death attributing to 63.60% of overall deaths, and NCDs attributed nearly 30 % of overall deaths. In 2019, the situation was reversed and NCDs became the leading cause of death attributing 71.15% of all deaths followed by 21% of CMNN and 7.85% of injuries. Further, the top three causes of year life losses (premature deaths) were cardiovascular diseases (17%) followed by maternal and neonatal (13.7%) and chronic respiratory diseases (12.7%) respectively (6). Dietary risk, air pollution, tobacco/alcohol use, physical inactivity, occupation, and sanitation are found to be some of the important risk factors associated with premature deaths (3).

A recent review of tobacco use in Nepal showed that smoking prevalence is declining and consumption of smokeless products is increasing (17). An annual number of deaths due to tobacco use is more than 27,000. The

majority of tobacco users initiate smoking before 18 years for both male and female smokers.

Likewise, the proportionate contribution of NCD to Burden of Disease is rapidly increasing and its noticeable that the efforts of the health sector alone are insufficient to address these wider health determinants, as it clearly goes beyond the mandate of health to other sectors.

Likewise, there have been impacts of climate change on disease burden and distribution. To take an example, despite the fact that the number of malaria cases in Nepal has dramatically dropped during the past ten years, the distribution of malaria cases and malaria mosquitoes has grown in hilly and mountainous areas that were previously believed to be non-endemic (21).

The country is experiencing rapid urbanization (17% in 2011 to 21% in 2021) (22). The growing trend of urbanization has several implications for the health sector. For example, the incidence of cancer was nearly double in the urban area of Nepal compared to rural area (23). Likewise, the increase in life expectancy in Nepal has increased the elder population to 6.5% of the total population, and its rapidly increasing, which demands a health system response to better address their healthcare needs. Nearly 20% of the elder population over 60 years have experienced mental health disorders (24).

There are great concerns regarding the increasing antibiotic resistance, which is contributed by several factors including irrational and uncontrolled use of antibiotics in the veterinary, agricultural and medical fields. The research has shown that almost 80% of patients purchasing antibiotics over the counter (25). Likewise, the issues of climate change and health, air pollution, water sanitation, and hygiene, among others also demand work from multiple sectors.

There have been several initiatives to address these changing dynamics of disease burden through policy and programmatic interventions. The public health service act 2017 has elaborately mentioned addressing multiple determinates and has also provisioned of a highlevel multi-sectorial committees to materialize it (10). The WHO Framework Convention on Tobacco Control (FCTC)based tobacco control act 2011 and national tobacco control strategic plan (2013-2016) was implement-ed to reduce the prevalence of tobacco use (11,12). Similarly, the Multi-Sector Nutrition Plan and Multi-Sectoral Action Plan for Prevention and Control of NCDs, National Action Plan on Antimicrobial Resistance are being implemented (13-15). Several surveys such as non-communicable disease risk factors: STEPS Survey, National Mental Health Survey, and Nepal Burden of Diseases study were conducted to gather evidence on the burden of diseases and associated risk factors (5,6,16). Moreover, efforts are underway to ensure health in all policies and one health approach. However, the implementation aspect of the developed documents is grossly inadequate, the regulatory function needs further strengthening and multi-sectoral involvement in health is a must to tackle these ever-increasing health issues.

Conclusion

Nepal is facing a triple burden of diseases with an increased proportion of NCDs over the decades. This is linked to multiple and wider socio-cultural, economic, behavioral, and other factors which demand interventions in multiple sectors. The government of Nepal is committed to addressing wider de-terminants of health and has several guidelines and policy documents to support action plans for address-ing socio-economic and environmental determinants of health. However, the implementation aspect of these guidelines and the expansion of the national documents at the local level remain challenging. Moreover, health is still perceived widely as the health sector's sole responsibility while many sectors have a role to promote positive health outcomes.

Recommendations

- High-level of political commitment and enough resource allocation for health sector (atleast 10% of National budget) for addressing wider determinants of health
- Effective implementation of existing legal and policy provisions e.g. ban on unhealthy products promotion and advertisement
- The functional institutional mechanism at the federal, provincial, and local levels for effective multi-sectoral collaboration including the formation/activation of multi-sectoral public health committees at all levels
- Making people responsible for their own health so as to encourage healthful lifestyle and risk behavior modifications
- Strengthening public health approach and increasing utilization of preventive and health promotional services including periodic health screening, counseling, etc.
- Addressing specific issues like climate change and its health impact, WASH, AMR, etc with multi-sectoral involvement and ownership
 - Develop climate resilient health system and implement health national adaptation plan to climate change
 - Proper management of water, sanitation, and hygiene
 - Air pollution control and provision of open space
 - Implement and scale up one health approach to address AMR
- Community engagement and effective media mobilization for addressing multiple health determinants
- Health system's effective preparedness to tackle the challenges posed by demographic changes including population aging and rapid urbanization
- Evidence generation, analysis, and use with regard to the wider health determinants in the context of Nepal.

References

1. Bambra C et al. Tackling the wider social determinants of health and inequalities: Evidence from systematic reviews. *Journal of Epidemiology Community Health*. 2010
2. Artiga S, Hinton E. Beyond health care: the role of social determinants in promoting health and health equity. *Health*. 2019;20(10):1-3.
3. Adhikari, A.P., Dahal G.P., Mahat I., Regmi B. Subedi K. D. and Shrestha B. (eds.). 2015. Sustainable Livelihood Systems in Nepal: Principles, Practices and Prospects. IUCN and CFFN. Kathmandu, Nepal.
4. Marmot M, Wilkinson R. *Social Determinants of Health*. 2 ed. Marmot M, Wilkinson R, editors: Oxford University Press; 2005.
5. Dhimal M, Bista B, Bhattarai S, D'ixit L, Hyder S, Agrawal N, et al. Report on Noncommunicable Disease Risk Factors: STEPS Survey Nepal 2019. Kathmandu: Nepal Health Research Council; 2019.
6. Nepal Health Research Council (NHRC), Ministry of Health and Population (MoHP), Institute for Health Metrics and Evaluation (IHME), Monitoring Evaluation and Operational Research (MEOR). Nepal Burden of Disease 2019: A Country Report based on the 2019 Global Burden of Disease Study. Kathmandu, Nepal: NHRC, MOHP, IHME, and MEOR; 2021.
7. Ministry of Health and Population (MOHP). Nepal Health Sector-Strategic Plan (2015-2020). Kathmandu, Nepal: MOHP, 2016.
8. Nepal Health Sector Strategy (NHSS), Mid-Term Review (MTR) Draft.
9. Ministry of Health and Population (MOHP). Progress of the Health and Population Sector: National Joint annual review Report, 2020/21. Kathmandu, Nepal: MOHP,2022.
10. Nepal Law Commission. The Public Health Service Act, 2075. Kathmandu, Nepal: NLC, 2018.
11. Ministry of Health and Population (MOHP). Tobacco Product (Control and Regulation) Act, 2011. Nepal: Kathmandu, Nepal: MOHP; 2011.
12. Ministry of Health and Population (MOHP). National Tobacco Control Strategic Plan (2013-2016). . Nepal: Kathmandu, Nepal: MOHP; 2013.
13. Ministry of Health and Population (MOHP). Multi-Sector Nutrition Plan (2013-2017).Kathmandu,Nepal: MOHP,2012.
14. Ministry of Health and Population (MOHP) and World Health Organization(WHO).Multisectoral Action Plan for the Prevention and Control of Non-Communicable Diseases (2014-2020). Kathmandu, Nepal: MOHP and WHO, 2014.
15. Department of Health Services (DOHS). National Action Plan for Antimicrobial Resistance Containment Action Plan Nepal. Kathmandu,Nepal: DOHS,2016.
16. Jha, AK; Ojha, SP; Dahal, S; BC, RK; Jha, BK; Pradhan, A; Labh, S; Dhimal, M. A report on pilot study of national mental health survey, Nepal. Kathmandu: Nepal Health Research Council,2018.
17. Nepal Health Research Council (NHRC). Trends in Prevalence of Tobacco Use in Nepal: Findings from National Studies (1980-2021). Kathmandu, Nepal:NHRC,2022.
18. Bista B, Dhimal M, Bhattarai S, Neupane T, Xu YY, Pandey AR, Townsend N, Gyanwali P, Jha AK. Prevalence of non-communicable diseases risk factors and their determinants: Results from STEPS survey 2019, Nepal. *PLoS one*. 2021 Jul 30;16(7):e0253605.
19. Sharma SR, Matheson A, Lambrick D, Faulkner J, Lounsbury DW, Vaidya A, Page R. The role of tobacco and alcohol use in the interaction of social determinants of non-communicable diseases in Nepal: a systems perspective. *BMC public health*. 2020 Dec;20(1):1-3.
20. Rastriya Samachar Samiti.Implement law against adverts for alcoholic, tobacco products.The Himalayan Times, 13 Nov 2021.
21. Dhimal M, Dhimal ML, Pote-Shrestha RR, Groneberg DA, Kuch U. Health-sector responses to address the impacts of climate change in Nepal. *WHO South-East Asia Journal of Public Health*. 2017 Jul 1;6(2):9.
22. World Bank.Urban Population(% of total population) of Nepal.Washington: World Bank. (Accessed on: 6 July 2022). <https://data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS?locations=NP>.
23. Subedi R, Budukh A, Chapagain S, Gyanwali P, Gyawali B, Khadka K, Thakur C, Dahal U, Dikshit R, Jha AK, Dhimal M. Differences in cancer incidence and pattern between urban and rural Nepal: one-year experience from two population-based cancer registries. *ecancermedicalscience*. 2021;15.
24. Nepal Health Research Council. National Mental Health Survey, Nepal-2020 FACTSHEET (Adults). Kathmandu: Nepal Health Research Council. Accessed on: 6 July 2022. <https://nhrc.gov.np/wp-content/uploads/2020/09/Factsheet-Adults-1.pdf> .
25. Rijal KR, Banjara MR, Dhungel B, Kafle S, Gautam K, Ghimire B, Ghimire P, Dhungel S, Adhikari N, Shrestha UT, Sunuwar DR. Use of antimicrobials and antimicrobial resistance in Nepal: a nationwide survey. *Scientific reports*. 2021 Jun 2;11(1):1-4.

Recommended citation: NHRC. 2022. *Addressing determinants of health (Policy brief)*. Kathmandu. Nepal Health Research Council.



Published by

Government of Nepal
Nepal Health Research Council (NHRC)

PO Box: 7626, Ramshah Path, Kathmandu, Nepal,

Tel: +977 1 4254220, E-mail: nhrc@nhrc.gov.np

Website: <http://www.nhrc.gov.np>



Supported by



Disclaimer: This material has been funded by UKaid from the UK government; however, the views expressed do not necessarily reflect the UK government's policies