NON-COMMUNICABLE DISEASES (NCDs) – NEPAL’S NEXT MAJOR HEALTH CHALLENGE

This policy brief is based on the World Bank’s recent publication: Capitalizing on the Demographic Transition: Tackling Non-communicable Diseases in South Asia (2011). It assesses the NCD burden and develops policy options at both country and regional levels.

- **Future aging in Nepal will increase the burden of NCDs** (Figure 1). The proportion of the population 65 years and older will rise from 4.2%, in 2000, to 5.8% in 2025. Older populations are more likely to be affected by NCDs. Thus, the health burden from NCDs will rise in parallel with aging.

  ![Figure 1: Age structure in Nepal, 2000 and 2025](image)

  Source: U.S Census Bureau. [www.census.gov/ipc](http://www.census.gov/ipc) accessed July 1, 2010

- NCDs already impose the largest health burden in Nepal. In terms of the number of lives lost due to ill-health, disability, and early death (DALYs), NCDs (inclusive of injuries) accounts for 60% of the total disease burden while 40% is from communicable diseases, maternal and child health, and nutrition issues all combined (Figure 2).

- The major NCDs are Cardiovascular Diseases (CVD), Injuries, Mental Health (neuropsychiatric conditions), Cancers, and to a more moderate extent, Chronic Respiratory Diseases and Diabetes (Figure 2).

- **Smoking, a major risk factor for NCDs, among adult female and youth is among the highest in South Asia.** Prevalence is in the mid range for males but is highest in women among the South Asian countries (males 36%, females 28%) while smoking prevalence among youth is among the highest (boys 13%, girls 5%). Tobacco use increases with age among women.

- The prevalence of hazardous and harmful drinking is also high. As expected, it is more common among males (39%); it is nevertheless also a very common practice among females (30%).

  ![Figure 2: Pattern of overall DALYs (age standardized) and NCD related DALYs in Nepal, 2004](image)

**NEPAL’S RESPONSE TO NCDs**

**POLICY AND PROGRAM**

*Nepal’s general health policies give a low priority to NCDs.* However, a national NCD policy and strategy has been drafted and awaits government review and adoption. In addition, a national policy and framework for injury and violence prevention is being considered. The Framework Convention on Tobacco Control (FCTC) was adopted. On this theme, a Smoking (Prohibition and Control) Act had been drafted in 2001, but has not yet been approved.

*Tobacco control efforts point in right direction but have not yet yielded major results.* The Ministry of Finance has set a tax on tobacco products. There is also a partial ban on tobacco advertising (applicable to electronic media only). Smoking has been banned in major public places. Anti-tobacco programs are implemented by a tobacco control cell within the Ministry of Health and Population (MoHP) and the National Health Education Information and Communication Center (NHEICC). The Ministry of Education also includes in the school curriculum elements on the ill-effects of tobacco consumption. Finally, the Nepal Health Research Council recently conducted a training program in alcohol and tobacco control.

*Several other NCD-related programs are ongoing or under preparation.* An NCD awareness program is under preparation for implementation in three districts. Screening camps for the detection of breast and cervical cancer, hypertension, and diabetes have been held in three districts. The National Institute for Injury Prevention is playing a major role in assisting the government in its injury prevention program. Implementation of the World Health Organization (WHO)’s Global Strategy on Diet, Physical Activity and Health has also been started.

**SURVEILLANCE**

*Gradually, Nepal has set up the building blocks of a national surveillance system.* In 2004, using WHO STEPS methods, behavior risk factor surveys were conducted in Kathmandu and then in 2006, nationally. Two cancer registries have been established, and a National Injury Surveillance Format is under development. Medical records are being analyzed to better understand the causes of violent deaths and to facilitate an evidence-based injury prevention policy. Health information systems are being developed for health, logistics, and fiscal management.

**HEALTH SERVICE DELIVERY AND HUMAN RESOURCES**

The MoHP has developed a decentralized system with sub-health posts, health posts, and primary health care centers. However, **little effort at the primary health care level for prevention and control of NCDs and their risk factors has been made.** In addition, delivery of curative health services are rather poorly developed (2 hospital beds per 10,000 populations). The main focus has been on NCD management through specialty hospitals at the tertiary level. Specialty tertiary care centers for NCDs include: Shahid Gangala National Heart Center, the B.P. Koirala Memorial Cancer Hospital, the charitable Bhaktapur Cancer Hospital, the Suresh Wagle Memorial Cancer Center at Tribhvan University Teaching Hospital, and the Mental Hospital at Lagankhel (Lalipur). The latter is the only facility that provides mental health services. **Overall, NCDs accounted for 82% of outpatient department cases and 88% of inpatient morbidity in the public sector.**

**Through great efforts, Nepal has been working with external development partners to implement its national health strategy.** The Nepal Health Sector Program Implementation Plan 2004–2010 relied on a sector-wide approach. It aimed to implement the Second Long Term Health Plan, particularly with the objective to extend access to essential services. Through the program, since 2008, such services are made available to the public at several facilities free of charge. The package – which includes tobacco- and alcohol-related services does not specifically refer to other NCDs.
Several training programs on NCDs have been conducted but these remain at small-scale. These include continuing medical education and training among health workers and trainees in: NCD data management and analysis and developing policy briefs; alcohol and tobacco control; mental health and rehabilitation management; highway injuries; and oral health care. However, like the other South Asian countries, Nepal’s workforce is inadequate. Nepal has only 2.1 physicians, 2.2 nurses, 2.4 midwives, and 0.1 pharmacists per 10,000 population and these providers are skewed towards urban areas.

A National Essential Medicines List has been developed but information on NCD-related drugs is not available.

**FINANCE**

The proportion of the government budget allocated to NCD-related activities for FY2009-10 is negligible, at 0.7%. Taxation of tobacco and alcohol products constitutes the main funding source for NCD activities. NCD spending is mainly on tobacco control, nutrition, and cancer programs.

**POLICY OPTIONS FOR NEPAL**

The World Bank’s recent publication: Capitalizing on the Demographic Transition: Tackling Non-communicable Diseases in South Asia (2010) introduces a policy framework for identifying NCD-related policy options. The options below follow this framework.

**FINALIZE NATIONAL NCD POLICY**

The draft NCD policy gives the bases for building strategies, plans and action. At this stage, the government could engage widely with stakeholders before finalizing the draft and adopting it.

**RETOOL THE HEALTH WORK FORCE FOR NCD PREVENTION AND CONTROL**

Efforts should focus on the two objectives: to increase the size and the skill level for NCDs among health professionals. Concomitantly, the health infrastructure for primary care will need to be equipped with basic diagnostic and management capacity. However, these efforts will not reach the poor, if specific financing strategies for access to services and medications are not in place.

**STRENGTHEN TOBACCO CONTROL POLICIES**

To better control tobacco, Nepal could expand and built upon its current efforts. The broad framework outlined in the FCTC can serve as useful reference. Reducing consumption will likely require a specific focus on taxation.

**CREATE A NATIONAL NCD SURVEILLANCE SYSTEM**

The current elements of the surveillance system could be complemented by specific focuses on risk factors, including tobacco (especially among women), alcohol use, and injuries. Public and private institutions with surveillance experience should be tapped for capacity development and technical assistance.

Regional collaboration can be very effective for preventing and controlling NCDs. Several promising areas for regional cooperation have been identified. Actively participating in regional collaboration on NCDs prevention and control would be beneficial. Activities include:

- Expanding and harmonizing tobacco advertising band to reduce demand
- Increasing and harmonizing tobacco taxation to reduce consumption
- Harmonizing tobacco taxes and strengthening anti-smuggling measures
- Standardizing and mandating food labeling policy to improve knowledge and awareness of food composition
- Collaborating on group purchasing of essential medications to increase their access and affordability
- Establishing a regional health technology assessment institution to improve the comparative effectiveness of interventions for NCDs and other conditions
- Using regional education and training capacity to complement the national needs for human resources in order to improve both staffing and skill levels
- Establishing a regional network of surveillance and burden assessment to improve national capacity through knowledge sharing and experience exchange

Notes

1 Non-communicable Diseases (NCDs) are defined by World Health Organization to include chronic diseases, principally cardiovascular disease, diabetes, cancer, and asthma/chronic pulmonary disease (COPD), in addition to injuries and mental illness.

2 Disability Adjusted Life Years (DALYs) are defined by World Health Organization as “the sum of years of potential life lost due to premature mortality and the years of productive life lost due to disability.”

3 WHO defines hazardous drinking as the consumption of 40-59.9 grams of pure alcohol for males, and of 20-39.9 grams of pure alcohol for females, on an average day. Harmful drinking has been defined as the consumption of ≥60 grams of pure alcohol a day by males, and of ≥40 grams of pure alcohol by females in a day. The data are for the prevalence of hazardous and harmful drinking in the last seven days among current drinkers.