



Knowledge Brief

Health, Nutrition and Population Global Practice

Tackling NCDs in Cambodia: an opportunity for inter- and intra-sectoral synergies

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KEY MESSAGES:

Non-Communicable Diseases (NCDs) are a set of chronic diseases, including cardiovascular disease, cancer, chronic respiratory disease and diabetes that are on the rise in Cambodia. Meanwhile, injuries include those due to traffic accidents, which are becoming a major source of mortality and morbidity in Cambodia. NCDs are increasing in Cambodia as a result of smoking, unhealthy diet, harmful use of alcohol, and physical inactivity, all resulting in a sharp increase in the rates of obesity and high blood pressure.

Cardiovascular disease, cancer, chronic respiratory disease and diabetes alone cause 46 percent of deaths in Cambodia. NCDs are affecting Cambodians in their productive years. Over half men and over a third of women dying from NCDs are younger than 60 years. The high cost of long-term health care and medicines, along with loss of income, pushes many Cambodian families deeper into poverty. It also overburdens the country's health system, constraining efforts to improve maternal and child health and tackle infectious diseases.

Because of the nature of NCDs, which are rooted in multiple causes, strengthening the health system alone will not reduce the burden of NCDs. Many of the actions needed to prevent and control these diseases require the participation of numerous ministries and government agencies, as well as the private sector. For Cambodians to continue enjoying the fruits of economic growth, a strong commitment by the Government, the people, and the international community is becoming increasingly important.

Introduction

Non-communicable diseases (NCDs) are chronic diseases, such as cardiovascular disease, cancers, chronic respiratory diseases, diabetes and mental health disorders. Injuries include those due to traffic accidents, which are also becoming a major source of mortality and morbidity. WHO estimates that 53 percent of deaths in Cambodia are from NCDs, with cardiovascular disease the main killer, followed by cancer, while 5 percent of deaths are due to injuries and 42 percent are due to

communicable diseases, and maternal, perinatal and nutritional deficiencies. Cambodia's history of conflict has contributed to a high prevalence of mental health disorders: a 2012 survey found that almost a quarter of Cambodians suffer from anxiety, and about 16 percent reported symptoms of depression. The link between mental health and NCDs is strong and co-morbidity of mental disorders with diseases, such as cardiovascular disease, cancer and diabetes, is common.

RISK FACTORS FOR NCDs

The leading risk factors for NCDs in Cambodia are: alcohol, blood pressure, tobacco, underweight, overweight, cholesterol, low fruit and vegetable intake, indoor smoke from solid fuels, and iron deficiency, with the addition of raised blood glucose. To give some examples, almost half of men are daily smokers, 10 times the proportion of women (5 percent). About 16 percent of men drink alcohol daily compared with 10 percent of women, with a third of male drinkers indulging in heavy drinking in the previous 7 days. Based on a 2013 survey, average daily salt consumption is about 7.7g, more than recommended by WHO (5g).

There is evidence of links between maternal and child malnutrition, and development of NCDs such as coronary heart disease, hypertension, and insulin resistance syndrome in later life. There is also evidence that for those with a relatively low birth weight, excess weight gain during childhood will lead to coronary heart disease in adulthood. Chronic child malnutrition in Cambodia is one of the highest in the region and, although underweight and stunting have declined since 2000, they are still high at 28 percent and 40 percent, respectively, for children under five.

ROAD TRAFFIC INJURIES

Dramatic improvements in Cambodia's road network in the past decade have sadly been accompanied by increased traffic-related injuries and deaths. According to the 2012 Road Traffic Accident and Victim Information System Report, 15,615 road crash casualties were reported as a result of 4,250 crashes. There were 1,966 fatalities and 5,349 severely injured. There were 13 fatalities per 100,000 people in 2012, and a strong increasing trend. Over the past 8 years (2005-12), the number of fatalities has doubled. At the same time, the number of registered vehicles has risen by 278 percent (82 percent of which are motorbikes).

In 2009, the leading causes of road crashes, fatalities and injuries (potentially leading to disability) in Cambodia were related to speed and drunk driving (70 percent of fatalities), in combination with low helmet wearing rates among passengers and children. Head injury is a key

cause of death and serious injury. Overall, 76 percent of fatalities are reported to have suffered from head injuries.

Road traffic injuries and fatalities have an enormous impact on the social and economic welfare of Cambodia with an estimated annual cost of US\$248 million, or 3 percent of GDP. Road traffic injuries disproportionately affect the poorest and the most vulnerable sections of the population. More than 85 percent of the road traffic casualties in Cambodia are from those motorcycling, walking and cycling, the primary means of transport used by poorer people.

NCDI POLICY AND REGULATORY FRAMEWORK

The National Health Strategic Plan (2008-15) includes NCDs as one of the key programs, and the progress on NCDs is reported in the Joint Annual Performance Review reports. Specific strategies and action plans include the National Strategic Plan for the Prevention and Control of NCDs (2013-20); a Mental Health and Substance Misuse Strategic Plan (2011-15); a National Strategic Plan on Education and Reduction of Tobacco Use (2011-15); and a multi-sectoral National Road Safety Action Plan for 2011-20.

Cambodia has ratified the Framework Convention on Tobacco Control (FCTC), and tobacco legislation. A sub-decree to regulate smoke-free environments has also been approved.

Clinical guidelines or protocols exist for the management of some NCDs and the MoH is developing the clinical guidelines for out-patient consultation for NCDs. There are (2008) guidelines for cervical cancer screening, prepared by the Preventive Medicine Department, gynaecologists and oncologists. These guidelines will be updated in 2015 following completion of a demonstration project in cervical cancer screening for all women aged 30-49 in selected operational districts in 2014.

FOCUSING ON AREAS FOR GREATEST HEALTH GAIN

In view of the epidemiological transition and the "double-burden" of communicable and NCDs in Cambodia,

priority should be given to reducing risk factors that are common, widespread and impact significantly on health.

Among NCDs, the leading cause of death is cardiovascular disease. Substantial reductions have been achieved in coronary heart disease mortality in some countries through a combination of population-level and prevention approaches targeting individuals at high risk. Most benefits have been achieved by reducing cholesterol, systolic blood pressure (e.g., through reducing salt intake) and reducing smoking. This calls for strong control of tobacco and nutritional interventions, including salt reduction. Palm oil, which is widely used, may contribute to cardiovascular risk. Diabetes is higher than expected for the levels of adult obesity and may reflect earlier origins of disease.

In low/middle-income countries, cancers of the cervix, stomach, liver, oral cavity and pharynx are common. One quarter of these are caused by chronic infection, while the proportion caused by tobacco is growing. For Cambodia's cancer profile preventable cancers are likely to be liver, oropharynx and lung, cervical and stomach. Cervical cancer in particular can be cured if detected early by raising awareness of symptoms among women, using screening, and better referral and treatment pathways. Prevention strategies include reducing transmission of infection (e.g., condoms and sexual health promotion), vaccinating for Human Papillomavirus (HPV), and tobacco and alcohol control.

Common risk-factor approach

Given the NCD profile, the prevalence of risk factors and the additional disease burden, strategies should have high impact, low cost and maximize synergies with other programs.

Guidelines exist for assessing multiple cardiovascular risk factors. Measures for cancer prevention include: promotion of breast-feeding; promotion of safe sex; high coverage of Hepatitis B vaccination; and the consideration of HPV vaccinations for cervical cancer prevention.

Models suggest that 70 percent coverage could reduce cervical cancer in Cambodia by half.

Early detection of cancer can be promoted through campaigns to: raise awareness of early symptoms of common cancers so that people are referred earlier for treatment; and improved quality/coverage of low-cost cervical screening.

Table 1 shows a cost-effective package of interventions for low-resource settings aimed at NCDs.

Table 1: Priority interventions for NCDs

Risk Factor	Intervention
Tobacco use	Accelerate implementation of the WHO Framework Convention on Tobacco Control Measures: monitor tobacco use and prevention policies; protect people from tobacco smoke; offer help to quit tobacco; warn about the dangers of tobacco; enforce bans on tobacco advertising, promotion, and sponsorship; and raise taxes on tobacco
Dietary salt	Mass-media campaigns and voluntary action by food industry to reduce consumption.
Obesity, unhealthy diet, and physical inactivity	Mass-media campaigns, subsidies, labelling, and marketing restrictions.
Harmful alcohol intake	Tax increases, advertising bans, and restricted access.
Cardiovascular risk reduction	Combination of drugs for individuals at high risk of NCDs, and reduced dietary salt through mass media campaigns; regulation of food industry.

Source: Adapted from Beaglehole, R. and others 2010.

Synergies with other health system programs

Given limited resources and the nature of NCDs, tackling them requires a 'disease-inclusive' approach. One

chronic disease (such as diabetes) should be used as an entry point for a more integrated approach (e.g., with cardiovascular disease), building on common risk factors.

Priorities for collaborating with maternal/child health programs could include: alleviating malnutrition and reducing smoking in pregnant women; increasing breastfeeding uptake; monitoring birth weight; increasing educational attainment of women; promoting health nutrition in families; identifying and managing hypertension and diabetes in pregnancy; and promoting smoke-free homes.

Examples of collaboration with reproductive health and sexual health programs promote condom use and safe-sex practices, and raise awareness of early symptoms of breast and cervical cancer.

Collaboration on infectious diseases and immunization programs includes improved access to HPV and/or Hepatitis B vaccinations, and extension of palliative care programs from HIV/AIDS to cover other chronic diseases. Models already exist for collaboration with tuberculosis control programs to benefit patients with non-infectious respiratory symptoms in primary care, e.g., asthma and obstructive pulmonary disease.

Examples of collaboration with environmental health and transport include: reduction of air pollution; promotion of smoke-free environments; promotion of walking and cycling through safe transport routes and healthy urban planning; enforcement of occupational health legislation; and reductions in environmental hazards and pollutants harmful to health.

Beyond health systems:

TOBACCO TAXATION

In Cambodia, where 20.5 percent live below the poverty line, lower-income households with at least one smoker use about 9 percent of total household spending on

tobacco. This could be spent on food, education, or health care. Total annual spending on tobacco by households is about US\$69 million. To reduce the demand for tobacco, excise tax increases work well as part of an overall strategy of tobacco control. Studies find that a 10 percent cigarette price increase will reduce consumption by 4 percent in high-income countries and by 8 percent in low- and middle-income countries, while contributing to increased government revenue.

Tobacco taxes are currently lower in Cambodia than in neighboring countries. The total tax on tobacco products in Cambodia is 20 percent of retail price for domestic and 25 percent for imported products, while in Vietnam it is about 38 percent and in Thailand it is 73 percent for the most sold brand.

Tobacco taxation is a key component of the FTCC that has been signed by the RGC. To support policy decisions and serve as an input for policy deliberations, further analytical work on tobacco taxation could be conducted by the MEF and MOH. The aim would be to simulate the revenue impact of gradual increases in tobacco excise tax and cigarette retail prices, as well as the public health impact. Such analysis could help build consensus in government for implementing tax increases.

In addition to tobacco taxation, it is important to enforce smoke-free public places, particularly in health facilities, schools, hotels and restaurants. This measure, which reduces the social acceptability of smoking, has been initiated as a gradual approach in 750 facilities, and an initiative for smoke free status in all public facilities was initiated in one provincial town in 2013.

ROAD TRAFFIC SAFETY

A priority in Cambodia is to reduce head injury related deaths and injuries due to motorcycle crashes through community-based programs to increase awareness, emergency medical training, providing incentives for correct wearing of helmets, and better enforcement of road safety laws. To ensure the sustainability of these interventions, a robust effort should be mounted and geared to support the implementation of the 2011-20

National Road Safety Action Plan.

Particular emphasis should be placed on (i) strengthening the institutional management functions of the National Road Safety Committee; (ii) institutionalizing the Cambodia Road Crash and Victim Information System at the Ministry of the Interior, MOH and National Road Safety Committee; (iii) enacting an amended Helmet Law to mandate the wearing of helmets by all motorcycle drivers and passengers; and (iv) reforming emergency medical services, including both pre-hospital and in-hospital services.

Conclusion: Designing an integrated approach

It is imperative for the RGC to: (i) prioritize mapping the health profile of Cambodia; and (ii) focus on how the NCDI agenda could develop synergies with other health programs, particularly in maternal and child health, health system reform, and initiatives on tobacco and alcohol control and road traffic safety. This course of action on NCDIs should be supported by the World Bank and other development partners to avoid creating an “unfunded vertical program”, making more effective use of limited resources.

Improved coordination among all MOH task forces would maximize financial and human resources and help implement priority NCDI-related interventions as part of, and not separate from, other ongoing programs. The application of the proposed measures would benefit from clear procedures for joint planning, programming, budgeting, training, reporting, and M&E of all programs.

Recommendations

The following are suggested ways of integrating approaches in order to achieve inter- and intra-sectoral synergies in tackling NCDIs:

- Prevention and case management of NCDIs require both intra- and inter-sectoral coordination, examples of which are given in the note.
- Coordination among the different programs needs to be strengthened to implement the Health Strategic Plan 2008-15 priority areas, including maternal and child health, communicable diseases, health system strengthening, and NCDIs.
- The organization and functioning of the MOH-led Task Force for NCDI (TF3) should be strengthened by reviewing its terms of reference and its membership.
- A high-level coordination mechanism should be established at the MOH to integrate planning, programming and operation of the separate MOH task forces appointed to guide the implementation of the HSP2, including NCDIs.
- A proposed 12-24 month implementation action plan for tackling NCDIs should be agreed between the MOH and development partners.
- Regular Health Program and Technical Working Group for Health meetings would help to provide a forum for advancing this policy dialogue in NCDIs.

The Health, Nutrition and Population Knowledge Briefs of the World Bank are quick reference on the essentials of specific HNP-related topics summarizing new findings and information. These may highlight an issue and key interventions proven to be effective in improving health, or disseminate new findings and lessons learned from the regions.

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