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POLICY OPTIONS FOR TACKLING NONCOMMUNICABLE DISEASES IN BANGLADESH

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KEY MESSAGES:

- Bangladesh is undergoing an epidemiologic transition with a growing burden of non-communicable diseases (NCDs) accounting for a larger proportion of mortality and morbidity.
- The major causes of mortality from NCDs are cardiovascular diseases, cancer, respiratory diseases, injuries, and diabetes, which are all linked to a few common risk factors such as tobacco, air pollution, dietary and occupational risks, hypertension, and high blood glucose.
- As the population is aging, the population suffering from hypertension and diabetes are projected to reach 39 million and 27 million by 2025, respectively.
- Health spending is projected to rise by about 47.7 percent by 2020, due to population growth and aging, exacerbated by NCDs.
- To address these challenges, the health system needs to adjust to focus on prevention, improve coordination across sectors, balance clinical with population-based interventions, and ensure the provision of coordinated care across the service delivery system.

The Growing Burden of NCDs

Bangladesh has made impressive progress in the social sectors during the last decade. It has increased its literacy rate and life expectancy at birth; continued its fertility reduction; sustained child immunization above 90 percent (lowering infant and child mortality); and cut its maternal mortality ratio by 40 percent. In health services delivery, antenatal care visits for pregnant women by medically trained providers rose from 33 percent in 1999–2000 to 53 percent in 2013, and delivery by such providers from 12 percent to 34 percent in the same period (NIPORT 2012; Sultana et al. 2014) (Box 1).

Box 1: Economic and social gains—but still high poverty levels

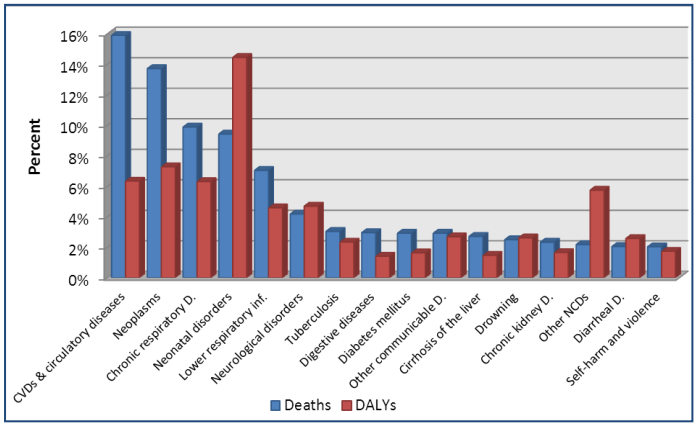
Since the turn of the century, gross domestic product (GDP) has been rising at a respectable 5.9 percent a year in real terms, or by 4.5 percent per capita, contributing to a decline in poverty from 49 percent in 2000 to 32 percent in 2010, in a period when Bangladesh had disproportionate poverty reduction for its growth. Annual population growth has dropped from 2.3 percent in 1981 to 1.4 percent in 2011. Life expectancy at birth for men and women is rising constantly and stands at 69 years in 2011, up from 58 years in 1994. These health and social gains are remarkable because Bangladesh remains one of the poorest countries in the world—in 2010 an estimated 32 percent of the population, mainly in rural areas, still lived below the national poverty line.

Source: World Bank 2015.

New population and health challenges have arisen from rapid demographic and epidemiological transitions, urbanization, social transformation, and human development:

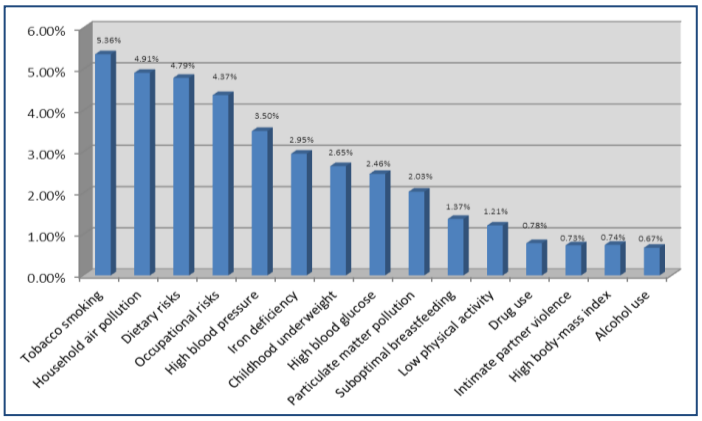
- The proportion of the population aged 60 years or more is projected to increase hugely, such that the elderly will make up 19 percent of the total population by mid-century, potentially increasing the NCD burden and spending on health. An overall rise of about 47.7 percent in health spending between 2000 and 2020 is projected, due to population growth (29.7 percent) and aging (about 18 percent), exacerbated by growth in NCDs.
- The burden of disease is shifting—NCDs (including injuries) now account for a larger proportion of mortality and morbidity than communicable diseases, maternal and child health illnesses, and nutrition causes combined (Figure 1). This pattern is similar to that of high-income countries decades ago.

Figure 1: Leading Causes of Mortality and Morbidity in Bangladesh, 2010 Estimates



- The population suffering from major NCDs like hypertension and diabetes is alarmingly high (one in every four people) and expected to increase in the future. A study in 2011 estimated that around 25 million people in Bangladesh are hypertensive/ prehypertensive, and 17 million people are diabetic/ prediabetic. As the population is aging, by 2025 the numbers are projected to reach 39 million and 27 million, respectively.
- The major causes of mortality from NCDs are cardiovascular diseases (CVDs), cancer, respiratory diseases, injuries, and diabetes. Aside from injuries, all are linked to a few common risk factors—(see Figure 2). With other social determinants such as poverty, low education, urbanization, and changing lifestyles, the risk of NCDs rises (Box 2). These factors have long-lasting, transgenerational impacts.

Figure 2. Leading NCD Risk Factors for Bangladesh, 2010 Estimates



Box 2: An alarming NCD burden and associated risk factors in Bangladesh

7.3 percent of the population have CVDs;
66 percent of cancer patients are of working age;
Tobacco use rate is one of the highest in the world among both men and women;
Salt intake is high;
The rate of low birth weight (36 percent) is among the highest in the world; and
Nearly 40 percent of children under five are moderately stunted.

- The NCD epidemic has an indirect impact on the economy and a direct impact on the financial vulnerability, particularly for the poor (Box 3). NCDs can hold back economic development and poverty reduction efforts. They may reduce per capita income through ripple effects by lowering the labor force headcount and productivity, access to factors of production, savings, and investment in physical capital, while increasing the dependency ratio and

Box 3: NCDs cost money—for individuals and the wider economy

Spending on the risk factors for NCDs and managing these disorders can hit families' financial status. For example, treatment for diabetes can cost 6–12 months' wages ($160 a year); and about half of rural poor households in Bangladesh were not poor before a traffic accident. Economywide, one World Health Organization (WHO) study found that tobacco was a major risk factor and, alone, cost Bangladesh about $44 million annually. Another study indicated that the cost for the clinical management of the estimated diabetes prevalence for 2011 was $262 million, equivalent to 24percent of the total budget in 2010–11 of the Ministry of Health and Family Welfare (MOHFW).

Source: Talukder and Ahsan 2011.

personal consumption.

- The NCD burden varies by socioeconomic stratum and gender. For example, the richest households have higher prevalence of high blood pressure and diabetes, while the prevalence of serious injury among males and females aged 15–59 worsens with decreasing socioeconomic status.

As the burden shifts from maternal and child deaths to NCDs, so must the focus of the country's health system shift to continue meeting the needs of the population, particularly the poor. The health system faces real challenges:

- The health system focuses on treatment, not prevention.
- The regulatory framework is weak.
- Strategic planning and coordination are lacking across sectors.
- The objectives and interventions identified in the country's health plan—the HPNSDP Strategic Plan—are not fully reflected in operational plans.
- The health service delivery system is fragmented, leading to lack of coordinated care that is critical for effectively managing NCDs.

Key Policy Options and Strategic Priorities

Tackling NCDs comprehensively requires an integrated approach to mobilize the different sectors of the government, as well as a partnership between the public and private sectors. Figure 3 represents a Policy Options Framework for the Prevention and Control of NCDs (see Table 5.1 in El-Saharty et al. 2013).

The framework is founded on the health sector's leading stewardship and regulatory role, represented by the MOHFW, including mobilizing the non-health sectors. This foundation upholds two broad categories: population-based and individual-based policy interventions, on which four pillars stand: multisectoral and health sector interventions, and clinical preventive and treatment services.

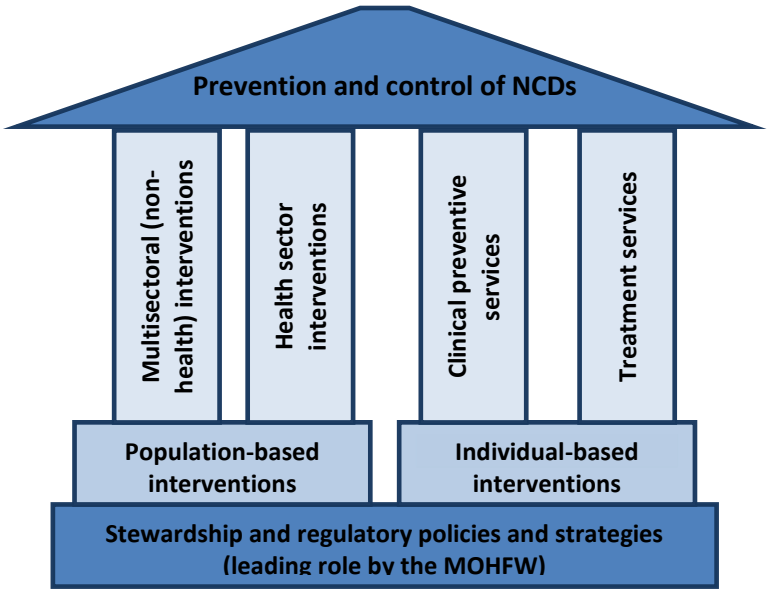
Each policy intervention mobilizes different parts of the health and non-health sectors, and requires very different inputs in infrastructure, capacity, and skill sets, while yielding very different outputs and outcomes. Harmonizing both sets of policy interventions is necessary to get the right strategic mix so that the population-based policy interventions complement those delivered to individuals within the clinical care system.

A key initial challenge is to determine the strategic priorities that will capitalize on existing activities, while taking into account the available resources and the main risk factors listed earlier.

The following bullets explore in more detail these options and form the basis for policy dialogue on how to integrate interventions into the national NCD program.

- **Stewardship and Regulatory Policy Options and Strategies**: Representing the health sector, the MOHFW leads efforts to combat NCDs, including mobilizing non-health sectors. The MOHFW will have to spearhead development and implementation of these strategic priorities and their full integration in the relevant operational plans. These steps will demand new skills so that the MOHFW can work effectively with other sectors to build a multisectoral alliance and ensure synergy among actions. Further, the MOHFW should consider:
  - Assessing periodically NCD mortality, morbidity, burden of disease, high-risk populations, risk-factors and their determinants in the health and non-health sectors, and beyond that the gaps in the policy and regulatory framework for NCD prevention and control.
  - Assessing current and future public health spending and health system capacity (institutional and management capacity and system intelligence) as well as health service delivery capacity (facilities, human resources, drugs, etc.) and current utilization of ambulatory and inpatient care.
  - Reviewing evidence-based public policies, population-based interventions, and cost-effective prevention and treatment interventions (including those in similar countries).
  - Developing a national policy and multisectoral strategic plan for the prevention and treatment of NCDs in consultation with the major stakeholders (health and non-health, public and private) and improving coordination across the NCD program.
- **Population-based Policy Options and Strategies for the Non-Health** Sectors**:** The government should consider the following policy options that would involve the different sectors:
  - Developing and enforcing laws and regulatory mechanisms for the non-health sectors, like strengthening policies for tobacco control, food regulation, and road traffic injuries as well as strategies to reduce child injury.
  - Developing the institutional and human capacity of the non-health sectors to address NCD risk-factor determinants, mobilize the necessary financial resources, and develop an effective monitoring and evaluation system.
  - **Population-based Policy Options and Strategies for the Health Sector:** The MOHFW should consider the following actions as its primary options:

Figure 3. A Policy Options Framework for the Prevention and Control of NCDs



- Strengthening the health promotion and risk reduction interventions for the general population and/or high-risk groups.
- Developing the MOHFW's institutional and human capacity to manage population-based health promotion and risk reduction, and an effective system intelligence and information technology for NCDs, as well as strengthening and expanding the national surveillance system to include NCDs and their risk factors

- **Policy Options and Strategies for Individual Clinical Interventions for Prevention of NCDs in the Health Sector:** Along with the options above, the MOHFW will need to adopt, on a priority basis, many of the following actions to complement the population-based interventions while engaging with the private sector:
  - Developing and implementing basic health services in public health facilities for reducing risk factors and preventing NCDs.
  - Strengthening the institutional and human resources capacity to provide facility-based health promotion, behavior change, and risk-reduction services.
  - Mobilizing additional financial resources for the health sector, and considering budget reallocation within the health sector in support of NCD prevention and treatment.
  - Establishing a monitoring system for the NCD prevention indicators in public health facilities and conducting impact evaluation studies.
- **Policy Options and Strategies for Individual Clinical Interventions for the Treatment of NCDs in the Health** Sector**:** The MOHFW, working with the private sector, should consider the following:
  - Strengthening health service delivery to provide high-quality and effective NCD control and treatment services in selected public health facilities.
  - Developing strategic purchasing mechanisms to motivate public and private service providers to provide cost-effective and high-quality prevention and treatment services.
  - Developing and monitoring NCD treatment indicators, and conducting impact evaluation studies.

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This HNP Knowledge Brief highlights the key findings from the Directions in Development series publication "Tackling Noncommunicable Diseases in Bangladesh: Now is the Time" written by Sameh El-Saharty, Karar Zunaid Ahsan, Tracey L. P. Koehlmoos, and Michael M. Engelgau (2013).