The enormous burden of deaths and disabilities caused by tobacco-induced diseases cost the economy of Bangladesh BDT 305.6 billion (USD 3.6 billion), which is equivalent to 1.4% of the national output (GDP) in 2017-18. Approximately 1.5 million adults are suffering from diseases attributable to tobacco use and nearly 61,000 children are suffering from diseases due to exposure to secondhand smoke. In addition, tobacco-attributable diseases caused nearly 126,000 deaths in 2018 accounting for 13.5% of all-cause deaths in the population.
A recent health cost study spearheaded by the Bangladesh Cancer Society in 2018, in collaboration with the University of Dhaka, the American Cancer Society, and Cancer Research United Kingdom, reveals these findings.

As of 2018, the death toll of tobacco has more than doubled from the more than 57,000 tobacco-attributable deaths estimated in 2004. The inflation-adjusted total economic cost of deaths and disabilities from tobacco-attributable diseases has more than doubled as well over this period.

Bangladesh, a lower-middle-income country with high population density, poverty, a paucity of resources for health care, and low levels of health literacy and awareness, has been facing severe health consequences and economic burden from a high level of tobacco consumption. Tobacco use is a major risk factor for noncommunicable diseases, such as, cardiovascular and respiratory diseases, and cancers, and contributes to greater health expenditures and loss of lives, healthy life years and productivity.

STUDY DESIGN AND DATA SOURCES

Following the cost-of-illness approach, the study estimated two components of the annual health cost attributable to tobacco use and exposure to secondhand smoke in Bangladesh:

1. **Direct costs**: Private out-of-pocket expenditure for inpatient and outpatient services used for the treatment of tobacco-related illnesses and public health care system costs.

2. **Indirect costs**: The loss of productivity and income due to disability and premature mortality caused by tobacco-related illnesses.

The primary data on disease conditions of all household members were collected during January-April 2018 from a nationally representative survey of 10,000 households selected using a multistage clustered sampling design from all 64 districts, with probability proportional to population size. National prevalence of tobacco-related diseases was determined using sampling weight. 2,600 households were found with at least one member diagnosed with one of the seven major tobacco-related diseases and 998 of them had proven medical records. These 998 households were then

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1 Impact of tobacco-related illnesses in Bangladesh. World Health Organization, Regional Office for South-East Asia. 2007.
interviewed on the health care services utilization and related expenses, employment status and earnings of the patients and their caregivers. For capturing the health effect of tobacco use, patients age 30 and above were selected. For capturing the effects of exposure to secondhand smoke, respondents were asked about additional conditions, such as asthma, autism, lower respiratory infection, low birth weight of the newborn, and sudden infant death syndrome. National level data on health care utilization, public health expenditure, cause-specific mortality and tobacco tax revenue were drawn from government sources.

THE CONTRIBUTION OF TOBACCO TO THE NATIONAL ECONOMY IS A MYTH

We must bear in mind that the spending on tobacco by tobacco users is the source of government revenue, profit of tobacco industry and the income of tobacco farmers and factory workers. While this spending is included in national income accounting, it represents a drain on household resources that could have been spent on healthier goods and services. This cost is borne by the households of tobacco users over and above the health care expenditures for treating tobacco-induced illnesses and the loss of income from premature deaths and disabilities of tobacco users.

The tobacco industry claims that tobacco production and sales make significant contributions to the economy by generating tax revenue and employment. The revenue estimate provided by the National Board of Revenue at BDT 228.1 billion in the 2017-18 fiscal year, is far outweighed by the health costs caused by tobacco.

This study has not accounted the substantial costs of the environmental and health damages from tobacco cultivation, loss of food security due to use of scarce land resource for tobacco growing, smoking-related fire hazards, environmental pollution from littering of cigarette butts, and so on. These costs can be measured in future research endeavors. But we will never be able to gauge the pain and suffering of tobacco victims and their families.

The burden of both the spending on tobacco and the harms done by tobacco are disproportionately excessive for the poor. The spending on tobacco and on health care utilization attributable to tobacco diverts resources away from necessities and can be catastrophic for lower income households. Tobacco, thus, aggravates the vicious cycle of poverty and economic and health inequality.

The need for reversing the adverse socio-economic, environmental and health consequences of tobacco use on individuals and on the society is urgent. The vision of Tobacco-Free Bangladesh by 2040 underscores this need. The path to a tobacco-free state is, however, arduous and can only be reached with aggressive and effective tobacco control measures:

- Raise tobacco taxes and prices
- Monitor tobacco use and prevention policies
- Protect people from tobacco smoke with smoke-free laws
- Offer help for tobacco use cessation
- Warn about the dangers of tobacco using warning labels on tobacco packages
- Enforce bans on tobacco advertising, promotion and sponsorship
- Tax tobacco farming land as industrial land to discourage tobacco cultivation
- Provide incentive to tobacco farmers to switch to alternative and more viable livelihoods; and
- Enforce ban of tobacco sales to minors.
CONTRIBUTORS

Study team:
Dr. Golam Mohiuddin Faruque, Professor & Former Head, Department of Radiotherapy, Dhaka Medical College; Project Director, Bangladesh Cancer Society
Syed Naimul Wadood, PhD, Associate Professor, Department of Economics, University of Dhaka
Maruf Ahmed, Research Associate, Bangladesh Institute of Development Studies
Rehana Parven, Joint Secretary, Ministry of Finance, Government of Bangladesh
Iftekharul Huq, PhD, Assistant Professor, Department of Economics, East West University
Dr. Sohel Reza Chowdhury, Professor, Department of Epidemiology and Research, National Heart Foundation Hospital & Research Institute

Research assistance:
Nahian Azad, Biplob Hossain, Masud Karim, MD Golam Ahad, Dr. Asish Shaha, Prof. Mushtaq, Dr. Afsana, Dr. Aporna, Dr. Alif, Dr. Ali Al Mahdi, Dr. Rafeea, Dr. Aziz, Dr. Pavel, Mr. Aminul

Resource persons:
AKM Ghulam Hussain, PhD, Professor, Department of Economics, University of Dhaka
Asadul Islam, Secretary, Ministry of Health and Family Welfare, Government of Bangladesh
Fowzul Azim, Chief Research Officer (District Judge), Bangladesh Law Commission

Technical advisors:
Nigar Nargis, PhD, Scientific Director, Economic and Health Policy Research, American Cancer Society, USA
Jeffrey Drope, PhD, Vice President, Economic and Health Policy Research, American Cancer Society, USA
Gregg Haifley, Director, Federal Relations, American Cancer Society Cancer Action Network, USA

Research assistance:
Nahian Azad, Biplob Hossain, Masud Karim, MD Golam Ahad, Dr. Asish Shaha, Prof. Mushtaq, Dr. Afsana, Dr. Aporna, Dr. Alif, Dr. Ali Al Mahdi, Dr. Rafeea, Dr. Aziz, Dr. Pavel, Mr. Aminul

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Gregg Haifley, Director, Federal Relations, American Cancer Society Cancer Action Network, USA

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