



# Prevention of Progression and Remission in Public Health Sectors: Bangladesh Perspectives

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**Abstract.** In South Asia, the prevalence of health problems is increasing day by day. Over 11.9% of the 167.85 million people in Bangladesh live in poverty with no safety net. Moreover, communicable diseases (vaccine-preventable diseases, tuberculosis, malaria, HIV/AIDS, and neglected tropical disease) and non-communicable diseases (diabetes mellitus, cardiovascular disease, cancer, chronic respiratory diseases, and mental disorders) significantly impact morbidity and mortality. Human resource development is not focused, whereas training is also biased toward curative care instead of prevention, having poor healthcare infrastructures, deficiency of skilled workforce, skilled financial resources allocation, and political unreliability. However, the existent physician-patient ratio in Bangladesh lies within 5.26 per 10000 of the total population, while the average infant mortality rate is over 21.6 per 1000 live births. This study currently aims to focus on several issues, i.e., governance, accessibility, and affordability, that Bangladesh's health care system is yet to tackle, which are the main issues that are preventing the implementation of the resolution to the public health problem in Bangladesh.

**Keywords:** Tuberculosis · Malaria · Tropical disease · Communicable disease · Diabetes mellitus

## 1 Introduction

Since its independence in 1971, Bangladesh has gone through several reclaims in the health sector. It has attempted a comprehensive health infrastructure in the private and public sectors [1]. In South Asia, Bangladesh is the most densely populated country in the world, having a population density of 1015 per km<sup>2</sup>. However, the GDP spent on healthcare is only 3% [2]. Bangladesh faces several major challenges, including poverty, widespread corruption, health problems (the combination of communicable and non-communicable diseases), overpopulation, the inadequacy of health professionals, and vulnerability to climate change.

Bangladesh's health system is a pluralistic system. A healthcare system consists of structural and non-structural resources, people, and their sequacious actions that promote, restore, or maintain health. The health system consists of four key actors those are Government, non-governmental organizations (NGOs), the private sector, and donor agencies. There are nine implementing authorities under the MOHFW as follows: Bangladesh National Nutrition Council (BNNC), Health Economics Unit, Disease International Centre for Diarrheal Disease Research, Bangladesh, Health Engineering Department, Department of Drug Administration (DDA), Directorate General of Nursing and Midwifery (DGNM), Institute of Child and Mother Health (ICMH). And there are five regulatory bodies under the MOHFW as follows: Bangladesh Medical and Dental Council (BMDC), State Medical Faculty (SMF), the Ayurvedic, Homeopathy and Unani Board, and the Bangladesh Pharmacy council (PCB), Bangladesh Nursing Council (BNC). Bangladesh has a startling shortage of Health workforce: Doctors, Dental surgeons, nurses, Public health professionals, Pharmacists, Physiotherapist, Radiotherapist, Medical assistants, Medical technologists, Family Welfare Visitors, Community paramedics, and Community-based skilled birth attendants [2].

WHO estimates Bangladesh approximately expends USD 26.60 per person on health per year [3]. Because of epizootiological and socioeconomic change, Bangladesh faces communicable and non-communicable diseases as well as the emergence and re-emergence of other diseases. The causes of death by communicable, parental, infant, and nutrient disorders fell significantly from 583/100 000 in 1990 to 178/100,000 in 2010, whereas around 360 deaths/100000 by non-communicable diseases<sup>3</sup>. Morbidity and risk factors for health status are Water & sanitation, Ambient pollution, Household air pollution, Under-nutrition, Smoking, Alcohol & drug abuse, taking high fasting plasma glucose, Dietary risks, Physical inactivity, Occupational risks, Road accidents, Emerging and re-emerging diseases, High blood pressure, Malnutrition, Mental health, Disability, Arsenic contamination. Prevention strategies are Promotive and preventive programs, Primary care, Ambulatory care, outpatient care, Inpatient care, Emergency care, Pharmaceutical care, Vaccines, contraceptives, and other products, Distribution of drugs, Rehabilitation facilities, intermediation, Long-term cares, Informal care service, Palliative therapy, Dental care, Mental health care [4].

Aim: The goals of public health are to improve the quality of life, reduce human suffering from several diseases, prevention of diseases, promotion of good health, increase public health facilities, increase affordability, and ensure accessibility of health care and quality of services and facilities.

## 2 Methodology

According to York's methodology, a review was substantiated, outlined by Arksey and O'Malley, 2005 from the University of York, United Kingdom<sup>3</sup>. The paper is based on a comprehensive review of published as well as unpublished data/information on health systems in the world. It includes pertinent annual along with reports by the United Nations Children's Fund (UNICEF), the World Health Organization (WHO), eHealth Electronic Health, measure DHS and USAID, (DGDA) Directorate General of Drug Administration, United Nations Fund for Population Activities (UNFPA), the

World Bank (2022), (DGFP) Directorate General Family Planning Bangladesh Bureau of Statistics (2009, 2011), (MOHFW) Ministry of Health and Family Welfare, (NIPORT) [5] National Institute for Population Research and Training Human development report 2020 [4], and Sustainable Development Goals (2022) [5]. UN (2018) Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development [6]. Several Research papers and articles published in journals were also reviewed. In a nutshell, the paper is based on secondary data, which is a review article.

### 3 Vaccine-Preventable Diseases (Communicable Diseases)

Vaccine-preventable diseases are diseases infected by bacteria or viruses. After taking vaccines, it can be prevented. Vaccine-preventable diseases can spread through several routes, such as respiratory droplets, air, and bodily contact [5]. Among important vaccine-preventable diseases are measles, mumps, diphtheria, tuberculosis, leprosy, dengue, *Haemophilus influenzae* serotype b infection, covid-19, hepatitis B, meningitis, pertussis, poliomyelitis, rubella [6]. From 2004–2017, Approximately 8,819 cases of diphtheria were reported globally [7]. In 2010–2017 Hib, deaths fell by 56% from 6,500 (4,500–8,800) to 2,900 (2,000–3,900) [8, 9]. Across the whole world, 296 million people are contagion with the hepatitis B virus and die of around one million people are every year from HBV-related causes. Globally, 10 million people are infected with measles, and 100,000 to 200,000 deaths each year, primarily in children [10]. According to new estimates from the World Health Organization (WHO) and the United States Centers for Diseases Control and Prevention, around 140,000 people died due to measles in 2018 [11, 12]. In 2019, there were an approximated 7.7 million cases of malaria, whereas death stood at 23,6000 [13]. The outbreak of mumps-infected deafness per 10,000 patients aged 0–64 years was 15.0 (1 in 668 patients) [14]. 16.3 million cases of poliomyelitis (whooping cough) and about 58700 deaths worldwide every year [15, 16]. WHO reports that every year roughly 100 000 inherent rubella syndrome cases occur. Approximately 25–50% of people are infected with the rubella virus. In addition, the Rubella virus is spread by respiratory droplet's direct contact [17, 18]. According to the cohort analysis, the vaccination reportage was 79.2% for diphtheria, 79.5% for tetanus, 84.8% for poliomyelitis, and 74.8% for pertussis. The occupied vaccination status was lower for diphtheria (69.4%) and higher for tetanus (86.5%), poliomyelitis (75.9%), Rubella (70%), Hepatitis B (78%), Measles (66%), *Haemophilus influenzae* serotype b (79%) Mumps (78.6%), pertussis (61.2%), Meningitis (87%) [18–22].

#### A. Tuberculosis

Tuberculosis is a contagious disease primarily affecting lung parenchyma. Tuberculosis (TB) is most often caused by *Mycobacterium tuberculosis* [23]. Globally, Tuberculosis is the second leading infectious disease after COVID-19 over HIV/AIDS. Approximately 86% of new tuberculosis cases were found in 30 high tuberculosis-burden countries in 2020. First, India, followed by China, the Philippines, Indonesia, Nigeria, Pakistan, Bangladesh, and South Africa, account for two-thirds of the whole [24]. It occurs by aerosol droplets that are inhaled [25]. It is usually curable and preventable.

Signs and symptoms include cough, coughing up of blood, shortness of breath, angina pectoris, sweating, anaemia, tachycardia, lung-auscultation finding, pyrexia, and low body-mass index [7, 8, 26]. Genetic susceptibility [27], alcoholism [28], diabetes mellitus [28], silicosis [29], drug abuse, organ transplant, severe kidney disease, cancer, being underweight, and tobacco smoking [30] are the main risk factor for tuberculosis. Preventive treatment is obtainable for people with TB infection. In this way, standard medication now consists of a 2-month induction phase with at least isoniazid, rifampicin, and pyrazinamide, followed by a 4-month consolidation phase with at least isoniazid and rifampicin. Infection [9]. (BCG) Bacillus Calmette-Guérin vaccine is the only authorized vaccine for the prevention of tuberculosis [31]. Achieve food security, enhance nutrition, remove hunger, and confirm access to reliable, affordable, sustainable agriculture.

### B. HIV/AIDS

Acquired immunodeficiency syndrome (AIDS) is a disease created by the human immunodeficiency virus (HIV) [32–34], a retrovirus [35]. In 2021, A report estimated (33.9–43.8) million people living with HIV because of HIV-related causes, two-thirds of the whole (25.6 million) are in the African Region .650 000. people died, and 1.5 million people acquired HIV [36]. HIV is transmitted by Blood transfusion 90% [37], Childbirth 25% [38], 0.67% Needle-sharing injection drug use [39], 0.30% Percutaneous needle stick [40], 0.04–3.0% Receptive anal intercourse [41], 0.03% Insertive anal intercourse [42], 0.05–0.30% Receptive penile-vaginal intercourse [43], 0.01–0.38% Insertive penile-vaginal intercourse [43], 0–0.04% Receptive oral intercourse, 0–0.005% Insertive oral intercourse [44]. HIV infection is three main stages: acute Infection, clinical latency, and AIDS [45, 46]. Still, it has no authorized vaccine for HIV or AIDS [47]. After a decade of hard work, High active antiretroviral therapy (HAART) has been discovered for almost all HIV infection treatments [48]. Methods of prevention include Health education, Blood safety, male circumcision, protected sex, needle interchange, pre-exposure prophylaxis, and post-exposure prophylaxis [49–51].

### C. Malaria

Malaria is a mosquito borne-disease caused by Plasmodium parasites. Malaria is a protozoal infection. It is transmitted by the bite of an infected female Anopheles mosquito [52]. Approximated 241 million cases of malaria, whereas death stood at 627000 in 2020. In humans, malaria is infected by six types of Plasmodium species: *Plasmodium vivax*, *Plasmodium malariae*, *Plasmodium falciparum*, *Plasmodium ovale*, *Plasmodium wallikeri* and *Plasmodium knowlesi* [53]. Signs and symptoms are high fever with headache, restlessness, anorexia, diarrhea, arthralgia, vomiting, anemia, hepatosplenomegaly, and convulsions. Antimalarial medications that include artemisinin is the primary recommended treatment for malaria [54–57]. Quinine, along with doxycycline, Lumefantrine, mefloquine, or sulfadoxine/pyrimethamine, may be considered as a second medication [58]. According to the World Malaria Report malaria vaccine is only licensed for use [59]. Vector control methods used to decrease malaria. For personal protection, highly

effective insect ejectors are formed on DEET or picaridin [60, 61]. Wear long cloth to cover skin, Insecticide-treated nets (ITNs) [9, 62, 63].

## 4 Non-communicable Diseases

### A. *Cardiovascular Diseases*

Cardiovascular disease is a common term that is defined as a disease of the heart or blood vessels [64]. Globally, it is cardiovascular diseases which is the moving forward cause of death. Approximately 17.9 million people passed away due to cardiovascular disease in 2019, reporting 32% of all global deaths. 85% of deaths were because of heart attack and stroke [65]. CVD includes coronary artery diseases, for example, angina and myocardial infarction, generally known as a heart attack. Other CVDs include stroke, heart failure, abnormal heart rhythms, congenital heart disease, hypertensive heart disease, rheumatic heart disease, aortic aneurysms, cardiomyopathy, heart disease, carditis, peripheral artery disease, thromboembolic disease, venous thrombosis [66–73]. There are several risk factors for heart diseases: Age, genetic predisposition, sex, and family history of cardiovascular disease are non-modifiable. Modifiable factors are physical inactivity, tobacco use, fatty liver disease, alcohol consumption, obesity, unhealthy diet, hypertension, diabetes mellitus, undiagnosed celiac disease, hyperlipidemia, psychosocial factors, poverty, low educational status, air pollution, excessive drug use, poor sleep [74–78]. If risk factors reduce, then approximately 90% of cardiovascular diseases may be curable. Maintaining a healthy diet, such as a vegetarian, plant-based diet, Mediterranean diet, low-fat diet, DASH diet, or high-fiber diet [78–83], limiting alcohol consumption [84], decreasing overweight or obesity [85], stopping smoking [86], physical exercise [87], decrease non-HDL cholesterol [88, 89], decrease psychosocial stress [90, 91], maintain normal blood pressure [92–94], anti-diabetic medication [94, 95], flavonoids [96], aspirin [97, 98], and beta-blocker [99, 100] medication may protect the risk of cardiovascular disease [101].

### B. *Diabetes Mellitus*

Diabetes mellitus is a metabolic disease, including inappropriately upgraded blood glucose levels. Globally, 463 million people, the majority living in the middle- low-income countries people have diabetes, and around 4.2 million passed away, directly attributed to diabetes in 2019 [102]. It is the seventh ascending cause of death globally [103]. The common symptoms of diabetes are unintended weight loss, polydipsia, polyuria, polyphagia, as well as headache, blurred vision, fatigue, itchy skin, healing of cuts, and retinopathy, dermadromes [104–108]. Acute complications can include a hyperglycemic state, diabetic ketoacidosis, or death. Chronic complications include cardiovascular disease, chronic kidney disease, neurological disorder, stroke, foot ulcers, injuries to the eyes, and physiological impairment [104, 109–113]. There are several types of diabetes: Type 1 diabetes is an immunological disease. The immune system invasions and kill cells in the pancreas, where insulin is made. It's not clear what is the reason behind this attack. When the body becomes resistant to insulin and sugar

growth in the blood, Type 2 diabetes occurs. According to WHO, 90% to 95% of people living with diabetes have type 2. Gestational: The placenta causes gestational diabetes. During pregnancy. Insulin-blocking hormones are generated because of increasing high blood sugar. Diabetes education, diet, exercise regularly, monitor glucose is the primary treatment for diabetes Mellitus [114]. The impaired insulin secretion and increased insulin resistance play a leading role in the pathogenesis of all types of diabetes mellitus [115]. The specific drugs include biguanides (metformin), meglitinides, thiazolidinediones, sulfonylureas, selective amylinomimetics, glucagonlike-peptide-1 agonists, alpha-glucosidase inhibitors, dipeptidyl peptidase IV inhibitors (DPP-4), and sodium-glucose transporter-2 inhibitors [116]. Pregabalin and duloxetine for the treatment of diabetic peripheral neuropathy are approved by the FDA. 130 mmHg systolic blood pressure and 85 mmHg blood pressure maintain regular blood pressure suggested by the ADA [117]. Therapy for hypertensive diabetics involves angiotensin receptor blockers, angiotensin-converting enzyme inhibitors, beta-blockers, diuretics, and calcium channel blockers [118, 119]. ADA also recommended that low-dose aspirin may also be beneficial not only for diabetic patients but also for cardiovascular disease [120, 121].

### C. *Chronic Respiratory Diseases*

Chronic respiratory disease is a pathological condition that affects the organs like the Trachea, Bronchi, Bronchioles, Alveoli, lungs & muscles of breathing, and tissue that helps in gas exchange due to the ubiquity of noxious environmental, occupational, and behavioral inhalation exposures [122, 123]. Chronic respiratory diseases (CRD), including asthma (262 million), chronic obstructive pulmonary disease (COPD, 65 million), respiratory allergies and occupational lung diseases (50 million), sleep apnea syndrome (100 million), and pulmonary hypertension (around million) people are affected according to the WHO [124–128]. Over 3 million deaths every year are due to chronic respiratory disease [129]. Beneficial Prevention strategies are Tobacco Control, Occupational Health, Improve Indoor and Outdoor Air Quality, Diet and Nutrition, Exercise, and Implement Physical Activity [130–136]. Different kinds of medications are used to treat the symptoms and complications of COPD like Bronchodilators, Oral steroids, Phosphodiesterase-4 inhibitors, Inhaled steroids, Combination inhalers, Lung therapies, Theophylline, Antibiotics (azithromycin), Lung transplant, In-home noninvasive ventilation therapy, Surgery (Lung volume reduction surgery), Bullectomy [137–141]. Identify asthma triggers and stay away from them, and follow your asthma medication as prescribed, like nebulizers, metered dose inhalers (MDI), or a dry powder inhaler (DPI), anti-inflammatory medications. It also includes Inhaled corticosteroids such as fluticasone propionate, beclomethasone (Qvar Redihaler), fluticasone furoate, leukotriene modifiers such as montelukast (Singulair), and zafirlukast, combination inhalers such as fluticasone-salmeterol (Airduo Digihaler) and formoterol-mometasone, and theophylline. Some short-term medications include levalbuterol (Xopenex), short-acting beta-agonists such as albuterol (ProAir HFA) and anticholinergic agents such as bronchodilators and ipratropium (Atrovent HFA), and oral and intravenous corticosteroids such as methylprednisolone (Medrol), prednisone (Prednisone Intensol) [142–144].

#### D. *Mental Health*

Mental health comprehends pathological, psychological, and social well-being which influences comprehension, perception, and behavior due to genetic, environmental, biological factors or chemical imbalances in the brain, lifestyle factors such as exercise, drug abuse, stress, diet, social connections and interactions [145–147]. More than 80% of people experience mental health conditions [148]. Mental Health disorders include Anger [149], Anxiety and panic attacks [150], Bipolar disorder [151], Body dysmorphic disorder (BDD) [152], Borderline personality disorder (BPD) [153], Depression [154], Dissociation and dissociative disorders [155], Eating problems [156], Hearing voices [157], Hoarding [158], Hypomania and mania [159], Loneliness [160], Obsessive-compulsive disorder (OCD) [161], Paranoia [162], Personality disorders [163], Phobias [164], Postnatal depression & perinatal mental health [165], Post-traumatic stress disorder (PTSD) [166], Premenstrual dysphoric disorder (PMDD) [167], Psychosis [168], Recreational drugs [169], alcohol and addiction [170], Schizophrenia [171], Seasonal affective disorder (SAD) [172], Self-esteem [173], Self-harm [174], Sleep problems [175], Stress [176], Suicidal feelings [177], Tardive dyskinesia [178], Trauma [179]. Antidepressant medication [180], antipsychotic medication [181], mood-stabilizing medication [182], community support [182], Electroconvulsive therapy (ECT) [183], Hospitalization [184], Involuntary treatment [185], Mental Health education [186], Rehabilitation [187], mental health awareness [188], are the treatment of mental health.

### 5 Public Health Concern: Current Vision

Public health is the process of mobilizing local, state, national, and international resources to solve major health problems. A fundamental quality of public health is its preventive nature. Prevention is far more effective than cure. Public Health is not only treating patients but also preventing disease, promotion, protection, population-based preparedness. Public health helps detect health issues as soon as possible and tries to eliminate them appropriately to avoid the development of diseases. Health professionals are mainly following to give, prescribe, and ask rather than to facilitate, inject, educate, help, dialogue, save, mobilize, and partner with people for change [189]. Most crucial things are considered lacking knowledge and skills, resources, control, and responsibility. Due to the lack of a Public Health framework, there are health inequalities and related issues found in developing countries. For the purpose of acting upon these public health issues, there should be a multi-sectoral approach, including stakeholders and professionals with common perspectives. This article has undertaken to demonstrate that it is possible to establish communicable & non-communicable disease detection and prevention programs in the developing world. Progress of the overall health agenda of the Government whereas Vaccination Coverage is 87.5% as well as per 1,000 live births, Infant mortality rate of 43 death, a child mortality rate of 11 deaths, and an under-5 mortality 44 deaths. Under age 5 are stupefied 41%, Severely stupefied 15%, Maternal Mortality rate is 194 per 100,000 live birth, Antenatal Care Coverage from any Provider 67.70%, Antenatal Care Coverage 25.50%. In addition, Children underweight 36%, Severely underweight 10%, Expert attendance at deliveries 32%, Total fertility rate 2.30%, and Overall wasting 16% [190].

## **6 The Way Forward to Improve Health System**

### *A. Evaluation and Surveillance*

An evaluation and monitoring capability that pinpoints issues, offers information to aid in making decisions about the best course of action, and tracks progress is a cornerstone of public health initiatives. An effective evaluation and surveillance system based on epidemiologic principles is a crucial component of a technically sound public health activity. Epidemiology has long been regarded as the foundational science of public health. In order to help states and localities fulfill their assessment obligations, federal organizations, including the Centers for Disease Control, the National Center for Health Statistics, and the National Institutes of Health, have offered national leadership, data, and technical support.

### *B. Policy Development*

A direction of action is determined by the combination of problem identification, technical knowledge of potential remedies, and societal values through the formation of policies. The committee's site inspections and other information have raised a number of concerns about the validity of recent public health policy developments.

### *C. Access to Public Health Benefits is Required*

One of the main purposes of public health initiatives is to guarantee that the advantages of public health are accessible to all citizens. The committee found a number of issues that prevent the implementation of that assurance.

### *D. Leading the Way for Public Health*

The committee's investigations turned up a variety of issues that prevent public health leadership from being effective. The committee's vision for the future of public health calls for leaders with a wide range of necessary skills, including managerial aptitude, communication skills, technical expertise in the core areas of public health issues, and knowledge of and proficiency in the public decision-making process, including its political facets.

### *E. Knowledge and Application*

Accurate information on the causes, distribution, and efficacy of health problems must serve as the foundation for effective public health initiatives. Often, decisions must be made based on partial information, but these knowledge gaps can undermine the success of programs and, ultimately, the public's support for decisions. The knowledge base, which includes knowledge regarding the efficacy of interventions, needs to be increased for many public health issues.



## F. Inadequate Health Resources and Implications on Care Quality

Although Bangladesh has a robust public and private health infrastructure, it needs more personnel as well as other resources including medications, equipment, and supplies. Despite a private sector that is expanding extremely quickly, there need to be more hospital beds to accommodate the demand at this time. Due to a severe lack of qualified healthcare workers and an unsuitable skill mix, the nation continues to have a doctor-to-nurse ratio that is substantially lower than the WHO-recommended ratio of 1:3:5. Despite the fact that there is fewer than one doctor for every 3000 people and a consistent rate of 20% vacancies among public sector health services, the qualified medical doctors are being quickly absorbed by the private sector.

## G. Accessibility and Affordability of Medications

The accessibility of vital medications is a crucial component in preventing the population from avoiding PHC facilities to get healthcare services. Even though the NDP has been in place for decades, there is evidence of regular and ongoing medicine shortages, particularly in government health facilities where the drugs are free of charge. It is common to overprescribe, prescribe many treatments, utilize pricey drugs that are optional, and overuse antibiotics and injections. The supply of necessary medications for common ailments is insufficient, according to a recent assessment of vital pharmaceuticals at Upazila Health Complexes. Due to the vast price differences across brands, accessibility is also hampered when service users must go to the market to buy medications that are not provided by UHCs. The study also discovered an increase in polypharmacy and the misuse of antibiotics in both dosage and indication. This is hardly surprising, especially in rural Bangladesh, where the dispenser and the provider—village doctors and drugstore salespeople—are sometimes the same individuals, leading to conflicts of interest. Even the most expensive drugs, including brand-name antibiotics, are frequently prescribed whether they are necessary in order to maximize profit. Additionally, pharmaceutical corporations use aggressive marketing techniques, particularly when dealing with unskilled or semi-qualified doctors.

## 7 Conclusion

In view of the findings of this article, it can be categorically demonstrated that Bangladesh suffers from a lot of problems and disputes in its health system. In Bangladesh, every year, significant improvement in health indicators without being affected by extensive inadequacy in the health system. The Ministry of Health and Family Welfare (MOHAFW) has tried to give an extensive health infrastructure. The health service delivery structure follows local, section, Upazila, union, and ward levels. It provides preventive, promotive, and curative services such as indoor patients, outdoor patients, and emergency care at several levels – primary, secondary, and tertiary. Communicable diseases can be prevented by following this way: when you're sick, stay home from public locations. When ill, clean regularly touched surfaces (desks, doorknobs). Use a tissue to cover your cough and sneeze. If you do not have a tissue handy, sneeze or cough into your elbow or upper

sleeve rather than your hands. Do not share towels between washes or personal items that can't be cleaned, such as toothbrushes and razors. Safely handle and prepare food. When preparing any food, especially raw meat, be sure often to wash your hands, utensils, and surfaces. Always wash any product before eating it. Consider getting immunized. You can avoid contracting some communicable diseases by being vaccinated (Flu, meningitis, COVID-19). As they can infect you and your pets, keep your distance from wild animals. You could get sick if you encounter an infected animal's saliva, blood, urine, or excrement. Practicing safer sexual behaviors to lower the chance of contracting sexually transmitted diseases (e.g., by using dental dams and condoms) (STI).

Non-communicable diseases can be prevented in this way, such as by increasing political and public understanding, practice, and awareness of NCD prevention and control. Include NCDs in social and development initiatives as well as efforts for reducing poverty. Budgetary appropriations for the prevention and control of NCDs should be prioritized and increased as necessary without compromising the sovereign right of nations to decide on taxation and other policies. By raising tobacco excise taxes, you can make tobacco products less affordable. Create smoke-free settings in all indoor public spaces, workplaces, and public transportation by law. Useful health messages and media initiatives should inform individuals of the perils of smoking and cigarette smoke. Totally outlaw tobacco sponsorship, marketing, and advertising. Use unsaturated fats in place of trans fats. Organize campaigns to raise public awareness of proper nutrition and exercise. Bangladesh has set a tremendous instance achievement of sound health at a very low expense and set up as a role model for other developing countries in the world.

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