# **Key Public Health Challenges in Bangladesh: Importance to Address and Steps to Implement**

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Bangladesh is facing many public health challenges. With its low resources tackling both Non-Communicable Diseases (NCDs) and infectious diseases. Among them three key public health challenges are interconnected and posing threats to securing the health of the nation.

# 1. Rising burden of Non-Communicable Diseases (NCDs) and persistent infectious threats

Bangladesh is combating with a dual challenge. Prevalence of Non-Communicable Diseases (NCDs) like hypertension, diabetes, cardiovascular disease, overweight / obesity cancer, and chronic respiratory illnesses, is rapidly raising being the leading cause of death over 70%, while still fighting a high burden of infectious diseases such as Dengue, Drug-Resistant Tuberculosis, and COVID-19 sequelae.

# Importance to address:

**Epidemiological shift:** NCDs are now the leading cause of death and disability, accounting for over 70% of mortality creating pressure on a healthcare system originally designed for acute, infectious diseases.

**Resource strain:** Continuous care, specialized doctors, and expensive medications, diverting resources from other areas are needed to manage long-term NCDs.

**Synergistic danger:** Infectious diseases can exacerbate NCDs and vice versa. A dengue

outbreak can overwhelm hospitals, disrupting care for diabetic or cardiac patients.

#### **Steps to implement:**

**Strengthen primary healthcare system:** Integrate prevention, screening of NCD (e.g., for hypertension and diabetes), and management into community clinics and primary health centers.

**National awareness campaigns:** Launch public health campaigns focused on diet, physical activity, tobacco control, and harmful use of alcohol, maintaining ideal body weight.

**Integrated surveillance:** Enhance disease surveillance systems to simultaneously track outbreaks of infectious diseases and the prevalence of NCD risk factors.

#### 2. Antimicrobial Resistance (AMR)

Bangladesh becomes a hotspot for Antimicrobial Resistance (AMR) due to misuse and overuse of antibiotics in humans, animals, and agriculture. Common bacteria are becoming resistant to first line and even last-resort antibiotics, rendering infections increasingly difficult and expensive to treat

## Importance to address:

A silent pandemic: AMR makes routine surgeries, cancer chemotherapy, and childbirth riskier due to the threat of untreatable resistant infections.

**Economic impact:** Drug-resistant infections lead to longer hospital stays, higher medical costs, and increased morbidity and mortality, pushing families into poverty.

**Global threat:** Resistant pathogens cross borders, making AMR a national security and global health priority.

## **Steps to implement:**

**Enforce prescription policies:** Strictly promote antimicrobial stewardship programs in hospitals and regulate the over-the-counter sale of antibiotics

**Education to public and professional:** Educate the public that antibiotics don't work for viruses like colds and flu and the hazards of its over or misuse. Train healthcare professionals on appropriate prescribing.

**Scale up pathogen genomics:** Invest in and expand the genomic surveillance of pathogens (as done by

the Child Health Research Foundation) to track resistance patterns and guide treatment policies.

pressing challenges for securing the health of the nation.

# 3. Inequitable access to quality healthcare and skilled human resources

A vast disparity in the quality and availability of healthcare between urban and rural areas, and between the rich and the poor is obvious. Critical shortage and maldistribution of skilled health professionals, including doctors, nurses, and specialized technicians compound the situation.

### Importance to address:

**Urban-Rural divide:** State-of-the-art private hospitals in Dhaka contrast sharply with under-equipped rural health centers, forcing poor patients to travel long distances for basic care.

**Financial hardship:** Out of pocket expenditure on healthcare remains high, often leading to catastrophic health expenditure and impoverishment.

**Workforce crisis:** The public sector faces a shortage of qualified staff, and there is a significant lack of specialists in fields like radiology, histopathology, oncology, psychiatry, and public health, as well as the new fields required for precision medicine (bioinformaticians, genetic counselors).

#### Steps to implement

**Strengthen public health infrastructure:** Invest in upgrading physical infrastructure, equipment, and drug supplies at district hospitals and Upazila Health Complexes.

**Motivate rural service:** Implement effective incentives (financial, career advancement) to attract and retain qualified health professionals in rural areas.

**Expand health insurance:** Accelerate the development and implementation of national health protection schemes to reduce out-of-pocket spending and provide financial risk protection.

**Revise medical education:** Expand training capacity and update curricula to produce more skilled professionals, including specialists and allied health workers, to meet current and future needs.

In summary, addressing the double burden of disease requires a fundamental reorientation of the health system, tackling AMR demands urgent regulatory and behavioral change, and solving Inequitable Access is essential for achieving the fundamental goal of "Health for All." These three issues are interconnected and represent the most