



ILLUSTRATION: ADRIN SARWAR

A SLOW-BURNING NATIONAL EMERGENCY

Bangladesh is no longer confined to tertiary hospitals or oncology wards in Dhaka. According to 2022 data from the Global Cancer Observatory (GLOBOCAN), with a population of about 167.9 million, Bangladesh recorded 167,256 new cancer cases and 116,598 cancer deaths.

Non-smokers are now facing elevated risks of lung cancer and respiratory disease simply by living in urban environments. Over years, this exposure becomes normalised, yet its health consequences are profound and long-lasting. Around 87% of lung cancer cases are caused by smoking.

ADRIN SARWAR AND FARHAN MUSFIQUE

It develops without signs; exposure to carcinogens accumulates over years through food, air and water before symptoms appear.

Diagnosis typically comes late across gender, geography and class; by the time patients seek care, the disease is often beyond early intervention.

PATTERNS OF CANCER IN BANGLADESH

Among men, oesophageal, oral-cavity and lung cancers take a large share. Oesophageal cancer alone accounts for 15.1 per cent of new male cases and 20.9 per cent of cancer deaths. Tobacco remains a major factor, while occupational and ambient pollution also contribute: men in transport, construction, manufacturing and informal industries inhale polluted air for years.

For women, breast and cervical cancers dominate: breast cancer represents 18 per cent of new female cases and cervical cancer 13.3 per cent. Both are highly treatable if detected

early; screening is limited outside urban centres, and stigma, low awareness and cost delay diagnosis. As Prof. Dr Syed Md Akram Hussain, Chairman of the Clinical Oncology Department at Bangladesh Medical University, reflects, "Most patients in our country come for treatment very late. There is a significant delay in diagnosis. Because of the stage at which they arrive, the chances of successful treatment decrease significantly. Consequently, the death rate is relatively high."

Public debate often reduces cancer to individual choices—smoking, diet or genes—but those explanations no longer suffice. Rapid industrialisation and weak environmental enforcement have created shared exposure pathways: people are not choosing these risks; they live inside them.

MAN-MADE REASONS

Chromium from tanneries illustrates this. Untreated tannery effluent has been discharged into rivers and land for decades, contaminating soil and groundwater; studies report tannery solid waste repurposed into poultry and fish feed.

Dr Sayed highlights the broader problem of adulteration: "In Bangladesh, adulterated food is a major issue. For example, urea is used to whiten puffed rice (muri). With Ramadan approaching, you'll see jalebis and other fried snacks being cooked in brake oil." He adds, "Fast food often contains chromium. This chromium comes from poultry feed made from tannery waste. That poultry feed eventually enters the fast food chain. Our children now consume a lot of fast food. While there is no specific research yet, these factors have raised questions in our minds that this could be the cause."

Lead and cadmium from informal battery recycling settle into nearby soil, homes and playgrounds. Small-scale smelters operate without protective equipment or oversight; children in affected areas show elevated blood-lead levels. Chronic lead exposure increases the risk of kidney, lung and other cancers later in life.

BREATHING IN POLLUTED AIR

Air pollution compounds these risks. Bangladesh frequently ranks among the world's most polluted countries.

Particulate matter from vehicles, brick kilns, diesel generators and factories penetrates deep into lungs, producing inflammation and cellular damage over years. For city residents polluted air is constant—during commutes, work and sleep.

Dr Sayed says, "The overall polluted air in Dhaka contains high levels of carbon monoxide, sulphur dioxide, and lead from vehicles. Various studies show this is even more dangerous than smoking."

Non-smokers now face elevated risks of lung cancer and respiratory disease simply by living in urban environments. "Around 87 per cent of lung cancer cases are caused by smoking. This situation can be managed by reducing air pollution. To achieve this, the government, stakeholders, and NGOs must work extensively and collaboratively," says Dr Kazi Mazur Ahmed, senior consultant & head of the department of clinical oncology & medical physics.

ARSENIC AND SLOW POISONING

Arsenic in groundwater remains a

slow-poisoning crisis for millions who rely on tube wells. The problem is worsened by unregulated pesticide and chemical use in agriculture; recent evidence links heavy pesticide exposure to rising liver and stomach cancers among rural workers and urban consumers. Reflecting on this trend, Dr Manzur notes that farmers are increasingly falling victim to a toxic exposure of substances; improper handling of bleaching agents and detergent powders also contributes.

Cancer in Bangladesh is not only a medical challenge but also a mirror of social, environmental and industrial failures. Late diagnosis, contaminated food chains, polluted air and poisoned water have woven the disease into everyday life. Addressing it requires stronger regulation, improved screening and referral, public awareness campaigns and collaborative action by government, industry and civil society. Without urgent, coordinated measures, cancer will continue to claim lives silently. Now.

From prevention to personalised treatment



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On this World Cancer Day, the message for every citizen of Bangladesh is clear: Prevention begins with daily actions. Healthy eating, regular activity, avoiding tobacco, and participating in screening programs are vital steps. With national commitment and increased awareness across all communities, we can prevent thousands of cancer cases every year.

ADRIN SARWAR

Bangladesh is currently at a critical crossroads in its fight against cancer. According to IARC-GLOBOCAN 2022 estimates, the nation faces approximately 167,256 new cancer cases and 116,598 deaths annually. The profile of the disease reveals a stark gender divide. Men are most frequently diagnosed with cancers of the oesophagus, lip/oral cavity, and lungs, while women face a high prevalence of breast and cervical cancers. Reflecting on these figures, Professor Dr Md. Mofazzel Hossain says, "These are just the tip of the iceberg; without a robust nationwide registry, our current data underestimates the true scale of the crisis."

PREVENTION FOR SURVIVAL

Despite this rising burden, nearly 40 per cent of all cancers are preventable through healthier lifestyle choices. In reality, the majority of patients in our country are diagnosed at an advanced stage, where treatment is significantly costlier. For this reason, prevention remains the most effective and cost-efficient strategy to save lives. By addressing preventable risk factors like tobacco use, poor diet, and inactivity, we can shift the narrative from treatment to total wellness.

NUTRITION AND THE 150-MINUTE RULE

A primary pillar of this shift is returning to our roots through the traditional Bangladeshi diet, which offers natural protection against various forms of cancer. Health experts recommend prioritising fresh vegetables, seasonal fruits, lentils, and whole grains while limiting processed foods and reducing salt intake. Alongside nutrition, staying active is essential. Dr Kazi Manzur Kader suggests the "150-Minute Rule," aiming for at least 150 minutes of moderate physical activity per week, such as brisk walking or cycling. These activities strengthen the immune system and lower the risk of breast and colon cancers.

BREAKING MYTHS

Furthermore, we must confront the tobacco crisis, which remains the leading preventable cause of cancer in the country. This includes not only smoking but also smokeless forms like

jarda and gul. These contribute heavily to oral and throat cancers. Dr Manzur Kader emphasises that quitting tobacco at any age significantly reduces risk. There is this myth that cancer is entirely "in the genes." In reality, only 5-10 per cent of cancers are purely genetic; the vast majority are triggered by lifestyle and environmental factors.

THE BIOSIMILAR REVOLUTION

While healthy living lowers risk, the shift toward local production of biosimilars has been a genuine game-changer for those already diagnosed. Dr Md. Mofazzel Hossain notes, "Today, locally manufactured advanced oncology drugs are 40 per cent to 60 per cent cheaper than their imported counterparts. This price reduction allows patients to complete their full treatment cycles without financial collapse and enables clinicians to offer targeted therapies at earlier stages rather than as a last resort."

BRIDGING THE GAP IN EARLY DETECTION

To truly combat the prevalence of late-stage diagnosis, Bangladesh must "shift left" by prioritising early detection through mobile outreach, district-level screening camps, and evidence-based pathways like VIA/HPV testing for cervical cancer. By integrating telepathology and tele-oncology, rural clinicians can more efficiently triage patients and bridge the gap between remote areas and tertiary care centres. However, for these efforts to be truly effective, screening must be seamlessly linked to treatment capacity, ensuring that early detection leads to a definitive and accessible pathway to care.

A UNIFIED VISION

As we look toward World Cancer Day 2026, the priority is to make early detection and timely treatment the national default. This requires a unified effort: policymakers must fund district-level screening and financial protection, the industry must ensure an affordable and uninterrupted supply of medicine, and the public must act early on symptoms. By collectively reducing late-stage presentations, we can save more lives than any medicine alone, ensuring that neither geography nor income remains a barrier to survival in Bangladesh.



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To ensure consistent availability, the government must streamline API imports and maintain mandatory buffer stocks of essential cancer drugs. Simultaneously, local pharmaceutical companies should invest in domestic API manufacturing to lower costs and position Bangladesh as a regional treatment hub. Finally, a real-time digital dashboard connecting hospitals and regulators is essential to predict and prevent shortages before they occur.