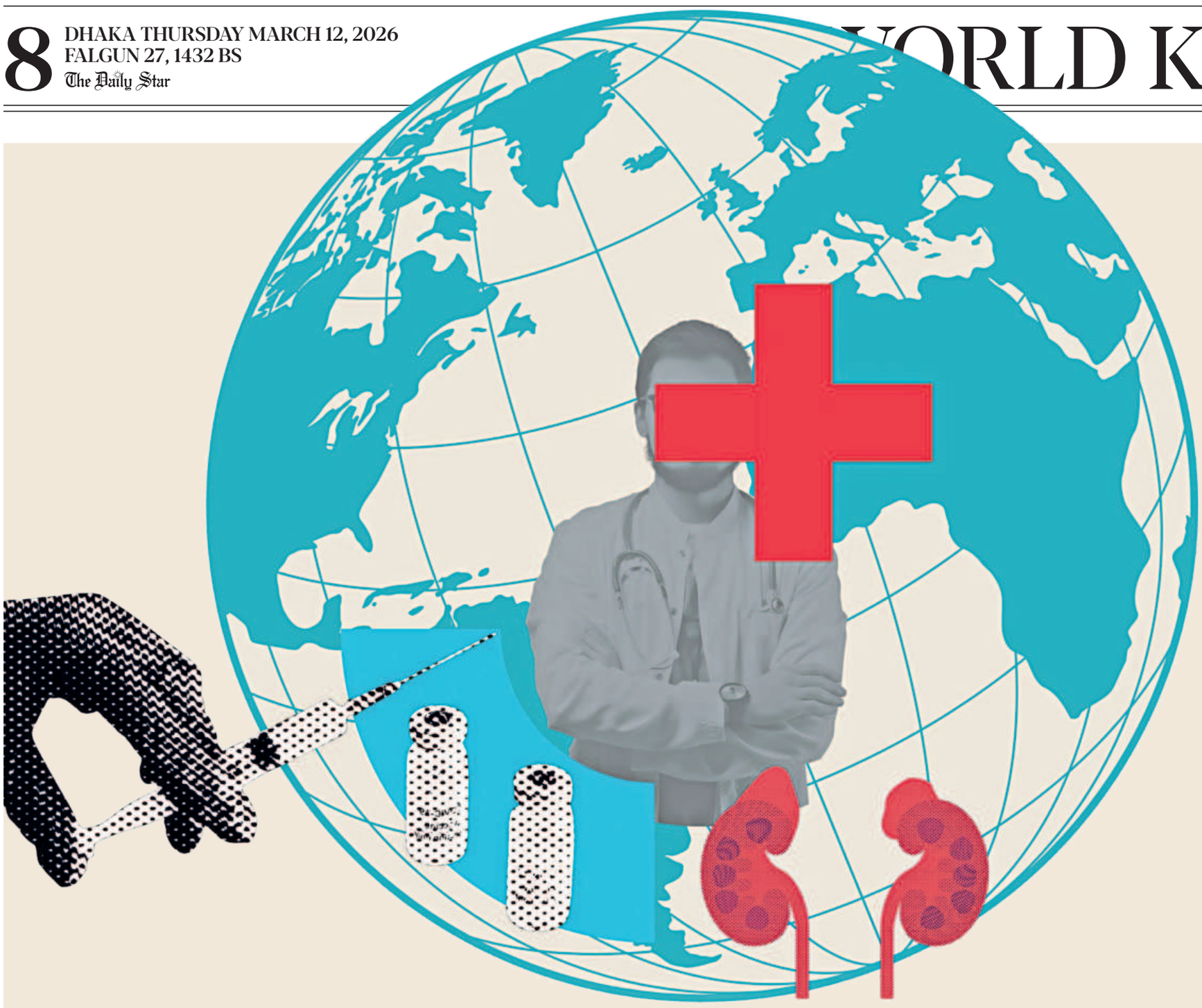

ILLUSTRATION: ADRIN SARWAR

GUARDING OUR VITAL FILTERS

TAGABUN TAHARIM TITUN

Bangladesh is currently navigating a quiet yet catastrophic renal emergency. With an estimated 3.8 crore people suffering from various forms of kidney ailments, nearly one-fourth of the nation's population is at risk. According to a 2024 data of Kidney Foundation, Bangladesh: approximately 54 people die every day across the country due to kidney-related complications,. This local crisis mirrors a burgeoning global trend. The World Health Organization (WHO) and the International Society of Nephrology report that over 850 million people worldwide live with kidney disease—double the number of those living with diabetes and twenty times the prevalence of cancer. With a global prevalence of 10.4% among men and 11.8% among women, Chronic Kidney Disease (CKD) is projected to become the fifth leading cause of death globally by 2050. As millions worldwide continue to lack access to transplantation or affordable dialysis, understanding early prevention and routine screening is no longer just a medical recommendation; it is a vital necessity for survival.

On World Kidney Day 2026, The Daily Star interviewed four leading nephrologists to address this crisis. They emphasise that while kidney damage is often silent, early screening of creatinine and protein levels can halt progression.

Halting the Path to Failure

PROF. BRIG. GEN. MAMUN MOSTAFI (RETD.)
MBBS, MACP(USA), FCPS, FRCP, FISN
Consultant, Department of Nephrology, Bangladesh Specialized Hospital
Former Head of Nephrology, Bangladesh Army

If a patient requires medicine three or four times daily, fasting may be prohibited. During the fast, monitoring is vital; if blood sugar levels fall below 4 or rise above 16, or if blood pressure spikes in the afternoon, the patient must stop fasting immediately. A 13-hour fast without water can severely stress the kidneys, making medical supervision mandatory.

Kidney health is often a battle against time. Professor Brigadier General Dr Mamun Mostafi (Retd.) explains that kidney problems generally fall into two categories: primary diseases originating in the organ, such as infections or stones, and secondary conditions like diabetes and hypertension. While primary issues can sometimes be reversed if caught early, secondary conditions require a lifelong strategy of slowing the damage. If a patient maintains an HbA1c (Hemoglobin A1C) level below 7 and keeps systolic blood pressure between 110 and 130, the progression of kidney decay can be significantly delayed.

For patients with kidney disease, lifestyle choices like fasting during Ramadan or traveling require meticulous planning. Dr Mostafi explains that kidney problems are generally divided into five stages. Patients in Stages 1 and 2 can typically fast without issue. However, those in Stage 3 must consult their doctors to rearrange medications for Sehri and Iftar.

But even after all these, Dr Mostafi offers a message of hope: dialysis is not a death sentence. Most patients on dialysis do not die of kidney disease but of secondary complications like heart disease. With modern, subsidised dialysis, patients can regain their quality of life, return to work, and live for decades. The goal is to manage the "enemy" whether it be sugar or pressure and to keep the kidneys resting rather than exhausting them.

Balanced Nutrition for Renal Safety

PROF. DR MD. ABDUL MUQUEET
MBBS, MD (Nephrology)
Professor and Head of Nephrology
Ibn Sina Medical College

Screening is remarkably affordable. A urine test, glucose check, and blood pressure monitoring can cost less than 150 Taka, thus making it inexcusable to wait for symptoms. Beyond clinical tests, nutrition remains vital. Dr. Muqueet warns against starfruit, which contains a specific toxin that can cause acute renal failure within days.

The most perilous aspect of kidney disease is its stealthy progression. Professor Dr Md. Abdul Muqueet highlights a critical physiological timeline: up to age 25, a person's functional capacity (GFR) is typically between 90 and 120, but after that peak, it naturally decreases by 1ml every year. Because the kidneys are remarkably resilient, they do not exhibit obvious signs of "failure" until a massive amount of damage has already occurred.

A patient, or even an uninformed general practitioner, might see a result of 1.6 and assume it is "barely above normal." A creatinine rise from 1.4 to 1.6 may seem minor, but it signals that 50% of kidney function is already lost. In reality, creatinine only begins to climb significantly once the kidney is already 50% damaged. This 0.2 difference is not a minor fluctuation; it is a siren song for urgent intervention. Never ignore slight increases in your lab results.

The gap in diagnosis is often widened by a lack of early referral. Many patients are only sent to nephrologists when their creatinine reaches 6 or 7, at which point dialysis is the only option.

While healthy kidneys can process most foods, the focus for the aging population must be on maintaining an alkaline environment through balanced, fresh, home-cooked meals while avoiding the chemicals found in processed deli meats.

Spotting Damage Before Symptoms Arise

PROF. DR NAZNEEN MAHMOOD
MBBS, MD (Nephrology), FRCP(Edin, UK), CCD(BIRDEM)
Professor and Head of Nephrology
Anwer Khan Modern Medical College and Hospital

A critical but overlooked issue is childhood hygiene habits. Parents often discourage children from using school washrooms because they are "dirty," leading kids to hold their urine for hours. This habit causes chronic Urinary Tract Infections (UTIs) and creates a breeding ground for stones.

The most dangerous aspect of kidney disease is its invisibility. Professor Dr Nazneen Mahmood points out that symptoms rarely manifest until the eGFR (estimated Glomerular Filtration Rate) falls below 30. By then, the damage is severe. To counter this, she recommends the uACR (Urine Albumin-to-Creatinine Ratio) test, which detects protein leakage long before standard tests show trouble. This is vital for those with sudden high blood pressure in their 20s, which is a renal red flag in 90% of cases.

Dr Nazneen also stresses that patients with a family history of renal issues must be proactive, as kidney conditions are often hereditary, mirroring the genetic patterns of diabetes and hypertension.

She also addresses the rising epidemic of kidney stones among the youth. The primary culprit is chronic dehydration and the consumption of soft drinks, which many families mistakenly use as a substitute for water. A healthy adult needs 4 to 5 liters of water in the summer to maintain a healthy kidney. Furthermore, dietary habits involving high-uric acid foods such as excessive red meat, liver, and even certain vegetables like cauliflower and spinach. These must be moderated. While lentils are a daily staple, she advises that those with stones or chronic kidney disease should limit their intake. But "Moong Dal" can be the only occasional exception in order to prevent the accumulation of excess protein and uric acid.

Integrated Control of Chronic Risks

PROF. DR MD. NAZRUL ISLAM
MBBS, FCPS, MD (Nephrology)
Professor of Nephrology department
Bangladesh Medical University

Dr Islam advises to maintain an optimum body weight, as obesity significantly accelerates proteinuria (protein loss in urine). Simple exercises, such as 30 minutes of daily walking, are remarkably effective at balancing the kidney functions of patients who have both diabetes and high blood pressure.

Chronic kidney disease is often the final destination of unmanaged lifestyle diseases. Dr. Nazrul Islam explains that long-standing diabetes and hypertension cause the collapse of the nephron which is the kidney's functional unit. When more than 50% of the filtering structures, known as glomeruli, collapse, impairment becomes official.

Managing a kidney patient's health also requires careful navigation of supplements. While water-soluble vitamins like B and C are often needed for energy production, anemia management, and wound healing.

Quality of life remains a major focus. Dr. Islam notes that a diagnosis does not mean the end of normal activity. Patients with an eGFR above 30, roughly corresponding to a serum creatinine of 1.5 to 2.5 mg/dL, can safely fast during Ramadan, provided they monitor their creatinine levels and adjust fluid intake under a nephrologist's supervision. Even travel is possible; dialysis patients can fly long distances if they arrange treatments beforehand and manage blood pressure diligently, though those with underlying heart conditions should seek a cardiologist's opinion before long flights. By integrating dietary modifications such as reducing salt, sugar, and carbohydrates while increasing green leafy vegetables, patients can protect their renal health and maintain independence even while living with a chronic condition.