



The Daily Star

WORLD KIDNEY DAY 2023

Kidney patients are at higher risk of unexpected disasters

On March 4, 2023, the Kidney Awareness Monitoring & Prevention Society (KAMPS), with the support of Eskayef Pharmaceuticals Limited, organised a roundtable titled “Kidney patients are at higher risk of unexpected disasters”. Here we publish a summary of the discussion.



Dr M.A. Samad,
President KAMPS, Professor and Head, Department of Nephrology, Anwar Khan Modern Medical College and Hospital

The overwhelming majority of dialysis facilities in Bangladesh, precisely 95% of the total 215 centers, are located in urban regions. Consequently, residents of Cox's Bazar face the daunting task of travelling 90km to Chittagong to receive vital dialysis treatment. This distance becomes insurmountable during disasters when transportation is disrupted, leading to dire consequences. Similar picture is seen throughout our country. To ensure kidney health for all during emergencies, we need to take proactive measures.

Treatment of kidney failure is highly expensive. Therefore, let's raise the slogan “Kidney Health for All”. Dialysis and Transplant service must be provided free of cost under universal health care.

One solution is for policymakers to introduce mobile dialysis centres, making the service more widely available during disasters. Additionally, doctors must take on responsibilities such as preparing patients mentally, creating emergency kits, and ensuring medicine and other essentials are available. Chronic patients should be registered

unstable land should receive special attention to ensure their safety.



Dr Abdul Latif Hilali,
Director of Program, Urban Resilience Program, RAJUK

We should start working on field-level projects to minimize the risk of earthquakes. The Bangladesh Urban Earthquake Resilience project, in collaboration with the World Bank, is a proactive government project aimed at achieving this goal. As part of the Earthquake Disaster Risk Reduction, a total of 3,252 buildings, including schools, colleges, and hospitals, were assessed on a priority basis. Of these, 42 buildings need to be demolished, while the rest remain vulnerable.

We have also developed a risk-sensitive land-use plan for Dhaka and a filled and sandy soil area map. Another project we initiated is the electronic construction permitting system, which enables floor-by-floor supervision without deviation, placing utmost importance on structural design. Additionally, we provided earthquake training to 1,200 engineers through 12 national and international professors.

To further minimize earthquake risk, we must be more vigilant in constructing and retrofitting buildings to withstand at least eight magnitudes of earthquakes. New constructions

should adhere to the Bangladesh National Building Code, while older buildings should undergo retrofits following proper assessment. With gradual interventions, we can effectively mitigate the risk of earthquakes.



Brigadier General Engineer Ali Ahmed Khan,
Former Director General, Department of Fire Service and Civil Defense

An effective emergency response plan is crucial in preparing for natural disasters. To ensure that we can save lives, we need open spaces, well-stocked blood banks, and mobile hospitals set up in and outside of Dhaka, in collaboration with stakeholders such as medical associations. Adequate preparation is necessary, and doctors must receive better training to support emergency response efforts.

The role of nearby hospitals, like Enam Medical College & Hospital, was critical during the Rana Plaza tragedy. In addition, a National Emergency Medical Center should be established. Hospitals require an emergency response plan, properly trained medical staff, and well-equipped facilities to provide assistance during crises. With the support of the Disaster Ministry, doctors and nurses must play a vital role in providing aid during medical rescue operations.



Engineer Iqbal Habib,
Joint Secretary, BAPA

Dhaka and other urban cities in Bangladesh are at a higher risk of natural disasters compared to countries like Turkey and Syria, which have recently experienced large-scale disasters.

A recent survey revealed that 187 hospitals, schools, and colleges are at extreme risk, with Dhaka National Medical College being the most vulnerable. Urgent assessments of high-risk buildings in Dhaka city should be conducted within the next 3-5 years, as most buildings in Dhaka are at risk of collapse if an earthquake above 4 or 5 on the Richter scale occurs. Only 23% of these buildings have been constructed by engineers.

To ensure the safety of the public, it is imperative for the government to assess whether the buildings at risk in Dhaka were constructed in accordance with the Bangladesh National Building Code. If a building is found to be non-compliant, it should be marked with an orange label to indicate that it is not environmentally friendly and with a red label if it poses a danger to the occupants. This will allow for better identification of potentially hazardous buildings and enable necessary actions to be taken to mitigate the risk of disasters.

The public must be educated on how to respond during emergencies such as fires and earthquakes, and every area should have a non-vulnerable refuge center stocked with food and equipment to provide safety during disasters.



Dr Mohammad Kamrul Islam,
Kidney Transplant Surgeon & MD, CKDU Hospital

Although patients undergoing dialysis are deemed to have a greater susceptibility to contracting the COVID-19 virus, over 300 kidney transplants were successfully performed during the pandemic. In Bangladesh, only a handful of hospitals, including Bangabandhu Sheikh Mujib Medical University, Kidney Foundation, Center for Kidney Disease & Urology Hospital, and Birdem Hospital, regularly conduct kidney transplants. The pandemic posed significant challenges for dialysis patients, who could not travel to hospitals for their treatment or import their medications from abroad. To overcome these obstacles, we implemented a home delivery system for medication and established a separate dialysis floor in the hospital. The success

rate of the transplants remained high at over 96%, with less than 3% failure rate recorded last year.



Professor Dr Nizamuddin Chowdhury,
President, Bangladesh Renal Association

The impact of kidney dysfunction extends beyond just the patient, affecting their family members socially, financially, and psychologically. However, early detection of the condition can significantly improve the prognosis of kidney disease. Unfortunately, most patients are diagnosed in the final stages of the disease, leaving no chance for recovery. Due to the lack of visible symptoms, kidney disease often goes undiagnosed until it's too late.

Acute kidney dysfunction, often caused by excessive painkillers and antibiotics, requires early dialysis for a higher chance of recovery. In preparation for natural calamities, it's essential to have functional resources available for kidney patients. Recognizing chronic kidney disease as a Non-Communicable Disease (NCD) at the government level would allow for special attention to be given to kidney patients and doctors, ultimately improving the management and treatment of this debilitating condition.



Professor Dr Anwar Hossain Khan,
President, Pediatrics Nephrology Society of Bangladesh

Kidney-related complications often arise in childhood or even before birth. To investigate hypertension in school-going children, we conducted a survey of 3267 students and found that 4.38% of them were suffering from the condition. Alarming, 30% of the students were obese, putting them at a higher risk of developing hypertension, which can persist into adulthood.

Furthermore, with 25% of babies now born premature, their reduced number of nephrons (the basic units of the kidney) puts them at risk of developing Chronic Kidney Disease (CKD) at an early stage of adulthood. If this trend continues, we can expect a “tsunami” of CKD patients in the future, making it crucial to prioritize preventing preterm births through maternal care and planned pregnancies. We must also monitor the food quality of children, as those who consume fast food and salty snacks are more likely to develop hypertension.

To mitigate these issues, it's essential to address them seriously, as it not only saves our children's health but also a significant amount of revenue for the government in the future.



Dr Harisul Haq,
Professor, Department of Cardiology, BSMMU

It is surprising that Chronic Kidney Disease (CKD) has not yet been recognized as a Non-Communicable Disease (NCD). Our body is like an orchestra, where each organ is critically linked with the others. Cardiorenal syndrome, which can cause acute or chronic problems in the heart or kidneys, can result in a corresponding problem in the other organ. Acute chronic heart failure can lead to and worsen CKD.

In light of this, it is crucial to be prepared for natural calamities by keeping emergency kits and dry food supplies for three to four days.

Additionally, CKD and heart failure patients must limit their water intake to avoid complications.



Rezwan Salehin,
Executive Director, KAMPS

The primary objective of KAMPS is to raise awareness about kidney

diseases and promote knowledge about their symptoms. We aim to provide education and resources to help people stay safe from this dangerous disease. Additionally, we provide life-saving dialysis and testing services to patients in need.

In times of disaster, transportation and communication may be disrupted, and the supply chain for medicine and treatment may be unavailable. Kidney patients, who require ongoing care, are particularly vulnerable in these situations. Collecting a sufficient amount of medication in advance may be the only solution for these patients. However, to better prepare for disasters, we advocate for the creation of better infrastructure and the establishment of more disaster-proof treatment centers. This would help ensure that kidney patients receive the care they need during and after emergencies.



Gazi Ashraf Hossain Lipu,
Former Captain, National Cricket Team of Bangladesh

Including disaster preparedness in the curriculum can equip students with the knowledge needed to respond effectively in times of crisis. By widely disseminating information about which foods are detrimental to kidney and heart health, students are more likely to retain this knowledge for life.

With only 300 nephrologists in our country, it is essential to address this scarcity appropriately. We also need to establish a comprehensive database that includes the names of doctors and technicians, which can be activated quickly during emergencies. Rather than solely focusing on constructing large buildings and infrastructure, we must prioritize the inclusion of necessary safety measures to ensure preparedness for any disaster. Our outlook needs to shift to emphasize safety and risk mitigation.



Md Mijanur Rahman,
Director General, Department of Disaster Management

The recent earthquake in Turkey serves as a stark reminder of the importance of disaster preparedness. It is imperative that we learn from this event and take necessary steps to safeguard the lives of our citizens. To this end, we must prioritize disaster prevention and response strategies, and make concerted efforts to raise public awareness of disaster preparedness.

In our efforts to protect the most vulnerable members of our society, particularly those with pre-existing medical conditions such as kidney disease, we must take special care. By investing in comprehensive disaster management plans and ensuring that everyone is well-informed and equipped to deal with emergencies, we can effectively minimize the impact of disasters and save countless lives.

The government has a plan to construct a national emergency operation centre. Fortunately, the Chinese government has agreed to provide funding for this crucial project. We have successfully acquired the required land for the centre from the Food Department. Moreover, we are actively searching for suitable land to establish a humanitarian staging area, which will significantly enhance our emergency preparedness capacity.

The Fire Brigade and Meteorology are two vital government bodies that play a crucial role in combating disasters. While the former falls under the purview of the Home Ministry, the latter is overseen by the Defense Ministry. If these agencies were brought under one umbrella, our disaster preparedness could have been further improved.

Considering the vulnerability of volunteers residing in Dhaka city during a disaster, it is imperative to train individuals from neighboring areas. This approach would ensure that volunteers can come forward to aid during crises, instead of being affected by the calamity themselves.

RECOMMENDATIONS

- A comprehensive emergency response plan needs to be formulated to prepare for natural disasters effectively.
- Proactive measures must be taken by the government to assess the safety of all buildings, particularly medical and dialysis centers, in anticipation of earthquakes.
- Establish mobile dialysis centres to improve accessibility of dialysis services during disasters.
- More kidney hospitals with disaster-proof infrastructures should be established across the country.
- Train more nephrologists, renal-care physicians, and nurses who can deliver quality kidney care services.
- Public awareness campaigns should be launched to educate people on how to detect kidney diseases early.
- Chronic kidney diseases must be declared as Non-Communicable Diseases (NCD).
- Healthcare professionals, including doctors and nurses, should receive better training to support emergency response efforts in the event of a disaster.
- After proper assessment, the most vulnerable buildings should be demolished, and at-risk ones should be retrofitted.
- The government must ensure that all buildings follow the Bangladesh National Building Code.

to receive necessary treatments in emergencies. Journalists can also play a crucial role in raising awareness among patients, so they can make necessary preparations.

At-risk patients can prepare their emergency kits and gather information about alternative dialysis centres in advance. They should also establish a network of supportive individuals, including friends and family, who can assist them during times of need. Finally, patients should be informed about dos and don'ts during emergencies to prevent complications.



Dr Mehedi Ahmed Ansari,
Professor, Department of Civil Engineering, BUET

It is imperative that the government takes proactive measures to assess the safety of all buildings, particularly medical and dialysis centers, in preparation for earthquakes. Those identified as at-risk should be strengthened accordingly. Earthquake signals often provide little time to evacuate, making strong and sturdy buildings crucial in providing protection for occupants.

In this regard, preparedness is paramount, with ensuring medical centers are earthquake resistant taking priority. Anchoring medical equipment to the floor is also crucial as part of preparatory measures.

The northeast region of Bangladesh is particularly vulnerable to earthquakes, and hospitals built on

should adhere to the Bangladesh National Building Code, while older buildings should undergo retrofits following proper assessment. With gradual interventions, we can effectively mitigate the risk of earthquakes.



Professor Dr. Harun Ur Rashid,
President, Kidney Foundation

The cure for acute kidney failure lies in providing immediate treatment, which can cure 80% of the disease. However, for those who suffer from gradual kidney damage, creating awareness is crucial. As chronic kidney disease often goes undetected, with no symptoms 80% of the time, 50% of patients are unaware they have the disease until it's too late. It is recommended that individuals over the age of 40-45 get their urine tested by a doctor every year, regardless of whether they have symptoms or not. Additionally, monitoring blood pressure, weight, and glucose at home can be beneficial. With blood pressure monitors costing only 150 BDT, testing blood pressure at home is affordable and easy. Individuals with blood pressure exceeding 140/90 must visit a healthcare center for a serum creatinine test and consult a nephrologist if the result is close to 1.2 ml.

Unfortunately, Bangladesh does not have enough nephrologists to treat everyone. To combat this issue, governmental and non-governmental organizations need to train more nephrologists, renal-care physicians, and nurses to test and treat kidney