

The evolving impact of Chronic Kidney Disease

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Chronic kidney disease (CKD) is quickly becoming a major public health concern, attracting increased global attention because of the disease's rapid rate of incidence and its grave impact on patients and their quality of life.

In Sri Lanka alone, there are over 164,000 identified CKD patients today, with another staggering 11,000 annually diagnosed with the condition, and 10,500 eventually succumbing to the complications caused by it.

So, what is CKD and how does it come about? Essentially, CKD is the slow, progressive and irreversible loss of kidney function over several years, to a point that brings about kidney failure.

Over time, the condition damages the routine functionalities of a kidney, obstructing its ability to filter waste and fluid, and allowing harmful waste to build up to such an extent that it harms a person's health and wellbeing.

It is usually caused by other secondary conditions that put a strain on the kidneys, and is often the result of a combination of different problems such as high blood pressure, diabetes, high cholesterol, kidney infections, polycystic kidney disease, kidney stones, and even the long-term use of certain medicines.

In CKD stages one to three, which are mild to moderate stages of the condition, patients are generally unlikely to feel unwell or present symptoms. However, even at this point, CKD can be diagnosed by an estimated glomerular filtration rate (eGFR) before any symptoms develop.

Once a patient is diagnosed, the psychosocial toll it creates amplifies due to the physical discomfort of the illness as well as treatment modalities such as oral medications, hemodialysis, renal transplantation, dietary, and fluid restrictions.

Financial burden

Depending on the stage, a patient is in, other stressors may include financial burden of dialysis, high time commitment for dialysis, a feeling of worthlessness and a burden to loved ones, a fear of pain through treatment, low sleep cycles, eating restrictions, and the constant worry of how all this impacts their families.

In fact, these mental stressors are not limited to the patient, their immediate communities and loved ones are also affected by the massive commitment of frequent treatment that CKD creates.

Symptoms start to present strongly when the kidney damage starts becoming more fierce - stage four or worse.

If kidney function continues to decline, various other problems



may develop - for example, anaemia and an imbalance of calcium, phosphate and other chemicals in the bloodstream.

These can cause various symptoms, such as tiredness due to anaemia, and bone thinning or fractures due to calcium and phosphate imbalance. Eventually, end-stage kidney failure, stage five, can prove to

be fatal unless treated quickly and efficiently.

Environmental factors

While the incidence of CKD elevates with age, the incidence of Chronic Kidney Disease of Unknown Origin (CKDu) depends on a multitude of environmental factors. CKDu

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tends to affect rural populations with limited access to safe drinking water and affects men more than women. In many patients, CKDu will progress to end-stage renal disease, which might be catastrophic for people in poor areas and communities where access to renal replacement therapy is limited or not affordable.

While there is no cure for chronic kidney disease, treatment can slow or halt the progression of the disease and can prevent other serious conditions from developing because of it. To survive end-stage kidney disease, the patient may need to have artificial kidney treatment, either through dialysis or with a kidney transplant to maintain their quality of life and health, with both procedures placing an intense level of financial burden on patients and their loved ones.

Dialysis

Dialysis is one of the primary methods of treating CKD. It is a procedure to remove waste products and excess fluid from the blood when the

kidneys stop working properly, and often involves diverting blood to a machine to be cleaned. In Sri Lanka, only 74 dialysis centres are available to cater to the frequent, island-wide demand of 164,000 patients, through just 482 machines.

With catastrophic numbers such as these, the national healthcare system often finds it difficult to cater to the full requirement of all patients requiring dialysis, affecting their health and wellbeing to a large degree. In Sri Lanka where the worsening macroeconomic conditions have put a gigantic strain on the healthcare supply chain, an increasing number of CKD patients continue to be impacted negatively, with strain on both their health and the wellbeing of their loved ones and communities.

In such a dire context, it has then become critical for the private healthcare sector to step up to the plate to elevate their support to ensure that all CKD patients in the country have a fair and equal chance at a good life with access to the treatments and medication they need to survive and thrive.