

**- Virus****Prolonged comorbid conditions and kidney disease**

Daily Mirror (Sri Lanka) · 14 Jan 2022 · A8 · BY KAMANTHI WICKRAMASINGHE DR. INDUMINA RUPASINGHE Medical officer at Medawachchiya Hospital

Studies have shown that people suffering from severe COVID are showing signs of kidney damage, including people who had no underlying kidney problems prior to contracting the virus. Signs of kidney problems in patients with COVID-19 include high levels of protein in the urine and abnormal blood work.

But in the Sri Lankan context, apart from several dialysis patients succumbing to the deadly virus, the situation had been very much under control.

“Dialysis patients had to face certain challenges during the lockdown period and a few of them succumbed to COVID19,” opined Dr. Indumina Rupasinghe, Medical officer at Medawachchiya Hospital. “We have advised all patients to get them vaccinated, especially those above 60 years of age. Since travel restrictions have been lifted, they have resumed coming to clinics. We also conduct screening programmes by visiting the people in villages in and around Medawachchiya and this is done twice a week,” said Rupasinghe.

When asked if kidney patients developed any side effects after getting the vaccine Dr. Rupasinghe replied in the negative but he said that patients sometimes complain about joint pain and fatigue which are usual side effects that develop after getting the vaccine. “However the number of kidney patients has reduced when looking at the rate of screening. But what is important is that the number of people with comorbid conditions is on the rise, particularly diabetes. Thereafter we started screening people for diabetes, cholesterol and pressure as well. When these conditions prevail for a long time, they can sometimes lead to kidney failure. We observed this trend in people between 40-50 years of age. It was rarely seen in the 20-30 year age group as well. These conditions would have developed mostly due to stress, sedentary lifestyles during the lockdown period and lack of exercise.” the doctor said.

How COVID-19 damage kidneys

The impact of COVID-19 on kidney damage is still not clear. But some possibilities according to doctors and researchers are as follows :

COVID might target kidney cells – The virus itself infects kidney cells which have receptors that enable the coronavirus to attach to them. After attaching, the virus invades the cells, make copies of itself, potentially damaging those tissues.

Too little oxygen can cause kidneys to malfunction – Kidney problems in COVID patients are due to abnormally low levels of oxygen in the blood, a result of pneumonia commonly seen in severe cases of the disease.

Cytokine storms can destroy kidney tissue – Cytokines are small proteins that help the cells communicate as the immune system fights an infection. However, this sudden influx of cytokines can cause severe inflammation. In trying to kill the virus, this inflammatory reaction can kill healthy tissue, including that of the kidneys. COVID causes blood clots that may clog the kidneys

– The kidneys are like filters that screen out toxins, extra water and waste products from the body. COVID can cause tiny clots in the bloodstream which can clog the smallest blood vessels in the kidney and impair its function.