

The Challenge of Chronic Kidney Disease in Nepal: Need for Preventive Strategies

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As we celebrate World Kidney Day on March 10th, we reflect on the progress of kidney care in Nepal. Chronic kidney disease (CKD) is characterized by abnormalities of kidney structure or function assessed using a matrix of variables - including glomerular filtration rate (GFR), thresholds of albuminuria, and duration of injury. Infection, dehydration, diabetes, hypertension, and nephrotoxic agents/medications remain on top of the list as causes/risk factors for kidney disease in developing countries globally. It is recognized as a major non-communicable disease of growing epidemic dimension worldwide and is expected to be a profound 21st century medical challenge. The presence of CKD significantly increases the risk for cardiovascular event in both diabetic and hypertensive patients. Therefore, early detection and prevention of kidney disease can improve overall cardiovascular health.

CKD cannot be cured and is generally a progressive disease, in some patients leading to End Stage Renal Disease (ESRD) and requiring Renal Replacement Therapies (RRT). The rate of decline in renal function depends on co-existing causes and risk factors of CKD. CKD patients have significantly higher rates of morbidity, mortality, hospitalization, healthcare utilization, and financial burden on both individual and national levels.

A good understanding of disease burden is the first step in formulating a response to it. Unfortunately, we do not have large high-quality studies related to CKD in Nepal to identify its prevalence, cause, rate of progression, and outcomes post-renal replacement therapy (dialysis or renal transplant). Based on limited available data, CKD affects around 10% of the population and is commonly caused by diabetes, glomerulonephritis, and hypertension.¹ Analysis of the Global Burden of Disease 2016 dataset shows an 87% rise in the global burden of

chronic kidney disease and a doubling of chronic kidney disease deaths between 1990 and 2016.²

There have been significant advances in Nepal over the last decade in terms of ESRD care due to the establishment of government funding.³ However, the current Nepalese Government policies focus heavily on the end product of kidney disease. ESRD care and renal replacement therapies are EXPENSIVE and a national economy like ours cannot sustain the current policy of free dialysis and subsidized renal transplant in the coming years. Instead, the ultimate goal for government policy should be to minimize CKD burden through preventive, cost-effective strategies such as improving awareness, access to health care, early detection of kidney disease, and aggressively combating risk factors like diabetes and hypertension. Critically, effective implementation of these strategies necessitates active support and participation from health professionals, policymakers, and the community at large.

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