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Healthy lifestyle or Chronic Kidney Disease: The Choice is yours!

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Dr. H. Sudarshan Ballal, President, NATHEALTH talks about how our lifestyle choices are among the top causesthat are associated with chronic kidney disease

Chronic kidney disease (CKD) is a growing health problem with an estimated prevalence of around 11.5%.Individuals with CKD are at high risk for progressive kidney failure. End-stage kidney disease leads to considerable human and financial costs with a 5-year survival rate of less than 50%. There are well-established risk factors for end-stage kidney disease of which Diabetes and hypertension are strong predictors for the development and progression of chronic kidney diseases and these in turn are closely linked to lifestyle factors. We have learned from research of other chronic conditions such as heart disease and cancer that lifestyle factors namely diet, physical activity, cigarette smoking, and body mass index plays a very important role in health outcomes namely cardiovascular events and mortality and kidney diseases are no exception to this rule. Over the next decade, the number of patients with end-stage renal disease requiring dialysis may double, and even developed nations will have difficulty coping with this alarming epidemic. There is an urgent need to highlight the importance of modifiable lifestyle risk factors as a basis for treatment strategies to prevent the development and progression of chronic kidney disease (CKD).

OBESITY has become an international epidemic, and there is growing agreement that modern lifestyle is driving this epidemic by encouraging overconsumption and discouraging energy expenditure. Obese patients can develop proteinuria, which is followed by progressive loss of renal function also called Obesity-related glomerulopathy (ORG-FSGS). There is a 10- fold increase in the incidence of ORG over the past 15 years suggesting a newly emerging epidemic. Various studies have shown that achieving a mean weight loss of between 4-12% can bring about a decrease in proteinuria by about 30-80%.

Alcohol may have both positive and negative effects on renal function. Alcohol consumption is a potential risk factor for kidney damage, hypertension, and hypertensive nephrosclerosis. Average consumption of more than 2 alcoholic drinks per day was associated with an increased risk of kidney failure in the general population.

Smoking increases the risk of developing kidney diseases and nearly doubles the rate of progression to end-stage renal failure. Studies have shown that smokers have increased median protein excretion, suggesting that smoking reduces renal function and increases proteinuria. In the MRFIT (Multiple Risk Factor Intervention Trial), cigarette smoking was associated with 84% increased risk for ESRD in middle-age men.

The effect of salt on renal function is related to its indirect effects on high blood pressure and to a direct effect on renal function. Hypertension is both a cause and consequence of renal failure and high salt intake acts as a force multiplier

accelerating the downward spiral of CKD progression.

Sedentary behaviour is one of the strongest risk factors for many chronic diseases including cardiovascular disease, hypertension, diabetes, obesity, osteoporosis, colon cancer, renal disease, and depression referring the adage “sitting is today the new smoking” A review of observational studies reported that the risk for all-cause mortality was 20% - 30% lower among adults who performed 30 minutes of moderate activity for 5 or more days per week. Persons who are less active have a 30% - 50% greater risk for high blood pressure.

The combination of obesity, smoking, poor diet, and lack of exercise can increase a person's risk for kidney disease by more than 300%, independent of age, sex, and race.

Obesity and poor diet conferred a 58% risk while individuals with 3 or 4 unhealthy lifestyle behaviours had a 337% increased risk for CKD.

In the Chronic Renal Insufficiency Cohort (CRIC) Study, researchers tracked the relationship between lifestyle factors and chronic kidney disease (CKD) progression and concluded that CKD patients who don’t smoke, are physically active, eat a healthy diet (comprised of more fruits, vegetables and whole grains and less red meat and sugar) and have a body mass index between 20-25 kg/m2, reduced their risk of death by 68% compared to those who did not have these lifestyle qualities

Hence, living a healthy lifestyle can help prevent diabetes, high blood pressure and kidney disease, or help keep them under control. Follow these tips to lower your risk for kidney disease and the problems that cause it:

- Follow a low-salt, low-fat diet
- Exercise at least 30 minutes on most days of the week
- Have regular check-ups with your doctor
- Do not smoke or use tobacco
- Limit alcohol
- Lose weight if obese

Careful attention to metabolic and lifestyle issues may help slow the loss of renal function. Strategies to introduce and encourage a healthy lifestyle among our population should become a priority.