

The progression of chronic kidney disease (CKD) and the influence of selected factors on CKD progression among patients following the Nephrology Clinic, Teaching Hospital Jaffna

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Background: CKD is a universal health problem. The treatment for end-stage kidney disease is prohibitively costly. No studies have been performed to assess progression of the disease in patients with CKD in Sri Lanka. This study aimed to assess the progression of CKD and the influence of knowledge and selected socio-economic and lifestyle factors on the progression of CKD among patients following the Nephrology Clinic in the Jaffna Teaching Hospital.

Methodology: This study was a descriptive cross-sectional institutional based study carried out at the Nephrology Clinic of Jaffna Teaching Hospital for a nine-month period. Hundred and thirty adult patients with document-diagnosed CKD stage 3 to stage 5 who were following the Nephrology Clinic for at least one year were included in this study.

Results: Mean age of the participants was 50.56 years. The majority of participants were male (65.4%). Most had studied up to less than O/L (43.8%). A large majority were non-sedentary workers (82.3%). Mean family income was Rs. 21,500. Only 14.6% participants were smokers or ex-smokers. Mean BMI of the participants was 23.77 kg/m². The majority of participants (73 %) had increased or accelerated GFR decline per year with a mean GFR decline of 9.30ml/1.73m²/year. The mean knowledge score was 66.97. Majority of the participants (60%) with overall poor knowledge had accelerated GFR decline (P < 0.001). When each aspect of knowledge was considered, basic knowledge, causes, risk factors for progression of CKD and functions of the kidney had a statistically significant association with progression of CKD. Among lifestyle factors, only BMI and smoking had a statistically significant correlation with CKD progression.

Conclusion: Even though overall knowledge about the disease among CKD patients was fairly good, the progression rate of CKD was not satisfactory. Studies to estimate the progression rate of CKD in the Sri Lankan population and the impact of behavioral changes in the progression of the CKD should be carried out in future.

Keywords: Chronic kidney disease, Jaffna, disease progression, knowledge