

**Abstract Submission No. : 1021**

### **Risk factors and their effect on the progression of Sri Lankan CKDu**

**MGIH Bandara<sup>1</sup>**, SWMPWCIB Weerakoon<sup>1</sup>, HMDK Herath<sup>1</sup>, HPNS Hewapathirane<sup>1</sup>, HGN Erandika<sup>1</sup>, HPM Hewavitharana<sup>1</sup>, N Nanayakkara<sup>2</sup>

<sup>1</sup>Department of NEPHROLOGY, Centre For Research National Hospital Kandy, Sri Lanka

<sup>2</sup>Department of Nephrology, National Hospital Kandy, Sri Lanka

**Objectives:** We focused on risk factors like family history, social support for patients, alcoholic beverage consumption, tobacco use, etc. in CKDu to demonstrate critical causative agents in disease progression.

**Methods:** 293 patients were randomly recruited from Wilgamuwa, using KIDGO guidelines, and followed in consecutive renal clinics at Wilgamuwa Divisional hospital. Following a preliminary evaluation in the clinic, home visits were scheduled for a detailed interviewer-administered questionnaire with informed consent. A rapid progression in CKDu was defined as an annual decline of greater than 5 mL/min/1.73m<sup>2</sup> in eGFR.

**Results:** Patients with CKDu who progressed rapidly had a lower prevalence [10.92%, n=32,  $p < 0.05$ ] than those who progressed slowly. A positive maternal history of CKDu reduced the risk of rapid progression by 5% (OR = 0.95, 95% CI = 0.32 to 2.89), but having a father, mother, or both with kidney disease and a positive paternal history of renal disease increased the risk of rapid progression by 48% (OR = 1.48, 95% CI = 0.68 to 3.49 and OR = 1.48, 95% CI = 0.53 to 4.15, respectively). Among rapid CKDu progressors, the likelihood of having chronic kidney disease in at least one family member was 1.02 (OR = 1.02, 95% CI = 0.48 to 2.14). 65.87% of patients were involved in farming, and 71.48% had 30 years of history in farming. Although 36.52% of CKDu patients used alcohol, there was no correlation between alcohol use and rapid CKDu progression. A significant proportion of patients used at least one kind of tobacco (70.65%,  $p < 0.05$ ), and 10.14% of those patients indicated rapid progression. 92.78% ( $p < 0.001$ ) of patients received family support in relation to helping in medication adherence.

**Conclusions:** In light of the results, we showed that there is a contribution of family history to the disease progression. Moreover, factors like tobacco intake and patients who received family support to medication adherence had a significant effect on the disease progression.