

Abstract 20:

Self-management practices and control of diabetes among diabetics with early chronic kidney disease attending Nephrology and Medical Clinics at Teaching Hospital Jaffna

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Background and objective: Chronic kidney disease (CKD) is a major cause of mortality globally, including in Sri Lanka, with uncontrolled diabetes mellitus being a significant risk factor. This study aimed to assess self-management practices, control of diabetes and the association between self-management practices and diabetic control among diabetics with early CKD attending Nephrology and Medical Clinics at Teaching Hospital Jaffna.

Methods: A hospital-based descriptive cross-sectional study was conducted with 300 patients using interviewer-administered questionnaires. Data, analysed with SPSS software, focused on key self-management areas: glucose monitoring, eating behaviour, cooperation with the diabetes team, medication adherence, and physical activity. Optimal and suboptimal self-management practice was defined as a score of ≥ 5 and < 5 , respectively, according to a scoring system used in a previous study. Diabetic control was assessed with HbA1c or fasting blood sugar. Early CKD was defined as eGFR 30-60ml/min/1.73m². Chi-square test was used to measure associations.

Results: In total, 300 patients participated with a response rate of 100%. Optimal self-management practices were observed in the areas of medication adherence (89.7%, n=269), cooperation with the diabetes team (80.3%, n=241) and glucose monitoring (59%, n=177). Suboptimal management practices were identified in physical activity (79.7%, n=239) and eating behaviour (57.7%, n=173). HbA1c levels were assessed in 25.3% (n=76) patients; among them 34.2% (n=26) achieved controlled levels. Of the patients with a fasting blood sugar (58%, n=174), 34.5% (n=60) had controlled levels, while among the 17.7% (n=53) with a post-prandial blood sugar test, 64.2% (n=34) had controlled levels. The study found a near association between practices of eating behaviour and diabetic control (p=0.061).

Conclusions and recommendations: The study findings suggest that self-management practices in eating behaviours and physical activity are suboptimal among patients with early CKD. Structured dietary counselling, nutritional and physical activity interventions should be prioritized to improve self-management and glycaemic control in this population.

Keywords: Self-management practices, Diabetic control, Chronic kidney diseases, Jaffna