

Quality of Life of Chronic Kidney Disease Patients in High Prevalence Areas of Chronic Kidney Disease of Uncertain Etiology in Sri Lanka: KDQOL- SF-36 Based Analysis

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Thousands of patients with chronic kidney disease (CKD) have been reported over the past two decades, primarily in North Central and Uva provinces of Sri Lanka. Given that the majority are in the late phases of CKD, effective patient management is crucial for preserving their quality of life. The study was performed to assess the Quality of Life (QOL) of CKD patients using the KDQOL- SF-36 questionnaire and functional methods. A total of 180 CKD patients were selected from Thanthirimale and Wilachchiya, Anuradhapura; 9 patients in stage 1, 26 in stage 2, 26 in stage 3A, 53 in stage 3B, 46 in stage 4 and 18 patients in stage 5. Basic demographic characteristics, clinical information, physical measures like Body Mass Index (BMI) and responses to SF-36 questionnaire were collected from all patients. The Short Physical Performance Battery (SPPB: group of measures that combines the results of the gait speed, chair stands, and balance tests) was also measured. The CKD cohort was predominantly males (63%) with a mean (\pm SD) age of 62.25 (\pm 9.63) years. Mean serum creatinine levels in men and women were 205(\pm 107.4) and 154.5 (\pm 100.6) μ mol/L respectively. The mean estimated glomerular filtration rate (eGFR) for the entire cohort was 40.36 (\pm 22.33) ml/min/1.73m². The average BMI was 21.4 (\pm 3.8) and 23.8 (\pm 5) in males and females respectively. Significant Pearson correlations were observed between SPPB ($p < 0.01$, $r = 0.494$), serum creatinine level ($p < 0.01$, $r = -0.253$), eGFR ($r = 0.454$, $p < 0.01$) and the total score of SF-36. Multiple regression analysis was conducted on significantly correlated variables where age, CKD stage and total score of SF-36 were identified as determinants of QOL of the CKD population. Low total score of SF-36, older age and low SPPB score were identified as determinants of QOL in the selected CKD population.

Keywords: Chronic Kidney Disease, Quality Of Life, Short Physical Performance Battery, Serum Creatinine, Egfr