

PATIENT-REPORTED SOCIAL FRAILITY AND ITS RELATIONSHIP WITH DEPRESSION IN END-STAGE RENAL DISEASE

Mahrukh Riaz,¹ Mahtab Asif,¹ Muhammad Umar Rafique,² Abdul Rehman Arshad,¹ Muhammad Iqbal¹

¹ Combined Military Hospital Lahore, ² CMH Lahore Medical College Lahore

ABSTRACT

Objective: To assess the relationship between frailty and depression in End-Stage Renal Disease patients

Study Design: Observational Cross-sectional Study

Place and Duration of Study: Department of Dialysis and Nephrology, Combined Military Hospital Lahore, from October to December 2025.

Methodology: Patients aged > 13 years of either gender with ESRD were included. All patients were evaluated for depression using the Public Health Questionnaire-9 and for frailty using the Social Frailty Index-7 questionnaire. The effect modifiers such as age, duration of dialysis, concern regarding serum creatinine, fear of disability, dialysis-associated fatigue, and haematological parameters were also assessed using binary logistic regression analysis.

Results: A total of 150 patients with a mean age of 56.93 ± 13.78 years were enrolled. Among these, 106 (70.6%) were males, 61 (40.67%) had diabetes mellitus, 71 (47.33%) often felt fatigued, 103 (68.67%) had unintentional weight loss, and 59 (39.33%) reported slight concern about serum creatinine levels. In the multivariate regression model, increased fatigue frequency (adjusted OR 5.15, 95% CI 1.58–16.84; $p = 0.007$) and concern about serum creatinine levels (adjusted OR 6.59, 95% CI 1.43–30.47; $p = 0.016$) remained independent predictors of depression. The patients who were classified as frail had markedly higher odds of depression (adjusted OR 105.74, 95% CI 13.38–835.00; $p < 0.001$) compared with non-frail individuals. Associations observed for education, income, fear of disability or death, unintentional weight loss, polypharmacy, and serum albumin were no longer significant after adjustment for confounders.

Conclusion: Frailty, fatigue, and psychological concern about serum creatinine levels were independently associated with depression in ESRD patients

Keywords: Depression, Frailty, Patient reported outcome measures, Quality of life, Renal Replacement Therapy

