DIALYSIS. EPIDEMIOLOGY, OUTCOME RESEARCH, HEALTH SERVICES RESEARCH - 1



SIMPLE FRAIL SCALE OUTPERFORMS OTHER FRAILTY INSTRUMENTS REGARDING DIALYSIS COMPLICATIONS IN RURAL CHRONIC DIALYSIS PATIENTS

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Introduction and Aims: Frailty has been recognized as an important geriatric outcome predictor. However, few studies focus on its influence on rural patients undergoing chronic dialysis. Comparison of different self-report questionnaires for frailty assessment among these patients has not been attempted before.

Methods: A prospectively enrolled rural chronic dialysis cohort was used for analysis. Six types of self-report questionnaires were administered to these patients. Correlation analyses between questionnaire results and clinical parameters/dialysis complications, including anemia, inflammation, and dyselectrolytemia were performed. Variables demonstrating significant correlations were further tested in multiple regression

analyses to determine their associations.

Results: Six types of questionnaire (Strawbridge questionnaire, Edmonton Frail Scale, simple FRAIL scale, Groningen Frail Indicator, G8 questionnaire, and Tilburg Frail Indicator) were provided to rural patients undergoing chronic dialysis. Scores from each questionnaire were significantly associated with each other, except the G8 questionnaire. Scores from the simple FRAIL scale correlated significantly with age (p=0.02), female gender (p=0.03), higher Liu's comorbidity index (p=0.02), lower serum albumin (p=0.03) and creatinine levels (p<0.01), and higher ferritin levels (p=0.02) (figure). The other 5 questionnaires did not show consistently significant relationships with important dialysis-related complications. Multivariate linear regression analysis confirmed an independently negative association between serum albumin and the simple FRAIL scale scores (p=0.01).

Conclusions: This is the first study establishing the utility of different self-report questionnaires for assessing frailty in chronic dialysis patients. This simple FRAIL scale demonstrated a stronger relationship with important dialysis-related complications.

