

CHRONIC KIDNEY DISEASE AND DEPRESSION: RESULTS FROM THE NATIONAL HEALTH AND NUTRITION EXAMINATION SURVEY

Ana C. Ricardo¹, Michael J. Fischer^{1,2,3} and James P. Lash¹

¹Department of Medicine, Section of Nephrology, University of Illinois, Chicago, IL; ²Jesse Brown VAMC/University of Illinois Medical Center, Chicago, IL; ³Center for the Management of Complex Chronic Care, Hines VA Hospital, Hines, IL.

Depression is known to be associated with chronic conditions such as diabetes and end-stage renal disease (ESRD); however, its relationship with early stages of chronic kidney disease (CKD) is less well known. The purpose of this study is to examine the association between CKD and depressive affect.

We conducted a cross-sectional analysis of adult subjects in the National Health and Nutrition Examination Survey (NHANES) from 2005 through 2006. Depressive affect was measured by the Patient Health Questionnaire (PHQ-9). A PHQ-9 score > 9 was considered to be indicative of depressive affect, consistent with existing literature in ESRD. CKD was defined as an estimated glomerular filtration rate by MDRD Study equation of < 60 mL/min/1.73m² or the presence of microalbuminuria (>30mg/g).

Among 4,759 subjects in our study sample, 802 (14.8%) met criteria for CKD. The prevalence of depressive affect was 6.7% in subjects with CKD and 5.2% in subjects without CKD (P=0.2787). The prevalence of depressive affect was higher among individuals with CKD compared to those without CKD across age, gender, race/ethnicity, and socioeconomic subgroups; however, these differences were not statistically significant. In multiple logistic regression analysis, CKD was not significantly associated with depressive affect (adjusted Odds Ratio = 0.90, 95% confidence interval: 0.60, 1.34).

In this representative sample of the United States population, there was a trend for a higher prevalence of depressive affect in individuals with CKD than in those without CKD. After adjustment for sociodemographic and clinical factors, CKD did not appear to be independently associated with depressive affect.