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The Prevalence of Adverse Childhood Experiences in Adults with Chronic Kidney Disease and the Effects on Health, Quality of Life and Coping Skills

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Abstract

Background. Adverse childhood experiences (ACEs) are traumatic events of physical and emotional neglect and abuse, household dysfunction, caregiver instability, community violence, and collective trauma. The prevalence of ACEs is higher in people with chronic disease, but limited data is available on the prevalence of ACEs in people experiencing chronic kidney disease (CKD).

Methods. This case-control study used the Adverse Childhood Experiences International Questionnaire to collect and compare ACE prevalence from people diagnosed with CKD (case) and people without CKD (control). ACE scores were coded on a scale from 0-13. Fisher's exact test determined the difference between groups within a 95% confidence interval. Logistic regression examined group differences for each ACE sub-type and adjusted for sociodemographic confounders.

Results. Thirty-four people with CKD and 29 controls were included in the analysis. Participants were predominantly female (66.7%), white (84.1%), had a college degree or higher (73.0%), were full-time employees (54.0%), and had a mean age of 36.1 years old (\pm 8.6, age-range 19.6 to 50.0 years). ACE scores for CKD ($M = 6.7$, $SD = 3.2$) compared to control group ($M = 5.0$, $SD = 2.4$) demonstrated significantly higher ACE scores, $t(61) = 2.4$, $p = .02$. People with CKD had a higher prevalence in 11 of the 13 ACE trauma sub-types with the highest reported categories including bullying (91.2%), emotional abuse (82.4%), physical abuse (70.6%), household violence (70.3%), and caregiver mental illness (64.7%). Odds ratios for having a CKD diagnosis were significant ($p < .05$) for emotional neglect (OR; 8.84), caregiver mental health (OR; 4.81), sexual abuse (OR; 4.52), and bullying (OR; 5.55).

Conclusions. This pilot research suggests that people with CKD experience a higher prevalence of childhood adversity and at greater frequencies than people without CKD.

Further research is needed to explore how ACEs affect disease occurrence and management of people with CKD.