Substantial regional differences exist in the treatment for end-stage kidney disease in older adults

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There is substantial regional variation in treatment practices for care of older adults with end-stage renal disease (ESRD), including receipt of hospice care and discontinuation of dialysis before death, according to a study in the July 14 issue of *JAMA*.

"Patients aged 75 years or older currently represent one of the fastest growing groups within the ESRD population. Average Medicare costs for an older patient receiving long-term dialysis exceed $100,000 during the first year after initiation of therapy," the authors write. They add that little is known about treatment practices for older adults with ESRD and the extent to which these practices vary regionally.

Ann M. O'Hare, M.D., M.A., of the University of Washington and VA Puget Sound Healthcare System, Seattle, and colleagues examined the incidence of ESRD and end-of-life care practices among older adults with ESRD across regions with differing intensities of care. The researchers used data from a national ESRD registry to identify a group of 41,420 adults (of white or black race), ages 65 years or older, who started long-term dialysis or received a kidney transplant between June 1, 2005, and May 31, 2006. Regional end-of-life intensity of care was defined using an index from the Dartmouth Atlas of Healthcare.

The researchers found that among whites, the incidence of ESRD was progressively higher in regions with greater intensity of care and this

trend was most pronounced at older ages. "Among blacks, a similar relationship was present only at advanced ages [men 80 years of age or older and women 85 years of age or older]. Patients living in regions in the highest compared with lowest quintile of end-of-life intensity of care were less likely to be under the care of a nephrologist [a physician who sees and treats people with kidney diseases] before the onset of ESRD (62.3 percent vs. 71.1 percent, respectively) and less likely to have a fistula (created by a surgical procedure that involves connecting an artery to a vein, usually in the forearm, and providing access for dialysis) (vs. graft or catheter) at the time of hemodialysis initiation (11.2 percent vs. 16.9 percent)," the authors write.

Overall, 51 percent (n = 21,190) of patients died within 2 years of ESRD onset, ranging from 47.1 percent in regions in the lowest end-of-life expenditure index quintile to 52.6 percent in regions in the highest quintile. "Among decedents, dialysis was discontinued prior to death in 44.3 percent of those living in regions in the lowest end-of-life expenditure index quintile compared with 22.2 percent of those living in regions in the highest quintile," the researchers write. "From the lowest to the highest end-of-life expenditure index quintile, the proportion of patients who received hospice care before death ranged from 33.5 percent to 20.7 percent, and the proportion who died in the hospital ranged from 50.3 percent to 67.8 percent."

The authors add that these pronounced regional differences in practice were not explained by differences in patient characteristics measured at the onset of ESRD.

"There is substantial, unexplained regional variation in the care of older adults with ESRD, both prior to ESRD onset and prior to death. This finding underlines the importance of a compre¬hensive informed and ongoing consent process for ESRD treatment based on available evidence and clinical practice guidelines. Such efforts will help to ensure

that treatment decisions— including those to initiate and to discontinue dialysis-—are based on patient preferences and values rather than regional practice style. Ultimately, improved decision making for dialysis initiation and discontinuation may serve as a valuable model for the use of other high-cost, intensive treatments in older adults," the authors conclude.

More information: JAMA. 2010;304[2]:180-186