

Predialysis nephrology care and dialysis-related health outcomes among older adults initiating dialysis



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Abstract (600 word limit)

Background : Predialysis nephrology care is associated with lower mortality and rates of hospitalization following chronic dialysis initiation. Whether more frequent predialysis nephrology care is associated with other favorable outcomes for older adults is not known.

Methods: Retrospective cohort study of patients ≥ 66 years who initiated chronic dialysis in 2000–2001 and were eligible for VA and/or Medicare-covered services. Nephrology visits in VA and/or Medicare during the 12-month predialysis period were identified and classified by low intensity (< 3 visits), moderate intensity (3–6 visits), and high intensity (> 6 visits). Outcome measures included very low estimated glomerular filtration rate, severe anemia, use of peritoneal dialysis, and receipt of permanent vascular access at dialysis initiation and death and kidney transplantation within two years of initiation. Generalized linear models with propensity score weighting were used to examine the association between nephrology care and outcomes.

Results: Among 58,014 patients, 46 % had none, 22 % had low, 13 % had moderate, and 19 % had high intensity predialysis nephrology care. Patients with a greater intensity of predialysis nephrology care had more favorable outcomes (all $p < 0.001$). In adjusted models, patients with high intensity predialysis nephrology care were less likely to have severe anemia (RR = 0.70, 99 % CI: 0.65–0.74) and more likely to have permanent vascular access (RR = 3.60, 99 % CI: 3.42–3.79) at dialysis initiation, and less likely to die within two years of dialysis initiation.

Conclusion: In a large cohort of older adults treated with chronic dialysis, greater intensity of redialysis nephrology care was associated with more favorable outcomes.

Importance of Research(200 words)

Several studies have demonstrated that absent, infrequent, or late nephrology care prior to dialysis initiation for patients with end-stage kidney disease (ESKD) is associated with significantly higher subsequent mortality and prolonged

hospitalizations. Among prior studies that included older adults, neither the frequency of predialysis nephrology care obtained nor detailed information about a variety of clinical outcomes was reported. We conducted a retrospective cohort study of dialysis-related health outcomes at the time of dialysis initiation and during the two-year period afterwards among older adults who initiated chronic dialysis between January 1, 2000 and December 31, 2001 from our previously reported cohort. Episodes of outpatient nephrology care as well as other utilization (e.g., primary care, hospitalizations) during the predialysis period were identified using both the Medicare Carrier files and VA administrative data. Patients who received a greater intensity of predialysis nephrology care had a higher prevalence of permanent vascular access (both fistula and graft) and a lower prevalence of severe anemia and very low eGFR at the time of dialysis initiation.

Biography: (200 words)

I am Dr. Simona Di Francesco, Director and Founder, UniFedericiana People's University, Cosenza, Italy. Graduated of University G. D'Annunzio Chieti-Pescara, School of Medicine and Surgery, Italy. I passed post graduate from University G. D'Annunzio Chieti-Pescara, Italy. I completed my PhD in Clinical and Experimental Medicine and Surgery (CEMS), School of Advanced Studies, Department of Medicine and Aging. University G. D'Annunzio Chieti-Pescara. I have been done research on Curriculum Metabolism and Vascular Damage and my Title of Research was Metabolic Alterations and Vascular Damage in Prostate Cancer.

Information of institute & lab

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