



To assess national trends in initial hemodialysis access with respect to race/ethnicity stratified by comorbid disease, nephrology care, and medical insurance status within the US Renal Data System” Zarkowsky et al 2015.

Reference:

Zarkowsky, D.S., Arhuidese, I.J., Hicks, C.W., Canner, J.K., Qazi, U., Obeid, T., Schneider, E., Abularrage, C.J., Freischlag, J.A. and Malas, M.B. (2015) Racial/Ethnic Disparities Associated With Initial Hemodialysis Access. JAMA Surgery. April 29th. .

Racial disparities associated with initial hemodialysis access <http://ctt.ec/pqf2W+> @ivteam #ivteam

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Abstract:

IMPORTANCE: Superior outcomes have been established with the use of an arteriovenous fistula (AVF) at first hemodialysis. However, considering the influence of comorbidities, medical insurance, and specialist care, racial/ethnic differences in the patterns of utilization of AVFs are unknown and deserve evaluation.

OBJECTIVE: To assess national trends in initial hemodialysis access with respect to race/ethnicity stratified by comorbid disease, nephrology care, and medical insurance status within the US Renal Data System.

DESIGN, SETTING, AND PARTICIPANTS: A retrospective analysis of all patients with end-stage renal disease in the US Renal Data System who initiated hemodialysis between January 1, 2006, and December 31, 2010. Univariable statistics (χ^2 test and analysis of variance) and logistic regression were used to compare racial/ethnic groups (white vs black vs Hispanic). Multivariable logistic regression and propensity score-matching techniques were used to evaluate hemodialysis access rates between patients of different races/ethnicities with comparable characteristics.

MAIN OUTCOMES AND MEASURES: Utilization rates of AVF, arteriovenous graft, and intravascular hemodialysis catheter.

RESULTS: In this cohort of 396 075 patients, more white patients initiated hemodialysis with an AVF than black patients or Hispanic patients (18.3% vs 15.5% and 14.6%, respectively; $P < .001$). Black patients and Hispanic patients initiated hemodialysis with an AVF less frequently despite being younger and having less coronary artery disease, chronic obstructive pulmonary disease, and cancer than white patients with an AVF. When stratified by medical insurance status, black patients (odds ratios, 0.90 [95% CI, 0.82-0.98] for uninsured and 0.85 [95% CI, 0.84-0.87] for insured) and Hispanic patients (odds ratios, 0.72 [95% CI, 0.65-0.81] for uninsured and 0.81 [95% CI, 0.79-0.84] for insured) persistently initiated hemodialysis with an AVF less frequently than white patients ($P < .05$ for all). Arteriovenous fistula utilization at initial hemodialysis was lower among black patients (odds ratio, 0.81 [95% CI, 0.78-0.84]) and Hispanic patients (odds ratio, 0.86 [95% CI, 0.82-0.90]) compared with white patients within the category of patients who had nephrology care for longer than 1 year ($P < .001$ for all).

CONCLUSIONS AND RELEVANCE: Black patients and Hispanic patients tend to initiate hemodialysis with an AVF less frequently than white patients despite being younger and having fewer comorbidities. These disparities persisted independent of factors that drive health access for fistula placement, such as medical insurance status and nephrology care. The sociocultural underpinnings of these disparities deserve investigation and redress to maximize the benefits of initiating hemodialysis via fistula in patients with end-stage renal disease irrespective of race/ethnicity.

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