

Clinical Attributes Differ Among Hemodialysis Patients of Various Racial and Ethnic Groups

Allen R. Nissenson, MD, FACP, FASN^{1*}; Steven M. Wilson, PhD²; Joe Weldon, MBA²

(1) Office of the Chief Medical Officer, DaVita Inc., Lakewood, CO, (2) DaVita Clinical Research, Minneapolis, MN

INTRODUCTION

Clear disparities exist in access to and delivery of care to racial and ethnic minorities with CKD (Norris K, Nissenson AR et al, *CJASN* 2008) which may also extend to ESRD. Very little has been published, however, on comparative characteristics and clinical indicators by racial and ethnic group. The extensive DaVita® clinical database provides an opportunity to better understand such issues to target interventions specific to individual patient needs.

The objective was to evaluate potential health-related contributing factors for ESRD health disparities by providing a description of the clinical attributes of a nationwide hemodialysis population in 2008 by racial and ethnic group.

METHODOLOGY

- We conducted an analysis in the DaVita database to describe potential health-related contributing factors for ESRD health disparities using 2008 data by racial and ethnic group (Table 1).

RESULTS

Table 1. Clinical attributes by race and ethnicity

	White	Black	Hispanic	p-value	Disadvantaged Group(s)
(mean±SD)	N=42131	N=40469	n=17322		
Age	64.6±15.0	57.2±14.5	57.6±15.2	<0.0001	White
% Diabetic	65.9	66.3	78.2	<0.0001	Hispanic
Charlson Index	6.0± 2.1	5.3± 2.2	5.6± 2.1	<0.0001	White
BMI (kg/m²)	29.0±7.5	29.4±7.7	28.5±6.4		
SBP (mmHg)	148.1±26.5	153.8±27.6	154.1±26.1	<0.0001	Black/Hispanic
DBP (mmHg)	76.0±16.0	83.3± 17.4	79.5± 15.8	<0.0001	Black/Hispanic
Albumin (g/dl)	3.8± 0.5	3.8± 0.5	3.9± 0.5		
Cholesterol (mg/dl)	148.8±42.5	154.2±41.4	147.1±41.4		
Calcium (mg/dl)	9.1± 0.6	9.0± 0.7	9.0± 0.7		
Phosphorus (mg/dl)	5.2± 1.6	5.2± 1.6	5.2± 1.6		
Hb (g/dl)	11.8±1.3	11.7±1.4	11.9±1.3		
Home Modality %	12.4	7.0	7.7	<0.0001	Black/Hispanic

CONCLUSIONS

- Whites were older and had greater co-morbidity overall (Table 1).
- Blacks and Hispanics were more likely to have an increased prevalence of diabetes and high blood pressure.
- Other clinical attributes, such as BMI, serum albumin, cholesterol, calcium, phosphorus and hemoglobin, did not differ among groups.
- Similar differences were noted for both 2006 and 2007.

KEY LEARNINGS

- ✓ Important differences in co-morbid conditions exist among Black, Hispanic, and White ESRD patients which in turn may drive outcomes and resource utilization.
- ✓ As more Blacks and Hispanics go on dialysis, there may be a shift in demographics.
- ✓ Specific co-morbidities may require more intensive management by racial group. This includes addressing the higher prevalence of diabetes in Hispanics, and the increased rates of hypertension in Blacks and Hispanics.

We thank the patients who participated in this study and DaVita Clinical Research® (DCR) for support in preparing the analysis and this poster. DCR is committed to advancing the knowledge and practice of kidney care.

*Correspondence: Allen.Nissenson@davita.com

