

The 2009 Annual Report of the OPTN and SRTR

Access and Outcomes among Minority Transplant Patients, 1999-2008

Overview

- Coincident with an increasing national interest in equitable health care, a number of studies have described disparities in access to solid organ transplantation for minority patients. In contrast, relatively little is known about differences in posttransplant outcomes between patients of specific racial and ethnic populations.
- In this chapter, a review is provided of trends in access to solid organ transplantation and posttransplant outcomes by organ type, race, and ethnicity. In addition, an analysis is presented of categories of factors that contribute to the racial/ethnic variation seen in kidney transplant outcomes.
- Disparities in minority access to transplantation among wait-listed candidates are improving, but persist for those awaiting kidney, simultaneous kidney and pancreas, and intestine transplantation. In general, graft and patient survival among recipients of solid organ transplants is highest for Asians and Hispanic/Latinos, intermediate for Whites, and lowest for African-Americans.
- Although much of the difference in outcomes between racial/ethnic groups can be accounted for by adjusting for patient characteristics, important observed differences remain. Age and duration of pretransplant dialysis exposure emerge as the most important determinants of survival in an investigation of the relative impact of center-related versus patient-related variables on kidney graft outcomes.

The table on the following page shows the incremental effect of different categories of data available at time of transplant on 5-year deceased donor kidney graft survival. It is included in Chapter X of this year's report.

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Relative Risk of Graft Failure at 5 Years by Race/Ethnicity among Deceased Donor Kidney Transplant Recipients, 2000-2008

Factor¹	White RR	African- American RR*	Hispanic/ Latino RR*	Asian RR*
No adjustment	1.00	1.35	0.83	0.75
+ Center factors	1.00	1.29	0.82	0.74
+ OPO factors	1.00	1.30	0.83	0.75
+ Organ factors	1.00	1.29	0.84	0.73
+ Transplant factors	1.00	1.23	0.84	0.72
+ Treatment protocol	1.00	1.24	0.84	0.73
+ Socioeconomic factors	1.00	1.19	0.79	0.73
+ Dialysis time	1.00	1.13	0.77	0.71
+ Disease burden	1.00	1.07	0.74	0.71
+ Age	1.00	1.11	0.77	0.73
+ Demographic factors	1.00	1.12	0.77	0.74

*p<0.05.

¹See Table X-3 for the list of variables included in each category of variables.

Source: OPTN/SRTR special analysis, August 2009; data as of February 2009

Deceased donor kidney graft survival at 5 years was best for Asians and Hispanic/Latinos, intermediate for Whites, and poorest for African-Americans. These differences were not explained in their entirety by the data (center factors, OPO factors, organ factors, transplant factors, treatment protocols, socioeconomic factors, dialysis time, disease burden, and patient demographics) at the time of transplant currently available in the OPTN/SRTR database. When compared with Whites, the unadjusted relative risks (RRs) seen in the first row varied from 0.75 for Asians to 1.35 in African-Americans. In the fully adjusted models (last row), this range is compressed to an RR of 0.74 for Asians and 1.12 in African-Americans. Thus, although much of the difference in outcomes between racial/ethnic groups can be accounted for by adjusting for patient characteristics, important observed differences remain.