

Racial Differences in Rates of Transplantation and Waitlist Mortality among HIV+ Kidney Transplant Candidates

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Introduction

- Excellent outcomes have been reported among HIV+ kidney transplant (KT) recipients
- HIV-associated nephropathy is the third leading cause of end-stage renal disease in African-Americans (AA)
- OPTN currently does not collect HIV-status at time of listing
- No study has examined rates of transplantation, waitlist mortality, or racial differences among HIV+ KT candidates on a national level

Methods

- **Study population** Adult HIV+ KT listings between 1/1/2001 and 10/1/2012 (obtained from SRTR, n=1000)
- **Analysis Design**
 - IMS pharmacy fills (01/01/2001-10/01/2012) were linked with SRTR data
 - Candidates with ≥ 1 antiretroviral fill unique to HIV treatment prior to or while on kidney waitlist were identified
 - 94% of candidates had >1 HIV+ medication fill, and simultaneous listings were collapsed
 - Candidates were followed from time of listing to KT, death, or administrative end of study
 - Descriptive statistics were used to characterize rates of transplantation and waitlist mortality

Results

Table 1. Median time to transplant and waitlist mortality rate by racial group

	White (N)	AA (N)	Hispanic (N)	Other (N)
Median Time to Transplant (years)				
2001-2004	3.6 (31)	3.8 (194)	3.5 (22)	6.1 (2)
2005-2008	1.9 (113)	3.6 (342)	3.3 (44)	1.7 (6)
2009-2012	1.2 (50)	2.3 (178)	1.7 (14)	0.8 (4)
Waitlist Mortality Rate (per 100 patient-years)				
2001-2004	6.7 (31)	7.9 (194)	1.2 (22)	0.0 (2)
2005-2008	16.6 (113)	9.2 (342)	12.1 (44)	30.5 (6)
2009-2012	29.5 (50)	15.4 (178)	5.6 (14)	0.0 (4)

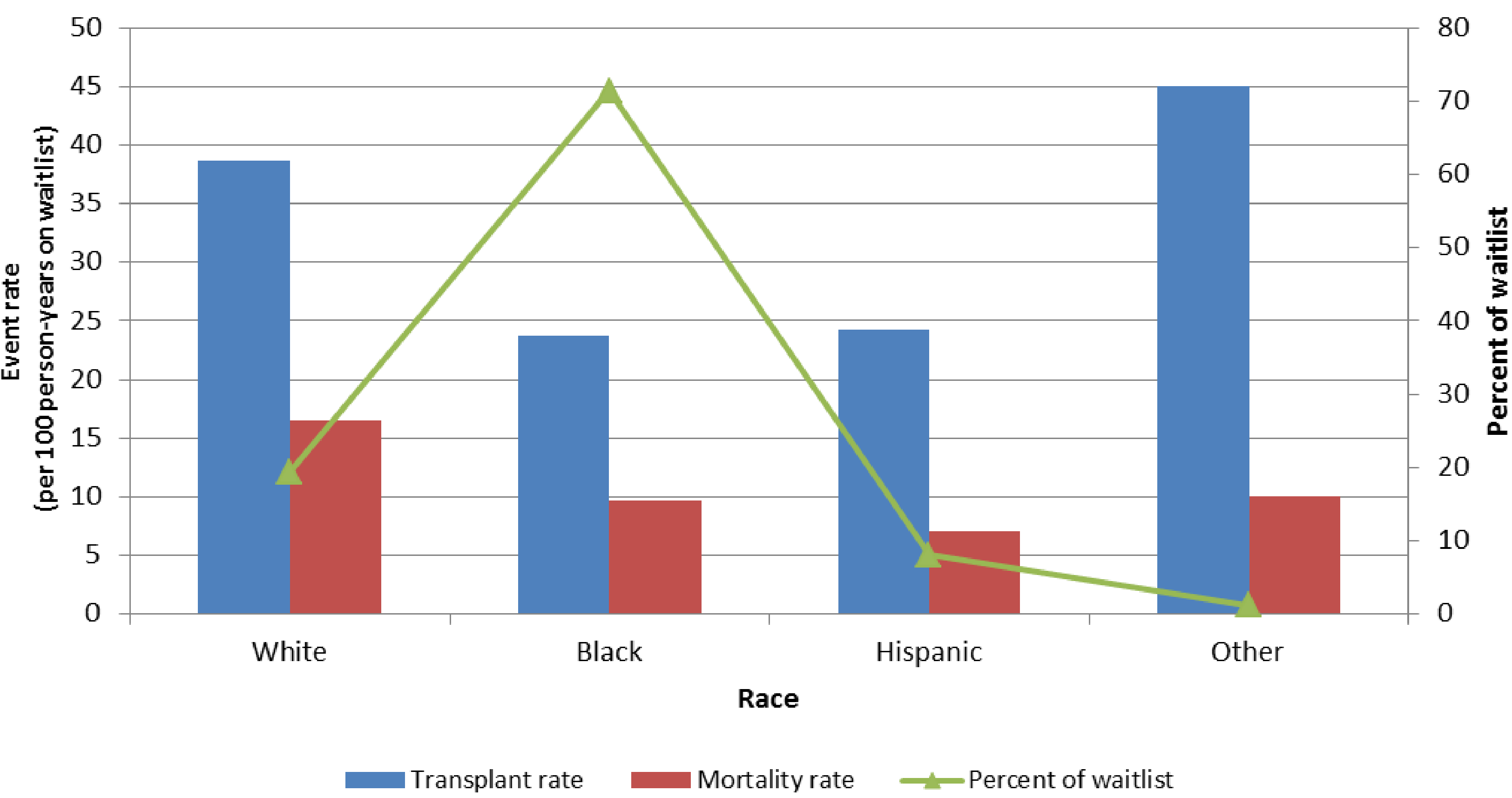


Figure 1. Percent of waitlist, transplant rate, and mortality rate by ethnicity

- Median time to transplant among HIV+ candidates has decreased from 3.66 to 1.85 years during the last decade; this trend holds within race groups (Table 1)
- Waitlist mortality has increased over time for most races (Table 1; Figure)
- Transplant rates are lower among AA, and waitlist mortality is increased among whites in comparison to other racial groups which is consistent with the general HIV-uninfected waitlist population

Table 2: Demographics of HIV+ KT candidates

Characteristics	HIV positive (n=1,000)
Number (%)	
Age at listing (years)	
18-34	93 (9.3%)
35-49	555 (55.5%)
50-64	326 (32.6%)
65+	26 (2.6%)
Gender	
Male	777 (77.7%)
Female	223 (22.3%)
Race	
White	192 (19.2%)
African-American	715 (71.5%)
Other	93 (9.3%)
Cause of kidney disease	
Diabetes	144 (14.4%)
Hypertension	326 (32.6%)
GN	99 (9.9%)
Other	431 (43.1%)
Dialysis Status at listing	
Pre-emptive	75 (7.5%)
On dialysis	925 (92.5%)
PRA > 80%	106 (10.6%)
Willing to accept HCV+ kidney	133 (13.3%)

- AAs comprise a majority of HIV+ waitlist candidates yet have longer waiting times and lower transplant and mortality rates (Table 2)

Conclusion

- AAs have the longest waiting times despite comprising the majority of the HIV+ waiting list and have lower rates of transplantation
- These findings suggest that racial disparities observed in general uninfected population persist in the HIV+ population

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