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Permalink

<https://escholarship.org/uc/item/2277674m>

Journal

AMERICAN JOURNAL OF KIDNEY DISEASES, 59(4)

ISSN

0272-6386

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Publication Date

2012

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Peer reviewed

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EXAMINING SURVIVAL GAIN OF THE ELDERLY KIDNEY TRANSPLANT RECIPIENTS COMPARED TO GENERAL POPULATION IN THE US

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Individuals older than 65 years constitute the fastest growing population group in US. Similarly, the median age of kidney transplant recipients (KTR) has increased. The survival benefit of the elderly from kidney transplantation has not been clearly quantified. We compared the mortality rates and ratios across 3 age groups (15-<65, 65-<75 and ≥75 years old) between the KTRs (derived from the Scientific Registry of Transplant Recipients 2001-2006) and the general population (GP) using US population in 2005 (derived from the National Vital Statistics System). After calculating the crude mortality rates in KTRs and the GPs across 3 age groups, the relative risk (RR) of death was calculated for the 2 elderly groups compared to 15-<65 years (reference). Additionally, the ratio of mortality each RR for KTR to GP was estimated in each group. In our study the KTRs (n=155,005) were 45±16 years old and included 40% women and 19% diabetics. Even though kidney transplanted patients aged 65-<75 years and ≥75 years had a 75% and 96% higher mortality risk, respectively, than 15-<65 year-old group, the age-related rise in mortality was substantially lower across KTR than GP (see Table):

AGE GROUP	15-<65	65-<75	≥75
Kidney Transplant Recipients (KTR) (2001-06) (n=155,005)			
Crude death rates multiplied by 1000	157 (155-159)	274 (267-281)	307 (282-332)
RR	1.00	1.75 (1.72-1.77)	1.96 (1.82-2.09)
General Population (GP) (2005)			
Crude death rates multiplied by 1000	3.1 (2.9-3.3)	21.4 (20.7-22.1)	76.6 (75.4-77.8)
RR	1.00	6.9 (6.7-7.1)	24.7 (23.6-26.0)
RR ratio KTR:GP	1.00	0.25 (0.24-0.26)	0.08 (0.07-0.09)

Compared to GP, elderly KTR 65-<75 and ≥75 years exhibit 75% and 92% survival gain, respectively. The survival gains of kidney transplantation in the elderly warrant additional studies.