

# Gender Disparities and Financial Barriers to Living Kidney Donation

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Since the early history of living donor kidney transplantation, women have made up a higher percentage of living donors than men.<sup>1,2</sup> This disparity is likely multifactorial, including the higher rates of ESRD in men (such that unaffected family members are more likely to be women) and sex differences in rates of comorbidities (e.g., hypertension) that limit donor candidacy. Additionally, studies show that women score higher on most measures of values associated with helping others and have higher voluntarism rates.<sup>3,4</sup>

Of concern, after 2004, living donation rates in the United States declined. Many reasons have been suggested: an increasingly older transplant population with fewer potential healthy donor candidates, increasing rates of obesity and hypertension in the general population, kidney allocation system changes, and inefficient donor education and evaluation processes.<sup>5</sup> Additionally, Gill *et al.*,<sup>6</sup> using United States registry data, previously reported that the decline in living donation rates was associated with the United States recession and that this decline was limited to donors in lower-income groups.

In this issue of the *Journal of the American Society of Nephrology* (JASN), Gill *et al.*<sup>7</sup> have extended their earlier observations to show an association between living donation rates and donors' sex and socioeconomic status. In contrast to previous studies, they adjusted for donor- and population-level differences in age, race, and median household income. In addition, given that the differences in ESRD rates between men and women might affect donor candidacy, they adjusted for age and the race-standardized rate of ESRD in men and women. They grouped zip codes, used as a surrogate for median household income, into quartiles. From 2004 to 2015, they found that donation rates remained stable in women but

declined in men, further increasing gender disparities. For both men and women, donation rates were more stable in the higher-income quartiles than in the lower-income quartiles. The most precipitous decline in donation, however, was in men from lower-income groups. Gill *et al.*<sup>7</sup> suggest that the recession may have had a greater effect on men's ability to donate, because in the United States, a larger proportion of men are considered the primary household income earners. Moreover, a larger proportion of men in the United States do manual labor—which typically requires longer recovery times postdonation, often without employer-paid benefits.<sup>8,9</sup>

It has previously been established that living donors incur significant out-of-pocket costs.<sup>10–12</sup> Many donors, especially those from low-income groups, also lack paid leave to cover time off work for donation and recovery. In addition, some lack job security protections; others describe problems with access to care and life insurability. For many, such expenses are a major burden.<sup>10,11</sup> For other potential donors, such expenses may be a deterrent to donation.<sup>13</sup> The observations by Gill *et al.*<sup>7</sup> in this issue of the JASN suggest that financial concerns not only burden potential and actual donors but also affect United States donation rates and donor demographic characteristics.

Financial barriers for donors certainly may have become more severe during the most recent United States recession. However, such barriers existed before the recession and remain a major problem today, despite ongoing recovery of the United States economy. Today, donation rates remain below the prerecession levels.

Living donors are heroes; they undergo a major operation with associated risks and no medical benefit. Irrespective of donation rates, donors should not also have to pay donation-related expenses. Many countries have enacted policies to ensure that all living donation-related costs are reimbursed or directly covered and that donors' jobs and a living wage are protected during recovery.<sup>14</sup> The United States could and should build from those models. In 2014, a Best Practices in Living Donation consensus conference (supported by 11 professional societies, including the American Society of Nephrology) recommended designing and implementing policies in the United States to support living donor financial neutrality.<sup>8,12</sup> Since then, more granular definitions of “financial neutrality” and associated implementation strategies have been proposed.<sup>15</sup> The medical community has reached the consensus that living donor financial neutrality is the “right” thing to do. The body of research from Gill *et al.*<sup>6,7</sup> suggests that eliminating financial barriers may also decrease gender disparities in living kidney donation.

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## DISCLOSURES

None.

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See related article, “The Change in Living Kidney Donation in Women and Men in the United States (2005–2015): A Population-Based Analysis,” on pages xxx–xxx.