Received: 2 January 2020 | Revised: 22 January 2020 | Accepted: 2 February 2020

DOI: 10.1111/ajt.15807

EDITORIAL

Ethical principles governing organ transplantation apply to paired exchange programs

The transplant community has focused on strategies for the safe and ethical expansion of living kidney donation, including innovations relevant to paired exchange programs.[1] The National Kidney Registry (NKR) is the largest exchange program in the United States, yet there has not been uniform participation from all transplant programs. In this issue of *AJT*, Verbesey et al provide the experience of living donor graft losses from transplants arranged by the NKR over a decade.[2] The rate of early graft loss was low and the NKR reports on a new policy that provides recipients of kidneys that have sustained procurement errors leading to a graft loss, the priority of receiving an end-chain kidney. There are centers that do not participate in the NKR and the hope is that this prioritization will belay concerns of surgeons regarding procurements performed at outside centers. In this context it is important to recognize that the determination that a procurement injury resulted in graft failure is adjudicated solely by the NKR. Furthermore, the NKR makes allocation decisions based on their own guidelines and priorities, outside the purview of the transplant community at large. Consideration of how these priorities are balanced and, more important, the processes that govern how these decisions are made is necessary both for transparency and consistency.

The assurance that a technical error leading to a graft loss will be accommodated by the future prioritization of an end-chain kidney is an important step that not only provides a safety net for patients but serves to provide confidence to compatible pairs who have elected to participate in an exchange. The effect of this policy may not be greater participation of transplant centers in the NKR but rather greater inclusion of compatible pairs in existing partner centers, a strategy that may substantially increase paired exchanges.[3] NKR partner centers commit to the "all-in" amendment requiring participation in the Advanced Donation Program and agree to the conscription of nondirected donors to the NKR.[4] These factors generate higher priority for patients at partner centers in the construction of chains and allocation of end-chain kidneys.

The ethical foundation for the allocation of organs has been to balance utility, justice, and the respect for persons (autonomy).[5] Although these principles are necessary for the fair distribution of deceased donor organs, they hold true for decisions in the construction of chains and how allocations are made for ending a chain. This is one area that has no consensus and little transparency within the transplant community. When nondirected donors are used to initiate chains, there are several competing interests that can justify allocation of the end-chain kidney. Bridge donation to optimize the future number of living donor transplants is one option, drawing upon utilitarian principles. Providing opportunities for highly sensitized patients, pediatric recipients, or individuals with minimal waiting time who are medically deteriorating on dialysis are also compelling arguments. These decisions and trade-offs call upon different ethical principles: maximin (prioritizing those worst off) and considerations of distributive justice or the rule of rescue (prioritizing those most likely to die without immediate intervention).

The NKR has a framework with policies showing which priorities will be used to determine the construction of chains and allocation of end-chain kidneys. However, inseparable from this system is a conflict between utility, justice, and the respect for persons that occurs when patients are prioritized based on the value their center has brought to the NKR to facilitate transplants. The utilitarian position would argue that if every center registered every living donor pair and nondirected donor into a large exchange platform, a marked increase in living donor transplants would be observed, resulting in lower waitlist mortality. However, organ transplantation has been founded on ethical principles where allocation decisions are driven by patient-level factors that address the fair and equitable distribution of organs to those most in need.[5] By providing preferential allocation to patients based on the level of participation of their center, justice and autonomous decision-making are challenged as primary drivers determining which individual will get prioritized. It also places undue compulsion on centers and their patients to participate fully along the terms dictated by the NKR, which results in an exclusionary pressure that is not consistent with how life-saving treatments should be allocated. Why should one NKR registrant be treated differently from another, whose need is the same and who comes forward with a living donor, simply based on their centers' level of commitment to an exchange program, regardless of societal utility?

[Correction added on April 16, 2020, after first online publication: The author name, Verbessey et al has been corrected to Verbesey et al].

Sustainability of living donation relies heavily on public trust and the perception of ethical decision-making is critical if the transplant community wishes to expand living donation. These commitments to the public should be upheld by all organizations engaged in transplantation and consistent with the basic ethical principles that have guided the transplant community for decades.

ACKNOWLEDGMENT

The authors thank Professor J. Douglas Smith for critical review of this manuscript.

DISCLOSURE

The authors have no conflict of interests to disclose as described by the *American Journal of Transplantation*.

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