

SUMMARY OF ETHICAL OBJECTIONS TO GLOBAL KIDNEY EXCHANGE

What is the 'Global Kidney Exchange'?

The “Global Kidney Exchange ” (GKE) is a new strategy to increase living donor kidney transplantation for patients with a living kidney donor(1). GKE involves the exchange of living donor kidneys between recipient-donor pairs in high-income countries (HICs) with kidneys from recipient-donor pairs in low and middle income countries (LMICs). The exchange aims to overcome distinct barriers to transplantation in these groups. The barrier in recipient-donor pairs from HICs is biologic (e.g. ABO blood group or HLA incompatibility), in contrast the recipient-donor pairs from LMICs are biologically compatible but unable to afford the cost of transplantation and described as “financially incompatible” in the GKE scheme.

In GKE, the biologically compatible recipient-donor pair from a LMIC would travel to participate in a pre-planned kidney paired exchange involving one or more biologically incompatible recipient-donor pairs in a HIC. The recipient-donor pairs in the HIC would presumably not be matched to a compatible kidney without the inclusion of the recipient-donor pair from the LMIC in the exchange. The cost savings generated by removing the recipients from dialysis in the HIC would be used to pay for the transplant procedure for the recipient-donor pair from the LMIC and for five years of post-transplant care including immunosuppressive medications for the recipient in their home country.

Although well-intentioned, there are serious concerns with GKE and the Declaration of Istanbul Custodian Group (DICG) has rejected this scheme. The full-length statement is available at <http://www.declarationofistanbul.org>. GKE is actively promoted and some transplants have been completed. The ISN members of the DICG provide this summary of the full-length DICG Statement for the ISN membership.

What concerns does the Global Kidney Exchange raise?

1. GKE is Deceptive

The donor-recipient pairs from LMICs who are sought by the GKE are not “incompatible” with each other; they are simply unable to afford the cost of a transplant and follow-up care in their own country.

GKE proponents claim it is a win-win proposition for both rich and poor nations. But the GKE is not the result of any intergovernmental or professional effort to establish and foster kidney transplant programs in LMICs or to increase transplantation through development of cross-border kidney paired exchange programs. Researchers who operate a large kidney paired donation (KPD) program in the United States conceived the GKE as a means of giving potential kidney recipients in the US and other HICs access to a wider pool of donors in other countries without having to travel to purchase a kidney.

2. The benefits of GKE flow disproportionately to patients in developed countries

The GKE does not help establish more accessible and equitable programs of transplantation in the countries from which its donors will be drawn. It is possible that the existence of the GKE will actually distract from efforts to develop sustainable transplant programs within LMICs (e.g., promoting ethical living donation, developing deceased donation, or addressing the financial barriers to immunosuppression). Any benefits GKE provides for a selected few LMIC recipients will do little to reduce the burden of end-stage kidney disease in such countries.

3. GKE exploits poor countries and individuals

Exploitation occurs when someone takes advantage of a vulnerability in another person for their own benefit, creating a disparity in the benefits gained by the two parties. GKE exploits the desperation of individuals in LMICs who are dying of end-stage kidney failure because they are unable to obtain transplantation or even dialysis. The chance to receive free transplantation will not be offered based on medical or even economic need but rather on the ability to facilitate the greatest number of transplants in HICs.

While the GKE offers a significant benefit to selected LMIC recipients, the benefits accruing to HIC patients and their health care systems will be even greater. The GKE authors estimate that the American health care system may save US \$3 million from just one such transplant. There is no calculation for LMIC savings or benefits.

The imbalance of benefits would likely continue after transplantation. Donors and recipients in HICs receive on-going medical evaluation and treatment as needed. In contrast donors and recipients from LMICs will often lack access to such care once they return home. Therefore GKE potentially creates substantial hazards and harms for participants, with no accountability for those harms.

4. GKE depends on paying for kidneys

GKE will only cover transplant-related costs for patients who provide a donor kidney for GKE. Legislation in HICs prohibits payment for organs for transplantation. These laws would prohibit payment from one recipient-donor pair to another pair, even though the pairs are also swapping kidneys. Yet this is precisely how the GKE would obtain kidneys for biologically incompatible pairs in HICs, the only difference being that rather than provide cash, the GKE proposes to pay for the transplant surgery and immunosuppressive drugs for the kidney recipient from the LMIC in exchange for a kidney from his or her donor.

5. Helping poor patients in exchange for “donated” organs constitutes organ trafficking

A central feature of GKE is that it pays for treatment that a patient from a LMIC could not afford in exchange for that patient supplying another person to donate a kidney for transplantation into a HIC recipient. The GKE situation is therefore no different from a scenario in which the donor is willing to

sell a kidney in exchange for a family member to receive a life-saving medical procedure such as heart surgery. GKE effectively conditions access to transplantation on providing an organ. The situation for the LMIC recipient-donor pair in GKE differs from kidney paired donations involving only incompatible recipient-donor pairs, and from the voluntary participation of compatible pairs in KPD programs where the compatible pair chooses to participate in the KPD because of a desire to help other patients with an incompatible donor.

6. GKE increases the risk that organs will come from paid sources, not relatives

Once desperate patients in LMICs recognize that providing a donor will allow them to obtain free access to transplant related services, there is significant risk that individuals produced by LMIC patients to allow their inclusion in GKE will be paid.

SUMMARY:

GKE is a well-intentioned but has the potential to create a new category of international organ trafficking. Health authorities in both HICs and LMICs should make clear that the statutes and regulations which prohibit exchanging organs for something of value preclude the acceptance of the GKE in their countries. At the very least, they should place a moratorium on any implementation of the GKE and instead find other means of increasing deceased and living related donation, developing domestic KPD programs, and generally improving access to transplantation in their countries.

Are there alternatives to the proposed Global Kidney Exchange?

In accordance with the principles of the *Declaration of Istanbul* and the *Guiding Principles* (2) of the World Health Organization (WHO), the Declaration of Istanbul Custodian Group (DICG) is committed not only to discouraging practices and policies that directly or indirectly contribute to organ trafficking and transplant tourism but also to supporting the development and strengthening of equitable programs of donation and transplantation around the world.

To assist in addressing barriers to transplantation that arise, the DICG supports efforts to establish equitable kidney paired exchange programs among countries. Such programs will not take advantage of financial inequalities between countries, but will instead address mutual problems of immunological incompatibility that require cross-border solutions.

Organ donation and transplantation represents an opportunity for people to meet on an equal footing and, in particular, for donors to share, without prospect of economic benefit, a lifesaving resource with fellow human beings regardless of any difference in their economic status. When opportunities to participate in such exchanges are determined by financial status, the poor are held hostage to wealthy patients' need for organs for transplantation (3).

References:

1. Rees MA, Dunn TB, Kuhr CS, et al. (2017). Kidney exchange to overcome financial barriers to kidney transplantation. *American Journal of Transplantation*, 17(3):782-90.
2. World Health Assembly. (2010) Guiding Principles on Human Cell, Tissue and Organ Transplantation. Available at:
http://www.who.int/transplantation/Guiding_PrinciplesTransplantation_WHA63.22en.pdf?ua=1
3. Delmonico FL & Ascher NL. (2017) Opposition to irresponsible Global Kidney Exchange. *American Journal of Transplantation*, 17(10): 2745-46.