

Greater Awareness and Improved Governance of Transplant Tourism Among Desperate Patients is Needed



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Chronic kidney disease (CKD) carries tremendous morbidity and mortality risk. The Global Burden of Disease study data from 1990 to 2016 demonstrate increases in CKD incidence, prevalence, and deaths by 89%, 87%, and 98%, respectively.¹ The local situation also matters substantially because the level of development and geography leads to varied measures of burden. The analysis found that the global impact of CKD is significant, rising, and unevenly distributed with major influences related to population growth and rates of diabetes in certain areas. The desperation facing patients with CKD, especially those dependent on renal replacement therapies, creates strain across national and local health care delivery systems. Not surprisingly, patients continue to explore any means necessary, often outside their country or continent, to achieve

access to kidney transplantation, which has led to a growth in “transplant tourism” for nearly 10% of all kidney transplants.² The main factors favoring utility of transplant tourism include absence of a living donor (or absent capacity to seek a living donor), better immune compatibility, religious beliefs, and economic advantages. Yosuke Shimazono described 4 modes of transplant tourism as follows: (i) when the recipient travels to the donor’s country of residence, (ii) when the donor travels to the recipient’s country of residence, (iii) when both the donor and the recipient from the same country travel to another country, and (iv) when the donor and the recipient from 2 different countries travel to a third country. These modes explain the complexity and legality involved in transplant tourism.

Transplant tourism raises numerous concerns for patients, transplant providers, regulatory bodies, and society because it carries risks to medical ethics, donor safety, and recipient outcomes. For instance, transplant

tourism heightens risk for recipient infectious complications because these transplants frequently have suboptimal pretransplant evaluation for both donors and recipients. Varied global infection prophylaxis can impact recipient risk of acquiring infections. Reactivation of latent infections poses a marked burden to the recipient. Much of the literature in transplant tourism observed decreased graft and patient survival, increased infectious complications, and raised incidence of rejection.² A group from Turkey reported recipients who had commercial transplantation outside the country developed malaria in 8.6%, whereas fungal infections and tuberculosis occurred in 4.3%.³ Expansion of transplant tourism, a global problem, reflects an indictment of health care delivery systems and their governments. It likely also signals a failure on the part of transplant providers and their societies to sufficiently educate patients about the risks of transplant tourism. Influencers should generate alternative transplant access approaches and transplant tourism deterrence to improve local transplantation.

In this edition of *Kidney International Reports*, Dr. Gill and colleagues from University of British Columbia, Canada, provide an excellent next step toward our improved understanding of transplant tourism in a survey study, which investigates willingness to travel for transplantation among a multiethnic cohort of patients (Figure 1).⁴ The authors define transplant tourism as the movement of organs, donors, recipients, or transplant professionals across borders with the involvement of transplant commercialism or profiteering.

Little is known about which patients have willingness to engage

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Willingness to travel and commercial transplantation in a Canadian cohort of chronic kidney disease

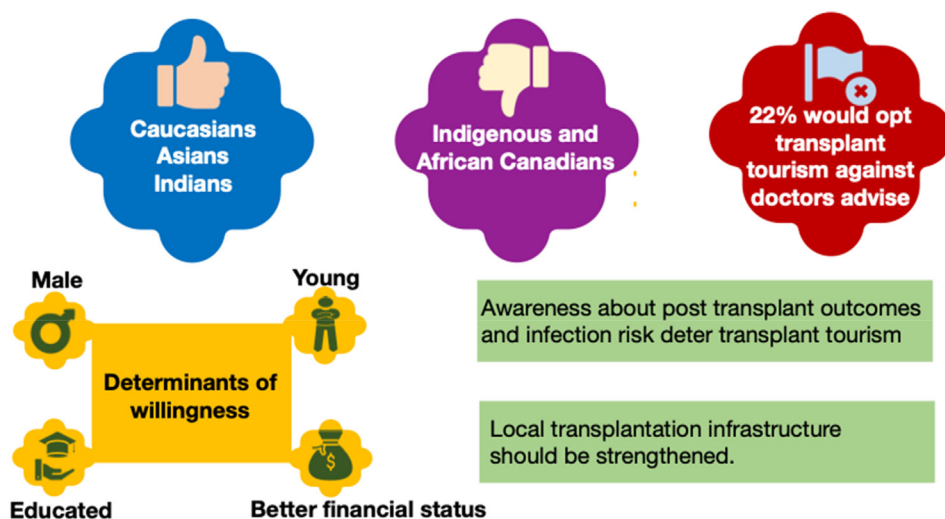


Figure 1. Schematic of selected survey results from a Canadian multiethnic cohort with chronic kidney disease, in which respondents were asked about their willingness to participate in the travel for or purchase of a kidney transplantation.

in transplant tourism. The authors conducted a cross sectional survey of 708 patients with CKD stage 4 and 5 who live in British Columbia, Canada. Willingness to travel for transplant was consistent across the 3 largest racial groups of the study with 62% of Caucasians, 57% of Asians, and 55% of Indian subcontinent Asians reporting as such. A substantial subset (22% of Caucasians, 30% of Asians, and 18% of Indian subcontinent Asians) also reported willingness to travel for purchase of a kidney transplantation, whereas indigenous and African Canadians reported less willingness. The highest willingness to travel for kidney transplantation were patients who were male, younger, highly educated, reported a higher income, and had an ethnicity common to the Pacific Islands or Middle East.

Interestingly, 22% of respondents reported that even if their doctor advised against travel outside of Canada, they would still consider travel for transplantation. However, the authors were able to demonstrate that willingness to travel for transplantation could be deterred if awareness of adverse

legal and medical consequences was increased. Many patients were unwilling to travel for transplant if their purchase of a kidney was necessary, if medical expenses were not covered, and if the kidney they received was from a paid living donor. Medical care factors, such as lack of donor screening assurances, physician or surgeon training, health and safety standards, and adequate medical follow-up after return to Canada decreased willingness to travel for transplantation substantially. Guidance from a physician advising against travel for transplant was found to reduce willingness across respondents, however ethical arguments and financial deterrents were less effective.

The study has a few notable strengths. The findings confirm that improved education and awareness of the risks associated with transplant tourism may be effective deterrents. Specifically, awareness of the possibility of medical uncertainty and legal ramifications dramatically reduced willingness to travel for transplantation. In addition, the study alludes that exploring alternative access to

kidney transplantation and heightened legislation against transplant tourism should be considered for improved local transplantation.⁵ Although commodification of organs has been rejected by most countries, including Canada and the United States, a nationally regulated system of live kidney donor compensation does exist in Iran. The multiethnic cohort surveyed in this study reflects a willingness to consider alternatives, which could encourage transplant providers, governments, and societies to explore options for a well-regulated live donor compensation system as another deterrent strategy to transplant tourism.⁶ Limitations of the report relate mostly to the fact that the respondents were from a single province of Canada, the study was conducted pre-COVID-19 pandemic, and that the findings may not generalize similarly to a current, larger population of patients with CKD.

In sum, the authors reported a state of desperation among patients with CKD with nearly 60% willing to consider travel for transplantation and 23% willing to purchase a kidney for transplantation.

The study had a large sampling of ethnic minority populations from Asia and a large subset from Canadians born outside of Canada. Despite the demographic differences among Caucasian and non-Caucasian Canadians, and among those born in or outside of the country, the results were generally consistent. Patients, transplant providers, regulatory bodies, and governments should strive to improve local transplantation and deter transplant tourism. Effective strategies here include highlighting the medical and legal risks to patients and consideration for well-regulated options to deter travel and improve local transplantation.

DISCLOSURE

All the authors declared no competing interests.

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