

International travel by Australians for overseas transplantation

Georgia Smith^{1,*}, Diba Gujari^{2,*}, Oscar Russell¹, Lyle Palmer², Maeghan Toews³, Germaine Wong⁴, Wai Lim⁵, Stephen McDonald^{1,2}, Phillip Clayton^{1,6}, Dominique Martin⁷, Patrick T Coates^{1,2}

People who travel overseas for organ transplantation may acquire organs by gaining access to local waiting lists for organs from deceased donors, by receiving an organ from a related or unrelated living donor, or through illegal organ trading. That is, international travel for transplantation sometimes involves illegal activities, such as trafficking in organs or trafficking in humans for organ removal.^{1–3}

Only limited information about overseas travel for transplantation is available, in Australia or overseas, particularly with respect to organ trafficking and transplant tourism. In contrast to transplantations performed in Australia, there is no systematic registration of Australian patients who have received a transplant overseas and no specific mechanism for collecting data on such patients. The Australia and New Zealand Dialysis and Transplant Registry (ANZDATA) opportunistically collects information on patients reported to have received kidney transplants overseas, but reporting is not mandatory.⁴

We distributed a survey to all 540 registered Australian nephrologists and transplant physicians and surgeons through the Transplantation Society of Australia and New Zealand (TSANZ) and the Australia and New Zealand Society of Nephrology (ANZSN). We were primarily interested in information from clinicians about patients who had considered or actually travelled overseas for transplantation (kidney or other organ). Secondary outcomes included their characteristics, subsequent medical complications, and a comparison of our data with data on overseas transplantations in the ANZDATA registry. The University of Adelaide Human Research Ethics Committee approved the study (reference, H-2018-034).

The survey response rate was 43% (197 responses to 453 deliverable surveys). Most responders (133, 68%) reported having discussed overseas travel for transplantation with at least one patient, and 105 (53%) had cared for at least one patient after an overseas transplantation. For the 129 reported overseas transplantations (including 121 kidney transplantations) during 1980–2018, China (40, 31%), India (10, 16%), and Pakistan (11, 9%) were

the most frequent destinations. Most organ recipients were born in countries other than Australia (119, 93%); 50 were transplanted in their countries of birth (39%). Complications following overseas transplantation were frequent, including bacterial and viral infections (33 patients, 26%). The rates of infection reported by the international Symphony study, which generally reflect rates for transplantation centres in Australia, are lower; for example, the cytomegalovirus infection rate was 10.2% among patients in the low dose tacrolimus/mycophenolate mofetil/steroid arm.⁵

The ANZDATA registry recorded 279 overseas kidney transplantations during 1980–2018; 49 instances identified by our survey were not included in the ANZDATA registry (including seven non-renal transplants). Seventeen of the 42 unreported kidney transplantations were undertaken during 2015–2018, suggesting that reporting of these events to ANZDATA has declined in recent years.

Our survey provides a first overview of Australians travelling overseas for organ transplantation. Our findings suggest that routine reporting of these events needs to be improved in order to collect detailed data on factors that influence such activity and facilitate international travel for obtaining organ transplants, as well as about the choice of destination and the outcomes of overseas transplantation. More systematic data collection could provide information for informing strategies that support clinicians and patients when making decisions about overseas travel for organ transplantation and care for people who intend to or have travelled abroad for this purpose.

Note: A preliminary report on this study was presented at the International Society of Nephrology World Congress of Nephrology, Melbourne, 12–15 April 2019 (*Kidney Int Rep* 2019; 7 Suppl: S34–S35).

Acknowledgements: We acknowledge the work of the medical students who assisted with preparing and delivering the survey letter: Adon Toru Asahina, Tanveer Singh Mokha, Dasith Wewegama, Anton Alvaro, Kevin Kour, and Natasya Cahyadi.

Competing interests: No relevant disclosures. ■

Received 2 April 2019, accepted 25 June 2019

© 2019 AMPCo Pty Ltd

- 1 Dominguez-Gil B, Danovitch G, Martin DE, et al. Management of patients who receive an organ transplant abroad and return home for follow-up care: recommendations from the Declaration of Istanbul Custodian Group. *Transplantation* 2018; 102: e2–e9.
- 2 Steering Committee of the Istanbul Summit. Organ trafficking and transplant tourism and

commercialism: the Declaration of Istanbul. *Lancet* 2008; 372: 5–6.

- 3 Shimazono Y. The state of the international organ trade: a provisional picture based on integration of available information. *Bull World Health Organ* 2007; 85: 955–962.

- 4 McDonald SP, Russ GR. Australia and New Zealand Dialysis and Transplant Registry. *Kidney Int Suppl* 2015; 1: 39–44.
- 5 Ekberg H, Bernasconi C, Nöldeke J, et al. Cyclosporine, tacrolimus and sirolimus retain their distinct toxicity profiles despite low doses in the Symphony study. *Nephrol Dial Transplant* 2010; 25: 2004–2010. ■

* Equal first authors.

¹Royal Adelaide Hospital, Adelaide, SA. ²University of Adelaide, Adelaide, SA. ³Adelaide Law School, University of Adelaide, Adelaide, SA. ⁴Westmead Hospital, Sydney, NSW. ⁵Sir Charles Gairdner Hospital, Perth, WA. ⁶Australia and New Zealand Dialysis and Transplant Registry (ANZDATA), South Australian Health and Medical Research Institute, Adelaide, SA. ⁷Deakin University, Melbourne, VIC. ✉ toby.coates@sa.gov.au • doi:10.5694/mja2.50333

Podcast with Toby Coates available at <https://www.mja.com.au/podcasts>