

EDITORIAL



# Immigrants as donors and transplant recipients: specific considerations

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## Introduction

Access to emergency and critical care has been established during the recent migratory waves in European countries of entry. However, as far as chronic health conditions are concerned, barriers in access to healthcare providers may vary across different health systems [1]. According to US data, kidney transplantation is cost-effective compared to chronic and emergency dialysis in various settings including immigrants [2]. Medicaid-covered immigrants who underwent renal transplantation had very favourable outcomes, mainly owing to their young age, providing a strong argument for broader access to transplantation programs [3]. Nevertheless, in the USA almost 2.5% of organ donation comes from immigrants, whereas less than 1% of organs goes to them, a fact that constitutes per se a social inequity [4].

## Ethics and justice

Ethical principles of justice are well documented in Western healthcare policy statements. According to the US Organ Procurement Transplant Network (OPTN) policy [5] and the National Organ Transplantation Act [6], only medical criteria are applicable in organ allocation decisions once a patient has been listed for transplantation, clarifying that race, citizenship and celebrity status have no role in listing decisions. Equity in donation is a major principle of the *Guide to the Quality and Safety of Organs for Transplantation* developed by the European Directorate for the Quality of Medicines & HealthCare of the Council of Europe (EDQM) [7]. In case of non-resident

candidate donors, regulations of the hosting country govern the procedure. Nevertheless, collaboration of host and origin country is encouraged to help search e.g. information from national organ donor registries. Overcoming linguistic barriers is highly recommended for successful pretransplant evaluation [7]. The Council of Europe has developed recommendations and resolutions covering a huge array of ethical, social and scientific aspects of donation, acting as policy statements that promote common course of actions among European governments [8]. Equally important is the recognition of the risk of trafficking in human organs, with the development of a protective framework for vulnerable populations including immigrants against any illicit removal of organs from living or deceased donors [9]. In addition, another important resolution for organ donation from living non-resident donors has been issued addressing ethical, medical, financial and safety issues [10].

## Practical barriers to successful donation and transplantation

Despite existing legal frameworks, practical access to care before, during and after transplantation may prove to be extremely complicated for immigrants and particularly those without documents, who are subject to a vast burden of disparities, compared to documented immigrants and citizens [1, 3]. Although the OPTN criteria for organ allocation are medical, the ability to pay—often linked to insurance status—is used as a very common prerequisite for inclusion in transplantation lists [11]. Profound differences are encountered among US states, which may advocate different policies relating to transplantations [1]. A similar situation has been reported for undocumented immigrants diagnosed with life-threatening haematologic malignancies, with huge practical barriers to accessing potentially life-saving targeted therapies and haematopoietic stem cell transplantation (HSCT), unless

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**Table 1 Ethical and practical considerations relating to immigrants as donors and transplant recipients**

Ethics and justice relating to inclusion in transplantation list or organ donation	Practical barriers to successful donation and transplantation
Ethical principles of justice are well documented in Western healthcare policy statements, although disparities exist	Insurance status or guaranteed ability to pay for transplantation and long-term medical treatments is a practical prerequisite
Advanced treatments for chronic health conditions are less available compared to emergency health procedures	Misperception due to linguistic obstacles and cultural differences may jeopardise follow-up procedures
Linguistic barriers may impede a successful pretransplant evaluation	Non-adherence to follow-up due to fear of job loss
Collaboration of host and origin country may be required	Difficulties in linking with non-profit organisations providing aid to patients with no insurance coverage
Harmonisation of laws addressing ethical, medical, financial and safety issues of donation across countries is important through international collaboration	Immigrants as donors or recipients should be screened for potential infectious exposure on the basis of their country of origin and immigration route
Recognition of the risk of trafficking in human organs is of paramount importance; a protective legal framework has to be developed globally	Gaps in identification of infectious exposure may classify immigrants as "increased risk" donors, with obvious implications in matching and obtaining informed consent from the recipient

they can find physicians and facilities willing to provide pro bono treatment [12]. In addition, admission to high-volume medical centres associated with optimised outcomes may prove even more difficult [12].

Linguistic obstacles play an important role in the initial access of immigrants to transplantation programs. Cultural differences, compared to the hosting country, may account for denial of opportunities for advanced treatments that were not available in the countries of origin [13]. Lack of perception of chronic and mainly asymptomatic illness, such as renal insufficiency, may lead to delayed treatment. Loss to follow-up and non-adherence to long treatments are common, frequently due to misconceptions about the disease course (i.e. remission perceived as a definitive cure) or inability to adhere to follow-up due to the fear of job loss [13, 14]. Finally, non-familiarity with the medical model of the hosting countries may impede long-term maintenance of treatment [13, 14].

The paucity of organs acts as a continuous challenge for list priorities; provision of these precious organs to uninsured and non-documented recipients has triggered social and policy reactions for "unjustified allocation of national resources". In that sense, even when inclusion in organ lists is not denied for an uninsured immigrant, guaranteed access to post-transplant medications and follow-up care has been elucidated as a pivotal prerequisite [1, 3] in many US states. Programs providing discounts to public hospitals to purchase a drug for a patient with no insurance coverage have been developed in the USA to cover this need [15]. Non-profit organisations may act supplementarily on this unmet need. Even with this aid, many medical centres require proof of long-term ability to pay for medication as a precondition to be registered on the waiting list [1, 3].

Organ transplantation is not without risks. Post-transplant infectious complications may stem from either the recipient or the donor; immigrants, in either case, are screened for potential infectious exposure to ubiquitous and geographically restricted pathogens on the basis of their country of origin and immigration route [7, 10] (Table S1, Supplementary Material 1). Transmission of acute or latent infections from donors, an important concern in transplantations, has to be balanced against the risk of the patient dying while remaining on the waiting list. With the classification of donors as "standard risk" (similar to population-adjusted average) or "non-standard/increased risk", immigrants may qualify in the latter group because of potential gaps in identification of all previous infectious exposure, for which a meticulous matching accompanied by informed consent from the recipient is required [7]. Basic considerations related to organ donation and receipt among immigrants are summarised in Table 1.

## Conclusions

There is a long way to go until we can provide immigrants with equal access to organ transplantation. While legal barriers are generally not an issue, practical barriers to successful donation and transplantation including access to care before, during and after transplantation require strong regulatory, governmental and social incentives to be surpassed. The current migratory crisis does not seem temporary; therefore, efforts to provide sustained, uniform and humanitarian solidarity to the immigrant or refugee with indications for a transplant are important.

### Electronic supplementary material

The online version of this article (<https://doi.org/10.1007/s00134-019-05534-z>) contains supplementary material, which is available to authorized users.

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### Compliance with ethical standards

### Conflicts of interest

On behalf of all authors, the corresponding author states that there is no conflict of interest.

### Ethical approval

An approval by an ethics committee was not applicable.

### Publisher's Note

Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Received: 7 November 2018 Accepted: 14 January 2019

Published online: 30 January 2019

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