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FORUM

Kidney paired donation is necessary in Brazil

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This Forum discusses the paper by Bastos et al: Kidney paired donation in Brazil – a single center perspective. Transplant Int 2021: 34;1568.

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Dear Editors,

I read with interest the study by Bastos *et al.* – KIDNEY PAIRED DONATION IN BRAZIL – A SINGLE CENTER PERSPECTIVE [1] and also the Letter to Editor by Abbud-Filho and Garcia [2].

Brazil has the largest public program of organ transplantation in the world and the second in absolute numbers of kidney transplantation (KT), performing over 6000 KT per year and having more than 26 000 patients on the kidney waiting list [3]. The number of living donor kidney transplantation (LDKT) has decreased annually in our country while a mortality rate of 20% per year among patients on dialysis has been verified.

Brazilian KT program, both for its time of existence and for the performed number, has achieved unquestionable maturity, with well-established laws that contemplate unrelated LDKT, provided that it follows a rigorous flow of multi-professional evaluations, submission to the Institutions' Ethics Committees, and a final judicial approval. This strict regulation for unrelated LDKT restrains any possibility of organ trade or trafficking in our country. Perhaps, the authors of the Letter to Editor, being from an older generation, have experienced a previous period of vulnerability in the assessment of LDs and have greatly contributed to the rigor of the current regulation.

Despite the unequivocal social inequality in our country, the alleged concerns of organ trade and trafficking have never been confirmed over the last decades, and the field of transplantation is one of the most regulated and monitored areas in Brazilian medicine. Furthermore, all patients in Brazil may be transplanted by SUS, a public health program; this system allows access to transplantation for all Brazilian citizens regardless of their social status. About 95% of Brazilian KT have been financed by SUS, which pays the entire medical team, including surgeons, anesthetists, and nephrologists the amount of U$2000.00 per transplant, and this value has not been updated for 10 years. It is clear by the above values mentioned that being a transplant physician in Brazil is rather a question of ideal than profit.

We do not understand the rationale behind the claim that KPD could stimulate organ trafficking and trade if the LD of an eventual KPD swap would be submitted to the same steps and rigor currently used for unrelated LDKT to be approved.

The acceptance of KPD is growing around the world. It brings a potential technological development with advanced algorithms and softwares, unites clinicians, surgeons, immunologists in fruitful discussions and analysis of matchruns, expanding and exchanging knowledge among multidisciplinary teams that currently work separately. KPD still has the beauty of not dividing, but joining efforts among different centers since the more groups participating, the more patients in the database and more matches are found.

The main goal of KPD was to increase the chance of KT among highly sensitized (HS) patients, preventing the onerous treatment of desensitization. For a country with more limited economic resources like Brazil, KPD makes perfect sense for always contemplating compatible, cheaper, and more successful transplants. According to the experience of the National Kidney Registry and other active centers, KPD has achieved matches for most of HS patients with PRA up to 100%, minimizing the need of desensitization and increasing 4-fold the chance of transplantation among this subcategory of patients [4,5].

Our group has recently published the first national study of a large registry of 50 000 patients in the Sao Paulo state waiting list for KT between 2000 and 2017 [6]. In this cohort, 8.6% of the patients were PRA >80% and this number is probably underestimated once only class I PRA data were available. It was shown that only 3.7% of patients with PRA >98% and 15% of PRA >80% reached KT within a period of up to 10 years.

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Finally, we have in numbers what we already knew from other countries that HS patients experience a dramatic disparity in access to KT. This indeed should be our main ethical and moral concern. What are we doing for our sensitized patients? We have a kidney allocation policy that has not evolved for the last 19 years and has not kept up with innovations and technology, such as KPD or advanced kidney allocation methods such as acceptable mismatches, which have been used for a long time by Eurotransplant [7].

Approximately one third of the pairs seeking LDKT are ruled out by ABO or HLA incompatibility. It is predicted that each country might have up to 10 incompatible pairs per million of population seeking kidney exchange every year [8]. Thus, KPD, if well structured in Brazil, would have the potential of 2000 new incompatible pairs included into a database each year. A great number of incompatible and willing LDs have been discarded and discouraged from participating in KPD because of concerns of "exploitation by unscrupulous and immoral people" that I have never met in my 32 years of professional lifetime. Personally, I do trust in our transplant society and think that it is time to move forward to new technologies and science instead of being stuck in old concerns and concepts. We are 20 years late on new strategies to improve Brazilian KT. There are thousands of HS patients progressing to clinical deterioration and death on the waitlist eager for changes. These patients cannot just wait for the slow growing of deceased donation. They demand urgent changes!

We have a new generation of KT professionals in the country eager for changes and for better treating their patients while minimizing deaths on waiting lists. This generation is aware of its commitment to ethics and morals, and that the Brazilian KT may never be compromised by any trafficking or trade report. But above all, the current generation of transplant physicians is imbued with offering the best and most modern technology to save patients rather than being trapped in concerns of the past.

It is time for the older generation, which played a fundamental role for regulating the Brazilian KT system, to give voice and opportunity to those who want to develop Brazilian transplantation with all that science has been offering in several countries without giving up the essential ethics and morals, but promoting greater equity in access to transplants.

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