

THE CHOICE BETWEEN DECEASED AND LIVING DONOR KIDNEY TRANSPLANTATION IN CHILDREN: A MULTICENTRIC CROSS-SECTIONAL STUDY

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BACKGROUND

- There are discrepancies in the donor source in pediatric kidney transplantation across the Eurotransplant countries.
- In Belgium there is a lower percentage of living kidney donation than average within Eurotransplant (fig. 1).

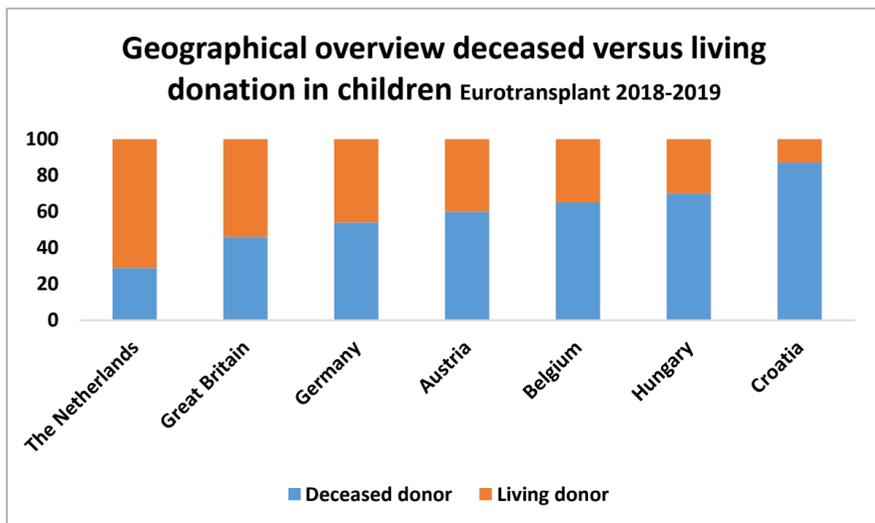


Figure 1. Geographical overview deceased versus living donor kidney transplantation in children (Eurotransplant, 2019-2018, Mumford et al. 2018)

AIM OF THE STUDY

1. To evaluate factors influencing the choice between a deceased (DDKT) and living donor for kidney transplantation (LDKT) from the perspective of parents and physicians.
2. To evaluate the potential differences between the medical recommendation and parental choice.

METHODS AND PATIENTS

- **Questionnaires** distributed among parents and physicians
- **Inclusion criteria:** patients with CKD stage 4-5 with (estimated GFR <30ml/min/1.73m² including patients on dialysis), informed consent
- **Period:** February 2019 - March 2020
- **Participating centres:** University Hospitals of Ghent, Leuven and Antwerp

RESULTS

Main characteristics cohort: 28 patients (mean age 10.48 yr, range 2-19 yr), 10 girls and 18 boys. Three patients had a history of previous kidney transplantation.

Parents preferred in:

- 13 cases a DDKT
- 13 cases a LDKT
- 2 cases no preference

Physicians recommended in:

- 14 cases a DDKT
- 14 cases a LDKT

The **factors precluding LDKT were multifactorial** for both parents as physicians

Parents:

- Medical reason(s) in 7 cases
 - Parents found unsuitable as a donor after medical screening (n=6)
 - Child too small for a LDKT (n=3)
 - Necessity of a combined liver- and kidney transplantation (n=1)
- Socio-economic reason(s) in 3 cases
 - Single caregiver family (n = 1),
 - Absence of social support (n = 1)
 - uncertainty about the financial situation after donation (n = 1).
- Combination medical and socio-economic reason(s) in 1 case
- No reason in 4 cases

Pediatric nephrologists:

- Medical reason(s) in 6 cases
 - Parents found unsuitable as a donor after medical screening (n=6)
 - Child too small for a LDKT (n=2)
- Socio-economic reason(s) in 6 cases
 - Single caregiver family (n = 1),
 - Absence of social support (n = 3)
 - Uncertainty about the financial situation after donation (n = 5)
 - Refugee background (n = 1)
- Combination medical and socio-economic reason(s) in 3

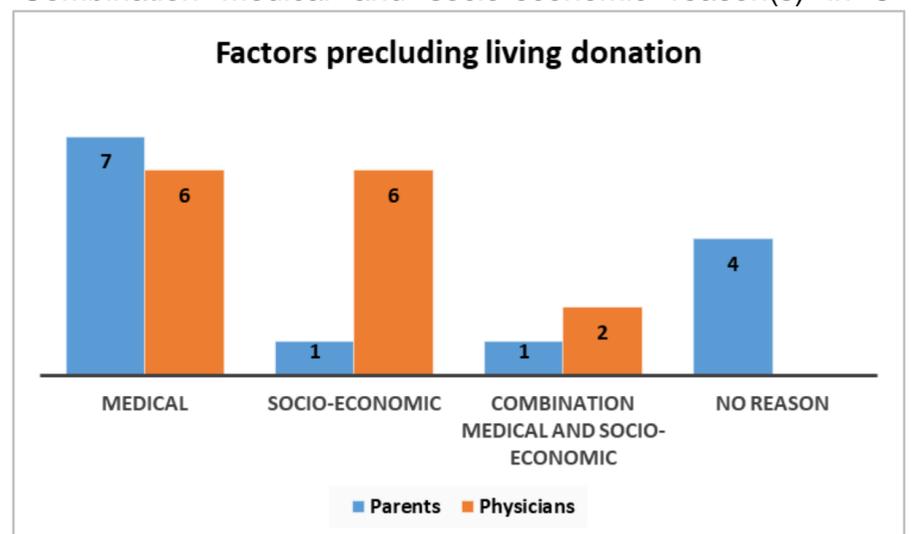


Figure 2. Factors precluding living donor renal transplantation. Parents versus physicians.

CONCLUSION

- Socio-economic factors play an important role in not actively promoting living donation in caregivers.
- Particular attention should be given to shared decision making.
- A better understanding and communication regarding socio-economic hurdles might contribute to a higher incidence of living donation.