## The Renal Association

## **UK Renal Registry**



## **Centre Variation in Access to Kidney Transplantation (2010-2015)**

People with kidney failure can be given dialysis or a kidney transplant to replace the function of their kidneys, with the aim of keeping them alive. A kidney transplant requires an operation and strong drugs, so for some patients with kidney failure, transplantation is not recommended because it is unsafe. However, for patients who are well enough to have a kidney transplant, transplantation is thought to be better than dialysis, because people with a transplant tend to live longer than those on dialysis and have improved quality of life.

In the UK, patients can receive a transplant from:

- 1) someone who is brain dead but whose heart has not stopped (donor after brainstem death)
- 2) someone whose heart has stopped (donor after cardiac death), or
- 3) a living donor.

In cases 1 and 2, kidneys are allocated to people with kidney failure (recipients) from a waiting list, using an agreed system. In case 1, the kidney could go to a patient from anywhere in the country, but in case 2, kidneys are offered to patients living nearby first, to reduce the time taken to transport the kidney. A combination of factors including recipient age, the immune 'match' of the kidney to the recipient, and the time that the recipient has spent on the waiting list are used to decide who will be offered the kidney. In case 3 (living donor), organising the transplant happens at the patient's regional kidney transplant hospital.

Before being added to the waiting list, potential recipients need to have tests to make sure they are fit to have the transplant operation. Being on the waiting list for longer increases the chance of transplantation, so getting on to the waiting list earlier gives a patient an advantage.

The purpose of this review was to investigate if the process of wait listing and allocating transplants was fair, or whether different treatment was given to patients at different kidney units. All patients from 71 kidney units in the UK who started dialysis or had a kidney transplant before starting dialysis between 2010 and 2012 were included.

Two years after starting dialysis, the percentage of patients at each kidney unit who were on the waiting list was measured. These percentages were compared to the national average. Most kidney units wait listed between three and seven out of every ten patients aged less than 65 within two years, but around 16% of units wait listed fewer patients. Similar results were shown when the percentage of patients who had received kidney transplants within two years of wait listing was analysed. These results suggest that there could be unfairness in the system of

transplant allocation. However, the information available to make adjustments for the type of patient at each unit was not very detailed (for instance, it wasn't known if there were lots of patients with multiple illnesses at some units which could prevent transplantation). For this reason, these results may still be inaccurate.

Older patients or those with diabetes were less likely to be wait listed or transplanted. This would be expected, because such patients would be less likely to be suitable for transplantation. However, in previous years there appeared to be reduced rates of transplantation in non-White patients compared to White patients. Since changes were made to the transplant allocation system, this difference appears to have gone. Ongoing research is looking at this in more detail.

Lastly, not all renal units perform transplants: there are some 'non-transplanting' centres and some 'transplanting centres'. There appeared to be a higher percentage of patients wait listed in transplanting centres compared to non-transplanting centres. Once on the waiting list, there was no difference in the percentage of patients receiving a kidney from a donor after brainstem death (number 1 above), but these kidneys are allocated using a national system, so this is an expected result. Receiving a kidney from the other donor types (cases 2 or 3) was more likely for recipients at transplanting units. This might tell us that patients at non-transplanting units are at a disadvantage. Again, more research is needed to investigate the reasons behind this in more detail.

For the complete annual report, please visit the UK Renal Registry website: www.renalreg.org/reports/2016-nineteenth-annual-report/