

The Renal Association UK Renal Registry



How Many People have a Kidney Transplant in the UK in 2015?

At the end of December 2015, 32,624 adults in the UK had a functioning kidney transplant. This group accounted for just over half (53%) of all adults receiving renal replacement therapy (RRT). RRT refers to treatments that take over the role of the kidneys when they have failed. This may be dialysis (blood cleaning) or a kidney transplant.

A greater proportion of men have kidney transplants compared with women. This difference occurs across all age groups and reflects the higher rate of kidney disease in men (figure 1). The average age at transplantation has been slowly increasing, and in 2015 was 50.9 years.

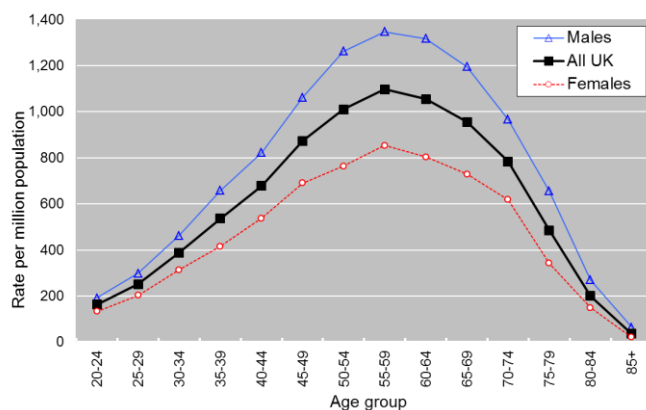


Figure 1. Transplant prevalence rate per million population by age and sex on 31st December 2015

Over the five years 2011 to 2015 (table 1), the number of adults with a working kidney transplant rose by around 1,500 patients each year. This was probably due to a combination of factors such as:

- more transplant operations being performed
- the number of failing kidney transplants not increasing
- fewer patients dying than previous years.

Table 1. Number, median age and gender ratio of incident and prevalent transplant patients 2011-2015

Year	Incident transplants			Prevalent transplants ^a		
	N ^b	Median age	M:F ratio	N	Median age	M:F ratio
2011	2,628	49.1	1.7	26,172	51.7	1.6
2012	2,782	50.5	1.6	27,535	52.3	1.5
2013	3,128	50.4	1.6	29,442	52.8	1.6
2014	3,031	50.6	1.5	31,044	53.3	1.5
2015	2,864 ^b	50.9	1.5	31,692 ^b	53.8	1.5

Median= middle value in a set of numbers arranged from lowest to highest

^aAs on 31st December for given year

^bNumber of transplants in 2015 is under-estimated as one transplanting hospital was unable to submit data

Outcomes in kidney transplant patients

Graft function is measured by calculating the estimated glomerular filtration rate (eGFR). This is a measure of how well the kidney is cleaning the blood. A normal eGFR is greater than 90ml/min/1.73m²; a mildly reduced eGFR is 60-90ml/min/1.73m² (stage 2); moderate reduced eGFR is between 30 and 60ml/min/1.73m² (stage 3) and severely reduced is less than 30ml/min/1.73m². A failing kidney transplant will have an eGFR of <15ml/min/1.73m² (stage 5).

Looking at new and existing transplant patients together, we see that in general, transplanted kidney function appears very similar to previous years. The median eGFR in all transplant patients at the end of 2015 was 51.8ml/min/1.73m². Of this group, approximately 13 in every 100 patients had severely reduced function (CKD stage 4) or failing transplants (CKD stage 5).

If we look at new patients who have had their kidney transplant for one year, there was a difference in the kidney function depending on the type of transplant they received. For patients who received a living donor transplant, the median eGFR was 57.5ml/min/1.73m² at one year; for patients receiving a deceased donor transplant (heart beating), the median eGFR was 53.7ml/min/1.73m² and for post-circulatory deceased donors (non-heart beating), the median was eGFR was 50.4ml/min/1.73m².

Patients who have a kidney transplant are generally not anaemic, with 1 in 20 patients having a haemoglobin value less than 100g/L. This tended to be in patients whose transplant was not working very well. Blood pressure control however was poor, with only a quarter of patients achieving a normal blood pressure (less than 130/80). Given the large amount of missing data, the reasons for this are difficult to interpret.

Causes of death in kidney transplant patients

Around one in 40 patients who had a working kidney transplant passed away during 2015 while their transplant was still functioning. As in previous years, the commonest causes of death in these patients were cancer and infection, each accounting for around one quarter of these deaths.

Conclusion

Although rates of transplantation have been increasing over time, there is still much work to be done to increase kidney donation, as many are still on the waiting list. Improving the health and well-being of kidney transplant patients, preventing loss of function and timely planning for a return to dialysis, where necessary, remain important areas of care for our patients.

For the complete annual report, please visit the UK Renal Registry website:

www.renalreg.org/reports/2016-nineteenth-annual-report/