The Renal Association
UK Renal Registry

How Many People have a Kidney Transplant in 2014?

Lay summary

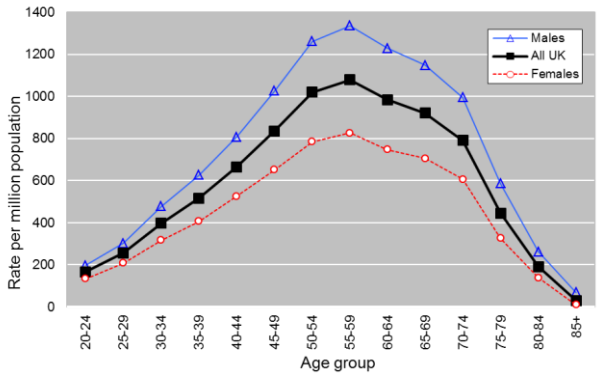
For the full annual report chapters click here or visit https://www.renalreg.org/reports/2015-eighteenth-annual-report/

Demographic information

At the end of December 2014, 31,164 adults in the UK had a functioning kidney transplant. This corresponds to approximately 53% of all those who were receiving renal replacement therapy (RRT) in the form of dialysis or transplantation.

The number of transplanted patients is higher for men compared to women at any age, reflecting the higher rate of kidney disease in men (Figure 1).

Figure 1 Transplant prevalence rate per million population by age and gender on 31/12/2014



The number of prevalent transplant patients has been increasing by around 1,500 patients per year, probably due to a combination of factors, such as the continuous increase in number of transplants performed each year, and the stable annual rate of graft failure with return to dialysis (2.4%) and rate of death with functioning transplant (2.3%).

In the last six years (Table 1) the number of kidney transplants performed each year (incident transplants) has overall been increasing from approximately 2,500 to 3,000, although a small decrease between 2013 and 2014 (with a significant fall in kidney donation from donors after circulatory death (10%)) was observed. Median age at transplantation has been slowly increasing, and in 2014 was 50.6 years.

Table 1 Number, median age and gender ratio of incident and prevalent transplant patients 2009-2014

	Incident transplants			Prevalent transplants*		
Year	*N*	Median age	M:F ratio	*N*	Median age	M:F ratio
2009	2,488	48.3	1.6	23,500	50.8	1.5
2010	2,584	49.6	1.7	24,889	51.2	1.6
2011	2,627	49.1	1.7	26,180	51.7	1.6
2012	2,781	50.4	1.6	27,541	52.3	1.6
2013	3,123	50.3	1.6	29,467	52.8	1.6
2014	3,020	50.6	1.5	31,164	53.3	1.5

*As on 31st December for given year

Clinical outcomes in transplant patients

Graft function measured as estimated Glomerular Filtration Rate (eGFR) in patients with a transplant has been slowly improving in prevalent transplant patients and remains stable in incident transplant patients at one year after transplant.

- Median eGFR in transplant patient at the end of 2014 was 52.5ml/min/1.73m^2, with 11.5% of transplant patients having reached CKD stage-4 (eGFR 15-29) and 1.5% at stage-5 (eGFR<15).
- In 2014, the median eGFR of patients one year after transplantation was 57.4ml/min/1.73m^2 post live transplant, 53.6ml/min/1.73m^2 post brainstem death transplant and 50.1ml/min/1.73m^2 post circulatory death transplant.

Haemoglobin achievement in prevalent transplant patients was good, with less than 5% of patients having a value of haemoglobin <100g/L, and anaemia being mostly associated with lower graft function.

Blood pressure (BP) control appears to be poor, with only a quarter of all transplant patients achieving a BP <130/80 mmHg. However, a high volume of missing data and measurement being more likely for patients with poor BP control, may bias the result.

Mortality in transplant patients

Of all adult transplant patients with a functioning graft at the end of 2013, 2.3% died with a functioning graft during 2014. As in previous years, the commonest causes of death in those patients were malignancy (26%) and infection (24%).

Conclusion

Although rates of transplantation have been increasing over time, there is still much work to be done to increase the number of kidney transplants, as many patients are still on the waiting list. A need remains to further improve the health and wellbeing of people with a kidney transplant and for those with a declining graft function, to delay graft failure or facilitate a timely return to dialysis where this could not be prevented.