The Renal Association

UK Renal Registry

New ('incident') Adult Patients Starting Renal Replacement Therapy in 2015

This paper shows the number of new adult patients starting renal replacement therapy (RRT) in 2015. This is also known as the incident RRT population. 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.

In 2015, just over 7,800 new patients started RRT in the UK. That means for every million people in the country, there were 120 people needing to start RRT for kidney failure. This was an increase on the previous year (115 per million of the population). This increase in new patients was seen in all four countries of the UK. Since 2010, there has been an 18% increase in the number of UK patients starting RRT.

Most patients starting RRT went onto dialysis, with a small number receiving a kidney transplant before dialysis was needed (pre-emptive transplant). After 90 days of treatment (figure 1):

- Over two-thirds were on haemodialysis (HD) either at hospital or a satellite unit able to perform HD- 70.9%
- Only 27 patients were receiving HD using a machine at their home - 0.4%
- Almost a fifth were on peritoneal dialysis (PD) - 19.6%.
- Almost one in ten patients received a kidney transplant - 9.1%. Compared with recent years, the percentage of patients receiving pre-emptive transplantation was stable.

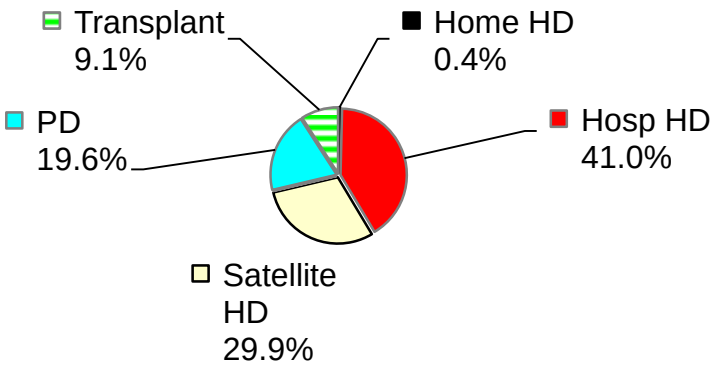

Figure 1. RRT type at 90 days after starting RRT (incident patients starting between 1/10/2014 and 30/9/2015

The most common kidney problem across all age groups was diabetic kidney disease, affecting about one in four new patients.

Although a person of any age can need to start RRT, kidney disease is more common as we get older. It is most common in people aged between 65 and 84. Figure 2 shows the number of people starting dialysis in each age group in 2015. The age group with the most people starting HD was 65–74 and for PD it was 55-64. The average age of people starting treatment was 64 years. This has changed little over recent years. The average age changes when ethnicity or type of RRT used is taken into account (average age 66 years for White patients versus 60 years for non-White patients, average age 67 years for people starting on HD, 60 for people starting on PD and 51 for those receiving a pre-emptive transplant).

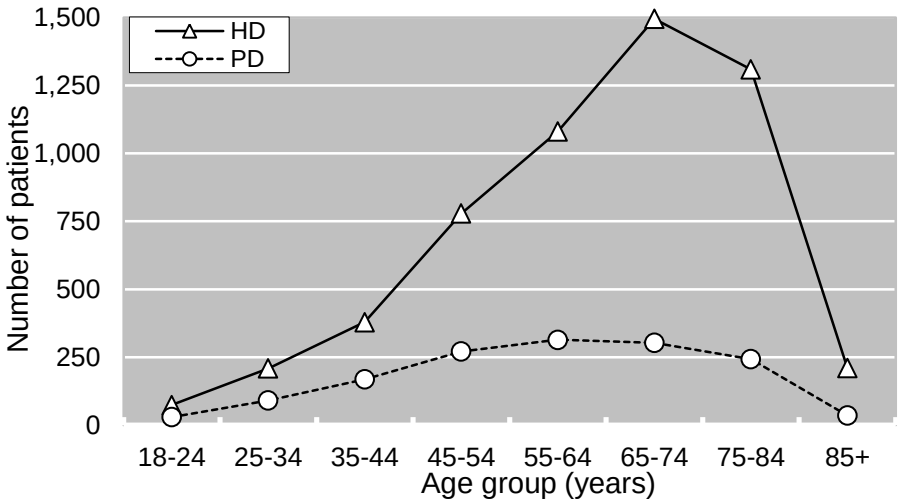

Figure 2. Number of new RRT patients by age group and dialysis type

More men started treatment in 2015 than women (62% male versus 38% female). This was seen in all age groups except the youngest. Different ethnic groups have different risks of reaching kidney failure, with Black and Asian people at most risk. About 22% of those starting RRT in England, Wales and Northern Ireland from 2011 to 2015 were from an ethnic minority background (Black, Asian, Chinese or other).

Kidney function is measured by calculating the estimated glomerular filtration rate (eGFR). This is a measure of how well the kidney is cleaning the blood. Established kidney failure is defined as an eGFR of less than 15ml/min/1.73m^2. In 2015, the average eGFR at the start of RRT was 8.5ml/min/1.73m^2. This is similar to previous years; however, information was only available from under half of all new patients so this value may not be a good estimate of the true average.

Late presentation is defined as needing to start RRT within 90 days of a first review by a kidney specialist. It is seen as a negative aspect of care and can be due to a number of causes. The percentage of patients presenting late fell from 23.9% in 2006 to 16.4% in 2015. Late presenting patients were more likely to be younger (64.5 years versus 65.1 years), of White ethnicity, less likely to start on PD and have a lower eGFR (7.7 versus 8.6ml/min/1.73m^2) than early presenters.

This fall in late presentation may be due to National kidney guidelines published by the Medical and GP Royal Colleges raising awareness of kidney disease as well as the introduction of eGFR reporting. The Health Foundation is currently funding a quality improvement programme (ASSIST-CKD study) that flags people with declining kidney function to their GP. This may help to further reduce the numbers presenting late.

For the first time, the UK Renal Registry has started to report the number of HD sessions used for patients with acute kidney injury (AKI). AKI is sudden damage to kidneys that stops them from working properly. This can range from mild to severe, where temporary dialysis is needed to survive. Reporting the number of HD sessions given in AKI may help us understand reasons behind deaths in the first 90 days of dialysis. It can also help national bodies such as NHS England to monitor use of HD for AKI across centres. In 2015, we received information on 998 people from 49 centres who had received acute HD. As this is the first report that includes this information we cannot yet comment on the recovery of renal function or survival in these people.

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