Choosing renal replacement therapy- do patients start and stay on the same modality?

Dr Julia Arnold¹, Michelle Barrett¹, Dr Jyoti Baharani¹
¹University Hospitals Birmingham NHS Foundation Trust, Heartlands Hospital, Birmingham, United Kingdom

Background:
Renal replacement therapy (RRT) should ideally be started in a planned way, but this requires patients to actively engage in and make complex decisions about their health. A planned start is associated with improved outcomes and a higher likelihood of undertaking a home therapy or renal transplantation. Despite its importance, there is a paucity of published data in this area. Last year, the results of a retrospective study looking at unplanned dialysis starts at Centre 1 were presented. Here we report data from our sister hospital, Centre 2, on determinants of late decision making and late modality change in our population.

Methods:
We conducted a retrospective analysis of patients referred into the Nephrology service who started RRT in 2017. Data was collected on demographics, choice of RRT at pre-dialysis education, eGFR at education, actual starting modality and modality at 6 months.

Results:
A total of 124 patients were included. 71.0% were male, 41.9% were of non-White ethnicity and 30.6% were in the most deprived Index of Multiple Deprivation decile. 92.7% had a documented date of referral to the Kidney Failure Support Team. At referral, the mean age was 61.6 years and mean eGFR 16.2 mL/min/1.73m². 87.1% (n=108) had a documented decision on choice of modality (42.6% HD, 51.9% PD, 0.9% conservative management, 4.6% undecided).

A total of 77 patients (62.1%) started on HD. Of these, 40.3% started on an AV fistula, 10.4% on a tunnelled dialysis catheter and 49.4% via temporary access. Of those who had a documented decision on RRT, 83.3% (n=90) started on their chosen modality (46 HD and 44 PD). All patients who chose HD started on HD. 12 patients who chose PD started on HD. All undecided and conservative management patients (n=6) started HD (5 via a temporary line). Of the 16 who had no recorded decision, 13 started on HD (11 via a temporary line) and 3 on PD.

At 6 months, 49.2% (n=61) were on HD (1 home HD), 35.5% (n=44) were on PD, 1 was transplanted, 2 recovered renal function, 2 transferred to other HD centres and 11.3% (n=14) were deceased. Overall, 64.5% (n=80) remained on their chosen modality at 6 months. A higher proportion of patients who were undecided, had no documented RRT decision or who had a late modality change (n=34) were male (73.5%) and of non-White ethnicity (44.1%).

Conclusions:
The majority of patients at our centre who made a decision regarding dialysis modality started and remained on their chosen modality. Almost all who were undecided, had no documented decision or who made a late modality change started HD via a temporary line. Similar to Centre 1, our data show that a higher proportion of these patients were male and of non-White ethnicity. Further work is needed to address the behavioural and cultural factors that influence late decision making in order to improve outcomes in this group of patients.
We would like to acknowledge and thank Dr Stephanie Stringer and Dr Alice Culliford for their prior work at Centre 1.