

Chapter 20: Transplantation and Waiting lists

This chapter was written in collaboration with UK Transplant and the British Transplantation Society. Data on some aspects have been analysed only for those centres on both the Renal and Transplant databases; for these patients it is possible to analyse the whole RRT history in a longitudinal manner. This approach will be developed in coming years.

Summary

Between 1988 and 1998, there was a decrease in both the percentage and absolute number of grafts in the age range 18-24. By contrast, both the number and percentage of grafts in the age range 35-44 increased, probably because more Type I diabetic patients were transplanted. Despite an increase in the number of patients over 65 years old on RRT (46% of all patients starting dialysis in 1998) only a few patients of this age are transplanted.

In 1998, 48% of kidneys were retained locally, in contrast to over 60% in 1988 and 1993. This is the result of regional arrangements from 1996 to exchange beneficially matched kidneys.

Between 1993 and 1998, the UK transplant waiting list increased from 3,800 to 4,400 with an increase in the percentage of patients in the 35 – 54 age group. In the over 55 age group where there has been the greatest increase in the dialysis population, figures have remained relatively static in terms of percentage and absolute number.

Between 1993 and 1998, there was an overall drop in the percentage of patients on the waiting list who received a graft. This reflects a combination of an increased waiting list and reducing donor numbers. This change was most notable in the drop in transplantation in 18-24 year olds associated with a relative increase in transplantation in the 35-44 age group.

In 1993, 16% of the total number of UK patients on the waiting list were suspended and this had risen to 19% on the 1st January 1999. As expected the proportion of suspended patients rises with age.

28% of the 6838 dialysis patients on the Renal Registry in 1998 were on the active waiting list; there remains a large variation (16-38%) in the percentage of dialysis patients on the transplant active waiting list from centre to centre in the Registry. A confounding factor, not analysed this year, may be differences in the age profile from centre to centre, since in the Renal Registry dialysis population, there is a trend for a higher percentage of younger patients to be on the waiting list.

Between 1983 and 1998 there was a marked increase in the incidence of diabetics transplanted. However, the 1983 data may be distorted; no diagnosis is available for 49% of patients in that year whereas this figure is 39% in 1998. The rise in diabetics was mainly noted in the 35-64 age group

For Renal Registry centres only 22% of dialysing diabetics aged under 65 were on the active waiting list compared with 44% of non-diabetics

Introduction

This section inaugurates the first collaboration between the Renal Registry and UK Transplant. It is anticipated that the integration of information from two complementary databases will lead to a more complete, accurate and comprehensive analysis of transplantation trends in the UK.

UK Transplant holds the waiting list, recipient tissue typing data and donor information. Linking this data with the pre-transplant history, post transplant failure data and quarterly biochemistry and blood pressure data collected by the Renal Registry will provide unique insights.

This supplement is a starting point to illustrate the potential of integration. With more centres joining the Registry it is anticipated that this will develop into a substantially more detailed and comprehensive analysis in the future and bear fruit in joint publications.

10 year changes in age at transplantation

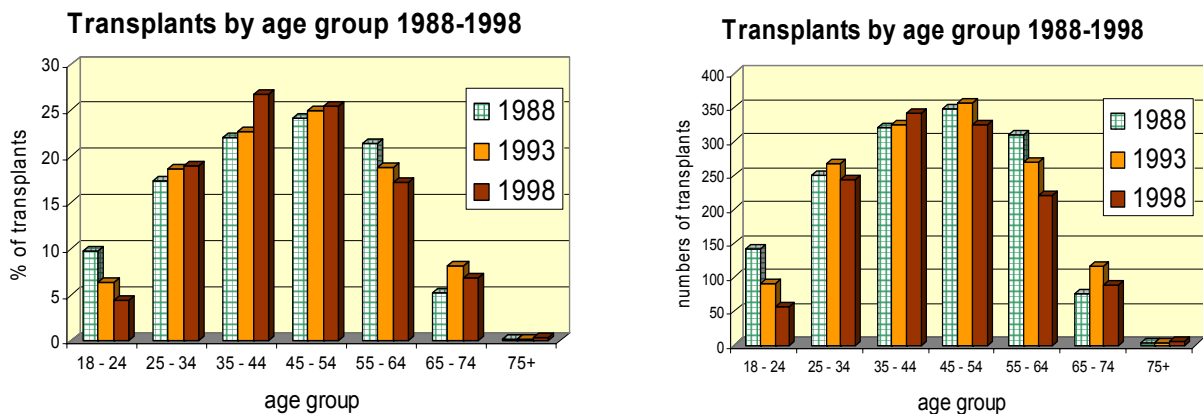


Figure 20.1a&b Transplantation by age groups 1988 -98

The figure above of new transplants by age group for the years 1988, 1993, 1998 indicate a trend to increased percentage of transplants in the 25-54 range, a drop in those between 55-64 and an increase in those greater than 65. When analysed using the numbers transplanted there is an increase in the 35-44 age group with a marked reduction in the 18-24 group. The reasons for the increase are probably related to a rise in transplantation rates of Type I diabetic patients.

Only a small percentage of patients over 65 years were transplanted although in 1998 26% of all renal replacement therapy patients were over 65 and 46% of all patients starting dialysis were over 65.

It was uncommon to transplant patients over 75 years although there were a few patients in this category.

10 year changes in use of local and exchanged kidneys

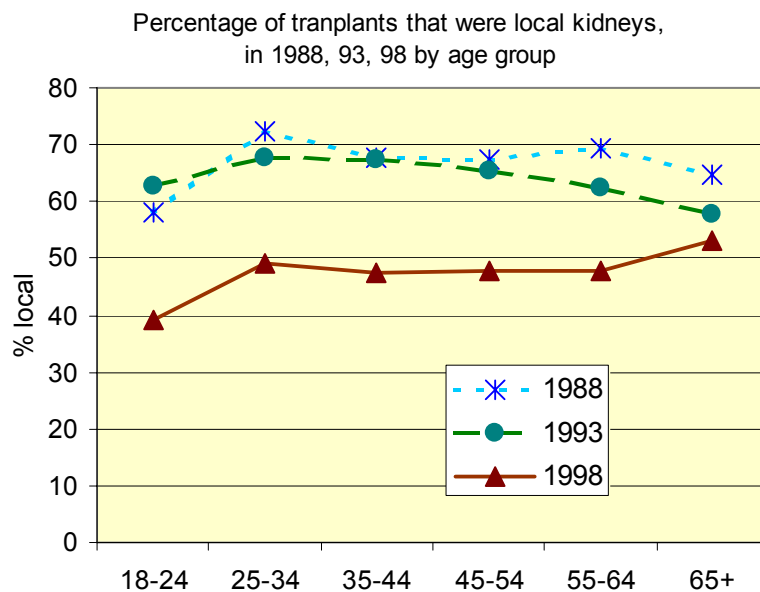


Figure 20.2 Transplanted local kidneys 1988 - 98

In 1988 and 1993 over 60% of kidneys were transplanted locally. This was generally true across all age bands and there was no bias to transplant younger people with an available local kidney. Within this period UK Transplant ran a beneficial matching scheme for exchanging kidneys.

In 1996 various transplant centres started to group together to exchange beneficially matched kidneys. As expected this has caused a reduction to 48% of kidneys that are retained locally and there was no age bias.

Five year changes in the transplant active waiting list by age

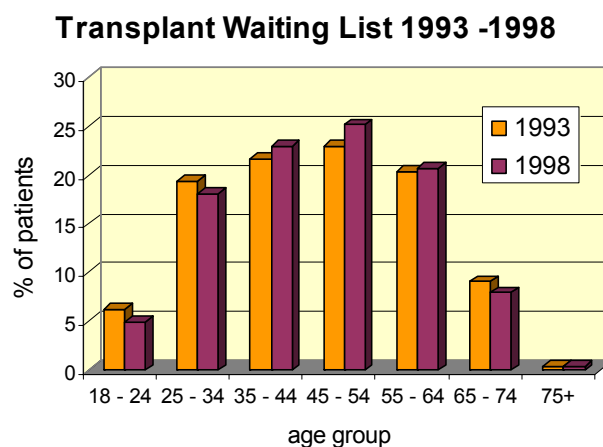


Figure 20.3 Transplant waiting lists 1993-98.

Over 5 years the total number of patients on the UKTSSA active waiting list has risen from 3,800 to 4,400 with an increase in the percentage of patients in the 35 – 54 age group waiting

for a transplant. Surprisingly in the over 55 age group where there has been the greatest increase in the dialysis population, these numbers have remained relatively static.

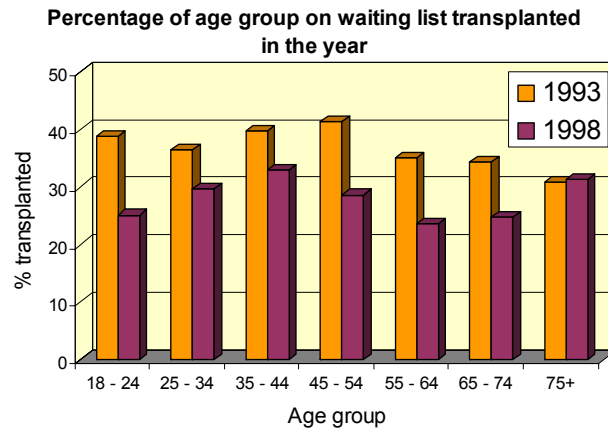


Figure 20.4 Transplants by age 1993-98.

Between 1993 and 1998, there is an overall drop in the percentage of patients on the waiting list who received a graft. This reflects a combination of an increased waiting list and reducing donor numbers. This change was most notable in the drop in transplantation of the 18-24 year olds associated with a relative increase in transplantation in the 35-44 age group.

Listing for transplantation

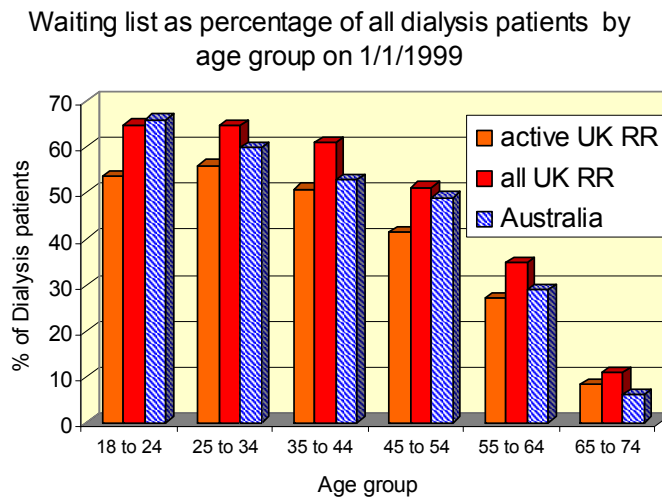


Figure 20.5 Waiting lists as a percentage of all dialysis patients

The above figure only includes data from centres on the UK Renal Registry and is therefore an approximation for the UK. In the UK only 50% of dialysis patients in the 18 – 44 age group were active on the waiting list. The total waiting list including the suspended patients is also shown. The Australian data, taken from the ANZDATA report excludes suspended patients (personal communication).

Pre-dialysis patients who have been listed pre-emptively have been excluded from the above UK analysis.

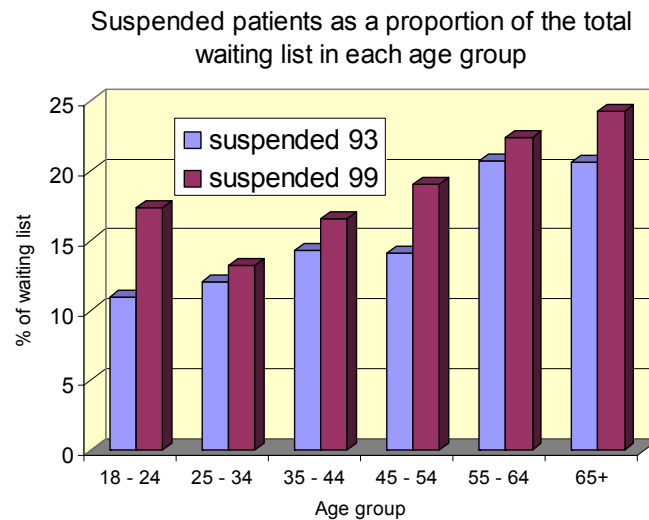
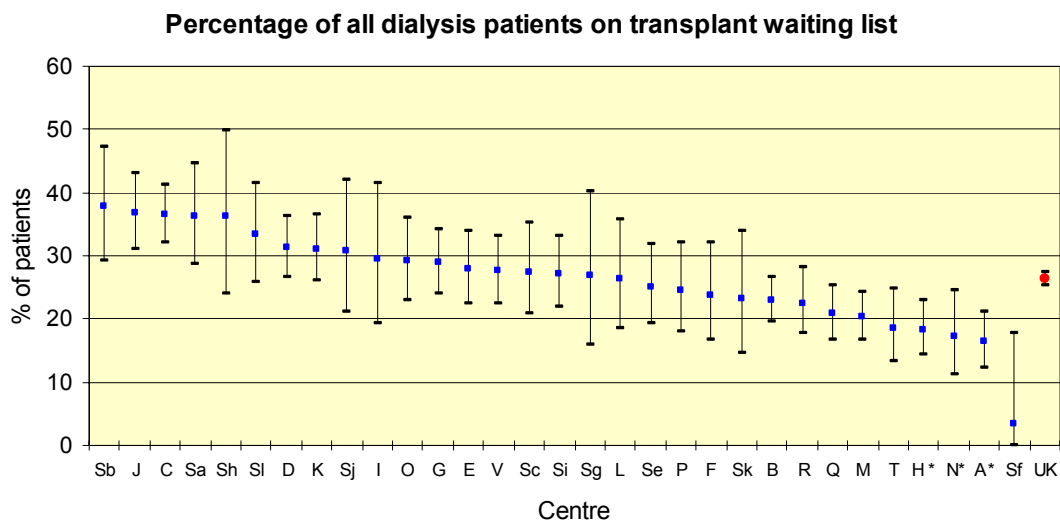


Figure 20.6 Suspended patients as a proportion of the waiting list

In 1993, 16% of the total number of UK patients on the waiting list were suspended and this had risen to 19% on the 1st January 1999. As expected the proportion of suspended patients rises with age. The reason for the rise in suspension of the 18-24 year olds is unknown.

Access to transplantation



* indicates 3 centres with a probable inaccurate count of the dialysis population

Figure 20.7 Percentage of all dialysis patients on waiting list by centre

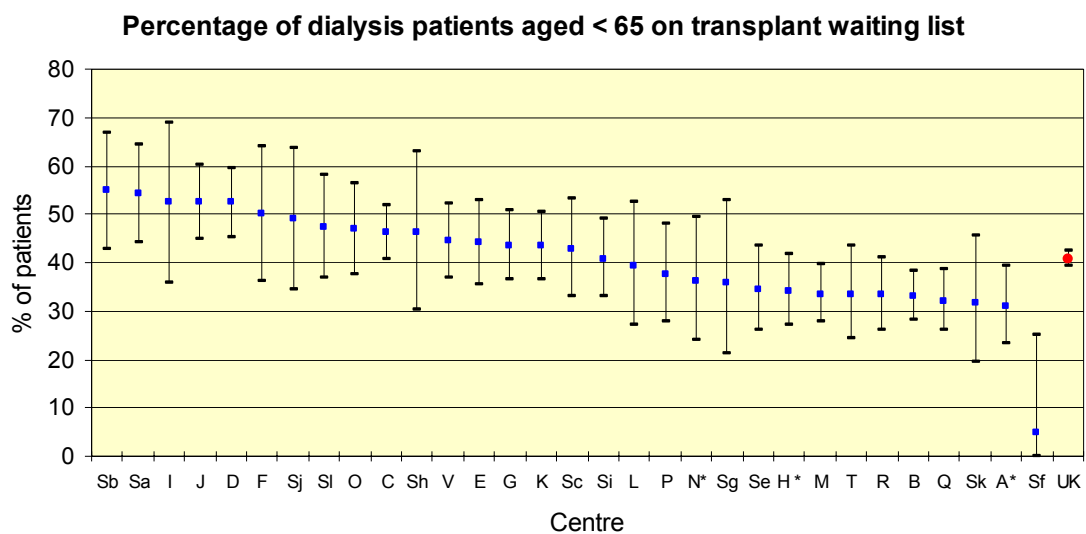
Pre-dialysis and suspended waiting list patients were excluded from this analysis

Figures 20.7-9 show the percentage of dialysis patients for each of the centres on the Registry who were on the transplant active waiting list on 31st December 1998. The data is arranged in

descending order and hence each centre position may vary between graphs. The lines indicate the 95% Confidence interval.

28% of the 6838 dialysis patients on the Registry in 1998 were on the active waiting list. This varied between centres from 16-38% (with one of the small centres <10%).

Figures 20.7-9 show a trend where a higher percentage of younger patients are on the waiting list. This trend may be related to the assumed increase in co-morbid conditions in the elderly. Additionally, these differences between centres may be related to an inter-centre variable proportion of patients in these age bands.



* indicates 3 centres with a probable inaccurate count of the dialysis population

Figure 20.8 Percentage of dialysis patients aged <65 on waiting list by centre

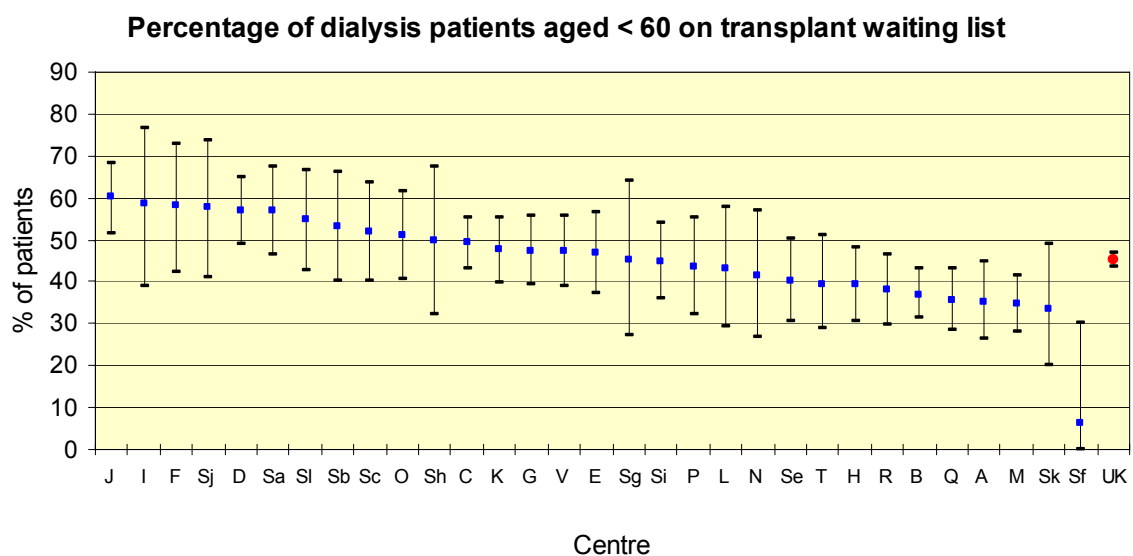


Figure 20.9 Percentage of dialysis patients aged <60 on waiting list by centre

Diabetes, transplantation and waiting lists

Numbers of diabetics transplanted

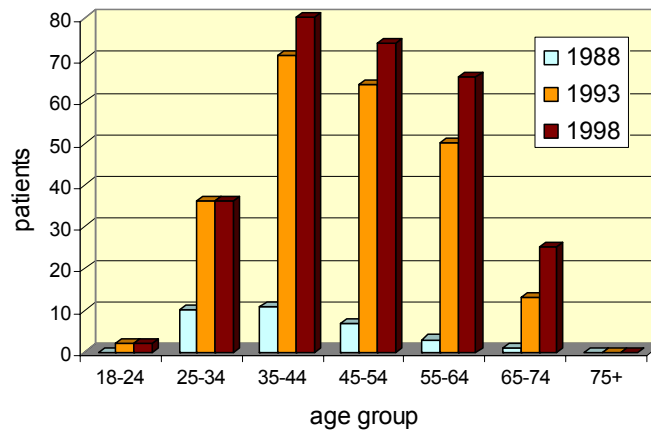
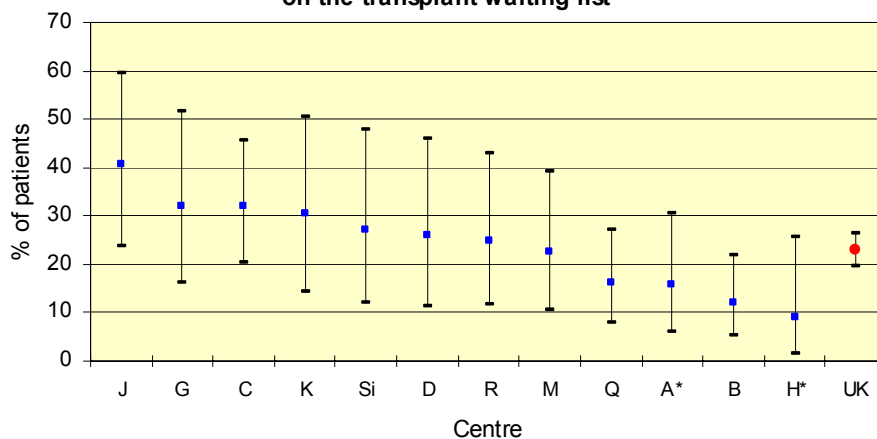


Figure 20.10 Number of diabetics transplanted

Between 1983 and 1998 there was a marked increase in the incidence of diabetics transplanted. However, the 1983 data may be distorted; no diagnosis is available for 49% of patients in that year whereas this figure is 39% in 1998 (Fig 20.10). The rise in diabetics was mainly noted in the 35-64 age group. This may just be a reflection of the increased percentage of diabetics entering the renal replacement therapy programme or it might additionally be a change in attitude to transplanting diabetic patients.

Percentage of dialysed diabetics aged < 65 on the transplant waiting list



* indicates 2 centres with a probable inaccurate count of the dialysis population

Figure 20.11 Diabetics on the waiting list by centre

The variation in the percentage of dialysing diabetics aged under 65 year who were on the active transplant list by centre is shown in figure 20.11. Centres with less than 20 diabetic patients in this category were excluded from the analysis, but have been included in the UK total. These numbers are small and the 95% confidence intervals are wide. Only 22% [95%CI 19-26%] of dialysing diabetics aged under 65 are on the active waiting list compared with 44% [95%CI 42 -45%] of non-diabetics.