THE IMPACT OF DIALYSIS TREATMENT ON THE PSYCHOLOGICAL HEALTH OF YOUNG ADULTS: DATA FROM THE SPEAK STUDY

Alexander Hamilton3, Fergus Caskey3, Anna Casula2, Carol Inward1, Yoav Ben-Shlomo3

1Paediatric Nephrology, Bristol Royal Hospital For Children, Bristol, United Kingdom, 2Statistics, UK Renal Registry, Bristol, United Kingdom and 3Population Health Sciences, University of Bristol, Bristol, United Kingdom

INTRODUCTION AND AIMS: Young adults (YA) receiving renal replacement therapy (RRT) have impaired psychosocial health and are high-risk for graft loss. We aimed to 1) describe their psychological status; 2) explore determinants of quality of life and 3) medication adherence.

METHODS: We conducted a cross-sectional online survey for YA on RRT. Additional clinical information was obtained from the United Kingdom Renal Registry. We compared outcomes by treatment modality using age and sex adjusted regression models, having applied survey weights to account for response bias by gender, ethnicity and socioeconomic status. We used multivariate linear regression to examine associations with scores on the 14-item Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS, maximum score 70 indicating greater wellbeing) and the 8-item Morisky Medication Adherence Scale (MMAS-8, maximum score 8 indicating higher adherence).

RESULTS: We recruited 976 YA and 64% responded to the survey - 417 (71%) with transplants and 173 (29%) on dialysis. Compared to transplant, dialysis was associated with: lowered health utility, wellbeing, disease acceptance, independence, patient activation and patient satisfaction; and more psychological disturbances, negative body image and stigma. As shown in Figure 1, positive associations with quality of life were: a more extraverted (p<0.0001) or open personality (p=0.002), being independent with activities of daily living (p<0.0001), and having above average social support (p=0.001). Negative associations included: having a more neurotic personality (p<0.0001), having greater negative body image (p=0.01), being more stigmatized (p<0.001), having a psychological disturbance (p<0.0001) and receiving dialysis (p=0.02). Gender and age group did not affect quality of life when adjusted for other factors.

As shown in Figure 2, factors associated with a higher medication adherence score were: living with parents (p=0.01), a more conscientious personality (p<0.0001), greater satisfaction with access to a doctor (p=0.008), a higher level of patient activation (p=0.008 for trend), male gender (p=0.04) and being aged 16 to <21 years (p=0.05). Factors lowering medication adherence comprised: having an additional condition (p=0.02), receiving dialysis (p<0.001), a lower age of finishing full-time education (p=0.01 for trend), Black and Asian ethnicities (p=0.002, p=0.02 respectively) and having a psychological disturbance (p<0.001).

CONCLUSIONS: This study demonstrates the adverse impact of dialysis treatment on the psychological health of YA on RRT. The reasons why YA remain on dialysis need better understanding. Psychological disturbances associated both with lower quality of life and medication adherence, are treatable and may be underdiagnosed.