**Physical Capacity and Exercise Patterns in Patients with End Stage Renal Disease**

**INTRODUCTION**: Patients with chronic kidney disease (CKD) and end stage renal disease (ESRD) often experience reduced physical activity levels and exercise capacity. This negatively impacts body composition by causing loss of muscle mass, and leads to reduced physical function and decreased quality of life. Evidence suggests that whilst physical activity is beneficial for patients with CKD and ESRD, incorporating it into their lifestyle can be challenging. Intradialytic and interdialytic exercise programmes are beneficial and widely advocated, and may help some patients to achieve more exercise. We therefore aimed to explore current levels of physical activity, exercise patterns, and barriers to undertaking exercise, in patients with CKD stage 5, to determine whether we could facilitate increased exercise by offering patients more information about exercise, and group-based exercise programmes.

**METHODS:** A questionnaire was distributed to a random sample of 100 patients with CKD stage 5, which included patients attending for dialysis and those attending pre-dialysis clinic. The questionnaire was designed to examine patients’ current physical activity levels, types of exercise undertaken, frequency and duration of exercise, level of motivation to undertake exercise, and barriers to exercise. Additional demographic data, and clinical data to determine treatment for CKD and ESRD, was also recorded.

**RESULTS:** 62 questionnaires were completed and returned (62% response rate). Respondents were 58% male and 42% female, median age 66 years. 85% were on dialysis and 15% attended low clearance clinic. 46 (74%) of respondents currently undertake some form of exercise, with 24 (39%) exercising on at least 3 days per week. The most popular exercise were walking (50% of respondents) and gardening/DIY (31% of respondents). The mean amount of time spent on exercise was 90 minutes per week. However, only 14 respondents (23%) considered themselves to be physically fit (8 were unsure). Those who considered themselves to be physically fit were more likely to be currently more active. 23 patients reported barriers to exercise, the most common being tiredness, pain and poor health. 23 (39%) patients would like to attend exercise sessions within the hospital and receive more education about suitable exercise, however this included only 5/16 patients who are not currently exercising. 50% of those patients not currently doing any exercise are contemplating starting exercise.

**CONCLUSION:** An encouragingly high numbers of our ESRD patients report that they are already undertaking exercise, and report spending a surprisingly high amount of time exercising each week. This could be explained in part by those patients who are more motivated to exercise being more inclined to complete the questionnaire. A relatively small number of patients consider themselves to be physically fit, which does not correlate with those reporting to be regularly physically active. As a reasonable number of patients would like to increase their activity levels and were keen to participate in exercise sessions for renal patients held within the hospital, we plan to investigate the feasibility of offering group exercise classes and evaluate their effectiveness.