**FRAIL ELDERLY PATIENT OUTCOMES ON DIALYSIS (FEPOD) PART 1: DESCRIPTIVE ANALYSIS OF SECONDARY OUTCOMES**

**Iyasere O, Johansson L, Smee J, Huson L, Brown E.A, and FEPOD 1 Investigators**

**Imperial College Renal and Transplant Centre, Imperial College Healthcare NHS Trust; Renal units SE England and Northern Ireland**

**INTRODUCTION**: Assisted peritoneal dialysis (aPD) is now more available as an alternative to hospital haemodialysis (HD) for frail older patients but the lack of outcome data comparing HD with aPD has limited its use. FEPOD part 1 reported no significant difference in the primary outcomes of quality of life and physical functioning, except for higher prevalence of possible depression in the aPD group. This report describes the secondary outcomes for the study group.

**SECONDARY OUTCOMES:** Hospitalisation, falls, symptom burden, cognition and patient satisfaction.

**METHODS:** aPD patients and HD patients were recruited from 11 centres. The HD patients were matched to recruited aPD participants by age, sex, diabetes status, time on dialysis, ethnicity and Index of Deprivation. The MiniMental State Examination (MMSE) and the Trail Making Form B were used to assess global cognitive function and executive function respectively. Falls and symptom burden were assessed using a falls questionnaire and the Palliative Outcome Symptom scale (renal) respectively. Patient satisfaction was measured using the Renal Treatment Satisfaction Questionnaire.

**RESULTS:** 106 patients (52 HD; 54 aPD) were recruited. 35 % of the study group had at least one hospital admission in the preceding three months. 42% of all admissions were dialysis related. 28% of the study group had at least one fall in the preceding three months.83.3% of them occurred at home, with the HD group sustaining more fractures than the aPD group (26.7% HD vs. 6.7% aPD, p=0.329). Lethargy, pain and poor mobility were predominant in the study group. The median number of reported symptoms were 9 (IQR 7 – 11) in the HD group and 10 (IQR 7.75 to 13) in the aPD group.42.3% of HD patients reported no improvement in symptoms since starting dialysis, as against 25.9% of the aPD group. 10.5% of the study group had abnormal MMSE scores (<24). There was no statistical difference in MMSE scores between HD patients and aPD patients [mean MMSE – 27 (HD), 28 (aPD), p=0.120]. In contrast, 36.8% had executive dysfunction (trail making B test time > 300 seconds) .Executive dysfunction was more prevalent in the aPD group [54.2% aPD vs. 27.7% HD, (p = 0.089)].

Despite the above outcomes, 91.5% of the study group would recommend their therapy to others (mean total renal treatment satisfaction scores - 49.6 HD vs. 50.3 aPD, p=0.722).

**RELEVANCE:** There is a high prevalence of falls, symptom burden, executive dysfunction and hospitalisation in frail elderly dialysis patients, irrespective of dialysis modality. This should be considered during discussions about renal replacement modalities (including non-dialytic care). FEPOD part 2, the longitudinal phase of the study, will provide information on the influence of dialysis modality on the trajectory of these outcomes.