

Quality of Life for Older Patients on Peritoneal Dialysis and Haemodialysis: Broadening Options for Long Term Dialysis in the Elderly (BOLDE)

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Patients ≥ 65 years old are less likely to start on peritoneal dialysis (PD) than on haemodialysis (HD) as there is a prejudice that they will not cope with a home based treatment. Little is known about difference in quality of life (QOL) between older patients on HD and PD. BOLDE is a multicentre cross-sectional study investigating how to extend access to PD to older patients. The first part has been to measure QOL using Short Form 12 (SF-12 v2), Hospital Anxiety and Depression Scale (HADS), Illness Intrusiveness Ratings Scale (IIRS) and Pictorial Representation of Illness and Self Measure (PRISM) in 70 matched pairs of HD and PD patients (age, sex, dialysis vintage, ethnicity, Index of Deprivation). Cognitive function was measured using MMSE and Trail Making Test-B. Patients with significant cognitive dysfunction and expected life expectancy of <6 months are excluded.

140 patients have been studied (70 PD, 70 HD). Matching was successful: mean age, time on dialysis, index of deprivation was 73 ± 5.5 years, 30.5 ± 28.3 months and 13.7 ± 11.3 for PD and 73 ± 5.1 years, 31.4 ± 26.5 months and 13.7 ± 8.7 for HD. Mean comorbidity count was 1.8 ± 1.3 for PD and 2.4 ± 1.6 for HD. As shown in the table below, Illness Intrusion Ratings, HADS anxiety and HADS depression were significantly higher (worse) in the HD group even after adjusting for comorbidity.

QOL measure	Unadjusted means scores			Adjusted means scores		
	PD	HD	p-value	PD	HD	p-value
SF-12 Mental Component Score	55.0	51.3	0.046	54.5	51.9	0.159
SF12-Physical Component Score	36.4	34.3	0.263	35.7	35.0	0.692
Illness Intrusion Ratings Scale	24.9	30.4	0.005	25.1*	30.2	0.012
HADS Anxiety	3.3	5.3	0.004	3.5*	5.1	0.006
HADS Depression	4.0	5.6	0.005	4.2*	5.5	0.014
Trail Making Test-B (difference between observed and expected) seconds	18.4	12.1	0.673	19.1	11.4	0.613
Symptom score	30.8	35.5	0.079	32.3	33.9	0.494
Handgrip kg	24.4	23.3	0.430	24.1	23.7	0.764
PRISM mm	111	91	0.067	111	91	0.083

Adjusted for comorbidity count

* scores indicate improved quality of life outcomes in PD compared to HD groups.

In conclusion, this cross-sectional study has shown that older patients on PD have less anxiety and depression and lower illness intrusion than their matched counterparts on HD. This information should be given to patients when making decisions about dialysis modality choices. The next part of the study is to explore how education is given to patients in different centres and how patients make decisions about dialysis modality.