

Quality of life in older patients with end-stage renal disease: comparison of comprehensive conservative care and dialysis

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INTRODUCTION

- Older patients approaching end-stage renal disease face the decision whether or not to start dialysis.
- Comprehensive conservative care is argued to be a reasonable alternative, as dialysis has not always been shown to benefit older and often frail patients in terms of survival.
- To truly improve decision-making, adequate data on other important outcomes like quality of life are needed.

METHODS

- Objective:** To compare health-related quality of life in renal patients ≥ 70 years old treated with either dialysis or comprehensive conservative care.
- Design:** cross-sectional, single-center cohort study.
- Participants:** 96 patients ≥ 70 years old with end-stage renal disease, who had chosen dialysis (n=73) or conservative care (n=23) after careful counselling. The dialysis group was divided into patients not yet started on dialysis (n=39) and patients started on dialysis (n=34).
- Outcome measures:** quality of life was assessed using the Kidney Disease Quality of Life Short Form (KDQOL-SF™). Physical and mental health summary scores and 3 kidney disease-specific domain scores were calculated. Higher scores (0-100) indicate better quality of life.

RESULTS

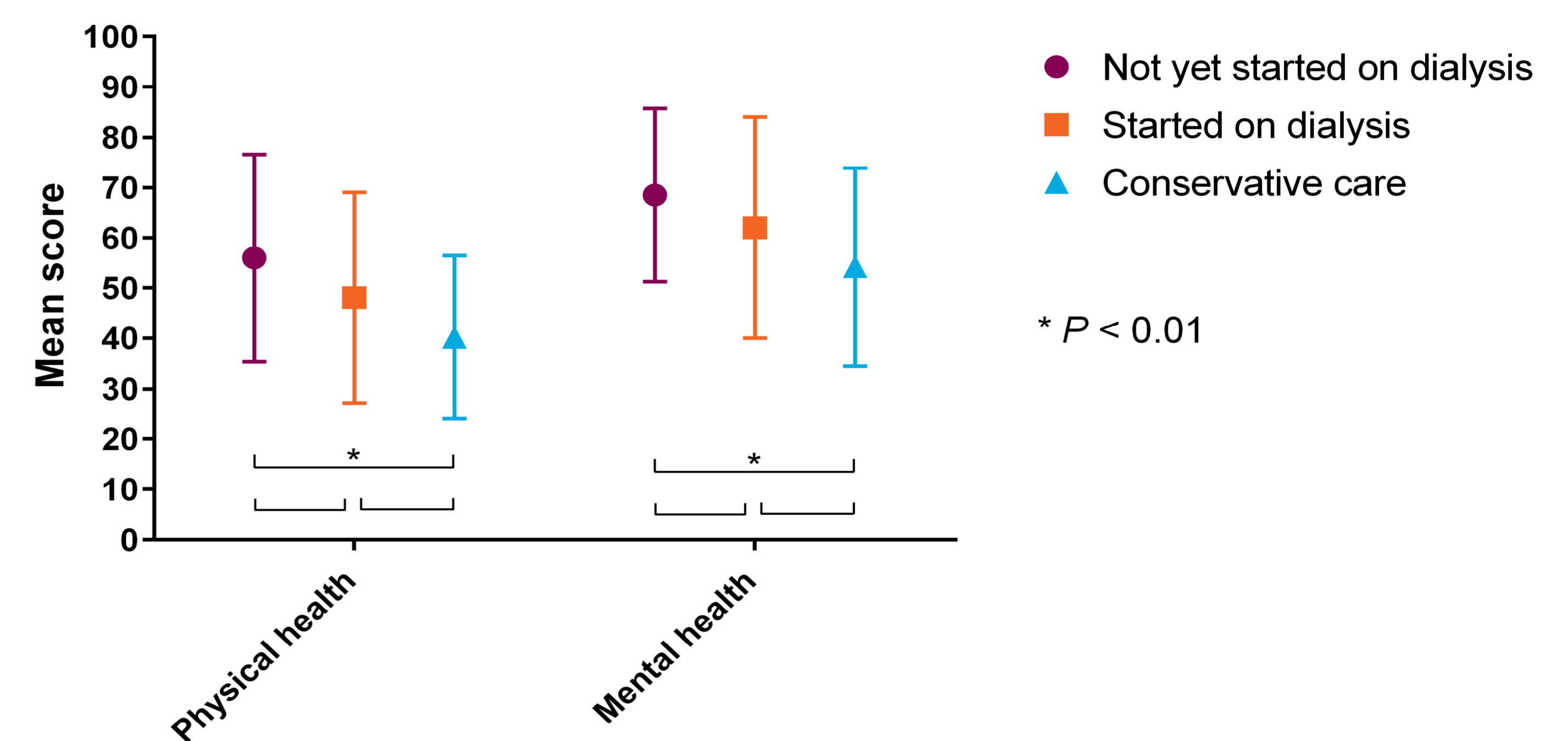
- Of the 134 eligible patients approached to take part, 99 patients (74%) consented. Three patients were excluded from analysis because of too many missing answers.
- Of the 34 patients on dialysis, 26 (76%) were treated with haemodialysis, and 8 (24%) with peritoneal dialysis.

Table 1. Baseline characteristics.
Mean (SD); Number (%)

	Not yet started on dialysis (n=39)	Started on dialysis (n=34)	Conservative care (n=23)	Pvalue
Age (years)	79.8 (5.1)	80.1 (3.3)	83.8 (5.0)	1: 0.004 2: 0.001 3: 0.78
Female	12 (31%)	8 (24%)	11 (48%)	1: 0.18 2: 0.06 3: 0.49
Davies comorbidity score				1: 0.85 2: 0.87 3: 0.83
No comorbidity (score = 0)	5 (13%)	3 (9%)	2 (9%)	
Intermediate comorbidity (score = 1 or 2)	23 (59%)	20 (59%)	15 (65%)	
Severe comorbidity (score ≥ 3)	11 (28%)	11 (32%)	6 (26%)	
Interviewer-administration of KDQOL-SF™	7 (18%)	18 (53%)	6 (26%)	1: 0.45 2: 0.04 3: 0.002

- 1: Not yet started on dialysis vs. Conservative care
2: Started on dialysis vs. Conservative care
3: Not yet started on dialysis vs. Started on dialysis

A. Physical and mental health summary scores



B. Renal specific domains

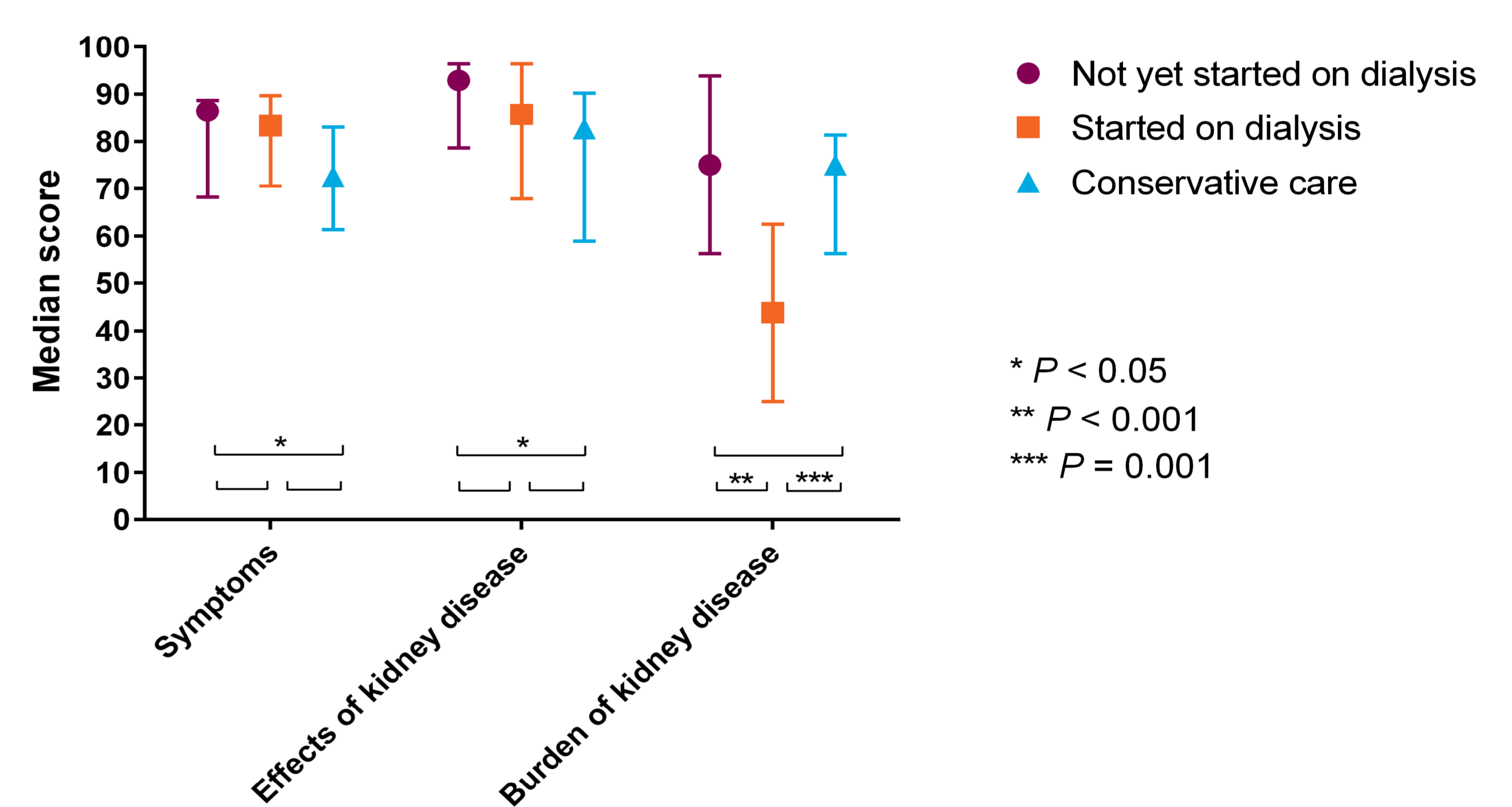


Figure 1. Scores for KDQOL-SF™ questionnaire.

Table 2. Multiple linear regression models of physical and mental health scores.
Age and Davies comorbidity score were no significant predictors.

Physical health summary score		95% confidence interval		Pvalue
R ² = 0.22, F(4,91) = 6.36, P < 0.001				
	B			
Constant	41.31	32.54 to 50.09		
Female vs. male	-10.01	-18.28 to -1.73		0.02
Interviewer-administration vs. self-administration	14.23	5.63 to 22.84		0.001
Not yet started on dialysis vs. conservative care	15.24	5.46 to 25.03		0.003
Started on dialysis vs. conservative care	1.58	-8.87 to 12.04		0.76
Mental health summary score		95% confidence interval		Pvalue
R ² = 0.28, F(3,91) = 11.77, P < 0.001				
	B			
Constant	48.82	41.30 to 56.34		
Interviewer-administration vs. self-administration	20.49	12.41 to 28.6		< 0.001
Not yet started on dialysis vs. conservative care	16.03	6.90 to 25.16		0.001
Started on dialysis vs. conservative care	2.01	-7.67 to 11.69		0.68

CONCLUSIONS

- Patients ≥ 70 years old choosing dialysis but not yet started had better quality of life scores compared with patients on conservative care.
- Quality of life scores did not differ between patients started on dialysis and patients on conservative care.
- Burden of disease was highest in patients started on dialysis.
- This study provides important information to improve counselling of older patients with end-stage renal disease.