

Assessment of Health - Related Quality of Life in Kidney Transplant Recipients vs Dialysis Patients

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Background: Diminished health-related quality of life (HRQoL) is common in End-Stage Renal Disease (ESRD) patients undergoing dialysis and is associated with increased morbidity and mortality. Kidney transplantation, the treatment of choice for ESRD patients, seems to improve both survival and HRQoL.

Objectives: The aim of this cross-sectional study was to evaluate and compare the HRQoL among three groups of patients: Hemodialysis patients (HD), Peritoneal dialysis patients (PD) and Kidney Transplant Recipients (KTRs) in our Nephrology – Kidney Transplant Unit of the University Hospital of Ioannina (Epirus, Greece).

Methods: A total of 213 (90 HD, 39 PD and 84 KTRs, mean age: 57.9 ± 13.8 HD, 58 ± 16 PD and 55.5 ± 10.7 KTRs years) stable, long term (at least 6 months on dialysis or kidney transplant) patients were enrolled, after providing written informed consent.

The Greek version of the Short Form 36 items health survey was used to evaluate HRQoL.

Results (Table):

- KTRs in comparison with HD patients had significantly better levels regarding dimensions of Vitality (VT) (p=0.01), Role Physical (RP) (p<0.01), Bodily Pain (BP) (p=0.01) and better levels of Physical Component Summary score (PCS) (p<0.01) as well.
- KTRs compared with PD patients had significantly better levels at dimensions of General Health (GH) (p=0.05), Role Physical (RP)(p<0.01) and Physical Component Summary score (PCS) (p<0.01), but worst levels of Mental Health (MH) (p=0,01) and Mental Component Summary score (MCS) (p<0.01).
- The comparison between HD and PD patients showed that PD patients had significant better score at dimension of Vitality (VT) (p<0.01) and worst at Bodily Pain (BP) (p≤0.05).

Conclusion:

The results of our study showed that KTRs seem to have better Physical Component Summary score compared with all dialysis patient. On the other hand, PD patients had better Mental Health compared with KTRs.

Comparison of SF-36 dimensions' scores among the three groups of patients

Dimensions	SF 36			KTR - HD	KTR - PD	HD - PD
	KTR (N=84)	HD (N=90)	PD (N=39)	P ₁	P ₂	P ₃
Physical Function (PF)	72.98 (20.40)	70.00 (25.81)	72.05 (23.72)	0.40	0.82	0.67
General Health (GH)	57.19 (24.23)	52.20 (21.58)	48.35 (20.87)	0.18	0.05	0.35
Vitality (VT)	65.28 (20.30)	56.33 (22.45)	72.56 (19.32)	0.01	0.06	<0.01
Mental Health (MH)	67.39 (19.73)	70.44 (18.65)	76.71 (17.26)	0.30	0.01	0.08
Role Physical (RP)	73.41 (26.20)	47.50 (43.39)	52.56 (46.87)	<0.01	<0.01	0.55
Role Emotional (RE)	75.50 (24.00)	73.33 (35.40)	70.08 (38.83)	0.64	0.34	0.64
Social Function (SF)	77.83 (22.57)	73.19 (32.26)	79.80 (24.77)	0.28	0.66	0.26
Bodily Pain (BP)	75.56 (26.26)	63.35 (34.50)	75.71 (30.13)	0.01	0.98	0.05
Physical Component Summary (PCS)	47.98 (8.70)	40.67 (11.33)	42.38 (10.02)	<0.01	<0.01	0.41
Mental Component Summary (MCS)	46.94 (9.70)	49.33 (10.26)	52.34 (9.08)	0.12	<0.01	0.12