

Factors associated with haemodialysis patients' quality of life

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Introduction

Chronic Kidney Disease (CKD) is characterised by gradual and unstoppable loss of kidney function.¹ The reduction in quality of life (QOL) in patients under regular haemodialysis has been evaluated by many authors. Several studies show that the QOL is lower in CKD patients under haemodialysis treatment (stage 5 D) as compared with the overall population.²

Objectives

To evaluate the correlation between the kidney-disease specific quality of life and age, Karnofsky Performance Status Scale³, comorbidities in maintenance haemodialysis patients.

Methods

91 people (46 male) undergoing haemodialysis participated in this cross-sectional study. Data collection included the questionnaire KDQOL vs. 1.3, Karnofsky Performance Status Scale, and Charlson Comorbidity Score⁴. Sociodemographics were determined on the basis of the existing database in the clinic and included age and gender.

Results

Participants in the study showed an overall low quality of life, mainly in the physical component. A statistically significant inverse correlation was found between QOL and age ($p < 0.001$) as well as between QOL and the Karnofsky Performance Status Scale ($p < 0.001$) (Table 1 and 2). Comorbidities had a significant inverse correlation to the physical component of QOL ($p = 0.001$) (Table 3).

Conclusion

Age and comorbidities appear to be important components of the physical health domain of quality of life. An increase in age and the number of comorbidities were associated with significantly lower QOL scores. This study contributes to support further studies aiming to improve the QOL in haemodialysis patients.

		Age	Karnofsky	SF-12 Physical Composite	SF-12 Mental Composite
Age	Spearman correlation	1			
	Sig. (2 extremity)				
	N	91			
Karnofsky	Spearman correlation	-,553	1		
	Sig. (2 extremity)	,000			
	N	89	89		
SF-12 Physical Composite	Pearson correlation	-,447	,516	1	
	Sig. (2 extremity)	,000	,000		
	N	87	85	87	
SF-12 Mental Composite	Pearson correlation	,012	,214	,158	1
	Sig. (2 extremity)	,912	,049	,144	
	N	87	85	87	87

Table I: Correlation between demographics, Karnofsky and scores KDQOL

Physical quality of life				
Karnofsky	β	95% CI	p value	R
Model 1	23.239	14.812;31.66	<0.001	0.516
Model 2	16.183	6.282;26.084	<0.001	0.588

β - not standardized coefficients
Model 1 - Unadjusted
Model 2 - Model adjusted for age, sex, duration of dialysis, education and marital status

Table II: Regression between demographics, Karnofsky and scores KDQOL

		SF Physical	SF Mental
Total comorbidities	Spearman	-0.349	0.075
	p value	0.001	0.492
	n	87	87

Table III: Correlation between comorbidities and KDQOL components

References

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