CPC028

Short form 36 and hospital anxiety and depression scale and its predictors in Saudi dialysis patients and healthy controls

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Introduction

Humans increasingly suffer from chronic diseases and the increased burden of chronic illness has an impact on mood and cognition in comparison to normal healthy subjects. The maintenance of good health related quality of life (HRQOL), lower anxiety and depression are an important goal for treatment, for example in dialysis patients. Marked impairment in QOL, higher anxiety and depression in dialysis patients were documented, however little is known about the specific case of Saudi dialysis patients.

Aims

The purpose was to understand and characterize any impairments in HRQOL, anxiety and depression using 36-item Short-Form Health Survey SF-36, hospital anxiety and depression scale (HADS), respectively (Arabic version) in Saudi stable dialysis patients and to explore predictors of poor HRQOL, anxiety and depression.

Methods

A total of fifty-three Saudi dialysis patients were recruited to this study from two dialysis centres at Riyadh, the capital city of Saudi Arabia. Age and education-matched healthy volunteers (36 subjects) were recruited from the same hospitals. This study was a cross-sectional assessment of HRQOL, anxiety and depression using SF36 and HADS, respectively; in a group of Saudi stabilized dialysis patients and healthy controls. Variables such as age, education , gender, dialysis duration, DM and smoking were identified by linear regression analysis as independent predictors.

Results

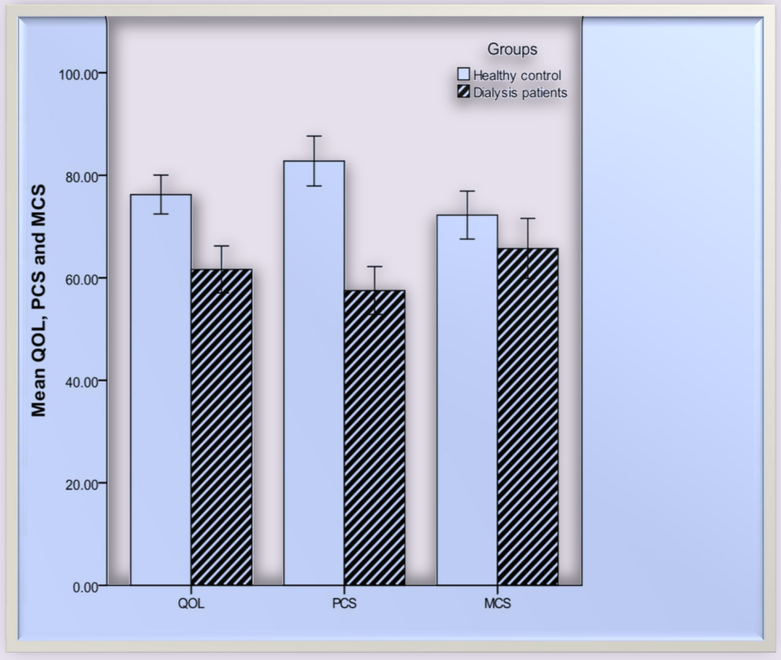
The dialysis patients and healthy controls had similar mean ages (33.7 ± 9.9 vs. 36.6 ± 10.9 years), and education level (12.1 ± 3.0 vs. 11.5 ± 3.3 years). The gender ratio was also similar, 55.6% male in healthy controls and 64.2% in dialysis patients. Longer dialysis duration was a predictor of poor HRQOL (R^2 = .08, p=.04), PCS (R^2 = .09, p=.03), MCS (R^2 = .09, p=.02), and also predict higher anxiety (R^2 = .07, p=.04). female gender (R^2 = .11, p=.045) and lower education level (R^2 = .06, p=.048) predicted higher anxiety.

QOL, PCS, MCS, and anxiety report of multiple regressions.

	B	SE B	Beta	P	R^2
QOL					
Constant	66.78	3.32	- .28	.04	.08
Dialysis duration	- .88	.42			
PCS					
Constant	63.06	3.37	- .29	.03	.09
Dialysis duration	- .95	.43			
MCS					
Constant	90.00	6.90	- .30	.02	.09
Dialysis duration	- 1.21	.51			
Anxiety					
Constant	5.92	3.08	.28	.02	.11
Gender	2.46	.99	-.26	.03	.07
Education	-.33	.15	.31	.01	.06
Dialysis duration	.25	.09			

- The B value indicates the relationship between RAVLT and each predictor. A positive value indicates a positive relationship between the predictor and the outcome whereas a negative coefficient represents a negative relationship.
- The SE B is the standard error of B value.
- The standardized beta value represents the number of standard deviations that the outcome (RAVLT) will change as a result of one standard deviation change in the predictor (DM and gender).
- R^2 represents a measure of how much the variability in the outcome (RAVLT) is accounted for by the predictor (DM in step 1). ΔR^2 represents a measure of how much the variability in the outcome (RAVLT) is accounted for by the second predictor (gender in step 2) and the third predictor (AT_2R in step 3).
- P represents statistical significant of observed differences.

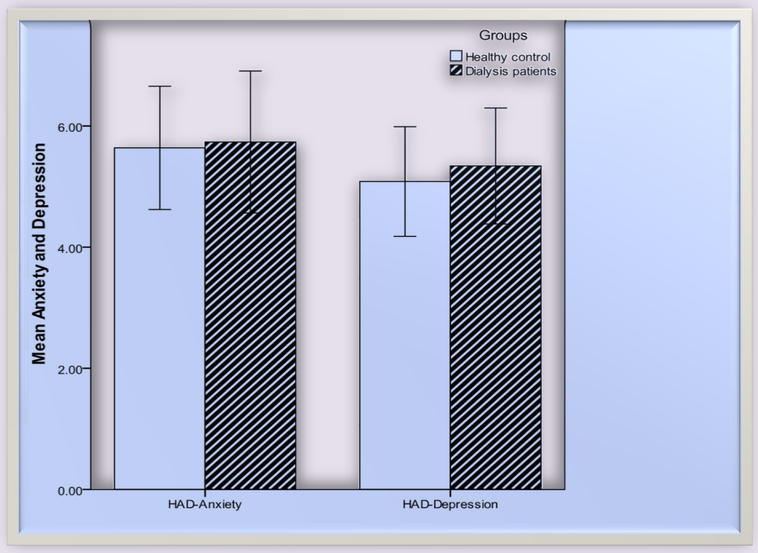
Mean ± 95% CI of QOL, PCS, and MCS sores for dialysis patients and healthy controls.



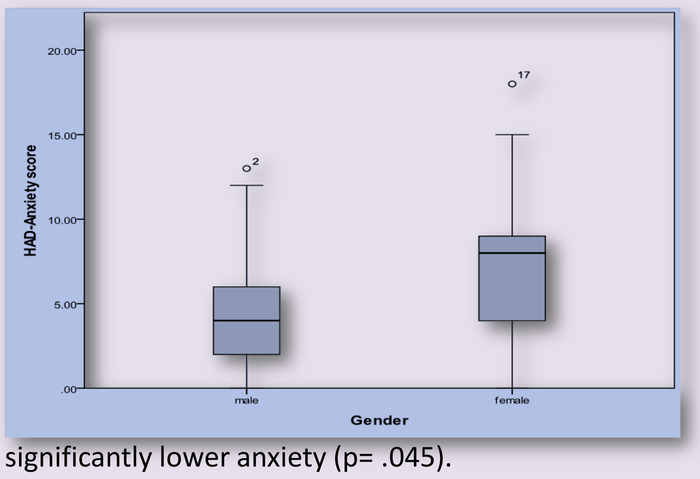
* represents significant difference from control group (p<.05).

QOL: quality of life, PCS: physical component summary, MCS: mental component summary.

Mean ± 95% CI of anxiety and depression scores of dialysis patients and healthy controls



Boxplot for the HAD-Anxiety score by gender type



Male patients have significantly lower anxiety (p= .045).

Conclusion

Hemodialysis patients give a representative sample of stable dialysis patients in Saudi Arabia. This study documents the low QOL in dialysis patients with the deleterious impact of dialysis duration on HRQOL as documented previously. Anxiety and depression test scores for dialysis patients were similar to that for normal healthy controls that is not in accordance with the previous reports. The deleterious impact of female gender, low education level and longer dialysis duration on anxiety was documented. The reason might be multifactorial and may include but not be limited to comorbid conditions, changes in lifestyle of dialysis patients, religious beliefs and social supports.

Acknowledgements

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