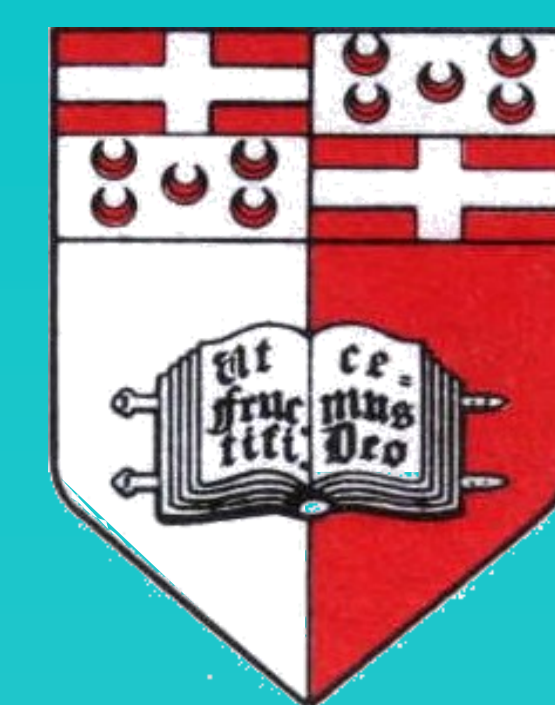


Quality of life in hypertensive dialysis patients



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Introduction

In chronic kidney disease (CKD), hypertension is the major risk factor for the progression of kidney dysfunction and the development of cardiovascular disease.¹ Management of CKD entails the use of haemodialysis (HD) and peritoneal dialysis (PD) treatment, that greatly affect the quality of life (QoL) of these patients. Moreover compliance to antihypertensive medications needs to be ensured as this will impact on the outcome of therapy.

Aims

To determine adequacy of long-term blood pressure (BP) control in dialysis patients; evaluate effects of dialysis and hypertension on patients' QoL; identify antihypertensive medications used and assess patient's compliance to treatment; identify factors causing a decreased QoL and reduced compliance and improve these aspects through patient education.

Methodology

Setting: Renal Unit, Mater Dei Hospital, Msida, Malta.

At baseline

- ◆ Dialysis patients were interviewed using the Kidney disease and quality of life short form (KDQoL-SFTM) questionnaire² and a compliance questionnaire, previously developed for a local study³, if they were receiving antihypertensive medications.
- ◆ A pharmacist-led educational intervention, undertaken by investigator (AMM), was next carried out with all dialysis patients, that covered:
 - ⇒ Role of the kidney; effects of kidney disease and dialysis;
 - ⇒ Health consequences of high BP and non-compliance;
 - ⇒ Ways of improving QoL, BP control and compliance.
- ◆ BP measurements for 3 consecutive treatments for HD patients and 3 consecutive clinic visits for PD patients were collected from patients' files, after being recorded by Renal Unit nurses.

After 6 months

- ◆ Patients were re-interviewed by the same investigator using the same questionnaires and another 3 consecutive BP measurements were recorded.

A control group of non-dialysis patients were interviewed using the Short Form-36 Health questionnaire (SF-36) and the compliance questionnaire, where applicable.

Results

BP results

Dialysis patients (n=60) were considered to be hypertensive if their BP $\geq 140/90$ mmHg after at least 2 consecutive readings or if they were receiving antihypertensive medications.

	Mean BP at baseline	Mean BP after 6 months
HD (n=27)	126/71	126/69
PD (n=33)	135/77	137/79
No. of patients receiving antihypertensives (n=60)	41	43

Table 1. BP results for dialysis patients at baseline and after 6 months (n=60).

QoL results

At baseline, highest QoL scores for dialysis patients were in patient satisfaction and dialysis staff encouragement whilst general health obtained the lowest score. After 6 months, significant improvements ($p < 0.05$) were found in the mean scores for emotional well-being*, energy/fatigue*, symptom/problem list* and sleep*.

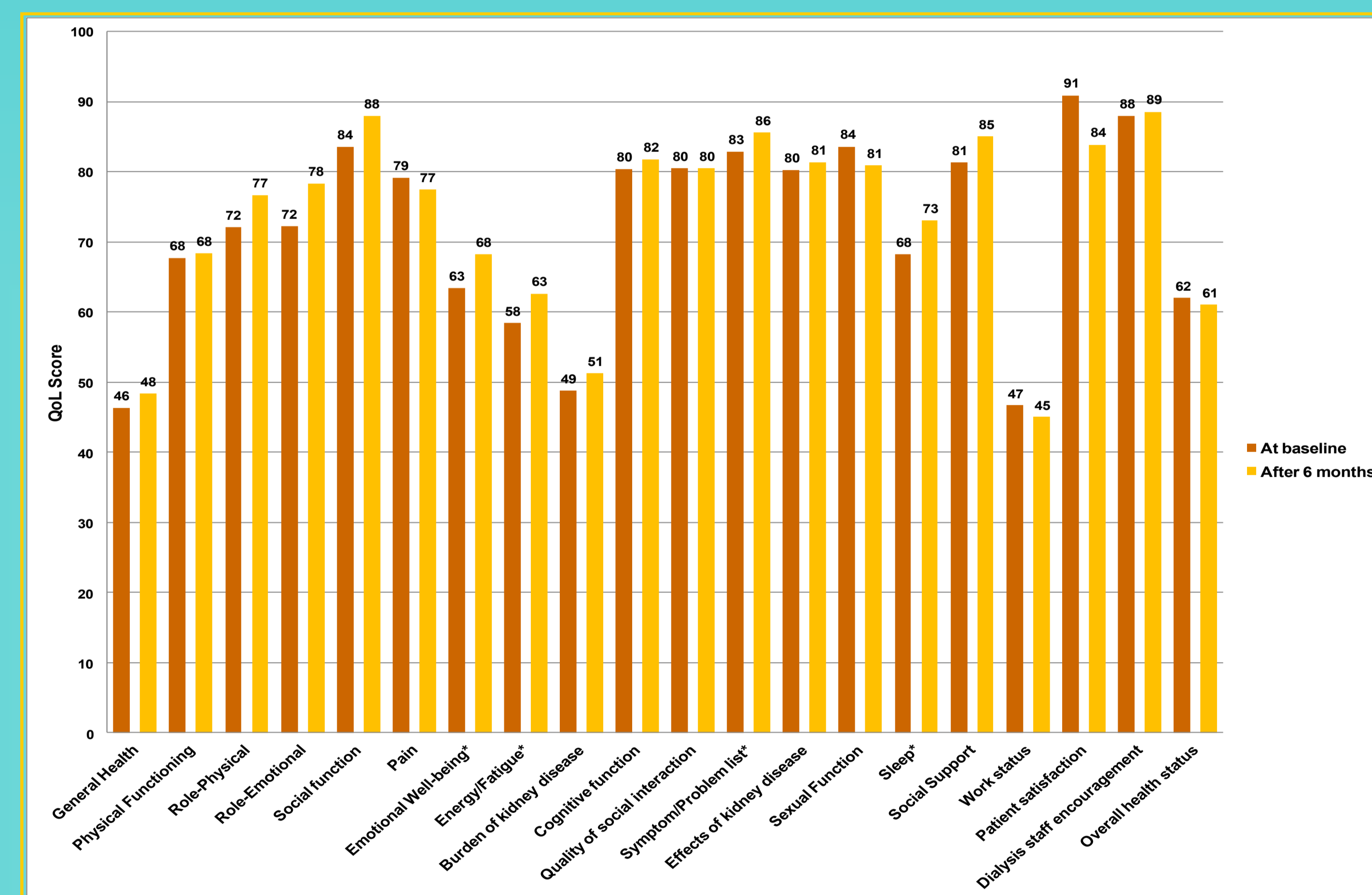


Figure 1. Bar chart showing QoL scores at baseline and after 6 months for dialysis patients (n=60).

Compliance results

The most commonly prescribed antihypertensive medications in dialysis patients were calcium channel blockers (n=28), with the majority of patients (n=28) stating they were always compliant with their treatment.

Conclusion

- ◆ BP was found to be adequately controlled in dialysis patients, with no significant differences over a period of 6 months.
- ◆ Dialysis treatment has a negative impact on patient QoL.
- ◆ Use of a pharmacist-led educational intervention had a positive outcome on patient QoL with significant improvements.

References

1. Tan KS, Johnson DW. Managing the cardiovascular complications of chronic kidney disease. *Aust Prescr* 2008;31:154-8.
2. Kidney Disease Quality of Life Working Group. Kidney disease and quality of life short form questionnaire v. 1.3. RAND & University of Arizona: 1995. Available at: [http://gim.med.ucla.edu/kdqol/downloads/kdqol13.peritoneal dialysisf](http://gim.med.ucla.edu/kdqol/downloads/kdqol13.peritoneal%20dialysisf)
3. Zammit L, Azzopardi LM, Serracino Inglott A, Zarb Adami M, Cacciatolo J. Compliance and antihypertensive therapy. *Clinical Pharmacy Europe* 2006;3. Available at: http://www.hospitalpharmacyeurope.com/default.asp?title=Compliance_and_antihypertensive_therapy&page=article.display&article.id=1927