

4. Parra E, Ramos R, Betriu A, Paniagua J, Belart M, Martínez T. Effect of a quality improvement strategy on several haemodialysis outcomes. *Nephrol Dial Transplant* 2008;23:2943-7.

5. Plantinga L, Jaar B, Fink N, Sadler J, Levin N, Coresh J, Klag M, Powe N. Frequency of patient-physician contact in chronic kidney disease care and achievement of clinical performance targets. *Int J Qual Health Care* 2005;17:115-21.

R. Pons

Nephrology Department, Castellon General Hospital. Castellon, Spain.

Correspondence: Ramon Pons Prades
Hospital General de Castellón. Castellón
ramon.pons@ono.com

B) BRIEF PAPER ON RESEARCH AND CLINICAL EXPERIENCES

Sleep quality in dialysis

Nefrología 2009;29(1):82

Dear Editor,

The prevalence of sleep disorders in the general public varies between 10 and 40%;¹ this figure increases to 50% in dialysis patients.^{2,3} There are very few studies comparing sleep quality according to the type of renal replacement therapy, which differ dramatically in terms of lifestyle.

In our study, we compare sleep quality between patients undergoing Peritoneal Dialysis (PD) and those undergoing Haemodialysis (HD), with samples of 49 patients similar in age, comorbidity index and time in dialysis.

The *Pittsburg Sleep Quality Index* (PSQI) was used. This consists of 24 items grouped into seven components: subjective sleep quality, latency, duration, efficiency, disturbances and daytime dysfunction. The higher the score, the lower the sleep quality.^{4,5}

PD was generally performed according to a daily routine (95% of patients underwent automatic PD.) In the group of patients undergoing HD, 49% underwent HD in the first shift (08.00-12.00) and 51% in the second (14.00-18.00.)

A total of 73% of HD patients presented with sleep quality problems compared to 55% of PD patients. The majority of the problems were slight to moderate. No relationship was found between sleep quality and the Charlson Comorbidity Index. However, in the

overall sample, women presented with poorer sleep quality. Table 1 shows the affected sleep areas according to the type of therapy.

The only component with a higher score in PD was that of disturbances. This group of patients had a greater hourly routine than HD patients. In addition, HD patients who underwent treatment in the first shift presented a lower score.

Sleep quality is an important and determining factor in the quality of life during dialysis. The significant differences between both groups are consistent with the lifestyle associated with each technique.

The PSQI survey is a simple tool offering very complete information on sleep quality. The implementation of actions aimed at improving the hygiene of sleep may be an excellent way to improve the patients' quality of life in an efficient and effective manner.

1. Ford DE, Kamerow DB. Epidemiologic study of sleep disturbances and psychiatric disorders. An opportunity for prevention. *JAMA* 1989;262:1479-84.
2. Holley JL, Nespor S, Rault R. A comparison of reported sleep disorders in patients on chronic hemodialysis and continuous peritoneal dialysis. *Am J Kidney Dis* 1992;XIX:156-61.
3. Walker S, Fine A, Kryger MH. Sleep complaints are common in a dialysis unit. *Am J Kidney Dis* 1995;26:751-6.
4. Buysse DJ, Reynolds III CHF, Monk TH, Berman SR, Kupfer DJ. The Pittsburg Sleep Quality Index: A new instrument for psychiatric practice and research. *Psychiatry Res* 1989;28:193-213.
5. Royuela RA, Macias FJ. Propiedades clinimétricas de la versión castellana del cuestionario de Pittsburg. *Vigilia-Sueño* 1997;9:81-94.

E. Novoa, C. Pérez, J.L. Ascarza, M. Borrajo

Nephrology Department. Ourense Hospital Complex. Ourense, Ourense. Spain.

Correspondence: Enrique Novoa
Servicio de Nefrología. Complejo Hospitalario de Ourense. Ourense.
quique_novoa@yahoo.es

Table 1

PSQI Components	Peritoneal	Haemodialysis	Sig.
Subjective quality	0.74	1.06	0.054
Latency	1.46	1.56	0.680
Duration	0.68	1.15	0.030
Efficiency	1.32	1.77	0.054
Disturbances	1.38	1.25	0.301
Use of hypnotics	0.84	0.92	0.779
Daytime dysfunction	0.24	0.60	0.004
Sleep problems: total	6.70	8.35	0.057

PSQI: Pittsburg Sleep Quality Index.