

Quality of life in hemodialysis and peritoneal dialysis patients in Saudi Arabia

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BACKGROUND AND OBJECTIVES: Quality of life (QoL) in end-stage renal disease (ESRD) patients is an important outcome for both physicians and patients in selecting dialysis modality. We conducted a comparison between regular maintenance hemodialysis and regular peritoneal dialysis patients in two tertiary referral hospitals in King Saud University in Saudi Arabia. We hypothesize that there might be cultural and socioeconomic factors modifying QoL in dialysis patients.

DESIGN AND SETTING: Cross-sectional study on hemodialysis and peritoneal dialysis patients.

PATIENTS AND METHODS: Two hundred dialysis patients participated in the study, one hundred in each group of dialysis modality, from July 2007 to July 2008. We used a cross-sectional design and collected the data using the Kidney Disease Quality of Life (KDQoL SF) questionnaire.

RESULTS: Patients in both groups had similar sociodemographic characteristics (age, marital status, and education). Mean age (SD) in the hemodialysis group was 47.5 (13.8) years and 51.0 (13.5) years in the peritoneal dialysis group. Males represented 53% and 43%, respectively. Mean duration of dialysis was 77.2 (75.5) months in the hemodialysis group and 34.1 (26.9) months in the peritoneal dialysis group. The mean (SD) score was 49.5 (13.7) in the hemodialysis group and 61.3 (12.4) in the peritoneal dialysis group. QoL mean scores were significantly higher among peritoneal dialysis in all domains and in the total QoL, with the exception of the score of physical QoL, which was higher in the hemodialysis patients, compared to peritoneal dialysis patients, although the difference was not statistically significant. Multiple regression analysis indicated that hemodialysis was a negative predictor of QoL score, compared to peritoneal dialysis. Also, age, male gender, and dialysis duration were negative predictors of QoL score.

CONCLUSION: In the unique culture of Saudi Arabia, peritoneal dialysis patients have better QoL, compared to hemodialysis patients, validating the findings of research reports from other countries.

Health-related quality of life (HRQoL) is an important outcome as well as indicator in end-stage renal disease (ESRD) patients undergoing hemodialysis (HD) or peritoneal dialysis (PD). Hemodialysis is usually performed in a hospital or day care center, three times in a week with each session lasting four hours. However, peritoneal dialysis is usually performed at home which can be done using two systems, continuous ambulatory peritoneal dialysis with four exchanges a day and continuous cyclic peritoneal dialysis with exchanges occurring at night for 8-9 hours using a peritoneal dialysis machine. ESRD im-

poses substantial effects on the patient's quality of life (QoL) by negatively affecting their social, financial and psychological well-being.^{1,2} The disease also affects body image and can have impact on patient's overall QoL and other domains like physical, functional, social and mental status.³⁻⁷ Previous relevant research compared both modalities as well showed that patients undergoing HD or PD treatment were found to experience QoL deficits.⁸ A description of a person's QoL should not reflect the opinions of health professionals or family members. QoL measures the individual's subjective perception of his functioning and well-being in his/her day-to-day