

### Quality of Life and its Correlates in Chronic Dialysis Patients

*F Gayle, AK Soyibo, DT Gilbert, EN Barton*

*Caribbean Institute of Nephrology, Department of Medicine, Faculty of Medical Sciences, The University of the West Indies, Kingston 7, Jamaica*

**Background:** Quality of Life (QOL) is an independent risk factor for mortality in End Stage Renal Disease (ESRD). Traditional parameters such as haemoglobin concentration  $> 11.1$  g/dl, higher socioeconomic status, educational level  $> 10$  years of study,  $Kt/V > 1.2$  or urea reduction ratio (URR)  $> 65\%$ , show a positive correlation with quality of life. Others such as age  $> 65$  years, comorbidity, diabetes mellitus, female gender, poor socioeconomic and educational status ( $< 10$  years duration) are risk factors for poor quality of life. Black populations within the United States of America have recorded higher QOL scores than their matched Caucasian population despite having negative predictive clinical parameters.

Quality of life and its correlates in chronic dialysis patients have not been previously documented in the English-speaking Caribbean. We therefore undertook a QOL survey in a tertiary care hospital outpatient haemodialysis and peritoneal dialysis units.

**Methods:** The Kidney Disease Quality of Life Short Form Questionnaire was completed by 60 haemodialysis and 10 peritoneal dialysis patients. This represented ninety per cent of both dialysis populations. Mean haemoglobin (Hb) concentration was  $10.0 \pm 1.8$  g/dl, mean serum albumin  $41 \pm 6.4$  g/dl and URR  $75\% \pm 9\%$ .

**Results:** Mean QOL scores were equivalent to the means of the sample population except in Sleep function ( $p = 0.03$ ), Burden of Kidney Disease ( $p = 0.002$ ) and Dialysis Staff Satisfaction ( $p = 0.045$ ) which were significantly lower. Positive correlates were noted with Hb  $> 10$ g/dL ( $p = 0.02$ ), URR  $> 65\%$  ( $p = 0.01$ ), serum albumin  $> 35$  g/dL ( $p = 0.024$ ) and high socioeconomic status ( $p = 0.045$ ) but not with age  $> 65$  years, comorbidity *eg* DM, nor educational level ( $p > 0.05$ ). Female gender was associated with higher Quality of Social Interaction scores ( $p = 0.045$ ) and Sexual Function scores ( $p = 0.008$ ) while males reported higher Physical Functioning scores ( $p = 0.024$ ). Higher socioeconomic status patients reported higher Quality of Social Interaction scores ( $p = 0.05$ ) and Energy scores ( $p = 0.007$ ) with positive correlation with Hb concentration ( $p = 0.02$ ) and URR ( $p = 0.024$ ). Lower income groups had worse Pain scores ( $p = 0.021$ ) and Burden of Kidney Disease scores ( $p = 0.02$ ). Married patients reported worse Pain ( $p = 0.01$ ), Emotional wellbeing ( $p = 0.024$ ) and Energy scores ( $p = 0.05$ ). Higher Patient Satisfaction ( $p = 0.04$ ) and Dialysis Staff Encouragement ( $p = 0.048$ ) were seen among those with health insurance coverage. Age  $< 60$  years was associated with higher Physical Functioning ( $p = 0.048$ ) and Emotional Role ( $p = 0.002$ ) with age  $> 65$  years reporting lower Energy scores

( $p = 0.03$ ). Multivariate analysis showed these to be independent associations.

**Conclusion:** Overall, QOL among the chronic dialysis patients in this study is good. Positive predictive correlates were age  $< 65$  years, Hb  $> 10$ g/dL, URR  $> 65\%$ , serum albumin  $> 35$ g/dL and higher socioeconomic status.