## Factors associated with quality of life among hemodialysis patients in Malaysia

## **ABSTRACT**

Although hemodialysis treatment has greatly increased the life expectancy of end stage renal disease patients, low quality of life among hemodialysis patients is frequently reported. This cross-sectional study aimed to determine the relationship between medical history, hemodialysis treatment and nutritional status with the mental and physical components of quality of life in hemodialysis patients. Respondents (n=90) were recruited from Hospital Kuala Lumpur and dialysis centres of the National Kidney Foundation of Malaysia. Data obtained included socio-demography, medical history, hemodialysis treatment and nutritional status. Mental and physical quality of life were measured using the Mental Composite Summary (MCS) and Physical Composite Summary (PCS) of the Short-Form Health Survey 36-items, a generic core of the Kidney Disease Quality of Life Short Form. Two summary measures and total SF-36 was scored as 0-100, with a higher score indicating better quality of life. Approximately 26 (30%) of respondents achieved the body mass index (24 kg/m2) and more than 80% (n=77) achieved serum albumin level (>35.0 mg/dL) recommended for hemodialysis patients. The majority of respondents did not meet the energy (n=72, 80%) and protein (n=68,75%) recommendations. The total score of SF-36 was 54.1±19.2, while the score for the mental and physical components were 45.0±8.6 and 39.6±8.6, respectively. Factors associated with a higher MCS score were absence of diabetes mellitus (p=0.000) and lower serum calcium (p=0.004), while higher blood flow (p=0.000), higher serum creatinine (p=0.000) and lower protein intake (p=0.006) were associated with a higher PCS score. To improve the overall quality of life of hemodialysis patients, a multidisciplinary intervention that includes medical, dietetic and psychosocial strategies that address factors associated with mental and physical quality of life are warranted to reduce further health complications and to improve quality of life.

**Keyword:** Quality of life; Hemodialysis patient; Hemodialysis; Malaysia