Prevalence of malnutrition and its associated factors among hemodialysis elderly in selected hemodialysis centres, Selangor

ABSTRACT

Background: In Malaysia, the number of patients on dialysis increased from 59 to almost 15,000 patients and the largest new population is older patients' age 55 years. Most of the hemodialysis (HD) patient's (69%) intake fall behind the recommendations which was lower than 35 kcal/kg energy and 50% lower than 1.2 gram protein/kg. This study aimed to determine the association between socio-demographic factors, medical history, anthropometry data, dietary intake and QOL with malnutrition among HD elderly. Materials and Methods: A total of 112 HD elderly (aged 60 years and above) were recruited from selected HD centers. Interview-based questionnaires were used to measure patients' socio-demographic, medical history, anthropometry data, dietary intake and QOL. The dietary intake was measured using 24-hour diet recall (non-HD day) and one day food record (HD day). KDQOL-36 consists of 3 parts with 36 questions to assess respondents QOL. The nutritional status was assessed by using SGA-DMS which divided into medical history and physical examination. Result: Majority (45.5%) of the respondent had moderate malnourished, 30.4% were well nourished and 24.1% had severe malnutrition. The HD duration ($p < 0.001$), phosphate level ($p = 0.010$) and the BMI ($p = 0.010$) were significantly associated with SGA-DMS. The energy and protein intake ($p < 0.005$) and QOL ($p < 0.001$) had negative correlation with malnutrition. Conclusion: Malnutrition among HD elderly had correlation with BMI, dietary intake (energy and protein) and QOL. An intervention towards diet and lifestyle is recommended to improve the nutritional status and the QOL of the HD elderly.

Keyword: Malnutrition; Hemodialysis; Elderly; Dietary intake; Quality of life