Abstract

Background: In patients with chronic renal failure under haemodialysis, we investigated the inter-relationships and relative contributions of disease, haemodialysis and of nutrition related factors on the patients' Quality of Life. Methods: Collected data in 60 adult patients comprised: co-morbidities (multiple medicines, other chronic diseases), duration of renal failure and of haemodialysis (in months), % weight loss since haemodialysis, nutrient intake derived from diet history analysis (DIETPLAN5 2003, UK). The EuroQoL instrument that includes 5 dimensions, mobility, self-care, activities, pain/discomfort, anxiety/depression, and an overall health visual analogue scale evaluated QoL. Results: Estimates of effect size attributed to each variable included in the general linear model revealed that 47% of patients’ mobility/self-care scores were worsened by deficient protein/energy intake and 30% by weight loss =10%. Poor performance of usual activities was attributed in 45% to duration of haemodialysis and of disease, 70% to protein/energy/vitamin B12/zinc/iron deficits, and 20% to weight loss =10%. Pain/discomfort were worsened in 45% by the duration of haemodialysis and of disease, and in 15% by co-morbidities. Higher anxiety/depression were related in 43% to protein/energy/selenium & vitamin C deficits, in 40% to the duration of haemodialysis and of disease, in 10% to weight loss =10%, and in 3% to co-morbidities. Likewise, 47% of poor overall health was determined by protein/energy/vitamin B12/zinc/selenium & vitamin C deficits, 25% by weight loss =10%, 10% by disease duration, and 7% by co-morbidities. Conclusion: Protein, antioxidants and key micronutrients involved in protein metabolism, did exert a major effect on patients' Quality of Life. Given the prevalence of nutrient deficits, the ensuing impaired functional capacity is likely to compromise QoL, timely nutrition is thus warranted.

Keywords