

Nutritional assessment of Dialysis patients in Groote Schuur and Tygerberg Hospital.

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Introduction

Chronic Kidney Disease(CKD) has many nutritional complications in dialysis patients. Research has shown malnutrition to be as high as 20-75%. However, recent studies show increasing trends in obesity. Therefore, this study aimed to assess the current nutritional status of dialysis patients using methods sensitive to under and over nutrition.

Methods

A cross-sectional descriptive study was performed at Tygerberg and Groote Schuur Hospital dialysis units. Anthropometrical measurements include weight, height, BMI, waist circumference, triceps, mid-arm circumference and arm muscle area (AMA). RAPA 1 and RAPA 2 scores assessed physical activity levels. Biochemical measures included haematology, renal function and nutrition outcomes. Dietary intake assessment included 24-hour recalls. Statistica was used to perform statistical analysis.

Results

There were 102 patients who participated, 71% (n=72) hemodialysis patients and 29% (n=30) peritoneal dialysis patients. The age of the patients were 40.6 ± 10.61 , 42% were males (n=43) and 58% females (n=59). Patients were mostly unemployed with a very low household income. The BMI showed patients were mainly overweight 34% (n=35) and obese 19 % (n=20). The AMA was low in the normal weight group. Biochemical results show mostly normal values, except for a high phosphate level. The RAPA scores showed that 77% (n=79) of patients did none to light aerobic activity and 80% (n=82) did no strength training exercises. Dietary intake showed suboptimal intake. High food costs as barriers to following dietary advice were identified in 76% (n=68) of patients.

Conclusion

Overweight, obesity and low muscle mass area were common in this group of dialysis patients. Physical activity and dietary intake was suboptimal which could be due to a variety of factors. Interventions should aim to increase muscle mass in susceptible patients, increase physical activity, optimize dietary intake and reduce obesity. Financial assistance for food purchasing should be explored.

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