

Nutritional Literacy and Adherence to Dietary Guidelines in Inner-City Dialysis Patients

Introduction: We examined knowledge of dietary guidelines, nutritional literacy and dietary guidelines adherence in inner-city dialysis patients.

Methods: A random sample of 34 dialysis pts was interviewed regarding knowledge about dietary guidelines and 24-hr food recall was recorded and analyzed using ASA-24. Nutritional literacy was assessed using the food label questionnaire.

Results: Mean age was 56 ± 17 , 58% (20) male, 88% (29) identified as Black, time on dialysis 64.1 ± 17.3 mos. Mean PO₄ intake was 968.2 ± 111.9 mg, sodium 2487 ± 240 mg, potassium 1983 ± 222 mg. There was no association between age, sex, income or time on dialysis and adherence to dietary guidelines. All pts received monthly nutrition counseling. 6/24 (25%) pts said they knew daily dietary sodium allowance, and 0 answered correctly. 2/6 (33%) consumed > 3000 mg while 8/18 (44%) who didn't know consumed less. Higher sodium intake in all groups correlated with higher fluid ($r=0.6$, $p=0.002$), PO₄ ($r=0.8$, $p<0.001$), and potassium (K⁺) intake ($r=0.5$, $p=0.007$). 5/24 (21%) said they knew daily K⁺ allowance but 0 answered correctly. 13/20 (65%) pts who didn't know how much PO₄ to consume ate > 800 mg daily and none knew their daily phosphorus recommendation. Moreover, 18/24 (75%) pts who stated they knew how much fluid to intake per day, 9 (50%) pts correctly answered. No pt scored for adequate health literacy by the food label test, with 21/24 (88%) scoring 0-1 (high risk) and 3/24, scoring 2-3 (moderate risk).

Conclusion: In our population: 1. Although they receive monthly nutrition counseling, the majority of pts did not know the recommended dietary restrictions for sodium, potassium, PO₄ or fluid. 2. The majority of pts were eating more than the recommended amounts for PO₄ and sodium. 3. Pts who ate more sodium or PO₄ were less adherent to other dietary recommendations. 4. Health literacy scores were in the high to moderate risk category, which should be taken into account when designing educational programs.