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±111.9mg, sodium 2487±240mg, potassium 1983±222mg. 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 <2300mg 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 >800mg 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.