

## **Qualitative study investigating nutrient specific nutrition education for the management of renal osteodystrophy: a pilot study**

Chelsea M. Bruce BS, Daniela A. Gutierrez More BS, Cassandra Z. Rutherford BA, Lima Hope PhD, Duha Hamed PhD, Wanda Koszewski, PhD RD, Department of Human Nutrition and Department of Mathematics, Winthrop University, Rock Hill, SC 29733

### **Abstract**

**Background:** There is little research on the influence that nutrition education has on Renal Osteodystrophy, a component of Chronic Kidney Disease-Bone Mineral Disorder.

**Objective:** The purpose of this study was to explore the techniques and tools used for nutrition education, and what nutrients are targeted specific to Renal Osteodystrophy.

**Design:** This study was a descriptive qualitative pilot study to explore the techniques of nutrition education specific to renal osteodystrophy. All participants completed a survey with questions related to their experience working with Chronic Kidney Disease patients and the current nutrition education provided to patients at each facility.

**Participants and Setting:** Forty healthcare practitioners who worked in South and North Carolina dialysis clinics made up the sample population.

**Statistical Analysis Performed:** Data was presented in frequencies and percentages and were analyzed using the statistical software Minitab.

**Results:** It was found that Nutrition education specific to renal osteodystrophy exist as a method to manage renal osteodystrophy. Common techniques and tools used are one-one counseling, handouts, and visual aids. Nutrition education specific to Renal Osteodystrophy focusses on calcium, phosphorus and vitamin D.

**Conclusion:** Nutrition education specific to renal osteodystrophy exists using various techniques. Further research needs to be done to explore the connection between patient barriers and the prevalence of renal osteodystrophy.

**Key Words:** Qualitative Research, Renal Osteodystrophy, Chronic Kidney Disease, Bone Mineral Disorder, Hemodialysis