THE EFFECT OF PROPER INSTRUCTION REGARDING DIET ON A GROUP OF ELDERLY, AFRICAN-AMERICAN FEMALES

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ABSTRACT

Purpose: The purpose of this study is to provide instruction about eating a healthy, well-balanced diet to a group of elderly, African-American females and evaluate any change in their blood pressure, waist circumference, and body mass index (BMI). This population is at a higher risk for developing diabetes mellitus, heart disease, and obesity and also has a higher mortality rate from heart disease. A healthy diet can be a successful means to weight loss, blood pressure control, heart disease prevention and management of diabetes mellitus. In fact, diet change is the first recommended treatment for almost all of these diseases. A diet that is low in fats, sodium and sugar but high in fiber and calcium may aid in decreasing blood pressure, controlling diabetes mellitus and preventing heart disease.

Methods: The population of this study will consist of a group of residents of an independent living facility for elderly individuals. The participants were African-American women between the ages of 50-75 years of age, of low socioeconomic status and overweight or obese. Nutritional counseling will be provided at six sessions covering the following topics: fiber, fats, cholesterol, calcium, sugar and sodium. At each of the sessions, the participants were engaged in the topics through pre- and post-tests about the information provided. At the first and last sessions, the blood pressure, weight and height (to calculate BMI) and waist circumferences were measured. A paired t-test was used to analyze the effect of the lectures on the three dependent variables; blood pressure, BMI and waist circumference. The level of significance was set at p<0.05.

Results: The thirteen subjects change in blood pressure was not found to be statistically significant (and testing results improved between pre and post testing, on average), but were not statistically significant with a p-value > 0.05. BMI and waist circumference were not measured due to participant refusal. There was only a 1.4 mmHg average decrease in systolic blood between the first and last session.

Conclusions: The effects on blood pressure were minimal and there was some statistically significant effect on learning. Some limitations include the small sample size, the short period of time, and decreased participant compliance. The conclusion that can be made from these results is that nutrition education, alone, is not enough to cause a change in blood pressure. Instruction on diet is important in the over health of a patient but more factors must be considered including exercise and medication. As such, it is imperative that all patients must be provided well-rounded care including education and medication, if needed.