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Title: The Effects of Ballroom Dance on Blood Pressure, Heart Rate, Weight, Waist Circumference, and Body Mass Index Among Filipino-Americans: A Feasibility Study

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Background: Physical activity decreases the risk of obesity and hypertension, thereby reducing the risk of cardiovascular disease. Lack of regular physical activity is a common health problem among Filipino Americans and it is associated with the increased prevalence of hypertension, diabetes, and dyslipidemia in this population. There are several reasons for physical inactivity. The most common reasons given for physical inactivity in this population are lack of interest, dissatisfaction with the type of activity they are engaged in, and lack of time due to family and work obligations.

Purpose: The purpose of this feasibility study was to examine the effects of 3-month ballroom dance on resting blood pressure, heart rate, weight, waist circumference, and body mass index of Filipino American adults.

Methods: This quasi-experimental research used a single group pre and post intervention design. Thirty-seven Filipino Americans between 35-65 years old living in the southwestern part of the United States participated in the ballroom dance program during the fall of 2012. The ballroom dances that were selected were cha-cha and salsa due to the moderate physical effort required, and rumba due to its popularity among Filipino Americans. Participants danced every week for two hours. Resting blood pressure, heart rate, weight, waist circumference, and body mass index were measured pre dance intervention (week1) and post dance intervention (week 12); results were compared. The paired sample t-test was used to determine the significant differences in the sample mean score pre and post dance intervention.

Results: Group means of resting blood pressure (BP), heart rate (HR), weight (WT), waist circumference (WC), and body mass index (BMI) post- intervention are slightly lower than those of pre-intervention (except for WC and BMI), but the group means change are not statistically significant: BP (pre)127/80 mmHg and (post)124/79mmHg; HR (pre) 72 and (post) 73; WT (pre) 68.18 kg and (post) 67.73 kg; WC (pre) 89.59 cm and (post) 90.53 cm; BMI (pre) 26.15 and (post) 26.01.

Conclusion: Cardiovascular disease is the leading cause of death among Filipino Americans and lack of regular physical activity has been linked to this problem. This study examined the effectiveness of ballroom dance as another form of physical activity among Filipino Americans and tested the hemodynamics and anthropometric effects of ballroom dance. Although the results are not statistically significant, this study revealed a slight improvement in the BP, HR, and WT scores of the sample. Larger sample and/or longer dance intervention may be considered in future studies. This study can be used to further explore ballroom dance and similar types of

activity that will benefit and motivate Filipino Americans and other populations to engage in regular physical activity.

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