

# IMPLEMENTING A CULTURALLY SENSITIVE FAITH BASED LIFESTYLE EDUCATIONAL PROGRAM ON NUTRITION AND PHYSICAL ACTIVITY FOR BLACK CARIBBEAN IMMIGRANTS

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## Research Question/Problem

*The effect of a three month culturally sensitive faith-based educational program on nutrition and physical activity to improve knowledge and lifestyle changes of healthier eating practices and benefits of physical activity in Caribbean immigrants, aged 21-64 residing in Southeast Queens, NY?*

## Background Information

- Black Caribbeans are disproportionately affected by chronic diseases.
- Highest (25%) prevalence rates of obesity.
- High genetic predisposition for chronic diseases.
- 70% of Afro-Caribbean immigrants between the ages of 18-64 are obese/overweight (Downes, 2010, Bamimore, et al., 2012)

## Significance

- Diet and exercise modifications are preferred methods of treatment in all populations
- Globalization has led to a more "westernized" lifestyle
- Obesity related disorders have climbed to epidemic proportions
- Black minorities do not engage in their recommended physical activities/dietary habits (Sodergren, Mc Naughton, Salmon, Ball, & Crawford, 2012)

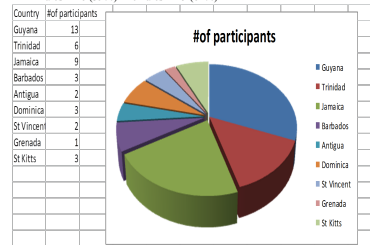
## Project Aims

- To assess impact of program on nutrition & physical activity by comparing pre/post intervention knowledge/lifestyle scores
- To examine awareness of dietary guidelines and physical activity recommendations by pre/post testing of knowledge/lifestyle scores



## Study Design and Sample:

- Quasi-experimental
- Level 3 evidence
- One group pre/posttest
- Males = 16 (39%) Females = 25 (61%)



## Measures (Week 1, Week 12, & Week 16)

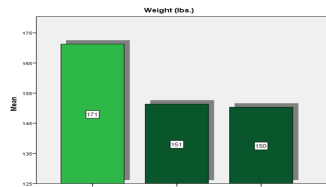
- Anthropometric measurements- height, weight, body mass index (BMI), systolic blood pressures (SBP), and diastolic blood pressures (DBP)
- General Nutrition Knowledge Questionnaire (GNKQ)
- Health Promoting Lifestyle Profile II (HPLPII)

## Intervention:

- 12 weekly, one hour didactic sessions on healthy eating
- 45 minutes of aerobic exercise such as brisk walking (10000 steps), and/or jogging
- Program recommended reduced caloric intake from good macronutrients- fruits/vegetables, and a whole grain/plant based diet
- Consumption of 8 glasses of water daily

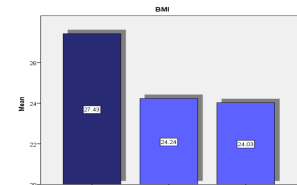
## Results: Weight

- Weight decreased significantly T1-T3 (mean decreased=20.95 pounds,  $F(1, 39)= 322.4, p<0.001$ )



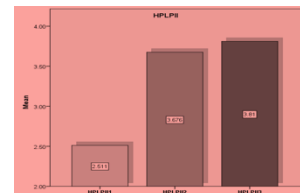
## Body Mass Index (BMI)

- Mean BMI decreased from 27.4 (T1) to 24.2 (T2) to 24.0 (T3)
- One-way ANOVA- Significant effect for time emerged from T1-T3,  $F(2, 80)=352.7, p<0.001$



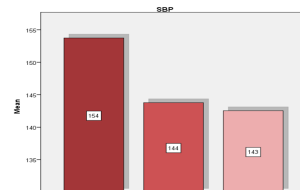
## Health Promoting Lifestyle Profile II (HPLPII)

- Supported at more than 99% confidence
- HPLPII increased significantly from T1-T3 (increase=1.3,  $F(1,40)=543.75, p<0.001$ )



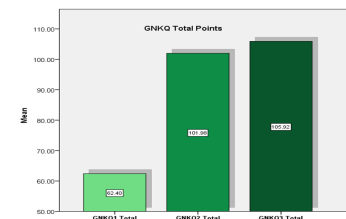
## Systolic Blood Pressures (SBP)

- Supported at more than 95% confidence
- Mean SBP decreased from T1-T3 (decreased=11.20,  $F(1, 40)=112.2, p<0.001$ ) and sustained from T2-T3 (decreased=1.24,  $F(1, 40)=5.21, p=0.028$ )



## General Nutrition Knowledge Questionnaire (GNKQ)

- Supported more than 99% confidence
- Increased significantly from T1-T3 (increase=39.6,  $F(1, 40)=763.43, p<0.001$ )



## Conclusion

- Faith-based lifestyle intervention programs:
  - ▶ Shows promise in health promotion and disease reduction
  - ▶ A solution for addressing health disparities in Black Caribbean immigrants

## Implications for Practice

- Lifestyle modifications-fundamental importance in primary prevention
- Nurses are ideal role models in health promotion

## Nurses:

- ▶ Play an important role in patient education
- ▶ Need to inform and direct consumers with respect to healthy behaviors
- ▶ Are relied upon to dispense this information



## For further information:

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