The Association of Caregivers’ Educational Level and their Knowledge of Children’s Nutrition and Exercise Behavior

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ABSTRACT

Study Design
- The study was done in context of the Fit Family Jr., an obesity prevention program targeted to the caregivers and teachers of African American preschoolers.
- All relatives (parents, aunts, uncles and grandparents) of children ages 6 and under living in a low-income neighborhood of Washington, DC were eligible.

Data Collection
- Participating families completed baseline questionnaires that contained questions concerning their nutritional and physical activity habits, knowledge tests on physical activity and nutrition and information on their socio-demographic.
- Weight and height of the participants was obtained at baseline.

Analysis Plan
- The main outcome of interest is caregivers’ nutritional and physical activity knowledge, which is a continuous variable.
- An ANCOVA model was used to assess the association between educational level and nutrition and physical activity knowledge.
- Chi-square was used to test the association between education and children’s nutrition behavior.
- All statistical tests were two tailed and a p-value <.05 was considered statistically significant.

RESULTS
- The mean BMI was 33 kg/m².
- 84% of the participants were overweight or obese.
- The mean scores for nutrition and physical activity knowledge were 41 % and 44.8 and 13% of participants were college graduates. 66% were obese. The 77% of the participants were grandmothers or mothers; the mean age was 44.8 years.
- Participants educational level was not significantly associated with their socio-demographics.
- 72 participants were enrolled in the Fit Family Jr. program.
- 77% of the participants were mothers or grandmothers.
- Figure 2 shows the distribution of BMI categories of the participants.
- Weight and height of the participants was obtained at baseline.
- 91% of the children eat fried foods.
- 51% of the participants’ children drink soda or sweetened beverages.
- The mean age of parents or guardians was 44.8 years.
- 77% of the participants were college graduates.
- 66% were obese. The 77% of the participants were grandmothers or mothers; the mean age was 44.8 years.
- All statistical tests were two tailed and a p-value <.05 was considered statistically significant.

METHODS
- This is a cross-sectional study of 72 participants from a nutrition and wellness program targeting parents of African American preschoolers. Socio-demographic, child’s nutritional and physical exercise habit survey and anthropometric data were collected from all participants at baseline.

RESULTS
- 89% of the participants reported that their children exercise at least once a week.
- 82% of the caregivers reported that they do physical activities with their children.
- Figure 5 shows the distribution of caregivers that do physical activity with their children.
- Educational level was not significantly associated with physical activity practice.

D I S C U S S I O N  & C O N C L U S I O N S
- Maternal educational level was significantly associated with nutrition knowledge.
- Higher scores on nutrition and activity knowledge did not translate into healthy behaviors for the participants children.
- This could be due to confounding factors such as low socio-economic status, lack of access to fresh produce and safe play areas.
- A high percentage of the participants were overweight or obese. Unhealthy behaviors among the caregivers may contribute to the high rates of obesity and overweight and in turn might influence the children’s nutritional and activity behaviors.
- Since the nutritional and physical activity behaviors were self-reported, there may have been social desirability bias which may have contributed to homogeneity of the study population.

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References


BACKGROUND
- The prevalence of obesity among U.S. children age 2-19 is 17%.
- Obesity among black children is disproportionately higher than their white counterparts.
- Obesity is affected by physical and social exposure during childhood, adolescence, young adulthood and late adult life.
- Educational level and nutritional knowledge of parents also play a major role in childhood obesity.
- Parents are instrumental in exposing children to certain foods, engaging them in physical activities and modeling other behaviors that contribute to energy balance and diet composition.
- Educational level and nutritional knowledge of parents also play a major role in childhood obesity.
- Several studies have demonstrated the positive association between nutritional knowledge of parents and the consequent nutrition behavior and physical activity habits.

OBJECTIVE
- To assess the association of parents’ educational level on their nutritional and physical activity knowledge.