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What Are Key Factors in Haitian and Hispanic Children and Obesity: Parent Answers

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Childhood obesity is a multifaceted phenomenon that has risen strikingly over the last 30 years. Some of the contributing factors include more fast food availability, an increase in sedentary lifestyles (including television, video games, and computers), less physical education in school environments, more specific advertising to children by food companies, and fewer safe areas for children to play outside within neighborhoods. Epidemiological studies of the prevalence of childhood obesity have determined that approximately 11% of youth in the U.S. are classified as obese (BMI > 95th) and another 14% have a BMI between the 85th and 95th percentiles for age placing them in the obese category. These estimates suggest that almost 25% of the pediatric population is overweight or obese.¹⁻³ As with many chronic illnesses, children living in poverty and ethnic populations seem to be disproportionately affected by childhood obesity, specifically Hispanic and Black children.^{2,4}

The significance of childhood obesity has both societal and individual effects. Large amounts of personal and national resources are used to address this chronic condition. The Surgeon General's call for action on obesity determined that \$117 billion annually could be attributed to health care cost associated with obesity and obesity related disorders.⁵ In addition to economic costs, childhood overweight has an effect on both the child's physical as well as emotional health. Physical conditions related to childhood obesity include cardiovascular disease, type 2 diabetes, and orthopedic problems.⁶⁻⁷ Psychological and emotional consequences include but are not limited to poor self-esteem, ridicule, and discrimination.⁸

Some ethnic groups seem to be affected to a greater extent than other groups by health issues. Haitians and Hispanics are two at risk populations that suffer disproportionate amounts of adverse health outcomes, including obesity.^{2,4} Although research statistics specific to the Haitian population and health are sparse, Haitians fall within the broader Black racial/ethnic group and suffer from the same health issues. In light of this, current research has shown that both Black (including Haitian) and Hispanic children have the highest prevalence of childhood overweight compared to all other ethnic groups.^{4,9} The increasing prevalence of childhood overweight in these populations suggests each culture may have unique contributing factors to the chronic condition. Therefore, it is necessary to investigate cultural influences contributing to this chronic condition within each culture before effective, culturally appropriate primary care interventions can be developed. As nurse practitioners understand what parents perceive as contributing factors of childhood obesity in each culture, care providers are able to cater interventions, education, and advocacy that are culture specific.

Purpose Statement

The purpose of this study was to examine the cultural beliefs and attitudes of Hispanic and Haitian parents regarding childhood obesity. A long term goal is the potential use of information gained to develop patient interventions, education, and advocacy in response to childhood obesity in a culturally appropriate way.

Design

A qualitative descriptive design informed by ethnographic methods was selected for this research.¹⁰ This descriptive design allowed for the exploration of cultural beliefs and attitudes of low-income Haitian and Hispanic parents. A very specific ethnographic method known as freelistings technique was used to illicit data from participants. Although salience scores are generated through data analysis, freelistings is considered primarily a qualitative descriptive approach. By exploring the cultural beliefs and attitudes, culturally acceptable and beneficial care can be developed.

Study Participants

The broad geographical setting for this study was a southeastern metropolitan city with a large stable Haitian and Hispanic population. A convenience sample of Haitian and Hispanic parents was recruited from school sites. The school settings for recruitment of parents in this study were schools and preschools serving low-income families. A total sample of nine Haitian parents and ten Hispanic parents participated in the study. Eligibility included Haitian and Hispanic parents who (1) had at least one child ages one to eighteen living in the same home, (2) had lived in the U.S. for at least five years, and (3) spoke English.

Of the nine Haitian parent participants recruited, the average age of was 37.5 years with a minimum of 27 years and a maximum of 49 years. Two Haitian participants were male and seven were female. These participants had from one to four children living in the household and the ages of the children ranged from 1 year to 18 years of age. The average age of the children was 9.47 years. The Haitian participants had lived in the United States from five to 42 years with an average age in the United States of 17.5 years. One Haitian participant was born in the United States.

Of the ten Hispanic parent participants recruited, the average age was 33.5 years with a minimum age of 23 years and maximum of 41 years. Of these participants, two were male and eight were female. Hispanic participants also had between one and four children living at home and the ages ranged from one year to 18 years. The average age was 6.25 years. Five participants were born in the United States and those born outside of the United States had been in the U.S. from seven to 30 years with an average of 17.6 years. The Hispanic countries of origin represented in the Hispanic sample were Cuba, Nicaragua, Columbia, Argentina, Spain, Guatemala, and Honduras.

Methods

Once local institutional review board (IRB) approval was obtained, structured interviews were conducted at locations agreed upon by the researcher and the participant. Within the structured interviews, as a systematic ethnographic method known as freelistings was used to describe each respective culture. This method allowed a organized approach to explore the cultural beliefs and practices of the cultural groups. A freelistings method was chosen because it assesses the amount of agreement among a group of people about some realm or domain of cultural beliefs or attitudes as well as provides information about the breadth of the cultural domain by exhaustively listing the elements of a particular cultural domain.¹¹ This is important because

by eliciting the participants' explanatory model or descriptions, an understanding can be gained of the participants' perceived causes of childhood obesity and what might be culturally beneficial interventions.

Since freelist method is considered a structured interviewing technique, three consistent questions were used for the freelisting in each interview: 1) Can you list all the reasons why children are more overweight today than ever before? 2) Can you list all the reasons that having an overweight child may be a problem? 3) Can you list all the things you would like to see done about childhood obesity? The decision was made to start from the premise that obesity carries with it some problematic potential although members of both of these cultures often espouse that being large in size is a sign of health and prosperity. This decision was made because it is widely accepted that both physical and psychological health issues result from obesity. This concept will be explored more fully later in this article.

To generate a full description of each cultural groups' beliefs and attitudes, it was important for each participant to construct an exhaustive list for each freelist question. Therefore, specific techniques described by Brewer were used to maximize output in the freelisting tasks.¹² These techniques included 1) nonspecific prompting such as, "What are other reasons that children may be overweight or obese?," 2) reading back the list of free-listed items, which allowed the informants to review their responses and add items, and 3) using free-listed items as semantic cues by repeating a free-listed word already used and asking the informant to think about similar or like items and to list those. Each of these non-specific prompts helped attain exhaustive lists of the cultural beliefs and practices for each group of informants about childhood obesity.

Analysis

As interviews were completed, data generated from the freelists were coded using the master list of freelist codes that was compiled during the freelist process. After all raw data were coded according to the master freelist codes, the data were entered into the ANTHROPAC software program.¹³ This program is used for analyzing data on cultural domains collected through structured techniques such as freelists. Freelists were analyzed for salience scores for each freelist question in each culture group. ANTHROPAC software uses response frequency, response percentage and response rank of items listed to create a salience score. Salience is a measure of how much knowledge or attitudes informants share and how important that knowledge is to them. More salient items indicate the shared and important indicators of a cognitive category, in this case the category of cultural knowledge and attitudes about childhood obesity. Salience scores range from 0.0 to 1.0 with responses considered more salient as they approach 1.0. Since the freelisting technique is not widely known, some explanation for the determination of salience scores is necessary.¹⁴⁻¹⁵ After data are entered, ANTHROPAC counts the number of separate responses listed and gives a frequency for each response. A percentage of informants who listed each response is generated and this is called a response percentage. Then, the place on each freelist for each response is noted and an average rank for each response is determined. The frequency and rank are used in the ANTHROPAC formula to produce a score called a salience score. Salience is a measure of how much knowledge or attitudes informants share and how important that knowledge is to them. Freelist analysis is based on two assumptions about cognitive organization in humans: 1) things most familiar or most important will be listed first and 2) the most important things will be listed by most of the people.¹¹ This salience score is one way to identify the typical core of cultural knowledge or attitudes.¹⁵

Results

The five most salient responses for each freelisting question and cultural group are presented with their salience scores in Table 1. The decision of how many items to use is debatable. Borgatti suggests that a typical domain will have a core set of items that are mentioned by many respondents, plus a large number of items that are mentioned by few or just one person.¹⁴ He further explains that the core set of items reflects the existence of a shared cultural norm regarded within a cultural domain, while the remaining items represent idiosyncratic views of individuals. Therefore, one would expect a noticeable drop-off in the frequency of items that are not core items in a domain. Borgatti admits, however, that this dropoff or “elbow” in the analyzed data may be difficult to spot in reality.¹⁴ When no “elbow” suggests itself, the researcher must find another means of deciding which items to include to represent the data accurately and thoroughly. Weller & Romney argue that there are no absolute rules for inclusion and exclusion of items and that sometimes low-frequency items are included to ensure a variety of objects to describe the cultural domain.¹⁵ Borgatti also suggests that one can alternatively pick the top n most salient items, where n is an arbitrary but convenient number given the nature of the research.¹⁴

In analysis of freelists data here, an obvious “elbow” was evident only in a few domains. Those obvious “elbows” were between Fast food (salience score 0.641) and Busy schedules (salience score 0.384) in Question 1 for the Haitian participants. Also, in all three culture groups there was an obvious “elbow” after the most salient response of Health and all other responses for question 2 (see Table 4.2). Given these explanations of which items to include in interpreting the data and the lack of an “elbow” in most of the data, the decision was made to include the 5 most salient items for each culture group in each domain. This allows for a representation of items in each domain and ensures a variety of responses are included. This also allows an opportunity to view how salient items are within a domain and provides a thicker description of the data.

Discussion

The study's results will be discussed in relation to the concepts brought forth in the freelist. Several specific concepts will be discussed related to current literature. With the freelist question asking parents perceptions of what causes children to be overweight, two elements that were illuminated relating to time issues. These were busy schedules fast food. Busyness can result in use of fast food and fewer home cooked meals. In addition to busy parents schedules influencing food choices it can also affect choices about physical activity for their children. These types of choices are evident when trends are examined. Food consumption from fast food restaurants has increased 300% between 1977 and 1996.¹⁶ Another study reported lack of time as a major factor identified for use of fast food consumption in low-income Hispanic.¹⁷ Respondents from this study also stated they did not have time to engage in physical activities.

Several salient responses from both cultural groups (“lack of exercise”, “television”, and “less active”) may result from issues the families face with difficulties in finding safe space for children to play. Several other studies support this concept stated by parents. In one study, parents in minority populations were twice as likely to report their neighborhoods were unsafe.¹⁸ In addition these parents stated that taking their children to engage in physical activity was related to safe access to facilities and equipment.¹⁸ Steinbeck reports that active time may be limited by safety concerns, lack of suitable environments and lack of family time.¹⁹ Specifically, safety concerns and lack of safe places were mentioned as barriers to being physically active in Hispanic low-income neighborhoods.¹⁷

It is generally accepted in Hispanic and Haitian cultures that children who are larger in size are considered healthier.²⁰⁻²¹ Therefore, it is interesting that the significant “elbow” in the data was health issues being listed as the main problem associated with being overweight in both cultural groups. Previous literature is contradictory related to this finding. For instance, in one study, few parents of overweight and obese children recognized their child as overweight.²² However, in another study, higher BMI was associated with body size dissatisfaction, lower peer esteem, and attempts to lose weight in Hispanic American youth.²³

Teasing, bullying, and self esteem issues were also identified in the freelisting as problems associated with children being overweight. These concerns result in needed care from health professionals. Swallen, Reither, Haas, & Meier found a significant relationship between increased BMI and worse reported general physical health.²⁴ In younger adolescents, results found a significant deleterious impact of overweight and obesity on depression, self-esteem, and school/social functioning. In addition, overweight and obese youth were shown to be at greater relative odds of being victims of aggression than normal-weight youth.²⁵ This study showed as well that certain age ranges of both overweight and obese boys and girls were more likely to perpetrate bullying than their normal-weight classmates.

Finally, parents' responses raise the issues that families have difficulties with accessibility of affordable food. Other research also identified the need for improved selection and quality at existing small stores and an increase in the number of food outlets in low-income neighborhoods.²⁶

Suggestions from parents that physical education, more outside play, and after school programs are needed imply that communities are viewed as having a role to play by creating neighborhood designs that foster healthy and active behaviors. Parents look to schools for care related to childhood obesity such as more P.E. and healthy vending options or no vending machines. Urban planners and policymakers need to be engaged at the community and societal level for creation of healthier, more active living environments.²⁷ In one study, researchers found that parents and health professionals who were surveyed were clearly in support of schools taking a leading role in obesity prevention with teachers displaying the least support.²⁸ However, in another study conducted in 1992 more parents opposed the ideas of schools as places for treatment of obesity than were in support of the idea.²⁹ Although this study is dated it is included to show the possible changing trends with more and more children becoming overweight and obese and the possible shift in parental attitudes.

Limitations

Two primary limitations existed for this study. First, the major limitation of this study was the number of participants in each cultural group. Although ten participants is considered adequate for freelisting if the group under investigation is a cohesive group, larger participant numbers might have resulted in a more significant ‘elbow’ cutoff point in the data in the groups for each question. Including more participants could potentially have strengthened the salience scores for the most salient items. The second limitation could be that participants were all recruited from one geographical location. It cannot be assumed that families from the same cultural group living in different geographical areas have the same experiences or beliefs. Further research in different geographical locations and with increased numbers of participants could strengthen the results of this study.

Implications for Practice

Findings from this study illuminate practical day to day implications for nurse practitioners. First, the significant ‘elbow’ of health being identified as the major problem associated with a child being overweight is in contrast to both cultures viewing ‘big as healthy’. This suggests

the need for nurse practitioners to direct education and intervention in terms of healthy behaviors that target health conditions and comorbidities when caring for patients of these cultural groups. Second, there is a significant need for nurse practitioners to be aware of issues of bullying, teasing, and self-esteem in obese children and adolescents both in the general population and in different ethnic groups. Patient interviewing, counseling and education should address each of these potential issues. Finally, finding from this study illuminate several areas of needed assistance for parents in order to help them maintain healthy lifestyles for their children. One area is education on time management and creative ways to get fresh food to the family table quickly. Parents are looking for practical solutions help their children maintain healthy lifestyles. Parents are in need of nutrition education for children and families alike. Parents are faced with many obstacles to creating healthy family environments and are looking to health professionals to assist by supplying them with information and support.

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Table 1

Results of Freelists and Salience Scores

Freelists Questions	Haitian Participants		Hispanic Participants	
Question 1: Can you list all the reasons why children are more overweight today than ever before?	Fast food	0.641	Fast food	0.389
	Busy schedules	0.384	Television	0.385
	Like fatty taste	0.340	Like fatty taste	0.326
	Lack exercise	0.299	Less active	0.315
	Poor diet	0.246	Processed food	0.263
Question 2: Can you list all the reasons that having an overweight child may be a problem?	Health	0.646	Health	0.775
	Energy level	0.262	Self esteem	0.385
	Teased	0.238	Bullied	0.280
	Limits abilities	0.228	Clothes issues	0.278
	Self esteem	0.157	Teased	0.210
Question 3: Can you list all the things you would like to see done about childhood obesity?	Nutrition ed.	0.389	Nutrition education	0.439
	More fresh foods	0.280	Physical education	0.327
	Eat out less	0.185	Parent education	0.326
	Unclutter schedules	0.134	More outside play	0.184
	Healthy food choices	0.120	After school programs	0.172