



THE COMPLEXITIES OF CHILDHOOD OBESITY: A QUALITATIVE STUDY AMONG MEXICAN AMERICAN MOTHERS

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Abstract

Introduction: Mothers play an important role in preventing childhood obesity; however, might differ in how they define healthy weight and the associated consequences. Due to the lack of research investigating how Mexican American mothers perceive childhood obesity, the purpose of this paper is to qualitatively assess Mexican-American mothers' perceptions regarding childhood obesity, its causes and consequences.

Methods: Three focus groups, two in Spanish and one in English, were conducted with 23 mothers in Bryan, TX. Thematic analysis was performed by three researchers independently using sentences as the unit of meaning.

Findings: Mexican American mothers believed that a child needs to be a healthy weight to be healthy; however, the mothers varied in their methods for determining if their child was at a healthy weight. Mothers identified several underlying causes of childhood obesity including genetics, parenting, household characteristics and culture.

Conclusion: Understanding the views of mothers of at-risk of rearing overweight children are important in elucidating effective strategies for preventing childhood obesity. Communication messages for this group might be more effective if they are contextualized within the culture, household and family.

Keywords

obesity; parenting; child health; Mexican American health

Cover Page Footnote

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The Complexities of Childhood Obesity: A Qualitative Study Among Mexican American Mothers

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ABSTRACT

Introduction: Mothers play an important role in preventing childhood obesity; however, might differ in how they define healthy weight and the associated consequences. Due to the lack of research investigating how Mexican American mothers perceive childhood obesity, the purpose of this paper is to qualitatively assess Mexican-American mothers' perceptions regarding childhood obesity, its causes and consequences.

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Keywords: obesity, parenting, child health, Mexican American health

INTRODUCTION

Due to their parental role as caregivers, mothers are influential in promoting the healthy growth of their children. Mothers' feeding and activity practices, especially during infancy, may influence their children's perceptions, attitudes, and receptivity to the new foods and activities introduced throughout various development phases (Birch & Ventura, 2009). Children's eating and physical activity habits establish themselves early in life and can impact the choices made throughout late childhood and adolescence (Lindsay, Sussner, Kim, & Gortmaker, 2006). Parents' influence over children's eating patterns at home (Wardle, Carnell, & Cooke, 2005) modeling of

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healthful eating practices (Golan & Crow, 2004), and levels of physical activity (Lindsay et al., 2006) can shape their children's lifelong habits that contribute to their weight status.

Mexican American mothers are more likely than non-Hispanic mothers to have overweight children. Between 2007 and 2008, the prevalence of obesity among Mexican American boys in the U.S. was significantly higher than their non-Hispanic white counterparts (26.8% vs. 16.7%) (Ogden, Carroll, Curtin, Lamb, & Flegal, 2010). Obesity rates increased more among Mexican American boys between 1988 and 1994 (14.1% to 26.8%) to 2007 and 2008, compared to their non-Hispanic White counterparts between those same years (11.6% to 16.7%). Obesity rates also increased among Mexican American girls when compared to non-Hispanic white girls (13.4% to 17.4%). Moreover, the association between mother-child body mass indices is highest among Mexican American mother-child dyads compared to their non-Hispanic counterparts (Olvera, Sharma, Suminski, Rodriguez, & Power, 2007).

Despite the impact Mexican American mothers have on their child's overweight and obesity risk, limited research has focused on their perceptions of childhood obesity (Lindsay et al., 2006). This dearth of research is problematic to understanding how to effectively tailor and communicate with Mexican American mothers regarding childhood obesity preventive efforts. For example, differing preferences for appropriate body sizes (Myers, & Vargas, 2000) might make Mexican American mothers more resistant to childhood obesity programs that emphasize appropriate body size as a goal.

Many Latina women are responsible for ensuring the health of their families (Marquez, McAuley, & Overman, 2004) and may play a key role in childhood obesity prevention efforts. Among the few studies that have focused on Mexican American mothers' perceptions regarding childhood obesity, a limited number have focused exclusively on the Mexican American subgroup or upon perceptions other than appropriate body image (Sosa, 2012).

The purpose of this paper, therefore, is to examine how a sample of Mexican-American mothers living in Texas perceives childhood obesity. Specifically, this study investigates these Mexican American mothers' beliefs regarding (1) what childhood obesity is, (2) the causes of childhood obesity, (3) its associated consequences and (4) the methods they employ to identify if a child is becoming overweight.

METHODS

Due to the limited amount of research on maternal perceptions, naturalistic inquiry was used to assess the mothers' understanding of childhood obesity, its causes, and the associated consequences of obesity. Three focus groups were used for data collection and thematic analysis of themes was conducted. To classify causes of childhood obesity mothers identified, researchers used a complex model that is versatile enough to classify the varied responses - Social Ecological Model (Glanz, Rimer, & Lewis, 2002). The Social Ecological Model takes into account varying levels of influence on a child's weight status (see Figure 1).

Researchers recruited mothers to participate in the study through a Hispanic Health Fair in Bryan, TX in August 2008. The annual health fair coordinators provided free school supplies to all attendees and granted researchers from the Child and Adolescent Health Research Lab at Texas A&M University permission to recruit focus group participants at the fair. Researchers presented study information, inclusion criteria, and possible dates and locations of focus groups, to potential participants. All recruitment information was available in both Spanish and English. Inclusion criteria included Hispanic mothers who were: (a) 18 years of age or older, (b) self-identified as

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Hispanic, lived in Bryan/College Station, TX and (c) had at least one child between 5 to 12 years old living in the same home.

Interested and eligible mothers who provided their contact information to research staff had the option of participating in either a Spanish or English language focus group. Out of approximately 35 eligible mothers, 23 agreed to participate. All materials and procedures were reviewed and approved by the Institutional Review Board at Texas A&M University.

Data Collection

Three focus groups, one in English and two in Spanish, were conducted in Bryan, TX during August 2008. A total of 23 mothers attended the focus groups (15 Spanish speakers and 8 English speakers). Prior to beginning the focus group, mothers completed a demographic questionnaire. Average age of mothers was 32 years old ($SD=5.3$). Mothers in the English group were born in the United States, and mothers in the Spanish group were born in Mexico and had lived in the United States an average of 9.6 years ($SD=4.6$). Mothers reported being of Mexican American origin. The demographic characteristics of our sample reflect the characteristics of the Bryan, TX Mexican American community. Additional sample characteristics are shown in Table 1.

Focus group questions were written in English and translated into Spanish by bilingual and native Spanish speakers. Questions were modified from previous studies (Jain et al., 2001) and assessed mothers' perceptions of: (1) what childhood obesity is, (2) what causes children to be overweight, (3) associated consequences, and (4) methods to identify a child is becoming overweight. Examples of focus group questions included "How do you know a child is healthy?" and "Why do you think some children are overweight and others are not?" Researchers asked open-ended questions first, followed by probes if more information was deemed necessary.

Focus groups were facilitated by two doctoral level Hispanic female researchers who had prior experience working with bilingual Mexican American participants and had been trained on focus group procedures, the study protocol and human subjects' protection. One researcher moderated the focus group while the other assisted in taking notes. Focus groups lasted approximately one and a half hours each and included free babysitting, a free meal, and refreshments. Researchers transcribed audio recordings for analysis. All participants received \$20.00 compensation for their time in the form of gift cards to a well-known store. All research procedures were reviewed and approved by our university's Institutional Review Board.

Data Analysis

Focus group recordings were transcribed for analysis by two bilingual undergraduate research staff members. The Spanish transcriptions were then translated into English by one of the undergraduate research staff members who originally transcribed the focus group. Thematic analysis was used to analyze emerging themes in the data. One doctoral level researcher and two faculty researchers independently conducted the analysis of each focus group. The analysis focused on complete sentences as the unit of meaning, and themes were created to reflect the in-vivo statements. After initial coding, the complete transcript was reviewed to ensure coding reflected concepts in context of the whole discussion. The researchers compared themes in order to establish the internal validity of the analytic process. When discrepancies in analyses occurred, the researchers met to discuss the differences. Researchers then reached consensus on themes and the resultant analysis reflected revised themes. Throughout the study, researchers used constant comparative processes to restructure themes and codes. Any differences between groups by language were also examined. All results are reported in English with the original quotation

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Table 1
Mother Characteristics

	English Group (n=8)	Spanish Groups (n=15)
Average Age \pm SD	28.86 \pm 4.78	34.36 \pm 4.60
Average Number of Children \pm SD	3.0 \pm .82	3.5 \pm 1.19
Marital Status		
Married	7 (87.5%)	14 (93.33%)
Separated	0	1 (6.66%)
Single	1 (12.5%)	0
Work Status		
Unemployed	5 (62.5%)	9 (60%)
Employed Part-time	2 (25%)	4 (26.66%)
Employed Full-time	1 (12.5%)	2 (13.33%)
Annual Household Income		
\$5,000 - \$15,000	0	7 (46.66%)
\$15,001 - \$25,000	1 (12.5%)	4 (26.66%)
\$25,001 - \$35,000	1 (12.5%)	0
Over \$35,000	4 (50%)	1 (6.66%)
Don't know	2 (25%)	0
Missing Data	-	2 (13.33%)
Education Level		
\leq 8 th Grade Education	1 (12.5%)	6 (40%)
Some High School	1 (12.5%)	5 (33.33%)
Completed High School	3 (37.5%)	2 (13.33%)
Some College	2 (25%)	2 (13.33%)
Completed Graduate School	1 (12.5%)	0
Household Composition		
Live with parents	0	1 (6.66%)
Live with grandparents	1 (12.5%)	0
Live with husband	7 (87.5%)	14 (93.33%)
Current Health Status		
Excellent	2 (25%)	2 (13.33%)
Good	4 (50%)	10 (66.66%)
Fair	2 (25%)	3 (20%)
Poor	0	0

following for Spanish quotations, as previously recommended (Lincoln & González y González, 2008). Quotations that were originally in Spanish are denoted with *.

During analysis, we employed the Social Ecological Model as a framework for coding and interpreting findings. The Social Ecological model was chosen due to its common use in public health research and the comprehensiveness of the model to take into account multi-level factors that influence health behaviors and outcomes (Glanz, Rimer, & Lewis, 2002). The model allowed researchers to classify the varied causes identified by mothers. The Social Ecological Model posits that health is influenced by multiple levels of factors (i.e., intrapersonal, interpersonal,

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organizational, community and public policy) and these factors interact across levels. The multiple levels of influence allow a behavior's causes to be discussed at the level of the individual (intrapersonal), the people and interactions among the individual and others (interpersonal), the organizations or groups to which the individual belongs (organizational), and the community characteristics or policy where an individual lives (community and public policy). A social ecological approach to childhood obesity, for example, includes intrapersonal factors (e.g., child genetics and behaviors), interpersonal factors (e.g., parenting, feeding practices), and community level factors (e.g., acculturation).

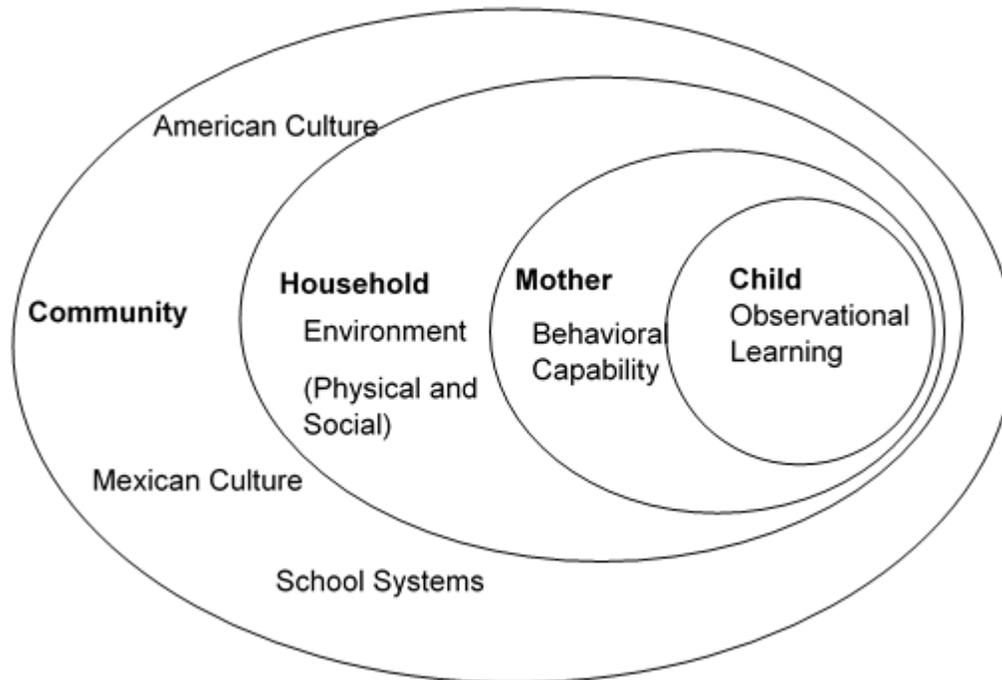


Figure 1. Social Ecological Model of Childhood Obesity

RESULTS

The findings are first presented in terms of general health and weight. Then, the causes are presented by levels of the Social Ecological Model. We first present intrapersonal or child level factors, followed by interpersonal, household and community characteristics. Finally, we present findings regarding consequences and markers of childhood obesity.

Indicators of health

When asked about how they recognize if children are healthy, mothers mentioned healthy children are those that receive vaccinations, get adequate sleep, perform well in school and are at a healthy weight. Mothers expected children to be active, and one stated children should “have at least one hour of exercise a day.” Others agreed with this statement, and believed that if a child is very sedentary, this was a sign the child is unhealthy. One mother stated, “Children have to run, jump and yell (laughs) even though one may get mad. That is what it is [to be] healthy.” *

The meaning of obesity

Mothers understood there is a difference between obesity and overweight. Obesity meant that the person had passed the overweight limit and when a person has such excessive weight gain he/she develops diseases. When asked what the ‘limits’ might be for children, the mothers alluded

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to illnesses: when diseases set in. Further, in the focus groups they discussed family members and adults with obesity but did not discuss obesity as an issue experienced in childhood.

Intrapersonal (child) characteristics as causes of overweight

The role of genetics was a very controversial issue among all focus groups. Although mothers acknowledged that genetics do play a role in a child becoming overweight, there were two distinct opinions. Some mothers felt that genetics was the main predictor of a child's weight. One mother said "because a lot of times a child sometimes is born chubby because they come from fat parents...or they are born big because their parents also are tall..." Others, however, said they believed genetics was just "an excuse" and most familial similarities could be explained by similar habits. One mother stated,

"but a lot of it [being overweight] falls down to, it's generation after generation of eating too many tortillas and...eating the food they're not supposed to be eating, then, if you have generation after generation that are overweight, then you say 'Oh, it's because of the genes.'"

Rather than genetics, specific behaviors of children were the most mentioned reason for children becoming overweight. Mothers believed children became overweight because of the foods they were eating and the amount of time spent watching television. When siblings behaved similarly, yet one child was overweight, mothers then credited the weight difference to genetics.

Medical condition

Mothers suggested a medical condition could cause a child to become overweight. Both the Spanish and English groups believed thyroid dysfunctions could lead to gain weight regardless of diet or physical activity levels. However, a few mothers in the English group believed thyroid dysfunction would be a rare condition among children and would not account for the rapid increase in the amount overweight children in the U.S. These mothers did caution, though, that thyroid dysfunction and similar medical conditions ran the risk of being overlooked because of the emphasis on childhood obesity epidemic and its emphasis on lifestyle. An English-speaking mother said "because we're getting so big, we overlook, if you have a kid that comes in that's sick, may have a medical condition, they don't get seen...the doctors may assume, 'Oh, it's a Latino kid, he's just eating too many tortillas'."

Interpersonal contributors

Mothers in our sample admitted to using food as reinforcement for specific behaviors. In many cases, distribution of food was a disciplinary action. As mothers discussed how they regulate their child's diet, they repeatedly mentioned allowing the child to have snacks or treats as a reward for the child eating all of their food. Conversely, fast food was sometimes withheld as a form of punishment. One mother discussed an incident when her son misbehaved.

Afterwards, he asked for a children's meal from a fast food restaurant. She said,

"I'll still buy it for him and my husband is not like that, my husband is like 'no, he is not gonna get something, you know, he doesn't deserve it' or whatever, and my husband's strict, you know, and we always have arguments and then...when I'm actually thinking about it, I'm like, you know, he's really right."

Feeding behaviors differed among mothers from different language groups, yet mothers from all groups reported having trouble getting their children to eat vegetables, despite the different

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methods used to persuade the children. In the Spanish speaking groups, most mothers believed it was important to bring only healthy foods into the home and suggested making healthy foods easily accessible for the children. As one mother stated,

“We know the kids are going to open the fridge or are going to be on the lookout then having, like, broccoli for them and for them to be provoked by it, like, we already know our children right, each parent, I think it’s more than anything responsibility of ourselves.”

In the English group, the methods used to encourage healthy eating were more varied. One mother discussed her way of getting her son to eat broccoli: she sent him to bed without dinner when he refused to eat it. She stated,

“It was like eight thirty at night you know and he was like, ‘Mom, can I have some of that broccoli,’ and I was like, ‘oh, you know, see I got you to eat it,’ ... and he ate it. And you know, he wanted a little bit of broccoli with cheese, but hey, I got him to eat broccoli.”

Mothers discussed the importance of shopping and bringing home only healthy foods. However, they also reported feeling bad whenever their children asked why they did not bring home treats and snacks. One mother stated,

“Sometimes, it is basically hard to say no. I think it’s one of our responsibilities, but it’s hard. Or, like, when you go to the store, you go shopping, you know, and of course, and...they want junk food,...they want donuts, they want juices, they want this, you know, that, and sometimes you just feel guilty not to do it.”

Regulating a child’s food intake was also associated with guilt among English-speaking mothers and they believed one reason children become overweight is that mothers feed their children too much food. However, they discussed the difficulties of regulating the diet. One mother talked about her overweight son saying,

“I don’t know...what to do because...when I feed him dinner he wants, ‘Mamma I want some more,’ I mean you can serve him three times and then when everybody finishes he’ll go back and get some more, but I don’t know, I feel like sad if I tell him ‘No, you can’t eat anymore.”

There was a consensus that poor communication can lead to childhood obesity among mothers in the English group. Busy work schedules interfered with their ability to cook for the family and their time to communicate with their children. Mothers expressed guilt over not being able to pay attention to their children all the time. One mother questioned the manner in which mothers deal with children when they’re asking for attention, saying “I mean, how much, how much will it really cost us to, you know, when they’re out down there yanking on our leg, ‘Momma, Momma, momma, look, look, look.’ How much time is it really gonna cost us to look down and say, ‘What?’” you know. ‘What do you want?’ and they say, ‘Look’ ‘oh, okay, thank you’ ... instead of ‘Go... why don’t you take a bag of chips, sit down in front of the television and let me have this little two minutes that I need.”

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Mothers across all groups expressed the benefits of communicating with the child. When a parent was involved in their child's life, mothers believed those parents would be able to detect bad habits earlier and, thus, help prevent them. One mother said if mothers wait and the child becomes overweight, it is because "you yourself didn't call the attention on time, didn't talk with [the child] when there was time." Another mother stated "if you know your child's habits, and ...if you find out that if one of their habits is not a good habit, you can do, or you can attempt to do whatever you can to change your child's habits."

Mothers believe many of children's obesity-risk behaviors occur due to lack of parental supervision, which is difficult to provide consistently when mothers need to work. Mothers in our sample stated that when children are at home alone, "they eat whenever they want—three, or four times a day, or more but not the adequate food like you say. Then, when the mom gets home, is when they get rice or beans or vegetables and all that and meanwhile, they got their stomach full with everything else."

Household characteristics

Mothers in our sample identified children's diets as mostly the mother's responsibility and stated that parents should be responsible for which foods they bring into the home and make available to their children. They also noted that it was their responsibility to make sure their children were not watching television or playing video games for long periods of time. They believed availability of unhealthy foods and video games in the household made children more susceptible to becoming overweight.

Cultural factors

Mothers believed the Hispanic or Mexican American culture (used interchangeably by participants in this study) contributed toward their children becoming overweight. Several mothers stated most Hispanics thought chubby children are cute. As one mother affirmed "you look at a chubby boy and say 'Oh no, that boy is very healthy!' That is wrong because a skinny child can be skinny, and well fed." Some mothers in the focus group agreed chubby babies are cute, although they recognized why this belief can be hazardous to a child's health. One mother said, "when you see a, you know, a chunky baby, when they're little you're like, 'Oh, my gosh he's so cute, I wish my baby was so chunky,' but not really understanding, you know, that they're gonna have a lot of health problems when they grow up."

Study participants also believed the Mexican diet was a major cause of excess weight among children. They stated that many of the foods associated with the Mexican culture were high in fat and disclosed using large quantities of salt and oils in the foods they prepared. Mothers also identified breads and sodas as part of the Mexican diet. Despite their critique, however, they also expressed resistance to preparing or eating non-ethnic foods (except fast food).

Consequences of being overweight

Alongside potential causal factors for childhood obesity, mothers participating in our study also identified physical, social, and emotional consequences that an overweight child might experience. Physical consequences included getting sick or developing diabetes, heart disease, and other chronic conditions. The mothers believed children who are not overweight get these illnesses, too, but overweight children are at higher risk. Mothers also believed overweight children are less likely to keep up, physically, with other children, during physical activity or play time. One mother said "the school says that being overweight, that [the children] can't do much, ...exercise, when they take them out to play and all that, they get tired more quickly, and all."

Regarding social consequences, mothers believed overweight children are prone to being ridiculed by schoolmates. They also believed such teasing could lead to low self-esteem. Weight

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could also keep a child from being able to keep up with other children when playing, which could also affect the child socially.

Emotional consequences included feeling depressed. One mother expressed concern that her daughter was depressed because her sisters were skinny and she was not. The mother worried that her daughter was becoming depressed about her weight and assured her she would most likely grow out of the weight.

Consequences differed among English and Spanish focus groups. Whereas English-speaking mothers spoke primarily about physical consequences, Spanish-speaking mothers discussed with equal emphasis the physical, social and emotional consequences of being overweight in childhood. One of the Spanish focus groups also related weight and health to a child's ability to do well in school; this theme did not emerge in the other groups.

An additional focus of this study was to identify how mothers perceived the consequences of childhood obesity. We were interested in finding out how mothers detected if children were overweight. These findings are presented below.

Overweight markers

Most mothers depended on their child's appearance and size to know if he/she was becoming overweight. A mother said, "most of the time, you can tell just by looking at them if they are overweight." Mothers identified an overweight child as a child who wore a clothing size designed for a much older age group. One mother said, "If they're um, they're young, and then they're like, they're wearing clothes that's like twice for their age, then it's obvious." However, some mothers also noted that normal-weight children might also wear larger sizes because of their height or build.

Participants in our study also identified a child as becoming overweight by observing the child's behaviors. If a child constantly ran out of energy, the child might be overweight. Children who wanted to stay indoors and watch television most of the time, were possibly becoming overweight. Finally, if the child was eating more than usual, the child might be gaining weight. One mother said, "Also, you can tell in your grocery bill. If you're buying more (several moms laugh) food everybody's eating more food."

Alongside appearance and behaviors, the mothers in our study recognized clinical assessments as another way to identify if a child was becoming overweight. Some were told by a pediatrician that their child was already overweight and a few said they heard this every time they took their child to the doctor. Mothers understood this assessment took into account the child's age, height and weight. However, they did not always depend on this indicator. Mothers believed some children were naturally larger but were still healthy. Moreover, the child's behaviors provided a more valid indication of overweight for the mothers. For example, one mother said "but [my daughter] is very active she runs and everything, so, no, I have never had problems with her. Yes, they tell me ... in the WIC that she is a little overweight, but she is normal, she is, she is good."

A few mothers had taken their child to the pediatrician because they were worried about their child's weight and believed their children to be too thin. One mother said she was concerned because people kept asking if her son didn't eat. She talked about the time she took him to the pediatrician and "[the pediatrician] said the boy was not anemic, he is not missing calcium, he is not missing iron, the boy is very good. He said, 'you don't need a fat child'. He says, 'Why would you want him overweight? If the boy is fine, he doesn't need other things.'"

DISCUSSION

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This study aimed to understand perceptions of childhood obesity and its causes, as held by a sample of Mexican American mothers residing in Texas. Mothers in this study defined obesity as an adult issue, primarily, not a childhood issue, and associated obesity with morbidity. Obesity is a term typically used among researchers, the popular media, and public health professionals to define children with weight levels above the 95th percentile for their age, sex, and height; however, clinicians are advised to report weight status to parents and children in this weight range as “overweight” and avoid using the term ‘obese’ which can be interpreted negatively (Dalton & Watts, 2002). Although childhood obesity and childhood overweight are still used interchangeably, scant research examines how parents understand each term. Mothers in this study understood obesity as being a more critical issue compared to overweight (thus, espousing a more negative view of obesity). However, their failure to identify obesity as a childhood problem could contribute to a lack of urgency in addressing these problems.

Spanish speaking mothers identified more short-term consequences of childhood overweight than did English-speaking mothers, possibly signaling a need for more programs highlighting early severity of childhood obesity among English speaking mothers. This supports previous research that found Spanish-speaking Hispanics were significantly less satisfied with their children’s physical health than were English-speaking Hispanics (Gorman, Kondo, & Favasuli, 2011). More research needs to be done in this area to further understand mothers’ perceptions of these terms, especially among at-risk groups.

When discussing causes of overweight, mothers identified how parenting behaviors (e.g., feeding practices and shopping) play a role. Despite expressing a need to regulate the amount of food children eat and limiting the purchase of unhealthy treats, English-speaking mothers felt these behaviors made them feel badly or guilty. This is troublesome because mothers of overweight children allowed this guilt to affect their behaviors and current interventions do not address this barrier directly. Similar research has found that working mothers expressed guilt over not being able to provide healthy meals to their children (Devine et al., 2006). More research should be done to examine these feelings of guilt among Mexican American mothers born in the United States and how it specifically affects their feeding strategies.

English-speaking mothers in our sample appeared to employ more varied feeding practices, than the Spanish-speaking mothers. The Spanish-speaking mothers were more likely to provide children with healthy options, without forcing the food upon the children. Research suggests when food is forced upon children, it becomes more aversive to them (Robert, Brown, Ansfield, & Paschall, 2002). Possible differences in feeding practices among mothers from different acculturation levels (commonly measured by language or time spent in the U.S.) could account for some variance in childhood diets examined in previous research (Caprio et al., 2008). More research on feeding differences among mothers from varying acculturation levels is needed.

Mothers participating in our study were aware of the manifold consequences of childhood obesity. As with previous research (Crawford et al., 2004; Reifsnider et al., 2006; Rich et al., 2005), they were aware of the physical consequences. In contrast to previous research (Rich et al., 2005), mothers in our group were able to list specific health issues overweight children are at increased risk for developing. Similar to previous focus group research (Crawford et al., 2004), mothers also noted the social consequences overweight children might face. Previous research suggests that mothers associate thinness with lack of health and risk for death (Crawford et al., 2004; Reifsnider et al., 2006). Although mothers in our study didn’t specifically mention this concern, they did mention that other family members were concerned when their children appeared too thin. Although mothers are aware of the consequences associated with children being

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overweight, more research is needed to ascertain if mothers perceive these risks as more severe than the risks associated with ‘skinny’ children.

The pediatrician and clinical assessments were the most frequently mentioned ways to distinguish between a child who is at a healthy weight and a child who is overweight. Pediatrician’s assessments help alleviate mothers’ worries about their children’s thinness. However, the mothers did not depend solely on these assessments when pediatricians identified their children as overweight. Overweight assessments were not considered as important as the child’s indicators such as appetite, physical activity, and overall energy. This finding supports previous research suggesting that mothers are not concerned about their children’s weight if the child is active and has “good appetite” (Dalton & Watts, 2002).

The tendency of mothers in our sample to worry more about their children being thin than being overweight represents an interesting paradox, in a historical moment when public health concerns center primarily upon overweight and obese children. Although mothers recognized that chubbiness does not mean the child has all the needed nutrients, they still were fearful that their not-as-chubby children might be unhealthy. The fear of the health implications underlying a thin child might contribute to Mexican American mothers’ preferences for larger child body sizes that have been found in previous research (Reifsnider et al., 2006; Worobey & Lopez, 2005).

Mothers believed an overweight child could be identified based on the child’s appearance. Previous research suggests, however, that mothers have inaccurate perceptions of their children’s weight, failing to recognize excess weight among their children (Akerman, Williams, & Meunier, 2007; Carnell, Edwards, Croker, Boniface, & Wardle, 2005; Eckstein et al., 2006; Killion, Hughes, Wendt, Pease, & Nicklas, 2006). Moreover, as children age, mothers’ perceptions of the children’s body sizes tend to become more critical (Striegel-Moore & Kearney-Cooke, 1994). Mothers’ dependence on their visual perceptions of their children’s weight status, especially younger children, might lead to delay in identifying and treating overweight and obese children.

Although informative and intriguing, the results of our study should be interpreted within its limitations. First, participants were recruited through a Hispanic health fair and through snowball procedures. This convenience sample might have had an overrepresentation of women interested in health-related issues. Such a potential “bias” could have generated a sample that was more informed, more concerned and better prepared to articulate their thoughts on the issue of childhood obesity. However, the similarity between some of our findings and those expressed in the health promotion literature allows us confidence in the responses we obtained. Also, the small sample size might limit the ability to extrapolate the findings.

Despite these limitations, this study adds to an under-examined area of research on Mexican American mothers’ perceptions of childhood obesity. Whereas previous studies have assessed perceptions among mothers of overweight children, this study focused on Mexican American mothers regardless of their children’s weight status. Studies that only include mothers of overweight children might inform obesity treatment programs. However, perceptions captured in this study might better represent how mothers typically think about childhood obesity and may better inform prevention programs.

Understanding perceptions of childhood obesity is critical among mothers of at-risk children. More research in this area can potentially elucidate the barriers and motivators mothers might have and provide Mexican American mothers with the skills they need to prevent childhood obesity among their children. Moreover, future quantitative studies might be able to examine relationships among other variables, such as child characteristics, in influencing these perceptions among a larger sample of mothers. By using the Social Ecological Model to classify the factors,

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we elucidate the complexities of childhood obesity prevention but also identify multiple opportunities for practitioners to intervene at each level. Given that family-based obesity treatment programs are associated with greater weight loss and higher healthy food intake than child only obesity treatment programs (Lutzer et al., 2009), identifying effective ways of engaging Mexican American mothers in childhood obesity prevention within the context of their culture is imperative for success.

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