

Clinical Care of the Child with Obesity: A Learner's and Teacher's Guide >

## CHAPTER 17: CULTURAL CONSIDERATIONS FOR EFFECTIVE OBESITY PREVENTION AND INTERVENTION

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### INTRODUCTION

- How do I effectively share health and nutrition information with families whose backgrounds differ from my own?
- What are the cultural factors that affect the pediatric patient, the patient's caregivers, and the management of childhood obesity?
- What are the most effective means to communicate with families and individuals from differing cultural backgrounds?

This chapter will address the following American College of Graduate Medical Education competencies: patient care, medical knowledge, interpersonal and communication skills, and professionalism.

**Patient Care:** This chapter will help the pediatric health care provider understand effective strategies for working with children and families from different cultures, an essential component of family-centered, compassionate care.

**Medical Knowledge:** This chapter will help the pediatric health care provider be able to define culture and cultural competency and the relationship between cultural factors such as race or ethnicity, socioeconomic status, gender, and education and use this knowledge in the prevention and treatment of childhood obesity.

**Interpersonal and Communication Skills:** It is important to be able to communicate effectively with patients, family, and the public across a broad range of socioeconomic and cultural groups, and this chapter will highlight culturally competent communication skills that the pediatric health care professional can use in care delivery.

**Professionalism:** This chapter will help the pediatric health care provider deliver effective cultural care by helping foster sensitivity and responsiveness to diverse patient populations.

Culture can be simply defined as “a system of shared understandings that shapes and, in turn, is shaped by experience”<sup>1</sup> or more broadly as “(something that is) learned, shared, transmitted intergenerationally, and reflected in a group’s values, beliefs, norms, practices, patterns of communication, familial roles, and other social regularities.”<sup>2</sup> The key to an understanding of culture is that it is learned and thus, is dynamic and that it is formed and influenced by both individual and group experiences.

Culture can impact all aspects of health, including beliefs surrounding healing, wellness, illness, disease, and health care services. Culture may affect health-related communications and interventions in 2 ways.<sup>3,4</sup> The first has been termed the “surface structure” and describes the matching of materials and messages to cultural characteristics observed within the target group. An example of this would be the incorporation of music and verbiage familiar to and preferred by a specific culture into health-related communications. The second has been termed the “deep structure,” and refers to the incorporation of cultural, social, historical, environmental, and psychological forces that have been found to influence a health behavior of interest in a specific culture. An example in which deep structure is incorporated into health communications would include acknowledging (although not necessarily accepting) that a certain culture may have a belief that illness or disease is brought on by religious causes.

Cultural sensitivity is an awareness of cultural differences without assigning inherent values to those differences. Cultural competence goes beyond

cultural sensitivity and describes an ability to understand and appreciate characteristics associated with different cultures, including values, norms, and traditions important for each and refers to the practice of incorporating cultural ideas and practices into health care messages and interventions. Through cultural competence, an effort is made to more fully understand external aspects that may contribute to or affect an individual's health and view of health—these aspects can be markedly different across cultures and can greatly impact the care of each patient.<sup>5</sup> Culturally effective pediatric health care can be defined as the delivery of care within the context of appropriate physician knowledge, understanding, and appreciation of all cultural distinctions leading to optimal health outcomes.<sup>6</sup>

Despite the expenditure of numerous resources, the rates of childhood obesity continue to be high and are increasing among certain cultures. One of the reasons programs and policies aimed at decreasing childhood obesity may have met limited success is because they largely ignore cultural influences and perceptions regarding the disease.<sup>4</sup> Indeed, research has shown that broadly targeted antiobesity public health messages have little resonance with particular minority groups.<sup>7</sup> Cultural competence or effectiveness is a critical tool for addressing several of the major health disparities, including those involving childhood obesity. This is especially important, considering the growing populations of a number of cultural groups within the United States. Different cultural influences contribute greatly to the development of childhood obesity, and these differences vary considerably across cultures. Thus, they should be taken into account when developing approaches and strategies for childhood obesity prevention and treatment. Care should be exercised, however, to avoid overgeneralizing this information to all members of these cultures; instead, it should be considered routine practice to view the individual child and family individually within the context of their culture.

## RACE AND ETHNIC DISPARITIES IN CHILDHOOD OBESITY

Childhood obesity is most prevalent among children from minority racial and ethnic groups. National studies consistently report that Latino, African American, and Native American children have the highest rates of overweight and obesity in the country. This chapter will specifically focus on Latino, African American, and Native American or Alaskan Native cultures.

The Centers for Disease Control and Prevention (CDC) routinely tracks and reports overweight and obesity prevalence data for Latino, African American, and white children through the National Health and Nutrition Examination Survey (NHANES). NHANES is a cross-sectional survey that collects health information and conducts physical examinations on noninstitutionalized children aged 2 to 19 years residing in the United States.<sup>8</sup> According to the most recently released survey from 2009 to 2010, the overall prevalence of overweight (body mass index [BMI]  $\geq$  85th percentile) and obesity (BMI  $\geq$  95th percentile) was 31.8% and 16.9%, respectively, for all youth aged 2 to 19 years.<sup>9</sup> Hispanic and non-Hispanic black children had among the highest prevalence of overweight (39.1%) and obesity (21.2% and 24.3%). In contrast, the prevalence of both overweight (27.9%) and obesity (14.0%) was far lower among non-Hispanic white children.

Although NHANES provides nationally representative information, data for Native American children are not available and few national studies report overweight and obesity prevalence among American Indian children. According to the CDC Pediatric Nutrition Surveillance System (PedNSS), which monitors nutritional information on children from birth through 4 years enrolled in federally funded programs that serve low-income families, obesity rates for all racial and ethnic groups stabilized from 2003 to 2008 except for Native American or Alaska Native preschool children, who continued to show an increase in obesity prevalence (from 18% in 2003 to 21% in 2008).<sup>10</sup> Emerging evidence, points to a plateauing effect among obesity in white children, causing the disparities in obesity rates to climb.<sup>9</sup>

While variation exists in rates of obesity across tribes, the prevalence of overweight and obesity is widespread in Native American youth, beginning early in life, and continues to increase among American Indian children. Tribal population-based studies indicate that American Indian school-aged children have the highest prevalence of childhood overweight and obesity in the United States, with estimates ranging from 39% to 47% for overweight, and 28% for children with obesity.<sup>11,12</sup> Native American preschool-aged children also have the highest rates of obesity. Measured data from the 2005 Early Childhood Longitudinal Study showed American Indian 4 year olds had an obesity prevalence of 31% compared to 22% for Hispanic, 21% for non-Hispanic black, and 16% for white children.<sup>13</sup>

While race and ethnicity have underlying genetic components predisposing to obesity, it is a complicated and ill-defined relationship. Perhaps more important are notable metabolic differences across races. For example, fat pattern distribution has been found to differ in different races, with African American children having less visceral and hepatic fat compared to whites and Hispanics.<sup>14</sup> Additional differences in resting metabolic rates have also been proposed to account for some of the disparities between races.<sup>15</sup> Insulin secretion and insulin response differences have been reported, with

African American and Hispanic children showing lower insulin sensitivity compared with white children.<sup>16</sup> The thrifty gene hypothesis posits that in populations that have experienced periods of both feast and famine, the survival of individuals with the so-called “thrifty alleles”—that is, those that promote the storage of fat and energy—was favored in natural selection.<sup>17</sup> This hypothesis offers a potential explanation for the high prevalence of obesity in certain cultures.

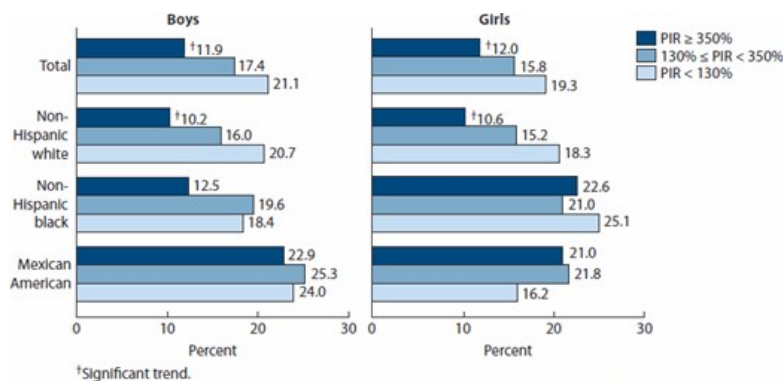
## EFFECTS OF SPECIFIC SOCIOECONOMIC FACTORS

The prevalence of childhood obesity has increased across all education and income levels over the past decade.<sup>18</sup> In general, however, the literature points to an association between lower socioeconomic status and increased risk for childhood obesity. This link is not fully attributable to income level, though, and is likely also affected by educational opportunities and living environment.

Data from the NHANES (2005-2008) have shown that obesity is more prevalent among children and adolescents from low-income families compared to higher-income families.<sup>18</sup> For both boys and girls, obesity prevalence decreases as income increases. This relationship, however, is not consistent across all racial and ethnic groups. Figure 17-1 shows obesity rates by income level for each racial group.

FIGURE 17-1.

Prevalence of obesity in children aged 2 to 19 years by poverty level, sex, and race, 2005 to 2008. (Reproduced with permission from Ogden CL, Lamb MM, Carroll MD, Flegal KM. Obesity and socioeconomic status in children and adolescents: United States, 2005-2008. NCHS Data Brief. 2010 Dec;[51]:1-8.)



†Significant trend.  
NOTES: PIR is poverty income ratio. Persons of other race and ethnicity included in total.  
Source: S. G. Hassink, S. E. Hampl, J. S. Huang, W. Slusser: Clinical Care of the Child with Obesity: A Learner's and Teacher's Guide  
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For both boys and girls, non-Hispanic whites are most affected by poverty level, with approximately 20% of children from lower-income families (130% below poverty) having obesity, compared to approximately 10% of children whose parents have higher incomes (350% above poverty). Among non-Hispanic black and Mexican American children and adolescents, there is no significant trend in prevalence by income level for either boys or girls. Even at the highest-income level, Hispanic boys and African American girls have high rates of obesity.

Regardless of race, obesity prevalence is increasing across all income levels. In the United States, the prevalence of obesity among boys at the highest income level (household income at or above 350% of the poverty level) increased from 6.5% in 1988 to 1994 to 11.9% in 2007 to 2008. Nearly 2-fold increases were also seen at middle-income (household income between 130% and 350% of the poverty level) level (from 10.1% to 17.4% between 1988 and 1994 and 2007 and 2008) and lowest-income (household income lower than 130% the poverty level) level (from approximately 12.5% to 21.1% between 1988 and 1994 and 2007 and 2008). Notably, the prevalence of obesity is highest among lower-income boys. Among girls, the prevalence of obesity in the United States in 2007 to 2008 increased compared to 1988 to 1994 at the highest- (12.0% vs 5.2%), middle- (15.8% vs approximately 10.3%), and lowest- (19.3% vs 11.9%) income levels. Again, the prevalence of obesity was highest among girls from lower-income families.

Children and adolescents from families in which the head of the household has a college degree are less likely to have obesity when compared with those from families where the head of the household has less education, although children of parents at all education levels showed an increase in obesity in 2005 to 2008 as compared with 1988 to 1994.<sup>18</sup> For boys who lived in households headed by an individual with a college degree, the obesity prevalence rate was 11.8%, households headed by an individual with some college education (15.9%), with high school education (17.9%), or less than

a high school education (21.1%). The same was true for girls, who showed an obesity rate of 8.3% from households headed by an individual who was a college graduate, compared with households headed by an individual with some college (14.8%), high school (19.8%), or less than a high school (20.4%) education.

Although prevailing data point to a decrease in the prevalence of childhood obesity with an increase in the education level of the head of the household, this relationship does not appear to be consistent across race and ethnic groups. For example, while non-Hispanic white boys and girls show a stepwise decrease in the prevalence of obesity with increasing education level, a similar relationship is not shared by Mexican American boys and girls. In these groups, the prevalence of obesity remains nearly the same regardless of education level.<sup>18</sup>

Studies also suggest living environment has an important impact on childhood obesity. For example, neighborhood safety can greatly affect the likelihood that children will be physically active outdoors. Various environmental factors such as neighborhood walkability, proximity to higher quality parks, and access to healthy foods have been associated with decreased rates of childhood obesity. In one study, children from neighborhoods which possessed these neighborhood attributes were 59% less likely to have obesity than children from neighborhoods without these characteristics.<sup>19</sup> Neighborhood environment remained significantly associated with childhood obesity rates even when models were controlled for parent weight status, individual, and household demographic factors. The issue of environment is further complicated when considering that a disproportionate share of minority children live in high-crime neighborhoods and areas with poor access to parks and school fields.

A large study involving Native American children, for example, reported lack of facilities and physical activity programs on various tribal reservations.<sup>20</sup> In addition, safety concerns and limited transportation have been reported as environmental barriers, which result in decreased physical activity.<sup>21,22</sup>

## CULTURAL BELIEFS AND BEHAVIORS

Culture influences beliefs about oneself and one's social structure. Cultural views not only influence perceptions of oneself but also contribute to the understanding of health, disease, and treatment—including the issue of childhood obesity.

Parents and other family members play a critical role in modeling eating behaviors and decision making for the types and amounts of food eaten by their children. Among Latinos, the influence of the family unit plays a major role in child eating behaviors. The dynamics both within and surrounding the Latino family often lead them to engage in frequent family meals, which have been shown to decrease the risk for overweight and obesity in non-Hispanic white and non-Hispanic black boys. Among Latino families, the solution is not as simple as sitting down to a family meal, however. A higher frequency of family meals increased the risk for obesity among Hispanic boys in low-education households, although the same association was not apparent for Hispanic girls in similar households.<sup>23</sup> While the authors of this study offer potential explanations for this difference among race or ethnicity, including evidence pointing to a greater reliance on fast food for family meals among Hispanics, further research is needed to probe the reason behind this discrepancy.

When discussing the family meal as a potential intervention point for behavioral change in Hispanic families, consideration should be given to the possibility that the family unit is so strong that children will have multiple “family dinners”; for example, when schedules bring fathers home late. Is the father eating his dinner later than the rest of the family and are the children sitting with him for their “second” dinner, consisting of a bowl of cereal?

Another important point for considering the impact of the family unit is to determine if, within the culture, it is normal or typical for the grandparents to either live with or have a significant role in raising the child. In a multigenerational, genealogical, prospective cohort study of the US population, a statistically significant relationship was found between child weight status and grandparental obesity that was independent of parental obesity.<sup>24</sup> The influence of the grandparents can be greater than genetics alone—often grandparents serve as child care providers, and therefore, they may make many of the dietary decisions for the children. In families where the grandparents are influential to the family unit, dynamics, and/or eating habits, it is important to engage the grandparents as much as the parents to promote healthy lifestyle change.

Native Americans also value family cohesion as well as community engagement, both critical components for health promotion. McCubbin and colleagues explored this concept by comparing Anglo American cultural views with those of 2 aboriginal Native American cultures (Native American and Hawaiians). A white Anglo American view of the family unit is that of a nuclear family, with parents and children. In contrast, Native Americans' view of the family unit is that of an extended family tribal structure, with concern for social and economic well-being for all. These family views translate to how the individual perceives themselves; Anglo Americans tend to have an individual “I” orientation, while Native Americans have a “We” orientation.<sup>25</sup>

Awareness of the importance and value of family allows providers to reach out to the patient's extended family, as available, and partner with them for the well-being of their children.

## Case

### First clinic visit

An 8-year-old Hispanic boy presented as a new patient to the practice accompanied by his parents and younger siblings, with concerns about weight. The mother recalled the boy's weight began to increase around age 6 years. Prior to age 5 years, the patient had been cared for by his maternal grandmother. Since then, the paternal grandmother has been the primary caretaker while both parents work. The parents recognized the paternal grandmother was permissive with food and allowed increased access to food. The patient wanted to adopt a healthier lifestyle because he had been bullied the year before in school. There were no current signs of depression. Family history was significant for hypercholesterolemia (paternal grandfather) and type 2 diabetes mellitus (maternal and paternal grandmothers).

His current health behaviors were determined using the clinic's 7-5-2-1-0 assessment:

- 7: Breakfast 7 days per week; 6 to 7 family dinners per week, which include paternal grandmother.
- 5: 3 to 5 servings of fruits and vegetables per day.
- 2: 2 to 3 hours of screen time per day.
- 1: Patient admitted he did not play outside very much, although he occasionally plays basketball and soccer.
- 0: Lemonade, juices, and sodas are all readily available at paternal grandmother's house; 2% milk and little water are consumed at the family's home.

Little structure was provided around meals and snacks, with the paternal grandmother allowing the patient access to food throughout the day.

### Review of system

Snoring and apnea noted in the last 12 months.

### Physical examination

Height: 54  $\frac{1}{8}$  in, weight: 94.5 lb, BMI: 22.7 (98% for age and gender), BP: 110/74 mm Hg (75%/86% for age, gender, and height), HR: 106 beats/min, RR: 22 breaths/min, 3+ tonsils, acanthosis of neck. Laboratory studies showed hypercholesterolemia.

You refer him to a pediatric pulmonologist for sleep study. Goals for the visit were to have the parents try to engage grandmother to promote healthier eating habits, schedule 3 meals or 2 snacks per day, change to skim milk (gradually), consider ways to flavor water with lime, lemon, herbs, fruit, and decrease sugar-sweetened beverages.

### Second clinic visit (1 month later)

The patient had been seen in sleep clinic and a trial of [montelukast](#) and a nasal steroid was started, and a sleep study had been scheduled. His family had decreased intake of [ice cream](#) by not buying it as much. They had also increased vegetable consumption. He had increased his exercise, including enrolling in Taekwondo. He attended Taekwondo 4 times per week for 45 minutes each session and also had begun playing outside for about 15 minutes per day. He had decreased screen time by decreasing his playing of video games, but it was difficult to decrease TV time as this was his primary activity while at his grandmother's house for the summer.

The family found that it was difficult to implement a 3 meals or 2 snack schedule per day. The patient asked for increased snacks in the morning when he was with paternal grandmother (not as much an issue in the afternoon as the family was usually "out" in the afternoon). It was shared that paternal grandmother was very cognizant about her own health behaviors due to her own type 2 diabetes, but felt she should not restrict her grandson and allow him to "go hungry." Boredom was identified as the biggest stimulus for increased snacking,

**Physical examination**

Height: 54 ¼ in, weight: 94 lb (a decrease of 0.5 lb), BMI: 22.5 (98% for age and gender), BP: 110/64 mm Hg (75%/59% for age, gender, and height), HR: 90 beats/min, RR: 22 breaths/min.

**Plan**

The family was to focus on helping the patient identify hunger and fullness and use specific distraction techniques, including playing basketball and bike riding, which were developed for dealing with boredom eating. The decision was made to invite the paternal grandmother to next visit.

**Third clinic visit (3 months later)**

The paternal grandmother was present with the patient, parents, and younger siblings. The patient continued to participate in Taekwondo and was playing basketball and bike riding every day. The family's schedule was hectic; meal or snack schedule was "out the door" due to family stressors. The sleep study had been done: positive for sleep apnea, tonsillectomy scheduled. The paternal grandmother was terrified that her grandson needed to have surgery. She understood that this was potentially a consequence of his weight and she was now on board with implementing behavioral changes.

**Physical examination**

Height: 55 ¼ in, weight: 94 lb, BMI: 21.7 (97% for age and gender), BP: 100/60 mm Hg (37%/44% for age, gender, and height), HR: 116 beats/min, RR: 22 breaths/min.

At the visit an effort was made to engage the grandmother; the pediatric health care provider acknowledged grandmother's love for her grandson and discussed her success in monitoring and successfully modifying her health behaviors around diet and exercise due to her type 2 diabetes. The relationship between childhood weight and sleep apnea, as well as the development of type 2 diabetes in children was also considered. A plan was made for dealing with boredom eating and how keeping to a meal and snack schedule would allow her grandson to have the nutritional intake he needed while decreasing other nonhunger eating. A plan was made to reinstitute meal and snack schedule with grandmother implementing the specific distraction technique of going for a walk with her grandson if he reported being bored.

This case highlights the need for and importance of engaging extended family members in the treatment of childhood obesity for members of certain cultures. Utilizing a strength-based approach, the importance of developing a positive partnership with this family included fostering a positive partnership with this patient's grandmother. She was as critical as the parents in implementing behavioral changes for her grandchild and needed to be a partner in the treatment plan.

Studies throughout the literature affirm a significant association between parental feeding style and child weight.<sup>26</sup> Different cultures display unique beliefs, values, and behaviors regarding how their children should be fed. Woven into this is the affordability and availability of healthful versus nonhealthful foods in different cultures. Even what foods are perceived as healthful differ across cultures—some cultures place a greater emphasis on fresh versus frozen food, and there are also cultural differences in the perception of the nutritional quality of school lunches.<sup>1</sup>

Parental feeding practices play a role in child eating behaviors and differ across racial or ethnic groups. Parental restriction and greater parental control over children's eating habits is associated with childhood obesity and may predict obesity later in life. Studies suggest that parental restriction behaviors are practiced most frequently by Hispanic parents compared to African American and white parents.<sup>27,28</sup> Awareness of parental feeding behaviors allows for the health provider to educate the family on alternative feeding practices.

Culture can also influence how food is prepared in the home as well as the types of foods served. Among traditional Hispanic and African American families, the predominant approach to food preparation involves cooking with large quantities of sodium, sugar, fats, and frying in oils and saturated fat.<sup>29</sup> For example, several of the traditional foods prepared in Hispanic households include fried taquitos, enchiladas, and gorditas.<sup>30</sup> A recent qualitative study examining among Latino parents' perspectives on healthy eating reported that families were amenable to multiple alterations in preparing traditional meals to improve their child's health; specific substitutions identified included whole wheat tortillas made with oil instead of flour tortillas prepared with lard, brown rice instead of white; reductions in meat consumption, increasing fruit and vegetable intake, and substituting





returns home, and snacks (large portions, which mother tries to restrict) after school due to patient feeling hungry. The mother expressed frustration with the “battle” to restrict snacks to one in the afternoon.

### **Physical examination**

Height: 43.5 in, weight: 83.0 lb, BMI: 30.9 (> 99th percentile for age and gender). A plan was made that included acknowledging cultural influence on eating habits. Discussed breakfast does not need to be a large cooked meal. Shared with mother and patient the benefits of having a small meal in the morning to provide energy while at school in the morning and help curb appetite in the afternoon. Discussed option of small uncooked meal prior to school to include 3 food groups; examples provided. Her mother was given healthy snack options and portions to assist her in planning a snack after school, followed by a mother-daughter fun activity after snack. The mother was interested in further decreasing sugar-sweetened beverage intake and decided to not buy juice for home. She also decided to continue current activities with walking and playing at park.

### **Third clinic visit (1 month later with pediatrician, dietitian, physical therapist, and behavior psychologist)**

She was seen by ENT, adenotonsillectomy scheduled. Her mother reports eliminating all sugar-sweetened beverages from the household; the patient now consumes 1 cup of juice 5 days per week at school. She has implemented preparing uncooked breakfast on school days. Breakfast yesterday included 1 cup low-fat yogurt, 1 cup fruit, and ½ bagel with fruit spread. The mother has also focused less on restricting after-school snacks and provides a planned healthy snack after school. The patient is less hungry with the new meal structure, but the mother reports her daughter is more likely to eat a second snack if no afternoon activity is planned. Both the mother and daughter continue on walks and park outings, although currently 1 to 2 days per week, and are now swimming in late afternoon 5 days per week. No cough or shortness of breath with activity.

### **Physical examination**

Height: 44.2 in, weight: 82.3 lb, BMI: 29.7 (> 99th percentile for age and gender), BP: 110/58 mm Hg (91%/57% for age, gender, and height), HR: 122 beats/min, RR: 22 breaths/min.

### **Review of systems**

Bilateral foot pain with increased activity, snoring.

### **Plan**

Manual blood pressure slightly elevated—will monitor. She is still snoring and will reassess after T&A. Currently denies headaches and difficulty with attention or behavior.

An orthopedic referral was made for bilateral foot pain and flat feet. A plan was made to continue swimming and the current breakfast and snack routine. Praised commitment to eliminate sugar-sweetened beverages from home and creativity in providing structured meals and family activities.

The mother and the dietitian are developing rapport and having success in meeting goals. This visit to the dietitian initiated discussion on relationship of fried foods and cooking with saturated fat to family history of high cholesterol and daughter’s risk of high cholesterol, currently with elevated triglycerides. Healthier options were presented to the mother, who was agreeable to consider changing cooking methods; however, planned to discuss with the father prior to implementing changes. The mother was encouraged to bring the father to next visit.

This case highlights subtle cultural influences in meal timing, preparation, and parental eating practices, all of which can impact child health. Utilizing motivational interviewing allowed the clinicians to partner with the mother on which behaviors she felt most comfortable modifying. As rapport developed, the mother was open to learning alternative methods for incorporating meals and healthy snacks into their daily routine.

Cultural values can influence parental perceptions of children’s weight. For example, among Native Americans, previous generations of tribal children suffered from nutritional deficiencies and malnutrition. Excess weight in children, therefore, was seen as healthy and protective against illness.<sup>32</sup> Among tribal preschool children, for example, one-third of mothers misclassified their child’s weight status, with 46% of children with obesity and 90% of children with overweight classified as normal weight by their mothers.<sup>33</sup>



Similarly, Latina women underreport overweight and often view excess weight in early childhood as healthy. In one survey, 75% of Latina women reported that their child was normal weight; however, 43% of these children were overweight.<sup>34</sup> When asked, Latina women prefer their children to have a more round figure, although they desire a slim figure for themselves. Focus groups have reported that Latina mothers view malnutrition as a greater threat than overweight and perceive extra weight helps children recover from illnesses.<sup>35</sup> These cultural beliefs can be a barrier to addressing healthy behaviors as excess weight tends to be desired. Qualitative studies with Latina women have suggested that focusing on positive health outcomes from improved nutrition and physical activity rather than negative consequences of overweight may improve receptiveness to change in weight management counseling.<sup>35</sup>

Parental perception about weight can also influence various health behaviors, such as physical activity. For example, Latino parents often place less emphasis on physical activity. In a cross-sectional analysis of data from the 2011 National Survey of Children's Health, children in immigrant Hispanic households were much more likely than US-born white children (with US-born parents) to be physically inactive (14.7% vs 6.7%). Immigrant Hispanic children were twice as likely as native Asian children to not participate in sports (67% vs 30.2%).<sup>36</sup> Lack of physical activity, specifically regarding sports team involvement, has also been seen among Native Americans and was significantly associated with overweight and obesity.<sup>22</sup>

Cultural beliefs may also impact body image perception, which differs dramatically across cultures. African American women generally perceive an ideal body size that is markedly larger than that perceived by white women. White women also express body image dissatisfaction with significantly lower BMIs.<sup>37,38</sup> Tied to this, African American men display a preference for a larger body size in women compared with non-Hispanic white men. Overall, African Americans equate a normal body image with a higher BMI.<sup>39</sup>

Perception of body image also influences health behaviors. Several studies have examined weight-related attitudes in Native American school-aged children and consistently report a high prevalence of body dissatisfaction leading to unhealthy eating behaviors. Data from Pathways, the largest and most comprehensive school-based obesity prevention project in Native Americans spanning 7 tribes in 4 states, showed that 56% of the 1441 students were dissatisfied with their body and were practicing weight modification techniques, including restrictive diets and skipping meals.<sup>32</sup> Additional studies from other tribes report similar perceptions and habits, occurring in children as young as third grade.<sup>21</sup> Assessing the child's acceptance of their body and current dieting patterns can lead to the opportunity to educate the family on the limitations of restrictive dieting and the importance of establishing healthy eating habits, especially early in life.

One important risk factor for childhood obesity is an increase in acculturation to the US lifestyle. Acculturation is the process whereby individuals from a particular culture will begin to adopt the behaviors and beliefs of another culture. For example, in a study that included 1385 Hispanic adolescents (sixth and seventh grades) from Southern California, acculturation to the United States was demonstrated to be significantly associated with a lower frequency of physical activity participation as well as an increased frequency of fast-food consumption—both obesity-related behaviors.<sup>40</sup> This suggests that in addition to an already lowered likelihood of physical activity that is observed in first-generation Latinos, acculturation may worsen the issue.<sup>36</sup> In general, more acculturated families demonstrate less healthy dietary behaviors than less acculturated families. For example, families with a higher acculturation level are more likely to eat away-from-home at least weekly. Another study found that while first-generation Asian and Latino adolescents have higher fruit and vegetable consumption and lower soda consumption compared with whites, this changes with subsequent generations.<sup>41</sup> In contrast, fruit and vegetable consumption by subsequent Latino generations decreases and soda consumption increases, and by the third generation, the nutrition of these Latino adolescents is poorer than that of their white counterparts. Importantly, eating foods traditional to a culture may not necessarily lower the risk of obesity because other cultures may have less healthful foods as the cornerstone of their diet.<sup>1</sup>

Globalization, a term used to refer to a diminishment in the burden of geographical constraints typically placed on a society, can also affect obesity. Overall, increased globalization has begun to “normalize” eating patterns across cultures, often with healthy eating habits being replaced by less healthy alternatives. Increases in travel, trade, and communication have all contributed to a growing promotion of poor eating habits and less healthful lifestyles. This may lead to changes among a culture in preferences for certain foods and physical activities. Similarly, throughout the world trends have been noted where high-fat, energy-dense foods are replacing traditional diets high in complex carbohydrates and fiber.<sup>1</sup>

## EFFECTIVE COMMUNICATION STRATEGIES

An integration of specific cultural beliefs and practices helps to establish rapport and aids in obesity management. General recommendations, though,

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can be applied to all cultural groups. These include:

- Recognize that cultural perceptions of health may affect parent perception of child weight.
- Initiate conversations about the child's BMI percentile early, beginning at age 2 years, as a measure of health.
- Recognize that minority children are at increased risk for obesity and obesity-related health complications.
- Ask open-ended questions to assess a child's acceptance of their body and current dietary and activity patterns.
- Acknowledge the ethnic and cultural connections to particular foods and cooking methods, while working to introduce sustainable healthy substitutions into family diet.
- Assess the living environment to better understand the family's community resources and potential barriers to treatment.
- Invite all relevant members of the family to clinic visits and involve them in developing health goals through motivational interviewing.
- Focus on positive health outcomes from improved nutrition and physical activity rather than negative consequences of overweight.

Culturally competent behavior change tools should be used when an intervention is required. Awareness of cultural and community-appropriate resource availability may help with improved adaptation into the patient's lifestyle ([Table 17-1](#)).

Table 17-1

**SUGGESTED TOOLS AND RESOURCES TO GUIDE CULTURE-SPECIFIC CLINICAL ENCOUNTERS**

Resource	Organization	Racial or ethnic group	Web site
Expanding perspectives: Improving cultural competency in children's health care	National Initiative for Children's Healthcare Quality	All	<a href="http://www.nichq.org/how-we-improve/resources/expanding-perspectives">http://www.nichq.org/how-we-improve/resources/expanding-perspectives</a>
Cultural competence improvement tool	The National Black Child Development Institute	All	<a href="http://www.nbcdi.org/sites/default/files/uploads/NBCDI.CCIT_.pdf">http://www.nbcdi.org/sites/default/files/uploads/NBCDI.CCIT_.pdf</a>
Obesity prevention and strategies in native youth	National Indian Health Board	Native American	<a href="http://www.nihb.org/public_health/obesity_prevention_youth.php">http://www.nihb.org/public_health/obesity_prevention_youth.php</a>
Toolkit and resource guide	Let's Move! in Indian Country Interagency Workgroup	Native American	<a href="http://www.letsmove.gov/sites/letsmove.gov/files/LMIC_Toolkit.pdf">http://www.letsmove.gov/sites/letsmove.gov/files/LMIC_Toolkit.pdf</a>
Healthy Active Native Communities (HANC)	Association of American Indian Physicians	Native American	<a href="https://www.aaip.org/programs/hanc/resources/">https://www.aaip.org/programs/hanc/resources/</a>
Diabetes public health resource: Eagle books	Centers for Disease Control and Prevention	Native American	<a href="http://www.cdc.gov/diabetes/projects/ndwp/ebtoolkit/index.html">http://www.cdc.gov/diabetes/projects/ndwp/ebtoolkit/index.html</a>
The RWJF Research Network to Prevent Obesity Among Latino Children	Salud America	Latino or Hispanic	<a href="https://salud-america.org/">https://salud-america.org/</a>

In addition, across all cultures, a strength-based approach to obesity management should be employed. A strength-based approach regarding cultural competency refers to identification of the policies, practices, and strategies that draw upon the strengths of children, families, and communities. Instead of focusing on problems and pathology, the strength-based approach concentrates on fostering a positive partnership with the family. In this approach, individuals and families are considered to be equal partners to help elicit change. Cultural competency significantly impacts the implementation of a strength-based approach, as individuals across different cultural backgrounds may hold different values and opinions regarding how strengths are defined. For example, in the first case commending the positive relationship and close bond between the paternal grandmother and her grandson were important, and drawing on this strength was necessary to implement behavior change for both the grandson and grandmother.

## POTENTIAL PITFALLS

Pediatric health care providers must have a keen understanding of their own culture in order to effectively practice cultural competency. Recognizing how one's culture shapes food choices and other nutrition- and physical activity-related behaviors will help health care providers recognize that these same areas may be viewed differently in their patient's daily life due to their own cultural influences. It is important to respect what the patient, family, or culture considers acceptable and what are considered inappropriate suggestions or behaviors. For example, advising a family to discontinue preparing traditional foods may result in unintentional perception of lack of respect, without education on how the specific foods relate to weight gain and/or risk of future disease. Thus, health care providers should be aware of the limitations in their cultural knowledge base.

## SUMMARY

Because children and adolescents from different races and ethnicities are disproportionately affected by obesity, it is especially important that health care providers become “culturally competent” to adequately address childhood obesity across cultures. This includes both an understanding of how an individual’s culture may influence the development of obesity in a child, as well as an understanding of how his or her culture may affect their perception of weight management and interventions. Communication between the health care provider and the pediatric patient and their family should express this understanding and be mindful of potential barriers that may prevent lifestyle or behavior modifications.

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