Barriers and Facilitators of Pediatric Weight Management Among Diverse Families

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Abstract

Objective. To describe barriers and facilitators relevant to pediatric weight management from the perspective of at-risk overweight children and families. Methods. Systematic thematic analysis of semistructured interviews with overweight children and families from diverse backgrounds at a large, urban academic pediatrics practice. Results. Twenty-five parents and their children ages 2 to 18 years with mean body mass index percentile of 96th% (standard deviation 4.3) participated. Fifty-six percent were Black; 40% were Hispanic/Other race. Perceived barriers to successful weight management included (a) inadequate resources (financial, time, access to programming, knowledge), (b) challenging social contexts (cultural practices and expectations, interpersonal dynamics), (c) negative emotional state (lack of confidence, defeat, loneliness), and (d) denial. Participants described linkages to resources, child–parent—provider partnerships, and consistent support as key elements in successful weight management. Participants also endorsed technology use for weight management support. Conclusions. Multiple barriers and facilitators affect weight management among at-risk families, which should be considered in future obesity interventions.

Keywords
pediatric, obesity, barriers, facilitators, health-coaching, qualitative research

Introduction

A total of 16.9% of US children and adolescents now qualify as obese, with a body mass index (BMI) greater than or equal to the 95th percentile for age and sex.¹ Prevalence of severe pediatric obesity, defined as a BMI above the 99th percentile, has also drastically increased over the past 3 decades.²

Obesity in childhood is associated with both immediate and long-term health consequences. Obese children have increased prevalence of hypertension³ and type 2 diabetes,⁴ as well as psychopathologies including depression and low self-esteem.⁵ Obesity in childhood frequently tracks into adulthood⁶ and has been linked to serious cardiometabolic morbidity and premature mortality later in life.⁷ Thus, childhood obesity currently represents a major public health concern in the United States.

Substantial racial-ethnic disparities in childhood obesity exist, with increased prevalence of obesity among non-Hispanic black and Hispanic children and youth compared with their non-Hispanic white peers.⁷ Socioeconomic disparities in childhood obesity are also prevalent, with a significant inverse association between socioeconomic status and obesity among whites, Hispanics, and Asians.⁸ This disparity appears to be widening; while obesity prevalence has recently decreased among high socioeconomic status youth, prevalence among low socioeconomic status youth has actually increased.⁹

Obesity stems from energy imbalance derived from a complex interplay of genetic, behavioral, environmental, and economic factors and presents a sizable challenge for clinicians and public health officials.¹⁰,¹¹ Obesity interventions may not be effective if they fail to consider these factors and how they affect families. Qualitative studies can provide nuanced insight into the personal experiences of families with obese children, and this insight can better inform future interventions.¹²

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The objective of this study was to describe facilitators and barriers related to weight management from the perspective of at-risk overweight children and their families through qualitative interviews. Incorporating patient and family input into the design of pediatric weight management programs may positively affect family-centeredness, adherence, and clinical outcomes.

Methods

Setting
This study was performed during well-child visits to the Boston Children’s Hospital Primary Care Center (CHPCC) from July 2013 to March 2014. The CHPCC is an urban academic practice that annually serves more than 14,000 children predominantly from low-income, diverse Boston neighborhoods: 67% are insured by Medicaid and 45% are overweight or obese.

Participants

Participants comprised English-speaking overweight (BMI at or above the 85th percentile and lower than the 95th percentile) or obese (BMI at or above the 95th percentile for age and sex) patients between the ages of 2 and 18 years seen for routine well care, and their parents. Patients were excluded from the study if they had chronic medical conditions contraindicating dietary or physical activity modifications. Research assistants identified potential candidates from the electronic medical record and invited eligible patients to participate in the study during a break in their appointment or after being seen by their provider.

Survey

After written informed consent (and assent from children 12 years and older) was obtained, 2 trained research assistants conducted semistructured interviews using an interview guide. Survey question domains included the following: (a) current weight management practices such as diet and physical activity habits, (b) perceived barriers to weight management, (c) and facilitators of weight management.

To elicit responses to questions in each domain, the research assistants began with general open-ended questions (example: “What are you currently doing to manage your child’s diet?”) and then followed-up with open-ended probing (“how, when, where, why”) questions to encourage participants to provide additional clarifying details when needed. Children were included to the extent appropriate given age. Interviews lasted approximately 15 minutes. Families were thanked for their time and input but no monetary remuneration was provided to participants.

Analysis

All interviews were audio recorded and transcribed verbatim. De-identified data were then analyzed using thematic coding based on Strauss and Corbin’s grounded theory.13 Triangulation was achieved using 3 independent coders, with an additional researcher available in case of discordance. After independently coding the data, open codes and axial codes were compared, and major themes were identified and grouped.

The Boston Children’s Hospital and Harvard School of Public Health Institutional Review Boards approved all study protocols.

Results

Twenty-five patient-families were interviewed. Fifty-six percent were Black; 40% were Hispanic/Other race. Participating children were ages 3 to 17 years (mean age 9.6, SD 4.7). Sixty-four percent of patients were female. Mean child BMI was 25.5 (SD 6.01), with a mean BMI percentile of 96.0 (SD 4.3). Thirty-two percent of children qualified as overweight; 68% were obese.

In the sections below, we have also included a sampling of participant quotes, selected on the basis of how well they illustrated common themes generated within the recorded data.

Current Practices

Dietary Practices. Dietary practices varied widely among participants, with some families describing structured meals scheduled throughout the day, and others recounting variable meal schedules with frequent snacking. Some families emphasized attempts to make healthy meals at home while others relied on prepackaged foods and snacks or on meals provided by the child’s school. Some families endorsed snacking on fruits and vegetables, but others described frequent intake of high-calorie, nutrient-poor snacks. Many participants also reported high intake of sugar-sweetened beverages. Although some families described portion control efforts, many others were focused on providing a balanced diet and increasing fruit and vegetable intake, without targeting calorie restriction.

Physical Activity/Screen Viewing Practices. Families also described variable exercise practices, with some children participating in multiple organized sports, and others
engaged in only casual exercise such as playing with friends. Families also described exercise patterns that varied considerably throughout the year, due to seasonal variation in sporting activities, and due to limited outdoor exercise opportunities during hot or cold weather. Unstructured exercise, including walking and playing, was the most frequently described physical activity among participants. Some families noted that the young age of their child prohibited participation in organized sports and membership in recreational centers. School-aged children described a variable amount of in-school physical activity, ranging from daily physical education to physical education once or twice a week. Some families discussed attempts to limit television-viewing time, but adolescents in particular described spending large amounts of time on the Internet and computer after school.

**Barriers**

**Inadequate Resources.** Families identified a lack of resources as a major challenge to weight management.

**Financial resources.** Parents frequently cited financial barriers to physical fitness. In particular, families described the inhibitory costs of community exercise programs as a barrier to enrolling their children in structured activities. For some families this included community programs offered on an income-based sliding scale. One father noted, “It’s so expensive. They go by your income, but it’s still killing you.” Another mother said, “I would like her to go to YMCA. That’s something I really, really want. I can just go by my income but they still charge me too much.” Despite these financial limitations, parents consistently expressed a desire to enroll their children in more physical activities.

**Limited time.** Several parents identified work hours as a barrier to family exercise, noting that they often had to work during evenings or on weekends, limiting their opportunities to exercise with their children. Other parents also described work hours as a barrier to preparing home-cooked meals. The latter was especially relevant to single-parent families, and families with 2 working parents. One adolescent identified schoolwork and other school-related activities as barriers to exercise, due to limited time outside of school for homework and extracurricular pursuits: “During the school year it’s really hard to exercise] because I’m taking college courses . . . and I’m also an honors student.” Another adolescent explained that school commitments kept her from joining organized sports: “I don’t know if [joining a sports team] will work with me doing other stuff, like with school hours and, like, homework and stuff.”

**Access to programs.** Participants noted that access to exercise programs is often limited, particularly for young children such as those in elementary school. Parents remarked that “most boy activities start at five or six, or even seven,” and “they were talking about her age, also, because most [programs] take kids seven years old, so she’s six and a half.” Additionally, families described seasonal variation in fitness opportunities as a barrier to exercise. Multiple parents discussed a lack of exercise opportunities in the winter months, saying, “I mean, there’s not much activity we can do in the middle of the winter,” and “Once it’s summer, spring, we’re outside. Like I make sure we’re outside. But it’s hard when it’s 12 degrees.” On the other hand, parents also described summer as a time when access to organized activity is limited due to school vacation. Many children were active only during specific sport seasons; when asked about her son’s current physical activity, one mother noted, “Football hasn’t started yet, baseball hasn’t started yet. So it’s all depending on the season.”

**Knowledge gaps.** Families described incomplete knowledge surrounding healthy eating as another important barrier to successful weight management. Some families expressed confusion about which foods are healthy or unhealthy, and several described receiving conflicting information regarding healthy dietary practices. One mother explained, “I don’t know . . . because sometimes when you use this or use that, afterwards it is ‘Oh it’s not good, use something else’ . . . it’s confusing.” Parents were also confused about food terminology, including the meaning of words like “organic”: “It’s confusing to figure out what is good, or what isn’t good . . . what is organic, what that is good for and what it’s not good for.” Some parents thought that diet was not important for weight management as long as children were physically active. Others thought that their child’s weight would not vary regardless of their dietary habits, making comments such as: “They all kind of have a set weight and it doesn’t seem to vary whether or not they eat.”

**Challenging Social Contexts.** Families described challenging social contexts as another barrier to weight management.

**Cultural practices and expectations.** Several families described cultural differences that contributed to their difficulty maintaining a healthy diet. Some participants described cultural diets leading to increased consumption of unhealthy foods. For instance, when a Hispanic adolescent was asked why she thought she was having a difficult time managing her diet, she responded,
“Because, like, I come from a Hispanic family. You know, like there’s a lot of meals that have to do with chicken, pork . . . it’s kind of hard.” Conversely, 2 Haitian parents noted that food in the United States was less healthy than the food from their home country. One mother noted, “I know what everything is in my country, our foods are healthy. We don’t have, um . . . processed. We don’t grow food processed. They grow natural, natural food.” A second mother complained that her daughter chooses unhealthy, American products over her traditional Haitian foods: “I come from Haiti. So I give her beans, salad, things like that. Like I said, sometimes she’s at school and she’s eating more than that. I give her food, and she goes and gets some ginger ale.”

Families also discussed culturally informed attitudes surrounding weight as a potential barrier. In particular, one Hispanic mother discussed cultural norms correlating a baby’s large size with overall health, and the way in which these norms affected her attitude toward her child’s weight:

She was born, and she was always over the curve. She was almost 9 pounds when she was born. And every time I brought her in she was like going above the curve, above the curve. So for a parent to see a baby healthy, big, you’re like ‘ooh, you know, it’s fine, she’s doing great, she’s very healthy.’ You know, like that kind of mentality.

**Interpersonal dynamics.** Families identified challenging family dynamics as an additional aspect of social context that can pose a barrier to weight management. Some parents felt a significant sense of control over their child’s health, making statements like: “As the parent, she [does not] have the money. So it’s in my hand to say no.” However, others expressed feelings of powerlessness over what their children ate, particularly during the school day. Mothers noted, “When they are in school, I can’t do anything,” and “Now, because she’s in school, the morning and lunch it’s not in my care, so I don’t know what she eats. . . . I don’t have that much control.”

Some children also noted that their adult family members’ eating and fitness habits created a barrier to healthy eating. One adolescent discussed her concerns about trying to change her eating habits while being surrounded by unhealthy foods at home, saying, “My mom, her eating habits. . . . She had the lap band surgery so they changed, but it’s hard, when you are used to eating specific things.” One patient discussed multigenerational unhealthy eating patterns:

It’s going to be hard at home to eat different. Because I know it’s hard for me. I go to my grandma’s house a lot and there’s a lot of things I would like to eat but I know it’s not good for me, so I try not to go around there but it’s really hard.

**Negative Emotional State.** Many patients and their parents expressed negative emotions surrounding weight management.

**Lack of confidence.** Parents described uncertainty over their ability to control their child’s weight, with resultant feelings of worry and stress: “We are concerned. Because her weight has been fluctuating up and down, up and down this past year. It is something we are having a hard time controlling.” Children and adolescents lacked confidence in their ability to control their food intake, describing how difficult it was to eat healthy portions despite their best efforts. One adolescent also described feeling worried about her ability to control her weight in the future: “I get nervous about what I eat ‘cause I don’t want to gain weight.”

**Defeat.** Families expressed feelings of defeat related to previous failed attempts at weight management, making statements such as, “It’s been . . . I’m worried about it. It’s been really bad. I’m trying the best I can.” Patients described themselves with derogatory terms such as “fat” and “a couch potato.” These feelings of defeat were at times reinforced by parental attitudes.

**Loneliness.** Adolescents in particular described feelings of isolation and loneliness related to their overweight status. One adolescent expressed how this in turn led to more overeating, as food had become a source of consolation when she felt isolated from her friends: “I pretty much push all my friends away, and food is there, it’s consolation. So yeah. I eat a lot. And a lot, and a lot.” She went on to explain: “It’s hard. Because there’s food. Food is there when people aren’t.”

**Denial.** Despite their involvement with the medical system, some families did not acknowledge any problems regarding their child’s overweight status, and others expressed satisfaction with their child’s current lifestyle and overall health. Parents repeatedly made statements expressing a lack of concern over their child’s weight, including, “I think that everything’s fine” and “Everything’s going good actually.”

In particular, several parents of young children felt that it was too early to worry about their child’s weight. One mother explained of her 4-year-old son, “Um, I think he’s too young for me to manage his weight in any way. . . . I’m not concerned about his weight at the moment.”

When asked about their child’s activity level, many parents described their children as extremely active, but did not describe any structured exercise, or activities beyond walking or playing informally with friends.
When asked about her daughter’s physical fitness, one mother remarked, “She’s already active—you know, playing.” Casual walking was the most frequent form of exercise reported by parents, and many parents described physical activity occurring only on weekends, which they felt was sufficient. One mother responded to questions about her daughter’s exercise by saying, “I think she’s excellent with her physical activity . . . just basically walking. Her riding a bike or basically walking on the weekend.”

In general, parents separated their child’s overweight status from their overall health, and most parents viewed their overweight children as healthy and active. Parents made comments such as, “I can’t tell what he’s gonna be like when he gets older, or how he’s gonna be health-wise, but I think for now he’s fine” and “She’s very healthy. She doesn’t have any issues besides just her weight.”

Facilitators

Building Partnerships. Besides barriers to weight management, patients and their families identified several potentially helpful elements for a weight management program. The first major theme that emerged was the importance of partnerships between patients, families, and health care providers. One mother explained, “If you don’t have someone reaching out to you, or trying to help figure out the situation, how do you move forward?” Some families specifically discussed goal setting in collaboration with providers as a helpful element for weight management. Patients noted that simply being told what to do to improve their health was not particularly effective; one adolescent male explained, “They used to tell me don’t eat as much, but obviously I don’t think I really listened”. Instead, families described setting goals in partnership with a clinician as a more favorable approach to care.

Families also described a desire to be engaged as an entire unit, so that parents and children could better partner to achieve goals around healthy living. When discussing potential facilitators to weight management, one mother explained that this family approach would be most beneficial: “Something for the parents and the child. So that it won’t be just for the child.”

Access to Resources. Many families discussed access to resources as key for successful weight management. Some families suggested that the primary care center directly provide programs, including fitness classes, nutrition courses, and cooking classes: “If you all had programs here for the children that would be awesome . . . if they had like a zumba class or something, you know for the kids to come and do,” and “Something that could be for the parent as well as the child. Like showing both of us how to create a healthy snack that not only looks good but tastes good.” Support groups were also discussed as a potentially helpful resource. Finally, nutrition education classes were requested:

If you guys held a class or something that the kids could come to that would really help, like . . . a group we could bring the kids into and they could learn about nutrition and stuff like that.

Other families requested improved coordination with preexisting community programs focused on nutrition and physical fitness. Many parents also sought financial assistance for community exercise programs. One mother said, “I would like if they could find something less expensive. Even for after school programs. She doesn’t go to afterschool programs, she just stays with me because of the money.” Another father had come into clinic specifically looking for help accessing community programs:

That’s what I wanted to talk to the doctor about, or someone who could gets us into a membership to like the YMCA so we could be swimming, doing different activities.

Consistent Encouragement. When asked about their current experience with weight management efforts, many children and parents praised the use of consistent encouragement by providers as a key component of successful weight management. When asked what was most helpful in maintaining her child’s healthy lifestyle, one mother responded, “I just think that keeping up with the families and staying on top of things, and just making sure everybody’s on the right road.” Families particularly appreciated continued encouragement provided by clinicians across visits and viewed this as an important element for inclusion in future healthy lifestyle initiatives, asking specifically for continual contact: “I’m one of those people. Call me. Let me know what’s going on. Keep me updated.” Notably, many families identified the use of technology (eg, via text-messaging or email) as a potential tool for providing ongoing encouragement related to weight management between visits, saying, “They could get emails, because now they have phones and text messaging,” and requesting, “technology to get to them to sort of give them ideas.”

Discussion

In this qualitative analysis of barriers and facilitators to weight management among a predominantly low-income, racially and ethnically diverse clinic population, overweight
youth and their families described myriad obstacles to the implementation and maintenance of healthy lifestyles.

Inadequate resources—in terms of financial, time, access, and knowledge limitations—emerged as a predominant theme in our study. Prior research has noted the lack of resources to be an important barrier to healthy diet and exercise, particularly in rural settings. A similar finding among our population of urban-dwellers living in a metropolitan area with a wide array of community resources suggests that logistical factors, such as program cost, target age, hours of operation, weather conditions, and geographical location, as well as pragmatic issues such as competing child and parent schedules may significantly limit participation in existing programs.

Many of our patient families identified knowledge gaps, including confusion about the concept of energy balance, as a major hindrance to success. The latter finding is consistent with research by Davis et al, which found inadequate knowledge regarding nutrition to be an obstacle to weight management in Head Start and Early Head Start participants. National literacy statistics indicate that nearly half of all American adults have difficulty understanding and acting on health information such as food nutrition labels, and additional data show that literacy is positively correlated with socioeconomic status as well as health outcomes. In aggregate, these findings suggest the need for strategies that augment the transfer of health knowledge and relevant skills, as well as for policies that improve meaningful access to resources, with special attention toward barriers faced by individuals from underprivileged backgrounds.

The theme of “Social Context” encapsulates the barriers posed by cultural influences and interpersonal dynamics in our study. Our research participants identified culture as an important force shaping lifestyle behavior; however, while some ascribed a positive impact to cultural influences, others found them to be detrimental to health habits. Culture exerts its influence through complex and dynamic pathways, including weight norms, preferential body shape, as well as diet and physical activity practices. Low-income individuals from low-income countries tend to favor larger body shapes as a symbol of health and wealth, while a slim physique is generally preferred in high-income settings. Culture may also interact with the pressures of normal development to determine day-to-day lifestyle choices in minority youth. Cultural norms change with both acculturation and globalization; however, these changes may differ by ethnic groups. For example, fruit and vegetable consumption is maintained in acculturated Asians but declines sharply among Latinos. One of our Haitian participants lamented that her daughter chose unhealthy American products over traditional Haitian foods; unfortunately, this mother’s concern may be justified—among Haitian-born children, BMI percentile has been found to increase by 3.7% for each year of US residency.

Interpersonal dynamics is an additional aspect of the social context that can pose a challenge to weight management. While some of our parents felt that they had control over choices such as what foods were available to their child at home, others felt they had limited control over what their children were offered at other locations such as school or when they spent time with other family members.

The theme of a “Negative Emotional State”—including a lack of confidence, a sense of defeat, and loneliness—emerged as another set of obstacles to successful weight management. Many parents and youth participants in our study endorsed a lack of confidence in their ability to make or sustain healthful behaviors over time, and those who had experienced failed attempts at weight management admitted to a sense of defeat. In addition, feelings of loneliness and isolation were common among overweight youth, who often found solace in eating for comfort. Evidence shows that “higher levels of confidence, or self-efficacy, increase the likelihood that a person will change a health behavior even when faced with obstacles” and also that “assessing parental confidence and readiness to change may enhance parental confidence in their ability to make weight-related behavior changes for their family.”

Denial regarding the child’s weight status was prevalent among our study participants, especially for the parents of younger children, many of whom believed that their child was “too young to have a weight problem”; several parents asserted that their child was “fine” despite having been told by their primary care provider that their child was overweight. This is a serious barrier to healthy weight management, as parental denial of their child’s overweight status as a problem is associated with a lack of readiness to initiate behavior change. In fact, previous studies have shown that parental denial of child overweight status is one of the most common barriers to weight management success. Of concern, longitudinal research has shown that children who are overweight by the age of 2 years are already at greater risk for becoming overweight adults compared with their non-overweight peers. Also of note, interventions targeting younger children appear to yield better long-term weight outcomes relative to those targeting older children and adolescents.

Patient–parent–provider partnerships were cited as a key facilitator of successful weight management.
Families described a desire to work with providers to set goals for their children’s health, and adolescents discussed the increased efficacy of collaborating with providers to manage their weight compared with simply receiving anticipatory guidance in a dictatorial manner during visits. Partnership and collaboration are considered key components of family-centered care, an approach to care widely recognized as the gold standard in pediatrics.25 However, among parents of children with special health care needs, racial and ethnic minorities as well as those living in poverty are less likely to feel like partners in the management of their children’s health.26 This knowledge, combined with the fact that low-income and minority families in our study desired strong family–provider partnerships, reiterates the importance of these relationships, while also suggesting that more work is needed to improve the quality of provider–family partnerships in at-risk populations.

Improved access to resources was also cited as an important facilitator of weight management. Families in our study expressed a desire for resources delivered directly by the primary care center, as well as improved access to community resources. They also expressed a desire for more varied, cost-effective resources, and resources for younger children. Partnerships between primary care providers and community and school programs is consistent with the Chronic Care Model of illness, which emphasizes the multifactorial etiology of diseases such as obesity, and calls for preventive approaches involving collaboration between the medical system and the environment in which families live, work, and play.27 The families in our study described a desire for a wide variety of exercise and nutrition programs, as well as programs offered to the entire family. Building connections between pediatric, adult, and family-centered resources within the community can potentially engage the entire family unit, while providing a more comprehensive approach to weight management that addresses the multifactorial etiology of obesity.

Last, children and adults in our study described consistent encouragement as a key facilitator of weight management. Notably, parents and children discussed the potential benefit of reaching out to patients between visits to “check-in” and offer support. Providing consistent encouragement to patients may in turn address some of the barriers identified in this study, including the negative emotional state and lack of confidence cited by many of our families. Different strategies for providing this type of continuous support have been studied in adult primary care and should be further explored in the pediatric setting. For example, using layperson health coaches to provide consistent encouragement to patients with chronic illness has been studied in the adult population28-30; based on our study, a similar role for health coaches may also be helpful in pediatric obesity. Families also discussed the use of technology, including email and telephones, to reach out to patients between visits. Texting and mobile devices may be a particularly important avenue for reaching low-income youth in particular, as low-income and minority youth are more likely to go online using their cell phones compared to their upper-income and white peers, despite being less likely to own a landline computer.31

**Improving Adherence in Pediatric Obesity Programs**

Low adherence and attrition are major issues in obesity management programs, with attrition rates of greater than 50% reported in some studies.32 Banks et al performed a qualitative study with families of obese children to discern reasons for lack of engagement in weight management services and found that some families did not engage due to a concern that their individual circumstances were not sufficiently considered by program clinicians.33 This result points to the potential benefit of designing weight management programs with patient family concerns in mind. Considering family-perceived barriers and facilitators during the design of weight management programs for diverse urban families can potentially improve adherence and attrition rates, while increasing family-centeredness of obesity care.34

**What This Study Adds to Our Current Knowledge**

Our study’s delineation of barriers and facilitators among a population of families already connected to primary care may have important implications. The barriers and facilitators described in this study come from parents, children, and adolescents, providing a truly family-oriented perspective on child health. In addition, its qualitative design provides a substantive understanding of a health problem that is affected by multiple factors, including socioeconomic and cultural components. This adds to our current understanding of the challenges facing families with at-risk, overweight children, and illuminates new facilitators and barriers related to pediatric weight management in urban settings. The additional barriers to and facilitators of weight management identified here and elsewhere should be considered in the development of programs for similar patient populations.

**Strengths and Limitations**

A strength of this study is its inclusion of a diverse group of patients and families who reflect those at highest risk
for pediatric obesity. Another strength exists in its qualitative design, which facilitates a holistic exploration of a complex topic from the perspective of patients and their families.

Limitations of this study include its use of a convenience sample of patients for enrollment. This decision was based on feasibility of recruitment, but the convenience sample could potentially represent a biased sample of the overweight and obese patients at our clinic. Additionally, this study was conducted in a large academic pediatric center in New England, and it may not be generalizable to other settings. Study participation was restricted to English-speaking patients. A follow-up study focused on non-English-speaking patients, and particularly on Spanish-speaking families, could potentially provide useful insights into any barriers specific to this population.

Conclusions

A multitude of factors, including inadequate resources, challenging social contexts, negative emotions, and denial, may hinder families’ abilities to achieve or sustain healthy lifestyles and optimal body weight and should be considered in future interventions.

This study contributes to a fuller understanding of patient–parent perceived barriers to and facilitators of weight management for at-risk overweight and obese patients, particularly in urban communities. Incorporating the lessons learned from this study into the design of future pediatric weight management programs can potentially improve adherence, increase family-centered care, and improve outcomes. More research is needed to evaluate the effectiveness of such programs.

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