A Qualitative Pilot Study of Pediatricians' Approach to Childhood Obesity

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ABSTRACT

Importance: Over the past 3 decades, rates of childhood obesity have tripled. Given the gravity of this health concern, it is important that physicians intervene early. However, physicians continue to underdiagnose and undertreat childhood overweight and obesity.

Objective: The aim of this pilot study was to identify current tools and strategies used by pediatricians in regard to childhood obesity, as well as to reassess barriers to success, and to uncover areas for improvement.

Design: One-on-one interviews were conducted with pediatricians during the summer of 2013. Seven of the interviews occurred in person, and 10 occurred via telephone. Each interview lasted 30 to 60 minutes. All interviewees (n = 17, 13.2% response rate) were Wisconsin pediatricians, representing 7 different health systems.

Main Outcomes: Themes relating to pediatrician's experiences in addressing and managing childhood obesity.

Results: Pediatricians interviewed in this survey are comfortable identifying and diagnosing pediatric obesity with the widespread use of electronic health records. They have several tools and strategies at their disposal for the treatment and management of obesity, but do not often achieve the desired outcome of achieving healthy body weight. Most of them lack connections to community resources and the ability to effectively communicate with referral systems outside of their clinic, such as with dietitians.

Conclusions: Building stronger connections between physicians and dietitians, as well as between physicians and the local community, may allow physicians to feel more empowered when it comes to managing childhood obesity.

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INTRODUCTION

The worldwide occurrence of pediatric obesity continues to be a major health concern.[1] In the United States, it is currently estimated that approximately 17% of children are obese.[2] There is a growing body of evidence indicating that early intervention is critical to the success of obesity interventions[3] and parents believe that primary care physicians are the most appropriate professional to intervene regarding the weight of their child.[4] Therefore, primary care clinicians play a valuable role in initiating early interventions and must be empowered to do so. In 2007, the American Academy of Pediatrics released its recommendations for the prevention, assessment, and treatment of childhood obesity.[5]

Studies have shown that the majority of primary care physicians are not following the recommendations,[6–11] suggesting that barriers exist to implementing recommended strategies. Those barriers have been well-studied and include individual, practice-based, and environmental barriers, such as lack of knowledge, lack of time, and lack of proper reimbursement.[12–15] Many such studies were conducted prior to the widespread implementation of electronic health records (EHR) and did not include experiences specific to pediatricians in Wisconsin.

The aim of this pilot study was to establish an updated understanding of physician's perspectives of pediatric obesity in Wisconsin and to identify areas for future investigation. This was accomplished by conducting in-depth interviews with primary care physicians, asking about their experiences identifying, addressing, and managing overweight and obese children.

Table 1. Summary of Physician Responses

Identification and Diagnosis	Physician/Patient Interaction	Referrals	Community
		Tools and Strategies	
Growth charts Body mass index percentile Electronic health records	Family-based interventions Patient education	Multidisciplinary approach Dietitians Fitness clinics	Schools YMCA Weight Watchers Specialist
		Barriers	
Emotional topic Family perception	Lack of evidenced-based approach Behavior change is difficult Patient access to care	Insurance reimbursement Patient compliance Lack of follow-up	Individual Family Socioeconomic/Cultural Environmental Time constraints *(see Table 2)*
		Suggestions for Improvement	
Emphasize data Sensitive language Build relationships	Motivational interviewing Insurance-based incentive programs	Communication between health care providers Formalized systems	Resources for community engagement Public health/advocacy

At each step in the identification, treatment, and management of childhood obesity, physicians have tools/strategies available to them. Along the spectrum, multiple barriers hinder effective care to varying degrees. Of the respective categories, community has the most numerous and ingrained barriers with very limited tools and improvement suggestions.

METHODS

Recruitment

Physicians were recruited from a list of 169 health professionals who had hosted medical students on University of Wisconsin School of Medicine and Public Health pediatric rotations. Members of this list were excluded from consideration if they were retired, were practicing outside of Wisconsin, were no longer participating in patient care, or were working with special populations unrelated to primary care of the general population. After these exclusions, 129 physicians met the inclusion criteria. These 129 physicians were then randomized and contacted by e-mail (if available online) and phone. A total of 17 physicians agreed to participate (17/129 = 13.2% response rate).

Data collection and Analysis

Seventeen interviews were completed using open-ended questions and prompts. The interview included questions related to direct patient care, the role of other health care professionals, and community involvement. All participants were board certified in pediatrics and used EHR for patient care. Participants represented 7 different health systems in Wisconsin, 4 of which were located in Dane County. Ten of the interviews occurred via telephone and 7 occurred as in-person interviews. Each interview was conducted by the same interviewer (BT), and all interviews were transcribed electronically during the interview by a second member of the research team. Interviews were conducted in private and lasted 30 to 60 minutes. Identifying information was removed from all transcripts after the interview was complete. Both the interviewer and interviewee reviewed the transcripts for accuracy.

The transcribed data was analyzed qualitatively using the Grounded Theory method.[16] After familiarization with the transcripts, 2 teams of researchers met separately to create a classification system for the data based on recurrent themes. The teams then came together and refined their classification systems into 1 final system. All transcripts were annotated and indexed separately by 2 coders according to the agreed upon classification system. The coders then met to reach a consensus regarding the coding of each individual transcript. Summaries of emerging themes were created.

Study design and methods were reviewed and approved by the University of Wisconsin-Madison Institutional Review Board and were determined to be exempt.

RESULTS

The physicians' responses were grouped into 4 inclusive categories: (1) identification/diagnosis of pediatric overweight and obesity; (2) physician/patient interaction; (3) health care referrals; and (4) community (Table 1). In each of these areas, physicians described tools and strategies allowing them to be successful, as well as barriers that made obesity management more difficult. They also detected areas for potential improvement in the future. Overall, physicians were confident with identifying and diagnosing obesity, but did not believe that their management strategies were effective in reducing obesity in their patients. Community engagement was minimal.

Identification/Diagnosis of Pediatric Overweight and Obesity

Tools and Strategies: The physicians' responses indicated that

EHRs provided helpful tools for addressing and diagnosing obesity. The physicians specifically used EHR-based growth charts to track and demonstrate trends in body mass index percentile, as well as a visual aid for patients and families to address the topic of obesity, if necessary.

Barriers: The emotional aspect of obesity could make initial conversations with the patient and family quite difficult. Furthermore, addressing obesity could be complicated if parents were uncomfortable with the topic or if they did not perceive their child's weight as a problem.

Keys to Success: Normalization of the conversation about weight at a young age, sensitive language, and strong relationships with families.

Physician/Patient Interaction

Tools and Strategies: The physicians' responses indicated that parents play a fundamental role in their child's behavior/lifestyle, and that whole family interventions were essential. Physicians used counseling strategies such as recommending less sugar-sweetened beverages and juice, switching to skim milk, more fruits and vegetables, eating meals at home rather than eating out, general cooking tips, exercise prescriptions, less screen time, and the use of mobile applications, such as Calorie Counter and Diet Tracker (www.myfitnesspal.com).

Barriers: Physicians noted that managing obesity in the health care system is difficult due to a multitude of barriers that hinder care, including the biological factors of obesity, the complexity of behavioral change, insurance reimbursement issues, a lack of evidence-based approaches, and other logistics, such as access to health care, location of follow-up, and time commitment.

Keys to Success: Family-based approach, motivational interviewing, insurance-based health incentives, and consistent/close follow-up.

Health Care Referrals

Tools and Strategies: The physicians believed that a multidisciplinary, team-based approach is needed to effectively manage childhood obesity. Useful team members cited by physicians included a wide array of health care professionals, such as nurses, dietitians, exercise physiologists, physical therapists, psychologists, and other physician specialists, such as endocrinologists or cardiologists. Many physicians believed that dietitians were the most useful team member due to their expertise in nutrition counseling. Some physicians referred to those with whom they had positive experiences in the past. Other physicians lacked positive experiences with dietitians and cited barriers, such as off-site location and low patient adherence to follow-up. Many physicians also referred their high-need patients to the UW Pediatric Fitness Clinic, a tertiary care center for childhood obesity located in Madison, Wisconsin. Some physicians' responses indicated that the fitness clinic served as a positive, multidisciplinary approach to managing and treating obesity, whereas others believed that more evidence of efficacy was needed.

Barriers: The physicians indicated that insurance reimbursement was a significant barrier to providing necessary referrals to health care professionals. Patient and family compliance also was believed to be a barrier because patients tended to be "no shows" for their appointments with dietitians and with the fitness clinic. As previously mentioned above, lack of professional cohesion with a local dietician was also a barrier.

Keys to Success: Consistent bidirectional communication with referral members, especially dietitians.

Community

Tools and Strategies: The physicians generally acknowledged that schools, YMCAs, and Weight Watchers groups were community resources that potentially could be useful in the management of obesity outside of the health care system. Overall, physicians believed that the public's knowledge and awareness of obesity has increased.

Barriers: The physicians mentioned various individual, family, socioeconomic, time, and environmental barriers that existed outside of the health care system, which may hinder the effective management and treatment of pediatric obesity. Many physicians believed that the locus of control for successful treatment was outside of their domain and was more dependent on the individual patient, the family, the communities in which they lived, or society as a whole. Also, physicians typically were not aware of specific community-based organizations and resources for obesity. A list showing the depth of what physicians perceive to be barriers specific to the community is shown in Table 2.

Keys to Success: Increased connections between community organizations focused on pediatric obesity and pediatricians.

DISCUSSION

The first purpose of our pilot study was to establish the current landscape as it relates to pediatric obesity in Wisconsin. That landscape can be summarized as follows. The pediatricians in our sample are generally comfortable discussing obesity with their patients and their families. They note that the EHR-based tools and strategies available to them for identification and diagnosis of childhood overweight and obesity have greatly improved identification. Despite this, these physicians believe that the current strategies are not effective in treating obesity, and community connections remain tenuous.

The second aim of this pilot study was to uncover areas for future investigation. Therefore, the following discussion will focus on 4 areas where improvement in patient outcomes might

Table 2. Perceived Community Barriers are Rooted in Multiple Foundational Social Units

Individual	Family	Socioeconomic/Cultural	Environmental	Time
Lifestyle	Family dynamic	Financial limitations	Food access	Time commitment
Self-esteem	Family history	Cultural perceptions	Transportation	Appointment compliance
Psychosocial	Family perception	Safety of neighborhood	School vending machines	
Patient knowledge			School meals	

be accomplished, as suggested by the physicians in our study.

First, physicians emphasize the importance of a family-based approach. Pediatricians recognize that children often do not have control over their own food and physical activity choices. Past studies agree that interventions for childhood obesity should include parents, making it possible to for the child to follow a healthy role model.[17,18] Family-based interventions that focus on behavioral change achieve the greatest success.[19]

Second, the study participants suggest a shift towards motivational interviewing techniques when speaking with patients about obesity. Motivational interviewing is a nonconfrontational counseling approach in which the physician's role is to help identify reasons for a patient's condition and then facilitate an internal discussion about their condition.[20] Most of the physicians in our study used patient education as the primary technique to counsel patients regarding obesity. Past studies have shown that motivational interviewing is a better tool than patient education when attempting to accomplish behavior change.[21,22] Unfortunately, pediatricians are not always trained in motivational interviewing, which presents an opportunity for further education.

A third area for improvement, according to the pediatricians in our study, relates to the lack of communication that occurs between physicians and dietitians. Among those physicians who had the most confidence in the dietitians with whom they worked, some themes were identified. Such pediatricians had built close working relationships with their preferred dietitian, including consistent bidirectional communication. In addition, these dietitians were generally on site. Many of the pediatricians who had less positive experiences with dietitians had difficulty locating dietitians with expertise in pediatric patient populations. Negative experiences also stemmed from lack of communication, both on the part of the physician and the dietitian. This represents a potential need for a system where the referring physician can easily identify dietitians who are experts in treating and managing childhood obesity and, in turn, build strong interprofessional relationships for the benefit of the patient.

The fourth barrier, according to our study population, is the lack of connectedness between the health care system and its local community. When discussing obesity, there is a pervasive belief among pediatricians that "I can only do so much," and that most of the responsibility of promoting healthy lifestyles lies on the family and the rest of society. In short, there is a sense of low physician effectiveness and presumed futility when treating childhood obesity. In order for physicians to feel effective when managing obesity they must have tools and strategies that exist outside of health systems, where their patients spend most of their daily lives. Some efforts are being made to establish community-based treatment strategies that are backed by evidence.[18] It may not be sufficient that pediatricians are aware of community resources such as local schools and YMCAs, because patients may benefit from more formal connections between health care and the community. By establishing meaningful community connections with local organizations and advocates, physicians will become empowered to overcome the environmental determinants of obesity. These health care-community connections may be sought out by physicians themselves, or by other staff members trained as liaisons.[23]

One limitation of this pilot study is the low response rate (13.2%), as physicians more interested in obesity may be more likely to respond. Additionally, the purpose of the inquiry was to generate a general, qualitative understanding of physician experiences, not to suggest specific interventions for pediatric obesity.

The strengths of this pilot study consist of the inclusion of physicians from a diverse number of health systems. Also, specific response themes existed in our data, suggesting that even in a skewed study population, there was some internal consistency and saturation of themes. Another strength of this study is that it provides an update to past studies by directly exploring the current beliefs of physicians in Wisconsin, asking them which areas of identification, treatment, and management of childhood overweight and obesity are sufficient for them to achieve success, and which are not.

In conclusion, the pediatricians in our study report that they are comfortable addressing the issue of overweight and obesity in children, but have not experienced consistent success in reduction of those patient's body weight. In recent years, tools and strategies to improve identification and diagnosis have allowed pediatricians to become confident in these areas. This pilot study suggests that in order to continue to become more effectual, we must explore improvements in several areas. These areas include implementation of family-based interventions, a shift toward the use of motivational interviewing, improvement in physician-dietitian communication systems, and strengthening the con-

nection between health systems and their community resources. By doing these things, the physicians who were interviewed in this pilot study suggest that they might be able to improve outcomes related to pediatric obesity.

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