A Childhood Obesity Program in Federally Qualified Community Health Centers

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Physicians and practitioners working in health centers may face challenges when trying to trying to encourage healthy lifestyles in an underserved patient population. One of the most challenging diseases to address is obesity. As the prevalence of childhood obesity reaches a new high, efforts must be made to reverse and protect children from this preventable disease. This column will describe how two federally qualified health centers used a modified version of a nationally known obesity prevention program called *We Can* to implement childhood obesity clinics.

Background

The obesity epidemic in the U.S. is multi-factorial, and children are among the most vulnerable to it. While the 2008 National Health and Nutrition Examination Survey (NHANES) reports that the number of children who are overweight or obese may have peaked, the current statistics are alarming. Rates of obesity among children age 2–19 have tripled since 1980.[1] The National Survey of Children's Health (NSCH) found that one third of children ages 10–17 are obese (16.4%) or overweight (18.2%).[2] In Washington, D.C., the percentage of obesity rates for 10–17 year olds is 35.4%, placing it at number nine among all cities in the country.[3] The implications of this include a staggering number of children who are at risk for developing serious chronic health conditions, such as diabetes and coronary heart disease.[4]

In underserved primary care settings, there are barriers to achieving healthy weight goals for patients. The parents of children in resource-poor locations face monetary restrictions and environmental challenges that inhibit change. Lack of education and language barriers are also impediments. The State of Education study of the District of Columbia reports that approximately 37% of D.C. residents are functionally illiterate.[5] For providers, the lack of time, inadequate training, and the paucity of culturally and linguistically sensitive materials for patients are all factors that make achieving healthy lifestyles difficult.

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Upper Cardozo Clinic is a comprehensive primary care clinic located in Washington, D.C., and is a part of the Unity Health care system. The patient population is primarily Hispanic and African American, with the remaining patients being of African, European, and Asian descent. Unsurprisingly, in view of the statistics for Washington, D.C., childhood obesity is a problem practitioners at the clinic routinely encounter. At the time of the project described here, there were not any current programs in local community health centers that had childhood obesity programs functioning inside of their clinic. Overweight and obese children were being referred to locations several miles away from their homes in locations vastly different from their current environments. Multiple factors, including time, distance, and unfamiliarity contributed to the historically poor results. Practitioners within the clinic were left to try and address this very complex issue during routine visits, although did not know how to connect patients with programs addressing social deterrents to health care.

To address these barriers, an educational program centered on the notion of a *medical home* was developed. The *medical home model* is defined by the Association of American Medical Colleges (AAMC), as a model of care delivery that includes an ongoing relationship between a provider and patient, around-the-clock access to medical consultation, respect for a patient's cultural and religious beliefs, and a comprehensive approach to care and coordination of care through providers and community services.[6] The design of the program at the Upper Cardozo Clinic incorporated cultural sensitivity, community resources, and provider involvement and focused on the entire family to obtain coordinated comprehensive care. Emphasis was placed on a holistic and multidimensional approach to family involvement, along with a coordinated and comprehensive care team at the clinic. The intent was to provide a safe, easily-accessible environment for overweight children ages 7–13 and their families to learn healthy eating choices, and promote physical activity under the guidance of primary care providers.

The program was developed as a Quality Improvement project for Upper Cardozo Clinic by a Georgetown University Family Medicine Fellow. The first step was to conduct a comprehensive search for current literature on obesity programs (in journal articles, guidelines, reviews, national reports, and Internet resources). While many sources reported initial positive outcomes, it seemed that sustainability and reinforcement of the behaviors was problematic. One comprehensive review determined that intervention strategies that have proven to be successful include using a combination of nutritional and activity promoting information; a cognitive-behavioral aspect; parent-directed activities; limiting sedentary behaviors and including a positive approach with children and practitioners.[7] With this information, the team decided that the most effective way to incorporate all of those stated elements was to involve the entire family along with the health care provider and make the program easily accessible to both parties.

In order to determine the best method to deliver the health information, a survey was created, taking care to make it easy to read, and distributed it in both English and Spanish to all patients at the clinic. The survey asked patients to identify what health concerns were of most importance to them, as well as how and from whom they would like to receive health information. Examples given included handouts, seminars, the Internet, and videos. Overwhelmingly, respondents mentioned nutrition and exercise as major concerns, and named group sessions with a physician or practitioner as their

preferred source of health information. This is in keeping with literature reporting that having a healing relationship with a personal physician can significantly improve outcomes.[8]

Additionally, physicians and practitioners at the clinic were surveyed to get an idea of the major barriers they face in managing obesity. Along with time constraints, many physicians expressed concern over lack of follow-up from obesity clinics, transportation costs for patients, and the costs for patients of taking time from work and school to make repeat appointments. Practitioners also pointed to safety concerns in the surrounding communities as potential barriers for patients seeking ways to exercise outdoors. Finally, practitioners noted the lack of culturally sensitive and literacy-level-appropriate nutritional information as hindrances to comprehensive care.

Community Health Center and Community Partner Collaboration

The collaboration between the Unity Upper Cardozo Health Care Center, the YMCA, and the Diabetic Research Wellness Foundation began when a Georgetown University Family Medicine Fellow reached out to a nurse practitioner to recruit participants for a childhood obesity prevention program. The partnership with the local YMCA was a natural fit to deliver exercise activities to the youth selected for the program. By introducing the patients to a local wellness center, there was a greater likelihood of visits to the center for continued physical activities. A plan was established to have a staff member of the YMCA sent to the clinic for weekly two-hour sessions with the children incorporating a variety of athletic activities that could be conducted in either indoor or outdoor settings. This was important as many of the youth did not live in environments that were conducive to outdoor play. The second partner was the Diabetic Research Wellness Foundation, which provided some funding for the project.

Program Design and Implementation

The success of the project required a strong infrastructure within the clinic, educating and recruiting a support staff knowledgeable about and sensitive to the target population, and support from the medical director at the clinic.

Meetings with practitioners and staff were held to educate them about the project and look for potential participants. Referral forms were created and distributed to practitioners at the time of the patient visit and collected at the end of the day. Practitioners participated in a friendly contest to determine who would have the most referrals before the program began. Flyers were displayed throughout the clinic and handouts were provided describing the program to all patients. The staff made reminder phone calls to patients in both English and Spanish.

A nationally recognized childhood obesity program, *We Can* (Ways to Enhance Children's Activity and Nutrition),[9] was selected to use as the template for educational classes for families who signed up for the program (classes were held in both English and Spanish). Areas of the waiting rooms and conference rooms functioned as meeting locations for classes. Initially, each group was designed to meet once a week in the evening for one month. Overweight children ages 7–13 years of age were considered

candidates for referral to the program. Children considered to be at risk were also referred along with their siblings and parents, where being *at risk* was understood as living in a family with overweight or obese parents.

Each class session began with a healthy dinner and conversation among the entire group of families. Lessons learned from previous visits were discussed, as well as impediments to accomplishing weekly goals. Then, the groups were divided into children and adults. A clinic provider taught the children received age-appropriate lessons and activities related to nutrition. Later, a member of the local YMCA led the children were led by in various types of physical activity. Simultaneously, another clinic provider taught adults about healthy eating, cooking, and nutrition. The adult session also incorporated exercise in the form of adult Yoga, a program that the intervention team chose to promote alternatives to traditional types of exercise as well as to teach ways to relieve stress. At the conclusion of each session, family members were reunited to discuss what they learned and how they planned to use the new information.

Sustainability

At the beginning, over 20 families were regular participants in the weekly program at the Upper Cardozo Clinic. Participant survey results indicated a positive response from both groups in learning healthy food choices, and the importance of regular exercise. Program participants cited companionship, safety of the location, and opportunities to discuss lessons with family members as reasons to continue with the program. Since the pilot program, over 150 patients have participated in the program, accumulating 400 visits.

One emphasis of the medical home model is on care being tailored to meet the needs and preferences of the patients,[10,11] and that makes a difference in the obesity prevention programs at Upper Cardozo Clinic. Not only are patients able to receive acute medical care from the clinic, but with the inception of this program, at the clinic they also learn about prevention, nutrition, exercise, and safety as they pertain to healthy living. The willingness of the providers and staff to participate by recruiting participants and leading group sessions is crucial. Additionally, efforts to create billable visits for the encounters have helped to ensure program viability. Each patient visit involves a nutrition history, vital signs, body mass index (BMI), health knowledge, and laboratory tests (if warranted), to track results. Efforts are currently being made to create similar programs at other Unity Health care system sites.

Rx for Fitness

Another adaptation of the *We Can* program is being conducted in Hudson River HealthCare, a federally qualified health center in Peekskill, New York. The target audience is an urban community of African American and Latino families. The pediatrics department offered the program, renaming it *Rx for Fitness*. Now in its fourth year, this program was originally funded through a Dannon Grant. The *We Can* curriculum targeting 6–11 year olds was modified to include an experiential component for nutrition, physical activity and a behavioral component. A transdisciplinary team is

responsible for conducting the program. A registered dietitian, a pediatrician, a patient care partner (community health worker), an Americorps volunteer, and a social worker all take part in the program.

The medical provider refers children and their families Rx for Fitness, which targets children and families who may have elevated BMIs or who appear to have poor eating habits.

RX for Fitness promotes the benefits of replacing a sedentary lifestyle with an active one, and guides children and their caregivers on how to improve eating, food purchasing, and physical activity patterns and habits.

The program stresses exercise through music, dance, and creative expression, using a multicultural mix of appealing and meaningful music that encourages children to participate in physical activity and dance. The nutrition segment of the program covers actual food preparation with both parents and children. Behavioral tips—on such topics as the importance of family meal time and guiding children away from screen-time activities—are shared with parents and children. The overall goals for Rx for Fitness include reduction in BMI; increased vegetable, fruit, and low-fat dairy foods; as well as an increase in physical activity and a reduction in screen time.

Rx for Fitness has expanded to one of the migrant sites of Hudson River HealthCare. The design was modified slightly, but the program's success seems evident. The graduates of the program have helped to spread the word about this program and the number of participants continues to grow. Barbara Morgan, RD, one of the leaders of the program, noted, "At the end of every session, families have been able to identify ways to move more and replace screen time with more activity. One family purchased home exercise equipment, another child enrolled in swim lessons, and other families chose to walk to and from school more often."

Conclusion

Research demonstrates that obesity is a complex and multi-faceted problem requiring multiple approaches and solutions utilizing a team management strategy. The federal government appears to be following this approach with the current health care reform legislation, the Surgeon General's Childhood Overweight and Obesity Prevention Initiative,[12] and First Lady Michelle Obama's initiation of the *Let's Move*[13] program, all of which use a multi-tiered weight reduction and management program for children. The most successful future initiatives will likely include the family, the community, and community health centers working collaboratively in order to overcome the challenges of obesity in economically disadvantaged populations.

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Notes

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