



# Pediatric Obesity Special Interest Group Newsletter

## WEIGHT STIGMATIZATION IN CHILDHOOD: SOURCES, SIGNIFICANCE, AND SOLUTIONS

The prevalence of obesity in the United States has become a public health crisis, with more than one-third of adults and 17% of children and adolescents now meeting criteria for obesity (i.e., BMI > 30.0).<sup>1</sup> There is evidence that overweight individuals face high rates of discrimination due to their weight, with weight-based stigma often stemming from the belief that obesity is attributable to personal choices (e.g., overeating, laziness, lack of self-discipline).<sup>2</sup> These biases permeate multiple facets of daily living (e.g., education, employment, health care), with overweight and obese individuals often facing weight-based discrimination that can have serious medical, financial, and psychological consequences.<sup>3</sup>

One population with high vulnerability to weight bias is children and adolescents, with discrimination often manifesting in the school environment. Research shows that weight stigmatization begins at an early age, with negative attitudes towards overweight peers emerging in the preschool years and becoming more prominent in later childhood and adolescence.<sup>4</sup> Studies show that children and adolescents perceive their overweight peers as being different from themselves, rating them as being less attractive, less athletic, and more likely to be ill.<sup>5</sup> Perhaps more alarmingly, weight biases have also been documented among teachers, who are more likely to rate overweight students as messier, more emotional, and less likely to succeed.<sup>6</sup> Gym teachers in training also report having a high anti-fat bias and lower expectations for overweight students compared to normal weight students.<sup>7</sup>

These beliefs, whether implicit or explicit, can lead to discrimination in the quality of education received by overweight students.<sup>8</sup> Besides being perceived differently compared to normal weight peers, overweight students are also at increased risk of weight-based victimization<sup>9</sup> and experience higher rates of both in-person bullying<sup>10</sup>

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and cyber-bullying<sup>11</sup>. Discrimination due to weight is linked with vulnerability to depression, low self-esteem, negative body image, and suicidal thoughts.<sup>12</sup> Overweight youth also report increased school avoidance<sup>13</sup> and decreased academic performance<sup>14</sup>. These effects may be far-reaching, as obese females may be less likely to attend college or obtain a college degree compared to normal weight females.<sup>15</sup>

Given the high psychosocial and educational risks faced by overweight children and adolescents, it is necessary to combat weight-based stigmatization at both a local and national level. However, trends show that weight stigma remains a socially acceptable form of bias in the United States.<sup>16</sup> Because schools are the primary environment in which children experience discrimination<sup>13</sup>, school-wide policies and preventive efforts addressing this issue are necessary.<sup>17</sup> With previous research identifying weight-based stereotypes among educators,<sup>6</sup> training for educators and school administrators in both the etiology of obesity and the need for increased awareness and responsiveness to weight-based victimization is vital.<sup>17</sup> While evidence suggests that anti-bullying policies are becoming increasingly emphasized, bullying due to weight is rarely explicitly addressed or included in school policies at the level of other forms of discrimination (e.g., race, sexual orientation). At an administrative level, there is a need for increased emphasis on and the implementation of clear school policies regarding weight-based bullying<sup>17</sup> to help prevent and further victimization.

School-level efforts will help to combat weight-based discrimination at a community level, but larger scale policy changes are also necessary to enact change more broadly. For example, portrayals of obese individuals in the media (i.e., television, movies, and magazines) have been shown to influence children's perceptions and reinforce negative attitudes.<sup>18</sup> For example, one study demonstrated a strong positive association between the amount of television watched by 3 to 8

year-old boys and the number of negative stereotypes about overweight females.<sup>19</sup> Cessation of negative portrayals of obese individuals in the media is a key step in stopping the perpetuation of negative weight-based stereotypes. Further, obesity prevention efforts will need to expand toward larger-scale policies that help to combat common misconceptions about both the causes of obesity and its solutions.<sup>16</sup> Education on the complexity of obesity, including genetic and biological factors, economic factors (e.g., affordability of calorie-dense foods), and cultural and societal factors (e.g., high rate of sedentary behaviors, increased availability of calorie-dense foods) may help to combat false assumptions that obesity is solely attributable to individual-level factors.<sup>16</sup>

While trends show an increase in weight-based stigmatization among adults between 1994 and 2006,<sup>20</sup> recent research suggests that perceptions of obese individuals may be changing. A national survey demonstrated that the number of Americans who believe that obesity is a community-level problem is rising, while the belief that obesity is caused solely by personal choices is decreasing.<sup>21</sup> However, little is known about trends in weight-based discrimination among children. Given the high rates of overweight and obesity among both children and adolescents and the heightened risk of adverse psychosocial, social, educational, financial, and vocational outcomes, prevention of weight-based discrimination is a

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*To access additional information on weight stigma and bias research as well as resources for children, parents, health care providers, and educators, visit the Rudd Center for Food Policy and Obesity website at:*

[http://www.yaleruddcenter.org/what\\_we\\_do.aspx?id=10](http://www.yaleruddcenter.org/what_we_do.aspx?id=10).

# CLINICAL SPOTLIGHT: The Strong4Life Clinic, Children's Healthcare of Atlanta

The Strong4Life Clinic at Children's Healthcare of Atlanta is a combined medical and surgical obesity program. Children of any age may be referred to the clinic by their pediatricians for concerns about weight and weight-related comorbidities such as insulin resistance, hypertension, dyslipidemia, non-alcoholic fatty liver disease, and obstructive sleep apnea. Our family-based program is year-long with monthly visits. At each visit, families meet with a nutritionist, exercise physiologist, medical provider, and psychologist. With input from the clinical team, families set two goals related to nutrition and physical activity. These goals are reviewed, revised, and added to at each subsequent visit. All clinical team members have been training in motivational interviewing, our primary approach in working with families.

Because families meet with multiple providers at each visit, we have worked hard to ensure that all team members adopt the same philosophical approach to diet and exercise. Early on, Strong4Life drew from the approach of child nutritional expert Ellyn Satter to teach parents and children their responsibilities around healthy eating and physical activity. Briefly, this approach encourages parents to assume responsibility for providing consistent, healthy meals and snacks in a healthy home food environment. Children, meanwhile, are taught to listen to their own signals of hunger and fullness and eat until full. When combined successfully, this approach can decrease the tension and anxiety families feel around food. It can decrease children's resistance to change and encourage a healthy, no-diet mentality towards eating. Because all team members are exposed to this philosophy we are able to send a uniform message of moderation in eating and physical activity and discourage adult approaches to dieting and exercise (think extreme restriction and boot camps) that many parents try to attempt with their children.

A unique aspect of our program is the accessibility of our clinical staff between visits. For example, in place

of written food logs, we have found that taking photos of meals provides rich information on portion sizes and consumption of various food groups. Families seem to like the ease of taking photos and emailing them to our nutritionist. In many instances, they are given prompt feedback which then allows them to make changes to their food habits immediately rather than waiting until their next appointment. Similarly, we have found that families enjoy sending photos or e-mail updates of their physical activity to our exercise staff. These interactions provide further support to families as they commit to altering their daily habits.

Because we offer both a medical and surgical program, we are able to meet families where they are in terms of readiness for surgery. Many times our surgical patients may find they are not mentally prepared for the major step of undergoing bariatric surgery. In those instances, we are able to continue working at a less intensive pace with these families, albeit on the non-surgical track, until they are ready to move forward. Families also report feeling less pressure to choose one or the other treatment option as they are able to change their minds at any time.

The psychologist on the team has a two-fold role of providing clinical services to the patient and providing support to the treatment team. When parents and children are at odds it is common for parents to attempt to exert greater control by placing further restrictions on food access, which, unfortunately often leads to increases in hiding and sneaking of food and overeating. Hence, the psychologist also works on improving family dynamics around eating. Mood disorders are a common comorbidity within our patient population. Additionally, these youth face weight-based discrimination, teasing, and physical violence in school. They may be socially isolated and many are currently enrolled in home schooling programs due to unresolved bullying in mainstream schools. Referrals are made for ongoing counseling services to address these issues if needed.

Finally, our psychologist helps to integrate treatment recommendations and ensure that the family feels equipped, financially, emotionally, and mentally to embark on behavior change.

In the last year, a conscious decision was made to increase our focus on families with chronic medical problems often exacerbated by weight gain. By increasing our visibility within our own hospital system, we are now seeing patients with congenital problems (e.g., spina bifida), cancer, orthopedic complications (e.g., Blount's), and hypertension. As the complexity of our patients' profiles increases, the role of integrating psychosocial, psychological, and cognitive functioning information into treatment recommendations has become even more important.

As with other clinics, we continue to struggle with issues of attrition. Since adopting recommendations from Focus on a Fitter Future for improving show rates, we have been successful at kept our no-show rate below 20% (Walsh, Palmer, Welsh, & Vos, 2014) while the national average is 30%. The same survey found that lengthy visits resulting in missed work and school were major obstacles to continued participation in comprehensive programs like ours. To ensure that we are as efficient as possible our team has undergone

yearly lean workshops that seek to eliminate wasted time and increase productivity. As a result, we implemented family-centered rounding which has almost eliminated patient wait times between providers. Family-centered rounding involves discussion of the patient's case with other providers in the presence of the family. This method increases patient engagement and ensures information is conveyed with minimal miscommunication. It also cuts down on time spent consulting with colleagues outside the exam room.

Our most recent data indicate that the majority of our patients have stabilized their BMI after 6 months of program participation (Walsh et al., 2014). As we grow, we are excited to be devoting more time to clinical research with the hope that these endeavors will translate to better, more sensitive, and more effective treatment approaches to help these families implement healthy, sustainable lifestyle changes.

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## SIG & News Announcements

### SIG Meeting

The Pediatric Obesity Special Interest Group will meet on **4/16/2015 from 5:30 PM to 6:30 PM** to introduce the new officers and discuss updates and upcoming activities. Please consider attending to learn more about the SIG, to get involved, to become a member or just network with those who attend!

### SPPAC Event Highlight: Walk with a Mentor

**When: Thursday, 4/16/2015 from 12 pm – 1pm**

Groups of approximately 4-5 students/trainees will be paired with 1-2 professionals in pediatric obesity to walk and discuss various professional topics in the field and answer any questions that trainees have. Some topics during the walk might include workplace settings, relevant pre-doctoral internship sites, how research is involved in their careers, working on interdisciplinary teams, etc.

The designated walking route will be along the Mission Bay Walking Path, for a less formal walk along the boardwalk while promoting physical activity!

# SPOTLIGHT: Integration of Research and Practice at the Healthy Lifestyles Center in Richmond, VA

The Healthy Lifestyles Center (HLC) at Children's Hospital of Richmond (CHoR) at Virginia Commonwealth University (VCU) offers comprehensive, integrated family-based care for children, adolescents, and young adults with obesity through outpatient clinics, inpatient consultations, and research investigations. Through a multidisciplinary team approach, these specialists work with children and families with the goal of promoting healthy eating and exercise habits that can last a lifetime. The HLC was established in 2012, via generous support from the Children's Hospital Foundation, to integrate and expand clinical and research endeavors in pediatric obesity.

The TEENS (Teaching, Exercise, Encouragement, Nutrition, and Support) clinical research program served at the cornerstone for the development of the HLC. TEENS is a multidisciplinary, family-based lifestyle clinical research intervention for adolescents with overweight and obesity, serving primarily African American, low-income families (with about 46% uninsured or a Medicaid recipient). The program has been in existence since 2003, with over 700 adolescent participants to date. As part of TEENS, adolescents participate in nutrition education, behavioral support, and supervised exercise in the TEENS gymnasium. Parents also participate in groups independent from their teens, in which strategies to support their teens in making lifestyle changes and the importance of family-based changes are discussed. As published by the HLC team in peer-reviewed journals, participation in the TEENS intervention is associated with significant reductions in adolescent body mass index (BMI) and improvements in cardiometabolic risk factors,

fitness, dietary intake and quality of life.<sup>1-3</sup> During TEENS, all participants receive a complementary membership to the YMCA via a long-standing collaboration between the HLC team and the YMCA. While the core components have remained similar, the team of investigators has developed and implemented three distinct treatment protocols within TEENS, with each subsequent protocol guided empirically by the previous cohort's response to treatment. As such, the TEENS intervention has a

wealth of data on feasibility of lifestyle intervention in this underserved population, pathophysiology of obesity, in addition to efficacy of each protocol. The team is currently preparing to implement a pilot of a fourth intervention (TEENS+) that investigates the specific role of parents in adolescent obesity

treatment. The strong research foundation of TEENS has become a launching pad for multiple externally funded investigations from the National Institutes of Health, the American Cancer Society, the American Heart Association, among others. Moreover, TEENS has proved a rich training site for trainees across disciplines, including psychology doctoral students, who implement the behavioral treatment under supervision from a licensed psychologist.

Since its inception, TEENS has provided a critical regional need for an integrated multidisciplinary approach to adolescent obesity treatment. However, access is limited by the parameters of a research trial (e.g., participant age, location, group size, medical and psychological factors, desire to participate in a research trial, among others). Prior to 2012, there was no dedicated clinical option for the treatment of



pediatric overweight and obesity in Richmond, VA. As such, Dr. Melanie Bean, Assistant Professor of Pediatrics and Psychology and Dr. Edmond Wickham, Associate Professor of Internal Medicine and Pediatrics, developed a proposal to the Children's Hospital Foundation, to establish the Healthy Lifestyles Center (HLC), a comprehensive pediatric obesity treatment and research center. The HLC is an extension of the Division of Pediatric Endocrinology and Metabolism at CHoR at VCU. The Children's Hospital Foundation has provided \$1.2 million in funding to the HLC over its initial three years, with additional support for subsequent years provided by the Children's Miracle Networks and Walmart. The functions of the HLC are to: 1)



provide comprehensive family-based weight management services for children, adolescents, and young adults with overweight and obesity, including consolidating current pediatric obesity treatment services and serving as a tertiary referral center for severe obesity; 2) provide the infrastructure and synergy for conducting novel research regarding obesity pathophysiology, prevention, and treatment;

and 3) offer cross-disciplinary obesity educational training for psychologists, dietitians, exercise physiologists, physicians, and public health trainees.

The HLC's is led by psychologist Dr. Bean, Director of Clinical and Behavioral Services, and physician Dr. Wickham, Director of Research. Dr. Ronald Evans is

the Director of Exercise Services. The HLC also has a dedicated research coordinator, exercise supervisor, data manager, and dietitian involved in both clinical and research endeavors. The HLC's established infrastructure has facilitated innovative research endeavors. The Center includes a dedicated gymnasium

that is outfitted specifically for the needs of this population, and includes both cardiorespiratory fitness and resistance training equipment. The gymnasium is staffed by exercise interns in the Department of Health and Human Performance, under the supervision of a masters-level exercise physiologist.

Through its clinical services, the HLC provides what experts from the American Medical Association, Centers for Disease Control and Prevention, and the American Academy of Pediatrics refer to as Stage 3 (Comprehensive Multidisciplinary Intervention) and Stage 4 (Tertiary Care Intervention) care to children and adolescents with obesity. The complete array of integrated services offered through our outpatient clinics includes the following:

- Comprehensive assessment by a physician weight management specialist, behavioral psychologist, dietitian, and exercise physiologist
- Individualized treatment plans that engage the entire family as appropriate
- Nutrition therapy
- Psychological support and counseling for behavior change
- Specialized treatment for eating disorders
- Psychiatric evaluation and treatment
- Exercise assessment and fitness plans with a personal trainer
- Group-based treatments
- Comprehensive evaluation for weight loss surgery in adolescents with severe obesity

The cornerstone of all treatment for pediatric and adolescent obesity is lifestyle intervention. As adjuvant therapy to ongoing lifestyle modification, the HLC has established a specialized weight loss surgery program for adolescents with severe obesity and weight-related comorbidities who meet established criteria including inadequate weight loss despite sustained participation in a multidisciplinary weight management program. This multidisciplinary team of specialists includes pediatric surgeons Dr. David Lanning and Dr. Claudio Oiticica, in addition to medical specialists, health psychologists, registered dietitians, and a nurse coordinator. VCU's bariatric surgery program has been designated by the American College of Surgeons as a Center of Excellence with Adolescent Qualifications; the only center with such qualifications in the State of Virginia. The HLC currently offers two procedures as part of the bariatric surgery program: laparoscopic gastric sleeve resection (as part of clinical care) and laparoscopic gastric plication (LGP; as part of an IRB-approved research study).<sup>4</sup> The Children's Hospital Foundation funding includes support to conduct 30 LGPs on eligible adolescents, which will be the largest adolescent trial of this procedure in the US.

The HLC's weight loss surgery program is only one example of how clinical and research opportunities are integrated within the Center to provide youth and their families with extensive comprehensive treatment options. The HLC currently has 13 active research protocols (including TEENS and TEENS+), spanning the prevention, treatment, and pathophysiology of obesity. These include the NIH-funded NOURISH (Nourishing Our Understanding of Role Modeling to Improve Support and Health) program, led by Dr. Suzanne Mazzeo, investigating a parent-exclusive treatment for overweight 5-11 year old children.<sup>5,6</sup> Via funding from the American Heart Association, Dr. Bean is investigating if a brief, motivational interviewing (MI)<sup>7</sup> adjunct to NOURISH can enhance retention and treatment adherence (two notorious challenges with this underserved population of primarily African American parents from lower income homes). Dr. Wickham has a K23 from the NICHD that

investigates the role of a novel adipocyte-derived hormone adiponectin, in the development of endothelial dysfunction (one of earlier vascular changes that can ultimately lead to clinically significant cardiovascular disease) among youth with obesity. Given an increased focus on policy change as an obesity prevention approach, Drs. Mazzeo and Bean are involved in several school obesity policy investigations, to prevent obesity via environmental strategies. For example, Dr. Mazzeo has led efforts to investigate effects (both intended and iatrogenic) of the revised National School Lunch Program on fruit and vegetable consumption (NIH R03). The depth and breadth of the HLC investigations covers the spectrum of pediatric obesity research, thus informing efforts to better understand and curb this public health crisis.

Importantly, HLC investigators have strong collaborations with community stakeholders. Faculty from the HLC serve on the Steering Committee for the Greater Richmond Coalition for Healthy Children, a cross-sector group of organizations dedicated to obesity prevention in this region. Given the increase in community efforts to address pediatric obesity, HLC investigators have been dedicated to serving as academic partners for obesity prevention programming, including efforts in Richmond City Public Schools and community housing districts, and those implemented by local non-profits. These strong academic/community partnerships are essential in guiding resource allocation and appropriately evaluating the feasibility and effectiveness of community-based obesity programming. Moreover, partnering with community organizations is an effective strategy to extend the HLC's reach outside of the clinic walls.

As HLC co-Directors, Drs. Bean and Wickham, with a growing number of HLC collaborating clinicians and investigators, are committed to the pursuit of innovative clinical and research endeavors to address pediatric obesity. This integrated approach to pediatric obesity is essential to foster effective, empirically supported approaches to addressing this epidemic.

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## OBESITY-FOCUSED RESEARCH AT SPPAC

The Society for Pediatric Psychology annual conference will run from April 16<sup>th</sup> – 18<sup>th</sup> in San Diego, CA. This is a great opportunity to bring researchers in the field of pediatric obesity together and to highlight the diverse and innovative research occurring nationally in this area. Pediatric obesity-focused presentations and posters are compiled below to make it easier for convention-goers to access this research. We look forward to seeing you there!

### THURSDAY, APRIL 16<sup>TH</sup>

#### 1:30 – 3:30 PM: PRE-CONFERENCE WORKSHOP

##### **Maladaptive Eating Patterns in Obese Children, Assessment and Treatment**

*Elizabeth Getzoff Testa, PhD, Kimberly Guion, PhD, Melissa Santos, PhD, Adelle Cadieux, PsyD, Wendy Ward, PhD, Laura Shaffer, PhD, & Shannon Hourigan, PhD*

Participants will earn 2 CEs and will learn how to:

1. Describe at least 5 unique maladaptive eating patterns seen in pediatric populations
2. Explain how maladaptive eating patterns may impact the treatment of pediatric obesity
3. Evaluate for the presence and severity of maladaptive eating patterns in children presenting for treatment of obesity
4. Implement evidence-based interventions for maladaptive eating patterns in children with obesity
5. Describe how assessment and treatment strategies for MEP can be adapted for use across various clinical settings

#### 7:00-8:00 PM: POSTER SESSION #1

#44: "Identifying differences in psychological adjustment among obese, overweight, and healthy weight children in primary care"

#48: "Cultural and linguistic considerations for interdisciplinary family intervention for adolescent obesity: An evidence-based case study"

#51: "Psychosocial correlates of dysregulation in adolescent females with severe obesity"

#54: "Severity of obesity in younger children in pediatric obesity treatment"



**FRIDAY, APRIL 17<sup>TH</sup>****8:00 – 9:00 AM: POSTER SESSION #2**

- #29: "An examination of predominantly African American adolescents' values in a motivational interviewing-based obesity prevention"
- #30: "Psychopathology in youth who are obese does not impact pediatric weight management treatment outcomes"

**6:30 – 7:30 PM: POSTER SESSION #3**

- #48: "Examining the predictive role of parental explanations for adolescent obesity on attrition and treatment outcomes in a multidisciplinary adolescent weight control clinic"
- #53: "Family functioning as a moderator of motivation to engage in a rural intervention program for overweight and obese youth"
- #55: "Executive functioning moderates the relation between sleep problems and childhood overweight/obesity"

**SATURDAY, APRIL 18<sup>TH</sup>****8:00 – 9:00 AM: POSTER SESSION #4**

- #22: "Emotional eating is associated with severe obesity in adolescents"
- #33: "Family-based intervention for adolescents with obesity: Evidence-based case studies"

**11:15 – 12:15 AM: POSTER SESSION #5**

- #11: "The influence of parenting stress on parental feeding styles and pediatric obesity for Latino families"
- #13: "Associations between executive functioning and overeating in youth who are overweight and obese"
- #49: "The impact of anxiety symptoms on child and family factors in pediatric obesity"
- #52: "Parent weight control behaviors predict weight control behaviors in children with obesity"
- #53: "Weight misperception among urban ethnic minority girls: Links with obesity-related health behaviors"
- #55: "Measuring child and parent readiness to change in obese youth"
- #56: "Medical neglect and pediatric obesity: Insights from tertiary care obesity treatment programs"

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### SPOTLIGHT: Integration of Research and Practice at the Healthy Lifestyles Center in Richmond, VA

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