

Unraveling Obesity’s Pediatric Screening Tool: The Missing Piece in Childhood Obesity Prevention

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INTRODUCTION: CHILDHOOD OBESITY, OBESITY MEDICINE ASSOCIATION (OMA) 4 PILLARS, UNRAVELING OBESITY TOOL

Pre-obesity and obesity are chronic, complex, and multifactorial medical conditions that are treatable using a comprehensive approach in children, adolescents, and adults. The prevalence of childhood obesity is rising and affects children and adolescents worldwide. The prevalence of obesity in U.S. youth (through 2020) is 19.7% affecting 14.7 million American children. Among all children and adolescents aged 2–19 years, obesity prevalence increased with age (12.7% for those aged 2–5 years, 20.7% for 6–11, and 22.2% for 12–19), was highest among Hispanic (26.2%) and non-Hispanic black (24.8%) children and adolescents, followed by non-Hispanic white (16.6%) and non-Hispanic Asian (9.0%) children and adolescents. (1) The prevalence of severe obesity in US children is 6.1%. (2)

Childhood obesity is often not addressed with professional guidance or current educational resources. For this reason, Unraveling Obesity’s team created the pediatric version of their adult obesity screening tool that was previously launched during Obesity Week 2021. The new version of the tool was recently launched during National Childhood Obesity Awareness Month 2022. It is based on the Obesity Medicine Association’s (OMA’s) 4 pillars of clinical obesity treatment (3) and the *OMA Pediatric Obesity Algorithm®: A Clinical Tool for Treating Childhood Obesity* (4) designed specifically for assessing and treating children with the disease of obesity. Unraveling Obesity’s online comprehensive pediatric screening tool can be completed by parents (of children 5–12 years old) or adolescents (for those 13–19 years old) in the waiting room prior to their doctor’s visit. The tool allows patients to receive their overall obesity risk score as well as the score for each of the individual 4 pillars (nutrition, physical activity, behavior, and medication management). The patients receive their results immediately and at the

same time as their provider who reviews this data before the clinical visit. This promotes provider-patient collaboration.

CHILDHOOD OBESITY, CONSEQUENCES, FAMILY HISTORY, BETA TESTING

Childhood obesity places children and teenagers at risk for chronic health conditions and life-threatening diseases both now and in the future. Medical conditions associated with obesity include (but are not limited to) metabolic syndrome, sleep disturbances (obstructive sleep apnea most common), prediabetes, type 2 diabetes, dyslipidemia, hypertension, degenerative joint disease, exercise intolerance, polycystic ovary disease (female), hypogonadism (male), gallbladder disease, cancers, anxiety, depression, poor quality of life, and poor self-esteem. (5)

Children of parents dealing with obesity will most likely struggle with this medical condition themselves. (6,7) “Our inherited DNA determines many aspects of weight control. Having a single overweight parent doubles the risk of developing obesity. If both parents have obesity, their children have at least a 90% chance of having obesity”. (8) In the beta testing phase, parents and their children completed the UO Questionnaire (adult and pediatric versions respectively). Results indicated that the children’s family history placed them at risk for obesity and that overweight/obesity was seen in both parents and children.

CHILDHOOD OBESITY, SCREEN TIME IN GEN Z & GEN ALPHA, COVID, BETA TESTING

There is an association between childhood obesity and screen time. Today, we are living in a world of technology, which is used in schools as well as at home. All children Generation Z / Gen Z (born 1995–2009) and Generation Alpha / Gen Alpha (from 2010–2024) are using electronics. “The term “screen time” is relatively new terminology, referring to time spent on televisions, computer monitors, and mobile devices. From kindergarten to college, students have weaved their lives around these gadgets in the 21st century. In addition to educational activities, children conduct their social activities online. Almost 75% of the teens have their own smartphones and 25% admit to being “constantly connected” to the internet/social media. Other alarming screen time statistics are: Children between the ages of 8–18 spend approximately 7.5 hours/day on entertainment media, 4.5 hours/day watching TV, and 1.5 hours/day on computer.” (9) During the COVID-19 pandemic, there was a digital surge due to social distancing norms and worldwide lockdowns. At one point, all students had no choice but to be in virtual learning

programs for their education. Unfortunately, after the unprecedented times of 2020, many children and adolescents continued to have screen time for many hours per day. Increased screen time may negatively affect children's weight and metabolic health, which we have seen with the beta testing pool. (9)

BMI PERCENTILE, BETA TESTING, UNRAVELING OBESITY TOOL

Childhood obesity is more than the Body Mass Index (BMI) / BMI percentile and management is not as simple as “eat less and move more”. Unraveling Obesity's comprehensive tool will help providers understand the complexity of obesity. From the beta testing results, some children who had the same risk for obesity were not told so by their clinician simply because the focus was only on the BMI percentile rather than the whole clinical picture. For this reason, many children and adolescents who had a healthy BMI percentile, in reality, had a moderate risk for obesity. Also, some whose clinicians told them they had obesity based on solely their BMI percentile were actually only at moderate risk. “Physicians are currently unprepared to treat patients with obesity, which is of great concern given the obesity epidemic in the United States. Currently, U.S. medical schools are not adequately preparing their students to manage patients with obesity. Despite the obesity epidemic and high-cost burden, medical schools are not prioritizing obesity in their curricula.” (10) Unraveling Obesity's screening tool, whether for children, adolescents, or adults, is valuable to clinicians because it provides deeper insight into risks, reasons for, and why their patients may be suffering from the disease of obesity. It also guides a provider's treatment options for high-impact foundational care and/or timely referral to an Obesity Medicine specialist. It only takes 5–10 minutes to complete; is tested and vetted by health care professionals, obesity medicine experts, and patient advocates; and, is secure, since all responses are HIPAA compliant. (11)

THE VICIOUS CYCLE, AMERICAN ACADEMY OF PEDIATRICS (AAP) PEDIATRIC OBESITY GUIDELINES

Since childhood obesity is a serious matter and can be like an endless loop, why not try to break free? The American Academy of Pediatrics (AAP) pediatric obesity guidelines emphasize that the cornerstone of obesity prevention is risk assessment and anticipatory guidance. (12) For

children who are over the 85th percentile for weight and height (overweight and obesity), the cornerstone of treatment is intensive lifestyle intervention using the broad categories of optimizing nutrition, activity, and behavioral support. In breaking down these categories further, the guidance includes assessment and management of weight-promoting medications, metabolic testing abnormalities, obesity-related complications, chronic stress, genetic contributions, limiting screen time and assessing the quality of screen activities, sleep abnormalities, and co-occurring conditions of attention-deficit hyperactivity disorder, anxiety, and disordered eating. Education that obesity is a disease is of primary importance as internalization for “failure to lose weight” is common and contributes to poor mental health. (13) Finally, the disease of obesity is associated with chronic stress, often exacerbated by weight-based victimization and bullying. (14) Ongoing assessment and support are crucial for psychosocial and physiological support. The use of trauma-informed care principles can be extremely helpful. (15)

Managing childhood obesity is not easy. Parents can be role models for their children by making healthy eating and physical activity a priority and supporting obesity management strategies. Parents can inspire, motivate, and empower their children and help them understand the importance of maintaining a healthy lifestyle, which is the journey of a lifetime.

UNRAVELING OBESITY TOOL AS MISSING PIECE AND ICE-BREAKER

Unraveling Obesity’s pediatric screening tool is the missing piece in the prevention and management of childhood obesity because providers, parents, and children/adolescents can collaborate as they discuss goals together to improve metabolic health. This innovative tool is an ice-breaker because it opens communication about weight issues and is essentially a valuable resource to use in clinical practice as it highlights the complexity of obesity and provides guidance to the clinician in the management of childhood obesity.

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