EXAMPLE Community Health Worker (CHW) Best Practice Guidelines for Pediatric Obesity

Body Mass Index (BMI) is a measure used to determine overweight and obesity. A child's BMI is expressed as a percentile relative to other children their age and sex (BMI percentile). Standardized Centers for Disease Control and Prevention (CDC) growth charts are used to calculate children's BMI percentile.

31.8% of US children are overweight or obese,[1] and a November, 2017 study[2] projects 57% of US kids will be obese by age 35. Although the overall rate of child and adolescent obesity has stabilized over the last decade after increasing steadily for 3 decades, obesity rates continue to increase in certain populations, such as African American girls and Hispanic boys.[4, 5] The proportion of children who meet the criteria for severe obesity also continues to increase.[6]

Obesity in children and adolescents is associated with morbidity such as mental health and psychological issues, asthma, obstructive sleep apnea, orthopedic problems, and adverse cardiovascular and metabolic outcomes (e.g. high blood pressure, abnormal lipid levels, and insulin resistance). Children and adolescents also may experience teasing and bullying behaviors based on their weight. Obesity in childhood and adolescence may continue into adulthood and lead to adverse cardiovascular outcomes or other obesity-related morbidity, such as type 2 diabetes.[3]

The US Preventive Services Task Force (USPSTF) recommends that clinicians screen children aged 6 years and older for obesity, and offer them or refer them to comprehensive, intensive behavioral interventions to promote improvement in weight status.[7] Community-based services have demonstrated effectiveness in delivering intensive behavioral interventions, and may be a good fit for many families.[8] These services are required to be covered by insurance, without co-pays or deductibles to the members.

Educational Messages

Pediatric obesity curriculums provide face-to-face group education that help participants reach and maintain a healthy weight. This goal is achieved by helping participants in four areas: nutrition education, physical activity, behavior modification, and family/parent involvement.

Behaviors that influence excess weight gain include eating high-calorie, low-nutrient foods and beverages, not getting enough physical activity, sedentary activities such as watching television or other screen devices, medication use, and sleep routines.[9]

Several factors contribute to childhood obesity—inadequate knowledge about fitness and nutrition, limited access to affordable fresh produce, exposure to fast food and sugary beverages, excessive exposure to television and video games, and decreased physical activity in the home. The Smart Moves and MEND program models employ evidence-based strategies to address these factors.

Content

- Nutrition – activities help participants target specific, evidence based nutritional goals (e.g. limiting sugar-sweetened beverage intake, eating breakfast daily, consuming a recommended amount of vegetables and fruits, teaching about hunger and fullness, and others).
- Physical Activity – services engage participants in regular moderate-vigorous physical activity and popular games to help them target evidence-based standards for healthy physical activity at home.
- Behavior Modification – services employ specific behavior management strategies including motivational interviewing, goal setting, recognizing triggers, self-monitoring, role modeling, and others.
- Family Involvement- programming highlights the importance of family involvement. Parents learn about good food choices for the entire family, how to be better role models, and better communicators.[11]
- ADDITIONAL content and messaging is included in the full Smart Moves and MEND curriculums.

Quality Assurance and Goals

- Conduct satisfaction surveys
- Evaluate outcomes
- Pediatric obesity services goals include lowered BMI percentile, improvements in participant's nutrition and physical activity, self-decision making and self-care

Resources

MEND http://www.mendfoundation.org/home
Bright Bodies/Smart Moves http://www.brightbodies.org/
My Plate: https://www.choosemyplate.gov
CDC Childhood Obesity: https://www.cdc.gov/obesity/childhood/index.html
National Association for the Education of Young Children: http://www.naeyc.org/childhood_obesity_resources

References

1. National NHANES data, for children 2-19 years old, Ogden et. al. 2014

2. Zachary J. Ward, M.P.H., Michael W. Long, Sc.D., Stephen C. Resch, Ph.D., Catherine M. Giles, M.P.H., Angie L. Cradock, Sc.D., and Steven L. Gortmaker, Ph.D. Simulation of Growth Trajectories of Childhood Obesity into Adulthood, November 30, 2017. New England Journal of Medicine; 2017; 377:2145-2153

3. O'Connor EA, Evans CV, Burda BU, Walsh ES, Eder M, Lozano P. Screening for Obesity and Intervention for Weight Management in Children and Adolescents: A Systematic Evidence Review for the U.S. Preventive Services Task Force. Evidence Synthesis No. 150. AHRQ Publication No. 15-05219-EF-1. Rockville, MD: Agency for Healthcare Research and Quality; 2017.

4. O'Connor EA, Evans CV, Burda BU, Walsh ES, Eder M, Lozano P. Screening and treatment for obesity in children and adolescents: systematic evidence review and evidence report for the U.S. Preventive Services Task Force recommendation statement. *JAMA*. 2017;317(23):2427-44.

5. Dietz WH, Economos CD. Progress in the control of childhood obesity. *Pediatrics*. 2015;135(3):e559-61.

6. Skinner AC, Skelton JA. Prevalence and trends in obesity and severe obesity among children in the United States, 1999-2012. *JAMA Pediatr*. 2014;168(6):561-6.

7. US Preventive Services Task Force recommendation for intensive behavioral intervention https://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/obesity-in-children-and-adolescents-screening

8. MN Partnership for Pediatric Obesity Care and Coverage (MPPOCC) "Best Practices in Clinic/Community Collaborative Pediatric Obesity Services," (January, 2017): http://www.mnaap.org/obesitymppocc.html

9. Centers for Disease Control "Childhood Obesity Causes & Consequences," https://www.cdc.gov/obesity/childhood/causes.html

11. "Smart Moves" A Childhood Obesity Treatment Curriculum Model http://smartmovesforkids.com/about.html

Supported by the Statewide Health Improvement Partnership, Minnesota Department of Health. In partnership with the MN Partnership for Pediatric Obesity Care and Coverage (MPPOCC), convened by the MN Chapter of the American Academy of Pediatrics, and the MN Council of Health Plans.