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Weight stigma in children and adolescents:

Recommendations for practice and policy

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Abstract: Weight stigma is the devaluation of a person because of excess body weight. Individuals who experience stigmatization are at increased risk for adverse physical and psychological health outcomes. This article provides an overview of weight stigma and the implications for nursing practice and policy.

Keywords: obesity, pediatric health, weight stigma

Obesity in children and adolescents is the most prevalent chronic condition in the US. Over 19% of children ages 2-19 years have obesity, which is defined as a body mass index (BMI) greater than or equal to the 95th percentile on the CDC growth chart.[1] Obesity is a complex physiologic condition influenced by genetics, hormones, sleep, environment, cultural norms, and economics.[2] The oversimplistic assumption that obesity is a choice and can be "fixed" by moving more and eating less is outdated and inaccurate in the current science of obesity.[3] Over the last 20 years, researchers have begun to shed light on the multifaceted complexity of obesity. Physiologically, adolescents with obesity have an increased risk of developing adverse health outcomes such

Key terms in weight stigma[7]

Weight-based stereotypes: Generalizations that persons with overweight or obesity are lazy, gluttonous, and incompetent; lack will power and self-discipline; are unmotivated to improve their health and noncompliant with medical treatment; and are solely to blame for their weight.

Explicit weight bias: Overt, consciously held negative attitudes that can be measured by self-report.

Weight stigma: The social devaluation and denigration of a person because of their excess body weight. Can lead to negative attitudes, stereotypes, prejudice, and discrimination.

Weight discrimination: Overt forms of weight-based prejudice and unfair treatment toward persons with obesity, such as being denied employment.

Implicit weight bias: Automatic, negative attributions and stereotypes existing outside of the conscious awareness of an individual.

as type 2 diabetes, hypertension, elevated serum cholesterol and triglyceride levels, respiratory disorders such as asthma, and joint problems.[4] Psychologically, they have been shown to have increased rates of anxiety, depression, low self-esteem, body image dissatisfaction, and decreased quality of life.[5,6] Additionally, youth with obesity are at increased risk of experiencing weight bias and stigma, which often exacerbate and perpetuate the cycle of adverse physiologic and psychological consequences.[7] By understanding the pervasiveness of weight stigma and its negative consequences, nurses must lead the prevention and cessation of weight stigma. This article discusses weight stigma and its implications for clinical practice and healthcare policy.

Key terms and definitions

Weight stigma is the social devaluation and denigration of a person because of excess body weight.[7] Weight stigma can lead to negative attitudes, stereotypes, prejudice, discrimination, and includes explicit and implicit weight bias (see *Key terms in weight stigma*). Weight stigma perpetuates the view that obesity is the fault of the individual due to poor diet and exercise patterns.[7] These inaccurate assumptions are prevalent in the United States and held by individuals, healthcare providers, educators, parents, media, and policymakers.[8,9] Weight stigma and its manifestations have been used to shame and "motivate" people with obesity to "comply" with recommendations.[10]

Weight stigmatization is prevalent in children and adolescents regardless of their socioeconomic and demographic characteristics. Adolescents, regardless of gender, are more likely to be bullied for their weight or physical appearance than for their race, ethnicity, disability status, or sexual orientation.[11] Recent estimates report nearly 25%-50% of youth have been bullied for their weight, and 13%-32% report they have been discriminated against based on their weight.[5,11-13]

Weight stigma contributes to the current obesity epidemic because individuals who experience stigmatization such as weight-based teasing, bullying, and victimization have increased risks for adverse health outcomes. Individuals may internalize stigmatization, decreasing their overall quality of life.[14,15] Public health policy aimed at reducing and preventing weight stigma may aid in improving global obesity rates.

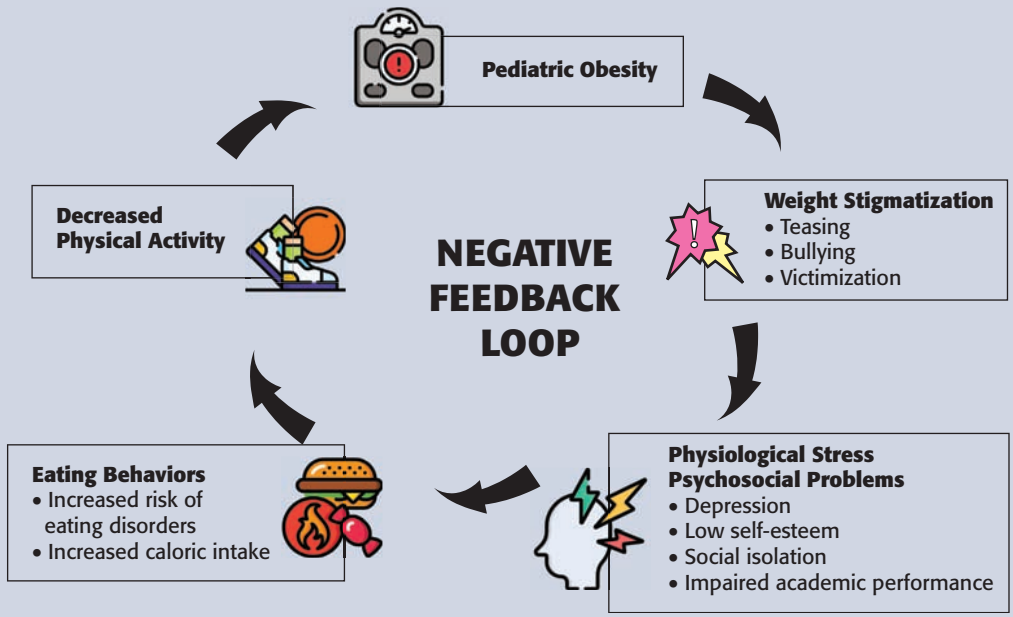
Noting the high prevalence of obesity in children and adolescents, recognizing and reducing internalized weight stigma must be prioritized in healthcare.

Manifestations of stigma

Weight stigma is manifested in various ways. The most common expressions of weight stigma in children and adolescents are weight-based teasing, bullying, and victimization. Weight-based teasing involves name-calling, derogatory remarks, or being made the object of ridicule.[16] Weight-based bullying can also involve physical actions of hitting, kicking, pushing, or shoving.[16] Children and adolescents with overweight and obesity are more likely to be bullied than their peers with healthy weight, and these experiences can begin at very young ages.[16] Weight-based victimization includes social exclusion, being ignored, avoided, or made the target of rumors.[17] It may be clear to see how these explicit forms of weight bias and stigma are harmful; however, implicit bias may be just as harmful. Implicit bias among parents, educators, and healthcare providers has been shown to impact the perceptions of children and adolescents concerning their physical, social, and academic abilities.[18-21] Over time, such implicit bias may contribute to adverse health outcomes in this population.[18-21]

Youth who experience weight stigma may internalize these experiences. This could result in weight bias internalization wherein one directs stigma and negative stereotypes at oneself due to weight-biased beliefs and attitudes.[14] Studies have shown that children with overweight and obesity who have experienced teasing by peers or who have lower self-esteem have higher weight bias internalization.[22]

Negative feedback loop in pediatric obesity



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Physical consequences of weight stigma

Physiologic stress, weight gain

The mechanism resulting from experiences of weight stigma is a negative emotional stressor that initiates a cascade of behavioral, emotional, and physiologic responses.[23] Though evidence is limited in how experiences of weight stigma impact the body's response to stress in children and adolescents, adult population research has demonstrated physiologic consequences of weight stigma including higher circulating levels of inflammatory markers (C-reactive protein) and cortisol.[23-26] Cortisol is a stress hormone, which when elevated, drives hunger urges, stress-induced eating, and causes weight gain.[23] Pearl et al.[14] reported weight bias internalization as a risk factor for metabolic syndrome, which can lead to comorbidities such as diabetes, heart disease, and stroke.

Decreased physical activity

Perceived weight discrimination has been associated with higher odds of being inactive in adults.[27] In persons seeking treatment for weight management, those with higher levels of weight stigma were more likely to avoid exercise and be less physically active.[28] Less is known about the impact of weight stigma on physical activity in children and adolescents. However, researchers have reported decreased physical activity, physical fitness, and exercise efficacy in children and adolescents experiencing weight stigma.[29,30]

Psychological consequences of weight stigma

Unhealthy eating patterns

Weight-based teasing, regardless of the source, has been associated with unhealthy weight management behaviors. Youth who internalize weight stigma are more susceptible to disordered eating behaviors such as binge eating, eating in secret, eating to cope with stress, and restricted eating.[13,31,32] These disordered eating behaviors may be overlooked due to the assumption that children and adolescents with obesity cannot experience consequences of restricted eating patterns or binging and purging. Furthermore, individuals who experience weight stigma have demonstrated increased use of emotional eating and higher caloric consumption overall.[33]

Psychosocial problems

Weight stigma has several short- and long-term effects on children and adolescents. Children and adolescents who experience weight stigma have been shown to have increased anxiety and depression, decreased self-esteem, increased rates of suicidal thoughts, and reports of loneliness.[34] Other research has described how blame, weight bias internalization, and strained family relationships add to these adverse psychological consequences experienced by children and adolescents with obesity and their caregivers.[14,35,36]

Reduced quality of life and academic performance

Health-related quality of life and academic performance have been reported to be negatively impacted by experiences of weight stigma in children and adolescents with obesity. Researchers have reported children experiencing weight-based teasing have decreased health-related quality of life.[37] Poorer academic performance among youth with obesity as compared with peers with healthy weight has been reported in the literature, though this is likely due to a stigmatizing environment and not caused by excess weight.[38-40]

Additional weight gain

The complex physiologic and psychological mechanisms which occur with experiences of weight stigma can produce a negative feedback loop, which ultimately can lead to additional weight gain (see *Negative feedback loop in pediatric obesity*). Stress hormones produced by stigmatizing experiences can drive hunger and cause the body to store fat.[22,41] This stress response can also lead to increased anxiety, depression, social isolation, and trigger unhealthy coping such as disordered eating behaviors and lack of engagement in physical activity.

Sources of stigma

Peers

The most prevalent source of weight stigma in children and adolescents is from peers.[34] Studies have shown children as young as age 4 holding negative biases and judgments toward peers with higher weight.[34] These negative biases continue through middle childhood into adolescence and can be influenced by stigmatizing media content.[42,43] Researchers examining relationships among children and adolescents with overweight and obesity and their peers have demonstrated youth with overweight and obesity are more likely to be bullied than their healthy-weight peers.[16] In addition, these youth experience higher levels of weight-based teasing, verbal threats, physical harassment, negative rumors, ignoring, avoiding, and social exclusion.[16,44] Children and adolescents are perceived as less popular, attractive, and athletic; more sensitive, and less likely to be identified as friends as their weight increases.[44]

Family

Weight bias among family members of children and adolescents with obesity is common and can be both implicit and explicit. Researchers report implicit and explicit biases held by parents, though parents with obesity have less bias than parents of healthy weight.[19] Implicit and explicit weight bias by mothers toward their adolescents significantly predicts higher weight bias internalization in these adolescents.[45] Siblings, parents, and extended family members have been reported to tease, bully, and place blame on children and adolescents for their weight.[35,46,47] In addition, conflict and blame between biological parents about their child's weight and how to approach weight management adds to family discord and stress and increases feelings of distress and helplessness for the child experiencing stigmatization.[35,46-48]

Teachers

Weight bias among teachers has been documented in the literature as prevalent in school settings and includes both implicit and explicit biases.[34,44] Research indicates that some physical education teachers harbor assumptions that children and adolescents with high weight have less general endurance compared with their peers.[41,49] Educators have reported to believe obesity is associated with impaired school performance, but as noted this is likely secondary to the stigmatizing school environment rather than the child's abilities.[41,49,50]

Society and media

Though our society has worked to address many forms of stigma and discrimination (such as race, disability, and gender), a person's body weight is one area where bias and stigma continue to be acceptable in society at large. In popular media, children with larger bodies are often depicted as aggressive, unpopular, and unhealthy.[51] They are often the target of ridicule and insults specifically about body size.[51] Researchers found over 50% of the content of movies and TV for children and adolescents had weight stigmatizing subject matter as compared with shows targeting general audiences.[51,52] Additionally, significant associations between greater media exposure among children and adolescents have been shown to influence increased expressions of weight stigma toward peers with overweight and obesity.[22]

Social media has been found to have a more significant impact on the promotion of weight stigma than other forms of media. Cyberbullying has been documented to occur on social media due to increased anonymity and lack of real consequences.[53] Body comparison among peers and exposure to unrealistic images on social media with its popular filter features have been reported to promote body dissatisfaction, eating disorders, and self-harm.[53] People with obesity may also be portrayed in stigmatizing ways such as being unintelligent or undisciplined.[53] Social media increases negative messaging about weight, which promotes individual blame that leads to negative self-perception and internalized weight bias.[53]

Healthcare providers

Healthcare providers in a variety of disciplines, including those providing obesity care, have been found

Best practices for avoiding weight stigmatization[11,22]

Avoid oversimplifying obesity and consider all potential causes.	Address weight bias in healthcare settings to improve patient experience.	Treat the child, adolescent, or parent with dignity, respect, and empathy.
• Recognize that obesity is a multifactorial disease which often requires lifelong management. • Challenge stereotypes about obesity as a lifestyle choice. • Incorporate evidence-based obesity and weight bias content in healthcare curriculum.	• Consider and confront implicit and explicit biases toward individuals with obesity. • Support evidence-based care (such as medications and metabolic surgery). • During visits, maintain focus on the patient's primary issue (which may or may not be weight-related). • Advocate for and educate colleagues on reducing weight stigma in practice settings.	• Consider the multifactorial nature of weight management, and explore alternative factors that contribute to higher BMI. • Commit to treating patients with dignity and respect, regardless of their BMI. • Ask permission to discuss weight during healthcare interactions. • Adopt people-first language; say child or adolescent with higher BMI rather than "obese" child or adolescent.

to hold implicit and explicit weight biases toward adults and youth with obesity.[54] These biases can increase patient stress and mistrust of healthcare providers, negatively influence patient engagement, motivation, adherence, prevent timely access to care, and reduce the quality of care provided.[55-57] Youth with obesity and their parents have reported interactions with healthcare providers which have ranged from overt blame to name-calling of the child.[35,36] In addition, parents have reported feeling blamed or stigmatized by healthcare providers for their perceived role in their child's weight.[35] This further diminishes the building of a trusting relationship with the healthcare provider.

Implicit and explicit weight bias among healthcare providers and medical students has been documented. One study found that medical students exhibited greater explicit bias against people with obesity than against racial minorities, gays and lesbians, and people who are poor.[21] In addition, nursing students have been reported to have negative attitudes toward patients with obesity.[18] To reduce weight bias among healthcare providers, content surrounding the complex etiology and physiology of obesity should be integrated into the curriculum.[21] Concurrently, faculty need education about the prevalence of weight stigma and how to negate stereotypes when instructing future healthcare providers.[55,58] Researchers have shown that when an obesity curriculum was implemented for pediatric residents, there were significant improvements in their weight bias scores.[58] Similarly, nursing students' attitude and support of patients with obesity improved after they participated in simulations designed to assist them in understanding the daily experience of living with obesity.[18]

Public health initiatives

Public health campaigns have neglected to consider stigma as a barrier in the effort to prevent and treat obesity or have perpetuated weight stigma through their use of images that perpetuate negative obesity stereotypes.[59] Some public health campaigns have suggested that openly shaming people with obesity will motivate them to change their diet and exercise habits, thus perpetuating stigma.[7,10] These strategies have the opposite effect, resulting in exercise avoidance, unhealthy diets, and increased sedentary behaviors that lead to worse physical and mental health, increased weight gain, and decreased quality of life.[6] It is critical that public health efforts to promote healthy weight and weight management behaviors are nonstigmatizing.

Recommendations for practice

Nursing is the largest healthcare profession in the US and has been ranked the most trusted profession for 20 years in a row.[60] This positions nurses to advocate for children and adolescents with obesity, lead in reducing the stigma, and improve holistic health for this vulnerable population (see *Best practices for avoiding weight stigmatization*). Nurses in pediatric healthcare settings can begin by advocating for and providing weight-neutral approaches to care. For example, consider whether a visit requires the patient to get weighed. Though pediatric medication dosing is weight-based for patients less than 40 kg, consider reviewing the patient's medical record for the reason for the visit and the timing of previous visits pri-

or to weighing the patient.[62] Placing scales in a private space or room if available and paying attention to patient and parent cues can reduce stress, stigma, and the anxiety of being weighed. Providing furniture in waiting rooms and other spaces, and equipment such as BP cuffs that are adequately sized for persons with obesity can promote a weight-inclusive environment.

Nurses can also educate others by modeling weight-inclusive words and behaviors and respectfully bringing attention to overt stigmatizing words and actions. Examples include listening to the patient and caregiver and not making the child's weight the focus of any visit unless given permission to discuss or if their weight is directly related to the reason for the visit. Consideration for the language used when discussing weight is an important area of advocacy. Using people-first language is critical to decreasing bias and stigma. Referring to people as obese can influence how they feel about their weight as well as how and when they seek healthcare.[63] People-first language places the person first, not the condition (such as "child with obesity" rather than "obese child") and helps to reduce weight stigma experienced while accessing healthcare.[63] In a survey of adolescents with obesity (50% girls, 50% boys) and asking their preferences for words that healthcare providers use to refer to their weight, adolescents preferred words like "weight," "weight problem," "BMI," and "plus size" as opposed to providers using the words "fat," "large," "curvy," "obese," and "extremely obese."[64] Healthcare providers should use non-stigmatizing communication, assess for teasing and bullying, and educate families about weight stigma in the home and school settings.[34] These behaviors will improve healthcare encounters for children and adolescents with obesity and positively impact the culture of healthcare.

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Recommendations for policy

Nurses should be leaders in advocating for changes in health policy in their institutions, communities, and society at large. This advocacy work begins with an awareness of one's own implicit bias regarding children and adolescents with obesity. Implicit bias is often a result of a lack of understanding of the complex physiology of obesity. Increased adipose tissue, weight loss, and food restriction all activate the body's compensatory mechanisms and make weight loss and maintenance extremely difficult to sustain with only lifestyle modifications (such as diet and exercise). Nurses should educate themselves and advocate for continuing education across disciplines on the physiology of obesity. This knowledge will hopefully translate into reduced implicit bias and increased empathy for youth with obesity.

Educating oneself, colleagues, patients, and their families on the consequences of weight stigma on patients' physical and mental health, quality of life, and their motivation to engage in healthy behaviors is another area for advocacy. Much like addressing the stigma associated with mental health and substance use disorders, it is important to correct inaccurate assumptions, communication, and behaviors. Nurses, regardless of practice area, can advocate for improved care for children and adolescents with obesity and their families. Unlike treatment tied to substance use disorders, one cannot simply stop eating because food is necessary for sustaining life, is a source of pleasure, and is central to most cultures and family traditions.

Nurses can also partner with schools and communities as they address bullying among youth by sharing that weight is the number one reason that children are bullied. By highlighting this, nurses can bring attention to the implicit and explicit bias educators and other community members may have about children and adolescents with obesity. Empowering youth to participate in both education and advocacy to reduce bullying and weight stigma is an example of how nurses can engage in their communities and society at large by seeking out and partnering with existing organizations.[65]

Conclusion

Understanding the prevalence and negative impact of weight stigma in society and healthcare systems is crucial to providing bias-free and high-quality care to children and youth with obesity and their families. Nurses can begin by considering their own implicit biases related to weight and identify explicit weight bias in their practice setting. Nurses are in a strategic position to advocate, educate, and begin to reframe the context of healthcare for children and youth with obesity. ■

REFERENCES

1. Fryar CD, Carroll MD, Afful JA. Prevalence of overweight, obesity, and severe obesity among children and adolescents aged 2–19 years: United States, 1963–1965 through 2017–2018. 2020. www.cdc.gov/nchs/data/hestat/obesity-child-17-18/overweight-obesity-child-H.pdf.

2. Hruby A, Hu FB. The epidemiology of obesity: a big picture. *Pharmacoeconomics*. 2015;33(7):673-689. doi:10.1007/s40273-014-0243-x.

3. Ludwig DS, Aronne LJ, Astrup A, et al. The carbohydrate-insulin model: a physiological perspective on the obesity pandemic. *Am J Clin Nutr*. 2021;114(6):1873-1885. doi:10.1093/ajcn/nqab270.

4. Skinner AC, Perrin EM, Moss LA, Skelton JA. Cardiometabolic risks and severity of obesity in children and young adults. *N Engl J Med*. 2015;373(14):1307-1317. doi:10.1056/NEJMoa1502821.

5. Juvonen J, Lessard LM, Schacter HL, Suchilt L. Emotional implications of weight stigma across middle school: the role of weight-based peer discrimination. *J Clin Child Adolesc Psychol*. 2017;46(1):150-158. doi:10.1080/15374416.2016.1188703.

6. Puhl R, Suh Y. Health consequences of weight stigma: implications for obesity prevention and treatment. *Curr Obes Rep*. 2015;4(2):182-190. doi:10.1007/s13679-015-0153-z.

7. Rubino F, Puhl RM, Cummings DE, et al. Joint international consensus statement for ending stigma of obesity. *Nat Med*. 2020;26(4):485-497. doi:10.1038/s41591-020-0803-x.

8. Lawrence BJ, Kerr D, Pollard CM, et al. Weight bias among health care professionals: a systematic review and meta-analysis. *Obesity (Silver Spring)*. 2021;29(11):1802-1812. doi:10.1002/oby.23266.

9. Palad CJ, Yarlagadda S, Stanford FC. Weight stigma and its impact on paediatric care. *Curr Opin Endocrinol Diabetes Obes*. 2019;26(1):19-24. doi:10.1097/med.0000000000000453.

10. Callahan D. Children, stigma, and obesity. *JAMA Pediatr*. 2013;167(9):791-792. doi:10.1001/jamapediatrics.2013.2814.

11. Bucchianeri MM, Gower AL, McMorris BJ, Eisenberg ME. Youth experiences with multiple types of prejudice-based harassment. *J Adolesc*. 2016;51:68-75. doi:10.1016/j.adolescence.2016.05.012.

12. Haqq AM, Kebbe M, Tan Q, Manco M, Ramos Salas X. Complexity and stigma of pediatric obesity. *Child Obes*. 2021;17(4):229-240. doi:10.1089/chi.2021.0003.

13. Puhl RM, Wall MM, Chen C, Bryn Austin S, Eisenberg ME, Neumark-Sztainer D. Experiences of weight teasing in adolescence and weight-related outcomes in adulthood: a 15-year longitudinal study. *Prev Med*. 2017;100:173-179. doi:10.1016/j.ypmed.2017.04.023.

14. Pearl RL, Puhl RM. Weight bias internalization and health: a systematic review. *Obes Rev*. 2018;19(8):1141-1163. doi:10.1111/obr.12701.

15. Pearl RL, Puhl RM, Himmelstein MS, Pinto AM, Foster GD. Weight stigma and weight-related health: associations of self-report measures among adults in weight management. *Ann Behav Med*. 2020;54(11):904-914. doi:10.1093/abm/kaaa026.

16. Puhl RM, Himmelstein MS, Pearl RL. Weight stigma as a psychosocial contributor to obesity. *Am Psychol*. 2020;75(2):274-289. doi:10.1037/amp0000538.

17. Pont SJ, Puhl R, Cook SR, Slusser W. Stigma experienced by children and adolescents with obesity. *Pediatrics*. 2017;140(6):1-11.

18. Hunter J, Rawlings-Anderson K, Lindsay T, Bowden T, Aitken LM. Exploring student nurses' attitudes towards those who are obese and whether these attitudes change following a simulated activity. *Nurse Educ Today*. 2018;65:225-231. doi:10.1016/j.nedt.2018.03.013.

19. Lydecker JA, O'Brien E, Grilo CM. Parents have both implicit and explicit biases against children with obesity. *J Behav Med*. 2018;41(6):784-791. doi:10.1007/s10865-018-9929-4.

20. Lynagh M, Cliff K, Morgan PJ. Attitudes and beliefs of nonspecialist and specialist trainee health and physical education teachers toward obese children: evidence for "anti-fat" bias. *J Sch Health*. 2015;85(9):595-603. doi:10.1111/josh.12287.

21. Phelan SM, Dovidio JF, Puhl RM, et al. Implicit and explicit weight bias in a national sample of 4,732 medical students: the medical student CHANGES study. *Obesity (Silver Spring)*. 2014;22(4):1201-1208. doi:10.1002/oby.20687.

22. Fields LC, Brown C, Skelton JA, Cain KS, Cohen GM. Internalized weight bias, teasing, and self-esteem in children with overweight or obesity. *Child Obes*. 2021;17(1):43-50. doi:10.1089/chi.2020.0150.

23. Tomiyama AJ, Epel ES, McClatchey TM, et al. Associations of weight stigma with cortisol and oxidative stress independent of adiposity. *Health Psychol*. 2014;33(8):862-867. doi:10.1037/hea0000107.

24. Sutin AR, Stephan Y, Luchetti M, Terracciano A. Perceived weight discrimination and C-reactive protein. *Obesity (Silver Spring)*. 2014;22(9):1959-1961. doi:10.1002/oby.20789.

25. Himmelstein MS, Incollingo Belsky AC, Tomiyama AJ. The weight of stigma: cortisol reactivity to manipulated weight stigma. *Obesity (Silver Spring)*. 2015;23(2):368-374. doi:10.1002/oby.20959.

26. Schvey NA, Puhl RM, Brownell KD. The stress of stigma: exploring the effect of weight stigma on cortisol reactivity. *Psychosom Med*. 2014;76(2):156-162. doi:10.1097/psy.0000000000000031.

27. Pearl RL, Wadden TA, Jakicic JM. Is weight stigma associated with physical activity? A systematic review. *Obesity (Silver Spring)*. 2021;29(12):1994-2012. doi:10.1002/oby.23274.

28. Han S, Agostini G, Brewis AA, Wutich A. Avoiding exercise mediates the effects of internalized and experienced weight stigma on physical activity in the years following bariatric surgery. *BMC Obes*. 2018;5:18. doi:10.1186/s40608-018-0195-3.

29. Greenleaf C, Petrie TA, Martin SB. Relationship of weight-based teasing and adolescents' psychological well-being and physical health. *J Sch Health*. 2014;84(1):49-55. doi:10.1111/josh.12118.

30. Ievers-Landis CE, Dykstra C, Uli N, O'Riordan MA. Weight-related teasing of adolescents who are primarily obese: roles of sociocultural attitudes towards appearance and physical activity self-efficacy. *Int J Environ Res Public Health*. 2019;16(9):1540. doi:10.3390/ijerph16091540.

31. Himmelstein MS, Puhl RM, Watson RJ. Weight-based victimization, eating behaviors, and weight-related health in sexual and gender minority adolescents. *Appetite*. 2019;141:104321. doi:10.1016/j.appet.2019.104321.

32. Vartanian LR, Porter AM. Weight stigma and eating behavior: a review of the literature. *Appetite*. 2016;102:3-14. doi:10.1016/j.appet.2016.01.034.

33. Araiza AM, Wellman JD. Weight stigma predicts inhibitory control and food selection in response to the salience of weight discrimination. *Appetite*. 2017;114:382-390. doi:10.1016/j.appet.2017.04.009.

34. Puhl RM, Lessard LM. Weight stigma in youth: prevalence, consequences, and considerations for clinical practice. *Curr Obes Rep*. 2020;9(4):402-411. doi:10.1007/s13679-020-00408-8.

35. Roberts KJ, Polfuss ML, Marston EC, Davis RL. Experiences of weight stigma in adolescents with severe obesity and their families. *J Adv Nurs*. 2021;77(10):4184-4194. doi:10.1111/jan.15012.

36. Zenlea IS, Thompson B, Fierheller D, et al. Walking in the shoes of caregivers of children with obesity: supporting caregivers in paediatric weight management. *Clin Obes*. 2017;7(5):300-306.

37. Guardabassi V, Mirisola A, Tomasetto C. How is weight stigma related to children's health-related quality of life? A model comparison approach. *Qual Life Res*. 2018;27(1):173-183. doi:10.1007/s11136-017-1701-7.

38. Wu N, Chen Y, Yang J, Li F. Childhood obesity and academic performance: the role of working memory. *Front Psychol*. 2017;8:611. doi:10.3389/fpsyg.2017.00611.

39. Asirvatham J, Thomsen MR, Nayga RM Jr. Childhood obesity and academic performance among elementary public school children. *Educ Res*. 2019;61(1):1-21. doi:10.1080/00131881.2019.1568199.

40. Guardabassi V, Tomasetto C. Weight status or weight stigma? Obesity stereotypes-not excess weight-reduce working memory in school-aged children. *J Exp Child Psychol*. 2020;189:104706. doi:10.1016/j.jecp.2019.104706.

41. Tomiyama AJ, Carr D, Granberg EM, et al. How and why weight stigma drives the obesity 'epidemic' and harms health. *BMC Med*. 2018;16(1):123. doi:10.1186/s12916-018-1116-5.

42. Karsay K, Schmuck D. "Weak, sad, and lazy fatties": adolescents' explicit and implicit weight bias following exposure to weight loss reality TV shows. *Media Psychol*. 2019;22(1):60-81. doi:10.1080/15213269.2017.1396903.

43. Rex-Lear M, Jensen-Campbell LA, Lee S. Young and biased: children's perceptions of overweight peers. *J Appl Biobehav Res*. 2019;24(2):e12161. doi:10.1111/jabr.12161.

44. Nutter S, Ireland A, Alberga AS, et al. Weight bias in educational settings: a systematic review. *Curr Obes Rep*. 2019;8(2):185-200. doi:10.1007/s13679-019-00330-8.

45. Puhl RM, Himmelstein MS. Weight bias internalization among adolescents seeking weight loss: implications for eating behaviors and parental communication. *Front Psychol*. 2018;9:2271. doi:10.3389/fpsyg.2018.02271.

46. Eisenberg ME, Puhl R, Watson RJ. Family weight teasing, LGBTQ attitudes, and well-being among LGBTQ adolescents. *Fam Community Health*. 2020;43(1):17-25. doi:10.1097/fch.0000000000000239.

47. Pearlman AT, Schvey NA, Neyland MKH, et al. Associations between family weight-based teasing, eating pathology, and psychosocial functioning among adolescent military dependents. *Int J Environ Res Public Health*. 2019;17(1):24. doi:10.3390/ijerph17010024.

48. Roberts KJ, Gallo AM, Patil CL, Vincent C, Binns HJ, Koenig MD. Family management of severe obesity in adolescents. *J Pediatr Nurs*. 2021;60:181-189. doi:10.1016/j.pedn.2021.06.016.

49. Kenney EL, Redman MT, Criss S, Sonneville KR, Austin SB. Are K-12 school environments harming students with obesity? A qualitative study of classroom teachers. *Eat Weight Disord*. 2017;22(1):141-152. doi:10.1007/s40519-016-0268-6.

50. Lessard LM, Puhl RM. Reducing educators' weight bias: the role of school-based anti-bullying policies. *J School Health*. 2021;91(10):796-801. doi:10.1111/josh.13068.

51. Eisenberg ME, Carlson-McGuire A, Gollust SE, Neumark-Sztainer D. A content analysis of weight stigmatization in popular television programming for adolescents. *Int J Eat Disord*. 2015;48(6):759-766. doi:10.1002/eat.22348.

52. Throop EM, Skinner AC, Perrin AJ, Steiner MJ, Odulana A, Perrin EM. Pass the popcorn: "obesogenic" behaviors and stigma in children's movies. *Obesity (Silver Spring)*. 2014;22(7):1694-1700. doi:10.1002/oby.20652.

53. Clark O, Lee MM, Jingree ML, et al. Weight stigma and social media: evidence and public health solutions. *Front Nutr*. 2021;8:739056. doi:10.3389/fnut.2021.739056.

54. Garcia JT, Amankwah EK, Hernandez RG. Assessment of weight bias among pediatric nurses and clinical support staff toward obese patients and their caregivers. *J Pediatr Nurs*. 2016;31(4):e244-e251. doi:10.1016/j.pedn.2016.02.004.

55. Phelan SM, Burgess DJ, Yeazel MW, Hellerstedt WL, Griffin JM, van Ryn M. Impact of weight bias and stigma on quality of care and outcomes for patients with obesity. *Obes Rev*. 2015;16(4):319-326. doi:10.1111/obr.12266.

56. Alberga AS, Pickering BJ, Alix Hayden K, et al. Weight bias reduction in health professionals: a systematic review. *Clin Obes*. 2016;6(3):175-188. doi:10.1111/cob.12147.

57. Jachyra P, Anagnostou E, Knibbe TJ, et al. Weighty conversations: caregivers', children's, and clinicians' perspectives and experiences of discussing weight-related topics in healthcare consultations. *Autism Res*. 2018;11(11):1500-1510. doi:10.1002/aur.2017.

58. Rincon-Subtirelu M. Education as a tool to modify anti-obesity bias among pediatric residents. *Int J Med Educ*. 2017;8:77-78. doi:10.5116/ijme.58b1.46e3.

59. Johnstone G, Grant SL. Weight stigmatisation in antiobesity campaigns: the role of images. *Health Promot J Austr*. 2019;30(1):37-46. doi:10.1002/hpja.183.

60. American Association of Colleges of Nursing. *Nursing Fact Sheet*. 2019. www.aacnnursing.org/news-Information/fact-sheets/nursing-fact-sheet.

61. Gaines K. Nurses ranked most trusted profession 19 years in a row. 2021. https://nurse.org/articles/nursing-ranked-most-honest-profession/.

62. Matson KL, Horton ER, Capino AC. Medication dosage in overweight and obese children. *J Pediatr Pharmacol Ther*. 2017;22(1):81-83. doi:10.5863/1551-6776-22.1.81.

63. Obesity Action Coalitian. *People-First Language for Obesity*. 2021. www.obesityaction.org/wp-content/uploads/1033162_FirstPersonOne-Pager01_041921.pdf.

64. Puhl RM, Himmelstein MS. Adolescent preferences for weight terminology used by health care providers. *Pediatr Obes*. 2018;13(9):533-540. doi:10.1111/ijpo.12275.

65. 10-8 InService. 2021. https://10-8inservice.org/.

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