

Perspectives on Weight Stigma and Bias in Medical Education: Implications for Improving Health Outcomes

Erin L.M. Bowden, MD; Elizabeth M. Petty, MD

Weight stigma, a result of fatphobia, is felt by individuals as a result of microaggressions and fat shaming. In the US health care system, weight stigma and bias results in worse mental and physical health outcomes for patients living at a higher weight. Reducing weight stigma experienced by patients starts with reducing weight bias in medical trainees.

The Scope of the Problem

Across the United States, about one quarter to one third of individuals live at higher weights than what is reported as normal by the World Health Organization.¹ The degree of reported obesity varies by state and geographical region as well as within different populations, such as those defined by socioeconomic levels and race/ethnicity. The Centers for Disease Control and Prevention reports that in 2022, 37.7% of Wisconsinites self-reported height and weight consistent with current definitions of some degree of obesity based on current body mass index (BMI) categorization standards. Higher body weight has been associated with

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Author Affiliations: University of Wisconsin School of Medicine and Public Health (UWSMPH), Madison, Wisconsin (Bowden); Department of Pediatrics and Office of Academic Affairs, UWSMPH, Madison, Wisconsin (Petty).

Corresponding Author: Erin L.M. Bowden, MD, email erin.bowden2@outlook.com; ORCID ID 0009-0000-5569-0756

increased risk of cardiovascular, metabolic, and musculoskeletal issues, but often times the causality and interventions have been controversial. Some interventions have been shown to cause increased harm through unintended

on mental health.²⁻⁴ People living at higher weights often are subjected to microaggressions and more often are considered lazy, uneducated, or sloppy, among other derogatory categorizations and stereotypes that cre-

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outcomes of treatment and perpetuating weight stigma.

Given these statistics, it is paramount that we as a health care community work to better understand our patients' needs and educate future health care professionals based on current evidence as it relates to caring for patients at a higher weight, including reducing weight stigma and bias, to optimize their health outcomes. Weight stigma experienced by individuals at a higher weight can be seen in counseling by health care professionals that is primarily focused on weight loss as the end goal as opposed to counseling focused on increasing health-focused habits and lifestyles. Weight stigma often is perpetuated in the name of good health, when weight stigma itself can actually result in increased harm to patients, including disordered eating, unhealthy cycles of weight loss and gain, and negative effects

ate additional biases and stigma when compared to others at lower weights.

Weight-neutral approaches to care—that is, approaches that focus counseling on health habit goals rather than weight loss goals—have been shown to improve mental health outcomes of patients at higher weight, promote healthier eating behaviors, enhance self-esteem, and optimize quality of life—even when there was no weight lost.^{5,6} Incorporating weight bias education into medical school curricula as a part of preventive medicine aimed at reducing weight stigma in medical students will result in a physician work force that is less biased and that provides better care to patients living at a higher weight, resulting in positive outcomes. Weight stigma encountered in clinical situations can create a culture of fat shaming that is detrimental to patients, as well as learners and clinicians who live at higher weights.

Current Education and Culture

A review of existing curricula on weight for medical trainees at all stages demonstrates that current education content is generally focused on increasing understanding about the diagnosis of obesity based on BMI, as well as counseling and providing weight loss interventions for patients.^{7,8} Mentions of weight stigma in curricula reviewed were rare but largely centered around the complexity of caring for patients at a higher weight given the sensitivity of the topic and societal stigma.⁹ A variety of educational interventions were described, including lectures, standardized patient encounters, role playing, and even personal weight loss tracking of trainees.⁹ It is clear the current curricula at most medical schools does not reflect the current evidence in the literature indicating that weight-neutral approaches to health care are better for patients' physical and mental health.

What is taught in the classroom only reflects one aspect of medical education. A large aspect of medical training is the experience with patients, other trainees, and physicians in the clinical environment—the so-called “hidden curriculum.” More exposure to medical school faculty that modeled discriminatory behavior or negative comments about patients at higher weights was correlated with increased implicit and explicit weight bias among learners.¹⁰ Medical trainees learn not only from formal curriculum in didactic sessions but also from the language and actions of faculty and staff role models and mentors in clinical settings. This highlights the importance of continued education interventions on weight bias throughout medical training and the careers of physicians.

The culture of medical schools and perpetuation of weight stigma in medical school curricula not only impacts future patients but also affects medical students who themselves are living at a higher weight. Students at a higher weight who perceived stigma felt more loneliness, depression, and lower self-esteem. They also reported a lower sense of mastery over course material and were more likely to use substances to cope with stress.¹¹ One can imagine this culture of weight stigma, bias, and fat shaming that has an impact on medi-

cal students likely extends to residents and attendings. Clinicians at a higher weight may experience stigma from colleagues, patients, staff, and superiors. This stigma may be a contributor to physician stress, poor health, and burnout and will be important to consider in further research. Improving the mental health of our medical student community through reducing weight bias in medical education will have positive effects, not only on medical students who feel the stigma directly but also on the academic medicine community as a whole. In addition, increasing size diversity of medical students will result in a student body that is more reflective of the populations we serve and a physician workforce that understands their patients better, not only because of curriculum but also because of shared personal experiences.

How and What to Teach

A variety of interventions aimed at reducing weight stigma in health professionals and students have been described in the literature. Interventions studied include web-based modules,¹² group sessions,¹³ and play readings,¹⁴ as well as more traditional methods such as lectures and standardized patient encounters. Overall, interventions that focused on evoking empathy, increasing understanding of the causality and controllability of weight, teaching benefits of a weight-neutral approach, and that promoted active participation by students displayed lower weight bias in participants postintervention.¹⁴⁻¹⁶ In a study of kinesiology undergraduate students, implicit weight bias increased in the control group focused on traditional teachings of diet and exercise.¹⁷ The challenges of these studies are that the bias-reducing effects of these short-term interventions may not be long-lasting, and the longest intervention and follow-up period was 3 years.¹³

While more data are needed to further understand the specific interventions and their longevity, current data suggest bias reduction can be achieved by adding weight bias education throughout medical training. Experts in the field recommend a multifaceted approach targeting knowledge, empathy, exposure to individual people and experiences, and teach-

ing about weight bias explicitly. It is also recommended that this education is provided longitudinally throughout medical training and beyond.^{3,13,15,16,18} It is important to recognize that biases can be perpetuated by cognitive shortcuts where health care professionals rely on stereotypes to guide clinical decisions during stressful or overwhelming situations. Teaching and promoting stress reduction and emotional regulation to clinicians also may help with focus and clarity, reducing reliance on these cognitive shortcuts.³

Based on these recommendations for weight stigma reduction in health care professionals, we propose a possible approach to integrating weight stigma education into medical curricula. Interventions that are engaging and interactive for students should be used, such as group readings, patient panels, role playing, implicit bias exercises, and indepth discussions with faculty and peer experts, with the goals of these activities being to evoke students' empathy and develop an understanding of their own implicit biases. More traditional interventions aimed at increasing knowledge base and clinical approach also should be incorporated, such as lectures on weight bias and causality of a person's weight and standardized patient encounters using a weight-neutral approach. These interventions should be incorporated at various places in medical training starting with first-year medical students and continuing through and beyond residency, as well as in the curriculum of other health professions learners and clinicians.

Conclusion

As a health care community, we must recognize the inherent power health care professionals hold in the patient-clinician relationship. As health care professionals, our words and actions can greatly impact the way patients view themselves—especially as it relates to their weight, body size, and physical ability. Recognizing this and incorporating weight-neutral approaches to care into medical education is the first step in improving the physical and mental health outcomes for our patients living at higher weights. This is especially important in populations where increased weight is often cited as a major

health issue, including within lower socioeconomic groups and those from historically marginalized race and ethnic backgrounds where weight is an additional factor that may contribute to discrimination and bias that negatively affects health care.

It is important to include consistent education about bias and hate of all types in medical education. For example, ongoing work against racism and sexism in the medical community is necessary for continued effective work in fat activism. Success incorporating weight stigma education and weight-neutral approaches to care into medical school curricula will allow for expansion into other health profession training programs, furthering the positive impacts on patients. Reducing weight stigma in the medical school environment through longitudinal education that evokes empathy and understanding, plus positive role modeling from resident and attending physicians, has the potential to not only improve the health of patients in the future but also the health of medical students in the present.

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