

Overcoming Weight Bias in the Management of Patients With Diabetes and Obesity

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Rising obesity rates in the past several decades have been paralleled with increasing evidence of bias, stigma, and discrimination toward individuals with obesity (1). Weight discrimination is commonly reported by Americans (2) at rates comparable to those of racial discrimination (especially in women) (2,3) and has increased in recent decades (4). Individuals with obesity are vulnerable to stigma and unfair treatment from multiple sources, including inequities in employment settings, educational institutions, and health care facilities, as well as in the broader society and the mass media (1), all of which can lead to negative consequences for their psychological and physical health. Several decades of evidence demonstrate consistent weight bias expressed by health care providers (HCPs), which can impair quality of care to patients with obesity and diabetes. In this brief review, we summarize evidence in these areas, discuss the importance of addressing weight bias in clinical care for patients with obesity and diabetes, and highlight the need for increased awareness of this form of bias in diabetes management.

Health Consequences of Weight Bias

Being the target of weight bias and discrimination can lead to numerous adverse health consequences affecting psychological, social, and physical health (Figure 1). Individuals who experience weight stigma have

an increased risk for depression, anxiety, low self-esteem, poor body image, substance abuse, and suicidality (5–8). These outcomes remain even after controlling for variables such as BMI, obesity onset, sex, and age, suggesting that psychological consequences are not associated with obesity per se, but rather with experiences of weight stigmatization (9,10).

Weight stigma also increases vulnerability to unhealthy behaviors that can contribute to weight gain and obesity (11), including increased likelihood of engaging in binge-eating behaviors, maladaptive weight control, disordered eating patterns, increased calorie intake (11–16), avoidance of exercise, and lower motivation for physical activity (17–19). Experimental studies have demonstrated increased calorie consumption after exposure to weight stigmatization among women with overweight or obesity compared to women at a lower body weight (15,20). These findings parallel self-report research showing that as many as 79% of women with obesity report eating food as a coping strategy to temper the distress of being stigmatized (21).

Emerging evidence has additionally demonstrated heightened physiological reactivity in response to experiences of weight stigmatization, including heightened cortisol reactivity, C-reactive protein, and blood pressure (22,23). This evidence has relevant implications for people with diabetes, especially given research showing that weight discrimination

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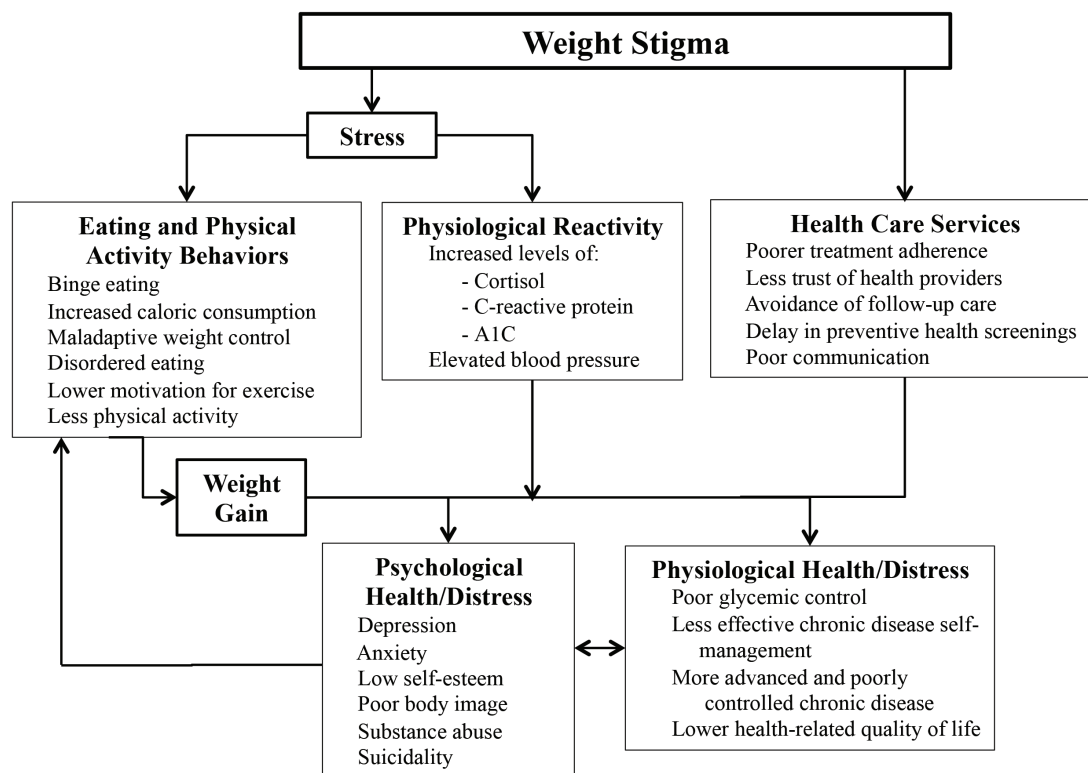
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■ **FIGURE 1.** Health consequences resulting from experiences of weight stigma.

exacerbates the harmful effects of waist-to-hip ratio on glycemic control (indexed by A1C) (24).

Finally, recent longitudinal evidence has documented more direct links between perceived weight discrimination and obesity and weight gain. In a nationally representative study of >6,000 adults from the Health and Retirement Study, those who reported experiences of weight discrimination (but not other forms of discrimination) were 2.5–3 times more likely to develop obesity or maintain obesity through time compared to individuals with no experiences of weight discrimination, regardless of baseline BMI (25). In a similar study of 2,944 adults from the English Longitudinal Study of Aging, participants who reported experiencing weight discrimination had greater odds of developing obesity and increases in weight and waist circumference regardless of baseline BMI (26).

Taken together, this evidence indicates that weight stigma can

impair quality of life through a range of health consequences, some of which may reinforce behaviors that contribute to obesity, interfere with weight and diabetes management, and ultimately increase risk of further weight gain over time. These findings highlight the need for increased awareness among medical providers treating people with obesity and diabetes about weight bias and its adverse health consequences.

Weight Bias in Clinical Care

Unfortunately, negative societal weight biases against people with obesity often are shared and expressed by HCPs. Weight bias has been demonstrated among primary care providers (PCPs), endocrinologists, cardiologists, nurses, dietitians, and medical trainees, including attitudes that patients with obesity are lazy, lack self-control and willpower, personally to blame for their weight, noncompliant with treatment, and deserving targets of derogatory humor (27–33). A recent study of 2,284 physicians found that weight bias is as

pervasive among medical doctors as it is in the general public (31). Other research shows that women with obesity view physicians as one of the most frequent sources of weight bias that they encounter in their lives (21). Some of these negative weight biases appear to have worsened rather than improved over time, even among professionals who specialize in obesity (34).

Given these findings, it is perhaps not surprising that some people with obesity have reported a lack of empathy from HCPs, feeling blamed for their weight, upset by comments that HCPs make about their weight, and reluctant to discuss their weight concerns in light of previous negative experiences (35–38). People with obesity have reported negative weight-related judgments from PCPs and maternity care providers and perceive disparities in provider communication quality, especially among people of ethnic minority status (37–39).

Emerging research also has begun to examine weight stigmatization

experienced by people with diabetes, with attention to the overlap between stereotypes common to both obesity and type 2 diabetes stigma (40), such as being blamed for causing their condition (41). This has led to concerns that HCPs' weight biases may interfere with effective diabetes management for their patients and has stimulated calls to reduce weight bias among HCPs to provide an optimal medical environment conducive to diabetes management (42). These calls seem particularly warranted given the evidence regarding weight bias in health care and the fact that clinical guidelines for diabetes treatment are increasingly emphasizing body weight and obesity in diagnostic and treatment approaches (43). Furthermore, the American Diabetes Association's Standards of Medical Care in Diabetes—2015 emphasize patient-centered approaches to weight management for patients with diabetes and highlight the importance of advocating for these patients given the adverse consequences that obesity can impose on their health (44). Thus, recognition of the need to address body weight in diabetes management and support patients in adopting healthy lifestyle behaviors underscores the importance of taking steps to reduce weight bias in diabetes care.

Adverse Consequences of Weight Bias on Health Care Delivery

The importance of addressing weight bias in clinical care is further highlighted by evidence that weight bias by HCPs can impair quality of health care for patients. Evidence suggests that HCPs spend less time in appointments (45), provide less education about health (46), and are more reluctant to perform certain screenings with patients who have obesity compared to thinner patients (47). Furthermore, some physicians view patients with obesity as less adherent to medications (28), express less desire to help these patients, and report

that treating obesity is "more annoying" and a greater waste of their time compared to providing care to their thinner patients (45). In addition, perceived weight bias in the health care setting contributes to reduced health care utilization among patients with obesity, especially for women (35,48,49).

HCPs' weight biases may contribute to negative outcomes for patients with obesity and diabetes through several mechanisms. First, extensive evidence suggests that implicit and explicit beliefs about groups that are stigmatized can negatively affect interpersonal behavior and patient-centered communication with patients who are members of those groups (50–53). This may explain the finding that encounters with patients with obesity include less rapport and relationship-building talk (54,55). A common stereotype of patients with obesity is that they are undisciplined and non-adherent (1,28,56,57), especially with regard to weight loss recommendations. Providers have been shown to use less patient-centered language with patients they perceive as non-adherent (58). Thus, the expectation that patients will not comply with advice to lose weight may reduce the quality of counseling. The potential impact of this impaired communication is concerning given strong evidence that less patient-centered care predicts lower patient adherence, less patient-provider trust, and worse patient outcomes (54,59–61). In one study, individuals with obesity who were counseled to lose weight were more successful when they reported their physicians did not come across as judgmental when discussing weight (62).

Weight bias can also affect care for people with diabetes through stress responses. Physicians' implicit bias has been shown to predict lower patient satisfaction with care (63). Several studies have shown that feeling stigmatized causes a stress response (64,65) that may have immediate and long-term effects on people with obesity. First, physicians

whose behavior is influenced by weight bias may trigger a "stereotype threat response" from patients, which occurs when individuals are aware that they are perceived stereotypically, triggering an immediate stress response. This response lowers cognitive capacity and impairs the abilities to communicate effectively and to learn and retain new information (66,67). Longer-term effects of stigmatization in health care include the cumulative effects of stress on health (68,69) and avoidance of follow-up care, which is linked to poor outcomes in diabetes. In addition, there is evidence that the experience of weight bias is associated with poorer weight loss outcomes, possibly resulting from both the stress response and coping behaviors (70–73).

Strategies to Reduce Weight Bias in Clinical Practice

Addressing weight bias in clinical practice is challenging because it is pervasive and more socially acceptable than other types of bias (32,74). Thus, weight bias is frequently explicit (consciously and deliberately expressed), as well as implicit (at the unconscious level and involuntarily formed). Explicit and implicit weight bias are only moderately correlated (75,76), and strategies to address them may be more suitable for one or the other.

Interventions that have reduced explicit weight bias include education that emphasizes the complex causes of obesity, including genetic, metabolic, and social factors (77,78). Many providers support the energy balance model of weight gain and loss almost exclusively (56,79), which can limit the scope of the counseling they give patients and may contribute to beliefs that obesity is simply an issue of personal responsibility. For example, presenting medical trainees with information about contributing factors of obesity outside of personal control (e.g., biological and genetic factors) have demonstrated reductions in negative weight bias (57,80–82) and improved self-efficacy for coun-

selling patients with obesity (83). These approaches have demonstrated success in different delivery formats (e.g., educational films, lectures, written materials, and simulated interactions with virtual patients), indicating that this strategy can be feasibly included in health-related curriculums and clinical training settings.

Interventions that focus on reducing implicit weight bias include making providers aware of the evidence that implicit, unconscious attitudes influence the quality of the care they provide to develop motivation to address implicit bias. One strategy is exposure to counterstereotypical exemplars of people who have obesity. Counterstereotypical traits include success and intelligence. Exposure to individuals who defy stereotypes and rejecting media portrayals and public health messages depicting individuals who behave in ways consistent with group stereotypes can reduce implicit bias (84). Implicit biases are most likely to influence behavior when providers are cognitively taxed and do not have the energy or time to process patient information deliberately. Therefore, strategies to reduce implicit bias aim to maintain focus and clarity by learning and practicing emotion regulation and stress-reducing techniques such as deep breathing, which may free HCPs' cognitive resources to approach patients as individuals rather than relying on group stereotypes to guide counseling (85,86).

Beyond these approaches, several other bias reduction strategies may influence both explicit and implicit forms of weight bias. For example, contact theory stipulates that having shared experiences with members of stigmatized groups reduces bias against that group if those interactions are positive, include the exchange of information and thoughts, and focus on shared goals (87–90). Positive contact with patients or peers with obesity during medical school has been shown to reduce implicit and explicit weight

bias in medical trainees (91). The effect of positive contact on bias is partially mediated by increased empathy (92), which has been linked to bias reduction (93,94). One strategy to build empathy is perspective-taking, through which participants imagine themselves as a member of a stigmatized group and write about their experiences. Evidence of the effects of empathy-focused interventions on weight bias has been limited (95) or mixed (96,97), and more work is needed to determine whether empathy induction is an effective approach to reduce weight stigma.

Another strategy involves altering a clinic's normative beliefs about and expectations of how to behave toward patients with obesity (98). For example, adopting a zero-tolerance policy for clinic staff's use of derogatory language about patients with obesity may be beneficial (99). Derogatory comments or humor occur frequently in some institutions (100), and overhearing this language predicts increases in bias in medical trainees (91). Thus, adopting policies for more respectful language toward patients with obesity may help to shift otherwise common weight bias expressed in the clinical care environment (27,100). To this end, there have been increasing calls by health experts and medical organizations for the use of "people-first language" in the context of obesity, with the aim of treating patients with obesity with respect, as individuals, rather than labeling them by their disease (101,102).

Finally, training and practice in patient-centered communication strategies such as motivational interviewing may help reduce the impact of implicit bias on quality of communication. Preliminary evidence indicates that training providers in communication skills addressing language to discuss obesity, recognition of stigma, and increased empathy can facilitate improved counseling skills among medical trainees (83).

Conclusion

Weight bias has received increasing attention as a clinical concern for people with obesity. Three factors provide ample justification for the need to address this problem in diabetes care: the prevalence of this form of bias expressed by HCPs, the adverse consequences that stigmatizing experiences pose for health and health care quality for patients, and the increasing emphasis on body weight and obesity in diagnostic and treatment approaches to diabetes. Provision of training and education about the complex causes of obesity, implementation of respectful language when discussing body weight with patients, and concerted efforts to challenge negative weight-based stereotypes in the clinical care setting can all help to shift the medical culture from one that often shames and stigmatizes patients because of their weight to one that supports and empowers patients with obesity and diabetes in their efforts to improve their health.

Duality of Interest

No potential conflicts of interest relevant to this article were reported.

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