

Women's perceptions of weight stigma and experiences of weight-neutral treatment for binge eating disorder: A qualitative study



Meg G. Salvia,^{a,b} Marilyn D. Ritholz,^{c,d} Katherine L. E. Craigen,^e and Paula A. Quatromoni^{b,e,*}

^aHarvard T.H. Chan School of Public Health, Boston, MA, 02115, USA

^bDepartment of Health Sciences, Boston University, Boston, MA, 02215, USA

^cJoslin Diabetes Center, Boston, MA, 02215, USA

^dDepartment of Psychiatry, Harvard Medical School, Boston, MA, 02215, USA

^eWalden Behavioral Care, Waltham, MA, 02453, USA



Summary

Background The detrimental effects of weight stigma are a growing concern as a contributor to negative physical and mental health outcomes, disparities in care, and healthcare avoidance. Research exploring the impact of weight-neutral healthcare is limited but suggests weight-neutral interventions are associated with positive psychological and behavioral outcomes. Little is known about patients' lived experiences receiving weight-neutral healthcare.

Methods We conducted semi-structured interviews between Feb 5, 2019 and Feb 25, 2020 with 21 women (90% non-Hispanic white, mean age 49 ± 14.8 years) who had type 2 diabetes or prediabetes and high body weight (mean body mass index 43.8 ± 8.4, range: 30.2–63.9) and previously attended a specialized treatment program for binge eating disorder. We recruited individuals with type 2 diabetes or prediabetes who completed of >2 weeks of a specialized binge eating disorder treatment program with the ability to participate in an English-spoken interview and did not have cognitive impairment or severe psychopathology that would limit recall or engagement in the interview. Interviews were analysed using thematic analysis and Nvivo software. The main outcome we studied was patients' lived experience in healthcare settings and in a weight-neutral eating disorder treatment program.

Findings Participants reported experiencing weight stigma in healthcare encounters and believed this decreased the quality of care they received. While participants frequently attempted to lose weight, they experienced embarrassment, internalized a sense of failure, and felt blamed for their weight and health conditions. In describing experiences within a weight-neutral paradigm, participants reported that helpful elements included consistency in the eating pattern (emphasizing adequate, varied, and nourishing intake), sufficient and specific education, and comprehensive support. Reported impacts included decreased binge episodes, experiencing less shame, and increased resiliency following treatment. Some participants experienced the weight-neutral treatment recommendations and the absence of the pursuit of weight loss as challenging.

Interpretation Weight-neutral treatment may improve psychological and behavioral outcomes regarding binge eating, and longitudinal, quantitative research is warranted. These findings are useful to decrease weight stigma in provider-patient interactions.

Funding The Dudley Allen Sargent Research Fund, Boston University.

Copyright © 2022 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Keywords: Weight stigma; Weight neutral; Women's health; Binge eating disorder; Type 2 diabetes; Qualitative study

Introduction

Weight stigma encompasses a range of discriminatory acts and stereotypes based on a person's body weight or

size. The detrimental impact of experiencing weight stigma on mental and physical health outcomes has emerged as an area of concern^{1,2} and a better

*Corresponding author. Department of Health Sciences, Boston University, Boston, MA 02215, USA.

E-mail address: paulaq@bu.edu (P.A. Quatromoni).

Research in context

Evidence before this study

The detrimental effects of weight bias and weight stigma are a growing concern as a contributor to negative physical and mental health outcomes and health disparities. Research exploring the impact of weight-neutral healthcare frameworks as a strategy to mitigate the negative effects of weight stigma is currently limited but evolving. We searched PubMed for articles before 2019 when enrollment in the present study began, using the terms "binge eating disorder" OR "binge" AND "type 2 diabetes"; 92 publications were identified of which 44 were not relevant. We included 38 articles that provided or reviewed epidemiological research and 10 that reported on treatment strategies (specifically, weight-loss interventions or medications, although one publication advocated for interdisciplinary treatment); none discussed weight-neutral approaches. An updated PubMed search (adding "weight-neutral" to the original search terms) on December 2, 2022 yielded no results.

Added value of this study

The findings from our qualitative research contribute to the understanding of the experiences of weight stigma and the

perceived impact of weight-neutral care among a population of women receiving treatment for binge eating disorder. These women reported experiencing weight bias in medical settings and perceived providers had limited understanding of the complexities of their weight-loss efforts, though self-advocacy regarding weight discussions was effective. Healthcare avoidance also manifested in a reluctance to discuss or disclose binge eating behaviors. In the setting of this specialized binge eating disorder treatment program, weight-neutral care facilitated skill-building that improved physical and/or mental health, though some participants verbalized the challenges of the contrasting weight-neutral and weight-focused approaches.

Implications of all the available evidence

More research is needed to better understand what contributed to these participants' ability to self-advocate and strategies to promote and support the development of self-advocacy skills. Quantitative longitudinal research measuring and evaluating physical, psychological, and nutritional outcomes over time after receiving weight-neutral health care is a next, much-needed step.

understanding of the occurrence and sequelae of weight stigma is needed. Underlying weight stigma is weight bias, which includes negative attitudes, beliefs, and judgements about individuals stemming from their high weight status.^{1,3-5}

Weight stigma has been associated with elevated markers of oxidative stress,⁶ inflammation,⁷ and cardiometabolic disease.⁸⁻¹¹ Specifically, perceived weight discrimination has been associated with 1.3 higher odds of type 2 diabetes,¹¹ a chronic condition resulting in impaired insulin sensitivity and high blood glucose levels. Individuals with higher BMI were more likely to report weight discrimination,¹¹ and individuals who experienced weight discrimination were more likely to become or stay at BMI >30.⁹ Experts in public health, obesity, and eating disorders identify weight stigma as a social justice issue^{12,13} and a contributor to health disparities.^{14,15}

Of particular concern is the extent to which weight stigma is experienced in healthcare settings. Research provides evidence that where healthcare providers hold negative attitudes regarding people with high body weight, the quality of clinical care is adversely affected,^{16,17} which can result in healthcare avoidance.¹⁸ People with type 2 diabetes described experiences of stigma from health professionals that included being judged and shamed for their weight and diabetes-management efforts that fell below provider expectations¹⁹ and perceived that providers did not understand the difficulties in managing diabetes.²⁰

The effects of experiencing weight stigma are particularly salient when considering the healthcare-seeking behaviors and treatment experiences of individuals with eating disorders who live in larger bodies. Weight stigma is associated with eating disorder symptoms such as binge eating.^{21,22} Binge eating disorder (BED) is characterized by recurrent binge eating episodes in which an objectively large amount of food is consumed in a discrete period, accompanied by hallmark feelings of loss of control, distress, guilt, and shame in the absence of compensatory (calorie-purging) behaviors.²³ BED is the most common of all eating disorder diagnoses; in the U.S., lifetime prevalence is ~2-3% among both men and women²⁴ and occurs with the same or higher prevalence among people of color.^{25,26}

Use of a weight-neutral framework, which focuses on supporting health-related behavior change rather than weight loss per se, has gained attention as a means of reducing peoples' experiences of weight stigma. Empirical evaluation of the efficacy of weight-neutral interventions is ongoing. To date, the literature is limited but evolving and includes small studies of limited scientific rigor. A 2018 systematic review reported health interventions based on a weight-neutral model were associated with positive psychological, physical activity and eating behavior outcomes, whereas conclusions about cardiovascular and body image outcomes were less consistent.²⁷ A 2020 meta-analysis found weight-neutral approaches were not significantly different from weight-loss methods regarding physical (e.g., BMI, blood pressure, and HbA1c) and psychological

(e.g., disordered eating behaviors, self-esteem, depression, quality of life) health outcomes.²⁸

Little is known about patients' lived experiences in weight-neutral treatment settings. This qualitative study explored patient experiences with and perceived impact of weight-loss-focused and weight-neutral healthcare experiences among a sample of women with type 2 diabetes/prediabetes who also had BED.

Methods

Participant recruitment

We invited former adult patients of a BED treatment program delivered as an intensive outpatient program (IOP) to participate in one-on-one interviews. Inclusion criteria included completion of >2 weeks of program and discharging at least six months prior to enrolling in the study, and diagnosis with both BED and type 2 diabetes or prediabetes. Exclusion criteria were cognitive impairment or severe psychopathology limiting the ability to recall treatment program experiences or participate in an interview. Potential participants were identified by screening 319 medical records from admissions to the Intensive Outpatient Program between Jan 01, 2015 through Apr 30, 2019; recruitment letters were mailed to eligible individuals inviting them to participate in a single study visit. Study procedures were approved by the Boston University Institutional Review Board.

Setting

All participants were past patients of a single specialty centre that offered a specialized intensive outpatient BED treatment program at its multiple, in-person clinic locations in Massachusetts. A summary of the components comprising the BED treatment protocol's weight-neutral approach is presented in Fig. 1. While some BED treatment programs include a component of weight-loss or weight-management,^{29–31} the program we recruited from provided weight-neutral treatment.

Data collection & analysis

We used purposive sampling to conduct in-depth interviews to obtain patient-level qualitative data about participants' perceptions in primary care practice where weight loss is a conventional cornerstone of diabetes care and in the setting of a weight-neutral BED treatment program. Individuals who enrolled in the study attended a 60-min in-person visit at the treatment centre. They were informed of the rationale and objectives of the study and provided informed consent prior to participating. They were compensated (\$50 gift card) for their participation. Interviews were conducted by members of the research team (MGS and PAQ) who were not members of the participants' past treatment team.

The semi-structured interview guide included questions specifically about lived experiences at the intersection of diabetes and BED, experiences with binge eating, and experiences receiving primary or specialist healthcare services.³² De-identified interview transcripts were coded and analysed by a multidisciplinary research team (MGS, MDR, KLEC, PAQ) using thematic analysis.³³ This team approach ensured investigator triangulation and supported the internal validity of the data.³⁴ Following this analysis, marked transcripts were entered into NVivo software³⁵ to organize and facilitate the grouping of themes. We applied the Standards for Reporting Qualitative Research (SRQR) checklist to support methodological rigor in reporting our findings.³⁶ The data presented here focus on participants' perceptions of usual primary care healthcare versus weight-neutral healthcare regarding body weight and weight stigma; findings specific to participants' experiences with managing co-occurring type 2 diabetes and BED have been previously published.³⁷

Role of the funding source

The funder of the study had no role in study design, data collection, data analysis, data interpretation, or writing of the report. All authors (MGS, MDR, KLEC, and PAQ) had access to the full de-identified dataset and had final responsibility for the decision to submit for publication.

Results

Twenty-one women participated in interviews; participant characteristics are presented in Table 1. Of the 319 individuals screened, 62 were eligible to participate (56 women and 6 men (1 transgender man)), of which 31 did not respond, and 10 declined (due to distance/moving away or being too busy or not interested in participating). The experiences and impact of weight stigma in the primary care setting and of weight-neutral care in the BED treatment setting are summarized in Fig. 2.

Primary themes articulated by study participants included the following: (1) focus on weight and weight loss in medical appointments and providers' limited understanding of the complexities; (2) weight stigma affecting access to and quality of medical care; (3) weight-neutral care facilitated skill-building that improved physical and/or mental health; (4) differences between and challenges of weight-neutral care and weight-focused care.

Theme 1: focus on weight and weight loss in medical appointments and providers' limited understanding of the complexities

Participants reported weight stigma in interactions with healthcare providers, which they described as impacting the quality of care they received. The recommendation

Clinical Environment and Program Protocols

- Weights were obtained on a weekly basis for most clients as part of the clinic-wide standardized protocol. This information was primarily used as one data point in clinicians' ongoing holistic assessments regarding individuals' responses to treatment as well as for insurance-coverage purposes; it was not used to guide treatment goals or meal plan changes. Weights were not measured for participants who requested to opt out of this component of program.
- The clinic environment was designed to accommodate a range of body sizes allowing people in larger bodies to be comfortable, with private spaces dedicated to patient interactions, adequate physical space, and appropriately sized chairs and equipment, including blood pressure cuffs for taking vital signs.
- The program treatment team communicated and collaborated with clients' outpatient providers, including primary care physicians and diabetes specialists (when applicable). The outpatient medical team remained the primary providers for diabetes management.

Therapeutic Support

- Three-hour program sessions led by clinic staff (social workers, dietitians, or mental health counselors) were held three days per week and included a shared meal plus educational and processing groups (e.g., addressing body image).
- Participants met with their licensed therapist on a weekly basis for one-on-one counseling sessions. These sessions included psychoeducation and applied standard therapeutic strategies including cognitive behavioral therapy to develop coping skills and address binge eating behaviors. Individual sessions included discussions of weight and emotions associated with weight loss, including participants' histories with weight and weight-loss efforts and ongoing discussions when clients felt conflicted, challenged, or sad about the drive to lose weight (whether internalized or externally motivated) or the program's weight-neutral presentation that may differ from their or their healthcare providers weight-loss focused approach.
- Physical activity was incorporated into the weekly schedule. For example, chair yoga was offered in program, and walking and other forms of lifestyle activity were encouraged.

Nutrition

- Meal plans were planned to be weight-neutral and nutritionally adequate rather than creating a caloric deficit. The primary goal of nutrition intervention was to provide a structured eating pattern designed to interrupt and decrease binge eating behaviors while supporting proper nutritional status.
- Participants had individual sessions with a registered dietitian nutritionist upon admission, then every-other-week for program duration. The dietitian set weight-stabilization goals, rather than prescribed weight loss, to achieve the primary objective of reducing binge episodes, severity, and sequelae. Dietitians receive education regarding medical nutrition therapy for diabetes management, but most dietitians in this treatment centre were not diabetes specialists. Program dietitians integrated diabetes-focused education and adjusted meal plans on an individualized basis.
- The dietitian ran a weekly group nutrition education and processing session.

Fig. 1: A description of the weight-neutral aspects of the clinical environment, program protocols, therapeutic support, and nutrition interventions provided in the binge eating disorder treatment program.

to pursue weight loss from medical providers was nearly universal, as was participants' efforts at losing weight. Women described frustration with medical providers' emphasis on weight loss during visits and overly simplistic recommendations that underappreciated the bio-psycho-social complexities of weight. Participants expressed feeling that their efforts and experiences of past or current weight-loss attempts went unseen and unacknowledged:

"It's approached in a very cut-and-dry way, like 'well you need to lose weight, cut calories, cut food, exercise more,' without an understanding of how complex that is

and all of the other pieces that go along with it, as if it's just a simple formula."

– Participant 1, Age 40

"It's kind of insulting. Because they [providers] assume that I'm this weight because I want to be, not because I try everything I possibly can to not be this weight."

– Participant 10, Age 57

Participants reported feeling blamed or shamed in response to provider comments or interactions. Some participants described not only feeling judged for their body weight or difficulties with weight-loss attempts, but a lack of weight loss often was interpreted as non-

	n (%)
Participant age, in years	
18-39	5 (24)
40-59	11 (53)
≥60	5 (24)
Participant race	
White	19 (90)
Black or African American	1 (5)
Multiple race identities indicated	1 (5)
Body Mass Index	
30.0-39.9	7 (33)
40.0-49.9	10 (48)
50.0+	4 (19)
Education	
Completed high school	1 (5)
Some college or technical school	6 (29)
College degree	11 (52)
Graduate degree	3 (14)
Employment status (multiple selections possible)	
Employed, full-time	10 (48)
Employed, part-time	5 (24)
Disabled, employed part-time	1 (5)
Disabled, not able to work	4 (19)
Student	3 (14)
Frequency of binge eating episodes (at time of interview)	
<1x/month	5 (24)
1-2x/month	2 (10)
1x/week	4 (19)
2-3x/week	3 (14)
4-6x/week	2 (10)
1x/day	3 (14)
>1x/day	2 (10)
Insurance coverage	
Group plan (through employer or union)	13 (62)
Individual private plan (member pays premium)	3 (14)
Medicaid	4 (19)
Medicare	1 (5)
Chronic health conditions/diagnoses	
Hypertension	9 (43)
Hyperlipidemia	4 (19)
Hypothyroid	4 (19)
Type 2 diabetes	11 (52)
Prediabetes or impaired glucose tolerance	10 (48)
Sleep apnea	4 (19)
Osteoarthritis	2 (10)
Polycystic ovarian syndrome	4 (19)
Congestive heart failure	2 (10)
Non-alcoholic fatty liver disease	1 (5)

Table 1: Participant characteristics (n = 21 women).

compliance. As a result of these experiences, self-blame and self-loathing were amplified, and there was a decreased alliance in the patient-provider relationship:

"Most of my experience with doctors was about, 'you have to get in control, you have to have willpower, you

have to do this, do that.' So, it was very guilt-ridden ... My doctor was horrible. She was so mean. ... All she used to say to me was 'well, you are in the line for a heart attack and a stroke; you're right there standing in line.' I remember her precisely saying that to me. And just with a very, you know, 'you are a failure.'"

– Participant 18, Age 63

"I felt that when I was doing well, she [my doctor] was really supportive, ... when I stopped taking care of myself, her attitude was very condescending, and I was wasting her time. She didn't say that, but that was how she very clearly made me feel with the words that she used. And I carry enough guilt and self-loathing and hate that someone else doesn't need to do that. And it's unfortunate that she didn't get my struggle, didn't have time for my struggle, was too busy with people who were really trying, and I get that; but I just want to go guilt-free, that someone won't instill the guilt because I already feel guilty enough."

– Participant 11, Age 56

Importantly, some participants described reacting to providers' unhelpful comments by advocating for themselves and specifically asking for weight to be less of a focus of discussions. Notably, participants reported that they were the ones to take initiative to reduce the focus on weight as the primary, or sometimes sole, health-related intervention, and the results were often positive and effective:

"[My provider] did talk to me about weight, weight loss, and I've found that talk not helpful ... And I just stewed about it. And then I went in to see her the next year for my follow-up, and I kind of had to psych myself up. I said to her like, 'you know, last time you said this thing...' and she was wonderful about it. She was like, 'oh, ok great.' And she said to me like, 'next time, don't wait a year to tell me.' And she was absolutely right!" ... It [self-advocacy] was hard, but it was good! And she was great."

– Participant 3, Age 52

"When I went in to this first doctor, she initially commented on my weight and said, 'this is a big issue.' And I touched her arm, and I said, 'I understand, I want you to know I have binge eating disorder, I'm working on it, but putting me on a diet is not the right way to do it.' Like, I could advocate for myself. And now I love her, I love her."

– Participant 21, Age 50

Theme 2: weight stigma affected access to and quality of medical care

Participants reported their experience of having a high body weight as a barrier to accessing care. In particular, participants described feeling dismissed or invalidated in healthcare settings because of their weight. For example, two participants reported instances where

Perceptions of weight stigma in primary care medical settings	
Experiences	Impact
<ul style="list-style-type: none"> • Medical providers focused on weight during appointments • Weight-loss recommendations were perceived as simplistic, lacking nuance, individualization, and an understanding of past attempts • Weight bias limited the availability and quality of health care • Participants (patients) needed to self-advocate to reduce the focus on weight 	<ul style="list-style-type: none"> • Participants internalized weight stigma and blame • Participants reported healthcare avoidance and reluctance to disclose or discuss eating behaviors including binge eating • Participants verbalized feelings of hopelessness and paralysis • Participants perceived that weight-focused conversations displaced other health-related topics • Self-advocacy improved the patient-provider relationship and supported a more empowered patient role
Perceptions of weight-neutral healthcare delivered in an eating disorder treatment setting	
Experiences	Impact
<ul style="list-style-type: none"> • Shift in therapeutic and educational focus away from changes in weight to center on capacity-building for holistic self-care and skill-building • Autonomy was built into collaborative decision-making and goal setting • Participants were encouraged to eat/nourish and experienced less rigidity around food (shifting from dieting rules to food choices) 	<ul style="list-style-type: none"> • Reduced binges • Resiliency to interrupt/rebound from binges that did occur • Acquisition of new skills and mindset • Openness between patients and providers with reduced feelings of shame • Increased body acceptance • Shift in mindset and self-care behaviors consequent to education and skills development • Improved self-efficacy with meals • Participants' disappointment with body weight's response • Slow buy-in for weight-neutral strategies because of a sustained internalization of weight loss as a priority • Emotional reactions to not trying to lose weight and the contrast with past weight-loss efforts (a continued, internalized goal)

Fig. 2: Summary of themes categorizing participants' perceptions of experiences with and impact of weight-focused and weight-neutral care.

physicians declined to accept them as new patients, showing evidence of weight bias:

"It was the first time the doctor met me, and she was like, 'You're overweight; I don't want any more overweight [patients].' She was just horrible. And she left the room, and I burst into tears."

– Participant 21, Age 50

"He's supposed to be this great weight-loss doctor, and he sort of said, 'thanks but no thanks' ... And he basically said he couldn't help me because I had too much of an emotional attachment to food. And I remember sitting in the car crying saying, 'Oh my God, even the 'fat-doctor' rejected me.'"

– Participant 11, Age 56

Participants also reported barriers to receiving the individualized healthcare they needed, particularly to address binge eating symptoms, feeling as though there weren't treatment options for their specific behaviors or symptoms. Some described being viewed as "not sick enough" to warrant an evaluation, referral, or treatment of sufficient duration for binge eating due, in part, to having a higher body weight. Both weight bias and a poor understanding of the spectrum of eating disorder diagnoses was evidenced here:

"Binge eating people are an afterthought. There are just not really services for me. That's just how it is."

– Participant 19, Age 22

"I've looked around [for treatment options] and there's just nothing. It's either the inpatient [treatment] for like anorexia or something; there's nothing for severe binge eating disorder."

– Participant 7, Age 37

"You hit a point where your insurance is like 'well, we're not going to pay anymore for you.' But then I was like... I'm not ready to transition out [of BED treatment]."

– Participant 1, Age 40

Participants described how experiencing weight stigma in medical settings resulted in perceptions of getting lower quality care and exacerbated healthcare avoidance. As a result of weight-stigma experiences, participants reported internalizing stigma and self-blame. Weight stigma occurred within the healthcare system, but it is also apparent that the pervasive influence of weight stigma is evident in a broader societal context. Participants described blaming themselves for health outcomes (e.g., developing type 2 diabetes) and wanting to avoid appointments with healthcare providers because of perceived "failure" at weight loss, fear of facing the doctor's anger at their "lack of willpower," or being treated as non-compliant with medical directives:

"You can't brow beat people into good health. You know, how many times do you hear someone say 'Ugh, I've got my physical coming up, I'm going to cancel it because I didn't lose weight'? It's that fear, it's that judgment ... And it doesn't work, it only makes us feel worse, and so we're in a spiral. A spin. And so, we'll just avoid you [the healthcare provider] because we don't want to face your wrath."

– Participant 18, Age 63

"The binge eating stuff has always been, I don't know, fraught with shame, guilt, I shouldn't be doing this, and it's my own fault that I have problems. I would say, you know, punishment is too strong, but 'I did this to myself' is kind of the character of it. So, you know, that shame, and there was also a sense of kind of like hopelessness or paralysis."

– Participant 3, Age 52

In addition to the possibility of missed appointments, healthcare avoidance was characterized by the extent to which participants limited sharing details of their weight- and eating-related experiences or concerns with providers. In this sample of women with binge eating disorder, most were reluctant to disclose binge episodes. This occurred both because they didn't want to acknowledge the binge eating to themselves, or they feared disclosing the episodes to providers:

"To be honest I wasn't bringing that [binge behaviors] up to my doctor either. I was not; nor to the nutritionist, I was not talking about it ... So, there would be many times

when I did not have a good food log for her [the nutritionist] because I was refusing to write down how much I was eating, and it was fear. I just didn't want to face it."

– Participant 16, Age 63

"It's embarrassing. And they [the physician] have already told me to lose weight, and if I tell them I'm binge eating, they're going to be very disappointed in me."

– Participant 10, Age 57

Theme 3: weight-neutral care facilitated skill-building that improved physical and/or mental health

In discussing their experiences of the weight-neutral program in the BED treatment setting, participants identified both helpful and challenging elements of their experiences. Among the benefits perceived from receiving weight-neutral care were improvements in physical health (e.g., reduced binge eating and improved self-efficacy around food choices) and mental health (e.g., reduced shame):

"It's good, and I don't feel any guilt. There was no restriction, so there was no need to binge."

– Participant 10, Age 57

"I was like 'I'm going to try the meal plan, I'm going to listen to what they're saying, talk through my issues, I'm going to learn how this happened and kind of correct for myself, and the bingeing started to go down. And I'd never thought that would happen, but it did.'"

– Participant 17, Age 22

Participants described having more self-efficacy in meal planning and autonomy over food decisions. They reported that nutrition education and the therapeutic focus of the BED treatment program, which normalized the daily structure of nutritionally balanced meal patterns, helped reduce binge behaviors. In their experience, they had greater success managing their eating concerns when they stopped restricting calories and stopped "dieting." In this program, patients were empowered to be more flexible in their food choices and educated to build up the nutritional quality of their diet, achieved by inclusion of a diverse variety of foods:

"It is more about, I'll use the word consistency again ... it was less about 'I need to change everything.' ... I think it really helped me relax a little bit around 'I don't need to be perfect in my patterns to address this.' So, that's a relief. That took pressure off."

– Participant 3, Age 52

"It wasn't about counting calories, it was just about, like, trying to have a balanced meal. That's when it [binge eating] really, it stopped when I stopped trying to lose weight."

– Participant 6, Age 44

Participants reported that the weight-neutral treatment program helped them learn new concepts and skills that impacted attitudes and behaviors, causing a positive shift in mindset and sustainable self-care abilities:

"Having the coping mechanisms, like learning, you know, understanding why; why I eat like that, or why people eat like that. And having the education around nutrition that I hadn't really had before. I learned a lot from that."

– Participant 7, Age 37

"For me now, what I'm trying to work on is the fact that I can eat kind of what I want and eat it in moderation, but I can also workout, and it's not a diet plan."

– Participant 20, Age 19

Finally, participants reported how the experience of weight-neutral treatment resulted in reduced feelings of shame and an increased sense of self-acceptance:

"I'm much more gentle with myself and with other people about weight and shape. I've learned that ... my quality as a human being isn't determined by my appearance."

– Participant 16, Age 63

"[Treatment] helped me forgive myself. It helped me to see myself not as a failure but as just a person with a challenge."

– Participant 18, Age 63

Notably, several participants continued to experience binge episodes, particularly when experiencing stress, even though binge frequency was reduced. Further, if or when a binge episode occurred following treatment, participants reported that they'd gained skills in interrupting the binge pattern and became adept at engaging in recovery-oriented coping mechanisms, demonstrating increased resilience and not spiraling into all-or-nothing thinking. They acknowledged that perfection was neither the goal nor the outcome of binge eating treatment but observed an improvement in both behaviors and mindset:

"I won't say that it [binge eating] reduced 100%, but it reduced. But when I did binge, I was able to rebound faster and say 'okay, this is just – let it go.' More resilience, less beating yourself up and giving yourself all that negative self-talk ... Certainly education did improve it [binge eating], and like I said, I still fail at times, but I rebound better. ... It definitely improved my mindset around it [binge eating] and my desire to continue to be healthy and not focus as much on being a failure."

– Participant 18, Age 63

"I sort of kept up with the snacks a little more religiously; I didn't think I deserved snacks, but then I learned that I did. Also, the distracting, doing something else, putting off the binge. Because sometimes if you get the urge to binge and you put it off, it goes away."

So, I did that a few times but that was a little bit harder especially if I hadn't eaten enough earlier that day. So, I think the first step was the eating regularly and then after that, if I still felt like bingeing which was very rare."

– Participant 17, Age 22

Theme 4: differences between and challenges of weight-neutral care and weight-focused care

Experiences in the weight-neutral program were noted as standing in contrast to the diet recommendations participants had received in healthcare settings that emphasized weight loss, or when putting themselves on restrictive fad diets in the past. Participants also reported the shift from a weight-loss focus to a weight-neutral approach was an adjustment that was emotionally jarring at times:

"The first big hurdle I had to get over was the fact that I was allowed to eat, that I was supposed to eat, and that all the ideas I had about myself and my self-worth around weight and everything, because I literally had so much self-hatred (I still kind of do) and all of it was kind of surrounding the fact that I put 'I'm overweight' as my first identity sort of over everything else."

– Participant 17, Age 22

"It was a shock because I don't know if I thought it [BED treatment] was going to be a weight loss program, like I was so used to that, so it was different. ... Like I said, [the weight-neutral dietitian] was the first nutritionist I ever worked with who wasn't just like 'okay, let's look at food labels' or 'let's do this...' she talked about principles of nutrition. And it was much more relevant, so that was really helpful."

– Participant 6, Age 61

In the context of BED treatment, progress was framed as reduced frequency in binge eating episodes, but some participants voiced concerns and frustrations because they had difficulty not explicitly pursuing weight loss. Participants described this as a sometimes-challenging experience and many talked about maintaining the ongoing goal of trying to lose weight. Here too, medical-care experiences interacted with broader societal influences that conflate weight with health and pervasive messages from diet culture. The experience of weight-neutral care contrasted with past experiences of weight-loss-focused messages and beliefs that participants held onto:

"It's just hard because I want to lose weight now, and I want to count calories. And you know, the common consensus is you've got to count calories, and I understand. When I tried to do that, it didn't work, but I need to eat less calories."

– Participant 19, Age 22

"It's just like well, why can't I just be one of those bigger, pretty, plus-sized girls, you know? Then I try to be like, should I embrace that? Or should I just kinda try to lose the weight and be healthy? And whatever size I am that's healthy is what I should embrace. It's just like this huge internal conflict."

– Participant 15, Age 32

Even among participants who appreciated the weight-neutral approach of the treatment program, some voiced disappointment and maintained negative self-perceptions when weight loss didn't occur over the course of treatment:

"I see that [following a weight-neutral approach] as me giving up and being a failure at losing weight. But, at that trade-off, like I said to you, I don't have the craziness in my head about like, what am I eating and when am I eating and how much am I eating. Like, I don't have all that stuff in my head, which is good, but I'm also not losing weight, and I feel like I should be losing weight."

– Participant 6, Age 44

"[Treatment] wasn't so much about losing weight, but just getting healthier and having a better relationship with food and making better choices and feeling good about those choices. But, yeah, when I get on the scale, I'm like 'oh my God, I have to lose pounds,' you know?"

– Participant 8, Age 59

Discussion

In this qualitative study, we explored perceptions of weight stigma in healthcare settings as well as experiences and impacts of a weight-neutral binge eating disorder treatment program. Participants reported experiencing weight stigma in their previous healthcare encounters and felt this decreased the quality of care they received. While participants frequently attempted to lose weight, they experienced embarrassment, internalized a sense of failure, and felt blamed for their weight and health conditions. In describing their experiences attending a BED treatment program providing care within a weight-neutral paradigm, participants described helpful elements that included consistency in the eating pattern (emphasizing adequate, varied, and nourishing intake), education, and support. Consequently, participants experienced a decrease in binge episodes, less shame, fewer negative self-perceptions, and more resiliency. At the same time, however, some participants experienced the weight-neutral treatment recommendations and the absence of the pursuit of weight loss as challenging and stressful.

These findings align with previous findings that the quality of care received during a medical appointment was compromised by perceived weight stigma, and that

experiencing weight bias by a doctor was associated with less communication and collaboration.³⁸ People with type 2 diabetes described the need for collaborative, person-centered care, quality advice, and appropriate multidisciplinary support³⁹ to help them pursue healthcare goals. To be more holistic, medical treatment needs more than a simple prescription for weight loss for persons with type 2 diabetes or other cardiometabolic conditions.⁴⁰

Notably, participants in this study who were able to self-advocate for decreasing the focus on weight in visits with physicians reported that their providers' responsiveness to their advocacy improved the patient-provider relationship. More research is needed to better understand what contributed to these participants' ability to self-advocate and how to promote and support the development of self-advocacy skills. Healthcare providers who capitalize on opportunities to explore or incorporate weight-neutral care may be able to facilitate patients' efforts at self-advocacy. Strategies may include establishing a safe healthcare environment built on trust, acceptance, and mutual respect, initiating conversations with compassion, and encouraging patients' inquiry and active participation in identifying healthcare priorities.

Participants also described improvements in physical health, including patients' reported improvements in diabetes self-care behaviors, which is an illustration of how health outcomes and health behaviors can be improved even if weight loss does not occur. Another example of shifting healthcare conversations could include reframing conversations about weight and diet, and interrupting the conflation of weight with health status to focus discussions on other aspects of health, such as mental health, behavioral patterns, and collaborative goal setting. This is particularly relevant to contemporary clinical practice since the assumption that advising individuals to lose weight is effective and harmless has been called into question.⁴¹

This research contributes important, novel findings about experiences with, and perceived impact of, healthcare delivered in a weight-neutral treatment setting. Among the most notable findings is the extent to which participants described the experience that the weight-neutral approach and non-restrictive eating plan prescribed by the BED treatment protocol enhanced self-efficacy, flexibility, and freedom around food and feeding decisions. It should be noted that framing treatment "success" in terms of reduced binge eating rather than defined by weight loss was challenging or disappointing for some individuals. It is important for providers practicing within a weight-neutral framework to be cognizant of this potential disappointment and to understand how individual views regarding the need to lose weight are deeply bound by cultural and societal factors. As such, a weight-neutral approach in eating disorders care can only go so far to change these societal

norms or the extent to which they are internalized. This change requires extensive public health efforts,¹⁴ but providers should not overlook the importance of validating for their patients the personal gains achieved by weight-neutral care that benefit physical and mental health. Too often, praise for wellness indicators that are independent of weight loss is not forthcoming yet can be tremendously meaningful and impactful to clients on a weight-neutral journey. Providers who acknowledge improved self-care, more balanced eating patterns, reduced binge frequency or intensity, improved psychosocial wellbeing, and healthier biomarker profiles can help clients shift their mindset from disappointment to a sense of self-efficacy about their accomplishments. The impact of these interactions requires research, which may lead to patient empowerment. Furthermore, individual reactions of fear, resistance to decreasing the emphasis on caloric restriction, and a lingering goal of weight loss may persist for some individuals who need to be heard and supported using a patient-centered, collaborative therapeutic approach.

That many participants identified the nutritional guidance and delivery of nutrition education in the weight-neutral setting as helpful to their healthcare experience points to the need to ensure that patients are provided with access to sufficiently complex, evidence-based education and advice. This is particularly important with the tremendous amount of dietary advice that exists on social media that is not scientifically supported. However, as participants noted, identifying appropriate providers or specialists, and gaining access to healthcare that was sufficiently covered by insurance was a barrier to receiving weight-neutral binge eating disorder treatment. There is the potential for exacerbating inequities if access and coverage of care are not addressed. Providers can be proactive in implementing conversations for screening and referral to other members of the healthcare team, including registered dietitian nutritionists and mental health providers, to enact comprehensive case-management. Further, reimbursement and duration of weight-neutral care (in this study, BED treatment) should depend on symptoms or pathology, not on weight status or weight change.

In this treatment setting, many participants did report the impact of weight-neutral care was indeed a reduction in binge eating behaviors during and after the program. However, their experiences also depicted a non-linear pattern in the recovery process. Several reported a recurrence of binge eating episodes, to varying degrees of intensity and persistence. For longstanding BED where binge onset occurs in adolescence or young adulthood, as represented in our middle-aged, adult population,³⁷ it is unrealistic to expect that one treatment episode will extinguish binge eating altogether. This reality reinforces the need for adequate, sustained support for BED treatment and nutrition therapy in both inpatient programs and outpatient settings.

The enduring conflation of weight status with health status manifested in participants' feeling conflicted at times about weight-neutral treatment and prompted some to consider returning to the pursuit of weight loss. Although some researchers⁴² endorse a weight-centric approach to managing diabetes for "many" patients, we note that it is not necessarily endorsed or appropriate for "all" patients. Our findings demonstrated that for patients with an eating disorder, specifically longstanding binge eating disorder characteristic of our study sample but typically under-represented if not excluded from weight-loss research, a weight-centric approach is not necessarily the best primary treatment strategy even in the context of type 2 diabetes. In fact, our research showed that an overemphasis on weight loss can actually backfire and have unintended consequences including decreased diabetes self-management and self-care, weight cycling, weight regain, and worsening of physical and mental health for some individuals. We also need to consider that health constitutes not only physical health, but mental health as well. For example, our participants have a significant mental illness that puts their physical health, diabetes-related health, emotional health, personal safety, and ability to function in their daily lives at risk. For these individuals, the first line of treatment appears not to be weight loss; rather psychological treatment should be offered as the first-line treatment approach for BED.⁴³ This directive is backed by Grade A evidence from randomized controlled trials (RCTs) of high internal validity and low risk of bias and is appropriate even in the pursuit of desired diabetes-related outcomes. The goals of treatment for these individuals are to reduce or extinguish the binge eating behavior, normalize eating patterns, correct malnutrition, and achieve optimal diabetes management consistent with the goals set forth by the American Diabetes Association.⁴⁴ In these participants' experiences, receiving BED treatment reduced binge frequency and subsequently improved diabetes outcomes;³⁷ however, more quantitative, longitudinal research is needed to evaluate the effect of this weight-neutral treatment on long-term diabetes outcomes. As reported here and previously,^{32,37} these goals can be achieved in the absence of an explicit focus on weight loss. Thus, our participants' challenges both during and after receiving weight-neutral care highlight the way broader societal attitudes and beliefs about weight interact with their experiences in medical settings and can sustain or worsen the impact of weight stigma. Participants' internalization of weight stigma reflected a sense of individual responsibility, but it is also necessary to consider and intervene upon societal and systemic factors.⁴⁴

There are several limitations to recognize in this research, including that our exploration of experiences in weight-neutral treatment are limited to a relatively homogenous sample (mostly white women with high

weight and prediabetes or type 2 diabetes) who received care in a specialized treatment centre. This limits the generalizability of our findings. The possibility of selection bias exists, particularly in that those who are not able to access BED treatment may have different experiences of healthcare and society, and men and ethnic minorities are less likely to seek treatment for BED.⁴⁵ Additional research is needed to include the perspectives of more diverse gender, racial, and ethnic identities, and individuals from less advantaged socioeconomic backgrounds. Of note, in addition to ensuring the researcher conducting the interview did not have prior research or clinical relationships with participants, KLEC and PAQ, who are affiliated with the treatment centre, do not provide patient care services. Research is also needed regarding healthcare providers' perceptions of weight bias, weight stigma, and experiences with weight-neutral clinical practices. Nonetheless, despite these limitations, this qualitative study is one of the first studies to provide insight into patients' perceptions of weight-neutral treatment in comparison to usual weight-biased treatment and thus has important implications for clinical care.

Contributors

MGS, PAQ, and MDR contributed to the research design, PAQ contributed to funding acquisition, MGS and PAQ were involved in data collection, MGS and MDR contributed to the literature search, and all authors (MGS, MDR, KLEC, and PAQ) participated in the data analysis and manuscript development with full access to and verification of the underlying data.

Data sharing statement

The dataset used and analysed during the current study is not publicly available due to the sensitivity of the data (i.e., transcribed interviews from patients) and is available from the corresponding author upon reasonable request.

Declaration of interests

KLEC is an employee of Walden Behavioral Care, and PAQ is a Senior Consultant to Walden Behavioral Care's Department of Nutrition. MDR is a scientific advisory board member for DarioHealth and a board member at Ohio University Diabetes Institute. MGS declares no competing interests.

Acknowledgments

This study was funded by the Dudley Allen Sargent Research Fund from Boston University, College of Health and Rehabilitation Sciences: Sargent College. We thank the participants who shared their experiences and perceptions for the purpose of this research.

References

- Alberga AS, Russell-Mayhew S, von Ranson KM, McLaren L. Weight bias: a call to action. *J Eat Disord.* 2016;4:34.
- Puhl RM. Bias, stigma, and discrimination. In: Cawley JH, ed. *The oxford handbook of the social science of obesity.* New York, New York: Oxford University Press; 2011:553–561.
- Washington RL. Childhood obesity: issues of weight bias. *Prev Chronic Dis.* 2011;8:A94.
- Pearl RL. Weight bias and stigma: public health implications and structural solutions. *Social Issues Policy Rev.* 2018;12:146–182.
- Rubino F, Puhl RM, Cummings DE. Joint international consensus statement for ending obesity. *Nat Med.* 2020;26:485–497.
- Tomiyama AJ, Epel ES, McClatchey TM, et al. Associations of weight stigma with cortisol and oxidative stress independent of adiposity. *Health Psychol.* 2014;33:862–867.
- Sutin AR, Stephan Y, Luchetti M, Terracciano A. Perceived weight discrimination and c-reactive protein. *Obesity.* 2014;22:1959–1961.
- Pearl RL, Wadden TA, Hopkins CM, et al. Association between weight bias internalization and metabolic syndrome among treatment-seeking individuals with obesity. *Obesity.* 2017;25:317–322.
- Sutin AR, Terracciano A. Perceived weight discrimination and obesity. *PLoS One.* 2013;8:1–4.
- Tsenkova VK, Carr D, Schoeller DA, Ryff CD. Perceived weight discrimination amplifies the link between central adiposity and nondiabetic glycemic control (HbA1c). *Ann Behav Med.* 2011;41:243–251.
- Udo T, Purcell K, Grilo CM. Perceived weight discrimination and chronic medical conditions in adults with overweight and obesity. *Int J Clin Pract.* 2016;70:1003–1011.
- Hart LM, Ferreira KB, Ambwani S, Gibson EB, Austin SB. A roadmap for addressing weight stigma in public health research, policy, and practice. *The strategic training initiative for the prevention of eating disorders.* Boston, MA: STRIPED; 2020. <https://www.hsph.harvard.edu/striped/striped-roadmap-for-addressing-weight-stigma-in-public-health-research-policy-and-practice/>. Accessed January 12, 2022.
- Thille P, Friedman M, Setchell J. Weight-related stigma and health policy. *CMAJ.* 2017;189:E223–E224.
- Puhl RM, Heuer CA. Obesity stigma: important considerations for public health. *Am J Public Health.* 2010;100:1019–1028.
- Hatzenbuehler ML, Phelan JC, Link BG. Stigma as a fundamental cause of population health inequalities. *Am J Public Health.* 2013;103:813–821.
- Sabin JA, Marini M, Nosek BA. Implicit and explicit anti-fat bias among a large sample of medical doctors by BMI, race/ethnicity and gender. *PLoS One.* 2012;7:e48448.
- Puhl R, Suh Y. Stigma and eating and weight disorders. *Curr Psychiatry Rep.* 2015;17:10.
- 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;16:319–326.
- Himmelstein M, Puhl R. At multiple fronts: diabetes stigma and weight stigma in adults with type 2 diabetes. *Diabet Med.* 2021;38:e14387.
- Litterbach E, Holmes-Truscott E, Pouwer F, Speight J, Hendrieckx C. 'I wish my health professionals understood that it's not just all about your HbA1c!': qualitative responses from the second Diabetes MILES–Australia (MILES-2) study. *Diabet Med.* 2020;37:971–981.
- Romano K, Heron KE, Henson JM. Examining associations among weight stigma, weight bias internalization, body dissatisfaction, and eating disorder symptoms: does weight status matter? *Body Image.* 2021;37:38–49.
- Wu Y, Berry DC. Impact of weight stigma on physiological and psychological health outcomes for overweight and obese adults: a systematic review. *J Adv Nurs.* 2018;74:1030–1042.
- American Psychiatric Association. *Diagnostic and statistical manual of mental disorders.* 5th ed. 2013.
- Kessler RC, Berglund PA, Chiu WT, et al. The prevalence and correlates of binge eating disorder in the World Health Organization world mental health surveys. *Biol Psychiatry.* 2013;73:904–914.
- Perez M, Ohrt TK, Hoek HW. Prevalence and treatment of eating disorders among Hispanics/Latino Americans in the United States. *Curr Opin Psychiatry.* 2016;29:378–382.
- Goode RW, Cowell MM, Mazzeo SE, et al. Binge eating and binge-eating disorder in Black women: a systematic review. *Int J Eat Disord.* 2020;53:491–507.
- Ulian MD, Aburad L, da Silva Oliveira MS, et al. Effects of Health at Every Size® interventions on health-related outcomes of people with overweight and obesity: a systematic review. *Obes Rev.* 2018;19:1659–1666.
- Dugmore JA, Winten CG, Niven HE, Bauer J. Effects of weight-neutral approaches compared with traditional weight-loss approaches on behavioral, physical, and psychological health

- outcomes: a systematic review and meta-analysis. *Nutr Rev.* 2020;78:39–55.
- 29 Hilbert A, Petroff D, Herpertz S, et al. Meta-analysis of the efficacy of psychological and medical treatments for binge-eating disorder. *J Consult Clin Psychol.* 2019;87(1):91–105.
- 30 Palavras MA, Hay P, Filho CA, Claudino A. The efficacy of psychological therapies in reducing weight and binge eating in people with bulimia nervosa and binge eating disorder who are overweight or obese-A critical synthesis and meta-analyses. *Nutrients.* 2017;9(3):299.
- 31 Grilo CM. Psychological and behavioral treatments for binge-eating disorder. *J Clin Psychiatry.* 2017;78(Suppl 1):20–24.
- 32 Ritholz M, Salvia MG, Craigen KLE, Quatromoni PA. What helps and what hinders primary care treatment for women with type 2 diabetes and binge eating disorder? a qualitative study. *Diabet Med.* 2022;39:e14887.
- 33 Boyatzis RE. *Transforming qualitative information: thematic analysis and code development.* Thousand Oaks: Sage Publications; 1998.
- 34 Miles MB, Huberman AM. *Qualitative data analysis: an expanded sourcebook.* Thousand Oaks, CA: Sage Publications; 1994.
- 35 QSR International Pty Ltd. Nvivo (Version 12). <https://www.qsrinternational.com/nvivo-qualitative-data-analysis-software/home>; 2018. Accessed January 12, 2022.
- 36 O'Brien BC, Harris IB, Beckman TJ, Reed DA, Cook DA. Standards for reporting qualitative research: a synthesis of recommendations. *Acad Med.* 2014;89(9).
- 37 Salvia MG, Ritholz M, Craigen KLE, Quatromoni PA. Managing type 2 diabetes or prediabetes and binge eating disorder: a qualitative study of patients' perceptions and lived experiences. *J Eat Disord.* 2022;10(1):148.
- 38 Puhl RM, Himmelstein MS, Hateley-Browne JL, Speight J. Weight stigma and diabetes stigma in U.S. adults with type 2 diabetes: associations with diabetes self-care behaviors and perceptions of health care. *Diabetes Res Clin Pract.* 2020;168:108387.
- 39 Geerling R, Gray SM, Holmes-Truscott E, Speight J. 'I need someone to believe in me and walk the journey with me': a qualitative analysis of preferred approaches to weight management discussions in clinical care among adults with type 2 diabetes. *Diabet Med.* 2022;39:e14790.
- 40 Wermeling M, Thiele-Manjali U, Koschack J, Lucius-Hoene G, Himmel W. Type 2 diabetes patients' perspectives on lifestyle counselling and weight management in general practice: a qualitative study. *BMC Fam Pract.* 2014;15:1–7.
- 41 Mauldin K, May M, Clifford D. The consequences of a weight-centric approach to healthcare: a case for a paradigm shift in how clinicians address body weight. *Nutr Clin Pract.* 2022;37(6):1291–1306.
- 42 Lingvay I, Sumithran P, Cohen RV, le Roux CW. Obesity management as a primary treatment goal for type 2 diabetes: time to reframe the conversation [published correction appears in *Lancet.* 2022 Jan 22;399(10322):358] *Lancet.* 2022;399(10322):394–405.
- 43 Ralph AF, Brennan L, Syrne S, et al. Management of eating disorders for people with higher weight: clinical practice guidelines. *J Eating Disorders.* 2022;10:121–163.
- 44 Zafir S, Jovanovski N. The weight of words: discursive constructions of health in weight-neutral peer-reviewed journal articles. *Body Image.* 2022;40:358–369.
- 45 Coffino JA, Udo T, Grilo CM. Rates of help-seeking in US adults with lifetime DSM-5 eating disorders: prevalence across diagnoses and differences by sex and ethnicity/race. *Mayo Clin Proc.* 2019;94:1415–1426.