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'My words would have more weight': exploring weight stigma in UK dietetic practice and dietitian's lived experiences of weight stigma

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Abstract

Background: Weight stigma is pervasive within healthcare and negatively impacts both access to care and the patient-practitioner relationship. There is limited evidence on weight stigma among registered dietitians, particularly in the United Kingdom, though data show weight-related prejudice towards people living with obesity. The aim of this study was to examine both explicit and implicit weight stigma in practicing dietitians in the United Kingdom, as well as the lived experience of weight stigma among dietitians, both towards themselves and towards others.

Methods: An online cross-sectional survey was disseminated between February and May 2022 using snowball sampling. Inclusion criteria were that participants were UK registered dietitians aged 20–70 years.

Results: Four hundred and two dietitians responded to the survey (female [94.1%], mean age 40.2 years [standard deviation (SD) 10.7]; White ethnicity [90%]; median 12 years [interquartile range (IQR) 6, 22] within dietetic practice). Mean self-reported body mass index was 25.1 kg/m² (SD 8.7). Most dietitians reported experiencing weight stigma prior to (51%) and postregistration (59.7%), whereas nearly a quarter (21.1%) felt that weight influenced their ability as a dietitian. Weight stigma was experienced across the weight spectrum. Overall participants reported explicit weight bias attitudes, moderate beliefs that obesity is controllable and implicit antifat bias. Within open-ended responses, dietitians reported three key themes related to their personal experiences of weight stigma and (3) perception of weight, appearance and job.

Conclusion: This study shows that UK dietitians exhibit both explicit and implicit weight bias towards people living with obesity. Dietitians reported experiencing weight stigma, which impacted their career-related decisions and their perception of their own ability to perform as dietitians. The study highlights the need to address weight stigma and its implications within the dietetic profession.

KEYWORDS

dietitians, explicit bias, implicit bias, lived experience, weight stigma

Key points

• Dietitians personally experience weight stigma prior to and post registration. Experiencing stigma impacts on career-related decisions, the area of

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expertise dietitians choose and their confidence in their own abilities to practise as dietitians.

- Weight stigma is experienced across the weight spectrum.
- These data show that dietitians have both explicit and implicit bias towards people living with obesity.
- Our data highlight the need for weight stigma to be addressed within dietetic practice, both from a patient-practitioner and professional point of view.
- There is a need for dietetic associations to address how weight stigma impacts the profession.

INTRODUCTION

The prevalence of obesity is continuing to rise worldwide, with national statistics indicating higher proportions of people living with overweight or obesity than without, as seen in countries such as the United States, United Kingdom, Mexico and across Europe.¹ Despite the already established and increasing evidence of the complexity of obesity, many people, including healthcare professionals, believe weight is solely within an individual's control, and subsequently, that weight management is an individual's personal responsibility.^{2,3} This belief, and thus, attribution of responsibility, can result in negative judgements towards people living with obesity based solely on their body weight where stereotypes such as laziness, gluttonous and weakwilled are directed at people perceived as living with overweight or obesity.² Alongside the increase in overweight and obesity prevalence has been an increase in weight stigma, with empirical evidence showing it is pervasive both worldwide and in the United Kingdom^{4,5} (Supporting information S1: Table S1 for definitions of weight-based stigma). For instance, the All-Party Parliamentary Group for Obesity in the United Kingdom reported that 88% of people living with obesity have experienced stigma and criticism specifically related to their body size.⁶ Extensive literature highlights that experiences of weight stigma have a detrimental impact on both physical and mental health, as well as on engagement in health-related behaviours. For instance, approximately 80% of patients report that weight stigma caused them to emotionally eat, and that experiences of weight stigma results in an increase in cortisol levels, food intake and body weight.^{2,7}

Counterintuitively, given that healthcare is a setting designed to support public and clinical health, empirical evidence demonstrates that people living with obesity experience weight stigma and discrimination.^{8,9} This includes people from healthcare professionals who are either directly involved as obesity or weight-related practitioners or indirectly.^{9,10} For example, Puhl and colleagues¹¹ reported that 69% of doctors and 37% of dietitians hold biased attitudes towards those with obesity. Furthermore, like other healthcare professionals, dietitians report that the main factors causing obesity are behavioural factors, including lack of physical activity, overeating and emotional eating.^{12,13}

At present, there is a dearth of research examining weight stigma solely among registered dietitians, particularly within the United Kingdom, with much of the evidence having previously focused on dietetic and nutrition students or other medical professions.^{14–16} To date, there are only two UK studies: one examining weight stigma among practicing dietitians and the other among dietetic students.^{13,17} These studies showed significant negative weight bias towards people living with obesity; however, these studies have not looked at implicit weight bias and also how the lived experience of weight stigma towards others. Furthermore, only one study has currently looked at weight stigma within practicing dietitians.

Previous reviews have highlighted that weight-related prejudice towards people living with obesity was evident among dietitians in the United States, Brazil, Israel and Germany,^{14,15} with a more recent study from Turkey.¹² Of the few studies examining weight stigma in dietitians, they have primarily measured explicit (conscious), rather than implicit (unconscious), weight bias; to our knowl-edge, only two studies have examined implicit weight bias among dietitians exclusively.^{18,19} Social desirability bias may impact explicit weight bias responses,¹⁶ leading to under-reporting or a reduced extent of the bias held by dietitians. Thus, examining implicit weight bias may lead to the measurement of less biased and more comprehensive evaluation of weight stigma.²⁰

Moreover, there is also a paucity of research examining dietitians' own personal experiences and the impact of weight stigma, though evidence in dietetic students exists.²¹ Dietitians are key members of the multidisciplinary team, including weight management and obesity services,²² and thus experiences of weight stigma and discrimination could impact the care provided to patients and their relationships with patients and colleagues. It is therefore essential that dietitians are aware of their own weight bias or stigmatising attitudes, how their experiences of weight stigma may impact their decisions, practice and care offered in clinical practice and how this may impact patient outcomes.

The current study aimed to understand weight stigma among UK dietitians, examining both explicit and implicit weight stigma, as well as the lived experience of weight stigma both towards themselves and towards others. This

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specifically examined how experiences of weight stigma have impacted their interactions with patients and colleagues.

METHODOLOGY

Design

This study used an online survey method hosted by Gorilla platform at the University of Leeds, a secure online experiment building platform for behavioural research.²³ Dietitians practising in the United Kingdom were invited to participate in the study via an email was distributed to the membership list of British Dietetic Association (BDA), specialist groups of the BDA, social media and from clinical practice. Snowball sampling was used. Potential participants who wished to take part gained access to the survey through a link that directed them to the online survey. They were first presented with an electronic participant information sheet and given time to decide if they wish to participate in the study and opportunities to ask questions via email or telephone with a member of the research team. Those who wished to participate provided electronic online informed consent. The survey took approximately 20 min to complete. Inclusion criteria were that participants were a registered dietitian with local healthcare professional regulator and aged between 20 and 70 years, with exclusions being healthcare professionals who were not registered dietitians. The study was granted ethical approval by the UCL Research Ethics Committee (REC number 16191/002).

Demographic data, including weight, height, age, gender, ethnicity and country of residence, years in profession, job title and setting, were collected. This was followed by a series of validated measures to assess both implicit and explicit weight stigma.

The implicit association test (IAT)²⁴ is a response latency task that measures implicit weight bias. The IAT can be manipulated to measure various forms of bias, including weight, and is the most widely used measure of implicit bias. The IAT for weight (preference for fatness or thinness) as described in Flint et al.⁵ and Vartanian et al.²⁵ was used, where participants work through seven blocks that present stimuli words in the centre of the screen, with grouping categories in the upper left and right of the screen.

The seven blocks were (1) *pleasant* or *unpleasant*, (2) *fat* or *thin*, (3) *fat/pleasant* or *thin/unpleasant*, (4) *fat/pleasant* or *thin/unpleasant* (stage 3 repeated), (5) *thin* or *fat*, (6) *fat/unpleasant* or *thin/pleasant* and (7) *fat/unpleasant* or *thin/pleasant* (stage 6 repeated). Steps 3, 4, 6 and 7 are used to measure implicit weight bias; the remaining steps were opportunities for participants to practise. The task required participants to assign the stimuli words that appear in the middle of the screen to the grouping categories as quickly as possible where response latency is measured in milliseconds. Response latency to the different pairs of grouping variables provides an indication of implicit

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preference for fatness or thinness. The IAT score ranged from +2 to -2, with zero indicating neutral preference between thin and fat bias. More positive scores indicated stronger associations with antithin weight bias, whereas negative scores indicated stronger antifat weight bias.

The Modified Weight Bias Internalisation Scale $(WBIS-M)^{26}$ measures the degree to which individuals internalise weight bias. The WBIS-M was developed by adapting from the original WBIS,²⁷ enabling weight bias internalisation to be measured in people of all body weights; the original WBIS was developed for use by people living with obesity only. The WBIS-M consists of 10 items with a seven-point Likert scale (1 = 'strongly disagree' to 7 = 'strongly agree'). Mean scores for the 10 items are calculated and range from 1 to 7, with higher scores indicative of higher weight bias internalisation. Previous research has reported that the WBIS-M has good reliability and validity.²⁸

The Beliefs About Obese Persons (BAOP) Scale²⁹ measures the extent to which individuals believe obesity is controllable, consisting of eight Likert-type items on a six-item Likert scale. In each item, individuals indicate the extent of agreement or disagreement (3 to -3) to a statement about the causes of obesity. To calculate the score, the six negatively worded items are reversed and added to the score. BAOP scores range between 0 and 48, with higher scores indicating a stronger belief that obesity is not under the person's control.

The F-scale (Fat Phobia Scale – short form)³⁰ is a 14-item measure of explicit weight bias that presents weight-related stereotypes as well as the opposite (e.g., fast and slow), where participants indicate their perceptions of people living with overweight or obesity using a 1–5 Likert type response scale. Higher scores indicate higher fat phobia. Average scores for the 14 items were calculated on a scale of 1–5, with a score of 2.5 indicating a neutral attitude. A score ≤ 2.5 indicates a positive attitude, whereas a score ≥ 2.5 indicates a negative attitude.³¹ Further categories within the F-scale are mild (2.51–3.45), moderate (3.46–4.39) and high (≥ 4.4) fat phobia levels.^{12,32}

Self-perceived body size was assessed to see how the participant assessed their own body weight. This was done using a single-item question: 'please rate yourself on the following scale', with the following answers: very thin, moderately thin, slightly thin, average, slightly heavy, moderately heavy, very heavy.³³

In addition to the validated scales above, participants answered a series of closed and open-ended questions about weight stigma, and where relevant, how it had impacted them personally, as well as the practitionerpatient relationship when delivering their role as a dietitian (see Supporting information S1). These were developed through discussion between A.B. and S.W.F., reflecting the experience of weight stigma for other healthcare professionals. Additionally, these questions were discussed with the dietitians who took part in the pilot study to ensure appropriateness.

Data analysis

Demographic data were summarised using mean (standard deviation [SD]) for normally distributed continuous variables or median (interquartile [IQR] or entire range) for continuous variables for data that were not normally distributed. Normality tests were used to assess the distribution of the continuous data. Categorical variables were described with counts (percentages), and statistical analyses were performed using Statistics Package for Social Sciences (SPSS Version 27.0). Statistical significance was defined as a *p*-value < 0.05.

Differences between demographic characteristics were analysed depending on normality, using either independent sample *t*-test, Mann–Whitney *U* test or analysis of variance (ANOVA) for continuous data and χ^2 test for categorical data. Following this, a series of regression models were built. Correlations between continuous data were performed using appropriate test based on normality (Pearson's or Spearman's correlation).

Continuous data were analysed using hierarchical multiple linear regression, employing two separate models to assess whether variables predicted WBIS-M, F-scale, BAOP and IAT. Model 1 used demographic data, namely body mass index (BMI) and age. Model 2 included the weight stigma measures (WBIS-M, F-scale, BAOP and IAT) described above, which were not being analysed. Ethnicity and gender were not added to the models due to insufficient numbers of dietitians in ethnic groups other than White and male respondents.

Qualitative data were collected using 10 open-ended free-text questions to gather greater insights into dietitians' views and experience of weight stigma (see Supporting information S1). Initially, the two authors independently coded 10 responses from each of the 10 open-ended questions to help identify general themes within Excel. A.B. then coded the remaining questions using these codes, having regular meetings with S.W.F. to ensure consistency and agreement with coding. Summary statements for each theme were created for each question. Thematic analysis was used.³⁴ Thereafter, through discussion, which included resolving any coding disagreements, the final themes, subthemes and supporting quotes were agreed.

RESULTS

Baseline demographics

A total of 402 dietitians completed the survey. All participants were included in the final analysis. Most participants were female (n = 374, [93.0%]), of White ethnicity (n = 362, [90.0%]), with a mean age of 40.2 (SD: 10.7) years and had been registered dietitians for a median of 12 years (IQR: 6, 22) (Table 1).

TABLE 1 Demographic characteristics of the participants (n = 402).

Characteristics, <i>n</i>	<i>n</i> = 402
Gender (<i>n</i> = 402)	
Men, <i>n</i> (%)	27 (6.7)
Women, <i>n</i> (%)	374 (93.0)
Prefer not to say, n (%)	1 (0.3)
Age, years (SD)	40.2 (10.7)
Ethnicity, <i>n</i> (%) (<i>n</i> = 402)	
Asian	14 (3.5)
Black	7 (1.7)
Mixed	15 (3.7)
Other	4 (1.0)
White	362 (90.0)
Body weight, kg (SD) $(n = 400)$	69.7 (15.0)
BMI, kg/m^2 (SD) ($n = 400$)	25.1 (8.7)
Living with obesity, n (%) ($n = 400$)	47 (11.7)
Years since registration (IQR)	12 (6, 22
<i>Job title</i> , n (%) ($n = 402$)	
Band 5 (general/newly qualified)	17 (4.2)
Band 6 (senior/specialist)	119 (29.6)
Band 7 (highly specialist)	144 (35.8)
Band 8 (advanced clinical practitioner/consultant)	22 (5.5)
Dietetic manager	10 (2.5)
Local government	2 (0.5)
Industry	5 (1.2)
Academia	29 (7.2)
Freelance	31 (7.7)
Other	23 (5.7)
Setting, $n (\%) (n = 402)$	
Acute/hospital	171 (42.5)
Community	114 (28.4)
Primary care	19 (4.7)
Local government	3 (0.7)
Academia	30 (7.5)
Working from home	28 (7.0)
Industry	5 (1.2)
Other	32 (8.0)
Area of practice, n (%) ($n = 402$)	
Critical care	19 (4.7)
Oncology	23 (5.7)

TABLE 1 (Continued)

Characteristics, <i>n</i>	<i>n</i> = 402
Mental health	35 (8.7)
Neurology	10 (2.5)
Weight management	43 (10.7)
Diabetes	42 (10.4)
Bariatrics	6 (1.5)
Hepatology	1 (0.2)
Paediatrics	62 (15.4)
Kidney disease	18 (4.5)
HIV	1 (0.2)
Gastroenterology	21 (5.2)
Maternal	2 (0.5)
Cystic fibrosis	3 (0.7)
Inborn errors of metabolism	3 (0.7)
Sports	2 (0.5)
Public health	18 (4.5)
Older adults	21 (5.2)
Food service	3 (0.7)
Other	69 (17.2)

Abbreviations; IQR, interquartile range; n, number; SD, standard deviation.

The mean self-reported weight of participants was 69.7 kg (SD: 15.0), with a BMI of 25.1 kg/m² (SD: 8.7). Most participants (n = 248, [61.7%]) reported a BMI between 18.5 and 24.9 kg/m², with 11.7% (n = 47) living with BMI ≥ 30 kg/m². Participants for the most part worked in either acute (n = 171, [42.5%]) or community (n = 114, [28.4%]) settings, with the majority either Band 6 or Band 7 (n = 119, [29.6%]; n = 144, [35.8%], respectively). The main areas were paediatric (n = 62 [15.4%]), weight management (n = 42 [10.7%]), diabetes (n = 42 [10.4%]) and mental health (n = 35 [8.7%]) (Table 1). Details on the other job titles, settings and areas of practice are provided in Table 1.

Weight bias internalisation

The mean WBIS-M (weight bias internalisation) score was 2.81 (SD: 1.03). Weight bias internalisation significantly differed based on BMI categories (p < 0.001), with those living with a BMI of 25–29.9 kg/m² and a BMI > 30 kg/m² reporting the highest scores (3.1 [SD: 1.1]; 3.7 [SD: 1.0], respectively) compared to dietitians who reported a BMI of 18.5–24.9 kg/m² (2.5 [SD: 0.90]).

Post hoc analysis showed that dietitians living with a BMI \ge 30 kg/m² had significantly higher WBIS-M compared

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with those within the BMI 18.5–24.9 kg/m² and overweight but not those with a BMI < 18.5 kg/m² weight ranges (1.22 [SD: 0.15] p < 0.001; 0.64 [0.16] p < 0.001; 0.93 [0.38] p = 0.92, respectively). Distitians living with a BMI 25–29.9 kg/m² had a higher weight bias internalisation compared to distitians living with a BMI 18.5–24.9 kg/m² (0.59 [SD: 0.11] p < 0.001), whereas there was no significant difference in weight bias internalisation between distitians with a BMI 25–29.9 kg/m² or > 30 kg/m² and distitian with BMI < 18.5 kg/m² (0.29 [0.37] p = 1.0, respectively).

There was a moderate, positive correlation between WBIS-M and BMI (r = 0.39; p < 0.001). Weight bias internalisation differed based on self-perceived body weight, with dietitians who perceived themselves to have a higher weight status reporting greater weight bias internalisation (3.48 [SD: 1.11]) than those who considered themselves as average (2.48 [SD: 0.77]) or thin (2.34 [SD: 0.76]; p < 0.001, respectively).

Explicit weight bias

The mean score of the F-scale was 3.11 (SD: 0.21) and the BAOP was 27.1 (SD: 6.9), indicating that participants reported negative weight bias attitudes, stereotyped people living with obesity and had a moderate belief that obesity is controllable.

From the F-scale results, nearly all participants (99.8%) reported negative attitudes towards people living with obesity (>2.5); the majority reporting mild fat phobia (94.3% [n = 379]), 5.5% (n = 22) having moderate fat phobia and just one participant indicating neutral/ positive perceptions of people living with obesity (0.2%).

There was no difference or correlation between BMI with either the F-scale or BAOP or between perceived body weight with either scale.

Implicit weight bias

The mean IAT score was -0.26 (SD: 0.40), indicating that overall, there was a slight implicit antifat bias (i.e., preference for thinness compared to fatness). The majority of participants (64.1%) reported an antifat bias, with 43% having moderate (28.6% [n = 115]) to strong bias (14.4% [n = 58]), whereas the remaining had either no preference (21.2% [n = 85]) or an antithin bias (14.6% [n = 59]), with 7.4% having moderate (6.2% [n = 25] to strong bias (1.2% [n = 5]; Table 2). There was no difference or correlation between BMI and the IAT found.

Predictors of weight stigma

Hierarchical linear regressions were performed to assess predictors of weight stigma (Supporting Information S1: Table S1). Higher BMI and BAOP scores predicted TABLE 2 Summary weight stigma per body mass index (BMI) categories and self-reported body weight questionnaires.

Questionnaires					
n	402	7	248	99	48
BMI categories (kg/m ²)		<18.5	18.5-24.9	25-29.9	≥30
WBIS-M (SD)	2.81 (1.03)	2.80 (0.54)	2.51 (0.85)*****	3.10 (1.12)****	3,73 (1.04)***
F-scale (SD)	3.11 (0.21)	3.12 (0.28)	3.10 (0.19)	3.11 (0.23)	3.11 (0.21)
BAOP (SD)	23.4 (9.3)	31.1 (5.7)	27.2 (7.0)	27.2 (6.4)	26.0 (7.3)
IAT (SD)	-0.26 (0.40)	-0.20 (0.42)	-0.29 (0.38)	-0.23 (0,42)	-0.17 (0.48)
Self-reported body weight, n (%	<i>()</i>				
Very thin	1 (0.2)				
Moderately thin	14 (3.5)				
Slightly thin	60 (14.9)				
Average	185 (46.0)				
Slightly heavy	89 (22.1)				
Moderately heavy	33 (8.2)				
Very heavy	20 (5.0)				
IAT categories					
Slight thin bias	29 (7.2)				
Moderate thin bias	25 (6.2)				
Strong thin bias	5 (1.2)				
No preference	85 (21.2)				
Slight fat bias	85 (21.1)				
Moderate fat bias	115 (28.6)				
Strong fat bias	58 (14.4)				

Note: WBIS-M, higher scores indicate higher weight bias internalisation range 1–7; BAOP, higher scores indicate stronger belief that obesity is not under personal control range 0–48; F-scale, a score of 2.5 indicates a neutral attitude. For IAT, 0 indicates neutral preference between antithin and fat bias.

Abbreviations: BAOP, Beliefs About Obese Persons Scale; F-scale, Fat Phobia Scale; IAT, implicit association test; *n*, number of dietitians; SD, standard deviation; WBIS-M, Modified Weight Bias Internalisation Scale.

*p < 0.05 BMI 18.5–24.9 kg/m² compared with other categories; **p < 0.05 BMI 25–29.9 kg/m² compared with other categories; ***p < 0.05 BMI ≥ 30 kg/m² compared with other categories.

higher weight bias internalisation. Each unit increase of BMI resulted in a 0.09 point increase in weight bias internalisation (WBIS-M) (p < 0.001 95% confidence interval [CI] 0.07–0.11). Although for each point increase in beliefs about the controllability of obesity (BAOP), there was a 0.02 point increase in WBIS-M (p = 0.03; 95% CI 0.002–0.03). Lower IAT (indicating greater antifat bias) was associated with higher weight bias internalisation. Each unit reduction in IAT was associated with a –0.25 point reduction in weight bias internalisation (p = 0.04; 95% CI –0.48 to –0.02).

Higher BMI predicted stronger antithin bias, whereas higher WBIS-M (weight bias internalisation) predicted stronger antifat bias. Each unit increase of BMI resulted in a 0.01 point increase in IAT (p = 0.014~95% CI 0.002–0.02), whereas with each increase in WBIS-M, there was a 0.05 reduction in IAT (p = 0.04~95% CI –0.087 to –0.003).

Higher age predicted lower F-scale score (less stereotypical attitudes about people living with obesity), and higher BAOP predicted higher F-scale. For every year increase in age, there was a reduction in the F-scale by -0.002 (p = 0.016 95% CI -0.004 to 0.000), whereas for every point increase in BAOP, there was a 0.004 increase in the F-scale (p = 0.009 95% CI 0.001–0.007).

Higher BMI predicted lower BAOP scores (lower scores indicate a stronger belief that obesity is controllable), whereas higher WBIS-M (weight bias internalisation) and F-scale scores (stereotyping of people living with obesity) predicted higher levels of BAOP (higher scores indicate a stronger belief that obesity is less controllable). Each unit increase of BMI resulting in a 0.16 point reduction in BAOP scores (p = 0.046~95% CI -0.32 to -0.03). Although for each point increase in WBIS-M, there was a 0.80 point increase in BAOP score

(p = 0.03, 95% CI 0.08-1.51), and for every point increase in F-scale score, there was a 4.4 point increase in BAOP (p = 0.09; 95% CI 1.11-7.74).

Influence of weight stigma and body size on dietetics career

Table 3 shows the results from the quantitative questions related to dietitian's perceived impact of weight stigma and body size on their dietetic career. Results show that 51% of participants (n = 205) reported experiencing stigmatising attitudes about their body size before commencing in dietetics, with 17.4% reported that their body size influenced them to choose a career in dietetics. Nearly 60% (n = 240) of participants reported that they had experienced weight stigmatising views at work from either a colleague, patient or member of the public. Three hundred and forty four participants (85.6%) reported that their body size did not impact their choice of specialism, and 3.7% (n = 15) reported that it had impacted their career progression. Nearly a third (32.3% [n = 130])reported giving weight management advice to someone with a lower weight, and nearly three quarters (71.6%) [n = 288]) reported that weight and/or body size influenced patients' responses to their advice. Fifty participants (12.4%) reported that they internalised weight bias (i.e., directed weight stigma towards themselves), with nearly twice as many (21.1% [n = 85]) believing that their weight influences their ability to perform as a dietitian.

Qualitative analysis

Participant responses to the 10 open-ended questions were analysed, with three main themes identified: (1) experiences of stigma in dietetic practice, (2) impact of weight stigma and (3) perception of weight, appearance and job (Table 4). Interconnecting subthemes ran throughout these three main themes associated with dietitians' self-perceptions, as well as their experiences of weight and appearance-related judgement from their colleagues and patients.

Dietitians' views on what weight stigma is

Overall, dietitians were able to accurately define weight stigma. There was a feeling that this related to discrimination, bias, judgements, assumptions, prejudice and blame towards people due to their weight, body size or shape. There was acknowledgement that weight stigma related to negative social stereotypes about obesity, including laziness, greed or lacking motivation, alongside inequitable access to healthcare and unfair

TABLE 3 Summary of closed questions responses to the 10 open-ended question responses.

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205 (51)

Ouestions, n (%)

Yes

Before starting in dietetics, had you experienced stigmatising attitudes about your body size?

No	197 (49)
Do you feel that experiencing stigmatising attitudes about your body size influenced your choice to pursue dietetics as a profession?	
Yes	70 (17.4)
No	332 (82.6)
Have you experienced stigmatising attitudes about your body size while working as a dietitian? This could be from either a colleague, patient or member of the public.	
Yes	240 (59.7)
No	162 (40.3)
Has your body size had an influence on the area of dietetics that you chose to work in?	
Yes	58 (14.4)
No	344 (85.6)
Do you feel that your body size has had a negative impact on your career progression, that is, You've been overlooked for a promotion being ignored in meetings?	
Yes	15 (3.7)
No	387 (96.3)
Do you ever feel that the negative thoughts held by others towards you are an accurate reflection of you?	
Yes	50 (12.4)
No	352 (87.6)
Have you ever provided advice for weight management to someone with a lower weight and/or body size than yourself?	
Yes	130 (32.3)
No	272 (67.7)
Do you think that your weight and/or body size influence patients' responses to your advice?	
Yes	288 (71.6)
No	114 (28.4)
Has your weight and/or body size influenced your perceptions of your ability to perform as a dietitian?	
Yes	85 (21.1)
No	317 (78.9)

Abbreviation: n. number.

TABLE 4 Defi	nitions of three	key themes.
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Theme	Definition
1. Experiences of weight stigma in dietetic practice	This theme describes the lived experience of weight stigma among dietitians throughout their lives, including within their practice.
2. Impact of weight stigma	This theme describes the impact of weight stigma on dietitian, with a focus specifically on their perceived ability to perform as a dietitian and subsequent career choices. Dietitians also described how this impacted professional with other professionals including patient-practitioner relationship.
3. Perception of weight, appearance and job	This theme describes dietitians' recollection of stigmatising experiences and the process by which these stigmas are internalised. This theme also highlights the paradoxical position that dietitians report experiencing, as well as how their weight is judged by themselves and others.

treatment. Definitions focused on weight stigma of people living with overweight or obesity; however, when asked to describe their lived experiences, many reported experiencing weight stigma related to being 'thin'.

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Theme 1. Experiences of weight stigma in dietetic practice – predietetic training, during dietetic training, practicing/during consultations.

Predietetic training

Experiences of weight stigma varied among participants, with many reporting experiences throughout their journey to clinical practice. School represented a key setting where weight stigma was present in the form of teasing and bullying from peers throughout their education, as well as at home where family members were sources of weight stigma prior to becoming a dietitian. Here a participant recalls how their mother stigmatised her children about their weight: 'Yes, my mum is continuously insinuating that I'm fat. As children one of us was given a pig themed present in our Christmas stocking each year depending on who had been the most "piggy". There were several comments specifically about sports participation relating to a perceived need to be 'athletic', to be a certain body size to play a sport or 'being picked last at school' for not meeting these standards. These experiences in childhood were highlighted as factors that influenced participant's pursuit of dietetics as a career where, for instance, these experiences seemed to spark their interest in nutrition, a desire to learn more about nutrition and health, and to take steps to 'personally help themselves' to lose weight. Some participants also highlighted a desire to help others with nutrition-related conditions such as coeliac disease, and family members who had chronic disease, for example, 'I went into dietetics when my mum got diagnosed with T1 diabetes in her 30s and my nana had a triple bypass'.

Therefore, the key reasons for pursuing a career in nutrition centred around family members, in particular mothers, wishing their child to be 'thinner' and a nutrition-based career as a route that would support weight management. 'I grew up in a family with a heavy interest in food. I think my mum suggested dietetics as she thought it would make me lose weight!' In some instances, participants reported that experience of an eating disorder was a driver for pursuing a career in dietetics, alongside wanting to know about eating behaviour and relationships with food.

During dietetic training

Similarly, there was a view that people were unsuitable to study dietetics or nutrition or be a dietitian or should not deliver education focused on living with overweight or obesity if they had a higher weight. Experiences of weight stigma impacted participants' self-perception leading to internalisation of weight bias. For instance, some dietitians with a higher weight reported a perception that they should not give advice: 'how can you give a person advice if you do not meet societies image of health'. This link to the 'thin ideal'³⁵ ran throughout the participants discourses, with people feeling they had to be thinner to meet what a dietitian should look like. Furthermore, dietitians reported experiences of weight stigma while at university or placement, for example, 'when I was a student I was asked by a lecturer whether I had anorexia nervosa'.

Practicing/during consultations

Participants expressed experiencing weight stigma from both patients and colleagues while working as a dietitian; the majority were from colleagues. With dietitians often discussing weight within their practice, there was a feeling that weight-related comments were 'fair game' without considering the negative impact that these may have on the recipients. Here a participant explains how both colleagues and patients have commented on their weight 'I'm a petite person but not underweight. A nurse once made a comment that I was "too skinny" to be a dietitian. Few patients have told me that I should be taking my own weight gain advice'.

Dietitians reported comments such as 'it's alright for you' or 'of course you're a dietitian you are so thin' when they were perceived as having a 'thin' physique. With people making assumptions about their eating habits, and that they were 'healthy' due to their external appearance, with this participants reporting, 'Assumptions that I am "thin" because I only eat healthy foods'. At times, dietitians reported that although they did not experience overt weight stigma within the workplace, there was a pressure and expectation to be a certain weight to meet what is perceived to be 'what a good dietitian looks like'. Those who were described by themselves or others as 'thin', 'fat', 'skinny', 'slim', 'plump' and 'normal' did not fit within this expectation, resulting in experiences of weight stigma from colleagues or patients, or a pressure to meet these weight or body size expectations. Thus, there was an expectation that dietitians fitted a certain image, appearance and body size, with a perceived 'perfect dietitians' body' that was 'neither thin or fat' that would allow them to work effectively as a dietitian. Despite the instances of weight stigma, weight-related commentary and pressures and expectations relating to their appearance, dietitians appeared to accept weight-related discussions about their body weight almost as if it was to be expected in their role as a dietitian.

Numerous examples of stigmatising language towards participants were expressed, including 'skinny', 'chubby' and 'fat', with this dietitian saying 'people have referred to me as skinny - not a term I like, its used in a derogatory way not implying health'. Although primarily directed towards higher weight dietitians, this language and weight-related comments were not exclusive. For example, comments towards dietitians with a lower weight included that they 'need to put some fat on'. Dietitians associated thinness with having an 'eating disorder', and that despite individuals not having an eating disorder, concerns were raised with them from family members, colleagues and friends. Although dietitians living with overweight or obesity reported that they had been told that they 'should not be giving dietary advice' due to their weight.

Theme 2. Impact of stigma – impact of weight stigma experiences on decisions and ability related to being a dietitian; relationships with others, including the patient-practitioner relationship; career progression.

Impact of weight stigma experiences on decisions and ability related to being a dietitian

There appeared to be aspects of shame linked to choosing dietetics as a profession if participants did not meet the expected 'image of a dietitian', with this participant reporting 'I struggle with how I look and JHND

my shape. As a dietitian I often feel that I am not meeting expectations of how a dietitian "should look", it can be hard to shake that off'. As such, participants wanted to avoid being judged within their work, which resulted in (1) them choosing of specialities that were not related to bariatric surgery, obesity management or giving healthy eating advice, and (2) that they preferred delivering consultations online to avoid the 'public eye' and possible ridicule, for example, '...except critical care where my patient would likely be sedated and would not be able to see me and therefore judge me'. Often questions about the ability to perform the role of a dietitian were more directed towards those living with a higher weight.

Relationships with others, including the patient-practitioner relationship

Weight appeared to have an impact on the fostering of a good relationship with patients, with consultations suffering as a result. For example, one participant said 'I present something that looks good' when discussing how they present themselves to patients in an act to manage concerns patients may have about their weight or body size.

There was also a perception that dietitian's weight status might impact the level of trust patients would have in the advice they receive, where, it was perceived that patients would believe they are being judged during consultations by a 'slim dietitian' and so would not be honest. They reported that patients make assumptions of dietitians' ability to give advice if they do not meet the weight-related societal expectations discussed previously, though dietitians appeared to do the same to fellow colleagues and themselves, with this participant expressing 'as a younger dietitian with a lower body mass comments such as "you're so thin, you wouldn't understand" made me feel my professional skills were invalid'.

Stigmatising views of how weight impacts the patientpractitioner relationship manifested in different ways. Some patients, colleagues and dietitians themselves thought that living with a higher weight enabled 'greater understanding' and shared experience of living with a higher weight allowing them to be 'better dietitians'. However, others reported feeling like 'frauds' if working in obesity management and that they were worried patients and colleagues would think they 'should not be given advice'. On the contrary, dietitians viewed as 'thin' had comments from patients about them not being able to understand or empathise with people living with a higher weight, for example, 'I have received comments from patients along the lines of, "what do you know, you have never had to worry or watch your weight" based on the weight they saw me at'. Other patients expressed gratitude that they were 'thin', where they were seen as a 'role model' and able to follow their own advice, giving a

perceived legitimacy to their work. Dietitians also viewed themselves as role models due to their weight where they directly linked their weight with ability: for example, one dietitian expressed, 'I do think that as I have an average body weight that I am seen as a good role model and that my advice is correct'.

Relationships with colleagues were also impacted. For instance, one participant expressed, 'I feel very selfconscious at times, and that this can hold me back in being myself – worried that as a result I can come across as a bit aloof or at times a bit over the top (a bit of a mask to keep people at a bit of a distance)'.

Career progression

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Weight stigma was reported to impact career progression, though this was in the minority, with several experiences of managers and other senior staff commenting on the weight of dietitians in a negative way. With one participant saying when asked about experience of stigma at work 'many instanced from direct to indirect e.g., a manager telling me that being overweight did not give a good image for the department, to being bullied by a younger member of the department'.

Participants reported that living with a higher weight and feeling stigmatised resulted in a lack of self-esteem and confidence, leading to participants not applying for promotions or speaking up in meetings, 'I feel I have less confidence to apply for promotions or speaking in meetings because of it'. For those who did not report that their weight impacted their career progression, they commented that they had 'kept their weight in check' to avoid feeling this way and appeared to suggest that if they were heavier, they would have experienced stigma. Here, this participant reports 'being overweight' would impact recruitment in her department, 'However, I am sure it would have had a negative impact on my career in the department I worked in – I can't even imagine being offered a job in this department being overweight'.

Theme 3. Perception of weight, appearance and job – internalised self-stigma and expression of explicit bias; 'ultimate paradox' – dietitians living with higher weight give weight loss advice; judgement of weight.

Internalised self-stigma and expression of explicit bias

Participants appeared to internalise weight stigma experiences and comments received from patients, colleagues, family or society, where they appeared to hold a belief that these opinions were what they subsequently thought others thought of them. Feelings of shame, being an imposter and that they should be able to control their weight despite understanding the complex drivers of weight regulation were still evident, as well as a desire to lose weight. For instance, 'I know I struggle with my weight, so they are right. I often feel ashamed to tell people what I do for a living'.

Though internalised weight stigma was evident from the responses, participants did not appear to be aware of it. For instance, dietitians reported that they did not experience weight stigma while also reporting a belief that their weight (higher) made them 'less capable'. When participants did talk about internalised weight stigma, they felt that the negative thoughts and feeling were true about them. This is evident from this participant when asked if they believed thoughts of others were accurate, 'At times feel others are right that it's not my place to give advice when I do not follow that advice myself'. This did not always relate to work but rather to their ability to control their own weight.

Expressions of dietitian's explicit bias towards people living with a higher weight were articulated, including their opinion about their 'struggles' to accept dietary advice from dietitians living with a higher weight. For instance, 'I would be hesitant to take advice from someone who appears not to take their own advice'. This was also reported by dietitians living with a higher weight, reflecting an internalisation of weight bias they had experienced. Dietitians reported that they needed to be 'fit, slim and healthy', which implicitly meant that dietitians not meeting these standards were not. Despite not impacting their beliefs about themselves, participants felt that this might impact patients, thus undermining the validity and adherence to advice. There were direct comments by patients to other dietitians about not wanting to see the 'fat dietitian' or that 'I clearly know what I'm doing' and 'how they ignored the advice from a health care professional who was overweight'.

Overall, the negative feelings appeared to come from colleagues, particularly other dietitians, towards participants rather than patients, with feelings that previous experiences of trauma or weight stigma had continued into their professional lives. Indeed, some participants reported that you should never give weight loss advice if you have a higher weight than your patient and 'It's not professional to do so!!'. Though participants with a lower weight also remarked on comments from colleagues who questioned their ability to provide weight loss advice because they are 'thin' do not have lived experience and therefore should not give advice which negatively impacted their confidence.

'Ultimate paradox' – dietitians living with higher weight give weight loss advice

There was a sense that participants living with a higher weight had both negative and positive emotions about giving advice to people of a lower weight and/or body size than themselves. Negative experiences such as 'uncomfortable' (most common feeling), 'disingenuous', 'unethical to give advice' and feeling like a 'fraud' were reported. One participant expressed that it was the 'ultimate paradox' and reported feelings of internalised stigma: 'This made me feel like a massive joke. It's the ultimate paradox – a fat dietitian giving someone thinner than them weight loss advice is actually quite ridiculous'.

On the contrary, they also felt that it was a positive experience for the patients, and patients liked it, they understood 'the struggle' and difficulties, had 'increased empathy' and did not lead with 'a stick', all of which helped with 'being relatable' to their patients. These challenges appear to specifically relate to weight management and giving healthy eating advice, with participants who work in paediatric, sport nutrition and eating disorders often supporting people with a lower body weight but not reporting weight stigma as an issue. Others recognised that people had negative opinions, views and beliefs about them, but felt that because these people did not know them or their health-related behaviours, these experiences did not affect them or their beliefs about themselves. With this participant saying, 'When people have a negative opinion of me due [to] prejudging me on my size they do not know me personally or professionally'. Thus, the source of weight stigma appeared to be key for some participants.

Throughout the comments, dietitians expressed the impact that comments about their weight had on them, not only personally but also professionally, in terms of choosing which area of dietetics to specialise in. Dietitians avoided areas of practice where they might receive judgement. This manifested in dietitian living with a higher weight, avoiding careers in weight management, bariatrics and in those where they had to give healthy eating advice.

Judgement of weight

There was an expectation by dietitians that their weight mattered not just to themselves but also to others. Participants also reported that their views of weight and weight stigma attitudes had changed over time, with their education as a key influencing factor. This changed from early in their career, where there was previously a lack of understanding of weight stigma or challenges experienced by people living with a higher weight, to one of empathy and understanding later in career, where participants reported that they gained weight or had their own personal struggles with their weight. Here a dietitian discusses the change throughout her career: 'I have been both slim (BMI 22) and heavier (BMI 28). Gained weight during menopause so feel I understand difficulty of weight management having experienced it myself'.

The assumptions that dietitians should be a particular size continued to run through the responses and themes, with a feeling that dietitians should look a certain way to be a 'role model' for their patients and their profession. If they were not that size, then this questioned their ability. There was a belief that if you 'can't follow the advice', how can you support patients. Additionally, there were comments from patients to dietitians saying, 'How can you help me if you can't help yourself'. There was a sense that dietitians were expected to 'practice what they preach' 'related to diet and lifestyle, forgetting or even ignoring the complex aetiology of weight regulation that they themselves appeared to be aware of.

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There were instances of dietitians changing jobs to avoid having to talk about health and feeling scrutinised and embarrassed. For example: 'I was doing my patients a disservice by not physically embodying good health'. Interestingly, dietitians were willing to change career as they felt unworthy or 'lacked confidence' in giving advice due to a perception that their image does not embody the 'thin ideal'. Although others turned down job opportunities due to their higher weight, as they perceived themselves to be an 'oxymoron if you will'. However, others felt strongly that their weight or body size did not impact their abilities to perform the job or their clinical reasoning skill as they had the education and skills required to be a dietitian. For those who did not experience weight stigma, there was a substantial amount of speculation of how patient might feel or respond to being supported by a higher-weight dietitian, as well as how they would be treated by fellow colleagues. Some participants reported seeing colleagues being stigmatised, '... I have seen [others] being made to cry in the profession for having a high BMI' and having negative comments made about them by fellow colleagues and believed this potentially impacted job promotions.

DISCUSSION

This study shows that UK registered dietitians exhibit both explicit and implicit weight bias towards people living with obesity, which is consistent with previous findings in both practicing dietitians and dietetic students.¹⁴ This is also the first study that identifies that UK dietitians' lived experiences of weight stigma within and outside of the practice.

This study provides the first examination of weight bias internalisation among practicing dietitians, demonstrating low-to-medium weight bias internalisation and that this internalisation appeared to impact dietitian's perceptions of themselves and their abilities to perform their job role, particularly in relation to their advice about weight management. Although weight bias internalisation in our sample was lower than previous research in the general population,³⁶ our study recruited participants across the weight spectrum, rather than a focus on overweight and obesity in previous research. Weight bias internalisation has been shown to increase as BMI increases.³⁶ This association was also evident in the

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current study, with linear regression confirming that higher BMI predicted higher levels of internalised weight bias. Furthermore, counterintuitively, a belief that obesity is less controllable was associated with higher weight bias internalisation. This could be explaining by the fact that dietitians have greater training on the aetiology of obesity, and despite people having higher internalised weight stigma, they believe that weight is not a person's responsibility. Previous research examining beliefs about the controllability of obesity, including locus of control, has revealed inconsistent results, with data showing that internalised locus of control (greater belief that weight is within a persons' control) predicted lower BAOP (belief that obesity is less controllable).³⁷ Yet, others have shown that those with greater weight controllability beliefs tended to have higher internalisation of weight stigma.³⁸ However, it should be noted that previous research exploring this association has typically sampled participants from the general population, and thus, further research to unpick this association is needed.

Within the qualitative analysis, there were multiple instances where internalised weight bias was evident with dietitians reporting an agreement with negative societal stereotypes about people living with obesity. In those with internalised weight bias, the negative societal stereotypes, such as feeling like a 'fraud', being incapable and questioning their own ability, were mentioned which supports previous research.² These beliefs appeared to impact the areas that practicing dietitians were willing to work in, with participants indicating that they purposely avoided weight management, bariatric and roles where healthy eating advice was given. This has direct implications for dietetic practice, potentially impacting the available workforce within these specialities.

This is only the third time that implicit weight bias has been measured solely within dietitians, with previous data showing in German dietitians' strong-to-moderate implicit weight bias ranged between 56.4% and 61.7%,¹⁹ whereas 76% of US dietitians had a strong-to-moderate implicit weight bias.¹⁸ Furthermore, among HCP specialising in obesity, including dietitians, high implicit weight bias has also been reported.^{10,20} Our study showed similar trends with 43% of participants with strong-to-moderate antifat weight bias (preference towards thinness compared to fatness), albeit to a slightly lesser degree, though the majority of participants (64.1%) showed some form of antifat implicit weight bias. Further analysis showed that higher internalised weight bias was associated with higher antifat bias, whereas higher BMI was associated with stronger antithin bias. The greater antifat bias among people with higher internalised weight bias is expected and in line with previous research.³⁹ However, the stronger association between higher BMI and antithin bias was contrary to other research,^{18,40} although we recommend caution for the reader, given the comparatively lower numbers of participants who reported an antithin bias compared to antifat bias in our sample.

Antifat bias in our sample was lower than that has been reported in other countries,^{18,19} but it still requires attention to reduce this further. Possible explanation might be that the awareness of weight stigma has recently gained more traction within the United Kingdom, with the BDA publishing their 'Eliminating weight stigma' communication guidelines, alongside multiple weight stigma webinars, which have highlighted the harms of weight stigma, stigmatising language and imagery.⁴¹ In addition, the BMI of participants in our study was higher than that in previous studies examining weight stigma in dietetics, which may explain the lower weight stigma reported, given that research shows weight stigma is typically higher among people with a lower weight.⁴⁰

Most studies that have assessed explicit weight stigma in dietitians and dietetic student have used the F-scale,¹⁵ with the mean scores for the general population being 3.60 (SD 0.64)³⁰ and for dietetic students between 3.45 and 3.8.⁴² Among practicing dietitians, F-scale scores range from 3.30 to 3.37,^{12,32,43} whereas our study reports slightly lower, but consistent mild-to-moderate weight bias with a mean F-scale score of 3.11. Higher F-scale scores appear to impact the type of dietetic advice given to patients, with a greater focus on weight loss instead of focusing on other aspects or even the underlying complaint.^{32,44} This can potentially negatively impact the care being offered to people with a BMI \ge 30 kg/m² in all specialisms.

Current study results indicate more weight-stigmatising attitudes among younger dietitians; higher weight bias is typically reported by younger compared to older adults.^{5,14} Schwartz⁹ suggests that this may reflect the greater societal pressures of the 'thin ideal' for younger people. Although this might be feasible, dietitians in our study reported that the reason for a reduction in the weight stigma attitudes is due to improved understanding of weight stigma and that their views had decreased as they progressed through their careers. This appeared to be due to their own personal challenges with weight, including following pregnancy, realising that it is not solely related to personal responsibility and instead related to other complex factors, including psychology and biology.

Beliefs about the controllability of obesity (BAOP scores) did not indicate a strong view that obesity was or was not controllable, whereas the only other UK dietetics study using the same measure about controllability of obesity recruited UK dietetic students and showed high beliefs that obesity is under a person's control and excluding other contributing factors.¹⁷ This view is confirmed in dietetic research, with the causes of obesity by dietitians focusing mainly on a lack of physical activity and excessive eating.^{12,13,43} The difference in beliefs about the controllability of obesity between our cohort and Swift and colleagues'¹⁷ cohort could be explained by the changing view of obesity now being a chronic, relapsing, lifelong condition³ with complex aetiology that includes genetic, biology and social determinants of health.⁴⁵ When looking at the impact of weight on beliefs about

controllability of obesity, we found consistency between the quantitative and qualitative data. Here, higher BMI predicted greater belief that a person was in control of their weight, suggesting that people living with overweight or obesity believe that they are in control of their weight. This was also seen within the open-ended responses, with dietitians living with a higher weight expressing that they felt they should be able to control their weight.

The lower explicit weight stigma reported by participants in our study could be explained by social desirability bias, with dietitians not overtly wishing to show that they hold stigmatising opinions. As the dietitians were aware of the topic they were being assessed on, they may have answered the questions in a more desired way and accepted by society, whether they believed this or not.⁴⁶

To our knowledge, this is the first study to examine how weight stigma experiences have impacted dietitians' career decisions and perceptions of themselves to perform this role. The results also demonstrate that weight stigma is experienced across the weight spectrum. Although the majority reported weight stigma relating to a higher body weight, there were also a substantial number of dietitians reporting that they experienced weight stigma due to a lower body weight or being considered 'thin'. As such, efforts to address weight stigma, which have typically focused on biases against higher weight, should also address stigma directed towards low-weight people.

Of interest and concern was that, in a professional setting, dietitians perceived themselves as the main cause of bias and discrimination towards other dietitians. Participants indicated that in many instances, weightrelated comments would often be 'throw away' comments about people's weight, alongside overt bias towards dietitians living with a higher weight regarding their suitability to work in the profession. Many of these comments appeared to be considered 'part of working life'; however, there was a sense that there was a longlasting impact of these experiences on dietitians in terms of their professional careers and confidence in their ability to support patients, particularly in relation to obesity management.

Previous research has highlighted that dietitians pursue a career in dietetics because of their desire to help other people,⁴⁷ which was also evident in our study. Specifically, participants in our study wanted to help people with similar health conditions to either their family members or themselves.

Experiences of weight stigma outside of the professional arena often came from family members, with mothers being voiced as the main source, wishing their children to have a lower weight and a perception that a career in nutrition represented a gateway towards this goal. These views are confirmed in previous research^{2,48} where family members are identified as holding highly stigmatising views towards those heavier family members.

Dietitians appear to be visibly wearing their qualifications, where dietitians living with overweight or obesity are viewed as less qualified compared to those perceived to be 'thin'. These stereotypical judgements, based solely on a persons' weight, may impact dietitians living with a higher weight to developing good professional relationship, both with patients and colleagues.

The questions of what makes a dietitian a dietitian was evident in participants' responses, with appearance and weight being key elements to be considered qualified and competent to give weight-related advice. Having the right weight helped dietitians themselves feel more confident about their role as a dietitian and providing weight-related advice. There was a need to be a 'goldilocks' weight, not too 'skinny' not too 'overweight' but just perfect, and therefore be a good advertisement for giving suggestions and advice. Dietitians appeared to be a yardstick by which patients measured their success against and subsequently wanted to be the weight of the dietitian advising them. It was suggested that this put dietitians living with a higher weight at a disadvantage.

Unlike previous research that suggests dietitians feel they are the most equipped healthcare professional to support people living with obesity in managing their weight,⁴⁹ dietitians living with a higher weight did not report this. Instead, they actively avoided this area of specialisation. Current study results highlighting dietitians felt like 'frauds' and that they were 'doing my patients a disservice by not physically embodying good health' are worrying, as concerns about perceived weight stigma from patients and colleagues are impacting dietitians' confidence and areas in which they work.

Our results and in line with calls from health authorities (e.g., World Health Organization¹), there is a clear need for healthcare professional, including dietitians, to actively address their weight bias, ideally before and following registration. In addition, this will improve understanding, support and reduce the impact that weight stigma is having within dietetics in the United Kingdom. Training is essential, and recent review data have shown that weight stigma can be reduced, though there is a need to address it early in training and throughout postregistration practice.⁵⁰ This training should aim to educate dietitians on the genetic and socioenvironmental determinants of obesity, alongside discussing the sources, impact and implications of weight stigma.⁵⁰ Based on our findings, dietetic associations globally should, therefore, aim to offer this training to their members to reduce and potentially avoid the profound impacts these experiences are having on dietitians practice.

STRENGTHS AND LIMITATIONS

This study is the first to examine weight bias internalisation and one of only a few to examine both explicit and implicit weight bias in dietitians alongside personal

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experiences of how weight stigma have impacted them. Comparatively, this study provides greater representation of weight stigma, with the few previous studies examining weight stigma being in small samples of dietitians or students. It also provides evidence from the United Kingdom, with most evidence emerging from the United States. Data collection was entirely anonymous, allowing participants to be open with their responses and therefore overcoming, to some extent, the potential social desirability bias,⁵¹ thus enhancing the internal validity of the findings.

There are also several limitations to the study, which should be appreciated when interpreting the results. The study used a cross-sectional design. Therefore, it does not show a longitudinal view and how experiences and internalisation of weight stigma may have changed and impacted dietitians. The weight and heights of the dietitian were self-reported and therefore may not fully reflect the actual BMI of the dietitians. Like much of the research in dietetics, the participants were mainly female and of White ethnicity, though this is an issue with all research in this area at present.^{14,15} This also demonstrates the lack diversity among UK dietitians.⁵² Thus, the lack of diversity in our sample may reflect the lack of diversity in practicing UK dietitians. There persist challenges in comparing dietetic weight stigma research as multiple assessments are used for explicit weight bias, which may also explain the contrasting results between studies. As the focus of the research was on the lived experiences of dietitians, the patient voice regarding dietitians was not included in this paper, though it is an important point for future studies.

CONCLUSIONS

Dietitians' experiences of weight stigma and body size appear to impact their decisions regarding whether to follow dietetics as a profession, the area of expertise and perceptions of themselves. There is a need for professional organisations, such as the BDA in the United Kingdom, to be aware and take steps to support registered dietitians who may experience weight stigma in the workplace, as well as students and trainees. Our data highlighted that weight bias is experienced by dietitians of all body weights, although it is more commonly reported and associated with people living with overweight or obesity.⁵³ It is important for HCP to understand that weight stigma is not experienced in isolation. Given that our study shows that experiences of weight stigma impact career decisions, including the specialisms chosen, feeling accepted by colleagues, and to support more students to take dietetics roles that are being avoided as a result of weight stigma are crucial, given that there is an increasing demand for dietitians to work in roles such as within obesity management. There is clearly a need

to address the issues of weight stigma within the dietetic profession and aim to actively reduce it. Though it does appear that the degree of weight stigma, both implicit and explicit, is lower than reported among the general population and in other research on dietitian, it is still concerning that negative attitudes and beliefs exist in healthcare, and particularly among those who are meant to be helping and supporting patients living with a BMI \ge 30 kg/m².

TRANSPARENCY DECLARATION

The lead author affirms that this manuscript is an honest, accurate and transparent account of the study being reported. The reporting of this work is compliant with STROBE guidelines. The lead author affirms that no important aspects of the study have been omitted and that any discrepancies from the study as planned have been explained.

POSITIONALITY STATEMENT

Noting to the reader that the authors wish to provide information about their backgrounds. With respect to gender, when the manuscript was written, both authors self-identified as men. With respect to ethnicity, one author self-identified as mixed ethnicity and the other one as White ethnicity. One author is a dietitian by profession.

DATA SHARING STATEMENT

De-identified participant data that underlie the results reported in this article will be made available on publication and ending 5 years after publication. Proposals should be made to the corresponding author and will require a data access agreement.

AUTHOR CONTRIBUTION

Adrian Brown conceived the study. Adrian Brown and Stuart W. Flint contributed to the study, survey design and methodology. Adrian Brown was responsible for the oversight of the study. Adrian Brown and Stuart W. Flint contributed to the recruitment of participants. Adrian Brown and Stuart W. Flint were responsible for the data analysis. All authors contributed to data interpretation and the writing of the manuscript. All authors contributed to critical revision of the manuscript and gave final approval.

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CONFLICT OF INTEREST STATEMENT

Adrian Brown reports honoraria from Novo Nordisk, Office of Health Improvement and Disparity, Johnson and Johnson and Obesity UK outside the submitted work and is on the Medical Advisory Board and shareholder of Reset Health Clinics Ltd. Stuart W. Flint reports grants from Novo Nordisk and travel fees to attend academic meetings from Novo Nordisk and Johnson & Johnson, outside the submitted work.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

PEER REVIEW

The peer review history for this article is available at https://www.webofscience.com/api/gateway/wos/peer-review/10.1111/jhn.13337.

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Stuart W. Flint has a specific interest in weight stigma and discrimination, leading work internationally and nationally to highlight its pervasiveness and impact, as well as developing weight stigma interventions.

SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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