

Weight Bias Education for Medical School Faculty: Workshop and Assessment

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INTRODUCTION

Medical professionals often have negative biases about obese patients that lead to discriminatory treatment.^{1,2} Interventions to address weight biases are relatively rare, with poor efficacy.³ Two prior interventions for medical professionals in training were found to be ineffective at changing students' prejudices.^{4,5} Benefits of a brief intervention may be limited because students receive ongoing training from mentors who also endorse weight bias, an example of the hidden curriculum, in which faculty stereotypes may be passed on to students via stereotypical case reports in the classroom⁶ or biased, derogatory humor in clinical settings.⁷ Therefore, training faculty leaders may be essential to reduce student weight stigma. Academic medical center faculty were the target audience for this workshop.

OVERVIEW

A 1-hour, face-to-face workshop on medical weight bias was presented to faculty at regular faculty meetings and grand rounds in 5 general and specialty clinics (occupational medicine, psychiatry, weight and wellness, cancer control, and medicine) at a rural academic medical center. A review of the literature on weight stigma by medical professionals was used to develop the workshop. This workshop had 4 objectives: (1) Before the work-

shop, attendees would complete a survey of explicit weight stigma, and (2) their results would be compared with previous research⁸; and (3) after the workshop, attendees would report increased weight stigma awareness and (4) would be able to list 2 effects of stigma on patient outcomes.

WORKSHOP DELIVERY

Attendees first completed an anonymous pencil-and-paper 7-item, 7-point point (1 = strongly disagree; 7 = strongly agree) Likert-type explicit weight bias questionnaire used in previous research.⁸ This questionnaire had 3 subscales: dislike of fat people (3 items), will-power/blame (2 items), and fear of fat (2 items).⁸ Internal-consistency reliability estimates in this sample ranged from $\alpha = .84$ (blame) to $\alpha = .87$ (dislike). Next, a PowerPoint presentation ([Supplemental Material](#)) discussed obese patients' health care experiences, provider weight bias, health outcomes, and best practices. Implicit weight bias self-assessment was also demonstrated, but attendees did not complete self-assessment during the workshop. The workshop ended with discussion and a written evaluation.

EXPLICIT BIASES

Participants' responses were compared with those of medical students in previous research⁸; 106 participants completed the questionnaire ($n = 106$ for analyses

unless otherwise noted). The mean dislike score in this sample was 2.3 (out of 7; $SD = 1.3$), with 5% moderately or strongly agreeing with at least 1 item, compared with a mean score of 2.3, with 7% agreeing, in the previous study.⁸ The mean blame score was 3 ($SD = 1.6$), with 13% agreeing, compared with a mean of 4, and 30% in the previous study. The mean fear of fat score in this sample was 4.6 ($SD = 1.9$); 45% agreed, compared with a mean score of 4.6 and 46% in the previous study. The researchers used an N-1 chi-square test of homogeneity to compare the proportions agreeing with each subscale in this sample and the previous study. The samples were significantly different only on the blame subscale ($\chi^2 = 14.4$ [1] 95% confidence interval, 9–22.9; $P < .001$).

As an exploratory analysis, 1-way ANOVA was used to compare whether different medical specialties displayed significantly different levels of explicit fear, blame, or dislike of fat. There was a significant effect of medical specialty (occupational medicine, $n = 22$; psychiatry, $n = 11$; weight and wellness, $n = 14$; cancer control, $n = 12$; and medicine, $n = 47$) on dislike ($F_{4,101} = 4.8$; $P = .001$) and blame ($F_{4,101} = 6.6$; $P < .001$) but not fear ($F_{4,100} = 2.4$ $P = .06$; $n = 105$). *Post hoc* comparisons with Bonferroni correction indicated that the mean score for dislike was significantly lower for attendees of the weight and wellness center (mean = 1.3; $SD = 0.5$) presentation than for attendees at the medicine presentation (mean = 2.8; $SD = 1.5$). Attendees at the medicine presentation (mean = 3.8; $SD = 1.5$) also had significantly higher scores on blame than attendees at the psychiatry (mean = 2.3; $SD = 1$), cancer control (mean = 2.1; $SD = 1.3$), or weight and wellness center (mean = 2; $SD = 1.7$) presentations. None of the other *post hoc* comparisons for blame or dislike showed statistically significant differences between groups.

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Conflict of Interest Disclosure: The authors' conflict of interest disclosures can be found online with this article on www.jneb.org.

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J Nutr Educ Behav. 2017;49:605–606

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<http://dx.doi.org/10.1016/j.jneb.2017.05.337>

WORKSHOP EVALUATION

A total of 52 attendees returned pencil-and-paper evaluation forms. Three 7-point Likert-type items assessed increased awareness of weight stigma. The mean score for *As a result of attending this talk, my awareness of the problem of medical provider weight stigma significantly increased* was 5.8 (SD = 1.5), in which 5 represented slight and 6 represented moderate agreement. The mean score for *I learned something at this talk that will change my practice with patients* was 5.4 (SD = 1.4). The mean score for *I learned something at this talk that will change how or what I teach students/fellows/trainees or colleagues* was 5.8 (SD = 1.2). Participants were asked to list effects of provider stigma on patient health outcomes. Most (75%) listed ≥ 2 effects.

With respect to fear of fatness and dislike of fat patients, participants' responses resembled those of medical students in previous research, although dislike was lower among attendees of a faculty meeting for obesity and weight specialists than among attendees at a general medicine grand rounds. Providers appeared less likely than students to express blame of patients for their obesity, although again, specialty providers showed less explicit blame than general medicine providers. Obesity specialist providers may have more

exposure and expertise in working with larger-bodied patients, which may have a positive impact on their level of explicit weight stigma. Participants generally self-reported benefitting from the workshop. However, actual changes in attitudes or knowledge after the workshop were not assessed, nor was the impact of workshop attendance on medical education, which were limitations of this workshop. Future work should evaluate such changes and may extend this workshop to other audiences such as students, medical residents, or fellows.

NOTES

This project was approved by Dartmouth College's Institutional Review Board and was supported by a grant from the Hitchcock Foundation. This research was also supported by a Health Promotion and Disease Prevention Research Center supported by Cooperative Agreement No. U48DP005018 from the Centers for Disease Control and Prevention.

SUPPLEMENTARY DATA

Supplementary data related to this article can be found online at <http://dx.doi.org/10.1016/j.jneb.2017.05.337>.

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CONFLICT OF INTEREST

The authors have not stated any conflict of interest.