

## Fat phobia among first and fifth year medical students in Tijuana, México



### *Fobia a la grasa entre los estudiantes de primer y quinto año de medicina en Tijuana, México*

Phemal et al.,<sup>1</sup> recently published a study conducted among a national sample of medical students that demonstrated changes in implicit and external bias toward people with obesity. Results suggest that intervention during medical training might be promising in curving this bias. Kushner RF et al.,<sup>2</sup> also reported a short-term decrease in negative stereotyping and a longer-term increase in empathy toward persons who are obese among first year medical students after an encounter with an overweight, standardized patient. A systematic review examining the effect of training for overweight and obesity interventions in undergraduate medical education found only two studies addressing medical student bias toward overweight and obese patients.<sup>3</sup>

Very few or none of the results from these studies have been reported in Latin America. The purpose of this study was to assess fat phobia among first and fifth year medical students in Mexico. A cross-sectional study was conducted among 278 first and fifth year medical students. Classification of weight status was as follows: Underweight, BMI < 18.5; normal weight, BMI 18.5–24.99; overweight, BMI 25–29.99; and obesity BMI  $\geq$  30 kg/m. Fat phobia was assessed with the F-scale, which contains 14 pairs of adjectives that describe people with obesity. Participants responded, on a scale of 1 to 5, which one was the best adjective that described their beliefs about people with obesity. Further detail of the methods is reported elsewhere.<sup>4</sup> Responses were scored according to the criteria established by Bacon et al.<sup>5</sup>

Scores ranged from 1 to 5, with higher scores indicating greater phobia. A score less than 2.5 indicates a positive attitude and score higher than 2.5 indicates a negative attitude. The students' average age was 20.5 year old; 51% were women, 35% were overweight or obese, and 28% had abdominal obesity. The mean F-scale score was 3.51. Only 4% showed neutral or positive attitudes towards obesity. Fifth year medical students were more likely to have fat phobia (OR = 1.88, 95%CI = 1.148–3.077,  $p = 0.012$ ) than the first year students; healthy weight and, or underweight students were also more likely to have fat phobia than OW or obese participants (OR = 1.83, 95%CI = 1.11–3.01,  $p = 0.01$ ); and students with normal waist circumference were more likely to have fat phobia compared to students with AO (OR = 1.84, 95%CI = 1.09–3.11,  $p = 0.02$ ).

The negative attitudes towards obese people observed in this study are consistent with those reported in the USA<sup>1</sup> and by Mexican psychology students.<sup>4</sup>

By their fifth year, medical students should have already studied basic science and clinical training, and they should also have learned that obesity is a multifactorial condition and the emotional implications of stigmatization; therefore, their negative attitudes towards obesity are incongruous with their training.

The results of this study suggest that Mexican medical student in their fifth year have not yet learned the origin and effects of weight bias. Therefore, Mexican medical schools should address weight bias as part of a comprehensive obesity curriculum.

## Editor in charge

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## Contributions of authorship

Lucero Soto participated in the conception of design, implementation, interpretation and writing of the paper. She also approve the final version for its publication

Ana Lilia Armendariz Anguiano, participated in the conception of design, supervision of the implementation, and critical review of the paper. She also approve the final version for its publication

Montserrat Bacardí Gascón, participated in the conception of design of the study, statistical analysis, interpretation and critical review of the paper. She also approve the final version for its publication

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## Conflict of interest

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