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Mitigating Weight Stigma: A Randomized Controlled Trial Addressing Obesity Prejudice through Education among Healthcare Undergraduates

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Abstract: Beyond the challenges presented by obesity itself, a considerable portion of the population encounters prejudice and discriminatory behavior based on their weight and size. This phenomenon, termed weight stigma and weight bias, appears to be perpetuated not only by the broader society but also by healthcare providers, leading to distrust and alienation among individuals with obesity, thereby exacerbating a global issue. Recognizing weight stigma as a violation of human rights and its association with declining health outcomes, there is a pressing need to explore evidence-based strategies for mitigating it within healthcare. This is especially crucial at the early stages of professional development. Methodology: A randomized controlled trial employing a 60 min lecture experimental design was conducted to evaluate changes in conceptions, beliefs, and prejudices toward obesity among healthcare undergraduates (n = 242). Results: Semantic network analysis revealed participants' conceptualization of obesity as a condition closely linked to diet and sedentary habits. Moreover, three out of four healthcare students considered obesity a disease for which the individual is responsible. While individuals with obesity were described as weak, lazy, and having a high affinity for food, these prejudices decreased following the educational intervention. Conclusion: Following an educational intervention based on the multifactorial nature of obesity and weight stigma, it was possible to modify prejudices and conceptions about obesity among future healthcare professionals.

Keywords: obesity; stigma; fat phobia; healthcare professionals; healthcare education

1. Introduction

Obesity remains a global concern despite widespread efforts in prevention and treatment. Over the past five decades, obesity rates have tripled worldwide, reflecting significant investments from governments, public institutions, and the private sector—amounting to 17.8% of health system expenditure or 2.42% of gross domestic product, yielding no substantial impact [1,2]. This panorama only denotes the limited effectiveness of conventional strategies and highlights the need for new perspectives in the approach to this pathology.

Alongside the challenges presented by obesity, a considerable segment of the population deals with weight bias and stigma. Weight bias denotes underlying negative beliefs

and attitudes, while weight stigma encompasses discriminatory behaviors directed towards individuals with obesity based on their weight and body size, whether expressed implicitly or explicitly [3].

Weight stigma and bias have been assessed in multiple populations using qualitative and quantitative tools. Among the main tools used to investigate beliefs and attitudes towards people with obesity are the Stigmatizing Situations Inventory, the Obese Persons Trait Survey, the Experience of Weight-based Discrimination Scale, the Perceived Weight Discrimination Scale, the Anti-Fat Attitudes Questionnaire [4], the Beliefs About Obese Persons Scale, the Fat Phobia Scale [5], and semantic networks [6].

Weight stigma affects approximately 19–42% of the population [7]. Studies have consistently shown that weight stigma is more prevalent among marginalized groups, women, and individuals with higher body mass index (BMI). However, it transcends age and sociocultural backgrounds, impacting people across various demographics [7,8]. Environments, such as social media, television shows and movies, workplaces, schools, families, government policies, and healthcare, have been reported to reinforce and perpetuate weight stigma [9]. Although this issue is widespread, healthcare settings are particularly concerning, given the pivotal role practitioners play in assisting individuals dealing with obesity.

Healthcare practitioners have reported significant levels of weight stigma, often stereotyping individuals with obesity as lazy, gluttonous, and lacking willpower and self-discipline, despite lacking evidence [10]. Moreover, they have expressed beliefs that patients with obesity are less likely to adhere to recommendations and follow treatment plans and are deemed a waste of time [9]. These entrenched attitudes notably influence healthcare providers' practices, resulting in shortened consultation times with individuals with obesity and attributing patients' symptoms primarily to their weight, thereby restricting healthcare treatments and timely diagnoses [9,11].

On the flip side, individuals living with obesity have recounted experiences of discrimination from their healthcare providers in a recent qualitative systematic review [11]. They have shared instances of receiving derogatory remarks, being unfairly accused and shamed, and encountering displays of disgust and repulsion due to their weight status. Some have even noted avoidance of physical examinations by their healthcare providers, perceiving subtle slights through facial expressions and a lack of eye contact, and encountering scare tactics such as the use of terms like "morbidly obese" or exaggerated risks associated with obesity. Equally troubling is the denial of equitable healthcare services, with non-weight-related issues dismissed, collaboration on treatment options discouraged, and care outright denied based on weight alone. Patients have shared frustration over receiving simplistic advice like "eat less, move more" without consideration for their individual circumstances, existing lifestyle habits, weight loss efforts, or external factors. These experiences have left many patients feeling disempowered, vulnerable, frightened, and even abandoned, ultimately alienating them from seeking further engagement with healthcare services.

The lack of progress in addressing this issue within healthcare providers is often attributed to the misguided weight-centered paradigm adopted by professionals, heavily influenced by clinical guidelines. The current approach to combating obesity primarily focuses on individual weight control through calorie reduction and increased physical activity, guided primarily by BMI. This approach places sole responsibility on the individual for their condition, disregarding the multifaceted etiology and contributing factors of obesity, such as age, genetic/epigenetic changes, hormonal/organic alterations, and psychosocial factors [12,13]. This reductionist paradigm has the potential to foster weight bias and discrimination among healthcare professionals, further exacerbating the stigma associated with the condition, a phenomenon observed in other diseases like HIV and AIDS [14,15].

The multifaceted impacts of weight stigma on an individual range from undermining social and human rights to exerting a significant influence on one's health [16]. Psychologically, it has been shown that people who are subjected to weight stigma and internalize it manifest high levels of depression, anxiety, stress, and thoughts of suicide [17]. Socially, iso-

lation is a common response reported in people living with obesity; this behavior is highly associated with previous negative judgments and experiences particularly associated with activities related to eating and physical activity [18]. Surprisingly, the health consequences of weight stigma and bias are being reported more frequently every day and involve both the loss of communication with and trust of healthcare providers, increased absenteeism from healthcare, limited adherence to treatment, and avoidance [19].

Weight stigma and its implications have become increasingly recognized in the realms of obesity prevention, monitoring, and treatment. The findings reported underscore the need for health professionals to reassess their approaches in addressing this issue. A recent review by Talumaa and colleagues [20] has delineated strategies aimed at combating weight bias within healthcare settings and improving the overall quality of care provided. Enhanced education, comprehensive reporting considering multiple causes and controllability of obesity, adopting an inclusive approach to weight, and incorporating mixed methodologies are suggested strategies for healthcare professionals to mitigate weight stigma. Emphasis has been placed on the significance of addressing weight stigma early in healthcare training.

In this sense, the present investigation evaluated the influence of an educational intervention (with a multicausal approach to obesity and pointing out the consequences of weight stigma and bias) on the conceptions, beliefs, and prejudices of obesity in healthcare undergraduates.

2. Materials and Methods

2.1. Participants and Design

A randomized controlled trial was conducted employing a pre–post-intervention experimental design to assess alterations in healthcare undergraduates' perceptions, beliefs, and biases regarding obesity. Initially, 80 healthcare students from each major (medicine, nursing, dietetics, and psychology) at two universities in northwestern Mexico were invited to participate between September and October 2023. The intervention aimed to reshape participants' views on obesity through a 60 min lecture, with one group focusing on individual responsibility for weight (control group), while the second group emphasized the complexity of obesity, its multifaceted nature, weight stigma, and associated consequences (experimental group). Ultimately, the educational intervention was provided to 242 randomly allocated participants.

2.2. Variables Analyzed and Intervention Procedures

The main variables analyzed were conceptions, beliefs, and prejudices about obesity. These variables were analyzed through the Natural Semantic Networks methodology, the Beliefs About Obese Persons (BAOP) scale and the Fat Phobia Scale—short form (F-scale).

Initially, participants were requested to provide informed consent, outlining the research's objectives. Subsequently, questionnaires were provided to assess their conceptions, beliefs, and prejudices about obesity at baseline. Once baseline data were obtained, students were randomly assigned to one of two groups: the control group or experimental group (with the latter being recognized as the group that would be intervened with educationally with weight stigma perspectives).

The educational intervention consisted of a 60 min lecture addressing obesity. A traditional weight-centered lecture was used as the control group, led by a PhD dietitian, which focused on a diverse set of topics related to obesity, including epidemiology, pathogenesis, comorbidities, diet, physical activity, behavior modification, and management, based on a first-year curriculum [21]. In contrast, the experimental group, led by a PhD psychologist, concentrated on body weight regulation and weight stigma, highlighting its consequences in healthcare. This lecture was structured based on recommendations for addressing weight stigma in healthcare [20]. The synthetic content of the lecture is presented in the Appendix A section as Table A1.

After the intervention, the participants completed the previously described evaluation scales for the second time.

2.3. Natural Semantic Network

The semantic network technique is employed to understand how information is stored and connected through conceptual nodes in a network structure by individuals. To achieve satisfactory results, study participants were asked to follow a series of specific steps. First, participants were prompted to write five words that they freely associate when they think about "obesity" (used as a stimulus word); these words could be verbs, adjectives, or other elements that they consider relevant to the word in question. Next, participants were asked to order the five elements considering their importance or strength of association with the stimulus word [22].

Finally, the results were analyzed and reported through the four most common indices for the tool: network breadth (J value), semantic weight (M value), semantic core, and semantic distance (FMG value).

2.4. Belief about Persons Living with Obesity

The assessment of beliefs regarding personal control over obesity was conducted using the BAOP scale, which comprises eight items rated on a six-point scale from −3 (strongly disagree) to +3 (strongly agree). These items include affirmations such as 'Obesity is primarily caused by overeating'. To interpret the results, all items (except for 2 and 7) were multiplied by −1, and then, 24 was added to the final sum. Low BAOP scores suggest a belief that an individual is solely responsible for their obesity or excess weight, while high scores indicate a recognition of multifactorial causes. The internal consistency (Cronbach's alpha) of the BAOP scale indicated an acceptable reliability of 0.64 [23]. The adapted and validated Spanish version of the BAOP scale was previously employed among health professionals (α = 0.60) [24].

2.5. Fat Phobia Scale

The F-scale is designed to assess respondents' perspectives on stereotypical traits associated with individuals with obesity, such as being labeled as 'lazy' or 'slow.' Originating in 1993, the scale underwent revision and shortening in 2001, exhibiting internal consistency with a Cronbach's alpha of 0.87 [25,26]. The scale has been previously administered to a varied range of Mexican healthcare professionals [27,28]. Comprising 14 items, with each presenting a pair of contrasting adjectives characterizing individuals with obesity on a scale of 1 to 5, respondents assess the relevance of these descriptors. To ensure uniform scoring, positive items are inverted (1, 2, 8, 9, 11, 13, and 14). The total score, derived from the average of the 14 items, reflects a positive or neutral attitude with a score of $\leq$2.5 (indicating low fat phobia) and a negative attitude with a score of >2.5 (indicating higher fat phobia) [26].

2.6. Statistics

The results of the semantic networks were reported through four common measures for this methodology: The J value is an indicator of the semantic richness of the network, obtained by adding the total of concepts reported by the participants. The M value (semantic weight) was obtained by multiplying the frequency of appearance for a definer by the assigned hierarchy. The FMG value (semantic distance) was obtained by calculating the proportion of the weight of a word based on the defining word with the highest weight in the network (which represented 100%). The SAM set (central core of the semantic network) was identified with the fifteen defining words that reached the highest M value of the network.

Additionally, the responses of the BAOP and F-scale scales were reported as mean ± SD. To explore pre–post-intervention differences, T-Student analysis was used for paired samples. The value of $p \leq 0.05$ was used to denote significant differences. Data

collection and analysis were carried out with Microsoft Excel and GraphPad Prism (Version 8.3.1. 2019).

2.7. Ethical Considerations

This research was approved by the Bioethics Committee of the Faculty of Medicine and Psychology of the Autonomous University of Baja California after complying with the provisions of the Regulations of the General Health Law on Health Research. Ethical approval code: D329.

3. Results

3.1. Intervention Design

The general design of the intervention included the participation of 80 students majoring in medicine, nursing, dietetics, and psychology (n = 320). However, although the baseline measurement did achieve the expected goal, the experimental dropout rate after the intervention was 30.4%. Figure 1 provides a general summary of the methodology and criteria determining the final sample size for the study.
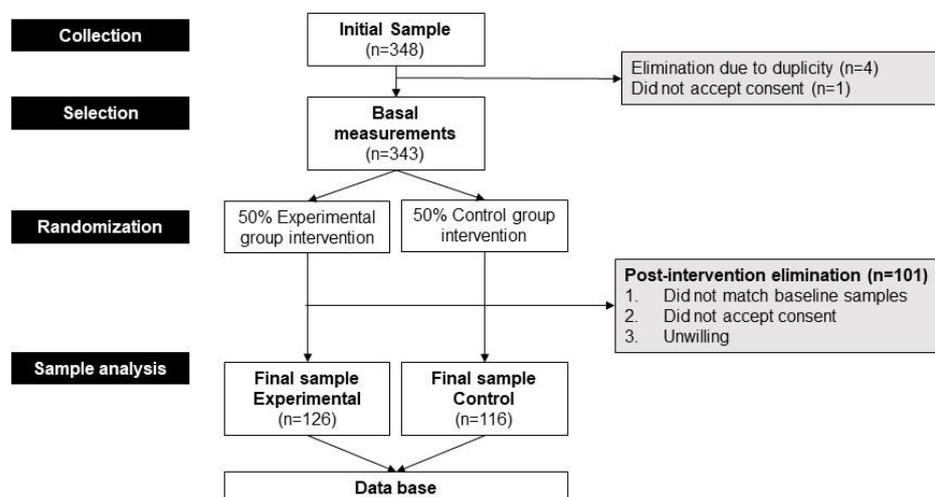

Figure 1. General diagram of sample collection, selection, and analysis.

At the beginning of the intervention, 348 students showed interest in participating and responded to the initial surveys. However, 5 of them were eliminated due to errors in survey capture, duplicate responses, or not consenting to participate, resulting in 343 initial participants.

After obtaining the baseline data, participants were randomly assigned to one of the two 60 min lectures (control or experimental). Once the assigned intervention was applied, the evaluated tools were collected again.

3.2. Participant Characteristics

Student recruitment was made through an open invitation to all levels of healthcare educational programs. The percentage distribution of the sample revealed that three out of four participants were women, and the smallest study group corresponded to the areas of psychology, followed by medicine, nursing and dietetics (Table 1). Most of the analyzed population belonged to the fifth semester of their major; however, there was a very homogeneous distribution of participants from basic to intermediate–advanced levels. The age range of the analyzed population was between 18 and 54 years.

3.3. Beliefs and Conceptions of Future Health Professionals towards People Living with Obesity

Cognitive psychology emphasizes that memory plays an important role in an individual's behavior, as it is determined by the information deposits available to that individual. Thus, to analyze the beliefs and conceptions of obesity, it was necessary to explore the

information stored through previous experiences; this analysis was generated using the semantic network methodology.

Table 1. Characteristics of the analyzed population (n = 242).

Variable		Frequency (%)
Sex	Feminine	71.9%
	Masculine	28.1%
Educational program	Dietetics	28.1%
	Nursing	26.9%
	Medicine	26.5%
	Psychology	18.6%
	One	32.6%
Semesters attended	Three	28.1%
	Five	39.3%
Age range *		18–54

* Reported in years.

It is necessary to mention that, given the diversity of synonyms used by the students to define the word 'stimulus', a 'normalization' process was necessary. This was achieved by integrating the synonyms or plurals (e.g., disease–illnesses) into the same term without modifying the syntactic meaning of the selected word.

The components that healthcare students use to construct their concept of obesity are presented in Table 2.

Table 2. Perceptions about obesity by healthcare students.

Premeasurements				Post Educational Intervention					
				Control (n = 116)			Experimental (n = 126)		
Network Breadth = 189				Network Breadth = 138			Network Breadth = 117		
Appearance	Concepts	M Value	FMG Value	Concepts	M Value	FMG Value	Concepts	M Value	FMG Value
1	Disease	746	100.0	Disease	396	100	Disease	383	100.0
2	Fat	524	70.2	Fat	237	59.8	**Stigma**	**269**	**70.2**
3	Food	480	64.3	Sedentary	200	50.5	Fat	265	69.2
4	Sedentary	422	56.6	Diet	187	47.2	Diet	208	54.3
5	Overweight	406	54.4	Food	181	45.7	Sedentary	194	50.7
6	Weight	401	53.8	Problem	160	40.4	Food	188	49.1
7	Fatty	384	51.5	Habits	152	38.4	Weight	188	49.1
8	Diet	353	47.3	Health	148	37.4	Self-esteem	175	45.7
9	Diabetes	257	34.5	Excess	121	30.6	Fatty	172	44.9
10	Big	256	34.3	Weight	109	27.5	Health	144	37.6
11	Health	237	31.8	Fatty	107	27.0	Overweight	135	35.2
12	Problem	235	31.5	Self-esteem	102	25.8	Habits	128	33.4
13	Habits	224	30.0	Overweight	99	25.0	Problem	119	31.1
14	Excess	213	28.6	**Junk food**	**76**	**19.2**	Big	110	28.7
15	Self-esteem	180	24.1	Diabetes	66	16.7	Excess	108	28.2

Highlighted words indicate descriptors not reported in the initial core.

An initial semantic network of 189 concepts that students associated with obesity was recorded. The expressions with the greatest semantic weight (disease and fat) showed a clear association with the main definitions offered by international health institutions. Additionally, expressions such as food and sedentary appeared in the third and fourth position as strong influences on obesity. Taken together, these expressions reinforce the conception of people living with obesity as sick individuals associated with increased adipose reserves who are inactive and consume excessive amounts of food.

In accordance with the above, the BAOP scale revealed that, without prior knowledge of the cause, 66% of future healthcare professionals agreed that obesity is caused by excessive food intake, while 68% attributed it to a lack of physical activity (Table 3). This

phenomenon of beliefs and prejudices without etiological knowledge makes the individual responsible for his or her condition because students associated obesity strictly with the individual's poor habits (three out of four students).

Table 3. Beliefs about obese persons among student health professionals.

Items	Control (n = 116) Mean ± SD			Experimental (n = 126) Mean ± SD		
	Pre	Post	*p* Value	Pre	Post	*p* Value
1. Obesity often occurs when eating is used as a form of compensation for lack of love or attention.	0.1 ± 1.8	0.0 ± 1.8	0.23654	0.2 ± 1.9	−0.6 ± 1.7	**0.00008**
2. In many cases, obesity is the result of a biological disorder.	0.8 ± 1.8	0.9 ± 1.7	0.76181	0.9 ± 1.6	0.9 ± 1.6	0.58211
3. Obesity is usually caused by overeating.	0.6 ± 1.7	0.7 ± 1.6	0.62203	0.6 ± 1.7	0.0 ± 1.7	**0.00142**
4. Most obese people cause their problem by not getting enough exercise.	0.7 ± 1.9	0.8 ± 1.7	0.62546	0.9 ± 1.7	0.0 ± 1.6	**0.00000**
5. Most obese people eat more than nonobese people.	−0.1 ± 1.8	0.3 ± 1.8	0.97613	0.2 ± 1.9	−0.5 ± 1.8	**0.00039**
6. Most obese people have poor eating habits that lead to their obesity.	1.2 ± 1.8	1.1 ± 1.7	0.19636	1.2 ± 1.6	0.5 ± 1.6	**0.00031**
7. Obesity is rarely caused by a lack of willpower.	−0.1 ± 1.9	0.2 ± 1.7	0.28621	−0.3 ± 1.7	−0.5 ± 1.6	0.08110
8. People can be addicted to food, just as others are addicted to drugs, and these people usually become obese.	1.5 ± 1.7	1.3 ± 1.7	0.18174	1.5 ± 1.6	0.9 ± 1.7	**0.00018**

The BAOP scale ranges from −3 (completely disagree) to +3 (completely agree), with higher scores indicating stronger agreement with the statement. Statistical significance values denote differences between groups using Student's *t*-test for paired samples.

In addition to the stated conceptions and beliefs, the F-scale revealed that undergraduate healthcare students perceived people living with obesity as individuals who are slow and insecure and have low self-esteem (Figure 2).

3.4. Post-Intervention Beliefs, Conceptions, and Prejudices towards People Living with Obesity

The effectiveness of the intervention on the prejudices and perspectives of future health professionals are shown in Tables 2 and 3, as well as Figure 2.

In a brief 60 min lecture, new concepts related to the understanding of obesity were introduced. While traditional lectures on obesity often emphasize notions like "junk food", discussing weight stigma and its implications offers a perspective that recognizes the shared responsibility of social factors. Integrating terms such as "stigma", which have been previously overlooked (now placed as the second expression), enriches this perspective.

Following the intervention, the experimental group exhibited a significant difference, registering lower scores across all items in the BAOP scale, apart from those related to multifactorial causes, such as biological disorders and willpower, items 2 and 7 (Table 3). This suggests a discernible alteration in beliefs among healthcare students after the 60 min lecture on weight stigma.

Moreover, the experimental group expanded its comprehension of obesity beyond the conventional association with overeating and sedentary behavior. Instead, it recognized the complexity and multifaceted nature of its origins. This approach also avoided stereotypical depictions of obesity, as previously reported, refraining from labeling individuals as lazy, slow, or excessively fond of food. This avoidance likely stems from a recognition of the diverse factors contributing to its development.
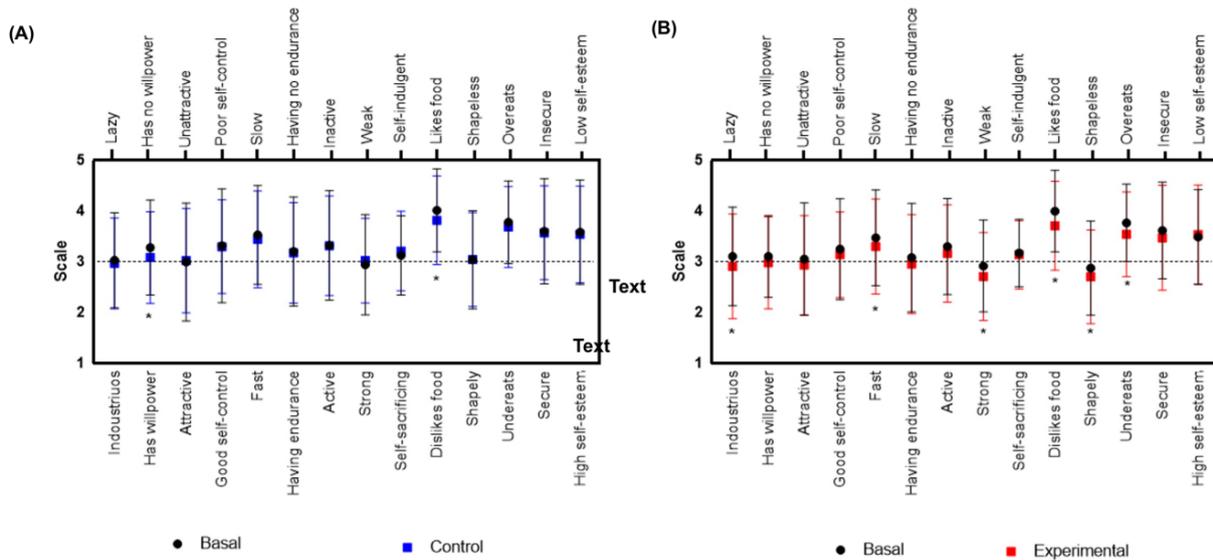
Figure 2. Distribution of F-scale scores according to a cut-off indicating neutral/positive or negative attitudes towards obesity after lecture. (**A**) Control group. (**B**) Experimental group. * represents statistical significance $p \leq 0.05$.

4. Discussion

It is intriguing how the students' conceptions align with the definition of the World Health Organization [29], where obesity is defined as *an abnormal or excessive accumulation of fat that can be harmful to health*—with this last expression being synthesized into the idea of *disease* (the main descriptor reported here). This phenomenon only explains that the conceptions of this condition are highly influenced by traditional doctrines established by national and international organizations. These results are consistent not only among undergraduate students but also with health professionals from other nations who define and associate obesity as a disease in which sedentary lifestyle and diet hold high semantic value [6,30].

In this sense, it is imperative to improve the set of beliefs held by health professionals to give meaning to unbiased and quality healthcare services. Fundamentally, pathologizing obesity can reinforce complex associations between its determinants and modify not only weight-related beliefs, weight stigma, and discrimination, but also its approach. As an example, a study involving 365 health professionals in Australia showed that endorsing weight as a heuristic for health was associated with greater weight stigma and differential treatment recommendations, focusing more on the patient's weight and less on the initial reason for consultation [31].

Currently, evidence indicates that health professionals hold patients living with obesity responsible for their weight and offer unsolicited and inappropriate advice on weight control. These actions can be perceived by the patient as negative attitudes, contributing to the individual's discomfort by evoking responses of rejection of communication, distrust, stress, poor self-care, and ultimately, poor adherence to recommendations [32].

It is important to mention that, in the initial phase of the study, a marked trend was observed towards negative adjectives associated with phobias and attitudes towards obesity. These included traditional conceptions that linked obesity to a person who is overeating, lazy, and unattractive. However, integrating the lecture on weight stigma, a change was observed in the participants, who began associating obesity with more positive adjectives, such as greater willpower, hardworking, and confident. This event is relevant because, although the results were not statistically significant, they might suggest that modifying the approach to obesity could potentially lead to substantial changes in future healthcare professionals.

These small changes may have substantial effects on healthcare that go beyond creating truly competent health professionals; the impact even includes components of psychological well-being in patients. The article published by Pearl and Puhl [17] analyzed 74 studies where weight bias was related to greater psychological alterations in patients. Depression, anxiety, self-esteem, eating disorders, psychological distress, and overall quality of life are, to some extent, related to harmful attitudes ingrained in health professionals. Negative stereotypes, including the unfounded opinions stated here, only contribute to a cycle of care where the root cause of the problem is not addressed and the disease is prosecuted and perpetuated.

Overall, the panorama analyzed in this research is alarming, as undergraduate healthcare students will later become health professionals not necessarily trained to address obesity from a holistic perspective. The beliefs and prejudices expressed by healthcare students do not distinguish them from the rest of the population. The weight-centric ideas they have internalized strengthen the need to focus their weight-based recommendations.

The significance of the results presented here is pertinent to the enhancement of healthcare provision. Continuous education for healthcare professionals that embraces non-weight-centric perspectives and adopts empathetic approaches not only promotes respect and trust between the individual and the healthcare provider but also establishes an effective communication pathway to reduce absenteeism in weight-related medical consultations, enhance treatment adherence, and improve the overall health of individuals living with obesity.

5. Study Limitations

The study's main limitations are the lack of knowledge of the permanence of the changes reported in this research because the population was not followed up on over time. In turn, the influence of multiple sessions on students' future conceptions, beliefs, and prejudices is unknown. These key points are presented as an area of opportunity for future research.

6. Conclusions

The present research demonstrated that an educational intervention based on body weight regulation and weight stigma can modify students' prejudices or beliefs about obesity. Considering the points mentioned above, health professionals are encouraged to center their efforts on evidence-based practices and collaborative decision-making with patients. Goal-setting processes should consider more precise methods for evaluating body composition while prioritizing the patient's interests regarding body-related decisions. This invitation envisions a future in healthcare free from historically unfounded centrist biases. This call is not about 'normalizing obesity'; it underscores the reality that 'targeting obesity' has never been the solution.

Conflicts of Interest: The authors declare no conflicts of interest.

Appendix A

Table A1. Topics addressed in each of the intervention groups.

Control Group	Experimental Group
Participants in this group underwent a 60 min lecture centered on the traditional etiology and consequences of obesity. The content of this lecture was drawn from the standard obesity curriculum, encompassing several crucial topics, which are outlined below:	Participants in this group received a 60 min lecture focusing on the ecological model of obesity and its stigmatizing consequences. The educational session aimed to equip future healthcare professionals with the knowledge and strategies necessary to cultivate a weight-inclusive healthcare environment. The lesson provided a succinct overview of the subject and presented key strategies to mitigate weight stigma. The following topics were addressed during the session:

1. Introduction to Obesity: A comprehensive overview covering the definition, prevalence, and global impact of obesity.
2. Energy Balance and Weight Management: Exploration of the concept of energy balance, delving into the interplay of energy intake and expenditure and its connection to weight gain and loss.
3. Behavioral Determinants of Obesity: Examination of various behavioral factors contributing to weight gain and obesity, including eating habits, physical activity levels, sedentary behaviors, and sleep patterns.
4. Health Consequences of Obesity: Addressing the physical and psychological health ramifications linked to obesity, such as type 2 diabetes, cardiovascular disease, certain cancers, mental disorders, and diminished quality of life.
5. Strategies for the Prevention and Treatment of Obesity: A comprehensive look at approaches to preventing and treating obesity, covering lifestyle modifications, medical interventions, and multidisciplinary care.

1. Body Weight Regulation: Exploration of factors influencing body weight, including the intricate interplay between genetic and socioenvironmental determinants in obesity.
2. Introduction to Weight Stigma: Definition of weight stigma and its impact on individuals with obesity, encompassing physical, psychological, and social consequences.
3. Prevalence and Implications of Weight Stigma in Healthcare: Examination of research findings highlighting the presence of weight stigma among healthcare professionals and its effects on patient care and outcomes.
4. Understanding Personal Biases: Exploration of implicit biases and personal beliefs that healthcare professionals may hold regarding weight and obesity.
5. Effects of Weight Stigma on Patient Care: Analysis of how weight stigma can impact the quality of care provided to patients with obesity, including diagnostic shadowing, treatment disparities, and negative communication.
6. Language and Terminology: Discussion on the importance of using person-first language, avoiding derogatory terms, and promoting respectful and inclusive communication.
7. Promote an Inclusive Weight Approach: Introduction to the concept of a weight-inclusive model of care, focusing on healthy behaviors and overall wellness rather than weight as the primary outcome.
8. Recognize and Challenge Stereotypes: Encouragement for future healthcare professionals to identify and challenge common stereotypes associated with obesity, such as assumptions about laziness, lack of willpower, or personal responsibility.
9. Communication Skills for Integrative Care: Practical tips and techniques for effective communication with patients with obesity, including active listening, nonverbal cues, and validation of experiences.
10. Resources and Continuing Education: Recommendations for resources, training programs, and professional organizations that can assist healthcare professionals in reducing weight stigma and enhancing patient care.

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