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PAPER

Weighing the care: patients' perceptions of physician care as a function of gender and weight

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OBJECTIVE: To examine patients' reports of the level of care that they receive from their physicians, and determine the influence of weight and gender in these reports.
DESIGN: In a four-cell design, male and female, overweight and nonoverweight patients reported on the medical care that they received immediately following their appointment.
SUBJECTS: A total of 125 patients affiliated to one of four large clinics in the Texas Medical Center of Houston completed this study.
MEASUREMENTS: Patients reported the positivity of the care that they received, the time that physicians spent with them, and the extent to which physicians discussed weight-related topics with them.
RESULTS: Overweight patients, as a whole, did not report poorer levels of care than did their thinner counterparts. Rather, the weight and gender of the patient significantly interacted across each of the measures to reveal some divergence between male and female patients' weight-based experiences. When significant differences in reported perceptions emerged, overweight men reported deficits in care relative to average weight men (eg, physicians spent less time), whereas overweight women reported enhanced care relative to average weight women (eg, better levels of care, more topics discussed).
CONCLUSION: Based on patients' reports, this study reveals that physician care may not be as influenced by patient weight as previously thought. Yet, there is a discernable impact of patients' weight on physician behavior. Overweight men, who may comprise the most at-risk population, indicate that less time is spent with them than that indicated by average weight men. While this may be alarming, overweight women do not report reductions in care. We propose that not only might physicians respond to them differently, but overweight female patients may also be engaging in denial strategies or compensatory behaviors that assure them of quality care.
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Keywords: overweight; patient attitudes; physicians; prejudice; stigma

Introduction

As the prevalence of obesity in American society continues to increase and the costs associated with the disease reach staggering proportions, research attention that focuses on obese individuals' perspectives may be helpful in more fully understanding the weight epidemic.[1] One area that has received relatively little research attention focuses on the quality of health care that heavy patients report receiving from their physicians. One might assume that physicians deliver a particularly strong dose of compassion, care, and responsiveness to their overweight patients, who suffer on medical dimensions,[2,3] social dimensions,[4–6] and overall well-being.[7–9] Similarly, physicians might be anticipated to view favorably and give quality treatment to overweight patients because, unlike the general population who tend to believe that weight is a completely controllable condition,[10] physicians have access to mounting research showing genetic and uncontrollable aspects of body weight.[11,12] Contrary to these assumptions, however, research shows that physicians also hold negative attitudes and discriminatory intentions toward those who are overweight.[13,14]

Although most of these studies are more than 15 y old, they converge in showing that physicians hold overweight individuals responsible for their condition and attribute their failures at weight loss to gluttony and a general lack of

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cooperation and discipline.[15–18] Compared with individuals in the general population, a recent study revealed that physicians and other health professionals were somewhat less likely to show overt forms of antifat bias toward heavy patients; but that they were equally likely to exhibit cognitive biases and deep-rooted stereotypes against heavy individuals.[19] Such biases may be strengthened in physicians during their training, as they realize that heavier people often require more space, more effort increased recovery times, and nonstandardized sizes of equipment.[20,21] Indeed, residents have reported that their overweight patients are less likable and more emotional than their nonoverweight patients.[22] Similarly, medical students have indicated that overweight patients are not as likely to benefit from medical help, are depressed and nervous, and would benefit from seeing a psychiatrist or a clinical psychologist.[23]

While some physicians say that they doubt their negative beliefs translate into actions,[24] scores of studies demonstrate that attitudes and intentions often predict behaviors.[25,26] Physicians' attitudes may adversely affect the physician–patient relationship in a number of meaningful ways. For instance, any increases in hostility and decreases in positive affect may result in physician/patient interaction styles that are lacking in warmth and comfort. Physicians might be more likely to rush the medical appointment, misdiagnose a condition, or terminate the interaction before adequately treating the overweight patient. Whether consciously or subconsciously, physicians may become focused on recognizing obesity as a catch-all answer to medical problems, such that they may neglect or overlook other potentially debilitating conditions.

Physicians' negative attitudes may further set up a self-fulfilling prophecy dynamic.[27] If physicians treat overweight patients less favorably, overweight patients may learn or continue to expect lower levels of care for themselves. If physicians' hopes for the patient are not favorable, if affectivity is not positive, and if patients anticipate diminished levels of care, overweight individuals may actually encourage and reinforce physicians' prejudices and biased responses. Furthermore, overweight people may delay or avoid altogether seeking the medical attention they need.[4,28] Past research confirms that if stigmatized individuals sense that they are going to be treated negatively, they avoid interactions. It is possible that such avoidance behavior may be a major contributing factor in elevating the mortality rate of overweight individuals.[29]

Physicians not only perceive patients differently, they also indicate their intentions to discriminate against them.[30] When asked to make medical recommendation, physicians indicated that they would spend approximately 9 min fewer with the heavier than thinner patients, and that they intended to display more negative behaviors toward heavier patients (ie, having less desire to help, being less patient, displaying less positivity). Furthermore, fewer than 50% of physicians recommended responses that seem to be most relevant for heavier individuals (eg, weight loss, nutrition counseling, exercise counseling), recommendations that some health experts believe are the critical foundation for obesity health care.[31,32]

Given that obesity is on the rise, with recent surveys suggesting that an astonishing 60% of men and 50% of women are overweight,[33,34] a better understanding of the treatment that obese patients receive is warranted. While it is clear that obese patients are treated differently, it is less clear if they are aware of the differential treatment that they may be receiving. Thus, the goal of the current study is to look at the other side of the interaction and examine patients' responses concerning the quality of care they receive following actual office visits.

Assessing the perspective of patients is important for a number of reasons. First, using patient perceptions to evaluate the health-care system is becoming common and can be sensitive to discerning differences and deficits in the quality of care that patients receive.[35–37] Second, this research identifies how the factors of weight as well as gender influence patients' ability to detect physician bias. Across a number of studies, weight has been identified as an area of greater concern for female than male adolescents, college students, and adults.[38] Such findings suggest that society tends to overemphasize and use weight as a merit-based cue for women more than men,[39,40] although there are some moderators of this effect (eg, race of the evaluator, antifat attitudes).[41–44] It does not seem to be the case, however, that men are unaffected,[45] but they are often omitted from research studies.[46,47] Thus, we include men in our investigation. Third and finally, this research adds to a growing body of discrimination findings[48–50] that are beginning to include the perspective of the stigmatized target, an omission of many past discrimination studies.

In the current study, we predict that overweight patients will report lower quality of care than will nonoverweight patients. We do not make specific predictions regarding gender differences in the way the treatment will be perceived.

Methods

Participants

A total of 66 nonoverweight patients (41 women, 25 men) and 59 overweight patients (44 women, 15 men) volunteered without compensation to complete questionnaires, a 65% response rate. Four large clinics in the Texas Medical Center, Houston, TX were included as study sites. All participants were randomly sampled and were18 years of age and older.

Materials

Patients completed a questionnaire that was comprised of four different portions. First, patients were asked to respond to 11 items that assessed the quality of the physician and of the care received. These items were adapted from previous

research conducted on patient perceptions of physicians and discriminatory behaviors of physicians.[30,51] Using these items, patients rated physicians on their (a) responsiveness, (b) patience, (c) professionalism, (d) trustworthiness, (e) listening skills, (f) communication skills, and (g) overall adeptness. Patients also indicated the extent to which (h) they believed the physician liked them, (i) the physician made them feel better, (j) they intended to follow the physician's advice, and (k) they felt comfortable with the physician. Participants responded to all of these questions on nine-point scales anchored by (1) 'Not at all,' (5) 'Somewhat,' and (9) 'Extremely.' A factor analysis on the 11 items revealed one factor accounting for 61% of the variance (eigenvalue = 6.70). Thus, all 11 items were averaged together to create a Total Positivity Composite (Cronbach alpha = 0.92).

Second, patients were asked to indicate the length of time that the physician spent with them. Consistent with past research,[30] this was a measure of behavioral intentions and is particularly useful in looking at the extent to which individuals choose to interact with stigmatized individuals. Third, in an attempt to assess actual differences in medical behaviors, patients were asked to indicate whether the physician discussed five medical issues linked with obesity or obesity-related stereotypes. These items include recommendations involving: (a) nutrition counseling, (b) stress, (c) weight loss, (d) depression, and (e) exercise. For each item, patients responded by checking a 'Yes' or 'No' box. Fourth, patients were asked to indicate their height, weight, gender, and age. Patients' weight was categorized as overweight or nonoverweight according to national criteria.[52] Patients also indicated their physician's specialty, gender, and estimated age. While these latter three variables did alert us to the fact that there was not much overlap in the physicians that the patients saw, none of these variables showed significant results and will not be discussed further. Finally, patients indicated the reason for their physician appointment on an open-ended item.

Procedure

After the conclusion of the medical appointment, a female experimenter approached patients individually and asked if they would be willing to complete a 10-min questionnaire that assessed the level of care they had just received in their appointments. If they agreed, the experimenter distributed a small packet that contained a cover letter describing the study. After giving their informed consent, participants completed the questionnaire, and placed it in a nearby box labeled 'Completed Questionnaires.'

Results

The anticipated Weight main effect on the Positivity of Care composite was not significant, $F(1,124) = 0.02$, $P = 0.88$, but a Gender × Weight interaction was significant, $F(1,124) = 5.70$, $P = 0.02$. As shown in Figure 1, overweight men ($M = 7.60$, s.d. = 1.52) did not perceive their care to be significantly worse than did nonoverweight men ($M = 8.07$, s.d. = 0.97), $t(38) = 0.24$, $P = 0.47$. However, overweight women ($M = 8.47$, s.d. = 0.60) perceived their care to be significantly more positive than did non-overweight women ($M = 7.94$, s.d. = 1.32), $t(83) = 2.43$, $P = 0.02$. The Gender main effect was not statistically significant, $F(1,124) = 3.04$, $P = 0.08$.

In examining the total time that patients reported the physicians spent with them (see Figure 2), no Weight main effect emerged, $F(1,117) = 0.97$, $P = 0.33$. However, a significant Gender × Weight interaction was again found on this measure, $F(1,117) = 8.56$, $P = 0.004$. Female overweight patients did not report that their physicians spent significantly longer time with them ($M = 21.75$, s.d. = 11.98) than did female nonoverweight patients ($M = 17.90$, s.d. = 7.23), $t(77) = 1.72$, $P = 0.09$. However, male overweight patients reported that physicians spent significantly shorter time with them ($M = 13.67$, s.d. = 6.94) than the time reported by male nonoverweight patients ($M = 21.46$, s.d. = 11.58), $t(37) = 2.35$, $P = 0.02$. The Gender main effect was not significant, $F(1,117) = 1.29$, $P = 0.26$. To examine whether the reason that patients were seeing their physicians influenced the findings, independent coders categorized reasons into three levels of severity: (1) basic checkup or follow-up, (2) minor condition (eg, cold, labwork, flu), and (3) major condition (eg, heart, pancreas, lungs). While physicians did spend longer with those patients who had more serious conditions, the reason did not interact with Gender or Weight. Moreover, the reasons for visits were almost equivalently distributed among the four conditions.

An analysis also was conducted on the number of weight-related topics physicians discussed with the patients. First, we simply added the number of items that patients reported that physicians discussed with them. Again, the data reflected the previous Gender × Weight interaction pattern found, $F(1,115) = 22.00$, $P = 0.04$. Compared to their non-overweight counterparts, female overweight patients reported that their physicians talked with them on the weight-related topics more ($M = 2.40$, s.d. = 1.84) than did nonoverweight female patients ($M = 1.13$, s.d. = 1.32), $t(78) = 3.53$, $P = 0.001$. Male patients, however, did not report differences in the number of issues addressed as a function of weight (overweight: $M = 1.76$, s.d. = 1.58; *vs* nonoverweight: $M = 1.13$, s.d. = 1.60), $t(34) = 1.17$, $P = 0.25$.

The topics that physicians reportedly discussed with their patients were analyzed further by conducting a series of χ^2. As shown in Table 1, this pattern reveals that physicians were more likely to talk to overweight women about issues than to overweight men, and this pattern was statistically significant for discussions of nutrition and stress. It is important to note, however, that even for overweight women, less than half of the physicians reportedly talked to them about these stereotypical or actual weight-related concerns. Significant

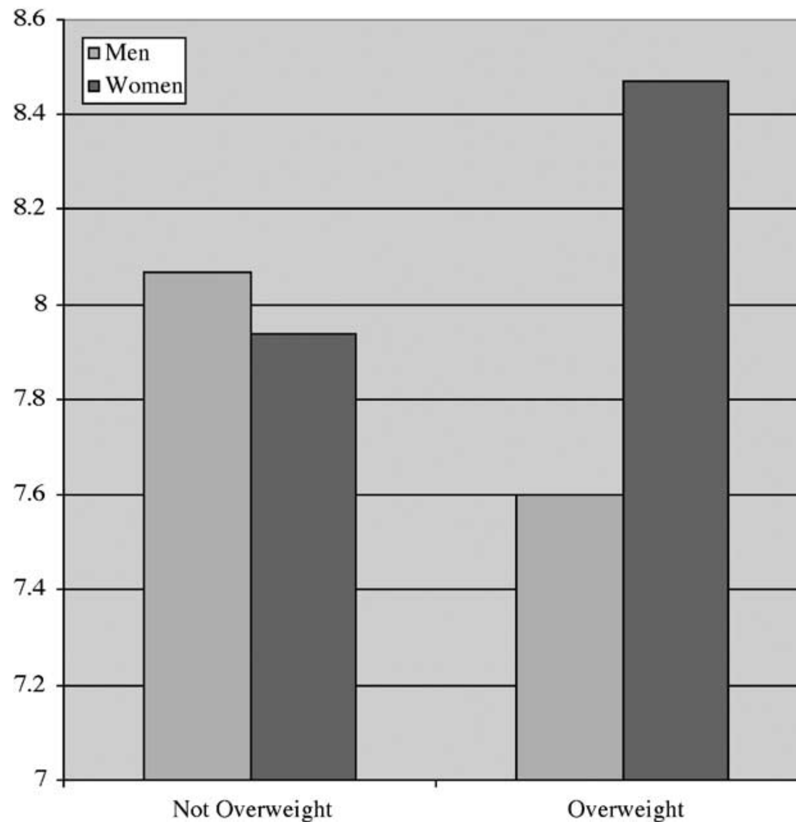

Figure 1 Patients' reports of the positivity of care.

differences did not emerge on the number of issues discussed by nonoverweight male and female patients; rather, they both reported low rates.

Discussion

The pattern of results do not support the notion that overweight patients as a whole perceive their quality of care to be lower than do nonoverweight patients. Rather, the pattern is more complex. Overweight patients are able to detect some degree of differential care compared to that detected by nonoverweight patients, but these detections differ by gender and the particular measures being assessed. The general pattern suggests that if men do detect differential care on the basis of weight, heavier men detect deficits in care. For instance, overweight men, compared to their thinner male counterparts, report that physicians spend less time with them, but male patients report similar levels of positivity of care, regardless of their weight. For women, the general pattern is different. If women detect differences on the basis of weight, heavier women detect improved care. For instance, the weight of female patients did not influence the time that they recalled their physicians spending with them. However, female overweight patients perceive the care that they received to be better than the care perceived by both female nonoverweight patients and all male patients. This unanticipated pattern is particularly noteworthy given that in past research,[30] physicians themselves report discriminating against both overweight male and female patients. Why might this pattern of results emerge?

The current results suggest one clear possibility—physicians may actually express little overt negativity toward patients. This may reflect the fact that physicians' biases toward obese patients are less extreme than previously thought and/or that, to some extent, physicians can modulate the overt feelings and behaviors they express toward stigmatized patients.[19,51] The gender differences found in the current results, however, require a more complex explanation. Mounting evidence suggests that women are particularly prone to the ill effects of obesity stigmatization. If, indeed, women experience this stigmatization more than do men, they may find themselves in a much more uncomfortable state as they sit in the waiting room and prepare to see the physician. In fact, many women conveyed to us their personal dislike in knowing that the scale will greet them just beyond the waiting room, that their physicians will likely be touching and physically examining some portion of their bodies, and that their stigmatized status will in some way be the focus of the appointment. Given this potentially stressful scenario, women, particularly those who are overweight, may experience

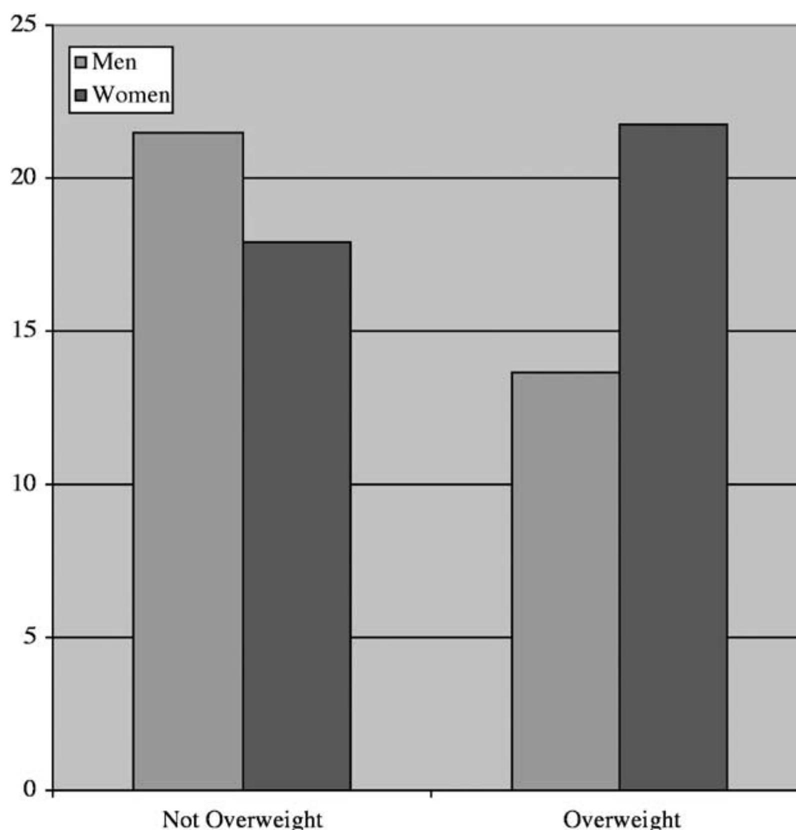

Figure 2 Patients' reports of the physicians' time spent.

Table 1 Topics that overweight patients reported their physicians discussed

	Overweight females	*Overweight males*	χ^2 *Results*
Nutrition counseling	19/42	2/15	$\chi^2=4.84$, $P=0.03$
Stress	21/43	3/15	$\chi^2=3.81$, $P=0.05$
Weight loss	23/43	4/15	$\chi^2=3.22$, $P=0.07$
Depression	8/38	7/22	$\chi^2=0.86$, $P=0.375$
Exercise	15/40	8/21	$\chi^2=0.002$, $P=0.96$

Note: Differences in the sample size across variables reflect the fact that a few participants did not fill out certain variables.

decreases in state self-esteem prior to the physician's visit.[53] Any favorable or mixed attention that they receive may be gratefully accepted because of potentially lowered expectations and poorer self-regard.[53,54]

Additionally, if they receive negative feedback and less favorable medical treatment, they may blame themselves and not attribute it to deficits in physician care. This rationale is consistent with past research,[55] which suggests that members of some stigmatized groups believe that the discrimination that they receive is justifiable. Furthermore, this has been particularly true in the case of overweight women, who feel that they deserve the substandard feedback they receive.[48,54] Additional research reveals that women and members of other stigmatized individuals may even deny that they are treated differently or face discrimination.[50] To cope even further with potential disadvantage, additional research reveals that overweight individuals who know that they might receive discrimination may actually engage in compensatory behaviors.[49,55] Such a possibility is, again, consistent with the fact that the physicians addressed more weight-related issues with overweight women.

Implications and conclusions

Since the overweight population in American society is increasing rapidly and overweight individuals may be at heightened health risks for some medical conditions, the

results in the current study are important. In particular, overweight male patients report that they are not receiving the same amount of time with physicians as are nonoverweight patients, a type of discrimination that physicians themselves have reported in past research.[30] Specifically, overweight men report receiving approximately eight fewer consultation minutes than their nonoverweight male counterparts report receiving (13 min and 40 s compared with 21 min and 27 s). These differential numbers are important to consider given that male overweight patients pose the greatest physical health risks relative to both smaller men and their entire female comparison group.[56] Given briefer patient–physician interactions, it is not surprising that physicians did not discuss as many weight-related issues with them, but it is troubling in the light of recent guidelines proposing that such discussions are an essential building block of good medical care for overweight patients.[32,33]

Future research is needed to more fully understand heavy female patients' perspectives and experiences. It is possible that a more in-depth, narrative approach may be necessary to understand if and to what extent women receive and/or deny the associated discrimination. Future research might increase the sample size of both the patient population as well as the physician population. This latter improvement would allow researchers to examine how the gender of the physician might further influence these patterns. In the current research, the vast majority of the physicians were male, and it is possible that female physicians may be attuned and react differentially to the weight of their patients.

From a public health perspective, the findings have a number of consequences. First, based on the perceptions that patients reported in the current study, the results suggest that physicians may not be discriminating against obese patients in consistent, severe ways. Second, however, physicians should note that patients are able to detect some degree of fluctuations in the delivery of care services that they receive. Thus, physicians might exercise special care in interactions with members of stigmatized groups to provide consistently optimal care to patients regardless of their size. Third, patients who are aware of the current results can be alerted to potential differences that exist in the physician care that they receive, so that they can protect themselves against such biases through more formal, external channels. In conclusion, we hope future research will continue to identify the perspectives of obese patients in an attempt to better understand patients' perceptions of physician care and the potential strategies that women may use.

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