BRIEF REPORT

Physician Respect for Patients with Obesity

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INTRODUCTION: Obesity stigma is common in our society, and a general stigma towards obesity has also been documented in physicians. We hypothesized that physician respect for patients would be lower in patients with higher body mass index (BMI).

METHODS: We analyzed data from the baseline visit of 40 physicians and 238 patients enrolled in a randomized controlled trial of patient-physician communication. The independent variable was BMI, and the outcome was physician respect for the patient. We performed Poisson regression analyses with robust variance estimates, accounting for clustering of patients within physicians, to examine the association between BMI and physician ratings of respect for particular patients.

RESULTS: The mean (SD) BMI of the patients was 32.9 (8.1) kg/m^2. Physicians had low respect for 39% of the participants. Higher BMI was significantly and negatively associated with respect [prevalence ratio (PrR) 0.83, 95% CI: 0.73–0.95; p=0.006; per 10 kg/m^2 increase in BMI]. BMI remained significantly associated with respect after adjustment for patient age and gender (PrR 0.86, 95%CI: 0.74–1.00; p=0.049).

CONCLUSION: We found that higher patient BMI was associated with lower physician respect. Further research is needed to understand if lower physician respect for patients with higher BMI adversely affects the quality of care.

KEY WORDS: obesity stigma; physician respect and body mass index.
J Gen Intern Med 24(11):1236–9
DOI: 10.1007/s11606-009-1104-8

Stigma against persons with obesity is pervasive in our society.[1] Persons with obesity earn less money, face discrimination from individuals and institutions, and experience insults on a frequent basis.[1] Obesity stigma is harmful and has been associated with low self-esteem, depression and eating disorders.[2,3] Despite the increasing commonness of obesity, obesity stigma is increasing even as other disparities are decreasing or have remained unchanged.[4] Persons with the highest levels of obesity are more likely to experience weight-related stigma.[4]

Negative bias towards persons with obesity has been well documented in health-care providers, including physicians, for the last 40 years.[5–7] In a survey of physicians, obesity was identified as a characteristic that elicited negative feelings,[6] and other studies have found that physicians associate negative terms, such as ignorant, lazy and incompetent, with obesity.[7] In addition, physicians have reported ambivalence towards the treatment of obesity.[7–8] However, none of these studies have documented physician attitudes towards specific patients with obesity. Several studies have documented health-care avoidance in patients with obesity, and in some studies, participants cited individual and institutional biases as the reason for avoidance.[9–12] There is also evidence that obesity is associated with decreased preventive services, especially cancer screenings.[13–15] Few studies have studied physicians' attitudes and beliefs towards specific patients, especially with regards to the patient's weight.

Respect for all patients, which involves positive regard, is a core component of professionalism in medicine.[16] Physicians who have more respectful attitudes towards patients share more medical information and have greater positive affect during encounters compared to patients for whom they have less respect.[17] In a study of obese females, participants indicated a desire for a respectful relationship with their physician and would avoid health-care visits if such a relationship did not exist.[9] While a general bias towards obesity has been documented in the literature, little is known about the respect a physician has for a patient with obesity and how that may impact the patient's care. In this study, we examine the relationship between physician respect and patient obesity. We hypothesized that physicians would have low respect for patients as body mass index (BMI) increased.

METHODS

Study Design and Setting

Data for this study were obtained from the baseline visit of the Patient-Physician Partnership Study, a randomized controlled trial of physician and provider interventions to improve patient-physician communication.[18] Forty physicians and 238 of their patients with height, weight and measure of physician respect available were included in this analysis. Physicians were recruited from 14 urban community practices

Received March 16, 2009
Revised July 28, 2009
Accepted August 18, 2009
Published online September 18, 2009

in the Baltimore, MD, area from January 2002–January 2003. Patients of enrolled physicians, aged >18 years and English-speaking, with hypertension were identified from physician rosters and enrolled September 2003-August 2005.

Measures

Physicians and patients completed questionnaires about the visit, their attitudes and their perceptions of one another upon completion of the encounter. The independent variable of interest was patient BMI, calculated from measured height and weight. The primary outcome was physician-reported respect. Physicians were asked to rank their level of respect for the patient on a 5-point Likert scale after the patient visit. Two categories were created [high respect = much more or more than the average patient (Likert score 4–5); low respect = average or less than the average patient (Likert score 1–3)]. Physicians and patients were asked to report their gender and race. Due to small sample size, race was examined as Black or not Black in multivariate analyses. Gender and race concordance were defined as the physician and patient having the same gender or race, respectively.

Statistical Analyses

Analyses were performed using STATA 9.2 (College Park, TX). Descriptive analyses of all variables were performed. Bivariate analyses of patient characteristics by physician respect were performed using the adjusted Wald test or Pearson's chi-squared test, as appropriate. Poisson regression with robust variance estimates were performed, including patient age and gender. Poisson regression with robust variance estimates was used as low physician respect was a common outcome (>10%), and Poisson regression with robust variance estimates provides a more reliable estimate of prevalence risk ratio compared to standard logistic regression.[19] All analyses were adjusted for clustering by physician.

Table 1. Patient and Physician Characteristics by Level of Physician Respect

Characteristic*		Patients receiving lowered physician respect (n=92)	Patients not receiving lowered physician respect (n=146)	p-value †
Patient	n=238			
Age, years, mean (SD)	61.2 (11.7) ‡	58.5 (11.4)	62.9 (11.7)	0.015
Female	64 (152) ‡	63 (58)	64 (93)	0.82
Black	63 (149)	64 (60)	62 (91)	0.76
High school graduate	68 (162)	70 (64)	67 (98)	0.67
Annual income <$35,000	73 (166)	74 (67)	73 (99)	0.77
No health-care insurance	10 (24)	10 (9)	10 (15)	0.97
BMI, kg/m^2 mean (SD)	32.9 (8.1)	34.7 (8.8)	31.8 (7.5)	0.009
Physician	n=40			
Age, years, mean (SD)	42.5 (8.6)	42.4 (8.4)	42.1 (7.8)	0.82
Female, % (n)	55 (22)	53 (49)	56 (82)	0.76
Black, % (n)	30 (12)	29 (27)	27 (40)	0.84
Relationship				
Race concordance	45 (106)	50 (46)	41 (60)	0.27
Sex concordance	59 (141)	60 (55)	59 (86)	0.90

*BMI, body mass index; SD, standard deviation; *reported as % (number) unless otherwise stated; †Pearson's chi-squared or adjusted Wald test, as appropriate, adjusted for clustering by physician; ‡significantly associated with BMI by linear regression adjusting for physician cluster*

RESULTS

Patient and provider characteristics are presented in Table 1. The majority of patients in this study were female (64%), Black (63%) and high school graduates (68%). The mean BMI (standard deviation, SD) in the study was 32.9 (8.1) kg/m^2. Patient age and gender were significantly associated with BMI. Physicians were predominantly female (55%); 30% were Black. The mean (SD) age of the physicians was 42.5(8.6) years.

Association of respect with patient, physician and relationship characteristics are shown in Table 1. Physicians had low respect for 92/238 participants (39%). Patients for whom physicians had low respect had higher BMI (34.7 vs. 31.8 kg/m^2, p=0.009) and lower age (58.5 vs. 62.9 years, p=0.015) than patients for whom they had high respect. There was no association between physician respect and other patient and physician characteristics.

The crude prevalence ratio (PrR) of low physician respect by BMI was 0.83 (95% CI: 0.73, 0.95; p=0.006; per 10 kg/m^2 increase in BMI; see Table 2). After adjusting for patient age and gender, BMI remained significantly associated with physician respect (PrR 0.86, 95% CI: 0.74–0.99, p=0.039). Further adjustment for additional patient and physician variables, such as patient race, and physician age, race and gender, did not substantively change the results.

DISCUSSION

In this study we found that as patients had higher BMI, physicians reported lower respect for them. A ten-unit higher BMI was associated with a 14% higher prevalence of low physician respect. This association was unchanged after adjustment for patient and physician demographics.

Table 2. Crude and Adjusted Models of Prevalence Ratio of Low Physician Respect

	Prevalence ratio of low physician respect (95% confidence interval)	p-value*
Unadjusted model		
BMI†	0.83 (0.73 – 0.95)	0.006
Adjusted model		
BMI†	0.86 (0.74 – 0.99)	0.039
Patient—age‡	1.11 (1.00 – 1.22)	0.044
Patient—male§	0.95 (0.79 – 1.13)	0.54

Poisson regression, with robust variance estimates, clustering for physician; †per ten-unit increase in BMI; ‡per 10-year increase in age; §compared to female patients

These findings are in agreement with prior studies that show obesity elicits negative attitudes from physicians.[5–7] Our study adds to this literature and shows that individual patients are the recipients of lower physician respect related to higher BMI, independent of other patient and provider characteristics. This is an important distinction and provides further evidence that the care for individuals may be affected by negative attitudes about obesity.

Respect is a central concept to the practice of medicine, yet the term respect may hold a variety of meanings. Respect generally refers to "positive regard" and has been further conceptualized as the "recognition of the unconditional value of patients as persons,"[16] and it therefore has been argued that this recognition should be independent of personal characteristics and accorded equally to all.[16] Yet we acknowledge that respect is conceptualized by many as a sort of admiration, which is dependent upon a subjective assessment of a person's worthiness of respect. It is possible that it is this sense of "admiration respect" that physicians were using when they rated their levels of respect for patients in our study, especially because the wording of the question gave physicians permission to rate people at different levels. Nevertheless, without a deliberate intention on the part of the physician to disentangle their own assessments of a person's admirability, one form of disrespect can easily lead to another, leading to an injustice in the amount of value accorded to the lives of individuals based on their weight.

In addition to the primary injustice of the lower respect with higher BMI, there may be further consequences of this finding that should also be explored. Physician respect is associated with a greater amount of information given by the physician at the patient encounter.[17] Focus groups and surveys have found that patients desire a respectful relationship with their physician and may avoid the health-care system if such a relationship does not exist.[9,12] We postulate that physician respect may play a role in patients with obesity avoiding the health-care systems and receiving less preventive care and less education about their health documented in other studies, but more studies are needed to determine specifically what additional consequences may occur as a result of lower respect.[12,14,15,20]

Future research should explore the impact of physician negative attitudes associated with obesity on the health-care processes and outcomes for patients. In addition, deeper understanding about the development of this bias in health-care professionals is needed. Negative bias towards obesity has been documented in medical students,[21] yet little is currently offered in medical education to reduce or compensate for these negative attitudes. One of the first steps in promoting equity is to recognize the problem and to help physicians develop insight into their own biases.

There are several limitations to our study. It is cross-sectional, and, as such, we cannot comment on the causal nature of this association. We are also unable to link low physician respect for patients to health outcomes. However, this study remains an important first step in describing and understanding the association between physician respect and patient BMI. A social desirability bias is possible as physicians may not want to report low respect for patients. We attempted to limit this bias by asking physicians to compare the patient to the "average patient." It is unlikely that this social desirability bias would be differential by BMI. There are many reasons why physicians might have developed a lowered respect for patients, and we are unable to explore all of the possibilities in this study leading to residual confounders. In addition, we are underpowered to explore possible mediators and moderators of this relationship.

CONCLUSION

Physicians have lower respect for patients with higher BMI. This finding is independent of other patient, physician and relationship characteristics. Low respect from physicians may lead to poorer health outcomes, but further research is needed to fully understand the implications of this study's findings.

Acknowledgements: *This work was supported, in part, by grants from the National Heart, Lung and Blood Institute (R01HL069403 and K24HL083113). MMH was supported by the Johns Hopkins Clinical Research Scholars Program (NCR 5K12RR023266). The authors would like to acknowledge Kathryn Carson for her assistance with data management.*

Conflict of Interest: *None disclosed.*

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