

Satisfaction with Health Care Among Individuals with Overweight and Obesity: A Nationally Representative Cross-sectional Study



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BACKGROUND

The U.S. Surgeon General declared obesity a national epidemic¹ and the prevalence of obesity has now reached nearly 40% of the adult population in the United States (U.S.).² Given its significant burden along with increased risks for many clinical conditions, the importance of providing timely prevention care has been emphasized.¹ However, obesity is a stigmatized condition, leading individuals with obesity to be more likely to experience weight-based discrimination when seeking care.³ Assessing patient experiences with received care among those with overweight or obesity could aid in training health care providers and targeting interventions to improve access to care among those at risk.

OBJECTIVE

To determine whether overall satisfaction with health care and perceived quality of interaction with one's health care provider were associated with clinically defined body mass index (BMI) category.

METHODS AND FINDINGS

We conducted a retrospective cross-sectional study of Medical Expenditure Panel Survey (MEPS) data from 2011 to 2015. The MEPS is an annual nationally representative survey of the US civilian non-institutionalized population in the U.S. Our initial analytic sample included U.S. adults aged 18 years or older who completed the self-administered questionnaire (SAQ) ($n = 90,070$). SAQ includes questions from the Consumer Assessment of Healthcare Providers and Systems Survey (CHAPS®), which measures overall patient experience

with health care. We excluded individuals who reported being underweight (BMI < 18.5; based on self-reported height and weight), diagnosed with cancer, or pregnant ($n = 6839$).

A multivariable logistic regression model was used to estimate the likelihood of reporting a top-box score for four measures of patient experience (Table 1): (1) perceived access to care (3 item summative scale), (2) perceived interaction quality with provider (4 item summative scale), (3) perceived need for health insurance (4 items summative scale), and (4) overall satisfaction with health care (1 item on a 10 point scale). These measures of patient experience/attitude domains were previously validated and the summative scale for each domain had adequate internal reliability (α values between 0.69–0.89).⁴ Each measure was scored based on the top-box approach, where the proportion of higher-level response was calculated (using “always” or scores of 9–10).⁴ A sensitivity analysis was performed by analyzing each measure as a continuous outcome.

In our sample of 83,231 U.S. adults, 32.6% had normal weight (BMI 18.5–24.9), 35.0% overweight (25–29.9), 27.2% obesity (30–39.9), and 5.2% had severe obesity (≥ 40). Table 1 shows the adjusted odds ratios for the association between BMI category and reporting a top-box score for the four patient experience domains. Compared with individuals with normal weight, we did not find any significant differences across BMI category. When patient experience outcomes were treated continuously, our finding for overall satisfaction was consistent, albeit there were small but statistically significant differences across other measures (Fig. 1).

DISCUSSION

BMI category was not associated with reporting a top-box score for perceived access to care, interaction quality with providers, perceived need for health insurance, or overall satisfaction with health care; however, we observed small but statistically significant differences in the conditional mean of patient experiences by BMI category such that a higher BMI category was generally associated with better perceptions of access to care and interaction quality with care providers. The top-box finding differs from previous findings suggesting that

Table 1 Adjusted Associations Between Body Mass Index Category and Perceived Patient Access to Care and Health Care Experience, Odds Ratio of Reporting Top-Box Scores (95% CI)

Composite outcomes	BMI category			
	Normal (18.5–24.9 kg/m ²)	Overweight (25–29.9 kg/m ²)	Obese (30–39.9 kg/m ²)	Severely obese (≥ 40 kg/m ²)
Perceived access to care*	1.00 (Ref.)	1.03 (0.99–1.07)	1.02 (0.97–1.08)	1.09 (1.00–1.20)
Perceived interaction quality with provider†	1.00 (Ref.)	1.02 (0.97–1.06)	0.99 (0.94–1.04)	1.06 (0.96–1.17)
Perceived need for health care‡	1.00 (Ref.)	0.97 (0.90–1.05)	1.07 (0.99–1.16)	1.01 (0.89–1.15)
Overall satisfaction with health care§	1.00 (Ref.)	1.02 (0.98–1.07)	1.00 (0.95–1.06)	1.09 (0.99–1.20)

CI, confidence interval; BMI, body mass index; Ref., reference group

Results are adjusted for age, sex, race/ethnicity, education, family income, employment, marital status, current smoking status, number of chronic conditions, SF12-Physical and Mental Component Summary scores, type of insurance, usual source of care, and survey year. All analyses were conducted using recommended stratification, clustering and weighting by Agency for Healthcare Research and Quality (AHRQ; https://meps.ahrq.gov/data_stats/download_data/pufs/h171/h171doc.shtml). Top-box score is based on percentages of most positive responses from patients on each patient experience measure. The most positive response is treated with “always” for 3 access to care items and 4 interaction with providers items and overall rating of 9 or 10 (best experience) for overall satisfaction with care. For example, if there are 90% of patients reporting “always” on the item asking “how often did your health provider listen to you carefully?” the top-box score of the item is 90

* Composite score of perceived access to care was calculated using 3 items of Consumer Assessment of Healthcare Providers and Systems asking how often (1) got care right away, (2) made an appointment for healthcare when needed, and (3) it was easy to get medical care you or health provider believed necessary

† Composite score of perceived interaction quality with health providers was calculated using 4 items of Consumer Assessment of Healthcare Providers and Systems asking how often your health provider (1) listened to you carefully, (2) explained things easy to understand, (3) showed respect for you, and (4) spent enough time with you

‡ Composite score of perceived need for health insurance providers was calculated using 4 items of Consumer Assessment of Healthcare Providers and Systems asking about attitudes about health insurance/system: (1) do not need health insurance, (2) health insurance is not worth the money it costs, (3) more likely to take risks than the average person, and (4) can overcome illness without help from a medically trained person. These items were reverse-scored with higher score indicating greater need for health insurance

§ Rating of healthcare from all doctors and other health providers, from 0 (worst health care possible) to 10 (best health care possible)

weight bias and stigma can impact quality of care and health outcomes for patients with obesity.³ However, a recent study suggests that variations in patient experience are largely driven by differences in socioeconomic characteristics or health status, independent of BMI.⁵ Our study adds to the literature by

highlighting additional measures of perceived patient experience not associated with weight status.

There are several possible explanations for our findings. First and most simply, patients with obesity may not, in fact, have more negative experiences on average than their normal

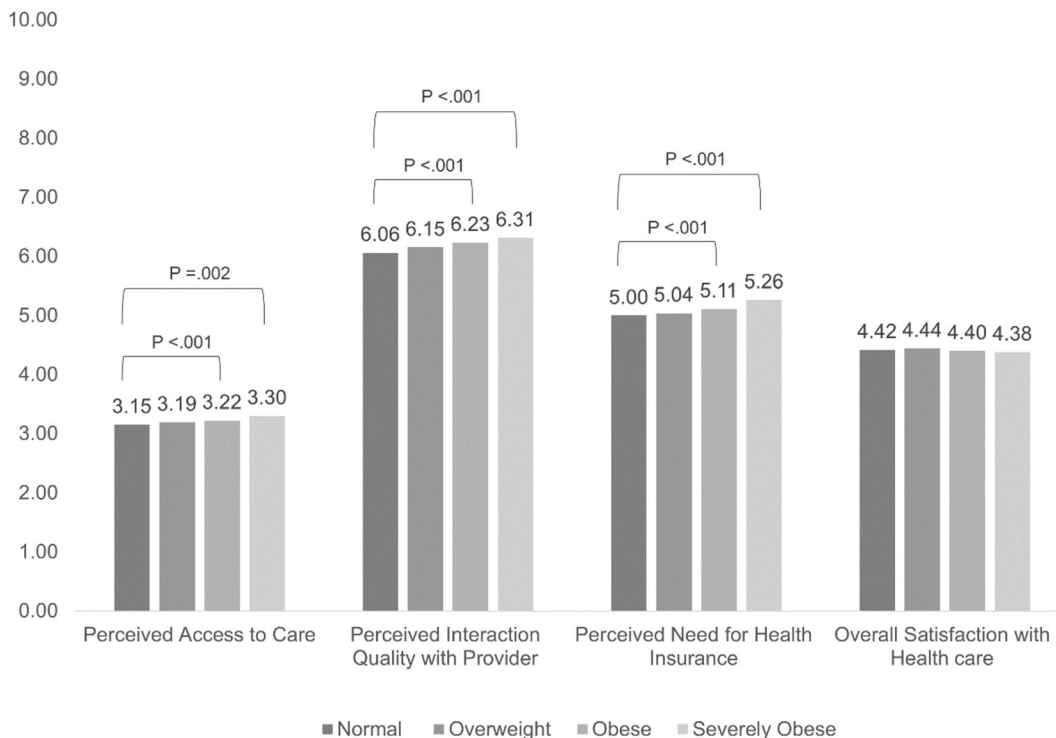


Fig. 1 Sensitivity analysis: adjusted comparison of mean score for patient experience with care by BMI category. Higher scores indicate a better perceived patient experience. Results are adjusted for age, sex, marital status, race/ethnicity, family income, and education attainment, census region, self-reported health status, number of comorbid conditions, health insurance, usual source of care, and survey year.

weight peers. This may be reflective of a change in training and perceptions that obesity is a disease and does not reflect a shortcoming of the patient. Alternatively, patients with a large body size may limit interactions with clinicians concerning their weight problems, resulting in minimal effect on ratings of health care received.⁶ Given the disparate findings of patient experience by weight status, there is a need for additional and ongoing assessment of patient experiences, including qualitative and quantitative research to understand both subjective and objective measures of care for patients with obesity.

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