Weight Bias in Health Care

Implications for Patients, Providers, and Public Health

Rebecca M. Puhl, PhD
Director of Research
Rudd Center for Food Policy & Obesity

- Non-profit research and public policy organization
- Seek to improve the world’s diet, prevent obesity, and reduce weight stigma
- Establish creative connections between science and public policy, develop targeted research, encourage frank dialogue among key constituents
- Multidisciplinary team
- Strategic Science
Objectives

- Sources of weight bias
- How bias affects physical & emotional health
- Whether bias affects quality of care
- Implications for providers and researchers
What is Weight Bias?

- Negative attitudes affecting interactions
- Stereotypes leading to:
  - stigma
  - rejection
  - prejudice
  - discrimination
- Verbal, physical, and relational forms
- Subtle and overt expressions
How is Bias Measured?

- Self-Report Surveys
- Experimental Research
Experimental Research

Random assignment to conditions: obese vs non-obese

Compared to non-overweight applicants, overweight candidates were:

- Less likely to be hired
- Ascribed more negative attributes
- Perceived as poor fit for the position
- Assigned lower starting salaries
- Evaluated less favorably, even when compared to thin applicants who were unqualified.

How is Bias Measured?

- Self-Report Surveys
- Experimental Research
- Population Studies
12,686 people from the *National Longitudinal Survey of Youth* – followed over 15 years to quantify wage effects of obesity

- Wages for obese females: 6.1% lower
- Wages for obese males: 3.4% lower
- Controlled for a number of socioeconomic/familial variables:
  (e.g., race, age, education, marital status, socioeconomic status, number of children, health limitations, health insurance coverage, occupation type, etc.)

How is Bias Measured?

- Self-Report Surveys
- Experimental Research
- Population Studies

Implicit Association Test

https://implicit.harvard.edu/implicit/demo/index.jsp
Why Care?

- Fosters blame and intolerance
- Hurts quality of life for adults and children
- Poses serious consequences for health
Prevalence of Weight Discrimination

- 2,290 American Adults, 25-74 years old
- Nationally representative sample (MIDUS)
- Experiences of discrimination due to multiple characteristics
- Institutional and interpersonal forms of bias
Rates of Perceived Discrimination Among Americans Aged 35-74
Data for 2004-2006

Error bars indicate 95% confidence intervals

Men  Women

International Journal of Obesity.
Trends in rates of perceived discrimination among Americans ages 35-74

Error bars indicate 95% confidence intervals

1995-96 2004-06

Likelihood of discrimination increases with body weight:

<table>
<thead>
<tr>
<th></th>
<th>Overweight</th>
<th>Obese</th>
<th>Severely Obese</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Men</strong></td>
<td>3%</td>
<td>6%</td>
<td>28%</td>
</tr>
<tr>
<td><strong>Women</strong></td>
<td>9%</td>
<td>20%</td>
<td>45%</td>
</tr>
</tbody>
</table>
The Science on Weight Bias

Substantial Evidence of Bias in:

- Employment
- Education
- The Media
- Interpersonal Relationships
- HEALTH CARE

Puhl & Brownell (2001); Puhl & Heuer (2009)
Weight bias documented in studies of:

- Dietitians
- Psychologists
- Nurses
- Medical Students
- Physicians
Dietitians

Registered dietitians express:

Negative attitudes
Beliefs that obesity is caused by emotional problems
Pessimism about adherence

Dietetic students view obese patients to be:

Overeaters
Lacking in self-control and willpower
Unattractive
Insecure
Slow

Berryman et al., 2006; McArthur et al., 1997; Oberreider et al., 1995
Influence of Patient Weight on Treatment Perceptions

Methods:

- Evaluated mock health profiles that vary only by weight characteristics & gender (wt, BMI, %BF)
- 182 Dietetics students randomly assigned to view one of four patient profiles
- Asked about treatment perceptions and attitudes toward obese patients

Puhl, Wharton, & Heuer (2009)
Obese patients viewed as less likely to comply with treatment recommendations

Obese patients’ diet quality and health status rated poorer than non-obese patients, despite identical nutritional and health information across weight categories

Puhl, Wharton, & Heuer (2009)
Percent of participants who agreed/strongly agreed with negative adjectives in the Fat Phobia Scale (N = 182).

<table>
<thead>
<tr>
<th>Negative Adjective on Fat Phobia Scale</th>
<th>% Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lazy</td>
<td>41</td>
</tr>
<tr>
<td>No willpower</td>
<td>41</td>
</tr>
<tr>
<td>Unattractive</td>
<td>54</td>
</tr>
<tr>
<td>Poor Self-control</td>
<td>65</td>
</tr>
<tr>
<td>Slow</td>
<td>68</td>
</tr>
<tr>
<td>Having no endurance</td>
<td>72</td>
</tr>
<tr>
<td>Inactive</td>
<td>77</td>
</tr>
<tr>
<td>Weak</td>
<td>31</td>
</tr>
<tr>
<td>Self-indulgent</td>
<td>47</td>
</tr>
<tr>
<td>Likes food</td>
<td>80</td>
</tr>
<tr>
<td>Shapeless</td>
<td>36</td>
</tr>
<tr>
<td>Overeats</td>
<td>81</td>
</tr>
<tr>
<td>Insecure</td>
<td>80</td>
</tr>
<tr>
<td>Low self-esteem</td>
<td>75</td>
</tr>
</tbody>
</table>

Puhl, Wharton, & Heuer (2009)
Psychologists

Ascribe to obese patients...

- more pathology
- more severe symptoms
- more negative attributes
- worse prognosis

Davis-Coelho, Waltz, & Davis-Coelho, 2000; Hassel, Amici, Thurston, & Gorsuch, 2001
Nurses view obese patients as:
Lazy  Lacking in self-control  Non-compliant

In one study…

⇒ 31% “would prefer not to care for obese patients”
⇒ 24% agreed that obese patients “repulsed them”
⇒ 12% “would prefer not to touch obese patients”

Brown, 2006; Bagley, 1989; Hoppe & Ogden, 1997; Maroney & Golub, 1992
Medical Students

Believe obese patients to be…

✓ poor in self-control
✓ less likely to adhere
✓ sloppy
✓ awkward
✓ unsuccessful
✓ unpleasant

Medical Students

Students reported that directing derogatory humor toward obese patients is acceptable, but that patients with cancer are “off limits” as targets for humor…. Except if the cancer patient is obese:

Interviewer: “So cancer trumps everything else? What if there were a morbidly obese cancer patient?”

Students: “We would still make fun of them for being obese”
Medical Students

Experimental research:

Randomly assigned to view videos of confederate obese or average weight patients, visiting a physician for the first time.

Students rated obese patients as:

- less likely to make lifestyle changes
- less responsive to counseling
- less compliant with treatment

Wigton & McGaghie, 2001
Physicians view obese patients as:

- non compliant
- lazy
- lacking in self-control
- awkward
- weak-willed
- sloppy
- unsuccessful
- unintelligent
- dishonest

Campbell et al., 2000; Fogelman et al., 2002; Foster, 2003; Hebl & Xu, 2001; Kristeller & Hoerr, 1997; Price et al., 1987
Physicians

Experimental Research:

Randomly assigned to view 1/6 patient vignettes that differed only by BMI and gender. Physicians rated heavier patients to be:

- less self-disciplined
- less compliant
- more annoying

As patient BMI increased, physicians reported:

- liking their jobs less
- having less patience
- less desire to help the patient
- seeing obese patients was a waste of their time.

Hebl & Xu, 2001
Physicians as a Source of Bias:

A study surveying 2,449 overweight and obese women listed 22 individuals (e.g., family members, employers, doctors, educators, strangers) and asked how often they were sources of weight stigmatization.

52% reported doctors had stigmatized them on more than one occasion

Puhl & Brownell, 2006
2,449 obese and overweight women

<table>
<thead>
<tr>
<th>Source of Bias</th>
<th>Ever Experienced</th>
<th>More than Once &amp; Multiple Times</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family members</td>
<td>72</td>
<td>62</td>
</tr>
<tr>
<td>Doctors</td>
<td>69</td>
<td>52</td>
</tr>
<tr>
<td>Classmates</td>
<td>64</td>
<td>56</td>
</tr>
<tr>
<td>Sales clerks</td>
<td>60</td>
<td>47</td>
</tr>
<tr>
<td>Friends</td>
<td>60</td>
<td>42</td>
</tr>
<tr>
<td>Co-workers</td>
<td>54</td>
<td>38</td>
</tr>
<tr>
<td>Mother</td>
<td>53</td>
<td>44</td>
</tr>
<tr>
<td>Spouse</td>
<td>47</td>
<td>32</td>
</tr>
<tr>
<td>Servers at restaurants</td>
<td>47</td>
<td>35</td>
</tr>
<tr>
<td><strong>Nurses</strong></td>
<td>46</td>
<td>34</td>
</tr>
<tr>
<td>Members of community</td>
<td>46</td>
<td>35</td>
</tr>
<tr>
<td>Father</td>
<td>44</td>
<td>34</td>
</tr>
<tr>
<td>Employer/supervisor</td>
<td>43</td>
<td>26</td>
</tr>
<tr>
<td>Sister</td>
<td>37</td>
<td>28</td>
</tr>
<tr>
<td><strong>Dietitians/nutritionists</strong></td>
<td>37</td>
<td>26</td>
</tr>
<tr>
<td>Brother</td>
<td>36</td>
<td>28</td>
</tr>
<tr>
<td>Teachers/professors</td>
<td>32</td>
<td>21</td>
</tr>
<tr>
<td>Authority figure (e.g. police)</td>
<td>23</td>
<td>15</td>
</tr>
<tr>
<td><strong>Mental Health Professionals</strong></td>
<td>21</td>
<td>13</td>
</tr>
<tr>
<td>Son</td>
<td>20</td>
<td>13</td>
</tr>
<tr>
<td>Daughter</td>
<td>18</td>
<td>12</td>
</tr>
<tr>
<td>Other</td>
<td>17</td>
<td>13</td>
</tr>
</tbody>
</table>

Puhl & Brownell, 2006
Reactions of Patients

- Feel berated & disrespected by providers
- Upset by comments about their weight from doctors
- Perceive that they will not be taken seriously
- Report that their weight is blamed for all problems
- Reluctant to address weight concerns
- Parents of obese children feel blamed and dismissed

Anderson & Wadden, 2004; Bertakis & Azari, 2005; Brown et al., 2006; Edmunds, 2005
Patient Examples

“I think the worst was my family doctor who made a habit of shrugging off my health concerns... The last time I went to him with a problem, he said, "You just need to learn to push yourself away from the table." It later turned out that not only was I going through menopause, but my thyroid was barely working.”

“I asked a gynecologist for help with low libido. His response “Lose weight so your husband is interested. That will solve your problem”. I changed doctors after that! And I've told everyone I know to stay away from that doctor.”

“I became very frustrated when a doctor disregarded what I was telling him because he had already made up his mind that obesity was at the root of all my problems.”

“Once when I was going to have surgery, I had to be taken to the basement of the hospital to be weighed on the freight scales. I've never forgotten the humiliation.”
Is Care Affected?

Physician interactions with obese patients:

- less time spent in appointments
- less discussion with patients
- more assignment of negative symptoms
- reluctance to perform certain screenings
- less intervention

Bacquier et al., 2005; Bertakis & Azari, 2005; Campbell et al., 2000; Galuska et al., 1999; Hebl & Xu, 2001; Kristeller & Hoerr, 1997; Price et al., 1987
Impact on Care

Obese patients are less likely to obtain…

- Preventive health services & exams
- Cancer screens, pelvic exams, mammograms

and are more likely to…

- Cancel appointments
- Delay appointments

Adams et al., 1993; Drury & Louis, 2002; Fontaine et al., 1998; Olson et al., 1994, Ostbye et al., 2005; Wee et al., 2000; 2005.
Bias Contributes to Delay of Care

Study of 498 women:
Obese women delayed preventive services despite high access

Women attributed their decisions to:
- Disrespect from providers
- Embarrassment of being weighed
- Negative provider attitudes
- Medical equipment too small
- Unsolicited advice to lose weight

Amy et al., 2006
Increased Medical Visits

Health Consequences

Avoidance of Health Care

Bias in Health Care

Negative Feelings

Obesity

Unhealthy Behaviors, Poor Self Care

Increased Medical Visits

Bias in Health Care

Health Consequences

Unhealthy Behaviors, Poor Self Care

Cycle of Bias and Obesity
The Personal Consequences of Weight Bias

- Psychological
- Social and Economic
- Medical
Weight Bias

Vulnerability for

Depression  Anxiety  Low Self-Esteem  Poor Body Image  Suicidal Acts and Thoughts

Cattarin & Thompson, 1994; Eisenberg et al., 2003; Haines, Neumark-Sztainer, Eisenberg, & Hannan, 2006; Hayden-Wade et al., 2005; Lunner et al., 2000; Neumark-Sztainer et al., 2002; Shroff & Thompson, 2004; Thompson et al., 1995; van den Berg et al., 2002; Young-Hyman et al., 2003
Social and Economic Consequences

- Social rejection
- Poor quality of relationships
- Worse academic outcomes
- Lower wages for same work

Gortmaker et al., 1993; Karnehed et al., 2006; Pearce et al., 2002; Sargent & Blanchflower, 1994; Strauss & Pollack, 2003
Health Consequences

Unhealthy eating behaviors

- binge eating
- unhealthy weight control practices
- coping with stigma with eating more and refusing to diet

Haines, et al., 2006; Neumark-Sztainer et al., 2002; Puhl & Brownell, 2006
more health consequences

- Avoidance of physical activity

- Cardiovascular health
  - elevated ambulatory blood pressure
  - increased physiological stress

- Poor quality of life overall

Bauer et al., 2004; Matthews et al., 2005; Schwimmer et al., 2003, Storch et al., 2006
Possible Medical Impact

- Bias, Stigma, Discrimination
  - Diminished Income, Education
  - Reduced Use of Health Care
  - Poor Access to, Delivery of Health Care
  - Diminished Self-Esteem, Perceived Inadequacy
  - Negative Impact on Physiology

  - Poor Recovery From Disease
  - Elevated Risk Factors
  - Psychological Disorders
  - Diminished Social Support

  → Morbidity and Mortality
Addressing Stigma in Obesity Intervention

- Incorporate anti-stigma messages
- Shift focus from appearance to health behaviors
- Implement policies to prohibit weight-based victimization
- Move beyond “education” to comprehensive strategies

Broader impact on public health

- Weight bias – absent in public health discourse
- Stigma can affect policy responses to obesity
- Government/Legislation
  - Ignore societal/environmental contributors
  - Protect the food industry
  - Emphasize personal responsibility/blame
Impact on public health.

- **Personal Responsibility in Food Consumption Act:** “This bill is about self-responsibility. If you eat too much, you get fat. It is your fault. Don’t try to blame somebody else”

- In 2008, a Mississippi State House Bill was proposed to prohibit restaurants from serving food to any person who is obese.

How Do We Reduce Weight Bias?
Origins of Weight Bias

- Societal/media portrayals of obesity
- Cultural values of thinness
- Attributions about causes of obesity
TV/Film Portrayals of Obesity

Content Analyses of Today’s Media:

- African Americans heavier than Caucasians
- Few obese characters on television
- Obese characters in stereotypical roles
- Male characters 3x more likely to engage in weight-stigmatization commentary
- Fewer positive social interactions, romantic and sexual relationships

Greenberg et al., 2003; Himes & Thompson, 2007; Harrison, 2000
Postcards / Greeting Cards

Having a WHALE of a Time
in Myrtle Beach
2. Should overweight kids be taken from their parents?

Last year, three-year-old Albuquerque, New Mexico, native Anamarie Martinez-Regino, right, was taken into custody by state officials, who believed she was so overweight that her health was at risk. Should the state have intervened?

38% say yes
“Kids need their parents to manage their food consumption, and if this girl’s diet is off the charts, her parents are failing her.” — SALLY, 24, TOPEKA, KANS.

62% say no
“The state should offer diet counseling rather than rip the family apart. A happy fat child seems better to me than a miserable thin one.” — JANET, 25, RALEIGH, N.C.
Cultural Influences

- Societal Values of Thinness

- The myth of the infinitely malleable body

- Dieting/beauty industry:
  “If you only work hard enough”
Attributions about Obesity

Onset is controllable

Condition is reversible

“if an obese person works hard enough, he or she can lose weight”
Causal Attributions of Obesity

Children and adults are less likely to express weight bias if they perceive the cause of obesity to be external factors…

And more likely to express bias if they perceive obesity to be caused by factors within personal control.

Crandall, 1994; Crandall & Moriarty, 1995; Crandall et al., 2001; DeJong, 1993
Education about Causes of Obesity

Educate participants about the biological, genetic, and external causes of obesity

Does this work?

Several studies improved attitudes

Several studies did not change attitudes

Anesbury & Tiggemann, 2000; Bell & Morgan, 2000; Crandall, 1994; Puhl et al., 2005
Other Strategies

- Evoke Empathy
- Address Normative Attitudes
- Use Multiple Stigma-Reduction Methods

Gapinski et al., 2001; Hague & White, 2005; Puhl et al., 2005; Teachman et al., 2001; Wiese et al., 1992
Multiple Component Interventions

- N = 95 Kinesiology students, 6-week intervention

- **Components:** Didactic lectures, group discussions, hands-on learning projects, writing assignments

- **Lecture content:** awareness of weight bias, challenging perspectives that blame the individual, redefining professional practice/weight loss ideals to emphasize healthy lifestyles

Intervention Via Internet?

- N = 258 students and teachers enrolled in online course on obesity

- Components: online lectures; body weight of course presenter was manipulated

- Lecture content: the causes of obesity, consequences of weight stigma, social pressures to be thin, strategies to reduce weight bias in school settings, and ways to help students cope with stigma

Ask the Experts

N = 318 Obese and Overweight Adults

Suggestions for Stigma-Reduction Strategies:

- Education about causes of obesity & weight stigma  (41%)
- Increased sensitivity and support for obese persons  (33%)
- Changes in media portrayals of obese persons  (17%)
- Consider what it’s like to walk in my shoes  (8%)
- More efforts to publicly accommodate obese persons  (5%)

Research: Summary

What we know:

Health care providers endorse stereotypes and negative attitudes
Obese patients perceive biased treatment in health care
Weight Bias increases vulnerability to emotional distress
Weight Bias contributes to unhealthy eating/exercise avoidance
Weight bias can affect providers’ weight management practices
Weight bias can negatively impact health care utilization
Research: Moving Forward

What we Don’t know:

How provider attitudes/bias impact quality of health care delivery
How/what forms of weight bias affect health care utilization
How weight bias contributes to health outcomes over time
Whether/how weight bias increases vulnerability to physiological stress or specific cardiovascular health outcomes
How to effectively reduce weight bias among providers
Whether attitude modification can be sustained over time
Whether stigma-reduction leads to actual behavior change
What Health Care Providers Can Do

Integrate sensitivity into practice:

1) Consider patients’ previous negative experiences
2) Recognize that being overweight is a product of many factors
3) Explore all causes of presenting problems, not just weight
4) Recognize that many patients have tried to lose weight repeatedly
5) Emphasize importance of behavior changes rather than weight
6) Acknowledge the difficulty of making lifestyle changes
7) Recognize that small weight losses can improve health
Identify Your Attitudes

- Do I make assumptions based on weight regarding character, intelligence, professional success, health status, or lifestyle behaviors?
- Am I comfortable working with people of all shapes and sizes?
- Do I give appropriate feedback to encourage healthful behavior change?
- Am I sensitive to the needs and concerns of obese individuals?
- Do I treat the individual or only the condition?
Sensitive Weighing Procedures

*Does the patient need to be weighed?*

- Ask patients for permission to weigh
- Use sensitive communication
- Weigh in private location
- Record weight silently, free of judgment/commentary
Creating a Supportive Environment

Examine the physical office setting:

Appropriate medical equipment

Weight-friendly waiting room

Appropriate examination room
Weight Bias in Clinical Settings:
Improving Health Care Delivery for Obese Patients

Course Description

Research shows that weight stigma in health care settings has a significant negative impact on obese patients’ health. Recognizing that providers face complex challenges in treating their obese patients, this course is designed to help clinicians improve delivery of care for this growing patient population. This course aims to increase awareness of the sources of weight bias in health care and provides a range of practical strategies to optimize the health care experience for overweight and obese patients.

Rebecca M. Puhl, Ph.D. – Director of Research and Anti-Stigma Initiatives, Yale Rudd Center for Food Policy & Obesity
Chelsea A. Heuer, M.P.H. – Research Associate, Yale Rudd Center for Food Policy & Obesity

This course is accredited by the Yale School of Medicine for AMA PRA Category 1 Credit™. After participating in the course, successfully taking the quiz and completing an evaluation, you will be able to print a Certificate of Credit. For more information, click here.
Weight Bias in Health Care

Rudd Center
For Food Policy & Obesity

Yale University

Overweight and obese patients frequently feel stigmatized in health care settings, and face stereotypes and prejudice from health care providers. These stigmatizing experiences (also called weight...
Supplement Issue in *Obesity*

*Expanding scientific interest in studying weight bias*

- Intervention strategies to reduce bias
- Impact of weight bias and physical health
- Impact of weight bias and emotional well-being
- Improving measurement of weight bias
- Prevalence of weight bias
- Cross cultural comparisons of bias
- Methods to improve sensitive care toward obese patients
- Weight bias in family relationships

November, 2008
Additional Resources

Yale Rudd Center
www.YaleRuddCenter.org

Weight Bias Resources for Providers
http://www.yaleruddcenter.org/what/bias/toolkit/index.html

“Weight Bias: Nature, Consequences, and Remedies”
Guilford Press, 2005