Weight Bias, Health Disparities in Minority Health

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Disclosure Statement

Speaker:
Dr. Fatima Cody Stanford

- Consultant: Calibrate, GoodRx, and Novo Nordisk
- Research: Amazon

- Will not be discussing unlabeled/ unapproved use of drugs or products
Objectives

- Discern: Discern how weight bias and stigma contribute to energy storage
- Learn about: Learn about how early life interactions influence weight bias
- Determine: Determine the deleterious impact of weight bias on health outcomes
- Ascertain: Ascertain how health professionals harbor implicit and explicit weight bias
- Determine: Evaluate national and international trends in weight bias and its influence of quality of life
Bias in Western Societies

Washington Post - 6/10/16

Glamour 5/2/12
Toddler’s Bias and Maternal Anti-fat Prejudice

- Mother-child dyads (N=70)
- Older infants (M=11 months) had a bias for looking at the figures with obesity
- Older toddlers (M=32 months) instead preferred looking at the average-sized figures
- Older toddlers' preferential looking was correlated significantly with maternal anti-fat attitudes

Parental Influence on Weight Bias in Children

Weight Bias Internalization and Metabolic Syndrome

Blood pressure, waist circumference, fasting glucose, triglycerides, and HDL measured in 178 adults with obesity in weight loss trial

159 adults (88.1% female, 67.3% black, mean BMI = 41.1 kg/m^2) completed Weight Bias Internalization Scale and Patient Health Questionnaire

51 adults (32.1%) met criteria for metabolic syndrome

High WBI predicted greater odds of metabolic syndrome and high triglycerides (Ps <0.005)

*Obesity (Silver Spring).* 2017 Feb;25(2):317-322.
Mental Health of Persons with Obesity Who Experience Bias

Weight Stigma, Internalization, and Coping Strategies

Total of 2,378 adults completed questionnaires about weight stigma, weight bias internalization, and coping strategies

Women reported higher weight bias internalization ($B=0.19$, $p=0.004$)

Black men and women reported less weight bias internalization than white men and women ($B=-0.43$, $p=0.009$)

Black women **LESS likely** ($B=-0.57$, $p=0.001$) and Hispanic women **MORE likely** ($B=0.39$, $p=0.020$) to cope with stigma using disordered eating

Black men **MORE likely** to cope with stigma using disordered eating ($B=-0.49$, $p=0.017$)

Medical Student Awareness of Weight Bias

Study Cohort
- 310 3rd Year Students - Wake Forest (2008-2011)

Testing Instrument
- Weight Implicit Association Test (IAT)

Bias in Cohort
- 33% (101/310) self-reported a significant ("moderate" or "strong") explicit anti-fat bias
- (67%, 81/121) were unaware of their implicit anti-fat bias

Medical Student Bias in CHANGES study

• Prospective cohort study of medical students enrolled at 49 US medical schools randomly selected from all US medical schools within the strata of public and private schools and region.

• Participants were 1795 medical students surveyed at the beginning of their first year and end of their fourth year.

• Web-based surveys included measures of weight bias, and medical school experiences and climate.

Implicit Bias in CHANGES study versus public

Explicit Bias in CHANGES study versus public

Medical Student Bias and Conclusions in CHANGES study

Medical schools may reduce students’ weight biases by:

1. Increasing positive contact between students and patients with obesity
2. Eliminating unprofessional role modelling by faculty members and residents
3. Altering curricula focused on treating difficult patients

Weight Bias Reduction in Health Professionals-Interventions to Reduce Weight Bias (Systematic Review)

- 15 studies with health professional students
- 2 studies with health professionals

Studies reported changes in health professionals’ beliefs and knowledge about obesity etiology

Evidence of effectiveness is poor
Long term effectiveness unknown

Overcoming Weight Stigma in the Treatment of Obesity

Ethnic Identity and Implicit Anti-fat Bias: Similarities and Differences between African American and Caucasian Women

African-American women have less explicit weight bias

Using Implicit Association Test (IAT), a pervasive implicit anti-fat bias was found in African American as well as NHW women.

African American women with lower ethnic identity were more negatively biased and NHW women with higher ethnic identity were more negatively biased.

Neutral obesity portrayals elicited lower expressions of weight-biased attitudes and higher reports of exercise liking/comfort.
Higher BMI significantly predicted fewer post-interview offers of admission into psychology graduate programs.

Results also suggest this relationship is stronger for female applicants.

BMI was not related to overall quality or the number of stereotypically weight-related adjectives in letters of recommendation.

Higher BMI was related to more positive adjectives in letters.

Obesity (Silver Spring). 2013 May;21(5):918-20.
Weight Bias and Employability Following Weight Loss and Weight Gain

►Participants (N = 154) viewed an image of a normal weight woman and rated their impression of her.

►Rated their impression of her overweight image after learning how she had previously gained and subsequently lost weight.

►Participants rated the model far less favorably including perceived employability if they thought the once overweight model lost weight through surgery vs. diet and exercise.

The Effects of Reality TV on Weight Bias

- 59 participants assigned to experimental (one episode of The Biggest Loser) or control (one episode of a nature reality show) condition.

The Effects of Reality TV on Weight Bias

• Levels of weight bias were measured by the Implicit Associations Test (IAT), the Obese Person Trait Survey (OPTS), and the Anti-fat Attitudes scale (AFA) at baseline and following the episode viewing (1 week later).

• Participants in The Biggest Loser condition had significantly higher levels of dislike of overweight individuals and more strongly believed that weight is controllable after the exposure.

Predictors of anti-fat attitudes across four countries

- Extent of weight bias was consistent across countries
- Attributions of behavioral causes of obesity and beliefs that obesity is attributable to lack of willpower and personal responsibility strongly bias
- Magnitude of weight bias was stronger among men and among individuals without family or friends who had experienced this form of bias

## German, US, and Iceland Stance on Obesity Anti-Discrimination Laws

<table>
<thead>
<tr>
<th>Support of general antidiscrimination laws or policies</th>
<th>Germany (G) (N = 2,513)</th>
<th>USA (U) (N = 899)</th>
<th>Iceland (I) (N = 659)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Inclusion of body weight in civil rights law for protection from weight discrimination</td>
<td>923 (37.1%)</td>
<td>452 (50.6%)</td>
<td>139 (21.2%)</td>
</tr>
<tr>
<td>2) Same legal protections and benefits for people with obesity as for people with physical disabilities</td>
<td>1,018 (40.8%)</td>
<td>358 (40.1%)</td>
<td>98 (14.9%)</td>
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<tr>
<th>Support of employment-specific antidiscrimination laws or policies</th>
<th>Germany (G) (N = 2,513)</th>
<th>USA (U) (N = 899)</th>
<th>Iceland (I) (N = 659)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3) Consideration of obesity a disability for protection from weight discrimination in the workplace</td>
<td>964 (38.6%)</td>
<td>290 (32.5%)</td>
<td>146 (22.2%)</td>
</tr>
<tr>
<td>4) Illegal to refuse to hire a qualified person because of body weight</td>
<td>1,417 (56.6%)</td>
<td>629 (70.4%)</td>
<td>468 (71.1%)</td>
</tr>
<tr>
<td>5) Illegal to assign lower wages a qualified employee because of body weight</td>
<td>1,627 (65.1%)</td>
<td>711 (79.6%)</td>
<td>528 (80.2%)</td>
</tr>
<tr>
<td>6) Illegal to terminate or fire a qualified employee because of body weight</td>
<td>1,550 (62.2%)</td>
<td>662 (74.1%)</td>
<td>495 (75.2%)</td>
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</tbody>
</table>

Calculation of % from valid cases. American (U) and Icelandic (I) samples from [14].

**p < 0.001.**

*Obes Facts 2017;10:101–111*
The Massachusetts Medical Society recognizes that weight stigma in the health care setting leads to disparity of care and poorer health outcomes in patients with obesity. (HP)

The Massachusetts Medical Society will develop and promote educational information to physicians and physicians in training about weight stigma. (D)

The MMS will advocate for legislative policies and institutional practices to prevent weight stigma. (D)
American Medical Association
People First Language in Obesity

Our AMA:

• (1) encourages the use of person-first language (patients with obesity, patients affected by obesity) in all discussions, resolutions and reports regarding obesity;

• (2) encourages the use of preferred terms in discussions, resolutions and reports regarding patients affected by obesity including **weight** and unhealthy **weight**, and discourage the use of stigmatizing terms including obese, morbidly obese, and fat; and

• (3) will educate health care providers on the importance of person-first language for treating patients with obesity; equipping their health care facilities with proper sized furniture, medical equipment and gowns for patients with obesity; and having patients weighed respectfully.

AMA H-440.821, Resolution 402, A-17
Summary

Weight stigma has a negative impact on the health and psychological health of patients who struggle with obesity.

Weight bias is seen as early as infancy.

Maternal and Paternal anti-fat bias influences children.

Weight bias may be mitigated by proper training in health professionals.
Thank You For Your Time

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