Weight Bias and Psychosocial Implications for Acute Care of Patients With Obesity

Rachel Smigelski-Theiss, RN, MSN, ACCNS-AG
Malisa Gampong, RN, MS, RN-BC
Jill Kurasaki, RN, MS, ACNS-BC

ABSTRACT

Obesity is a complex medical condition that has psychosocial and physiological implications for those suffering from the disease. Factors contributing to obesity such as depression, childhood experiences, and the physical environment should be recognized and addressed. Weight bias and stigmatization by health care providers and bedside clinicians negatively affect patients with obesity, hindering those patients from receiving appropriate care. To provide optimal care of patients with obesity or adiposity, health care providers must understand the physiological needs and requirements of this population while recognizing and addressing their own biases. The authors describe psychosocial and environmental factors that contribute to obesity, discuss health care providers’ weight biases, and highlight implications for acute care of patients suffering from obesity.

Keywords: obesity, bariatric, weight bias, psychosocial, body mass index

Obesity and its associated health implications have become a focus of public health—nationally and internationally. No state in the United States has an obesity prevalence below 20%: obesity is an epidemic. The associated risks of developing diabetes, hypertension, heart disease, stroke, cancer, obstructive sleep apnea, and osteoarthritis increase with the degree of obesity. Furthermore, severe obesity is recognized as a contributor to premature death and disability.

Along with the increased risk of subsequent comorbidities, patients with obesity have higher health care costs—individuals with obesity have an average annual medical expenditure that can exceed what those classified as healthy weight spend by $3,559. Obesity-related health care costs reach over $150 billion annually in the United States. Rising obesity rates and increased average body mass index (BMI) directly impact the health care community.

In addition to dealing with physiologic effects, those suffering with obesity must address psychosocial factors related to the disease, such as increased bias and stigma in employment, education, and health care settings. People suffering from obesity may lose out on college acceptances and employment advancements due to their weight and size. The combination of depression and severe obesity are often seen together, more so in women.

Rachel Smigelski-Theiss is Clinical Nurse Specialist, Queen’s Medical Center, 1301 Punchbowl Street, Honolulu, HI 96813 (rtheiss@queens.org).
Malisa Gampong is Nurse Manager, Queen’s Medical Center, Honolulu, Hawaii.
Jill Kurasaki is Nurse Manager, Queen’s Medical Center, Honolulu, Hawaii.

The authors declare no conflicts of interest.
DOI: http://dx.doi.org/10.4037/aacnacc2017446
White women report perceived experiences of weight discrimination more than any other demographic.12 Physical and psychological health concerns include stress, decreased motivation to participate in physical activity, binge eating, and depression.13 Health care providers and bedside clinicians must understand the significant factors affecting patients with obesity, identify barriers to care, understand how their own beliefs may impact care, and recognize the need for appropriate sensitivity training.

**History and Background**

**Definition and Etiology**

The World Health Organization defines obesity as “abnormal or excessive fat accumulation that may impair health.”14 A person is considered obese if they have a BMI greater than 30 kg/m².15 Obesity is further stratified: a BMI of 30 to 34.9 kg/m² is classified as obese class 1, a BMI of 35 to 39.9 kg/m² is classified as obese class 2, and a BMI greater than 40 kg/m² is classified as obese class 3 (Table 1).15

Between 1960 and 1980, the prevalence of obesity among adults in the United States remained relatively stable.16 However, in the years since then a significant increase in the prevalence of obesity has occurred—2016 data show that the age-adjusted prevalence of obesity in the United States is at 35% among men and 40.4% among women.16 Worldwide, the prevalence of obesity also has increased, with more than half a billion adults currently classified as obese.4 Obesity levels have increased in all age groups, including children, young adults, and the elderly.17

Identifying reasons for the increase in obesity has proven difficult.16 However, the Centers for Disease Control and Prevention notes that the increase prevalence of obesity might be due to changes in society, how communities develop, and human behaviors.2 For example, in the United States foods that are high in sugar, fat, and salt are more visibly marketed, are less expensive to purchase, and are easier to access than healthier alternatives.2 These factors plus increased portion sizes and reduced physical activity due to technology and car-dependent communities may contribute to the obesity epidemic.

**Identification and Treatment**

Obesity was first designated as a chronic disease by the American Medical Association in 2013.4 In 2014, the first Consensus Conference on Obesity was held by the AACE (American Association of Clinical Endocrinologists) and ACE (American College of Endocrinology) with the goal of establishing an evidenced-based, comprehensive plan to combat obesity.18 The AACE Obesity Scientific Committee determined that BMI is not the only factor to promote or identify treatment modalities for obesity.18 To better diagnose obesity, the degree to which adiposity affects an individual should be taken into consideration along with BMI.19 Assessment should include a clinical interpretation of BMI that takes into account age, sex, muscularity, hydration status, edema, third-spacing fluid collection, large tumors and sarcopenia, waist circumference (for BMI less than 35 kg/m²), and body composition tests.5,18

Bariatric patients can undergo pharmacotherapy and bariatric surgery in addition to making lifestyle changes in their diet and exercise patterns to treat obesity. Roux-en-Y gastric bypass, sleeve gastrectomy, and adjustable gastric banding are the most common bariatric surgeries performed in the United States—all with relatively low rates of serious complications.20

**Psychosocial Concerns**

A patient’s history of obesity can be complex and incorporates many factors, including psychosocial issues, coping mechanisms, educational background, socioeconomic status and social interactions, lifestyle,21 and even the structural design of his or her neighborhood.17,22 Obesity directly correlates not only to physical conditions (eg, cardiovascular disease,
diabetes, asthma, arthritis), but also to psychological conditions such as depression. Results from the National Health and Nutrition Examination Surveys 2005-2010 show that the relationship between obesity and depression is bidirectional: obesity can increase the risk of depression and depression can increase the risk of obesity. In those surveys, almost 35% of US adults over the age of 20 were found to be obese and 7.2% had depression. As the severity of depressive symptoms increased, the proportionate level of obesity increased. Among those with depression, 43% were obese.

The use of antidepressants correlates with a higher rate of obesity in adults with no-to-mild and moderate-to-severe depressive symptoms. More than 50% of adults taking antidepressants for moderate-to-severe depressive symptoms were suffering from obesity. Further, a recent meta-analysis examining the connection between obesity and depression demonstrated a bidirectional link, with the impact of depression leading to obesity believed to be stronger than that of obesity leading to depression.

Between 1995 and 1997, Kaiser Health Plan (San Diego, CA, US) surveyed more than 17,000 of its members as part of their Adverse Childhood Experiences Study, which looked at the relationship of diseases (eg, obesity) and health risk behaviors after exposure to different childhood traumas (eg, emotional, physical, or sexual abuse). This study also compared health risk behaviors to household dysfunction such as witnessing domestic violence and living with household members who were substance abusers or were mentally ill, suicidal, or incarcerated. Behaviors such as overeating or chemical substance abuse often are used as coping mechanisms to abuse and other forms of household dysfunction.

As part of Kaiser’s survey, participants answered questions to determine how adverse “childhood experiences were linked to health risk behaviors and adult diseases.” More than 50% of respondents reported at least 1 category of repeated childhood exposure to trauma; 25% reported 2 or more categories. A proportional relationship between the number of categories of childhood experience exposures reported and adult health risk behaviors and diseases existed; those with 4 or more categories of childhood exposure were 4 to 12 times more likely to develop severe health risks such as severe obesity and heart, lung, and liver disease.

The results of Kaiser’s survey imply that the foundation of obesity is exposure to adverse childhood experiences. Therefore, treatments for obesity need to be more than education of healthy lifestyles or changes in diet and exercise habits. Because of the association between childhood abuse and adult obesity, measures to prevent obesity in adults should focus on identifying and recognizing a history of childhood abuse. Strategies to intervene with children and families dealing with adverse abusive experiences are needed.

To develop successful therapeutic relationships with patients suffering from obesity, clinicians must recognize signs of childhood abuse and understand coping mechanisms such as overeating. Successful obesity prevention and treatment programs must include counseling to address histories of abuse that affect psychological, social, emotional, and stress-related factors that contribute to adult obesity.

Environmental Factors

As the link between obesity and environmental factors becomes clearer, researchers are paying more attention to such things as the built environment (ie, land use, urban design, and transportation systems), which is a determinant linked to lifestyle in a community and obesity. Street connectivity, transportation infrastructure, and the location of community resources such as parks and schools influence physical activity in individuals, which ultimately influences obesity. Geographic information systems (computer systems that displays spatial and geographic information) allow public health researchers to use spatial information from a wide range of sources to develop specific measures of the built environment, including distances to the nearest supermarket, green space, convenience store, or fast-food restaurant.

Living in areas with higher economic advantages may play a beneficial role against obesity. Social and economic environments of a neighborhood are important indicators between neighborhood environments and weight. The neighborhood environment affects a person’s food choices based on food availability. Neighborhoods with higher street connectivity, higher residential density, less crime, better aesthetics and sidewalks, and a greater number of destinations tend to
promote physical activity, thus increasing energy expenditure. Built environments that are not conducive to physical activity or those that encourage unhealthy eating due to lack of good food choices are often termed obesogenic—causing obesity.

Society often regards obese individuals as responsible for their weight because of laziness, lack of willpower, and overeating. However, other significant contributors to obesity are being explored: genetic and biological factors and multiple social and economic contributing factors promote and reinforce obesity. Understanding environmental change is a necessary component in finding solutions to obesity.

**Weight Bias**

Weight bias is the 4th most reported form of discrimination in the United States after race, sex, and age. Over the past decade, the prevalence of weight discrimination has increased by 66%—comparable to rates of racial discrimination. As obesity rates rise, weight stigma increases and negative stereotypes proliferate the idea that people with obesity are lazy, unmotivated, undisciplined, noncompliant, and sloppy. In Western society, stereotypes of people with obesity are tolerated and rarely addressed. People with obesity are vulnerable to social injustice, discrimination, and unfair treatment across multiple settings: work, school, health care, media, and interpersonal relationships. Evidence shows consistent weight bias displayed by health care providers can negatively impact the physical and psychological health of people with obesity, who can become vulnerable to depression, low self-esteem, anxiety, poor body image, and suicide. Weight stigma and biases negatively affect an individual’s motivation for physical activity and exercise and can be contributing factors to unhealthy weight control that leads to eating disorders such as chronic dieting and binge eating.

Multiple studies report weight bias by health care providers, including physicians, psychologists, nurses, dietitians, and medical students. Some health care providers view patients with obesity as lazy, undisciplined, lacking self-control, and noncompliant with treatment, and believe that these factors cause obesity rather than environmental or genetic factors. Some physicians view obesity as a behavior problem resulting from physical inactivity and overeating. Personal biases of health care providers, conscious or unconscious, may affect patients and hinder the trust between patient and clinician. As health care providers, we must identify and address our own personal biases toward people with obesity.

Huizinga et al studied physicians’ respect for patients with obesity and concluded that patients with higher BMI receive less respect from physicians. Less respect, in turn, correlates to less time spent with the patient and less information provided to the patient by the physician. A patient’s perception of this lower level of respect from the physician may have a direct role in that patient avoiding health care, thereby receiving inadequate education about his or her health.

Stereotypes of and biases toward people with obesity may harm patient outcomes and reduce patient satisfaction: clinicians spend less time with patients with obesity, do not intervene as much as they should, and tend to avoid discussing weight loss options with these patients. Patients with obesity are subject to poor treatment, derogatory comments, and prejudice from health care providers who have strong negative attitudes; as a result, patients with obesity are reluctant to seek medical care.

**Addressing Health Care Weight Bias**

Health care providers’ negative attitudes toward patients suffering from obesity must change. Strategies to address the obesity stigma in health care are needed. Research on methods
to reduce weight bias is limited; however, interventions can have a positive effect.\(^{34}\) Workplace environments that adopt a zero-tolerance policy of derogatory language and humor may reduce bias and raise awareness of patient-centered care.\(^{29}\)

Strategies to address weight bias should include teaching about awareness of the issues and creating a health care environment that is supportive and sensitive. Sensitivity training is already a requirement for all employees who have contact with metabolic and bariatric patients at hospitals wanting Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program designation.\(^{35}\) Employees at accredited centers receive sensitivity training at the start of employment and at least every 3 years thereafter—requirements for maintaining accreditation.\(^{35}\)

Implementation of sensitivity training and education of health care providers about the complexities of obesity can address and reduce negative attitudes and biases. Education should include the genetic, metabolic, and social causes of obesity.\(^{29}\) Sensitivity training should be engaging and use various techniques and methods, such as lectures, videos, written materials, simulated practice, interaction with community members, and self-reflection.\(^{29}\) This education should allow for a free exchange of ideas in a positive setting, which can help reduce bias.\(^{37}\) The Attitudes Toward Obese Persons scale and the Beliefs About Obese Persons scale, which measure attitudes toward and beliefs about people with obesity, can be administered to participants before and after annual training to evaluate effectiveness of the training.\(^{36}\)

Health care providers should use people-first language rather than condition-first language when discussing patients. People-first language for obesity places the patient before the condition (Table 2).\(^{37}\) Thus, the focus is on the patient rather than their disease. For example, describing a patient as “an obese patient” could cause discrimination among the health care team;\(^{37}\) instead, the people-first language of “a patient with obesity” creates a more positive experience for the patient, allowing for more effective, open communication between the patient and provider.

Weight bias among health care providers toward patients must be reduced no matter how challenging it might be to do so. Health care clinicians must develop relationships with patients that are free from stigma to reinforce and encourage healthy behavioral changes in patients. Organizations such as the American Heart Association, the American College of Cardiology, and the Obese Society have identified that health care providers need to improve how they help patients with obesity manage their weight;\(^{38}\) many of these organizations provide resources for doing so (Table 3). The Rudd Center has specific strategies aimed at health care practitioners to reduce weight bias with their patients (Table 4).\(^{39}\) Providers and clinicians need to have empathy to stigmatizing experiences that people with obesity encounter. Education on stigma reduction interventions should be given not only to clinicians already in practice but also to those training to be health care providers.\(^{32}\)

### Table 2: People-First Language Versus Condition-First Language\(^{37}\)

<table>
<thead>
<tr>
<th>People-First Language</th>
<th>Condition-First Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient with obesity</td>
<td>Obese patient</td>
</tr>
<tr>
<td>Patient with diabetes</td>
<td>Diabetic patient</td>
</tr>
<tr>
<td>People with autism</td>
<td>Autistic people</td>
</tr>
</tbody>
</table>

### Table 3: Internet Resources

<table>
<thead>
<tr>
<th>Topic</th>
<th>Website URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obesity education, advocacy, and support</td>
<td><a href="http://www.obesityaction.org/">http://www.obesityaction.org/</a></td>
</tr>
<tr>
<td>Obesity education, research, and advocacy</td>
<td><a href="http://www.obesity.org/home">http://www.obesity.org/home</a></td>
</tr>
<tr>
<td>Obesity data, resources, and prevention strategies</td>
<td><a href="https://www.cdc.gov/obesity/index.html">https://www.cdc.gov/obesity/index.html</a></td>
</tr>
<tr>
<td>Weight bias and stigma</td>
<td><a href="http://www.uconnruddcenter.org/weight-bias-stigma">http://www.uconnruddcenter.org/weight-bias-stigma</a></td>
</tr>
</tbody>
</table>
Acute Care Needs of Patients With Obesity

Equipment
To provide adequate care for patients with obesity, hospitals and clinicians in the acute care setting must have and use appropriate equipment, including larger blood-pressure cuffs, scales that can accommodate up to 315 kg (700 lb), and appropriately-sized gowns. Patients with obesity who are provided with the appropriate equipment feel accepted, safe, and less threatened. Bariatric beds with power-drive assistance, appropriately-sized wheelchairs, walkers, stretchers, and wider commodes help patients with obesity feel more at ease and comfortable during hospitalization.

Bariatric patients have thicker chest walls; therefore, a defibrillator with voltage up to 360 watts should be available for emergency situations. Equipment should be labeled clearly with either a maximum weight capacity or with an “EC” (expanded capacity) to indicate safety and appropriateness for bariatric patients. Nurses and health care providers should avoid using terms such as “big boy bed” or “big boy chair” when using bariatric equipment to maintain patient dignity.

Individuals who work directly with the patients should be familiar with and receive routine training on all specialty devices. Equipment must be available in sufficient quantities and must be easily accessible to ensure the safety of patients and staff. Staffing and resources may need to be increased to support appropriate use of equipment and safe patient handling; health care facilities may require wider doorways and larger patient rooms to accommodate the equipment. The Facility Guidelines Institute’s 2014 Guidelines for Design and Construction of Hospitals and Outpatient Facilities provides information on facility requirements for bariatric care rooms and units. This guide should serve as a resource when renovating or building new units.

Immobility
Patients who are immobile are at higher risk of developing pressure injuries; in the hospital setting, obesity in a patient decreases overall mobility. Patients with a BMI greater than 40 kg/m² who are in the intensive care unit are at greater risk for developing hospital-acquired pressure injuries. Thus, clinicians must focus on preventive factors, including use of specialty or bariatric beds and frequent turning and mobility of patients. Early mobilization should be included in the patient’s treatment plan to prevent deconditioning. Nurses should examine patients’ skin for excoriation, rashes, or ulcers and assess the need for antifungal medications.

Staff safety must be maintained as well. Appropriate equipment to lift and transfer all patients—regardless of size or BMI—is necessary to prevent musculoskeletal injury to the staff.

Medications and Pharmacologic Needs
Critical care clinicians must consider the pharmacologic needs of patients with obesity,

Table 4: Strategies to Reduce Weight Bias

- Approach patients with empathy and sensitivity. Many patients with obesity have had negative encounters with health care professionals. Many patients with obesity have attempted weight loss multiple times.
- Obesity has a complex etiology. Explore other causes beyond body weight.
- Focus on the importance of behavioral changes.
- Acknowledge the challenges in achieving and sustaining significant lifestyle changes that can lead to weight loss.
- Small weight loss can lead to meaningful overall health gains. Acknowledge patients’ successes.
- Create a welcoming and supportive environment with appropriately sized chairs, gowns, and equipment.

http://acc.aacnjournals.org/Downloaded from
including appropriate medication delivery route; medications administered topically, subcutaneously, or intramuscularly may not follow the predicted course and adjustments will need to be made.\(^3\) For example, needles longer than 2.5 to 3.8 cm (1 to 1.5 in) may be required for intramuscular injections.\(^10\)

Practitioners should work with a pharmacist to ensure the most accurate dosages of medications is being used to meet the patient’s pharmacological needs. Medications that are more lipophilic or hydrophilic in nature will be absorbed and distributed differently in patients with higher fat-to-muscle ratios.\(^3\)

### Policies and Procedures

Hospitals must develop policies and procedures to ensure safe and dignified care is provided to patients. Protocols for the care of patients with obesity should include when and how to use bariatric equipment and identify the need for assistance with mobility.\(^46\) Communication, policies and protocol, education, and patient flow are all topics to consider when caring for this specialized population.\(^47\) The National Association of Bariatric Nurses have recommendations and guidelines to help hospitals develop best practices for safe handling of patients with class 3 obesity (Table 6).\(^47\)

### Conclusion

Obesity is a multifactorial and complex disease that has psychological and physiological implications. Health care providers must increase their awareness about the etiologies of obesity and the obstacles individuals with obesity and their families face during the weight loss struggle. Health care providers need to provide competent and comprehensive care for all patients; therefore, hospitals or facilities must provide the necessary equipment and adequate training for all staff members. Employee preparation should involve sensitivity training that incorporates therapeutic communication techniques and clinical education that includes information tailored to caring for the bariatric patient population.
Messages that shame or blame people with obesity must be replaced with messages describing obesity as a chronic and often lifelong condition for most individuals with this disease. Health care providers should be aware of the individualized nature of the disease and must curtail their own biases, beliefs, and attitudes. Once the biases and barriers in health care are recognized and overcome, patients suffering from obesity will receive individualized and appropriate high-quality care.

ACKNOWLEDGMENTS
The authors thank Dr Dean Mikami for manuscript guidance and review and Mimi Harris, RN, MS, NEA-BC, Renee Latimer, APRN-BC, MS, MPH, and Ronelle Sato, PsyD, for manuscript review.

REFERENCES


Weight Bias and Psychosocial Implications for Acute Care of Patients With Obesity
Rachel Smigelski-Theiss, Malisa Gampong and Jill Kurasaki

AACN Adv Crit Care 2017;28 254-262 10.4037/aacnacc2017446
©2017 American Association of Critical-Care Nurses
Published online http://acc.aacnjournals.org/

Personal use only. For copyright permission information:
http://acc.aacnjournals.org/cgi/external_ref?link_type=PERMISSIONDIRECT

Subscription Information
http://acc.aacnjournals.org/subscriptions/

Information for authors
http://acc.aacnjournals.org/misc/ifora.xhtml

Submit a manuscript

Email alerts
http://acc.aacnjournals.org/subscriptions/etoc.xhtml