Obesity Is a Disease, Recognize It as Such

— Failure to recognize this has led to delays in prevention, treatment, and policy change

by Michael Rosenbaum, MD and George Bray, MD July 18, 2021

In 1962, the noted physiologist Edwin Astwood, MD, PhD, wrote "Obesity is a disorder which, like venereal disease, is blamed upon the patient. The finding that treatment doesn't work is ascribed to lack of fortitude." At that time, about 13% of U.S. adults had obesity (defined as a BMI > 30). Unfortunately, despite the best efforts of health professionals and others, the prevalence of obesity is now over 42%.

More unfortunately, Astwood's statement remains essentially correct. Two major causes of this pervasive misconception are a societal refusal to accept obesity as a disease process coupled with a tolerance of multi-level blatant and subtle fat bias, even in the face of an overwhelming body of scientific evidence to the contrary. The consequences are delays in obesity prevention, treatment to forestall the comorbidities, and passage of cost-effective legislation to support treatment.

This raises an important question: What would happen if society began recognizing obesity as a disease?

Disease Qualifications

The 2005 American Medical Association (AMA) Committee on Scientific Affairs stated that a disease must reflect an impairment of the normal functioning of some aspect of the body, characteristic symptoms, and harm or morbidity. Obesity is clearly the result of failure of energy homeostatic systems, and has a distinct phenotype and comorbidities that account for over $200 billion dollars per year in healthcare costs alone, with a projected annual cost of $390 to $520 billion dollars by 2030. All AMA criteria are met and we believe obesity is a serious disease process.

Why Is It So Easy to Gain Weight and So Hard to Lose It?

The increasing prevalence of obesity, and the difficulty in achieving and sustaining weight loss, reflect the interactions of environmental influences (e.g., more
calorically dense and highly processed foods) with multiple obesity-risk genetic variants. This complex interplay largely reflects an evolutionary environment favoring the selection for genes that enabled our progenitors to store extra calories as fat in the face of frequent undernutrition.

There is a remarkable physiological "coupling" of caloric intake and output at our usual weights. The average weight gain from early to middle adulthood in the U.S. is approximately 1 kg/year (about 4,000 net extra kcal) despite ingesting over 1 million kcal/year. Unfortunately, during or after weight loss there is a disproportionate increase in the drive to eat and decrease in energy expenditure creating "the perfect storm" for weight regain and accounting for the overall lack of long-term success of non-surgical weight loss.

Consequences of Fat Bias

The AMA officially identified obesity as a disease in 2013. Despite this, about 35% of individuals in weight reduction programs do not see obesity as a disease, and 40% of the U.S. public still perceived obesity as a "personal problem of bad choices."

Failure to recognize obesity as a disease process is most evident in the stigmatization of those who don't meet societal body shape standards. Fat bias has been there for centuries. The difference is that excess fat was seen as the consequence of karmic retribution for moral failure in Buddhist cultures and the sin of gluttony in the Judeo-Christian tradition. Now, fat shaming is a detrimental belief that the fault lies not in our stars or our cells but only in ourselves.

Worldwide, fat shaming is reported by over 50% of people trying to lose weight and is perpetuated by the news and entertainment media, health professionals, and the general public. The diffuse fat bias promotes self-directed fat bias, lack of self-esteem, and feelings of hopelessness in individuals with obesity. The view that obesity and the inability to sustain weight loss are due to a lack of willpower coupled with unhealthy lifestyle practices is augmented by the incorrect assumption that people without obesity therefore have more self-control and engage in better lifestyle choices. Fat shaming is perpetuated by weight loss plans promising you can "lose weight forever" simply by correcting your (implied) unhealthy lifestyle.

Fat bias worsens health independent of body weight and actually interferes with treatment (contrary to recent media comments). Stigmatization-induced stress has been associated with more eating and less gym attendance. The effect is evident throughout the lifespan. It was shown over 60 years ago that children ages 10 to 11 years ranked images of a child with obesity as less likeable than children who were "normal" weight, wheelchair-bound, with crutches and a leg brace, a
missing hand, or facial disfigurement. Similar findings have since been reported in pre-school children.

The psychological stress of social stigmatization imposed on children with obesity may be just as damaging as the medical co-morbidities, resulting in significant body dissatisfaction, social anxiety, loneliness, and somatic symptoms. These negative images can be so strong that growth failure and pubertal delay have been reported in children due to self-imposed caloric restriction arising from fears of developing obesity. The consequences are cumulative and greater weight-related teasing in childhood is associated with less successful weight maintenance in adulthood.

While explicit shaming of people with overweight or obesity may be increasingly rejected, the prevalence of weight bias is not changing quickly enough. In a survey of almost 90,000 adults, the Obesity Action Coalition found increasing social discomfort and rejection with people who have obesity.

**Recognizing Obesity As a Disease Is Important**

How big a difference would it make to a patient who wants to lose weight and keep it off if everyone recognized obesity as a disease and gave them the same consideration afforded to people with other chronic diseases?

Broad acceptance of obesity as a disease would be beneficial in many ways, some beyond decreased fat shaming. If Congress realized they were denying Americans coverage for a disease whose treatment could reduce health costs, they might allow the Stop Subsidizing Childhood Obesity Act of 2012, the bipartisan Treat and Reduce Obesity Act of 2012, the SWEET act of 2014, or the bipartisan ENRICHH Act of 2015 to progress to a vote instead of languishing in subcommittees in deference to Big Food.

To be sure, there is progress. The overall prevalence of fat bias is decreasing slowly. There are multiple new promising pharmacotherapies. The current NIH emphasis on precision medicine and nutrition is a big step towards augmenting our ability to leverage both current and future treatment options to promote weight loss and prevent regain. The mandate for health professionals and others to use person first language -- where someone is identified as a person with obesity or diabetes rather than as an obese patient or a diabetic patient -- is another big step towards separating the person from the stereotype of their somatotype.

Yet, the term "obesity" remains taboo and is rarely spoken to patients or by politicians. It affects 40% of eligible voters and there are ethnic/racial and income disparities. For example, African-, Latino-, and Native-Americans are disproportionately affected and are also subjected to treatment.
disparities. Americans earning below $25,000 are 40% more likely to have obesity than those earning above $75,000. Obesity accounts for over 300,000 deaths per year among U.S. citizens. There are tremendous health and financial benefits of recognizing and accepting that obesity is a disease process that begins long before the associated co-morbidities such as diabetes or cardiovascular disease are detected.

Almost 60 years ago, Astwood also wrote, "Corpulence in America is regarded along with narcotic addiction as something wicked, and I shall not be surprised if soon we have a prohibition against it in the name of national security." In 2013, Benjamin Carson, MD, Secretary of Housing and Urban Development in the Trump administration, characterized individuals with morbid obesity as "addicted to eating." A recent CDC publication is headlined "Obesity is Impacting National Security." How long will it be before all of Astwood's predictions are realized and half the country is held criminally liable for being too fat? Meanwhile, we are aggrandizing billionaires for becoming briefly weightless in space, but stigmatizing 100 million Americans because they don't weigh less.

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