Education

IN LIFESTYLE MEDICINE

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The Benefits of Obesity Medicine Certification

Abstract: *With the majority of patients seen by primary care practitioners suffering from overweight or obesity, an additional certification in obesity medicine provides the critical tools and skillset to expertly address the many chronic health conditions predicated by unhealthy adiposity and excess weight.*

Keywords: obesity medicine; obesity medicine certification; obesity education; obesity treatment; obesity treatment education

Statistics on Obesity

The prevalence of adults suffering from obesity in the United States has increased from 15% in 1980 to nearly 40% today, a jump of more than 200%. At present, 2 out of 3 adults are now overweight and as many as 1 out of 5 adolescents. The body mass index (BMI) distribution is shifting upwards dramatically, especially in the proportion of the US population having a BMI > 40 kg/m². Should we fail to address this epidemic, the majority of Americans are predicted to suffer from obesity by 2030.

Recent evidence indicates obesity is associated with more morbidity than smoking, alcoholism, and poverty. Remarkably, overweight and obesity is the leading cause of military medical disqualifications. With approximately 25% of applicants rejected for this

reason, it is deemed a burgeoning threat to national security. If current trends continue, obesity will soon overtake cigarette smoking as the leading cause of preventable deaths in the United States and play the central role in decreased life expectancy anticipated to occur after decades of increasing longevity.

Obesity is one of the biggest drivers of preventable chronic disease and health care costs. Per capita health care costs for class III obesity (BMI > 40 kg/m²) are 81% higher than healthy weight adults. Overall health care costs

health care expenditures in the United States, even exceeding health care costs due to smoking.

What Causes Obesity?

What causes obesity? Many people believe the answer to this question is a simple matter of energy imbalance—eating too many calories and burning too few. Yet, if this were true, advising patients to eat less and exercise more should have a greater effect. We would also have to conclude the majority of

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associated with obesity are estimated at \$117 billion in direct (preventive, diagnostic, and treatment services related to weight) as well as indirect (absenteeism and loss of future earnings due to premature death) expenses. This accounts for 6% to 12% of total national

Americans and 25% of the world population (1.9 out of 7.6 billion people) are just not trying hard enough to lose weight. We now know that obesity is a chronic, relapsing, multifactorial, and neurobehavioral disease where an increase in body fat promotes tissue

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dysfunction and abnormal physical stress to the body because of fat mass. This causes metabolic, biomechanical, and psychological health consequences.

The myriad factors causing obesity—including the role of genetics, the microbiome, medical conditions, medications, nutrition, and lifestyle—are being better elucidated. For instance, genes and their interplay with the environment (epigenetics) play an important part in the genesis of obesity. Genome Wide Association Studies, made possible since the Human Genome Project's completion in 2003, show that more than 300 genes, more than 60 relatively common genetic markers, and 30 syndromes that include obesity are implicated in predisposition or susceptibility to the disease.

Understanding the metabolic and neurohormonal imbalances leading to obesity in type 2 diabetes (and its precursors), depression, polycystic ovary syndrome, and obstructive sleep apnea is key to understanding and reversing the downward spiral of ever-increasing weight and subsequent poor health. Of course, nutrition and lifestyle play a central role. Through a growing body of research, we know all calories are not created equal. Refined carbohydrates and unhealthy saturated fats are implicated in expanding waistlines. Changes in behaviors and relationship toward food are of great importance in the shift toward obesity, including cultural, behavioral, and environmental factors. Sleep and circadian rhythms, as well as chronic stress, also figure importantly in the cause and treatment of this condition.

Obesity is a complex disease that makes treatment challenging. The main causes of obesity often involve a combination of the factors mentioned: environment, genetics, medications, psychological inputs, diseases, hormones, bacteria, and lifestyle choices. These different components often work together to cause obesity, and as a result, no single treatment is effective for everyone.

What Is Obesity Medicine?

Obesity medicine is the field of medicine dedicated to the comprehensive care of patients with obesity. Clinicians who practice obesity medicine use a comprehensive, scientific, and individualized approach to treat obesity and to help patients achieve their weight and health goals.

An obesity medicine physician has competency and a thorough understanding of the treatment of obesity and the genetic, biologic, environmental, social, and behavioral factors that contribute to it. As such, physicians certified in obesity medicine are able to employ therapeutic interventions including diet, physical activity, behavioral change, and pharmacotherapy, as well as utilize a comprehensive team approach, which may include nutritionists, exercise physiologists, psychologists, and bariatric surgeons, to achieve optimal results. Additionally, the obesity medicine physician maintains competency in providing presurgical, perisurgical, and postsurgical care of bariatric surgery patients; promotes the prevention of obesity; and advocates for those who suffer from obesity.

As the tide turns with increasing recognition that obesity is not simply a lifestyle choice, record numbers of physicians are gaining their certification in obesity medicine to better understand how to meaningfully treat this patient population.

Certification in obesity medicine became available in 2012 through the American Board of Obesity Medicine (ABOM). During the inaugural year, 224 physicians sat for the exam. In 2018, 722 physicians took the exam, growing the number of those certified as Diplomates to 2656 with the expectation this number will top 3000 after the 2019 exam and with 890 physicians registered for the upcoming exam, the expectation this number will top 3,400 in 2019.

Moreover, the NP and PA Certificate of Advanced Education in Obesity Medicine offered by the Obesity Medicine Association (OMA) provides nurse practitioners and physician assistants an opportunity to earn a certificate in obesity medicine to demonstrate an extensive knowledge of evidence-based obesity treatment approaches. This certificate is offered to NPs and PAs, who are currently not able to sit for the ABOM exam, with the intent of making treatment by obesity medicine specialists more accessible to those seeking care.

The number of obesity medicine specialists providing improved access to expert care via a comprehensive, scientific, and individualized approach to obesity treatment is expected to top 5000 physicians in the next few years and hopefully as many NPs and PAs in the not too distant future. This trend speaks to the growing number of health care professionals realizing the benefits of taking a weight-centric approach to patient care and the professional satisfaction of measurably improving chronic disease outcomes alongside durable weight reduction.

A Deeper Dive: Understanding Obesity Medicine

To date, more than 200 chronic health conditions have been directly linked to excess weight. Underscoring the impact of overweight and obesity on health across all age groups, the American Medical Association designated obesity a disease in 2013. In the 5 years since this declaration, a slow but steady transformation has taken place as health care providers, their patients, and health insurers begin to understand the large body of science behind obesity, metabolic dysregulation, and body weight set-point, and address patients' suffering from obesity rather than presuming insufficient willpower, lack of discipline, and bad choices as the central cause.

This growing mindset grounded in evidence-based medicine has been instrumental to increasing our knowledge of pathophysiological mechanisms regulating adiposity. Understanding the role genetics plays in body weight regulation and distribution allows health care providers to customize dietary, behavioral, and even physical activity recommendations for patients.

New information and tools in pharmacotherapy with an eye toward anti-obesity pharmacotherapy targeting specific pathways to aid in weight reduction and maintenance, as well as medications causing weight gain, allow for a more thoughtful approach to medication use and weight management. These new treatment modalities allow patients who have struggled unsuccessfully with weight loss for years to lose and maintain a healthier weight.

Take, for example, better knowledge of the incretin-like effects of GLP-1 receptor agonists. We now understand the role they play in pancreatic insulin synthesis, decreased gastric emptying, appetite suppression in the brain, and gluconeogenesis in muscle and the liver. This has allowed for medication development to improve glucose control and body weight regulation.

Addiction medicine and a better understanding that the same addictive pathways in tobacco, alcohol, and other substances also play a role in maladaptive eating patterns in food addiction and abuse have proven valuable in the medical treatment of obesity. For instance, the understanding that bupropion, a norepinephrine reuptake inhibitor, activates proopiomelanocortin (POMC) neurons in the hypothalamus regulated by endogenous opioids via opioid-mediated negative feedback can cause the downstream effect of decreased appetite and increased energy output has been key in its use for weight loss. Combination with naltrexone to further augment bupropion's activation of POMC neurons results in reduced food cravings and better outcomes in patients struggling with addictive behaviors

around food. This is likely through the modulation of the dopaminergic mesolimbic pathway, hypothesized to be a major site of the risk-reward analysis in the brain and associated in drug and food addictions.

Combining our knowledge of medication and genetics, Anton et al in 2008¹ reported in the *Archives of General Psychiatry* how an opioid receptor gene called Asp40, which is found in 60% to 70% of individuals of Asian descent and in 30% of Caucasians, demonstrated a strong response to naltrexone and predicted success in substance abuse treatment. Treatment in individuals without the gene variant, such as those of African descent, was ineffective.

These types of breakthroughs further inform the obesity clinician's individualized patient treatment plans and underscore the critical role obesity medicine specialists play in the treatment and management of obesity. Having anti-obesity medications available as part of one's armamentarium in the treatment of obesity often leads to a paradoxically lower overall medication use in patients—a welcome relief given the escalating prevalence of polypharmacy and its inherent dangers.

Collaborative efforts are necessary for more effective obesity care and to destigmatize the disease. Primary care providers must enter into the discussion with patients about weight and weight-related issues to increase understanding that obesity is a medical condition best addressed by medical professionals. Too many patients turn to popular advertising and heed nonmedical advice relating to weight loss because they either do not realize the importance of a medically trained obesity medicine specialist or cannot find one.

According to the ACTION study published in 2017, part of this misunderstanding stems from the belief that obesity is a personal choice rather than a medical problem, and that if patients just tried harder to eat less and exercise more, they would succeed. As a result, many patients fail to discuss

obesity with their primary care provider.

National studies have shown that obesity counseling rates remain low among health care professionals. The reasons vary and include practice time constraints, perceived lack of effective tools and treatment options, low confidence or insufficient training in weight management skills and counseling, or concern that raising the topic will be interpreted by the patient as insensitive. These data suggest there is an extensive gap between recommended obesity care and current physician practice. To address this need, an increasing number of physicians are devoting a portion of their practice to obesity care.

How to Certify in Obesity Medicine

Physicians in the United States and Canada are currently eligible to sit for the ABOM exam. Candidates for ABOM certification must complete a minimum of 60 credits of Continuing Medical Education (CME) on the topic of obesity within 36 months of the application deadline; must have proof of an active medical license and completion of a residency in the United States or Canada; and must have active board certification in an American Board of Medical Specialties (ABMS) member board or Osteopathic medicine/Royal College (Canada) equivalent. Once required credentials and CME are completed, candidates may submit an application to sit for the certification exam.

Though NPs and PAs are currently not eligible to sit for the ABOM exam, they may earn a Certificate of Advanced Education in Obesity Medicine through OMA. Candidates must have an active, unrestricted NP or PA license and must earn a minimum of 60 CE credits through OMA within a 36-month period in order to apply.

As board certification is the traditionally accepted designation of professionalism in medicine, fulfilling

these requirements and passing the exam demonstrates knowledge and ability to provide excellent medical care to patients with obesity. In so doing, we are improving patient outcomes by taking the steps to treat the roots, not the fruits of obesity.

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