

Obesity and its Related Chronic Diseases from a Corporate Perspective

Introduction

Progress in prevention and treatment of infectious diseases has been partially offset by increased incidence in noncommunicable diseases such as diabetes, heart disease, and lifestyle-related cancers. The marked increase in prevalence of obesity over the past five decades has been recognized as a major source of this problem. Obesity and its sequelae incur an enormous personal, social, and economic cost.¹ From a population perspective, obesity contributes to increased illness burden, reduced functional status and productivity, and higher costs of medical care. When applied to the corporate setting, obesity impacts almost all elements of business operations and performance, compromising corporate competitiveness.²

Obesity by the Numbers

Globally, excess weight affects more than 2.1 billion people. Almost 30% of the global population meets overweight (body mass index (BMI) ≥ 25 -29.9 kg/m²) or obesity (BMI ≥ 30 kg/m²) criteria based on body mass index, a staggering statistic when considering that it is nearly 2.5 times the number of people in the world who are undernourished. Current projected global prevalence of overweight and obesity is estimated at 50% by 2030.³ Furthermore, obesity is one of the top three global social burdens generated by human beings. The global economic impact of obesity is roughly \$2.0 trillion, or 2.8% of global Gross Domestic Product. Obesity, viewed through this lens, has the same impact on the global economy as armed conflict (armed violence, war, and terrorism) and only somewhat less than smoking (2.9% of global GDP).⁴ As BMI increases, so do

health care expenditures. The World Health Organization estimates that overweight and obesity is associated with 2% to 7% of global health care spending.

In the U.S., obesity rates have increased from approximately 13% in the late 1950s to 36% by 2010. Childhood obesity prevalence has tripled during the course of a single generation and adult obesity prevalence has increased to more than one-third of the U.S. population.⁵ Obesity-related medical expenditures in the U.S. were estimated at \$147 billion in 2008 and were projected to reach \$344 billion by 2018, effectively imposing a “tax” of \$1,425 on every American.⁶

A Corporate Point-of-View

From a corporate perspective, obesity is fast becoming a problem that can no longer be ignored. Over a span of three decades, between 1986 and 2011, obesity prevalence of the U.S. workforce doubled from approximately 15% to 30%.⁷ Obesity affects almost every aspect of running a company. It affects a company’s human capital—its workers—due to its detrimental association with increased illness burden, reduced function, and increased disability. For example, obese employees file twice as many workers compensation claims, have 20% more doctor visits, and 26% more emergency room visits compared to their healthier weight counterparts. In addition, obese workers often face stigma, discrimination, and prejudice at many stages of the employment process, including hiring, wage determination, and job promotions.^{2,7} All these factors associated with obesity may be considered “costs” that affect the worker and in turn, the company.

Obesity negatively affects a company’s financial capital as associations with health care costs and productivity loss erode the finances available for a company to operate.

For example, obese workers incur on average \$644 more in medical care costs, are 80% more likely to have work absences, and were 3.7 more days (7.7 vs. 4.0 days) absent from work than normal-weight workers.⁴ A corporation’s social capital is also affected by obesity due to impacts on worker performance. Perhaps not surprising given the fact that stigma and discrimination are particularly pronounced in the workplace setting, “getting along with co-workers” was noted to be negatively associated with obesity in a large multi-employer study.⁸

In today’s contemporary workplace, sedentary jobs are much more prevalent than five decades ago. Over the past 50 years, the need for physical exertion required to meet the demands of the job has reduced by approximately 100 calories per day. This seemingly minor shift in daily occupation-related energy expenditure is purported to account for as much as 80% of the concomitant increase in body weight among the U.S. workforce.⁹ An additional consideration employers need to consider is the aging of the workforce and the associated changes in generations working alongside each other. By 2020, the workforce is projected to include 1% Traditionalists, 22% Boomers, 20% Gen X-ers, 50% Gen Y-ers, and 7% Gen Z-ers. Five generations working alongside each other with varied worldviews and employment related perspectives—from the loyal traditionalists to the hyperconnected Gen



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Z-ers. Yet, obesity will be highly prevalent among all groups. Based on 2020 forecast data from the Future of the Workplace Survey data, obesity rates are projected to vary between 26.3% and 33.3% for the four older generations and be at 14.7% for the Gen Z generation. As such, obesity is likely to be a long-term corporate concern as much as it will remain a public health challenge.

The Challenge of Complexity

Obesity is a defiant health problem, largely resistant to interventions designed to prevent it. Efforts designed to reduce obesity have struggled to provide clear-cut answers for the workplace setting. In general, population-based interventions have generated small effect sizes and no single solution has created sufficient effect size to reverse the obesity trend among workers.^{10,11} Furthermore, as depicted in Figure 1, few interventions are successful at long-term maintenance of weight loss. Clearly, obesity is complex in its biological, social, psychological, and societal determinants and ramifications. The causes of obesity are complex, manifold, and interdependent. They are influenced by social, economic, financial, biological, and epigenetic triggers. Programs to address obesity at the workplace need to recognize this setting as a complex social environment. Solutions need to be sought across all sectors of society—a seemingly reasonable approach considering all sectors will share benefits.

Multi-Sectoral Approaches to Obesity

It is highly unlikely that a single solution will present itself to the challenge of obesity. It is also clear that no single entity “owns” the obesity problem. Rather, we should look for partnerships across multiple sectors in which companies and their leaders may play a certain role and provide a certain set of resources, but that are supported by other entities that extend the reach of activities way beyond the workplace walls. Whereas no single solution is likely to “fix” the problem, every single intervention is likely to have some degree of effect—cumulatively impacting upon the aggregate level. When such approaches are implemented in a multi-sectoral model and sustained over an extended period of time, successful outcomes may be

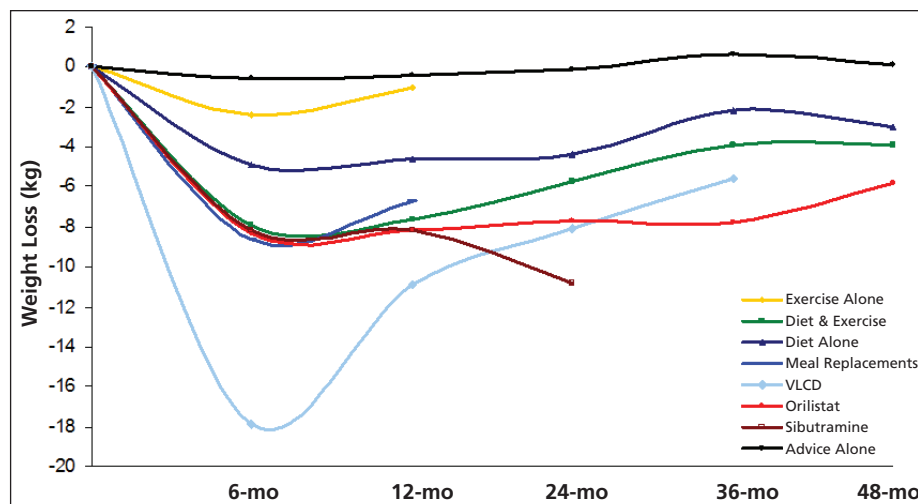


Figure 1. Average weight loss of subjects completing a 1-year weight management intervention based on a review of 80 studies (N = 26,455; 18,199 completers). (Reprinted from: Franz MJ, Van-Wormer J, Crain L, et al. Weight loss outcomes: A systematic review and meta-analysis of weight loss clinical trials with a minimum of 1-year follow-up. *Journal of the American Dietetic Association*. 2007;107(10):1755-1767. Copyright 2006 HealthPartners. Used with permission.)

generated.⁴ This means that employers need to provide resources and access to programs for their workforce. However, those resources should be coordinated with the families of workers, the clinics and physicians where employees and their families receive their care, local schools, and other partner organizations in the broader community.

From Workplace to Community

Individual behavior, notably eating and physical activity behavior, is linked to excess body weight, but the environment in which workers find themselves is a powerful modifier to such behavior. The culture of the workplace, the normative influence of the organization on the workers, may be considered a causal factor in the complex system that surrounds the individual. Therefore, employers should consider efforts at multiple levels of the organization and with partners that can deepen and extend the results beyond the time that people are at work. The first and foremost of such partners should be the individual workers themselves.

Employers should consider acting at the individual level to provide access to programs that modify lifestyle behavior. They should leverage the tools available to them to help facilitate changes in the corporate environment and organizational culture to make these more conducive to healthy lifestyles and healthy weight. Such tools would include benefits design, corporate communications, the use of social media, creative ways to leverage technologies, and, of course, people. In particular, corporate leaders need to be

explicit in setting a vision for the company and be visible in supporting their managers and directors in carrying out such vision.

Going beyond the workplace, employers should intentionally include the family in programs designed to support healthy weight. Furthermore, when it comes to addressing obesity as a disease, a connection to primary care or other clinical programs would be ideal. This is an area of much interest and new models, informed by the rapidly changing clinical environment due to implementation of the Affordable Care Act, are emerging. For example, building upon the Chronic Care Model, a new integrated framework for the prevention and treatment of obesity has been introduced by the Obesity Solutions Roundtable at the National Academy of Medicine. This framework explicitly recognizes the connections between obesity and the various community stakeholders, including the employer. ♦

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References available upon request.

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