Heavy cost of obesity in healthcare

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Health Care Finance

Abstract

This paper analyzes multiple studies that encompass a variety of the effects of the obesity epidemic in America. The current state of obesity and the effects attributable to obesity are discussed. An analysis of the total costs of obesity in healthcare and the economy resulted in the discovery that the total national costs of obesity is $147 billion. Along with the subjects previously mentioned, this paper also sheds light on the ways in which the epidemic is being addressed in the forms of health policy and workplace wellness programs. The scope of the problem is expected to greatly increase in the near future, with a projection of 86. 3% of adult Americans being overweight or obese by 2030. It is imperative to thoroughly research this topic in order to potentially decrease future healthcare expenditures.

Introduction

Obesity in America has become more problematic than ever before in our history. The World Health Organization defines obesity as abnormal or excessive fat accumulation that presents a risk to health. It is reported that nearly two-thirds of adults in America are overweight or obese (Marks, 2004). Being overweight or obese creates an elevated risk of acquiring many chronic diseases such as diabetes, cardiovascular diseases, and cancer. There are many contributing factors to the rapidly growing obese population. With advancements in technology and transportation, individuals are able to do more by physically doing less. Decreased activity levels, large portion sizes, and fast-paced lifestyles are a recipe for poor health and nutrition. This

epidemic has not only created problems for the overall population health, but also for the cost of America’s healthcare system. In 2017, United States healthcare spending reached a new high of $3. 5 trillion dollars, growing by 3. 9% (CMS, 2018). In 2008, the Centers for Disease Control and Prevention reported that the estimated national costs of obesity were $147 billion, and the productivity costs of obesity-related absenteeism ranged from $3. 38-6. 38 billion. This data shows that obesity is not only accounting for a sizeable portion of our healthcare spending, but also impacting our economy in productivity reduction for companies across the nation. The problem of obesity has grown to such an extent that it must be accounted for when discussing the most prevalent morbidities and their associated expenditures in healthcare. Obesity has continuously contributed to billions and billions of dollars of additional costs to the United States healthcare system and without intervention this amount could rise substantially in the forthcoming years.

Current State of Obesity

Today, obesity is more prevalent in the American population than at any other point in history. In order to screen and measure whether an individual is obese, Body Mass Index (BMI) is commonly used. BMI is defined as weight in kilograms divided by height in meters squared (NIDDK, 2017). The overweight classification for adults over age twenty is a BMI between 25-29. 9 and the obese classification is an BMI over thirty. A NHANES survey of the National Center for Health Statistics (NCHS) reported that 73. 7% of men and 66. 9% of women were either overweight or obese. Between the years 1980-200 the percentages of men and women who were obese increased by a

margin of about twenty percent and since 2013 women have seen another significant rise in individuals who were obese (NIDDK, 2017). The Hispanic and non-Hispanic black population had the highest age-adjusted prevalence of obesity with rates of 47% and 46. 8% respectively (CDC, 2017). Why are the rates of obesity increasing at a time when as a society we know more about health and nutrition that ever before is a question one might ask? Technological innovations is one of the primary factors that researchers point to when determining contributing factors to the current obesity epidemic. These innovations refer to improvements that have led to lower costs associated with consumption and increased rates of sedentary lifestyle (Bleich, Cutler, Murray & Adams, 2008). These innovations have led to a more automated work place in order to increase efficiency and reduce need for physical movement. As the amount of technology in the work place becomes more prevalent this will continue to be a factor that must be analyzed. Another causal factor of obesity that is often referenced is the portion size that Americans are consuming at each meal. As a population, it is now routine to often be exposed to larger portion sizes and it has distorted the image of what the appropriate amount to eat is (Livingstone & Pourshahidi, 2014). Restaurants have been utilizing a marketing strategy of providing larger portions at a low cost per unit to increase volume of sales (Ledikwe, Ello-Martin, & Rolls, 2005).

Obesity Attribution

Obesity is not only a cost in itself, but a cost in the other chronic diseases or illness that can often times be attributed to the health condition. There is a strong correlation between obesity and a wide variety of chronic diseases. A

2001 study showed that individuals with a BMI of 35. 0 or greater were approximately twenty times more likely to develop diabetes than those in the BMI range of 18. 5-24. 9 (Field, Coakley, & Must, 2001). In the same study, men and women who were overweight and not obese, BMI range between 25. 0-29. 9, were also significantly more likely to develop gallstones, hypertension, high cholesterol, and heart disease. During ten years of follow up for the study, more than half of the men and were diagnosed as having high blood pressure or high cholesterol.

Obesity also impacts the number of quality life years. The Framingham Heart Study estimates a decrease in life expectancy of six to seven years for those overweight and aged forty. Due to variation in how it is measured, the annual number of deaths attributable to overweight and obesity ranges from 110, 000 to 400, 000 deaths annually (Wyatt, Winters, & Dubbert, 2006).

Obesity does not only attribute to negative physical health outcomes, but mental health outcomes as well. Anxiety, depression, and low self-esteem rates may also be higher amongst those overweight or obese due to the negative stigma associated with it. One study even suggested that adolescents who are overweight are less likely to marry, complete fewer years of education, and have a lower household income as an adult (Wyatt, Winters, & Dubbert 2006). Evidence was provided by Puhl and Brownell (2001) that adults who are overweight or obese experience discrimination in employment, education, and healthcare. Even healthcare professionals reported they preferred not to treat or touch these patients and they were repulsed by them (Wyatt, Winters, & Dobbert, 2001).

Cost of Obesity

As stated previously, obesity cost the United States healthcare system approximately $147 billion dollars. This total number of healthcare costs can be broken down into many categories to get a better understanding of how that number is calculated. The average annual direct medical cost of being overweight is $266 and for being obese is $1723. The direct medical costs associated with overweight and obesity combines for approximately five to ten percent of all United States healthcare spending (Tsai, Williamson, & Glick, 2012). When compared to subjects with a healthy BMI, those who had a BMI of overweight or obese had 1. 20 and 1. 84 times the number of annual pharmacy dispenses respectively. The number of outpatient visits to primary care providers was also higher for the overweight and obese populations with rates of 1. 12 and 1. 38 times the number for those with a healthy BMI. It was discovered that individuals with a BMI equal to or greater than thirty had 36% higher annual healthcare costs (Thompson, Brown, Nichols, Elmer, & Oster, 2012). Not only does obesity contribute to the health costs today, but also in terms of future costs.

In one study that was done, a projection model estimated that by the year 2030, 86. 3% of all American adults would be either overweight or obese. Based off the projection, healthcare costs associated with overweight and obesity could range from $860 to $956 billion, which accounts for 15. 8-17. 6% of all healthcare expenditures or for one in every six dollars spent in healthcare. Even with these projections, the researchers believe that these numbers are likely an underestimation of the real influence it will have (Wang, Beydoun, Liang, Caballero, & Kumanyika, 2012).

Outside of healthcare expenditures, obesity also has a financial impact on the economy in other manners such as lost productivity and foregone economic growth due to lost work days, lower productivity at work, mortality, and permanent disability. Statistics from a study done in 2014 show that the global economic impact of obesity was estimated to be $2 trillion (Tremmel, Gerdtham, Nilsson, & Saha, 2017). The term “ presenteeism” is a term created to describe an employee being less productive while on the job. Researchers Ricci and Chee measured presenteeism by a definition of “ the average amount of time between arriving at work and starting work on days when an employee is not feeling well and the average frequency of engaging in five specific behaviors: losing concentration, repeating a job, working more slowly than usual, feeling fatigued at work, and doing nothing at work.” Their estimates from the measure they used were that obese workers cost United States employers an additional $11. 7 billion per year compared with normal workers due to increased absenteeism and presenteeism (Finkelstein, DiBonaventura, Burgess, & Hale, 2010).

Obese individuals not only cost their employers in terms of productivity, but also in additional expenditures for insurance coverage for their increased health risks and associated chronic conditions. Health insurance is one of the most significant costs for employers that adds no additional value to the company itself. In 2002 it was estimated that obesity cost private employers an additional $45 billion per year (Heinen & Darling, 2009). Obese employees on average cost their employers an additional $3880 per year in covered healthcare expenditures (Van Nuys et al., 2014). These additional costs may not seem that significant, but for a small business they can

greatly affect operations. Smaller employers fear these additional expenditures due to the fact that one or two serious health outcomes can put a company out of business and destroy what they have built up. This can lead to employers choosing a health insurance policy based on costs rather than the quality of coverage, which can leave their employees underinsured and with a greater out-of-pocket expense for their medical care.

Addressing Obesity

The scope of the obesity problem in America has forced healthcare professionals and employers to address the issue to try and rectify the negative impacts that this health condition can have. The United States has even begun to implement new health policies in order to combat the problem. Literature on nutrition and healthy lifestyle habits have increased, weight management programs have been put in place, and incentives for choosing healthy behaviors are just a few of the strategies that are being utilized in order to combat the problem.

The strategy to prevent obesity is not a new one as it has been a primary focus of national health public policy since 1980. Privately funded campaigns can be a useful asset to battling the issue but cannot be expected to accomplish a widespread change in behavior due to the autonomous nature of our society in that people are still empowered to make their own decisions on their personal health. For this reason, it is important for public health policy to reflect the goals it wishes to accomplish. The federal government has the ability to regulate places such as schools, medical centers, and communities which can allow them to create a healthier environment for its

citizens. As time has passed the policy changes have become more significant. Healthy People 2000 listed physical activity and fitness as the number one priority area for behavior change (Nestle & Jacobson, 2000). After this priority was listed, there was little change in the obesity trend in America, which led to a more targeted effort in Healthy People 2010. One of the goals listed by Healthy People 2010 was to decrease the prevalence of obesity to 15% by tracking data on overweight and obesity from 190 sources and listing it as a top ten leading health indicator (CDC, 2010). A more recent and familiar policy implementation is the Healthy Hunger-Free Kids Act of 2010, which was put into action by then First Lady, Michelle Obama. This act authorized government funding for federal school meal and child nutrition programs and increased the access to healthy food to low-income children. This piece of legislation allocated $4. 5 billion of government funds to implement and maintain these programs for ten years (Child Nutrition Reauthorization Healthy, Hunger-Free Act of 2010, 2010). This program was dedicated to reducing childhood obesity and is yet another government expenditure on obesity, in this case to prevent it.

Weight management programs in workplaces is another way in which the obesity epidemic is being addressed. These programs are often put in place by employers to help maintain affordable health care plans. Employers frequently try to increase participation by offering lower premiums to employees who complete the programs. They create a healthy lifestyle environment by offering healthy on-site food options, having open stairwells, walking paths, and even the simple offering of free, filtered water (Heinen & Darling, 2009). Multiple studies have shown that offering these types of

programs can generate savings for the company greater than the expense of offering the program. Baicker, Cutler, and Song (2010) created a study of a multitude of workplace wellness programs and found that the average reported return on investment across the studies was $3. 37. These programs produced $358 in savings through reduced health costs per employee per year, and at a much lower average cost to the employer of $144 dollars per employee per year (Baicker, Cutler, & Song, 2010). The absentee costs after implementation of the programs fell by $2. 73 for every dollar spent as well. These results show that the employer can have a huge role in combating obesity. These wellness programs lower healthcare expenditures by decreasing medical costs and allowing for more affordable insurance plans. Along with reducing employer and employee costs, wellness programs also promote a healthier work environment which can aid in employees making more appropriate lifestyle choices outside of the workplace.

Conclusion

Obesity in America has become a significant problem for the health of our people and for our healthcare system. This condition is more prevalent than ever before and has an estimated national cost of $147 billion to healthcare. Studies show that factors such technological innovations, decreased activity levels, and portion sizes have a strong correlation with the upward trend of obesity. Obesity is attributable to many other chronic conditions like diabetes, hypertension, and heart disease, while decreasing the number of quality life years. The effects of obesity are not only shown physically, but in mental health outcomes as well. The negative health outcomes associated

play a role in increased direct medical costs and indirect costs for those affected. Indirect costs associated are loss of productivity, loss of economic growth, and increased expenditures by employers for health insurance coverage. With the continuous growth in the obese population, there is a constant need to address the issue by way of health policy reform and implementing workplace wellness programs which can incentivize healthy lifestyle choices. With the projected estimate of 86. 3% of adults being overweight or obese in 2030, the future costs of obesity is increasingly concerning to the American healthcare system.

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