Qingyuan Xu

PSY329

Prof. Cornwell

December 6th

Obesity Impacts Women Physically, Psychologically, and Economically
ABSTRACT

Obesity is one of the most common and serious social problems in the United States. Moreover, the number of obese women increases dramatically over recent years. In the current paper, by providing and introducing three studies which demonstrate how obesity impacts obese women physically, psychologically, and economically respectively, we will reach our conclusion that obese women are more likely to have depression and breast cancer ,and on average, they spend much more money to live in the United States than others. As a result, we should encourage people, especially obese women, to do more exercise, eat lower-fat food, and drink more water to not only help solve the problem but live their lives much more healthily and happily.

INTRODUCTION

In the United States, obesity is an epidemic and it continues to grow, led by an alarming increase among women. Obesity is now considered as one of the nation's leading public health problems. This serious problem started to raise more awareness not only because the number of

obese people kept increasing over the recent years, but because of the alarming increase in the number of obese women.

Obesity is defined as having a body mass index (BMI), which is calculated by dividing your weight in kilograms by your height in meters squared, of 30 or more. According to the CDC (2017), in the United States, obesity in women who aged more than 20 years old had risen by 33.4% between 2001 and 2014, and from 2013 to 2014 it reached a high of 38.3%, exceeding the rate in men, which is 34.3%. By 2016, over 40% of women are obese, while the obesity rate for men was 35%. 15 percent of women worldwide and 11 percent of men are obese. In addition, the rate of obesity in women is also higher than in men across the world, although far lower overall than in the U.S. According to the World Health Organization (2016), 15% of women worldwide and 11% of men are obese.

By now, nearly everyone knows that being obese is bad for his/her physical health. However, being obese does not only cause physical harm, but bring psychological and economic problems. In this paper, I will introduce three recent research studies and talk about how women are impacted by obesity physically, psychologically, and economically.

DESCRIPTION OF RESEARCH

According to Engmann (2018), breast density is one of the strongest and the most common risk factors for breast cancer. Obesity is also a risk factor for breast cancer, but only for postmenopausal women. Based on previous research, obesity has been associated with no effect or reduced risk of breast cancer among premenopausal women. In Engmann's opinion, the effect

of volumetric breast density on breast cancer risk is modified by obesity for both premenopausal and postmenopausal women.

To examine this hypothesis, Engmann collected and analyzed 9450 cases from two breast-screening practices. Patients' demographic information and their menopause status were collected when they showed up for breast screening. Each patient's BMI was either calculated from self-reported height and weight or obtained from the medical record closest to the study. Estimates of dense breast volume (DV) are obtained by summing the estimated dense tissue across all pixels in the breast image and estimated total breast volume is determined by multiplying the estimated breast area by the breast thickness. Volumetric percent density (VPD) was obtained by dividing the estimated DV from the total breast volume.

Based on the result, VPD was positively associated with breast cancer risk in premenopausal women, and the association increased strongly with increasing BMI. Odds ratios for breast cancer risk for a 10% increase in VPD among normal weight, overweight, and obese women were 1.39, 2.19, and 2.88 respectively, which means that obese women were more likely to have breast cancer if their VPD increases. Similarly, for postmenopausal women, the association between breast density and cancer risk increased significantly with increasing BMI for VPD. In other words, higher VPD was associated with increased breast cancer risk, and the magnitude of this effect was significantly greater in both premenopausal and postmenopausal obese women.

The above study demonstrated that obese women are more likely to get breast cancer than women of normal weight. But in addition to physical problems, obesity can also harm women psychologically.

Many people think that there is some evidence of a reciprocal relationship between obesity and depression. Therefore, to explore the prevalence of depression among underweight, normal weight, overweight, and obese patients, a 15-minute cross-sectional survey was conducted in Australia (Carey et al., 2014). This is also one of the first studies to examine the prevalence of depression across all BMI categories in the Australian general practice setting. To gather as much data as possible, researchers set up touchscreen computers with surveys in 12 Australian general practices. Research assistants were assigned to these practices and sought informed consent from patients to participate in the study when they presented their doctor appointment. The survey assessed self-reported weight and height and depression were assessed by the Patient Health Questionnaire-9 (PHQ-9).

In total, 3,361 participants answered the survey. The result shows that underweight and obese patients are more likely to feel depressed than others: the prevalence of depression was 24% among underweight participants and 23% among obese participants, while the prevalence of depression was 11% among normal weight participants and 12% among overweight participants. In addition, 98 obese women and 58 obese men were diagnosed with depression, which showed that obese women are more likely to feel depressed than obese men. Therefore, we can conclude that the prevalence of obese women is higher than both other women and obese men.

As the two above studies showed, being obese has negative impacts on people both physically and psychologically, especially on women. Moreover, obesity even costs a woman more money to live in the United States.

Aiming to figure out how much does being obesity costs in the United States, Dr. Dor and three other researchers conducted a study (2010). By using existing literature, they analyzed and provided estimates of annual, incremental costs of overweight and obesity from the individual perspective.

To gain a better understanding of obesity and how obese people's life is like, a systematic literature search was performed and the search was limited to "U.S.-based studies published in English before June 4, 2010." In total, they identified 94 studies, which were divided into eight categories, including direct costs, premature mortality, absenteeism, presenteeism, disability, wages, gasoline consumption, and life insurance.

The study found several astonishing results. First, direct medical costs due to overweight and obesity are sizeable, and the costs have increased over time and are more likely to continue to increase. Secondly, obese people spend much more on health care and have a higher mortality rate than overweight or normal weight individuals. Also, the studies suggested body weight and wages for female employees are negatively related, ranging between 1.5% and 15%. In other words, female employees who are obese earn relatively lower wages compared to female employees who are not obese. However, there was no clear or reliable relationship between body weight and wages for male employees. In addition, studies also found that obese women are less productive and more likely to be absent from work as a result of illness or injury than normal-weight women. Finally, obese workers are more likely to suffer from disability than normal-weight workers, regardless of the measure of disability used, and they face more work-related limitations and higher incidences of long-term disability.

As a result, after calculation, It costs an obese woman \$4,870 more per year to live in America than a woman of healthy weight, but it costs less for men — only an additional \$2,646 per year. There is also an added cost for being overweight, although not as high as for being obese: it costs an overweight woman an extra \$524 per year to live in the United States, compared to \$432 extra per year for men.

CONCLUSION

The above three studies respectively demonstrated that obese women are more likely to have depression and breast cancer and on average, they spend much more money to live in the United States than others. Overall, we can conclude that being obese impact people physically, psychologically, and economically, and moreover, women suffer more from obesity than men do. As a result, we should encourage obese people, especially obese women, to do more exercise, eat lower-fat food, and drink more water. These actions will not only help the United States and the world solve this social problem, as obesity has become one of the most common and serious public health problems in the world, but help these patients to live their lives much more healthily and happily.

REFERENCES

- Ap. (2016, June 07). U.S. women hit milestone for obesity. Retrieved from https://www.cbsnews.com/news/us-women-hit-milestone-for-obesity
- Carey, M., Small, H., Yoong, S. L., Boyes, A., Bisquera, A., & Sanson-Fisher, R. (2014).
 Prevalence of comorbid depression and obesity in general practice: a cross-sectional survey. *Br J Gen Pract*, *64*(620), e122-e127.
- Dor, A., Ferguson, C., Langwith, C., & Tan, E. (2010). A heavy burden: The individual costs of being overweight and obese in the United States.
- Engmann, N. J. (2018). Breast density, body mass index, and breast cancer risk:
 Implications for clinical and public health settings
- Pal, S. (2017, September 15). Prevalence of Obesity in Women. Retrieved from https://www.uspharmacist.com/article/prevalence-of-obesity-in-women