

Prevalence and Cost of Obesity

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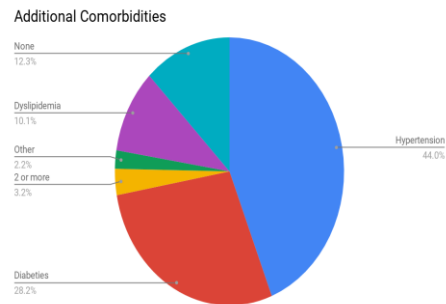
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Introduction:

In 2014, the nation spent over one hundred billion dollars in treating obesity. This results in around \$1,900 per person¹. The research was focused on the Northeast Ohio area, to see how much of our resources are used to treat the disease and solutions that could be implemented.

Methods:

ICD codes were received from the local area, notably Youngstown, and organized based on if they were diagnosed with E.66.1 or E.66.02, which both signify morbid obesity. Afterward, other diagnoses were reviewed to see if those with morbid obesity also significant comorbidities associated with them, as did diabetes.



Results:

- A total of 7601 people with their diagnoses were given
- 318 had either E66.1 or E.66.02
- Of those we see
 - 141 (44%) diagnosed with hypertension
 - 89 (28%) have diabetes
 - 32 (10%) have dyslipidemia
- More than \$600,000, about 0.005% of the total medical costs in Ohio, was spent on obesity treatment in the area

Conclusions:

- Doctor recommended nutritional program proven beneficial to lowering the cost of obesity and comorbidities.
- A meta-analysis reveals that the overall adherence rate of weight loss interventions was 60.5%².
- The following variables were found to impact adherence²
 - Supervised attendance
 - Interventions that offered social support
 - Dietary intervention alone had higher adherence than exercise programs alone.
- By educating the public on healthy eating habits, it is evident that the number of patients with obesity can be reduced, which in turn, can reduce the cost of obesity treatment.
- Nutritional program will provide educational information to patient/public population on weight reduction diets available.
- The exposure of multiple nutritional plans will give patients a variety of preferences to choose from. A prime example of a working diet is intermittent fasting.
- Intermittent fasting can lead to significant weight loss. It was found to reduce body weight by 3-8% over a period of 3-24 weeks³. It prevents some of the adverse effects of chronic calorie restriction, especially malnutrition⁴.
- Allocating funds towards building educational nutrition programs, will lower the cost of treating obesity and its comorbidities, leading to a decrease in morbid obesity.

Citations:

1. Kim, D. D. & Basu, A. Estimating the Medical Care Costs of Obesity in the United States: Systematic Review, Meta-Analysis, and Empirical Analysis. *Value in Health* 19, 602–613 (2016).
2. Johnston, B. C. et al. Comparison of Weight Loss Among Named Diet Programs in Overweight and Obese Adults. *Jama* 312, 923 (2014).
3. Gunnars, K. Intermittent Fasting Helps You Reduce Calories and Lose Weight. *Healthline* (2017).
4. Golbidi, S. et al. Health Benefits of Fasting and Caloric Restriction. *Current Diabetes Reports* 17, (2017).



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