PATHOPHARMACOLOGICAL FOUNDATIONS FOR ADVANCED NURSING PRACTICE: Obesity Pathophysiology, Identification, Treatment, and Disease Management
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ABSTRACT
The purpose of this research paper was to learn the pathophysiology that causes and sustains the obese state in individuals, the toll it takes on body organs and processes, how a patient is assessed and identified as being obese, the treatment options available, and how the disease is managed effectively.

Two states in the United States and two countries in Europe are compared and contrasted for obesity statistics and social determinants. Best practices according to national guidelines were researched in areas of identification, education, and follow-up for patients with obesity. By discussing the pathophysiology, obesity statistics, and best practices for treatment, it is hoped that those that read this paper will learn how to prevent or manage their illness.

It was concluded that diet, exercise, behavioral modification, and proper follow-up with a primary care provider is the key to successful obesity management.

DIAGNOSIS/IDENTIFICATION
- Height and Weight obtained and BMI calculated
  - BMI=30-OBES
  - BMI=25-29 with comorbidities
  - High Risk Waist measurement
- Waist Circumference
  - High risk calculation=
    - Males>94 inches
    - Females>35 inches
  - High Risk Waist Circumference = Increased risk for hypertension, cardiovascular disease, dyslipidemia, diabetes mellitus type 2

INTERESTING FACTS
On a level surface, the impact of the force of gravity on the knees is 1.5 times the body weight.
On an incline, the impact of the force of gravity on the knees is 2-3 times the body weight.
67% of those who achieved long term weight loss considered themselves as having a positive body image.

Being obese puts an individual at an increased risk for other diseases such as atherosclerosis, diabetes, hypertension, coronary artery disease, asthma, osteoarthritis, gallbladder disease, certain types of cancer, and stroke.
Obesity is a state of chronic inflammation, which increases insulin resistance.

TREATMENT OPTIONS
- Diet modification
  - 1000-1200 calorie diet females
  - 1200-1600 calorie diet males
- Exercise
  - 30 minutes of moderate intensity 5 days per week/150 minutes
- Stress reduction/Behavioral Modification
- Journaling of Food and Activity
  - Medication
    - Belvign, Qsymia, Contrave, Xenical,Saxenda
  - Surgery
    - Laparoscopic banding, Gastric Sleeve,Gastric Bypass, Duodenal Switch

BEST PRACTICE FINDINGS
- Restricted Calorie Diet
- Exercise at least 150 minutes per week
- Follow-up with physician for at least 6 months-1 year
- Success=10% reduction in weight over 6 month period

KEY REFERENCES