The Psychological Aspects of Obesity & Bariatric Surgery

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Selection & Medical Management of Weight Loss Surgery Patients
Cary, NC, March 3rd, 2018
Presenter: Kelli E. Friedman, PhD

As previously disclosed, these are the companies with which I have a financial or other relationships:

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Nature of Relationship</th>
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<tr>
<td>Covidien</td>
<td>Consultant/Grant/Proctor</td>
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<tr>
<td>Teleflex</td>
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<td>Gore</td>
<td>Educational Grant</td>
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<tr>
<td>Intuitive Surgical</td>
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Why Psychology?
“...As a psychiatrist, I have no doubt that a morbidly obese patient without other medical cause for obesity (i.e., thyroid disease) already has a severe psychiatric problem...”

-Amanda Itzkoff, M.D., Department of Psychiatry, Mount Sinai Hospital
The Relationship Between Obesity & Psychopathology

- Obesity
- Psychopathology
The Relationship Between Obesity and Psychopathology

Obesity

Psychopathology
The Relationship Between Obesity and Psychopathology

Obesity → Psychopathology
The Relationship Between Obesity and Psychopathology

Obesity → Comorbidities (Stigma, Disability) → Psychopathology
The Role of Psychology in Obesity

- Psychological consequences of obesity
- Psychological contributors to obesity
- Behavioral Weight Loss Treatment (BWLT)
- Psychological aspects of surgical treatment
The Role of Psychology in Obesity

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Psychological Consequences of Obesity

- Depression
  - Stigma and disability

- Extreme obese ~5x increase in risk of depression than average weight (Onyike et al., 2003)

- Relationship stronger for women (Herpertz et al., 2006)
  - (WHY has not been well establish, but likely related to sociocultural factors as well as hormones and fat metabolism)
Psychological Consequences of Obesity

- **Anxiety**
  - Embarrassment about weight
  - Excessive checking
  - Avoidant behaviors

- **Eating pathology**
  - Stigma, body image dissatisfaction, & ineffectiveness of efforts to lose weight, can lead to yo-yo dieting, cycles of deprivation and overeating, etc.
The Role of Psychology in Obesity

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The Etiology of Obesity

Obesity

Psychological Factors

BEHAVIOR
The Etiology of Obesity

- Genetics
- Psychological Factors

Obesity
The Etiology of Obesity

- Genetics
- Culture
- Environment
- Psychological Factors
- Behavior
- Economics
The Etiology of Obesity

Person A

Person B

Person C

Person D

- Psychology/Behavior
- Genes/Physiology
- Environment/ Economics
- Culture
The Etiology of Obesity

Genetics

Culture

Environment

Psychological Factors

Behavior

Economics
Psychological/Behavioral Contributors to Obesity

- Behavioral Factors
  - Lifestyle
  - Physical Inactivity

- Cognitive Patterns

- Psychiatric Symptoms
Psychological/Behavioral Contributors to Obesity

- Behavioral Factors
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- Psychiatric Symptoms
Psychological/Behavioral Contributors to Obesity

Behavioral Patterns - Lifestyle

- Poor adherence
Psychological/Behavioral Contributors to Obesity

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- Poor adherence
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- Stressors…
Psychological/Behavioral Contributors to Obesity

Behavioral Patterns - Lifestyle

- Poor adherence
- Poor problem-solving skills
- Self-care skills deficit
- Time demands
- Lack of structure
- Sleep deficit
- Stressors…
- It’s just plain hard to do!
Psychological/Behavioral Contributors to Obesity

Behavioral Factors – Physical Inactivity

- Embarrassment
- Skill deficit
- Time constraints
- Discomfort/Pain
- Disability
- Environment
- Cost
Psychological/Behavioral Contributors to Obesity

• Behavioral Factors
  • Lifestyle
  • Physical Inactivity

• Cognitive Patterns

• Psychiatric Symptoms
Psychological/Behavioral Contributors to Obesity

Cognitive Factors

- All-or-nothing thinking
- Lack of self-efficacy
- Unrealistic expectations
Psychological/Behavioral Contributors to Obesity

• Behavioral Factors
  • Lifestyle
  • Physical Inactivity

• Cognitive Patterns

• Psychiatric Symptoms
Psychological Contributors to Obesity

Eating Disorder Symptoms

• Binge Eating Disorder
  • Consumption of unusually large amounts of food in a short period, with LOC
  • Much more common in people with obesity
    • Estimates of prevalence vary dramatically
    • Overall community prevalence is a ~ 2%
    • Higher in WLS-seeking population (estimates as high as 47%)
    • Prevalence increases with severity of obesity
Psychological Contributors to Obesity

Psychiatric Symptoms

- Depression/Anxiety
  - Decrease motivation
  - Decrease self-efficacy
  - Decrease ability to engage in self-care
  - Elicit eating as a coping mechanism
  - Psychotropic medication may be weight-promoting
Psychological/Behavioral Contributors to Obesity

- Psychotic and Bipolar Disorders
  - Decrease motivation
  - Impulsivity
  - Decrease ability to engage in self-care
  - Psychotropic medication can be weight-promoting
The Role of Psychology in Obesity

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Behavioral Weight Loss Treatment

Weight management: A set of skills that can be learned

- **Target areas:**
  - Eating
  - Activity
  - Thinking patterns

- **3 Characteristics:**
  - Goal-oriented
  - Process-oriented
  - Focus on small, incremental changes (not OA)

Behavioral Weight Loss Treatment

Components

- Self-monitoring
- Goal Setting
- Stimulus control
- Nutrition education
- Physical activity
- Problem-solving
- Cognitive restructuring
- Relapse prevention
Behavioral Weight Loss Treatment

Components

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Groups
Behavioral Weight Loss Treatment

Outcomes

- Average loss of 10% initial body weight in 16-26 weeks
- Regain of 1/3 of lost weight in first year
- At 5 year follow-up, > 50% have regained all lost weight

Most effective plan = one that the patient likes

Maintenance is key

Successful maintainers:

- Use more behavioral strategies to control eating
- Consume a low-calorie, low-fat diet
- Engage in a high level of physical activity
- Weigh themselves frequently
- Eat breakfast
- Have a consistent meal pattern

Wing & Phelan (2005)
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Goals of the Psychological Evaluation – Old School

• Predicting weight loss
  • Data suggests psychopathology does not predict weight loss (in relatively short term)
  • Thus, some suggest the psychological evaluation is not necessary\(^1\)

• The ‘gatekeeper’ (obstacle)

\(^1\)Ashton, Favretti, & Segato, 2008
The Role of Psychology in Surgical Treatment
The Role of Psychology in Surgical Treatment

Evaluation

- Determine suitability of surgical treatment

- Identify psychological factors that may impact outcome
  - Motivating factors
  - Expectations
  - Psychiatric symptoms

- Assistant in informed consent process

- Develop appropriate treatment plan
Goals Beyond Psychiatric Diagnosis

- Help prepare patient for change
- Minimize emotional/behavioral distress through surgery
- Educate
- Optimize outcome (not just pounds lost)
- Clinic/hospital/staff burden
- Facilitator/Optimizer (‘not gatekeeper’)
- Risk Management
Specific Contraindications for Bariatric Surgery

• Few specific contraindications for bariatric surgery
  • Mental/cognitive impairment that limits ability to understand procedure – thus precluding informed consent

• AACE/TOS/ASMBS Guidelines (2008)
  • Extremely high operative risk (e.g., severe congestive heart failure)
  • Current drug or alcohol use
  • Uncontrolled, severe psychiatric illness
  • Lack of comprehension of risks, benefits, expected outcomes, alternatives, and lifestyle changes required with bariatric surgery

• Inability or unwillingness to adhere to post-op regimen

1 DeMaria, 2007
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The Role of Psychology in Surgical Treatment

Adjustment to Post-Surgical Changes

- Lifestyle changes
- Emotional consequences
- Interpersonal consequences
- Body image issues
- Fear of regain
- Eating behaviors
- Substance abuse
Medication Use Among Bariatric Surgery Pts

- LABS Data (~5,000 patients)\(^1\)
  - Pre-surgery
    - 39.9% on antidepressants
    - 26.6% statins
    - 17.9% beta-blockers
    - 16.1% narcotics
  - Post-surgery
    - Pts often able to discontinue use of medications
    - Antidepressants consistently the exception

## Long-term Mortality after RNY

![Image](image.png)

### Table 2. Distribution of Deaths and Death Rates per 10,000 Person-Years, According to Study Group.*

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<td>37.2</td>
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<td>All deaths caused by disease</td>
<td>198</td>
<td>25.6</td>
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Adams et al., 2007 - NEJM
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Long-term Mortality after RNY

Data suggests not only the need for psychosocial evaluation, but also access to regular psychological follow-up after surgery.
Physician Involvement
Physician Attitudes: Bariatric Surgery

- Bariatric surgery remains an underutilized treatment (Wolfe & Morton, 2005)

- 500 NJ family physicians (Ferrante et al, 2009)
  - WLS infrequently recommended for pts w/ severe obesity
  - Physician reported knowledge about surgery poor

- PCP & Endocrinologists (Sarwer et al., 2012)
  - More years of experience = more positive attitudes
  - Positive impression of surgery for obesity (80%) and type 2 DM (67%)
  - 21% would refer pts with type 2 DM with BMI 30 – 34.9 to randomized trail
Physician Involvement in Weight Loss

- Not commonly implemented (Galuska, Will, Serdula, & Ford, 1999)
- Repeated opportunities for intervention
- Balanced approach
- Pts often mention physician suggestion prompted to consider surgery
- Semantics
What’s in a Name?

- Weight Problem
- Unhealthy Body Weight
- Weight
- Fatness
- Excess Fat
- Excess Weight
- Obesity
- Heaviness
- Large Size
- BMI
- Unhealthy BMI

Wadden & Didie, 2003
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Wadden & Didie, 2003
Summary

• Obesity is an extremely complex phenomenon

• Physiology is a strong driver

• However, psychological factors:
  • contribute to obesity
  • are impacted by obesity
  • are important to consider in any type of obesity treatment
Thank You

Kelli E. Friedman, PhD

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