Introductory Remarks; Ochsner Obesity symposium 2019

Gabriel I. Uwaifo, MD, FACP, FACE, FTOS,
Department of Endocrinology, diabetes, metabolism and weight management,
Ochsner medical center
Why are we gathered here?

Why does obesity matter?
1. Because Obesity is highly prevalent and gaining momentum in all clinical demographics
It is now a global problem and is getting worse with so called 2\textsuperscript{nd} and 3\textsuperscript{rd} world countries fast catching up with the developed western countries.
The local situation in Louisiana

- **Overweight and Obesity**
  - 34.1% of adults were overweight.
  - 34.9% of adults had obesity.

- **Adolescent Statistics**
  - Overweight and Obesity
  - 16.4% of adolescents were overweight.
  - 13.5% of adolescents had obesity.
  - We are currently the 5th most obese state in the union.
  - We like 16 other states in the union had our prevalence of adult obesity increase again last year.
2. Because it is very costly
The Economic toll, cost and burden of Obesity in the U.S.

- Direct medical spending due to obesity and its comorbidities is estimated to be $210-$316 billion annually: 21-28% of total U.S. healthcare spending.

- When also accounting for the indirect, non-medical costs of obesity, the overall annual cost is estimated to be $450-$556 billion.

Some economic prediction models suggest that unless the current trajectories of obesity prevalence and associated comorbidities change they could single-handedly bankrupt the U.S. entire health care system by ~2040 when adult prevalence rates are projected to exceed 40%.

3. Because it is often the harbinger of worse medical problems; comorbidities, associations and complications
The Complications and Consequences of obesity

- Pulmonary disease
  - abnormal function
  - obstructive sleep apnea
  - hypoventilation syndrome
- Nonalcoholic fatty liver disease
  - steatosis
  - steatohepatitis
  - cirrhosis
- Gall bladder disease
- Gynecologic abnormalities
  - abnormal menses
  - infertility
  - polycystic ovarian syndrome
- Osteoarthritis
- Skin
- Gout
- Idiopathic intracranial hypertension
- Stroke
- Cataracts
- Coronary heart disease
  - Diabetes
  - Dyslipidemia
  - Hypertension
- Severe pancreatitis
- Cancer
  - breast, uterus, cervix
  - colon, esophagus, pancreas
  - kidney, prostate
- Phlebitis
  - venous stasis

Complications and Consequences of obesity

“Other the smoking Obesity is the single most important and is the most prevalent, ubiquitous modifiable cancer predisposition risk factor in the developed world today.”

Associated increased cancer mortality risk estimated; 52% higher in men and 62% higher in women with obesity.
PSYCHOSOCIAL Consequences and Complications OF OBESITY

<table>
<thead>
<tr>
<th>Mental</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Mood disorders</td>
</tr>
<tr>
<td>• Anxiety disorders</td>
</tr>
<tr>
<td>• Attention deficit disorders</td>
</tr>
<tr>
<td>• Sleep deprivation states</td>
</tr>
<tr>
<td>• Personality disorders</td>
</tr>
<tr>
<td>• Addiction and substance abuse disorders</td>
</tr>
<tr>
<td>• Psychotic disorders</td>
</tr>
<tr>
<td>• Cognitive disorders</td>
</tr>
<tr>
<td>• ** aggravation of indices of diabetes distress</td>
</tr>
<tr>
<td>• Discrimination against obese people</td>
</tr>
<tr>
<td>1. College admission</td>
</tr>
<tr>
<td>2. Employment, job advancement</td>
</tr>
<tr>
<td>3. Conjugal relationships</td>
</tr>
<tr>
<td>4. Childhood discrimination etc.</td>
</tr>
<tr>
<td>5. Delayed diagnosis and treatment deficits</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Monetary</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Education</td>
</tr>
<tr>
<td>• Employment</td>
</tr>
<tr>
<td>• Reduced income</td>
</tr>
<tr>
<td>• Disability</td>
</tr>
<tr>
<td>• Medical insurance, life insurance etc</td>
</tr>
<tr>
<td>• Bariatric appropriate furniture, aids, appliances</td>
</tr>
<tr>
<td>• Expenditure for weight management programs, fees for dieticians, health coaches, trainers, medications, devices, surgery etc.</td>
</tr>
</tbody>
</table>

“OBESITY IS THE LAST BASTION OF SOCIALLY ACCEPTABLE BIGOTRY”

Dr Richard Atkinson; Former President of TOS, AOA and emeritus Clinical Prof of Bariatric medicine
4. Because it is scandalously undertreated and overwhelmingly suboptimally managed
The Obesity treatment gap; Few people with obesity are treated in the U.S.

~94 million adults with obesity using BRFS data; ~127 million using NHANES data

<1% receive a prescription (Rx) for Anti Obesity Medication in a given month

~215-230,000 people per year receive bariatric surgery


2015 CDC estimates; ~ 30.3 million with diabetes and another 84.1 million with prediabetes in the US.
What drives the large care gap in obesity? Challenges and Barriers to Care

- Misaligned perceptions of success
- Past failures
- Prescription coverage
- Clinician competence and confusion
- Patient engagement
- Limited advocacy
- Provider reimbursement
- Few effective treatment options
- Time constraints
- Cultural stigma and bias
- Lack of clear guidelines
- Difficult, emotional conversations
- Obesity as a disease vs. condition
- Rx market history of withdrawals
- Competing clinician priorities


Results of National ACTION Study; Kaplan L et al *Obesity* (2018) 26, 61-69
5. Because Obesity is not merely the result of a moral failing, and is more than one disease
Obesity is a chronic clinical syndrome of multiple potential etiologies characterized by the presence of excess adipose tissue.

Obesity is thus not one disease but a common final pathway for many different diseases and thus no two obese subjects are exactly the same making individualized, nuanced evaluation and management key to therapeutic success.

Obesity is way more than “being fat” because someone eats too much and exercises too little!!!

“What is Obesity?

“Obesity is a complex, multifactorial disease that develops from the interaction between genotype and the environment. Our understanding of how and why obesity occurs is incomplete; however, it involves the integration of social, behavioral, cultural, and physiological, metabolic, and genetic factors.”

1998 - National Heart, Lung, and Blood Institute (NHLBI)
### The Causes of Obesity

#### Etiologic classification of obesity

<table>
<thead>
<tr>
<th>Category</th>
<th>Causes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Iatrogenic causes</strong></td>
<td>Drugs that cause weight gain, Hypothalamic surgery</td>
</tr>
<tr>
<td><strong>Dietary obesity</strong></td>
<td>Infant feeding practices, Progressive hyperplastic obesity, Frequency of eating, High fat diets, Overeating</td>
</tr>
<tr>
<td><strong>Neuroendocrine obesities</strong></td>
<td>Hypothalamic obesity, Seasonal affective disorder, Cushing’s syndrome, Polycystic ovary syndrome, Hypogonadism, Growth hormone deficiency, Pseudohypoparathyroidism</td>
</tr>
<tr>
<td><strong>Social and behavioral factors</strong></td>
<td>Socioeconomic status, Ethnicity, Psychological factors, Restrained eaters, Night eating syndrome, Binge-eating</td>
</tr>
<tr>
<td><strong>Sedentary lifestyle</strong></td>
<td>Enforced inactivity (post-operative), Aging</td>
</tr>
<tr>
<td><strong>Genetic (dysmorphin) obesities</strong></td>
<td>Autosomal recessive traits, Autosomal dominant traits, X-linked traits, Chromosomal abnormalities</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>Low birth weight</td>
</tr>
</tbody>
</table>
“We hope to give you a broad overview of the breadth of the problem of obesity as it applies to health care providers and some practical advice to assist you as you care for these patients.”
Thanks for coming and Welcome!!!