

Ochsner's 2021 Obesity and Bariatric Update; Battle of the Bayou Bulge-part 3

Welcome and Introductory Remarks

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Disclosures Statement

- While I am a clinical trialist that runs several industry and govt sponsored clinical trials all funds from these trials are paid directly to the Ochsner medical foundation.
- Nothing presented during this presentation has any relationship to any of the therapeutic medications nor devices in any of my ongoing or completed clinical trials.
- There are no personal nor family related/affiliated disclosures of any relevance nor bearing to any of the material presented here.

Thank you very much

Symposium Schedule

- 7.30am-8am Registration and Arrival to virtual meeting site
- 8am-8.10am; Welcome and introductory remarks. Gabriel Uwaifo, MD
- 8.10am-8.40am; Overview of the dietary and nutritional management of the pre and post bariatric obese patient. Marian Vigo RD
- 8.40am-8.45am; **Leg stretching break**
- 8.45am-9.15am; Update on diets; The good, the bad and the ugly. Carrie Gardache, RD, CDE, MPH
- 9.15am-9.20am; **Leg stretching break**
- 9.20am-9.55am; Pediatric Obesity; an update and overview. Daniel Hsia, MD Pennington Biomedical Research Center.
- 9.55am-10.05 am; Refreshment break and visiting virtual Exhibits
- 10.05am-10.35 am; Update on bariatric and metabolic surgery for management of complicated obese patients. William Richardson, MD.
- 10.35am-10.40am; **Leg stretching break**
- 10.40am-11.10am; Update on minimally invasive procedures and devices for the management of obesity. James Wooldridge, MD
- 11.10am-11.15am; **Leg stretching break**
- 11.15am-11.45am; Medical screening and follow up of the bariatric surgery patient. Amanda Fontenot, MD
- 11.45am-11.50am; **Leg stretching break**
- 11.50am-12.20pm; Hypothalamic Obesity; What it can teach us about obesity causes and management. Gabriel Uwaifo, MD
- 12.20pm -1.00pm; Lunch and visiting virtual Exhibits
- 1.00pm-1.30pm; The role of the gut microbiome in Weight modulation and management . Ray Arnab, MD
- 1.30pm-1.35pm; **Leg stretching break**
- 1.35pm-2.05pm; The detection and management of eating disorders and other psychopathology in Bariatric patients. Jackie Ball, MD
- 2.05pm-2.10pm; **Leg stretching break**
- 2.10pm- 2.40pm; Revision, Reversal, Conversion and staged bariatric surgical procedures; When and why. Jessica Gorham MD
- 2.40pm-3.00pm; Questions and answers + open round table discussion
- 3.00pm-3.15pm; Round up and closing remarks. Gabriel Uwaifo, MD

Obesity in the era of COVID-19

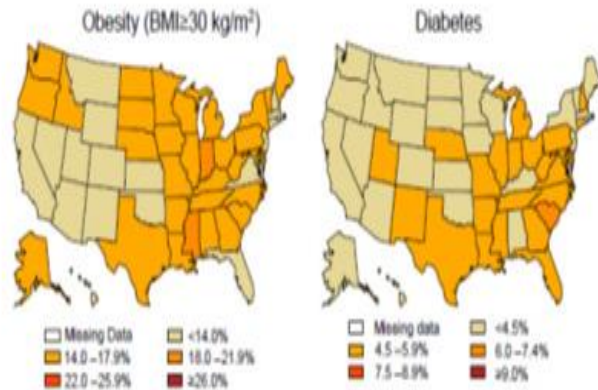
- Obesity is a common, serious, and costly chronic disease. Having obesity puts people at risk for many other serious chronic diseases and increases the risk of severe illness from COVID-19. Everyone has a role to play in turning the tide against obesity and its disproportionate impact on racial and ethnic minority groups.

- Obesity Worsens Outcomes from COVID-19
Adults with excess weight are at even greater risk during the COVID-19 pandemic:
[Having obesity increases the risk of severe illness from COVID-19. People who are overweight may also be at increased risk.](#)
- Having [obesity may triple the risk of hospitalization due to a COVID-19 infection.](#)
- Obesity is linked to impaired immune function.^{2,3} Obesity decreases lung capacity and reserve and can make ventilation more difficult.⁴
- As [BMI](#) increases, the risk of death from COVID-19 increases.⁵
- Studies have demonstrated that obesity may be linked to lower vaccine responses for numerous diseases (influenza⁶, Hepatitis B^{7,8,9}, tetanus¹⁰).

Obesity is becoming more prevalent

Age-Adjusted Prevalence of Obesity and Diagnosed Diabetes Among US Adults

1994

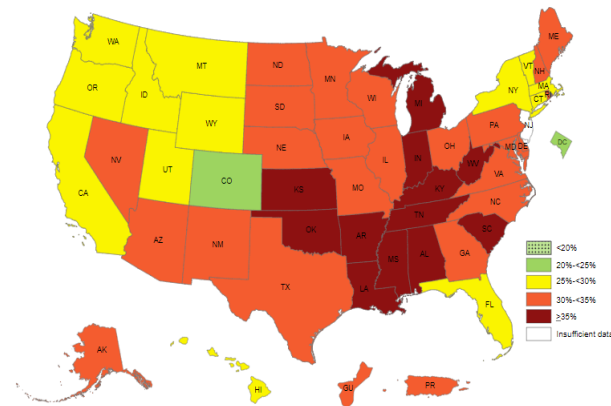


CDC's Division of Diabetes Translation, United States Diabetes Surveillance System available at <http://www.cdc.gov/diabetes/data>



Prevalence† of Self-Reported Obesity Among U.S. Adults by State and Territory, BRFSS, 2019

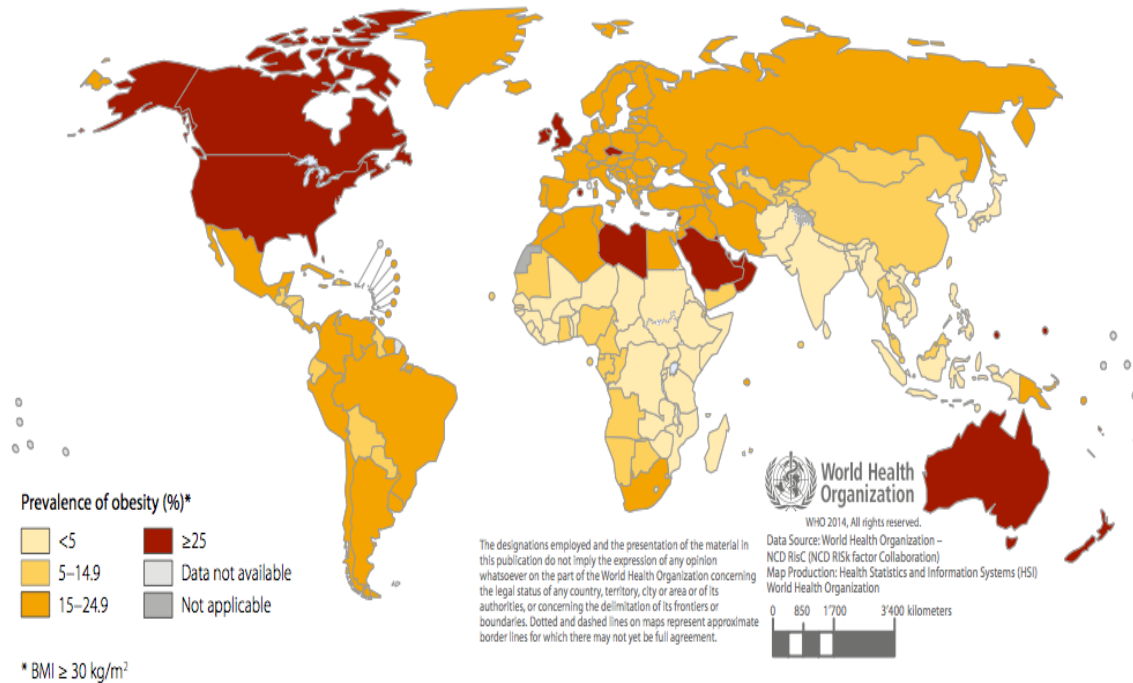
†Prevalence estimates reflect BRFSS methodological changes started in 2011. These estimates should not be compared to prevalence estimates before 2011.



The [2019 CDC Adult Obesity Prevalence Maps](#) show that obesity remains high – twelve states now have an adult obesity prevalence at or above 35 percent: Alabama, Arkansas, Indiana, Kansas, Kentucky, Louisiana, Michigan, Mississippi, Oklahoma, South Carolina, Tennessee, and West Virginia. [This is up from nine states in 2018.](#)

Obesity is the worldwide pandemic that preceded COVID-19

Fig. 7.1 Age-standardized prevalence of obesity in men aged 18 years and over (BMI ≥ 30 kg/m²), 2014



It is now a global problem and is getting worse with so called 2nd and 3rd world countries fast catching up with the developed western countries.

Figure 3. Changes in the distribution of body mass index (BMI) between 1976–1980 and 2005–2006, adults aged 20–74 years: United States

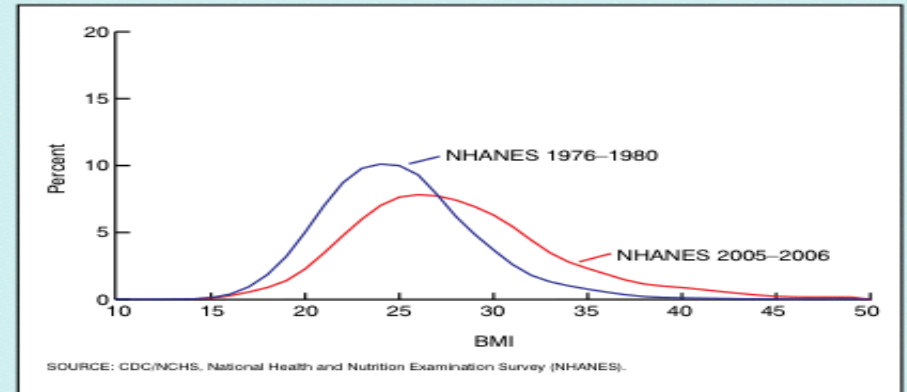
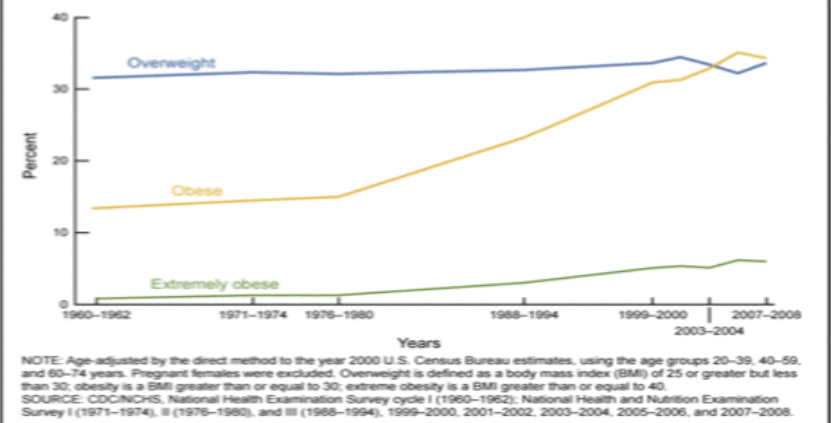


Figure 2. Trends in overweight, obesity, and extreme obesity among adults aged 20–74 years: United States, 1960–2008



Obesity is the pandemic that transcends all age groups

Prevalence of obesity in the U.S among children

In 2011-2014 For children and adolescents aged 2-19 years¹:

The prevalence of obesity has remained fairly stable at about 17% and affects about 12.7 million children and adolescents.

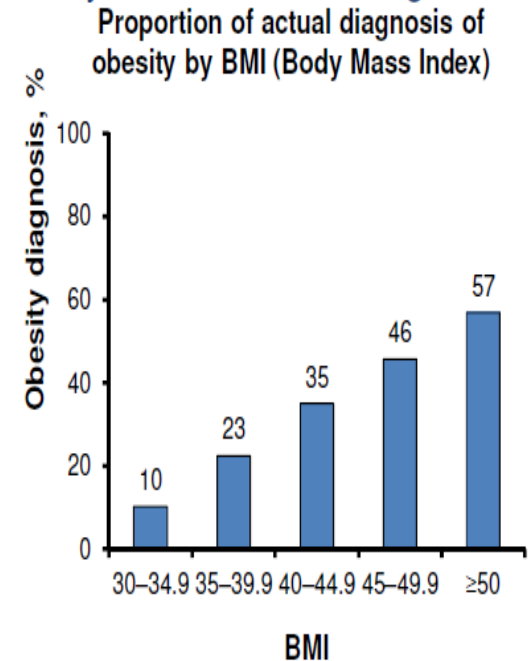
The prevalence of obesity was higher among Hispanics (21.9%) and non-Hispanic blacks (19.5%) than among non-Hispanic whites (14.7%).

The prevalence of obesity was lowest in non-Hispanic Asian youth (8.6%)

The prevalence of obesity was 8.9% among 2- to 5-year-olds compared with 17.5% of 6- to 11-year-olds and 20.5% of 12- to 19-year-olds.

¹Read [CDC National Center for Health Statistics \(NCHS\) data brief](#)

Yet, Obesity Remains Underdiagnosed in the U.S.



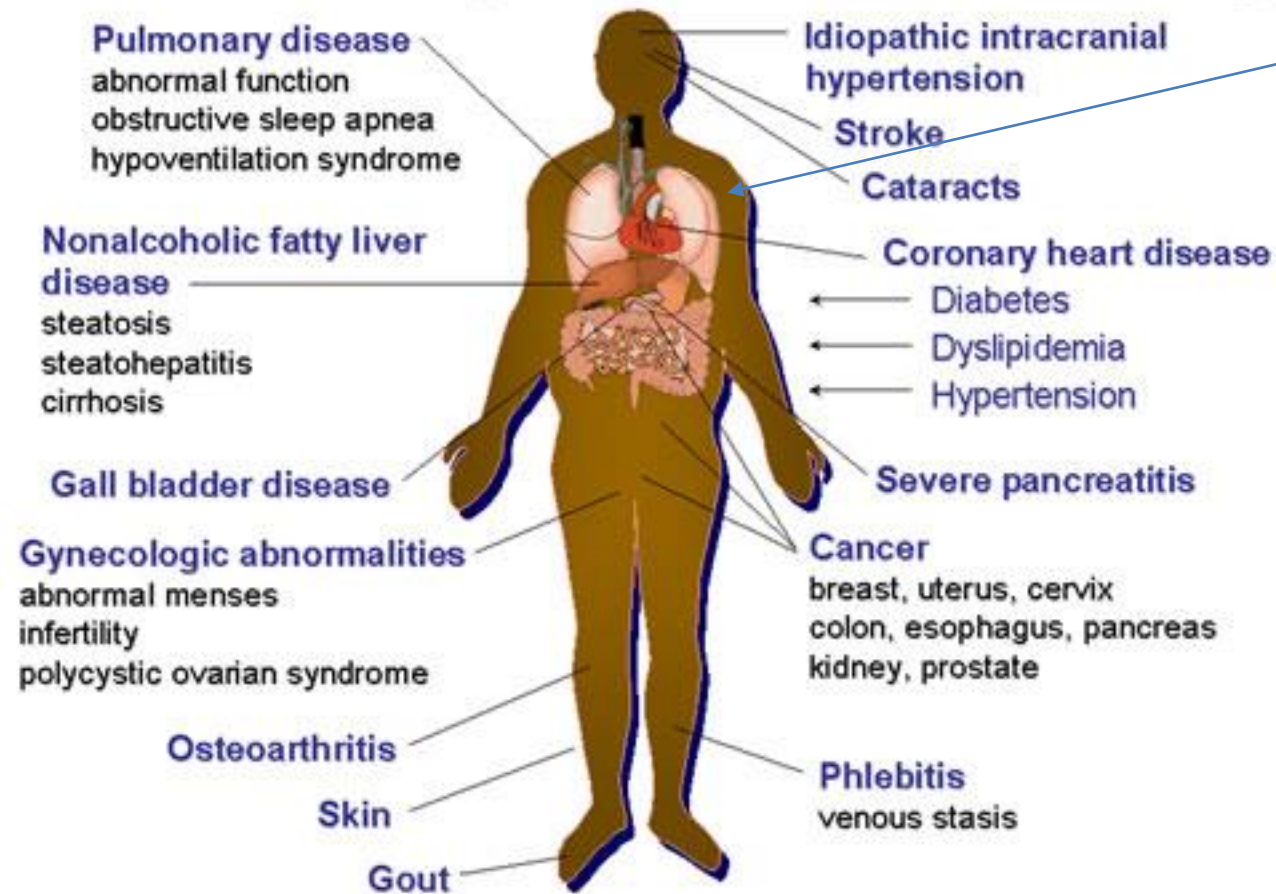
<23% of individuals with a BMI between 35-40 kg/m² are diagnosed with obesity

43% of patients with BMI ≥50 kg/m² are not diagnosed

The obesity and COVID-19 narrative should not however be surprising

- Obesity is the single most prevalent and impactful modifiable risk factor for morbidity and mortality in the developed world.
 - Obesity is 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.
 - The effective management of obesity requires careful attention to the 5 C's
 - The **C**lassification of obesity (Types)
 - The **C**auses of obesity (etiologic factors)
 - The **C**omplications/**C**onsequences of obesity
 - The **C**omorbidities/associations of obesity

Complications, Comorbidities and Consequences of Obesity



COVID-19

Complications and consequences of obesity



“ Other than 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.

The reality; very few People with Obesity are treated in the U.S.

~100 million adults with obesity



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



~275,000 people per year receive bariatric surgery






Sources: CDC 2014 (adults is defined as >20yrs. American Heart Association. Statistical Fact Sheet 2013 Update: Overweight and Obesity. http://www.heart.org/idc/groups/heart-public/@wcm/@sop/@smd/documents/downloadable/ucm_319588.pdf. Accessed June 9, 2014. Understanding the Treatment Dynamics of the Obesity Market, IMS Database (NPA) Aug 31, 2014; ASMBS website, estimated number of bariatric surgeries, published July 2016; asmbs.org

Why are we doing such a poor job both clinically and public health wise with obesity management and treatment?

It is complicated and multifaceted.

Perceptions of Barriers to Effective Obesity Care: Results from the National ACTION Study

Lee M. Kaplan ¹, Angela Golden ², Kimberly Jinnett³, Ronette L. Kolotkin⁴, Theodore K. Kyle⁵, Michelle Look⁶, Joseph Nadglowski⁷, Patrick M. O'Neil ⁸, Thomas Parry³, Kenneth J. Tomaszewski⁹, Boris Stevenin¹⁰, Søren Kruse Lilleøre¹¹, and Nikhil V. Dhurandhar¹²

Objective: ACTION (Awareness, Care, and Treatment in Obesity maNagement) examined obesity-related perceptions, attitudes, and behaviors among people with obesity (PwO), health care providers (HCPs), and employer representatives (ERs).

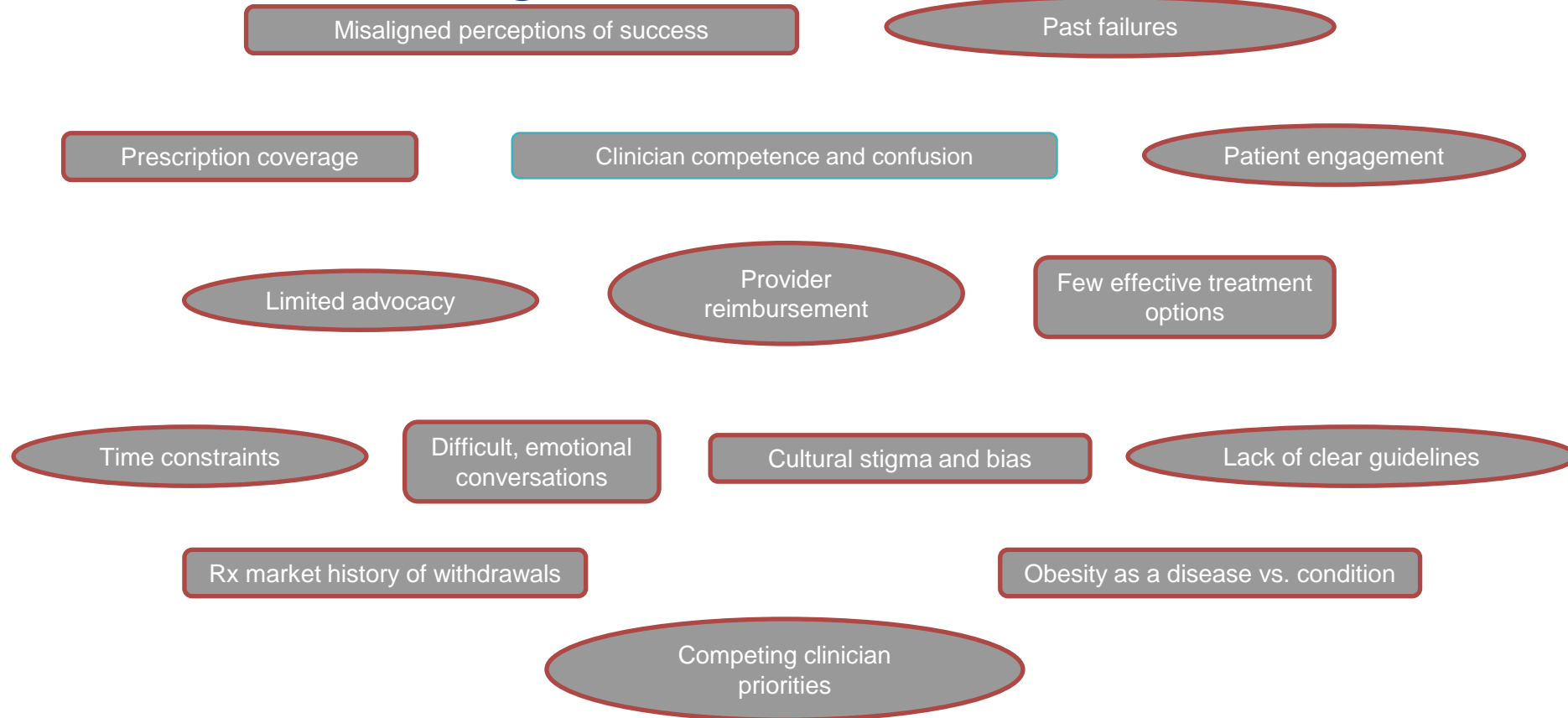
Methods: A total of 3,008 adult PwO (BMI \geq 30 by self-reported height and weight), 606 HCPs, and 153 ERs completed surveys in a cross-sectional design.

Results: Despite several weight loss (WL) attempts, only 23% of PwO reported 10% WL during the previous 3 years. Many PwO (65%) recognized obesity as a disease, but only 54% worried their weight may affect future health. Most PwO (82%) felt “completely” responsible for WL; 72% of HCPs felt responsible for contributing to WL efforts; few ERs (18%) felt even partially responsible. Only 50% of PwO saw themselves as “obese,” and 55% reported receiving a formal diagnosis of obesity. Despite HCPs’ reported comfort with weight-related conversations, time constraints deprioritized these efforts. Only 24% of PwO had a scheduled follow-up to initial weight-related conversations. Few PwO (17%) perceived employer-sponsored wellness offerings as helpful in supporting WL.

Conclusions: Although generally perceived as a disease, obesity is not commonly treated as such. Divergence in perceptions and attitudes potentially hinders better management. This study highlights inconsistent understanding of the impact of obesity and need for both self-directed and medical management.

Obesity (2018) **26**, 61-69. doi:10.1002/oby.22054

What Drives the Large Care Gap (knowledge to care and need to access gaps) in Obesity? Challenges and Barriers to Care



BARRIERS TO USE OF OBESITY DRUGS and other therapeutic strategies

- 1. Discrimination and bias against obesity and obese patients**
- 2. Physician/clinician ignorance**
- 3. Economic factors**
- 4. Policy/political barriers**
- 5. Lack of advocacy for obese people**
- 6. Modest effectiveness of obesity drugs and other non-surgical strategies**
- 7. Sordid past history of obesity drugs**

The Obesity pharmacotherapeutic hall of shame

- Thyroid extracts, T4, T3 1892
- 2-4 Dinitrophenol 1934
- Amphetamine 1947
- Rainbow pills (cocktail of amphetamines, digitalis, thyroid hormone, diuretics, laxatives, barbiturates etc) 1950
- Fenfluramine 1997
- Dexfenfluramine 1997
- Ephedrine
- Phenylpropanolamine (PPA)
- Sibutramine (2010)
- Rimonabant (2011)
- Hydroxycut (2009 reformulated 2011)
- Belviq (2020)

*** But obesity medications are not the only therapeutic options for chronic disease management with a checkered past though they seem to be the only therapeutic class that carry the lingering “pariah” stigma.

Concluding Remarks

- Obesity is a chronic complex multi-factorial syndrome cluster that includes very many different diseases with the commonality of excess adiposity and attendant health consequences.
- It is very prevalent in the U.S and worldwide with particularly increasing incidence especially among minorities and underserved populations.
- It has a myriad of underlying causes, predispositions and contributors to its etiology.
- It has myriad complications, comorbidities and associations that escalate the difficulty of its management and its cost burden on the health care system.
- It remains the single most impactful modifiable risk factor for both morbidity and mortality modulation in the US.
- The poor therapeutic record of the public and clinical health systems in obesity management in the U.S. is multifaceted and needs to be improved by a multifaceted approach to prevent a repeat of tragedy of the scale seen with the ongoing COVID-19 pandemic.

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- [Lee M Kaplan, Angela Golden, Kimberly Jinnett, Ronette L Kolotkin, Theodore K Kyle, Michelle Look, Joseph Nadglowski, Patrick M O'Neil, Thomas Parry, Kenneth J Tomaszewski, Boris Stevenin, Søren Kruse Lilleøre, Nikhil V . Perceptions of Barriers to Effective Obesity Care: Results from the National ACTION Study. Obesity \(SilverSpring\)2018 Jan;26\(1\):61-69. doi: 10.1002/oby.22054. Epub 2017 Oct 31.](#)