

## Abstract

Obesity is an alarming public health issue globally and adverse health impact in the United States, especially in disadvantaged communities, such as non-Hispanic Black. The World Health Organization (WHO) defined Obesity as the accumulation of excessive fat in the body that increases the health risk. The Center for Disease Control and Prevention (CDC) notes that 71.6% of Americans fit the criteria of being overweight or obese. In 2017 global burden of disease data showed, approximately 4.7 million die due to Obesity each year. Obesity can lead to type 2 diabetes, cardiovascular diseases, stroke, end-stage renal disease (ESRD), and cancers such as (endometrial, breast, prostate, liver, kidney). According to the Center for Disease Control and Prevention 49.6 % non-Hispanic Black adults had the highest age-adjusted prevalence of Obesity, 44.8 % Hispanic adults, 42.2 % non-Hispanic White adults, and 17.4% non-Hispanic Asian adults. They can face barriers to quality and access to health care due to racial discrimination, poor environments, lack of education, and socioeconomic conditions.

## Objectives

Use the Socio-Ecological Framework to examine the underlying factors associated with increased risk of obesity among non-Hispanic Black adults

The long-term consequences of untreated Obesity  
Identify interventions within the published literature that have been found to manage obesity

## Methods

**A literature review was conducted to identify:**

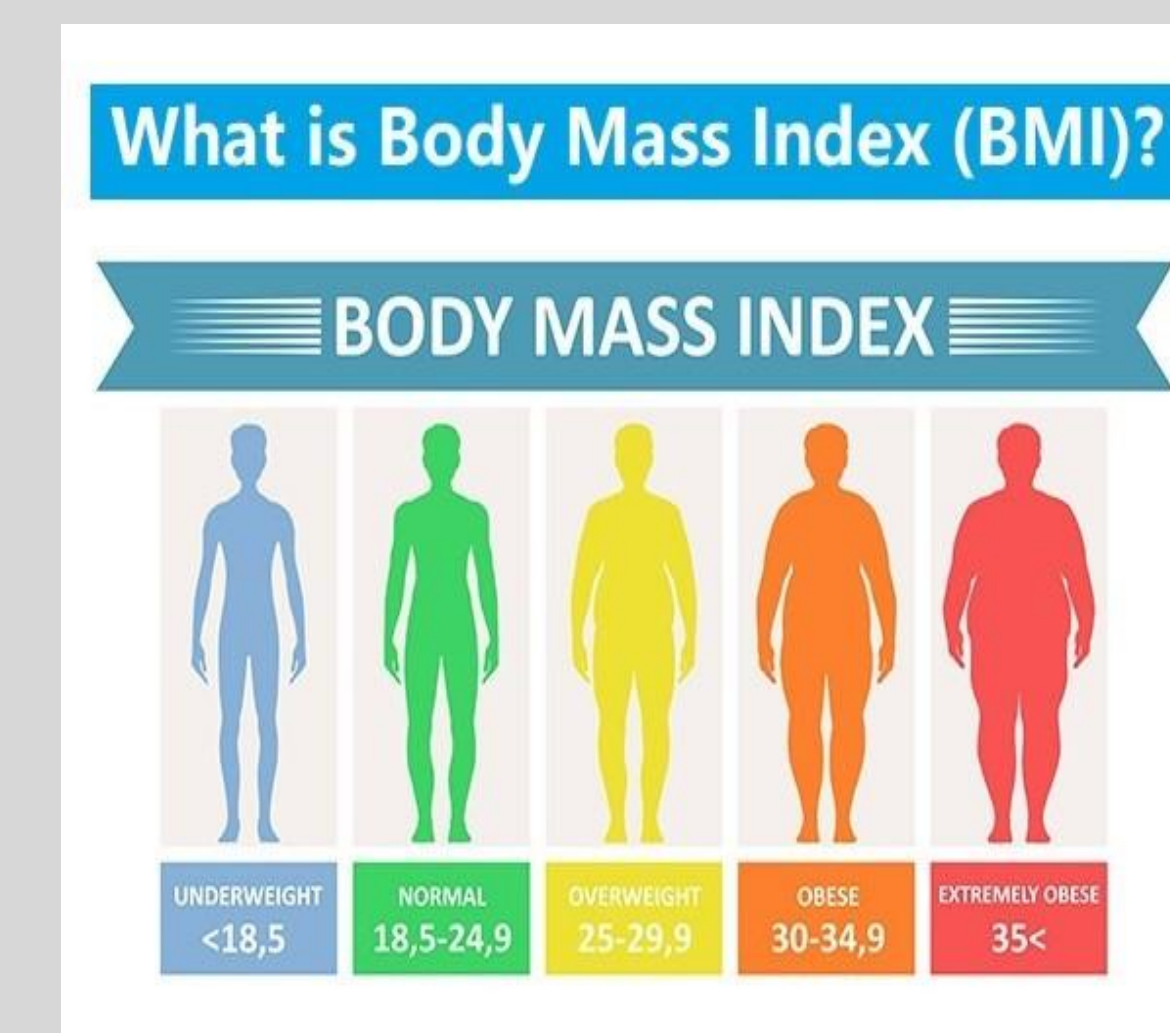
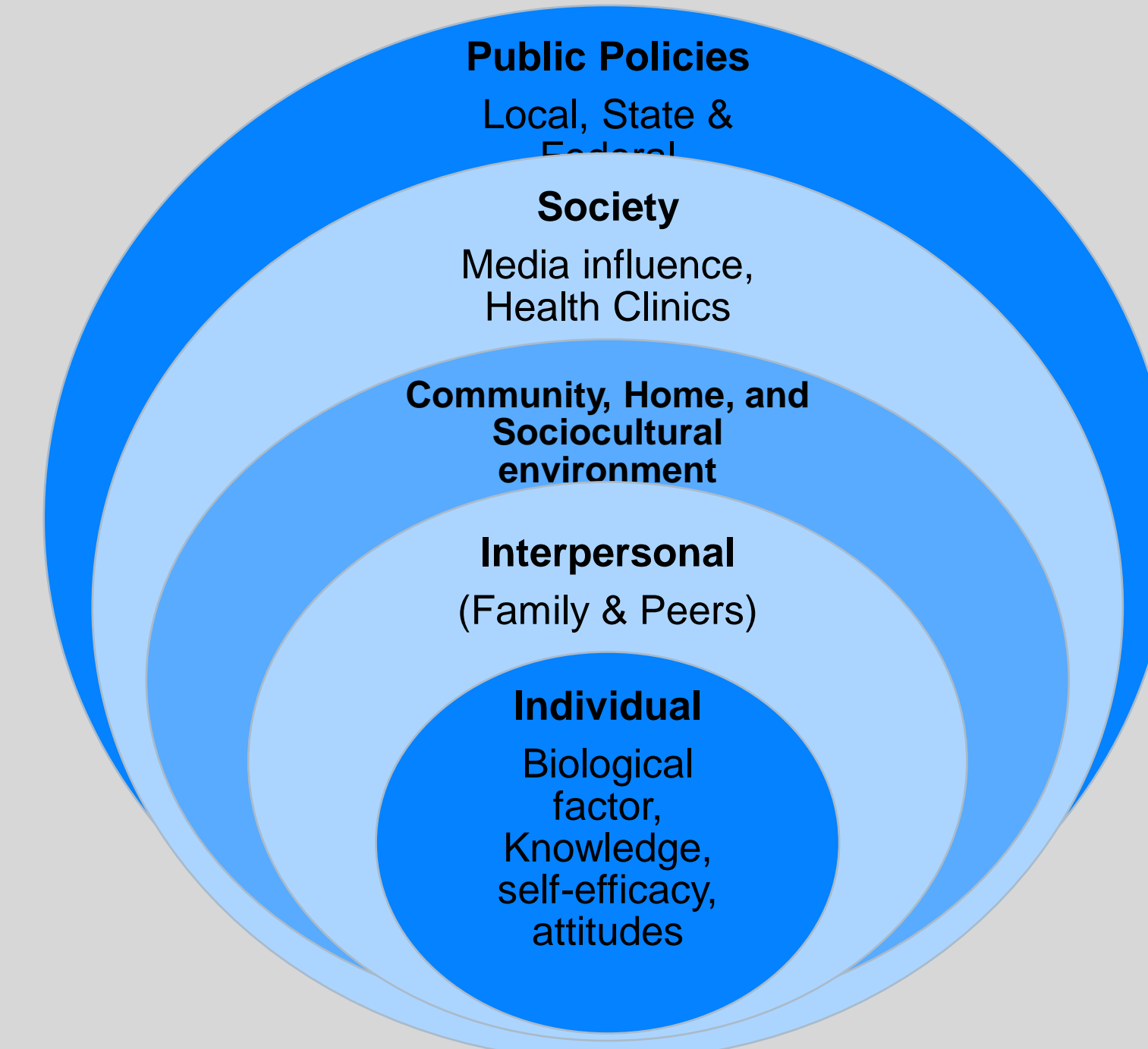
- The underlying factors associated with increased risk for Obesity
- The long-term consequences of untreated Obesity
- Interventions to address Obesity

37 articles were selected from the following websites, using the search term obesity, disparities, Black or African American, adults:

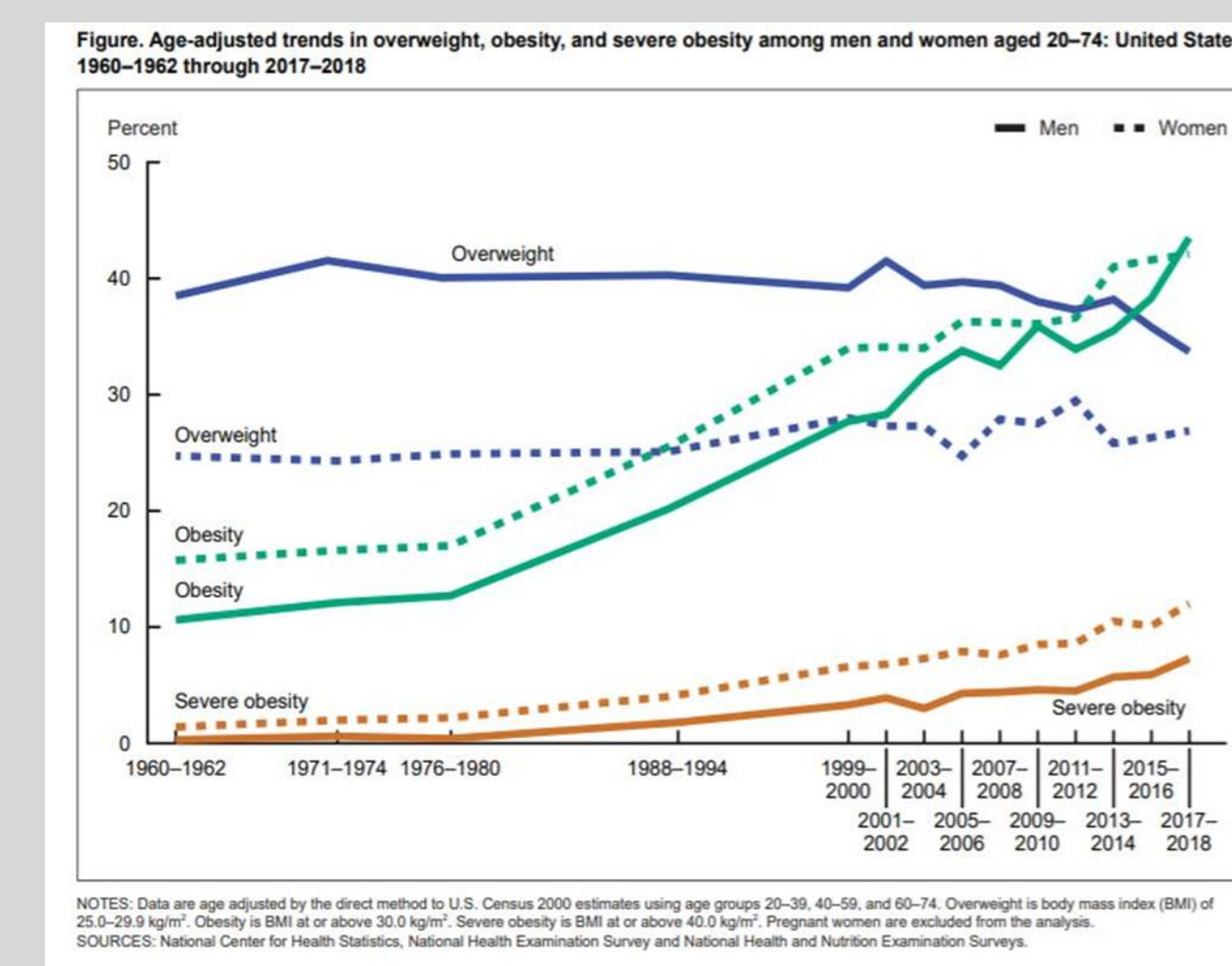
1. Pub Med
2. WHO
3. CDC
4. Wiley online Library
5. American Diabetes Association
6. NIH

## Results

### Socioecological Model



A high BMI can indicate high body fat



## Results

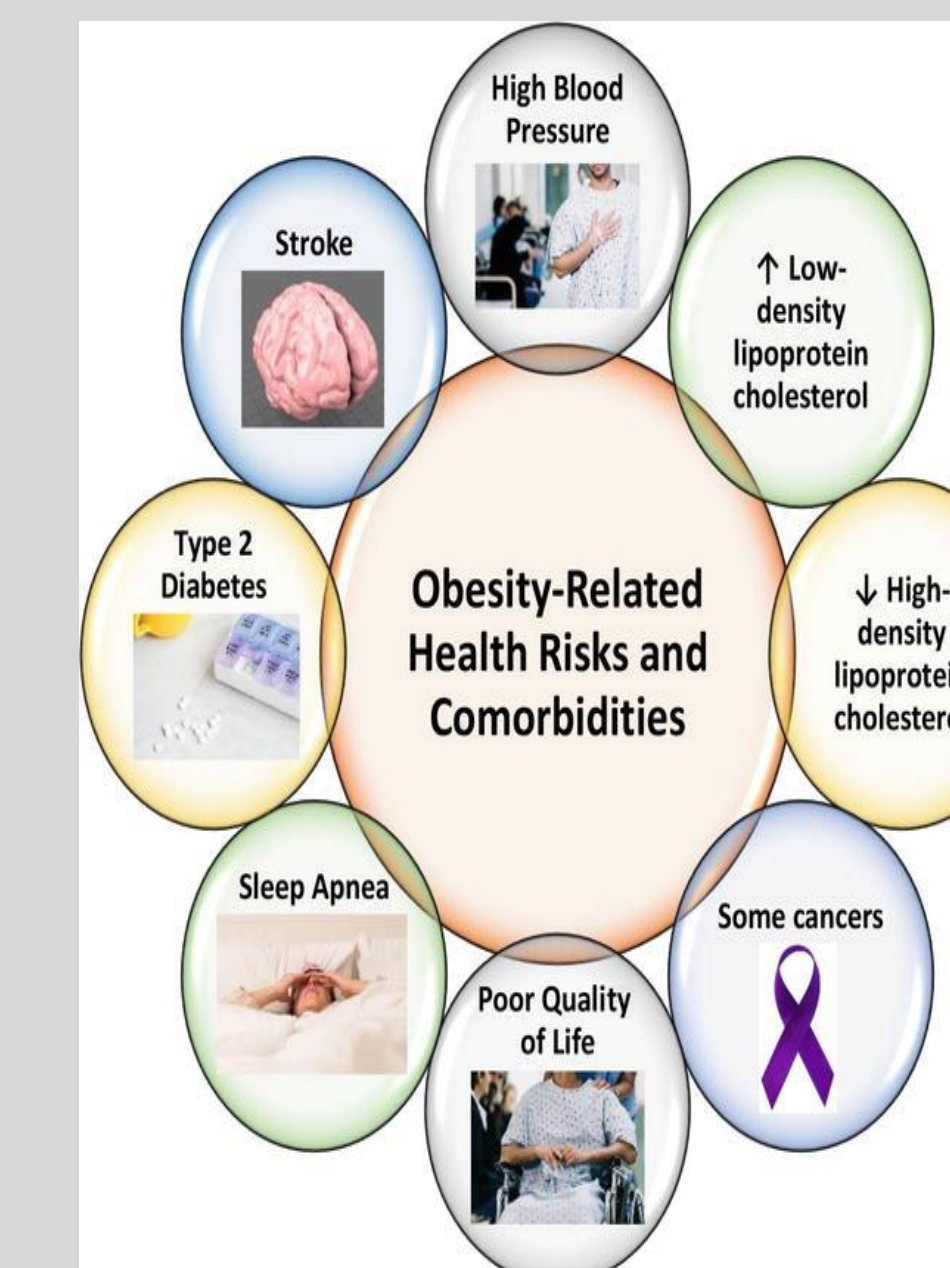
Many of the articles focused on disparities in access and receipt of quality health care among non-Hispanic Black adults.

The high prevalence of Obesity in non-Hispanic Blacks in the United States stems from multiple risk factors.

- Individual behaviors<sup>4</sup>
- Contributing risk factors of genetic and biological attributes<sup>4</sup>
- Community factors that influence individual and family<sup>4</sup>

## Risk Factors

- Waist circumference is interrelated with Obesity-related Comorbidities (ORCMs) in Obese African Americans at BMI levels up to 50kg/m
- Many non-Hispanic Black adults with a history of being overweight in their childhood do not know that they are at an increased risk of developing Type 2 Diabetes or Gestational diabetes during pregnancy.
- High C-reactive protein levels are associated with a higher risk of myocardial infarction, ischemic heart disease, and stroke. Besides heart disease, CRP levels are also elevated in the presence of metabolic risk factors such as obesity



## Interventions

Interventions need to be put into play to address obesity disparities In addition to Socioecological Model, can incorporate addition Theoretical Frameworks for behavior change<sup>10</sup>  
Health Belief Model (HBM)<sup>10</sup>

Identifies barriers and facilitators to behavior change

Interventions to motivate the participants (cues to action) are more likely to promote weight loss or additional weight gain  
Social Cognitive Theory (SCT)<sup>10</sup>

Interventions where people learn through their own experiences and adapts from the observations and results of others'  
actions

## Discussion/Conclusion

### Future Directions

- More research on examining within-group differences (e.g., by country of origin, generational status) among non-Hispanic Black adults
- Additional research examining structural racism policies and obesogenic environments
- Thinking about the role of media and new technology in the sustained engagement of weight loss

### Implications

In practice, improve efficiency of healthcare system

In policy, identifying which programs addressing environment, food and recreation centers, lead to the greatest improvements in obesity outcomes

## Acknowledgement

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