

Childhood Obesity in the COVID-19 pandemic: A look at Teenagers in East Flatbush

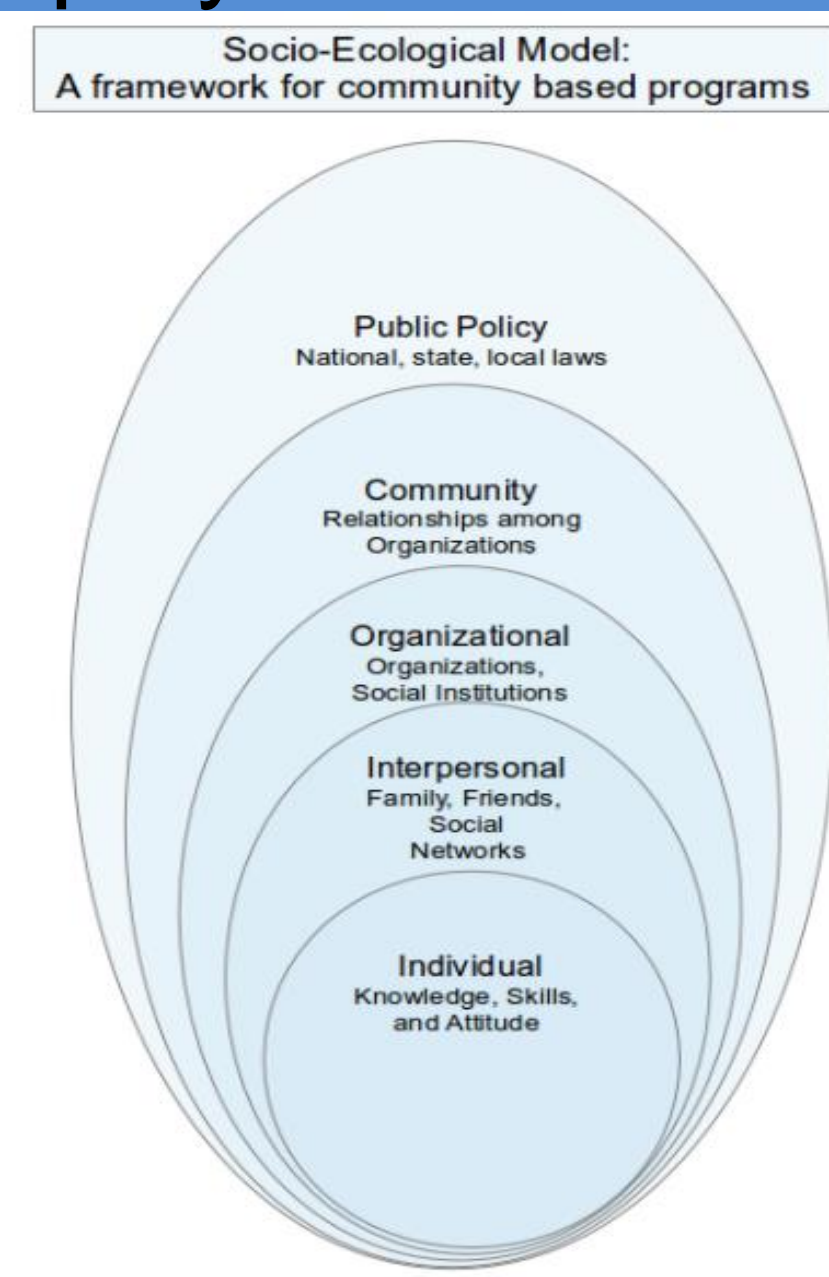
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Introduction

- Childhood obesity is a major health concern in the US.
- 1 out of 3 children are overweight/obese.
- Obese and severely obese children are at high risk of developing co-morbidities in childhood and adulthood.

Background

- Many factors play a role in child obesity.
- In East Flatbush, influencing factors include socio economic status and the physical environment.



- The pandemic has exacerbated these risk factors such as food accessibility and physical activity, and thus likely increased prevalence of obesity in our community.

Objective

To acquire epidemiologic data that describes the effects of the COVID-19 pandemic on obesity prevalence in East-Flatbush.

Methods

- BMIs obtained for 11-21yr olds going to DPA* clinic.
- Compared BMI percentiles pre covid with intracovid
- Stratified into under weight, normal wt, overweight, class I, class II & class III obesity based on CDC guidelines and growth chart.

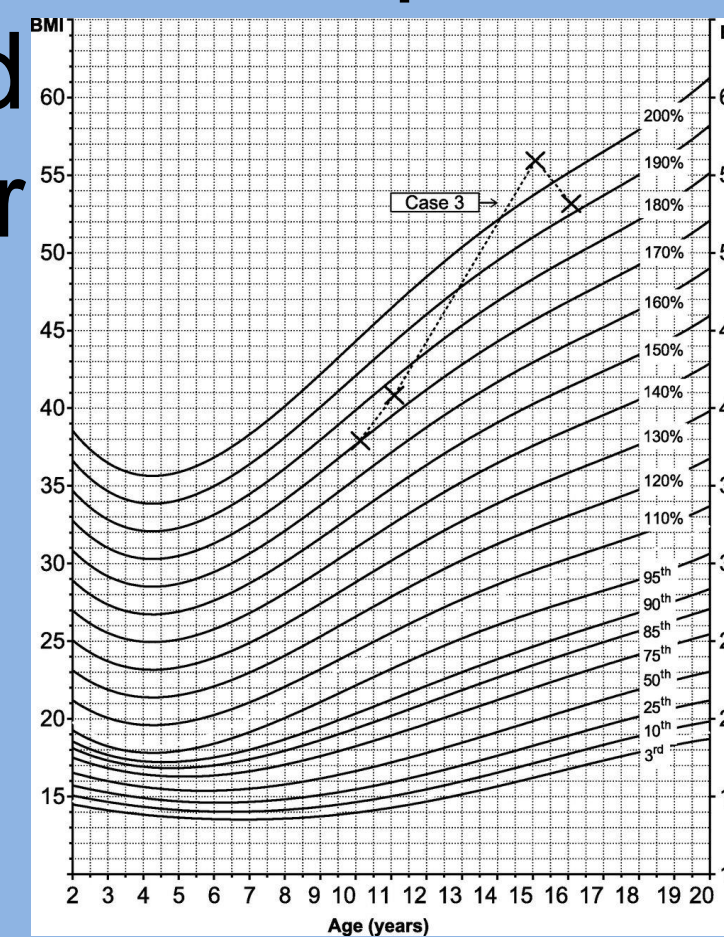
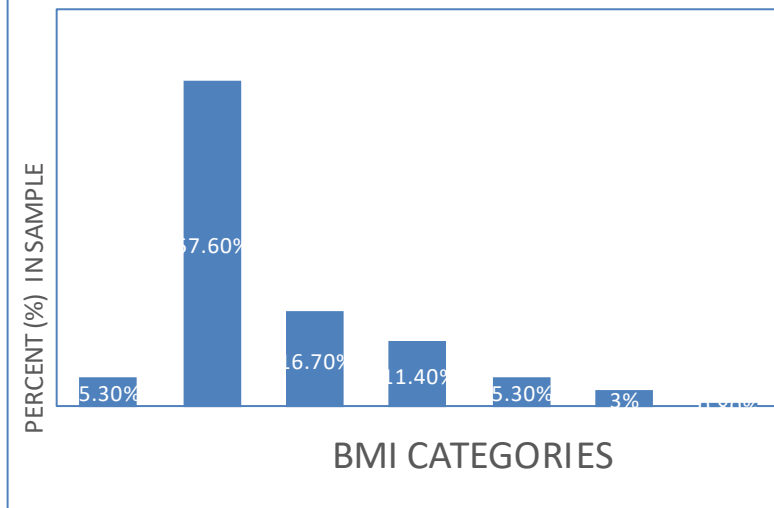


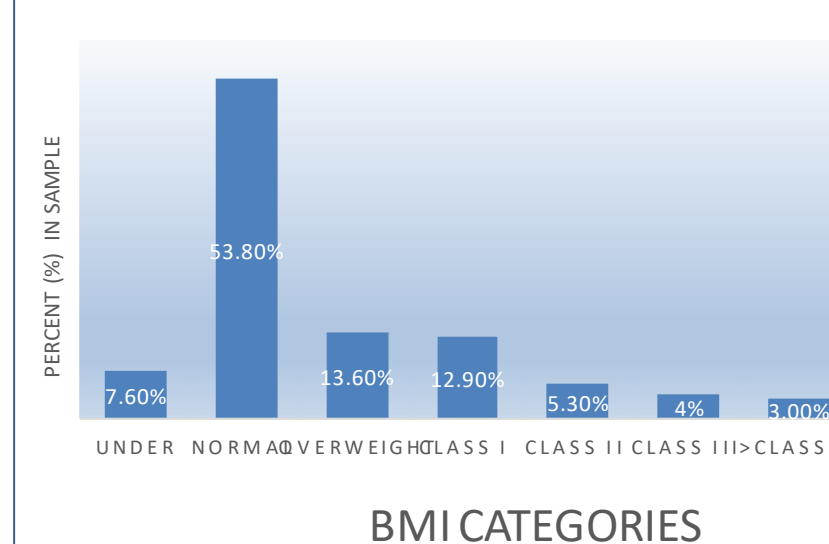
Fig 1: BMI for age growth chart with percentile lines from underweight (<5th %ile) up to Class III (>140% of 95th %ile)

Results

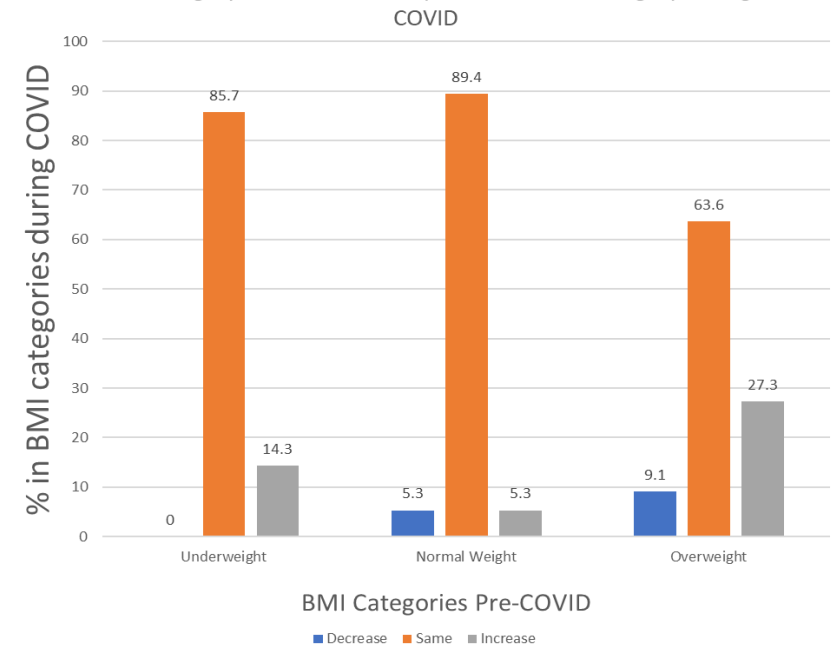
BMI CATEGORIES PRE-COVID



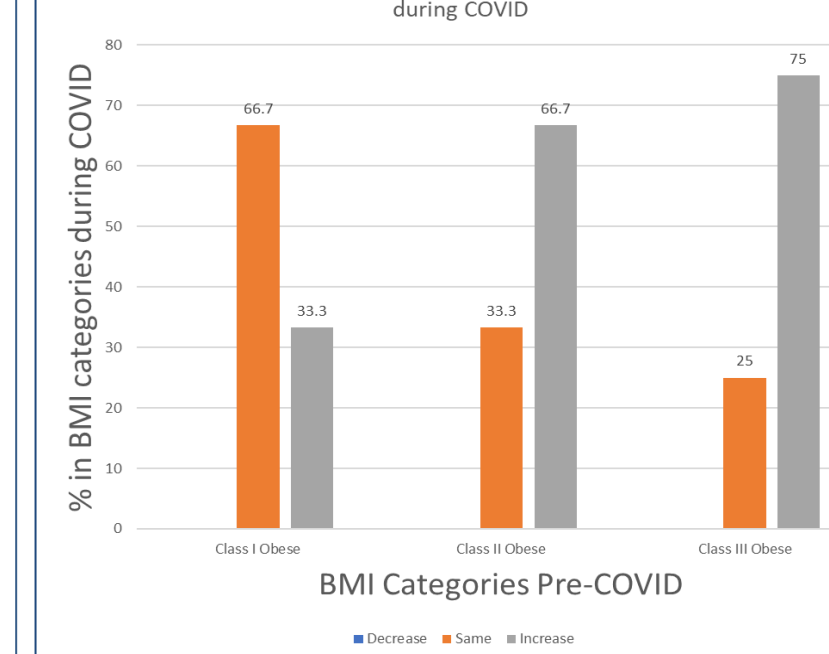
BMI CATEGORIES INTRA-COVID



BMI Category before Covid compared with BMI Category during COVID



Obese BMI Categories before COVID compared with BMI category during COVID



-n=132

-BMI categories shifted up or down by only one category.

-As you go higher in obese BMI categories there is a significant (P<0.001) increase in weight gain.

Discussion/Limitations

- Did not conduct surveys to confirm risk factors associated with results.
- Recommend modifying current policies on healthy food availability in East Flatbush, green areas for safe, socially distanced activities, and emphasizing authoritative parenting styles to encourage collaboration.

Conclusion

-It is crucial to balance the necessity for safety during the pandemic, and its effect on childhood obesity, which suggests a progressively higher risk of weight gain in overweight/obese children in our urban population.

Acknowledgements

-Effect of COVID-19 Pandemic on Obesity Risk in High-Risk Youth in Brooklyn: A Pilot Study
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