#249 Alecia James

## Increased Odds of Diabetes in Obese Black New Yorkers: Findings from the 2018 New York City Community Health Survey (CHS)

Background

Type 2 diabetes disproportionately affects African Americans with a prevalence of twice that of European Americans. In this study, we investigate if obesity independently increases the odds of diabetes in Black New Yorkers, and further suggest targeted approaches to address obesity, a known health disparity in this group. Methods

This is a cross-sectional study that used data from the 2018 New York City Community Health Survey; the final sample size for analysis was 2218. Data on demographic, health, and neighborhood factors, was collected via computer assisted interviewing. Logistic regression models were fit to determine whether obesity independently predicted the odds of diabetes in the sample. Analyses were weighted to account for the probability of selection, and to provide New York City population estimates.

Results

The overall percentage of diabetics in the sample was 13.5%. Most of the obese black population was female (68%) compared to 32% males (p<0.001). Going across the BMI categories from normal weight to obese, the percentage of diabetics increased from 8% up to 19%, p&lt;0.001. In the multivariable analysis, there was a significant association between obesity and diabetes, adjusting for age, gender, education, exercise, smoking, marital status, and income level (OR: 2.07, 95% CI (1.20 - 3.59), p=0.009). Conclusion

There is a clear association between obesity and diabetes which held true for the 2018 Black population in New York City. This group is a "hard to reach" population that is disproportionately affected by both the outcome and the exposure, adding to its complexity. While there are some aspects of diabetes such as the genetic component that are non-modifiable, some are modifiable, and are ripe for public health interventions. Priority such be placed on addressing factors such as obesity, which can help to delay or prevent the onset of diabetes in this population, and subsequently improve their health status.

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