



Obesity Prevalence in a Student Run Medical Clinic



Family Medicine

Evans, K¹; Momah, T¹; Ogunboye I².

1. UMMC Department of Family Medicine; 2. Jackson State University

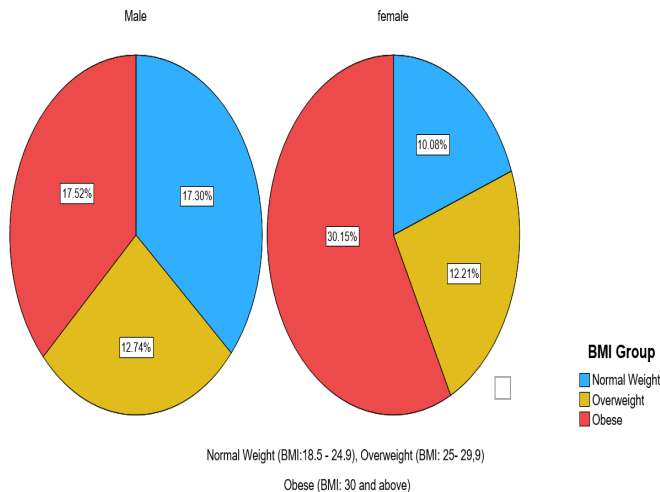
INTRODUCTION

- Obesity rates in the United States are currently spiraling at 41.9%.¹
- Obesity, among other factors, accounts for the increasing cardiovascular morbidity, mortality and disability seen in Mississippi with 39.1% of the population deemed obese.²
- Our study examined the distribution of obesity among the uninsured and indigent patients attending the student-run Free Clinic (SRFC) at the University of Mississippi Medical Center between January 2021 and April 2023.

METHODOLOGY

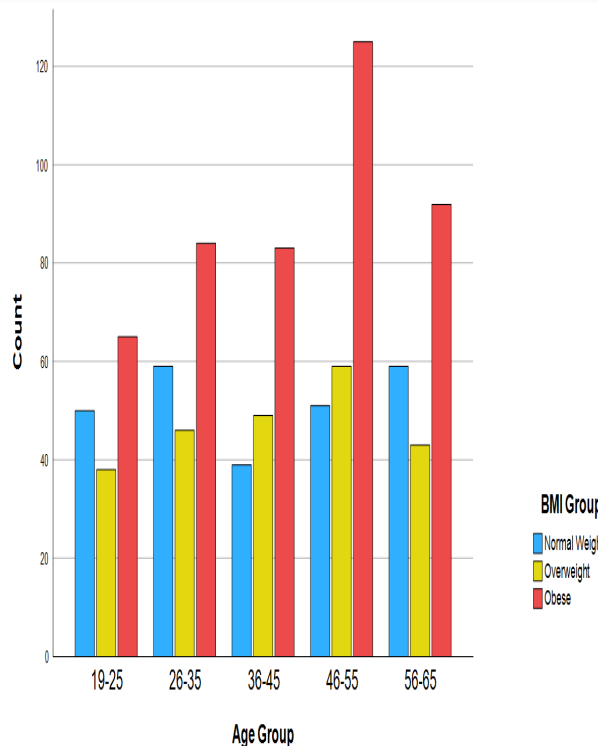
- Data was obtained from the Athena Electronic Medical Record of the JFC clinic. The study population comprises patients aged between 18 and 65 years who attended JFC from January 1st, 2021, through April 22nd, 2023. SPSS software was used for analyses to determine the percentage of the sample population (N= 942) that are obese and ascertain if there any disparities across sex, age, or race.

BMI CATEGORIES BY SEX AS A PERCENTAGE OF THE SAMPLE POPULATION



RESULTS

- The prevalence of obesity is 47.7% among the indigent and uninsured patient population attending JFC.
- This is higher than the adult obesity rates of 39.1% (2021) in the general population in Mississippi and 41.9% national average for the United States (2017 – March 2020).
- Disparity exists between sexes, and obesity is disproportionately higher in females (57.5%) than in male (36.8%). This sex-based difference in the obesity prevalence was statistically significant.
- However, other differences in obesity prevalence across age categories and races were not statistically significant.



DISCUSSION

- Mississippi has long been grappled with the dual challenges of food insecurity and obesity. Currently, it ranks 45th in the United States for obesity, and has the highest rates of food insecurity (15.3%) in the USA.¹
- This study showed higher prevalence of obesity among the population attending the SRFC - named Jackson Free Clinic (JFC) - than the state or national average, with a disproportional impact on the female population.
- Limited access to healthy and nutritious foods has been posited as a cause for obesity, as these individuals then rely on unhealthy alternatives (including low-cost, high-calorie foods).²
- A comprehensive review conducted by Franklin, encompassing 19 studies spanning from 2005 to 2012, reaffirmed a significant positive association between food insecurity and obesity, particularly among women.¹
- Similarly, a recent study by Levine et al,² attributes the increased weight of the indigent US population to poor access to quality foods, and sedentariness, among others.²
- In response to this pressing issue, the Jackson Free Clinic (JFC) has established a community garden, which provides fresh produce to patients on clinic days
- JFC has forged valuable partnership with the UMMC Student Health Coalition to disseminate its "Dollar General Cookbook" to inform and educate the indigent population on nutritious recipes that can be prepared using ingredients readily available at local dollar stores.
- To enhance its impact, JFC's hosts monthly food demonstrations, using the cookbook recipes and incorporating freshly harvested produce from the JFC garden.

CONCLUSIONS

- Our study demonstrated a student-run free clinic comprising of an uninsured adult population in Mississippi had higher obesity rates than the general US Population.
- Obesity disproportionately affected female patients and highlights the role SRFCs can play in ameliorating obesity.

REFERENCES

- Franklin B, Jones A, Love D, Puckett S, Macklin J, White-Means S. Exploring mediators of food insecurity and obesity: a review of recent literature. J Community Health. 2012 Feb;37(1):253-64. doi: 10.1007/s10900-011-9420-4. PMID: 21644024; PMCID: PMC3334290.
- Levine JA. Poverty and obesity in the U.S. Diabetes. 2011 Nov;60(11):2667-8. doi: 10.2337/db11-1118. PMID: 22025771; PMCID: PMC3198075.