

#239 Evan McNeil

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Economic Stability and COVID-19: Through the lens of NYC

Introduction

New York City became a major COVID-19 hotspot at the beginning of the pandemic. The effects of COVID-19 have been disproportionate, however there has been minimal research conducted on the social determinants of health in relations to COVID-19 infection rates and death rates. We choose to look at economic stability, which is one of the social determinants of health that focuses on the categories of housing stability, food insecurity, employment and poverty.

Methods

Secondary data analysis was used to look at the correlation between economic stability and Covid-19 rates. Data on Covid-19 infection and death rates for each New York City Zip code were collected along with demographics and economic data. Each zip code was categorized according to their cumulative percent positive rates (ppr) by quartiles. Low (7.99-11.15%), medium (11.16-13.07%), high (13.08-15.59%), and very high (15.60% and up). Groups were compared demographically and according to economic stability. ANOVA was run between the groups followed by a Bonferroni Post Hoc for statistically significant results.

Results

Zip Codes that fell under the very high ppr category were generally those with the second lowest socioeconomic statuses. Variables that followed that pattern included: College Graduation Rate ($F(3,173) = 181.114$, $p < 0.001$), Median Income ($F(3,173) = 40.580$, $p < 0.001$), Overcrowded Housing ($F(3,173) = 16.173$, $p < 0.001$), and Food Stamp Use ($F(3,173) = 17.318$, $p < 0.001$)

Conclusion

Analysis showed that zip codes with the lowest socioeconomic status fell under the high ppr category and not the very high. We would further want to investigate the factors that separate the high vs very high ppr groups to find out why those of the lowest socioeconomic status are doing better comparatively than those whose status would be higher than them. This information would assist policymakers when introducing long-term legislation to improve social welfare.

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