



The Relationship Between Poverty and COVID-19

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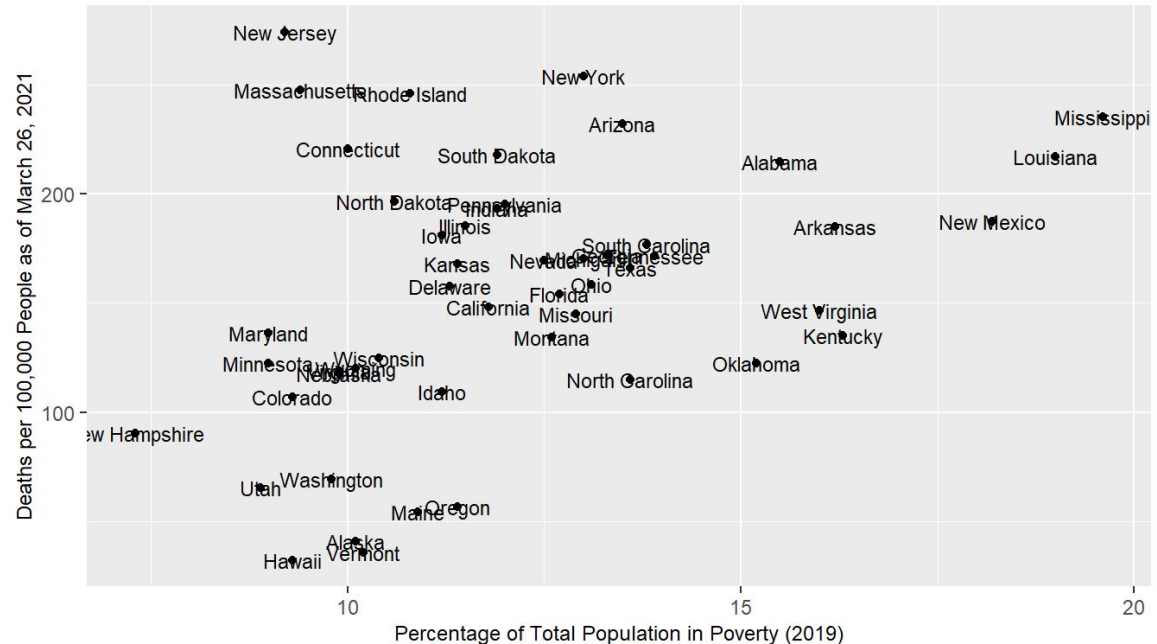


Introduction

- Research Question: the relationship between pre-COVID measures of the socioeconomic makeup of each state and its COVID-related death rate as measured in 2021
- Data Sources:
 - Coronavirus (COVID-19) Data in the United States - New York Times
 - 2019 American Community Survey (ACS) - United States Census

Data Description: Poverty vs. Death Rate by State

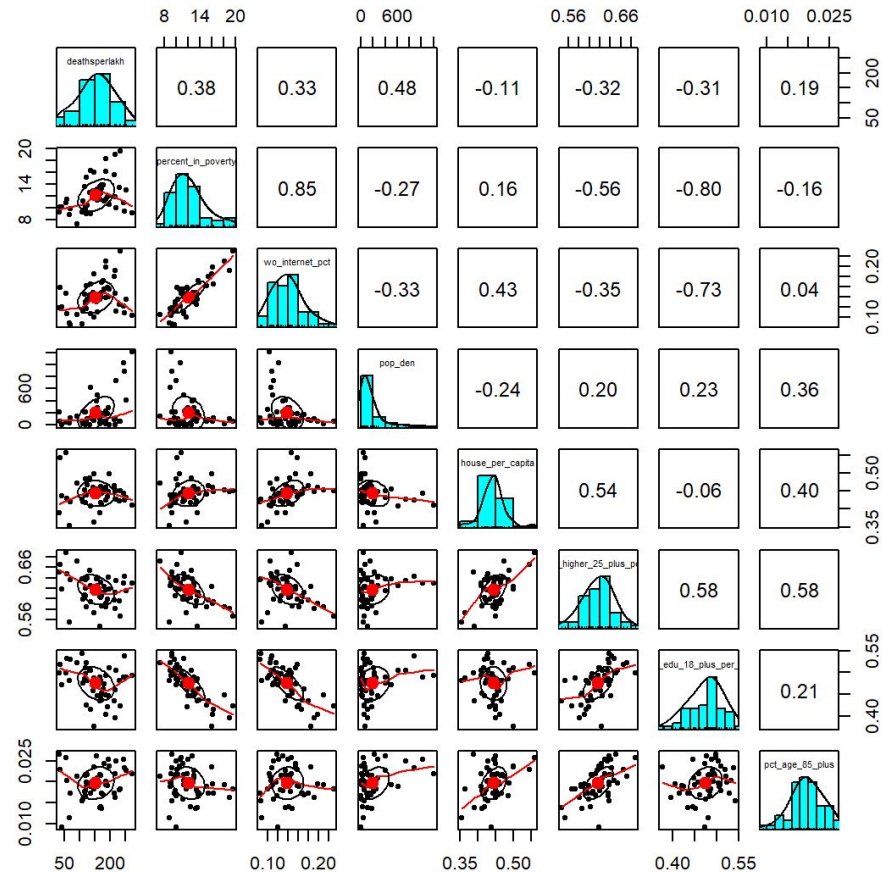
- Outlier territories were excluded
- Static date was used for analysis: 3/26/2021





Data Description: Key Variables

Covariate	Variable Name
Percent of State Residents in Poverty	percent_in_poverty
Percent of State Residents without an Internet Subscription	wo_internet_pct
Density of State Population (in units of people/mile²)	pop_den
Density of State Population (in units of people/mile²), log transformed	log_pop_den
Total Housing Units per State Resident	house_per_capita
Percent of State Residents 25 Years or Older with at Minimum a High School Degree	hs_or_higher_25_plus_percent
Percent of State Residents 18 Years or Older with at Minimum Some College Experience	higher_edu_18_plus_per_capita
Percent of State Residents 85 Years or Older	pct_age_85_plus



Model Selection & Interpretation

Model Comparison

Dependent variable:			
	(1)	deathsperlakh (2)	(3)
percent_in_poverty	8.383*** (2.958)	4.986 (3.387)	3.750 (5.043)
wo_internet_pct			402.277 (494.890)
pop_den		0.140*** (0.026)	0.144*** (0.027)
house_per_capita		370.263 (264.758)	256.142 (324.030)
hs_or_higher_25_plus_percent		-1,242.771*** (417.487)	-1,190.913** (469.612)
higher_edu_18_plus_per_capita			198.499 (268.983)
pct_age_85_plus		4,023.404* (2,024.794)	3,458.614 (2,171.352)
Constant	52.114 (36.775)	588.706*** (207.139)	482.254** (238.106)
Observations	50	50	50
R2	0.143	0.604	0.613
Adjusted R2	0.126	0.559	0.549
Residual Std. Error	55.864 (df = 48)	39.675 (df = 44)	40.136 (df = 42)
F Statistic	8.035*** (df = 1; 48)	13.419*** (df = 5; 44)	9.508*** (df = 7; 42)
Note: *p<0.1; **p<0.05; ***p<0.01			