A Snowball Effect; A Pandemic's Impacts on Household Food Insecurity in the United States

Sidie Sahid Sisay

ABSTRACT

Economic insecurity exists whenever income sources are uncertain, and this is a failure of a fundamental human right. The Covid-19 pandemic has presented unprecedented disruptions to the US economy and has created unparalleled food insufficiency and economic hardships. Before the pandemic, household food insufficiency existed but downplayed in the political arena. In 2019, 10.5 percent of households in the US lived in extreme poverty and were food insecure, the lowest since 1959, but the pandemic has had devastating effects on household food insufficiency. This paper uses nationally representative data from the Census Bureau's weekly household pulse survey, coupled with standard econometric and statistical techniques using R to estimate the impacts of the pandemic on household food insecurity.

Key socioeconomic variables' impacts: household income, race, ethnicity, unemployment pay, family structure, and education are estimated to account for meaningful differences in household food insecurity before and during the pandemic. The estimates report that white non-Hispanic household is estimated to be less food insecure or about 63% food sufficient, and Black households have the highest food insecurity than any other racial classification. Higher educational attainment and income levels improve household food insufficiency, while households with more than one kid are more likely to be food insecure. Similarly, households with more adults in the pandemic have higher risks of being food insecure. The national median of household food insecurity increased by 26.6 percent points during the pandemic. Furthermore, using randomForest modeling, a household family structure, number of kids and adults in the household, and income level represent the top variables in accounting for variations in household food insufficiency. Across states, similar patterns of increased household food insecurity hold during the pandemic.

Key Words: Covid-19, food, household, insecurity, impacts, pandemic, socioeconomic, United States