Baksun Sung


Abstract:
COVID-19 has become a nationwide public health crisis in the United States and the number of COVID-19 cases is different by U.S. counties. Also, previous studies have reported that neighborhood contexts have an influence on health outcomes. Therefore, the objective of this study was to examine the association between neighborhood contexts and cumulative number of confirmed COVID-19 cases (per 100,000) in U.S. counties. Cumulative number of COVID-19 cases gained from USA FACTS and variables related to neighborhood contexts gained from the 2018 5-Year American Community Survey at the county level. Data were analyzed using spatial autoregressive models. According to the present results, firstly, larger population, high poverty rate, higher % of bachelor's degree, higher % of no health insurance, higher employment rate, higher % of manufacturing jobs, higher % of primary industry jobs, higher % of commute by drove alone, higher % of foreign born, higher % of Hispanic, and higher % of Black are positively associated with higher cumulative number of COVID-19 cases. Secondly, higher income, higher % of cash assistance recipient, higher % of SNAP recipient, higher unemployment rate, higher % of commute by walked, higher % of Asian, and higher % of senior citizen are negatively associated with higher cumulative number of COVID-19 cases. In conclusion, there exist geographical differences in cumulative number of COVID-19 cases in U.S. counties, which is influenced by various neighborhood contexts. Hence, these findings emphasize the need to take various neighborhood contexts into account when planning COVID-19 prevention.


Abstract:
Objectives: The objective of this study was to determine the association between e-cigarette use and depression and examine how this association is different by gender among US adults. Methods: Data from the 2017 Behavioral Risk Factor Surveillance System and Selected Metropolitan/Micropolitan Area Risk Trends was used, and included 174,351 of 230,875 US adults aged 18 years and older. Data were analyzed using the multivariate logistic regression models. Results: After adjusting for age, race, education, income, marital status, employment status, smoking status, and physical activity, firstly, “current daily e-cigarette users” (AOR = 2.487, p < 0.001), “current non-daily e-cigarette users” (AOR = 1.623, p < 0.001), and “former e-cigarette users” (AOR = 1.573, p < 0.001) were associated with increased odds of depression compared with “never e-cigarette users.” Secondly, women were associated with increased odds of depression compared with men (AOR = 1.797, p < 0.001). Finally, male “current daily e-cigarette users” (AOR = 1.366, p < 0.01) were associated with increased odds of depression compared with female “never e-cigarette users.” Conclusion: Thus, even though women tend to be more vulnerable to depression compared with men, e-cigarette use was positively associated with depression among both men and women.