

**Laila Flores**  
**Undergraduate**  
**Xavier University, New Orleans, Louisiana**

Michael Celestin, PhD, CHES, NCTTS  
Louisiana State University Health Sciences Center, Department of Public Health

**"The association between COVID-19 and vaping among young adults ages 18 to 24 caused by COVID-19-related stressors"**

### **Background**

Research has shown that cigarette devices affect general health, increasing cancer risk and other illnesses. According to the Centers for Disease Control and Prevention (CDC), approximately 8.1 million Americans used electronic cigarettes in 2018. It is estimated that the highest vaping prevalence is among young people ages 18-24 in the United States. The COVID-19 pandemic has adversely affected everyone's life, leading to increased mental, economic, and social stress. Since this virus primarily affects the upper respiratory system, its effects can impact future e-cigarette use. As a result, this study examines the link between COVID-19 and vaping among young adults ages 18 to 24 due to stressors associated with the ongoing pandemic.

### **Methods**

A systematic review was conducted using three databases: PubMed, CINAHL, and EMBASE. The PubMed search terms "COVID-19 AND E-Cigarette" generated 201 articles, CINAHL search terms "COVID-19 AND Vaping" generated 105 articles, and search "COVID-19 AND "Vaping OR E-Cigarette" on EMBASE generated 364 results. The original inclusion criteria limited all articles to English language, adults ages 18-24, and in the United States. This resulted in a total of 31 abstracts that were reviewed.

### **Results**

31 articles were included and reviewed for analysis. However, 24 were excluded for having information containing regular cigarettes, alcohol, or marijuana. All remaining articles included in the synthesis (n=7) discussed research studies based on administered surveys. Cohort methods were used in 6 results, while cross-sectional methods were used in one. 2 results studied the impact of stay-at-home orders on E-cigarette use and how vaping decreased as a result. The other 5 results examined other potential predictors of increased/decreased E-cigarette use.

### **Discussion**

Global health will continue to be affected by the covid-19 pandemic. Young adults' vaping patterns were examined to identify potential COVID-19 stressors. Many factors may contribute to fluctuations in vaping due to COVID-19, including increased stress, decreased access to products, and initiatives to minimize e-cigarette use. Future research should examine how global issues affect the population so that researchers can determine preventative interventions to decrease smoking rates.

