

**Submission Id: 3698**

**Title**

*Assessing Electronic Cigarette Use and Depressive Symptoms among Adolescents in Kansas*

**Priority 1 (Research Category)**

Child and adolescent health

**Presenters**

Samuel Ofei-Dodoo, PhD, MA, MPA, CPH, Christopher Winburn, Leah Faust

**Abstract**

**Purpose:** The use of electronic cigarette has been increasing among adolescent in the United States population. With depression as a major risk factor for suicide in adolescent, this study examined depressive symptoms and electronic cigarette dependence in this age group.

**Methods:** The authors conducted a retrospective patient chart review at a pediatric clinic in the Midwestern United States, from May 2021 to September 2021. The clinic used the adapted Penn State Nicotine Dependency Index to evaluate the patients' electronic cigarette dependence and the PHQ-9 modified for adolescents to screen for depressive symptoms of the patients. Charts on 69 patients were reviewed for this study. The authors used standard descriptive statistics and a generalized linear mixed model to analyze the data on the 69 adolescents.

**Results:** The mean age of the adolescents was 17.6 (SD=2.3), 46.4% (n=32) were female, and 53.6% (n=37) were male. Approximately 30% (20 of 69) of the adolescent screened positive for depression and more than 88% (n=61) met criteria for high electronic cigarette dependence. Findings of the mixed model analyses indicated that there was not a significant association between electronic cigarette dependence and depressive symptoms (OR=1.07; 95% confidence interval, 0.93-1.23; P=.0365).

**Conclusions:** Our finding shows that while a third of adolescents screened positive for depression and majority (88%) depended on electronic cigarettes, there was no association between the outcomes. Future larger studies are needed to better understand the association between electronic cigarettes dependence and depressive symptoms as reported in the literature.