INTRODUCTION

• Recently, vaping has captured national attention. Vaping, often portrayed as a safer alternative to smoking cigarettes, still contains nicotine and other chemicals that are injurious to lung tissues, resulting in e-cigarette vaping associated lung injury, EVALI.
• In this study, vaping is the use of electronic cigarettes (e-cigarettes) that contain inhalants such as nicotine, tetrahydrocannabinol (THC), and cannabidiol (CBD). (Centers for Disease Control and Prevention, 2020)
• In this study, perception is a quick, acute, and intuitive cognition (Merriam Webster, 2020).

PROBLEM STATEMENT

• Despite rising numbers of hospitalizations due to EVALI, the public knowledge of potential dangers of e-cigarette usage is alarming as the public continues to use vape products.

PURPOSE

• This study aimed to assess public perception and knowledge of vaping in US adults ages 18 and older to investigate the potential reasons for vaping.

HYPOTHESES

• H₁: Knowledge of the chemicals found in vape pods is related to vape usage.
• H₂: Knowledge of the dangers of vape usage is related to vape usage.
• H₃: Public perception correlates with vape usage.

METHODS

• IRB approved, prospective exploratory study.
• Sample size (N = 413).
• Survey = 14 demographic items, 28 knowledge and perception items
• All statistics calculated using IBM SPSS Statistics Version 26 (Armonk, NY).
• An a priori power analysis revealed the minimum sample size needed to achieve significance was 317 respondents at 95% power and α = .05 using G-power Version 3.1.9.6 (Germany).

RESULTS

(A) Figure 1. Gender and education level of survey respondents. N=413

Gender and Education Level

Demographic Number of Respondents (Percent)

Gender

Male 82 (19.80%)
Female 327 (78.10%)

Transgender Female 0 (0.00%)
Transgender Male 1 (0.24%)

Age

Gender variable/nonconforming 2 (0.48%)
Not Listed 1 (0.24%)
Prefer not to say 0 (0.00%)

Education Level

Some High school, no diploma 3 (0.73%)
High school, graduate, diploma, GED 41 (9.93%)
Some college credits, no degree 140 (33.90%)
Trade school 0 (0.00%)
Associate’s degree 19 (4.60%)
Bachelor’s degree 124 (30.20%)
Master’s Degree 67 (16.22%)
Doctoral Degree (MD, DO, PhD, etc) 19 (4.60%)

(B) Figure 2. Age categories of survey respondents.

N = 413

Conclusions

• Low perception of risks, lack of awareness of vape pod ingredients, and health threats significantly correlates with the likelihood to vape (p-value).
• Flavor is not significant for vape use, and therefore current legislation may not be effective in deterrence of use in comparison to our findings for vaping cessation.
• Patients questioned by a healthcare provider were more likely to quit vaping devices. This included patients who reported never having been questioned by a provider.

CONCLUSIONS

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• Flavor is not significant for vape use, and therefore current legislation may not be effective in deterrence of use in comparison to our findings for vaping cessation.
• Patients questioned by a healthcare provider were more likely to quit vaping devices. This included patients who reported never having been questioned by a provider.

RECOMMENDATIONS

• Clinicians should screen for vaping use during every health examination.
• Accurate vape ingredient information should be explained to the general public.
• Offer behavioral therapies and alternative methods to help vapers quit.

CLINICAL RELEVANCE AND FUTURE IMPLICATIONS

These data may help clinicians better understand the factors that influence the public’s habits. We aim to provide evidence-based education that will aid clinicians in counseling their patients towards achieving vaping cessation.