



each ad ( $p=0.027$ ) in no vaping cue vs. neutral conditions. There was no significant difference in urge to smoke across conditions. **CONCLUSION:** Results suggest that brief exposure to vaping portrayals within e-cigarette ads may increase urge to vape among college students who are non-users or smokers. Vaping cue effects did not spillover to smoking urges. Further research is needed to inform regulations on e-cigarette advertising content to reduce uptake of e-cigarettes.

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## POS4-100 CONSTITUENTS DISCLOSURES ON CIGARETTE PACKS: A RANDOMIZED CLINICAL TRIAL

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**SIGNIFICANCE:** Federal law requires public disclosure of information about harmful and potentially harmful chemicals in cigarette smoke, but the impact of these disclosures is uncertain. We sought to assess the impact of putting disclosures about toxic chemicals on smokers' cigarette packs. **METHODS:** We enrolled a convenience sample of 719 adult cigarette smokers in California, US from September 2016 through March 2017. We placed informational messages on the right side of smokers' cigarette packs for three weeks, a different label each week. We randomly assigned smokers to receive either messages about chemicals in cigarette smoke and their health harms (intervention arm) or messages about not littering cigarette butts (control arm). The labels in the two arms were matched for size, color and word length. The primary trial outcome was intentions to quit smoking in the next month, assessed at the end of the three-week intervention. These results are preliminary until publication of final paper. ClinicalTrials.gov identifier: NCT02785484 **RESULTS:** In intent-to-treat analyses ( $n=719$ ), smokers whose packs had chemical disclosures did not have higher intentions to quit smoking at the end of the trial than those whose packs had a control message (mean [SD] intentions 2.6 [1.0] vs. 2.6 [1.1],  $p = .56$ ). Compared to the control messages, disclosures led to greater awareness of the chemicals (28% vs. 15%,  $p < .01$ ) and health harms (60% vs. 52%,  $p = .02$ ) that were in the disclosure messages. The trial arms did not differ with respect to awareness of the chemicals and health harms not in the disclosure messages. Chemical disclosures led to greater negative affect, thinking about the chemicals in cigarettes and the harms of smoking, conversations about the disclosures, and foregoing a cigarette (all  $p < .05$ ). **CONCLUSIONS:** Chemical disclosures on cigarette packs did not lead to greater intentions to quit smoking. Our trial findings suggest that implementing chemical disclosures on cigarette packs in the United States would inform smokers but may not lead to a population-wide reduction in smoking.

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## POS4-101 SHISHA WARNING EXPOSURE AMONG YOUNG ADULTS: A POPULATION-BASED ANALYSIS OF THE PATH STUDY

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**SIGNIFICANCE:** While FDA-mandated waterpipe tobacco (shisha) warnings are not required until August 2018, some manufacturers already include them on shisha packaging. To our knowledge, no studies in the US have monitored exposure to shisha warnings or associations with risk perceptions and use. **METHODS:** We used data from Wave 2 (2014-2015) of the Population Assessment of Tobacco and Health (PATH) Study, a nationally representative study of US adults. We conducted weighted analyses to examine frequency of past month exposure to shisha warnings and associations with demographics, risk perceptions, and use behaviors among current young adult (18-24) waterpipe users ( $n=1,226$ ). **RESULTS:** Forty percent of young adult waterpipe users reported past month exposure to shisha warnings (95% CI 36.8%, 43.3%). Frequency of exposure ranged from rarely (47.4%, CI 41.8%, 53.1%), to sometimes (29.0%, CI 24.0%, 34.5%), often

(12.0%, CI 9.4%, 15.1%), and very often (11.6%, CI 8.7%, 15.3%). Exposure varied among the three most commonly used brands: Fantasia (52.3%, CI 42.6%, 61.9%), Starbuzz (42.7%, CI 35.5%, 50.2%), and Al Fakher (39.6%, CI 27.4%, 53.2%). Exposure was higher among those who purchased shisha in person (47.1%), compared to those who purchased online (19.5%), by phone (33.4%), or did not purchase shisha (34.1%;  $F=10.8$ ,  $p<.0001$ ). There were no differences between exposure and non-exposure based on gender, ethnicity, race, perception of risk, or frequency of use. **CONCLUSIONS:** Just under half of young adult waterpipe users reported exposure to shisha warnings prior to implementation of FDA-mandated warning label policies. Exposure was not related to demographics, risk perceptions, or frequency of use. Fantasia, Starbuzz, and Al Fakher currently display text warnings, in small text, about health effects related to use, on a side or back panel. In contrast, the mandated warning will be required to occupy at least 30% of each of the principal display panels. Findings suggest the mandated warning may result in high exposure among users; however, it will be critical to assess exposure and impact on risk perceptions and behavior after the FDA-mandated warnings are in place.

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## POS4-102 IT'S A TRAP! AN EXAMINATION OF WATERPIPE SMOKERS AND NON-SMOKERS' REACTIONS TO ANTI-WATERPIPE PSAS

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**SIGNIFICANCE:** Waterpipe (WP) smoking can lead to negative health outcomes, and while cigarette smoking has decreased among youth and young adults, WP smoking is increasing. In order to communicate the risks of WP smoking, public service announcements (PSAs) have been employed. Research has examined the effects of anti-cigarette PSAs, but no research has examined the effects of anti-WP PSAs on WP smokers and WP non-smokers. **METHODS:** Current WP smokers ( $n = 20$ ) and never WP smokers ( $n = 25$ ) were randomized 2:1 (PSA:Control) to view either three anti-WP PSAs, created by the Truth campaign, or three control videos. Participants ( $N = 45$ ;  $n_{\text{Male}} = 24$ ;  $M_{\text{Age}} = 22.4$  years; 64.6% White) answered questions pertaining to message reactance, perceived risk, message acceptance, and motivations for quitting or avoiding WP after viewing each message. **RESULTS:** WP non-smokers reacted more positively than WP smokers toward the PSAs in terms of message acceptance ( $p < .001$ ) and attitude towards the message ( $p < .01$ ). While importance, readiness, and commitment to quit smoking WP stayed low for WP smokers, these constructs increased over time. Interestingly, even though WP smokers who saw the PSAs felt quitting was less important ( $p < .001$ ) and were less ready to quit ( $p < .001$ ) than WP non-smokers, they had increased confidence ( $p < .05$ ) and commitment to quit over time ( $p < .05$ ). **CONCLUSIONS:** Anti-WP PSAs may deter WP non-smokers from initiation, and while WP smokers may not respond positively toward the message, over time they may increase their confidence and commitment to quit the more they are exposed to PSAs. This shows that WP smokers may be harder to persuade, but over time and with increased messaging may be more open to quitting WP. WP smoking status and type of message exposure affects how individuals react to anti-WP PSAs. These responses should be taken into account when designing effective health communication campaigns focusing on WP.

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