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Vermont Adolescent Perception of Barriers to Smoking and Cessation

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Vermont Adolescent Perception of Barriers to Smoking and Cessation + AMERICAN LUNG

ASSOCIATION®

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Introduction

Despite a decline in youth smoking rates over the past decade, thirteen percent of Vermont high school students still smoke (Vermont Youth Risk Behavior Survey, YRBS, 2013). Smoking and nicotine exposure at an early age can have detrimental effects on brain development and lead to long term, sustained tobacco use (Arrazola et. al 2015). It was our goal to characterize the barriers to cessation for these adolescents. Some important factors suggested by the literature include living with someone who smokes (50% of VT teen smokers report a parent or guardian who smokes) and having a close friend who smokes (70% of VT teen smokers) (American Lung Association 2015). Nationally, while teen smoking rates continue to decline, the decrease is being offset by a significant increase in electronic vapor products (e-cigs) (12% increase from 2011-2014) (Arrazola et. al 2015). The 2013 Vermont YRBS data may therefore be misleading, and not capture this increase in tobacco and e-cig use. Therefore, we were particularly interested in further characterizing the link, if any, between e-cig use and smoking initiation or successful smoking cessation.

Methods

We conducted a literature search to find information regarding smoking rates amongst teens, factors influencing smoking cessation, the efficacy of current smoking cessation programs, survey writing techniques, and motivational interviewing techniques for holding focus groups.

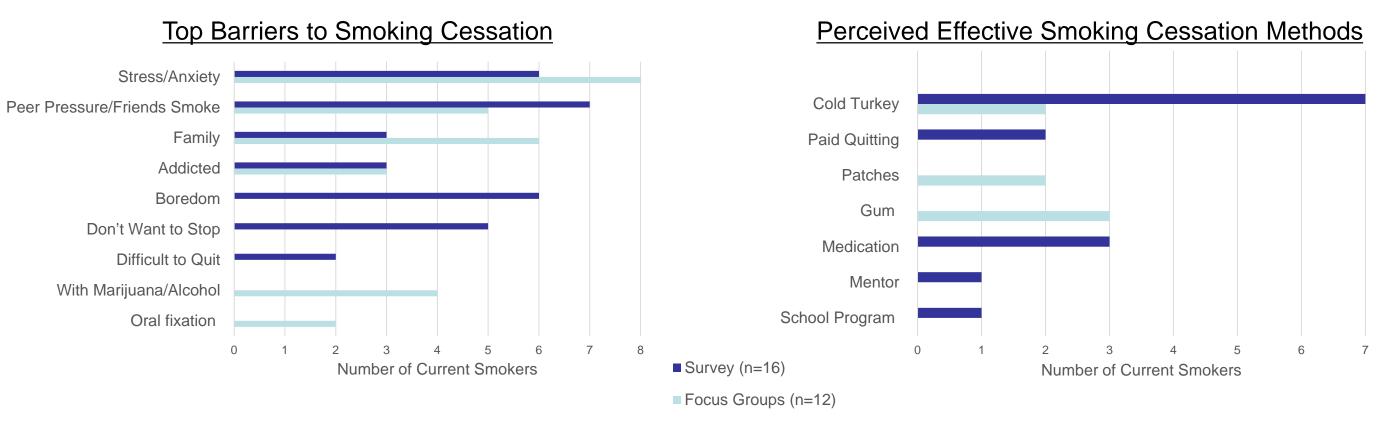
We developed a questionnaire using other validated surveys, such as the YRBS, to understand barriers that adolescents face in quitting smoking.

We distributed surveys among local high schools via LimeSurvey using contacts within the Vermont Agency of Education, as well as within multiple high schools throughout central and northern Vermont. Despite these efforts, we only received responses from 233 adolescents across six schools.

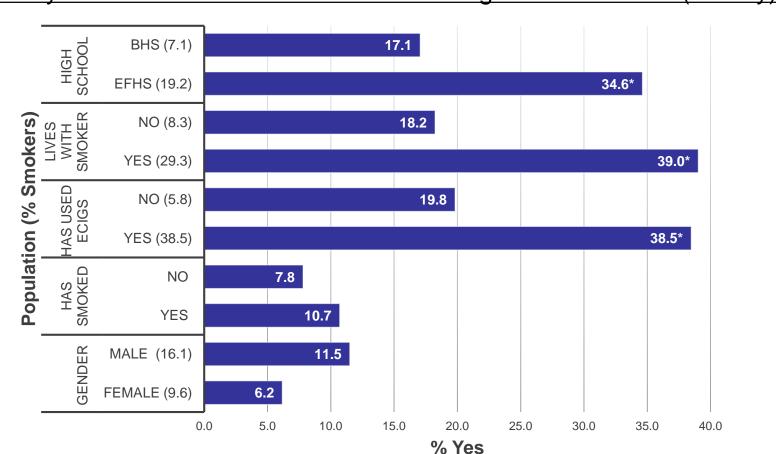
A consistent moderator conducted two focus groups, one with students from Burlington High School and the other with adolescents from Spectrum Youth & Family Services.

Demographics Currently Motivated to Quit? Schools Attended Gender (All Smokers) **Smoking Status** Spectrum Former

Results



"Do you think the health hazards of smoking are overrated?" (Survey)



*p value <0.01, significant difference between population groups on Chi Squared

Quotes from Focus Groups:

"I heard that it doesn't affect you until you're 20. If you quit when you're 30 you'll be okay. I only know two people that passed away from smoking. And we can do what we want."

"When living on the streets it is impossible to quit smoking'

"Need aimed programs for different populations"

"They should move the age up" [in reference to legal age of smoking]

"You can't have a soccer mom talking to people that have been homeless" [in reference to leaders of formal cessation programs]





Discussion

Barriers-

Major barriers to smoking cessation included stress and anxiety, living with a smoker, and peer pressure. There seemed to be a difference in perception of adverse health effects of smoking based on specific high school. Students from Enosburg High School had a higher rate of smoking. Regardless of smoking status, they were more likely to think the "health hazards of smoking were overrated," compared to adolescents from Burlington High. This may be due to differences in peer pressure at each school or prevalence of adolescents living with smokers. Many local high schools also refused to participate in the survey.

Cessation-

Many adolescents believed they would be able to quit on their own without any outside help. Adolescents also viewed e-cigs as effective cessation strategies.

Conclusion

In addition to living with a smoker and peer pressure, our data suggests that smoking to reduce stress and anxiety is another important barrier to quitting. There also seem to be some misconceptions regarding the effects of smoking on future health, which might contribute to a lack of strong motivation to quit or to abstain from smoking altogether. The perceived effectiveness of quitting "cold turkey" presents a challenge in the implementation of formal cessation programs. The idea that using e-cigs as an effective method of quitting is also concerning as the health effects of these products, and their relationship to using other tobacco products, are still being investigated.

References

Arrazola, R., T. Singh, C.G. Corey, C.G. Husten, L.J. Neff, B.J. Apelberg, R.E. Bunnell, C.J. Choiniere, B.A. King, S. Cox, T. McAfee, R.S. Caraballo. Tobacco Use Among Middle and High School Students. Morbidity and Mortality Weekly report. 64(14): 381-385. April 17, 2015.

Not on Tobacco Final Report FY15. American Lung association. Williston, Vermont. July 2015. Vermont Population Health 2013 Youth Risk Behavior Survey. Population Health. Vermont Department of Health. May, 2014.

Permission received from American Lung Association for use of both photographs.

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