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Increasing Awareness of the Risks Associated with Juuls in High School Students

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Problem Identification

• According to the Vermont Youth Risk Behavior Survey, in 2017 34% of high school students reported that they had tried an electronic vapor product (EVP) compared to 24% of students reporting that they have tried cigarettes.

• Many of these products have been marketed to adults as a way to stop using other tobacco products, however, only 5% of students who have used EVP in the past 30 days reported that as their primary reason for use.

• The report shows that 84% of students report peer disapproval of cigarette use and 86% of students understand that regular cigarette use poses a moderate-to-great health risk, however, most teens also believe that EVP are safer than cigarettes.

• This data was collected prior to the recent Juul trend which was first noted by the VT Department of Health in the fall of 2017.

• Anecdotal evidence suggests that current numbers are much higher, with the Vermont Department of Health recently hosting a seminar on the topic.
Public Health Cost

• Data is still being collected, however, at this time it is clear that there is a general lack of understanding surrounding what Juuls are and what impact they could have.

• Only 37% of Juul users knew that the product always contained Nicotine, additionally the amount of nicotine delivered varies by device and user at times surpassing conventional cigarettes.

• In teens, EVP use has been shown to increase risk of experimenting with cigarette smoking with very few using them as a tool to quit other tobacco products.

• Consequences of chronic vapor inhalation are unknown and levels of toxic and carcinogenic compounds vary by component and device.

• Even though flavoring was banned in tobacco products by the FDA in an attempt to limit their appeal to kids, these products are available in fruit and candy flavors.

• A study of 11th and 12th graders revealed an association with EVP use and chronic bronchitis symptoms.

• Full impact can not be estimated until research has been able to fully evaluate the health effects of these products, however, the fact that these products increase the likelihood of cigarette smoking in teens makes it a significant concern.
Community Perspective

- Sarah Roy, Vermont Department of Health Substance Abuse Prevention Consultant
  - “Juul use has picked up over the last school year, starting in the fall and snow-balled across the state in the winter. The tobacco unit has received consistent requests for more information but at this point there is still not enough information available. Students believe that there is no nicotine in Juuls. They don’t understand that there is any issue using them...they are viewed as a “new-age” alternative to smoking.”

- Rutland High School Student A
  - “They’re everywhere. I’ll walk into the bathroom and somebody will be using them in the stall. Kids have told me that there’s nothing bad in them.”

- Rutland High School Student B
  - “A lot of kids have one on them at all times. I’ve started seeing things about how dangerous they are, but I hate those things that just try to scare you into not doing the something.”
Intervention and Methodology

• An informational flyer was created to be hung in healthcare offices in an attempt to spark conversation between healthcare providers and high-school students.

• Providers were also supplied with an information sheet with facts from multiple sources that are most relevant and eye-opening for this age group.

• The information presented on the flyer was selected in collaboration with multiple members of the target audience in an attempt to provide facts relevant to this age group and dispel some of the prevalent myths surrounding Juuls.

• The interviews revealed that standard methods of information delivery such as informational brochures would have limited effectiveness in this age group, though, at the same time students preferred a straight-forward approach.

• Interviews also revealed that students were unaware that when cigarettes first became popular there was also a lack of knowledge surrounding long-term effects.
Results

- Flyer and fact-sheet was discussed with high school students to evaluate and improve appeal to this age-group
- Students attested that myths presented were similar to statements they have heard by peers and that they could understand language used in flyer
- Flyer and fact sheet was provided to area physicians, the Department of Health and area schools
Evaluation of Effectiveness & Limitations

• Due to the short-time frame surrounding this project the effectiveness was not able to be formally evaluated.

• If time allowed, a pre-intervention and post-intervention survey that evaluated accuracy of knowledge surrounding Juuls could have been used to assess the effectiveness.

• On a smaller scale, any increase in discussions noted by providers would indicate that this intervention was effective.

• In addition to the time-frame, this project was also limited by the lack of current scientific research regarding long-term use of Juuls.
Recommendations for Future Interventions

• Future interventions should continue to dispel the myths surrounding Juuls.

• Since a majority of high-school students displayed an understanding of the health consequences of cigarette smoking continued use of comparisons could prove to be effective.

• Facts should be provided to students in a straight-forward manner instead of in an attempt to scare them.

• A survey similar to the one outlined on the previous slide that assesses the accuracy of knowledge regarding Juuls could be widely distributed to high-school students as well as parents, teachers and healthcare providers.
References


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