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**Smoking Prevention Program for Adolescents: A
Hands-on Approach
Sean Closs
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Adolescent Smoking: What are the Facts?

- “9 out of 10 smokers start smoking before the age of 18” (U.S. Surgeon General, 2012)
- “When surveyed, 25% of high schoolers in Vermont report using a tobacco product at least once within the last 30 days” (VT Dept of Health, YBRS 2015)
- “The increases in current use of e-cigarettes and hookahs offset the decrease in tobacco products, resulting in no change in overall tobacco use among youths.”
(Morbidity/Mortality Weekly Report, 2015)

Public Health Cost of Adolescent Smoking

- Tobacco use in Vermont costs \$348 million in health care costs and over \$232 million in lost productivity each year (American Lung Association -State of Tobacco Control 2018 Report)
- Much of the social and health impacts of smoking seem fairly obvious, however the impact of smoking is most often seen years down the line, long after adolescents are introduced to it.

Community Perspective

- “The damage is done” is the remark of one local health care provider. Many of the people seen in clinic for smoking started as adolescents. Repeated office visits are needed to constantly reiterate the dangers/cost of smoking. Quitting can take a number of tries before finally being able to shake the addiction.
- The recent success of a ballot initiative related to “Tobacco 21” in Burlington highlights the interest in preventing adolescent smoking. Groups such as Burlington Partnership for a Healthy Community (BPHC) are working with after-school programs in local schools to for smoking (and substance abuse) prevention. Other organizations have expressed similar support for improving smoking prevention programs in the community.

Intervention and Methodology

- It is generally regarded that “active learning” is a better methodology for retention of material. Being able to engage with the consequences of smoking vs a Powerpoint presentation or panel discussion would be more impactful of a message.
- Access to the UVM health network provides a unique opportunity for adolescents to see the effects of smoking first-hand. Examples include: visiting the pathology lab to see effects of smoking on the lung, demonstration of a pulmonary function test, talks with PCPs on difficulty of smoking cessation.
- The proposal includes taking adolescents to the UVM Health Center pathology lab for an educational field trip. Additionally, presentations could be arranged by medical personnel bringing equipment for a school visit. A model example of this is already being done both by UVM student interest groups such as SmileDocs and school visits for health careers promotion.

Results and Data Collection

- An initial group of Burlington students through BPHC after-school program is already planned for a May '18 visit to the pathology lab. Additional plans are ongoing for getting access to pulmonary testing equipment to demonstrate PFTs, ideally explaining the impact of smoking on lung function.
- The results of the visit will be collected via a survey to see what resonated with the students. What were the kids most impacted by? What did they want to see or tell their friends about the most? What did they know about common dangers of smoking? Responses would be on an ordinal scale for impact, with a multiple choice section about the dangers of smoking.
- Data from this could be used to tailor the hospital visit/discussions to what 'experiences' seemed the most impactful.

Evaluation of Effectiveness

- Evaluations of the full effect of the proposed program would admittedly be difficult and require following a group for several years through high school.
- Ideally, a school-wide anonymous survey would be given as to the prevalence of smoking and measured across several years for a (hopefully) downward trend.
- Short-term 'success' of the visit would be garnered from the post-visit survey responses on the dangers of smoking.

Potential Ideas for Expansion

- This project is intended to be long-term and serve as a future potential model for intervening in schools. Extrapolating tobacco cessation programs to interviews with those suffering from alcohol or illicit substance disorders would be a possible next step.
- Coordination with local groups such as Turning Point, the Howard Center, Larner faculty, the VT Dept of Health etc. would allow for expansion by providing guest speakers and real world case examples. Coordination with school leadership could lead to these resources being brought to the schools for assembly-style meetings.

References

- ▶ Arrazola, Rene A., et al. "Tobacco use among middle and high school students--United States, 2011-2014." *Morbidity and Mortality Weekly Report*, 17 Apr. 2015, p. 381+. *Health & Wellness Resource Center*, http://link.galegroup.com.ezproxy.uvm.edu/apps/doc/A411471782/HWRC?u=vol_b92b&sid=HWRC&xid=5cfc1dca. Accessed 4 Mar. 2018.
- ▶ Peirson, Leslea, et al. "Interventions for prevention and treatment of tobacco smoking in school-Aged children and adolescents: A systematic review and meta-Analysis." *Preventive Medicine*, vol. 85, 2016, pp. 20-31., doi:10.1016/j.ypmed.2015.12.004.
- ▶ *Final Recommendation Statement: Tobacco Use in Children and Adolescents: Primary Care Interventions*. U.S. Preventive Services Task Force. December 2016.
<https://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/tobacco-use-in-children-and-adolescents-primary-care-interventions>
- ▶ National Center for Chronic Disease Prevention and Health Promotion (US) Office on Smoking and Health. Preventing Tobacco Use Among Youth and Young Adults: A Report of the Surgeon General. Atlanta (GA): Centers for Disease Control and Prevention (US); 2012. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK99237/>
- ▶ "Smoking & Tobacco Use." *Centers for Disease Control and Prevention*, Centers for Disease Control and Prevention, 16 Nov. 2017, www.cdc.gov/tobacco/data_statistics/fact_sheets/economics/econ_facts/index.htm.
- ▶ <http://www.burlingtonpartnership.org/>
- ▶ <http://www.healthvermont.gov/scorecard-tobacco>
- ▶ http://www.healthvermont.gov/sites/default/files/documents/pdf/HSVR_Tobacco_DB_%20YouthRiskAssets.pdf
- ▶ http://www.healthvermont.gov/sites/default/files/documents/pdf/DataPages_0.pdf