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Grace Culley Adamson

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Peer-Led Smoking Prevention

Winooski, VT

*“Above the Influence”
Afterschool Program*



GRACE CULLEY ADAMSON, MSIII

FAMILY MEDICINE CLERKSHIP, FEBRUARY-MARCH 2017

MENTOR: KATE NUGENT, WINOOSKI COALITION FOR A SAFE AND
PEACEFUL COMMUNITY

Problem Identification & Need

- Tobacco use is the **NUMBER ONE** preventable cause of death, contributing to more than 1 in 5 deaths. Cigarette smoking dramatically increases the risk of obstructive pulmonary disease, cardiovascular disease, stroke, and cancers of the lung, larynx, pharynx, pancreas, bladder and cervix.
- **2015 DATA for Vermont →**
 - According to the 2015 Vermont Youth Behavioral Risk Survey (“YRBS”)
 - 9% of middle school students in Vermont reported ever trying smoking. 5% reported ever smoking a whole cigarette. These numbers increase as students move into high school:
 - 11% of Vermont high school students reported smoking a cigarette in the last 30 days and 21% reported ever smoking a whole cigarette.
 - **Each year, at least 200 new children under the age of 18 in Vermont become new smokers.**
 - Prevalence of Vermont adults who smoke is 18% (National average is 15%)
- **Almost 90% of adult smokers smoke their first cigarette before age 18**

Local Problem Identification

- **Winooski, VT middle schoolers** in the 2015 YRBS in general reported **higher smoking rates** than other kids of the same age within the State of Vermont and within its own county (Chittenden County).
 - 18% reported ever trying smoking cigarettes (vs. 9% of middle schoolers in the State and 6% in the county)
 - 12% reported ever smoking a whole cigarette (vs. 5% in VT and 3% in the county)
 - 7% reported smoking cigarettes in past 30 days (vs. 2% in VT and in the county)
 - 10% reported using any tobacco product in the last 30 days (vs. 5% in VT and 4% in the county)
- By high school, 26% of Winooski youth report having tried smoking (15% within the county)
- Finally, multiple studies have shown that individuals with **lower incomes** are more likely to use tobacco. Indeed in Vermont, while the average adult smoking prevalence is 18%, that number increases to 29% of adults whose incomes are less than 250% of the federal poverty level.
 - In this vein, **Winooski has the smallest individual and household median earnings in Chittenden County**. Further, individual and household median earnings in Winooski are ~8% and 20% lower, respectively, than those median earnings within the State of Vermont as a whole.

Public Health Costs

- Approximate deaths per year in Vermont directly attributable to smoking: 1,000
- Annual healthcare expenses in Vermont related to smoking: at least \$348 million
- Annual Medicaid costs in Vermont related to smoking: \$87.2 million
- Vermont residents' state & federal tax burden due to government expenditures related to smoking: \$871 per household
- Estimated annual productivity losses in Vermont attributable to smoking and healthcare-related absences due to effects of smoking: \$232.8 million
- **10,000 kids in Vermont who are now under 18 years of age will die prematurely from smoking-related health complications**

Community Perspective

Rachel Swanson, Youth Coordinator, Winooski Coalition for a Safe & Peaceful Community

- Approximately 90% of Americans with a substance-use problem started using that substance before the age of 18; this includes tobacco. Youth nationwide and in Winooski are constantly faced with pressure to drink, smoke, and use drugs from peers, advertising, and media. During the adolescent stage, youth are figuring out who they are and what they believe in. Therefore, it is essential that we focus on young people in order to prevent and counter-act these pressures.
- Above the Influence is a national campaign to help youth live above the negative influences in their life, whether that's about bullying, drinking, or smoking. The Winooski ATI group supports youth in making healthy choices and empowers them to make a difference in their community. Our hope with ATI is for youth to not only make their own good decisions, but to have them help change norms and policies around substance use in the greater community. To accomplish this, ATI students learn science-based facts about substances and substance use, as well as practice public-speaking skills and advocacy skills...all while having fun, being social, and making friends.

Andrea Wheeland, Winooski Middle School Teacher

- There is currently no established or consistent tobacco prevention curriculum for Winooski middle schoolers
- At one point, there was a Vermont Kids Against Tobacco program run with the afterschool program, but it is no longer offered
- Local pharmacy students made a power point slide for kids on tobacco use, but it is not regularly utilized
- A yearly presentation regarding tobacco prevention to the students or materials for students and families are needed and would be welcome at the Winooski Middle School

Intervention & Methodology

- Because **(1)** 90% of tobacco users report having started smoking before the age of 18, **(2)** tobacco use among youth in Winooski, Vermont appears to be higher than that in the State and within its own county, **(3)** tobacco use greatly increases from middle school to high school, and **(4)** because tobacco use is shown to be higher among lower income individuals, my intervention focuses on tobacco education and prevention efforts geared toward middle schoolers in Winooski, the lowest-income community in its county. My intervention will take a different angle than traditional tobacco prevention programs in that I will be focusing on **peer-led prevention efforts**:
 - Several studies and randomized trials have shown that whether a youth elects to try smoking is strongly correlated with their peers' smoking behavior and beliefs about smoking. Such studies have further demonstrated that peer-led tobacco prevention strategies can be more effective than adult/teacher educational sessions in the formal classroom setting.
 - Evidence supports formal and informal peer-led tobacco prevention strategies as being effective at shaping norms of non-smoking behavior and in achieving sustained reduction in youth smoking rates.
 - Peer-led strategies involve identifying youth leaders, educating those leaders about the harms of tobacco use and the benefits of tobacco prevention, and training those leaders to informally or formally engage their peers on these topics, thereby cultivating non-smoking culture norms early in youth and ideally decreasing the number of new youth smokers each year.

Intervention & Methodology, continued

- The Winooski students enrolled in the **Above the Influence (ATI)** afterschool program typically are middle schoolers. By virtue of their voluntary enrollment in ATI, these students have demonstrated a special interest in peer leadership, prevention and education.
- An interactive and engaging presentation will be made to the ATI students regarding tobacco, its effects on communities and its harms to health. Through this session, the students will gain specific knowledge of what is contained in a cigarette, the burden of disease caused by smoking, the cost of smoking, and a discussion around talking to their peers about smoking. At the end of the session, the students will be provided access to a paper and electronic copy of the power point presentation. Students will be encouraged to have at least one conversation a month with peers about tobacco, and to explore with their teachers giving a classroom presentation on the topic using the power point provided.
- In other ATI sessions, the concepts of tobacco industry marketing to youth, e-cigarettes and other tobacco-related products, resisting peer pressure, talking to peers about prevention, building self confidence, public speaking, and advocacy skills will be emphasized. These other sessions will build upon my intervention such that the students gain additional relevant knowledge on the topic as well as skills that enable them to be more confident and empowered to speak to classmates about tobacco use and are able to influence and change norms in this area.

Results/Response

- The presentation to the ATI afterschool program is scheduled for April at the Winooski School District.
- It could not be scheduled during the limited time of the Family Medicine Clerkship, and before this presentation was due, because of scheduling conflicts and because of February break at the school. Further, ATI does not meet the first two weeks of March 2017.
- The Youth Coordinator of the ATI program anticipates that the ATI kids will be very excited about having an outside visitor from the medical school, and she thinks they will be receptive to the material and intervention.

Proposed Evaluation of Effectiveness & Limitations

- The ATI students will be encouraged to maintain a journal to document conversations with peers about tobacco use and prevention, and to share those conversations at subsequent ATI meetings.
- ATI students will be encouraged to ask their teachers if they can give a classroom presentation on tobacco prevention, using the power point provided.
- If even one ATI student speaks with one other student about the harms of tobacco use, or goes as far as making a classroom presentation, the intervention will be deemed a success in so far as training one youth to engage in peer-led prevention discussions. Simply having the conversation can shift norms around smoking, which in turn can lead to reductions in tobacco use.
- In terms of actual tobacco-use prevention, the intervention is limited in terms of quantitative follow-up measures to track reductions in Winooski youth smoking and to correlate the intervention to those reductions. Another limitation is assuming that students enrolled in the ATI program are considered leaders by their peers. ATI enrollment is voluntary and does not necessarily represent a subset of students that other students throughout the middle school will choose to respect or necessarily follow their proposed norms.

Recommendations for Future Focus to Enhance the Proposed Intervention

- Design and implement a Winooski-specific tobacco use survey for youth that would be administered to middle and high school students at the same time as the YRBS, but would be more detailed than that covered by the annual YRBS and would more thoroughly explore attitudes and norms around youth smoking.
- Utilize data from above survey as a base-line to inform future prevention efforts.
- Implement the ATI tobacco prevention intervention at every ATI session (the sessions and students change a few times throughout the school year) as a consistent and regular part of the Winooski ATI curriculum.
- Provide a weekend-long training session for ATI students on leading peer discussions on the topic of substance-use prevention so that they can receive more intensive training on peer-prevention strategies.
- Facilitate discussions with the ATI students and the Winooski School District health curriculum coordinator to establish a consistent, year-to-year tobacco prevention presentation made by the ATI students to their classroom peers. Design a survey for students listening to the presentation to assess its effectiveness.
- Implement the Winooski-specific tobacco survey on a yearly basis to track tobacco prevention progress. Re-tool the intervention in response to data from the surveys.

Other Recommendations for Future Focus

- Expand the tobacco-prevention discussion to include parents, such that at PTA meetings and school events parents are provided educational materials and resources on tobacco, how to quit and are also taught strategies for speaking to their children about not smoking. Collaborate with other organizations, such as Parent Up for Vermont, in this regard.
- Approach local businesses in Winooski regarding tobacco advertising and product placement to assess their willingness to either remove tobacco advertising, or at the very least move advertising and tobacco products so that they are not at the eye-level of middle school-age youth.

References

- Audrey, S. et al. It's Good to Talk. Adolescent Perspectives of an Informal Peer-Led Intervention to Reduce Smoking. 2006. Social Science & Medicine. 63: 320-334.
- Campbell, R. et al. An Informal School-Based Peer-Led Intervention for Smoking Prevention in Adolescence (ASSIST): A Cluster Randomised Trial. 2008. The Lancet. 371: 1595-1602.
- MacArthur, G. et al. Peer-Led Interventions to Prevent Tobacco, Alcohol and/or Drug Use Among Young People Aged 11-21 Years: A Systematic Review and Meta-Analysis. 2015. Addiction. 111: 391-407.
- 2015 Vermont High School Youth Behavior Risk Survey:
http://healthvermont.gov/sites/default/files/CHS_YRBS_highschool_report_2015.pdf
- 2015 Vermont Middle School Youth Behavior Risk Survey. <http://healthvermont.gov/health-statistics-vital-records/population-health-surveys-data/youth-risk-behavior-survey-yrbs>
- 2015 Chittenden County Middle and High school Youth Behavior Risk Survey:
http://www.healthvermont.gov/sites/default/files/documents/2016/12/CHS_YRBS_ChittendenCounty.pdf
- 2015 Winooski Middle and High school Youth Behavior Risk Survey:
http://healthvermontodmpdq6dnn.devcloud.acquia-sites.com/sites/default/files/Winooski_SD.pdf
- Campaign for Tobacco-Free Kids. Fact Sheet, Vermont.
https://www.tobaccofreekids.org/facts_issues/toll_us/vermont

References, continued

- U.S. Surgeon General 2012 Report, Preventing Tobacco use Among Youth and Young Adults.
<https://www.surgeongeneral.gov/library/reports/preventing-youth-tobacco-use/factsheet.html>
- Vermont Tobacco Control State Plan, 2015-2020
- <http://humanservices.vermont.gov/tobacco/documents-and-resources/vermont-tobacco-control-workplan/view>
- Vermont Department of Health, Tobacco Statistics: <http://healthvermont.gov/wellness/tobacco>
- Campaign for Tobacco-Free Kids. Fact Sheet, Vermont.
https://www.tobaccofreekids.org/facts_issues/toll_us/vermont
- Winooski Vermont Income Data. Towncharts.com
- <http://www.towncharts.com/Vermont/Economy/Winooski-city-VT-Economy-data.html>

References for Images:

- Hassink, Sandra. Keep Kids Tobacco Free. US News & World Report. October 26, 2015
<http://www.usnews.com/opinion/blogs/policy-dose/2015/10/26/its-time-congress-and-the-fda-protected-kids-from-e-cigarettes-and-tobacco>
- Ecg.Research.com. Conventional Cigarettes Contain Over 4,000 Chemicals. February 3, 2016.
<http://ecigresearch.com/2016/02/03/conventional-cigarettes-contain-over-4000-chemicals/>