

SELECTIVE PROPOSAL
By Tabitha Cleary and Edmund Kim
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TAR WARS SMOKING PREVENTION PROGRAM EVALUATION

Introduction and Background Information:

Surveys of school aged children indicate that between 14.1 and 25.2% smoke their first cigarette by age 12 (O'Loughlin et al, 1998). The surgeon general reports that most people that smoke are hooked by their graduation from high school. Despite a 30 year decline in overall smoking prevalence, there still remains a significant percentage of children that smoke. It has been shown in the past that children who begin smoking at an early age are more likely to develop a greater nicotine addiction. Early smokers are less likely to quit and are at higher risk of dying from a medical condition that has been caused by their tobacco use (Pierce, 1996 and Surgeon General, 1994). Aside from the long-term effects, tobacco use has been shown to reduce the rate of lung growth and diminish the level of maximum lung function that can be attained (Surgeon General, 1994).

During the 1980's, there appears to be a surge of documented smoking prevention programs aimed at young people, especially those who have not entered high school yet. These studies come from all across the United States, in urban as well as rural communities and include a diverse group of children. There are ten major studies found in the literature that focused on the 5th and 6th grade level. Most of these studies were no longer than 6-8 hour sessions spread over a couple of days. A wide range of program presenters were included from peer-led sessions to teachers to even health care professionals. To evaluate these smoking prevention programs most studies used pre and posttest questionnaires that varied to time of distribution and content of the form. The major focus of these questionnaires were one; the incidence of smoking as reported by the child and two; knowledge about smoking. A majority of the programs showed at least a 20% improvement in at least one of these categories, some did not (Breslow et al, 1988).

Unfortunately, there is very little smoking prevention literature concerning children in the 1990s. The only major program that was well documented was the peer assisted learning program or PAL which started in Canada during the early 1980s. This program also focused on younger children and evaluated its program through the pre and posttest questionnaire. The questionnaire focused on if the child had never smoked, tried but no longer smoked or currently smoked. It also divided the children up by gender. The results showed that males, who successfully completed the PAL program were more likely to report that they had never smoked than were males in the control groups. The results were disappointing for the females, however, in that there was no statistically significant effect (Abernathy, 1992).

The only other nationwide smoking prevention program that has been in existence throughout the 1990s is the TAR WARS program. The TAR WARS program was originally started in Colorado by Jeffrey Cain, M.D., then a chief resident at Mercy Medical Center and Glenna Pember, an employee of me Hall of Life. They were first to launch the project in the Colorado schools, recruiting health care professionals as well as teachers to initiate the program. By the 1990-1991 school year, over 50% of the 5th graders in Colorado were being taught the program (Cam et al, 1992). The mission of this program is to teach the positive aspects of not smoking, to teach the children about the short-term effects of smoking and to help the children become aware of the hidden messages in cigarette advertisements. The program takes about 2 ½ to 3 hours to complete. The first session concentrates on the short term effects of smoking, exercises to show the children what smoking does to the body,

attitudes towards smoking and interpreting different cigarette ads that are brought in by the presenters. The 2nd session is poster making. The TAR WARS program has a statewide as well as nationwide poster contest. The posters have to be about the positive effects of not smoking and the children really get into it. The children have that session and about a week to complete their poster which is then judged by teachers at the school or the presenters. The winning poster at each school is then entered into the state contest where there are cash prizes and the winner of that gets an all expenses paid trip to the nationals for the child and his/her family. The winner of the national contest gets an all expenses paid trip to Disney World (Figure 1).

This TAR WARS program has grown since 1988 and thousands of children are taught it every year. It has been so successful that the World Health Organization and the American Medical Association have given the program awards for excellence in education. Unfortunately, the TAR WARS program has never had a formal evaluation documented in the literature concerning the impact it has on the youth it teaches. We would like to objectively evaluate this program and hopefully publish the results.

Hypothesis:

At least 1/3 of the fifth graders taught the TAR WARS program curriculum will be able to retain the information presented to them for at least one month after the presentation. At least 1/3 of fifth graders will report a statistically significant lower 'weekly smoking rate', a lower "have tried smoking once but have not continued" and a lower "have never smoked rate."

Knowledge/Skill/Experience that we expect to gain:

Through helping to organize this program, we will gain experience with interacting with different ethnicities and professions in the community.

We will interact with medical and dental students as well as schoolteachers, principals, and occasionally parents. We are also interacting and learning from the physicians at the Connecticut Academy of Family Physicians who have organized a statewide TAR WARS program for several years.

Through teaching the TAR WARS curriculum personally, we will gain experience in interacting with the youth of suburban as well as inner city schools. We will learn about the pressures that children experience with tobacco and how they have learned to cope with tobacco issues,

Evaluating whether the children retain the knowledge and attitudes that they were taught from the TAR WARS curriculum will enable us to recommend changes to the curriculum. This is to ensure that the children remember the dangers of tobacco and that they serve as role models to younger as well as older individuals.

Methods:

We will spend November and December recruiting volunteers. We have a contact liaison in the 2nd year dental class who is also helping to recruit people. We have placed flyers and have sent numerous e-mails already to 1st and 2nd year medical and dental students. In mid-December, we will begin contacting numerous middle schools in the area. We will speak to 5th grade teachers in the suburban as well as the inner city schools in the surrounding community and will ask permission to teach the program in January and February. Two weeks before the program starts, we will distribute the 20-question questionnaire and about 1 month after the program, we will again distribute the same questionnaire. These will be collected either one of us and marked only as to which schools they come from. We will then analyze the data and do a formal report and oral presentation in April.

Supervision:

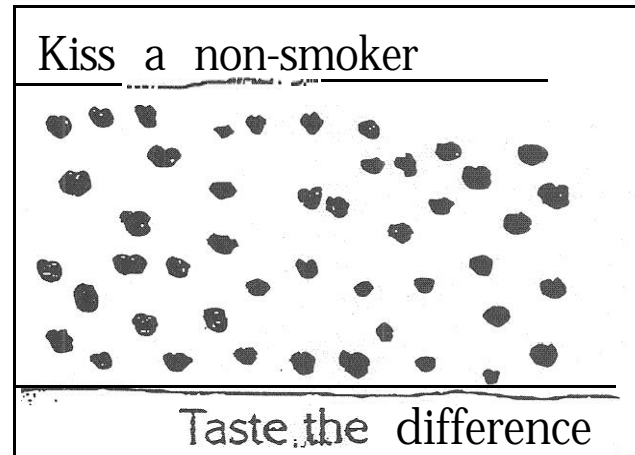
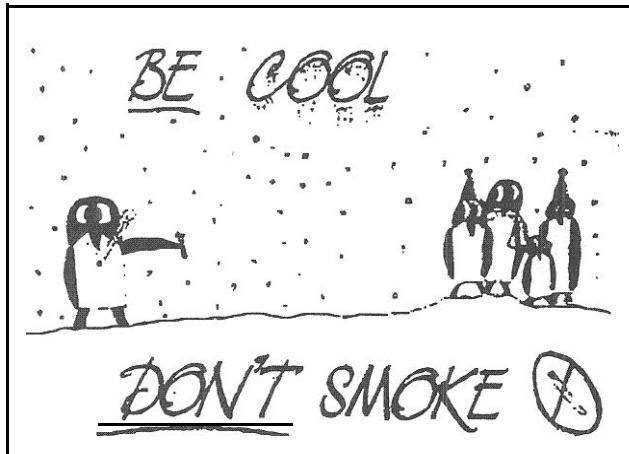
We will be in constant contact with our advisor Judy Lewis and the teachers of the schools who participate as well as the physicians at the Connect&t Academy of Family Physicians to let them know how the project is progressing and of the final outcome.

Thank you,

Tabitha L. Cleary MSIV

Edmund Kim MSIV

Figure 1. Some of the Winning posters in the 1990 Tar Wars Poster Contest sponsored by the Coalition for a Tobacco-Free Colorado



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Dear Judy,

Here are some sample questions that Ed and I were working on.

1. What percentage of kids your age smoke cigarettes every week?
5% 25% 50% 75%
2. How much money do cigarette companies spend on advertising each day?
\$50 \$1000 \$1,000,000 \$9,000,000
3. How likely are you to use tobacco products in the next year?
i will definitely try tobacco products
i am very likely to try tobacco products
i will possibly try tobacco products
i will never try tobacco products
- True or False
4. smoking causes bad breath
5. smokers have yellow teeth
6. cigarettes that contain low tar are safe
7. smokers have clean smelling clothes
8. smoking can decrease the amount of air that gets into your lungs
3. smoking a pack of cigarettes each day for a year would cost more than \$200.00
10. people use tobacco because their friends do
11. smoking is relaxing
12. advertisers tell the truth about the effects of tobacco use
13. smoking makes asthma worse
14. Does anyone who lives in your home use tobacco?
15. Do any of your friends smoke?
16. Have you ever been offered a cigarette?
17. Do you use tobacco now?
If yes, will you try to stop now that you have heard the TAR WARS Program?
18. How old are you?
19. Are you a boy or girl?
20. Did you enjoy the TAR WARS Program?

We wanted to limit the evaluation to 20 questions so as not to bore them.

We used a combination of knowledge as well as behavior questions and then some demographic information. Do you have any suggestions? I think our expectations from this project are really if the kids are really learning from this program and then some idea of where they are at with smoking in their lives right then. we hope that we can also show the kids that we care about them and about their decision not to smoke and that is why we are there. Also, we hope to get other medical students involved and carry on with this program as well as its evaluation. This would probably be our mission statement really. Our hypothesis would be that Tar Wars does make a positive impact on the kids decision to smoke and that kids will retain the knowledge they learn in TAR WARS 1-2 months out.