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anti- tobacco school-based programming for deaf youth

By Barbara A. Berman and Debra S. Guthmann

As part of the effort to reduce cigarette smoking—the single most preventable cause of death in our society—researchers have tried for over half a century to identify effective school-based anti-tobacco education that can discourage tobacco use among children and adolescents. Unfortunately, deaf and hard of hearing young people have been largely excluded from this effort. Prevention messages available to hearing youth are often inaccessible and inadequate, and culturally and linguistically appropriate programming has not been developed.

This may leave deaf and hard of hearing young people more vulnerable to a substance that is responsible for about one in five deaths—400,000 each year—in the United States, and over four million deaths across the globe.

More than 90 percent of today's adult smokers began to smoke when they were children or teenagers. Despite ongoing national campaigns against smoking, more than 4,000 young people in the United States under the age of 18 smoke their first cigarette each day and 2,000 others go on to become regular, daily smokers. That means that about 4.5 million youth under the age of 18 are current smokers.

Like adult smokers, these young smokers often believe they can quit whenever they choose. But when they try to stop smoking, they often find out that this is very hard to do; about 70 percent of high school seniors that smoke have tried to quit and failed. The most important reason for this is that tobacco products are as addictive as cocaine and heroin—and addiction can occur quickly.

While cessation is possible, prevention—keeping young people from ever starting—is far better, and there has been an enormous effort on the part of the public health community to find ways to discourage experimentation and regular tobacco use among young people. Raising cigarette taxes, making access to tobacco products more difficult, establishing rules to prevent tobacco industry sponsorship of youth-oriented events and marketing of tobacco products, and discouraging use of tobacco products in movies are all part of the picture. So, too, is school-based tobacco education.

Why a Special Program for Deaf and Hard of Hearing Youth?

School-based programs have been tailored to the needs of race/ethnic and other populations and they are now being expanded to include programs for deaf and hard of hearing youth. There are particular concerns that deaf and hard of hearing young people may be at risk for

Photography by John T. Consoli



tobacco use. Children and adolescents that struggle with issues of social acceptance and self-esteem, who experience communication barriers, and who face difficulties when it comes to school performance are at great risk for tobacco use and other risk-taking behaviors. Deaf youth often face these and other challenges.

Recognizing this problem, the Tobacco-Related Diseases Research Program in California has funded research that targets deaf and hard of hearing youth. Not much was known about smoking and deaf and hard of hearing youth, so investigators at UCLA's Division of Cancer Prevention and Control Research, School of Public Health and Jonsson Comprehensive Cancer Center partnered with the Greater Los Angeles Agency on Deafness to survey over 400 deaf adolescents and young adults. In-depth interviews with some of our survey respondents regarding their tobacco-related knowledge, attitudes, and practices were also conducted.

Crafting the Anti-Tobacco Curriculum

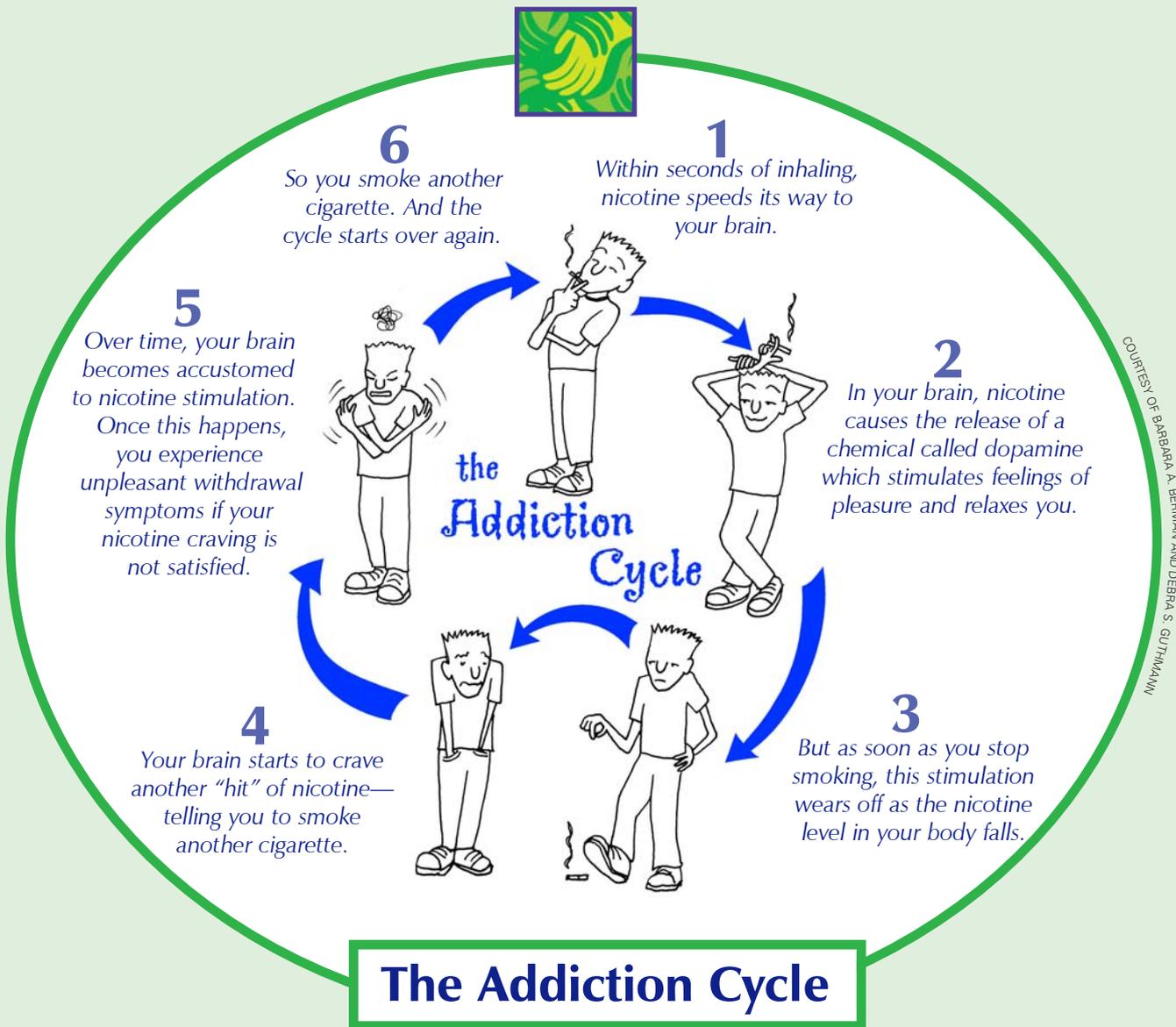
With these findings in mind, a school-based tobacco-prevention curriculum was tailored to the needs of deaf and hard of hearing youth. Working with a team of educators, the Hands Off Tobacco! curriculum, an anti-tobacco program for deaf youth, was developed. This program is now being tested in a quasi-experimental non-equivalent control group design involving over 600 deaf and hard of hearing students at four schools for deaf students in California, New Jersey and Minnesota.

Our program was designed for seventh through twelfth grade students, and it is now being extended for fifth and sixth grade students. Featuring a Social Influences and Resistance Model approach, we tailored the program to deaf and hard of hearing youth with the use of visual elements, graphic design, hands-on activities, and images of deaf and hard of hearing youth, and by drawing on examples from the lives of deaf and hard of hearing students. In seven lessons at each grade level our program features key elements that we return to each subsequent year, introducing specific content as appropriate for children and teenagers as they get older.

These elements include:

- **THE HEALTH EFFECTS OF TOBACCO USE**
- **THE ADDICTION CYCLE**
- **THE INFLUENCE OF TOBACCO INDUSTRY MARKETING**
- **ANTI-TOBACCO EFFORTS AND SOCIAL ACTION**
- **SELF-ESTEEM AND SELF-CONCEPT**
- **THE INFLUENCE OF FRIENDS AND PEERS**
- **DECISION MAKING**

We introduced the curriculum at two schools for deaf students while two other schools serve as control sites. We are collecting student survey data to assess how knowledge, attitudes, and behavior change over time among students who are exposed to the curriculum—intervention sites—and who are not—control sites. We are surveying faculty at our schools



Survey Confirms Interviews: Students Report on Smoking

What we've learned has confirmed what we had heard through educators, community agencies, and health care providers. We found :

- **CONSIDERABLE EXPERIMENTATION.** Among the 226 high school participants, 45 percent reported having smoked cigarettes; among 241 college students, the rate was 65 percent.
- **GAPS IN KNOWLEDGE.** Over 25 percent of our high school respondents did not know that exposure to environmental tobacco smoke was bad for their health. Over 10 percent did not know that smoking could cause cancer or that a fetus could be harmed by the smoking of its pregnant mother.
- **LACK OF INFORMATION FROM PHYSICIANS.** While 84 percent of our respondents saw a physician in the past year, only 35 percent were told by a physician why smoking was bad for health.
- **LACK OF EXPOSURE TO PREVENTION PROGRAMS.** Of our respondents, 25 percent had never been exposed to school-based tobacco prevention education.
- **LACK OF EXPOSURE TO DECISION-MAKING PROGRAMS.** Among those that had been exposed to anti-tobacco programs, only about 60 percent received programming that focused on making good decisions. Decision-making is recognized as state-of-the-art when it comes to education relating to the prevention of tobacco use, other substance abuse, unsafe sex, and other risk-taking behavior.

to learn about their experiences with tobacco education, their view of the importance of this curriculum in their students' program of study, and to identify barriers to program implementation. Assessment of individual lessons by teachers is also helping us to understand how they have adapted and used the program, particularly with respect to the range of language and other skills of the students in their classes.

Our goal in developing the curriculum was to create a program that could be used, in whole or in part, in a range of educational environments, including residential schools for deaf students as well as mainstream settings. There are modules that can be used to teach math, science, social studies, or health. They can be used in a classroom setting or within a school-wide program. Elements of the program can be introduced on a "stand alone" basis or can be used to address diverse risk-taking behaviors that are of critical importance to young people today.

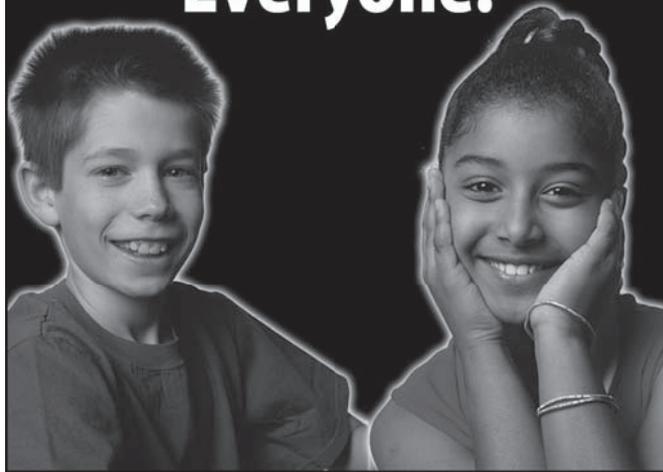
Feedback from teachers who have adapted the program suggest that we achieved our goal of creating a user-friendly curriculum. Lessons are complete with vocabulary words, assignments, examples, suggestions for discussion, and clear content. We provide cover sheets for each grade to give teachers an indication of materials they would likely want to have on hand. Worksheets and visual images are available on an accompanying CD for use in a PowerPoint presentation or

for distribution. Homework assignments can be used as classroom activities. We have been available to assist in any way needed to provide references to additional materials and information. Feedback also conveyed to us the many ways in which teachers modified the program content to adapt it successfully to the range of students they serve, even at the same grade level.

In addition to the written tobacco curriculum, the California School for the Deaf-Fremont has made a DVD (which comes with a teacher's guide) that features deaf students and that can be used in conjunction with the Hands Off Tobacco! program to reinforce key messages and themes in the curriculum.

We are now in the last year of our study and as part of our grant, in the spring, we will be sending out the curriculum and the DVD mentioned above at no cost to educators of deaf children around the country. If you are interested in receiving a copy of the curriculum or the DVD, please contact us at Dguthmann@aol.com or BBerman@ucla.edu.

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Lesson 9-2

Assessing Peer Pressure Strategies

Introduction: This lesson explores how peer pressure occurs and ways in which such pressure can be resisted. Students are taken through exercises in trying to pressure others into engaging in behaviors such as smoking; and in considering the various types of resistance strategies that might be employed to counter this pressure. The link between self-esteem and the ability to resist peer pressure is also reviewed.

Lesson Objectives:

By the end of Lesson 9-2, students will be able to:

- Identify the Tools of Trade (direct orders, insults, harassment, exclusion), strategies used by people to pressure others into certain actions or behaviors.

Materials:

- Tool Box (box with cards, each card imprinted with one of the Tools of Trade Strategies)

Key Terms:

harassment: Constant badgering or annoyance aimed at convincing someone to do something they otherwise might not want to do.

refusal skills: Tools which one can use against friend or peer pressure to do something that one finds undesirable, unsafe, or wrong.

refusal strategies: Ways of expressing refusal, divided here into three major types: passive, aggressive and assertive.

Passive: refusal in a non-confrontational manner without actually saying "No." (I'm, maybe, and often involves looking away and avoidance.)

Aggressive: refusal expressed by using confrontational strategies.

Assertive: Refusal in a firm, clear, but non-threatening manner.

For Review:

peer influence: the indirect force that pressure in shaping one's opinions, perceptions, desires and behavior. (See Lesson 8-2)

peer pressure: the more direct force that friends and peers often use to shape one's opinions, perceptions, desires and actions. (See Lesson 8-2)