WHAT CAN THE SCHOOLS DO?*

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EVIDENCE concerning cigarette smoking and its effect on man, particularly on his cardiovascular system, has already been presented at this conference. Undoubtedly this has added to our understanding of the problem, and at the same time it has raised many questions about our professional responsibility for contributing to its solution. Since the publication of the Surgeon General's report** and all the subsequent research, the magnitude of the problem and its seriousness have become ever more apparent and even frightening in terms of the disappointing results of the efforts to reverse the smoking trend.

Those of us in the field of education may feel more frustrated than some of the other professionals, since logic clearly suggests that the solution to the smoking problem is education. Even the thinking man, puffing on his cigarette, realizes that the elimination of smoking will also reduce drastically the deaths, the disease, the disabling, the accidents—and all those things that reduce human effectiveness and efficiency. Education—such a simple antidote to such an alarming problem! If you smoke, stop. If you haven't started, don't.

Therefore it would appear that what needs to be done is: 1) to inform people of the health hazards of cigarette smoking; 2) to convince them that some disease or disability associated with smoking can affect them personally; 3) to make them realize that such a personal health problem could be serious—literally a life and death matter; and 4) to show them that there is something that they can do to eliminate this unnecessary threat, namely, avoid cigarette smoking.

On the surface this seems to be a simple four-point program for education. It is like the suggested solution to a host of other health problems that require only avoiding a known cause: obesity, for in-

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**_Smoking and Health._ Report of the Advisory Committee to the Surgeon General of the Public Health Service, U.S. Department of Health, Education, and Welfare. Wash., D.C., Govt. Print. Off., 1964 and 1967.

stance, or alcoholism, or venereal disease. Apply that one-word panacea: education, and the problem is solved. But the solution is not that easy, as all of you know. Yet education is our greatest hope. It is only natural, then, to turn to the schools in this connection.

When it became apparent that changing the habits of confirmed smokers was virtually impossible, people began to advocate instead that we catch potential smokers while they are young. Educate them in the schools. Those clamoring for such programs in schools seem to ignore the fact that the schools have conducted mandated instruction on the harmful effects of alcohol for more than 50 years, while the consumption of alcoholic beverages has steadily increased.

Still, I suspect it is these same people who advocate the teaching of abstinence from alcohol who find it convenient to delegate responsibility in the case of smoking to someone else. It is comforting to entrust the schools with the education of children to help them make better choices about the smoking of cigarettes than they have made themselves. Community critics of schools are fond of asking: Why don't the schools do something about it? The "it" is adaptable to any current controversy and can be interchanged with any of the following difficulties: spelling, democracy, penmanship, grammar, geography, morals, character. In the area of health and social problems the most common current "it" is one of the following: illegitimacy, narcotics, LSD, glue sniffing, and other such problems. So "Why doesn't the school do something about smoking?" is a frustrating question to educators, but it is a legitimate question, and it deserves an answer.

The function of a school is to educate. And health has always been listed as a primary goal of education. A recent national health education study* proved that this objective is acceptable to school administrators, who in this report unanimously expressed their belief in education for health as an important part of the school curriculum. The rationale is that realizing and maintaining one's highest possible level of health has a direct relation to achieving any of life's goals. The acceptance of this philosophy is universal among school people.

Further, in New York State at least, health education is more than a moral obligation. Recent legislation mandates that every school have a broad health education curriculum in all elementary and secondary schools with emphasis on the current critical health problems: cigarette

*Sliepcevich, E. M. *Summary Report of a Nationwide Study of Health Instruction in the Public Schools 1961-1963.* Wash,, D.C., School Health Education Study, 1964.

smoking, drugs and narcotics, and the excessive use of alcohol. Such curricula, the law states, "shall include instruction in nutrition, mental and emotional health, family living, disease prevention and control, and accident prevention." If you have followed the introduction of this legislation, its promotion and, finally, its passage, you know that the man behind it was Edward J. Speno, a dynamic legislator who knew through personal experience the serious health hazards of smoking. The senator was convinced that something must be done, and he believed that something could be done through education. Known as the Speno Bill, Chapter 787 in the Laws of the State of New York, such a provision became law on May 2, 1968, and soon had effect. Coupled with it was a revised regulation formulated by the Commissioner of Education that specifies that the secondary-school curriculum shall include health education as a constant for all pupils and that, in junior high school, provision shall be made for a separate one-half year course. In addition, provision shall also be made for an approved one-half unit course in senior high school. Health education shall be required for all pupils in the junior and senior high school grades and shall be taught by teachers holding a certificate to teach health. Health education, it should be noted, is not physical education.

Such legislation can strengthen school health education and contribute to the achievement of the more specific objective that is the subject of this conference.

To deal with my topic specifically: What can the schools do? With all their inadequacies, schools are powerful institutions and they can do much. But whatever they can do and whatever they do accomplish is entirely dependent upon the quantity and quality of educational leadership and the climate in which they function.

Today's slogans make much use of the word power. There is Black Power, and there is Flower Power, to name two. Education power is in the hands of school personnel of all kinds—teachers, counselors, and administrators—all supported by boards of education. What can our school personnel do? I suggest that part of the power of this group depends upon its knowledge. The educational personnel need to know as much as possible about smoking and its associated problems. Teachers must always be students. It is their obligation to become as fully informed as possible. School personnel can study the nature and the magnitude of the problem; they can analyze the data; they can review the

literature. Such study should reveal the tremendous complexity of the problem, the social and biological components of smoking behavior.

Accordingly my first point is that schools can provide knowledgeable leaders to guide children and youth.

On the assumption that an understanding of what is known about the health hazards of smoking will affect attitudes, school personnel can then be expected to reflect their concern about it. Students who feel that school personnel really care about whether they start to smoke or not are probably less apt to start. A teacher's concern for the well-being of the students, if it is sincere and not a moral judgment, probably has more effect on young people than is appreciated. Attitudes are catching. They will be caught, whatever they are. An attitude that shows belief in an idea, concern for a person, and enthusiasm for building a positive joyous life will be caught. School personnel can project such attitudes.

And then, of course, in this triad of knowledge, attitude, and behavior around which I have organized these remarks, we come to one of the most important things that school personnel can do. It is a personal, rather than a professional, action. The personnel can demonstrate their own belief in what they know about the hazards of cigarette smoking very simply, by avoiding smoking. I know how easy it is for a nonsmoker to make this suggestion. And I think I have some appreciation of the difficulties inherent in giving up smoking if one is habituated. But I honestly cannot see how our educational programs, whatever they may be, can have the slightest meaning for students when our belief is not strong enough to affect our personal behavior. "Do as I say, not as I do" does not have much educational power. And neither does "I wish I had never started" or "If I had known when I was your age."

The effect of the role model has been widely studied. We know that children whose parents smoke are more likely to smoke. Surely children whose teachers smoke are also more likely to smoke. Innovative, creative, classroom experiences and stimulating audiovisual materials about smoking are minimized by the students' knowledge that the teacher smokes.

But in this action category, let us deal with professionalism. What can school personnel do? They can make sure that education related to smoking is included in the curriculum. Such education belongs there, and it can make an important difference in adult life. And it belongs at

those grade levels where it is most likely to have an effect on the decisions that young people make about smoking. It is too late once they have started. It is too late when they have reached the stage of development where the influence of their peers is much greater than that of the parents or the teachers, when they no longer have the same degree of objectivity. The school health education study to which I referred earlier showed that nationally education on smoking was included in most curricula for the first time at the seventh or eighth grades. In the New York metropolitan area this is probably too late for the introduction of the subject, though it is undoubtedly an appropriate time for reenforcement.

All indications are that much of the education about smoking, its introduction at least, must take place in the elementary grades. In the recently published New York State curriculum guide,* it is recommended that teaching about smoking and health be initiated in the fourth grade, starting right out with a statement on "Your Decision About Smoking." The anticipated outcome of this teaching, which is suggested for all of the intermediate grades (4, 5, 6) is the student's ability to arrive at a sound and sensible decision about the use of tobacco based on scientific evidence.

Schools can include teaching about smoking in the curriculum. They can start early enough to enhance its effectiveness. Starting in the elementary grades means that such teaching becomes the responsibility of the classroom teacher, who is no specialist in health education. It is unlikely that he has had any preparation for this part of his job. And the chance that there is a specialist to help him is very slim. What school administrators can and must do, then, is to make available in-service experiences to provide these teachers with the knowledge and know-how of dealing with topics such as smoking for which they are responsible.

Teaching that includes smoking does not end with elementary school. Any good curriculum provides for reenforcement and consideration of a topic in greater depth at higher grades. The complexity of the smoking problem lends itself to inclusion at junior and senior high school levels, not with repetition of what was considered in the elementary grades, but with facets of the problem for which the younger student was not ready. Such aspects include: the advertisement and

*The State Education Department, Curriculum Development Center. *Health Curriculum Materials, Strand II, Sociological Health Problems.* Albany, New York, Univ. of the State of New York, 1967.

promotion of tobacco and psychosocial factors related to habits—how they are developed and broken, the use of tobacco, and research on smoking. All of these are meaningful areas for exploration as part of a continuous sequential health education program in the junior and senior high school.

A moment ago I mentioned the problem that arises when elementary teachers without formal preparation in health education are expected to give leadership in this area to children at an impressionable period. Though it may seem surprising, there is a similar problem at the secondary level. Although health education has long been accepted as part of the junior and senior high school curriculum and is supposed to be taught by persons with special preparation, in many cases it is not. This is particularly true in New York City, where health education is the name given to a program that is mainly physical education and that is taught by physical educators many of whom have almost no preparation for their responsibilities in health teaching. But lack of preparation is not the most detrimental thing. It is lack of interest in teaching health. Many educators teach health reluctantly only because they are required to do so. Schools can rectify this deplorable situation.

Professionally, then, what schools can do is:

1) Make sure that teaching directed toward the most desirable behavior in relation to smoking is included in the curriculum.

2) Schedule such teaching so that it occurs at the time of greatest readiness for learning and has the greatest potential for influencing behavior.

3) Make sure that elementary school teachers responsible for this phase of the curriculum have the best possible preparation for it—in-service, if not preservice. And at the secondary-school level, where separate health education classes taught by special teachers are a part of the curriculum, make sure that those special teachers have adequate preparation and that health education is their *primary* interest.

4) School personnel can apply the best possible educational practice to the teaching.

What does all this mean? For one thing, teaching must have some kind of structure or framework if learning is to take place most efficiently. Where does teaching about smoking belong in the curriculum? It could be in a number of different places. Certainly smoking is not an isolated topic. It relates to biological, sociological, and psychological

areas, and can be considered in any or all of these contexts. The New York State curriculum guide couples smoking with alcohol and drugs in sociological health problems. The school health education conceptual approach to curriculum* suggests that smoking be considered in relation to one of 10 health concepts in describing the use of substances that modify mood and behavior that arise from a variety of motivations.

The application of the best educational practice also implies that teachers should make their teaching relevant to the lives of the children they are teaching and that they express it in understandable, meaningful terminology. Memorizing the effect of smoking on various parts of the body may not be the best way of influencing smoking behavior, even if it is understood. But when approached from the standpoint of why people do or do not smoke, the topic may have more personal meaning. Schools can utilize research findings that show that instruction in scientific ideas even at the elementary level need not follow slavishly the natural course of cognitive development in a child. As Jerome S. Bruner reports, "Experience has shown that it is worth the effort to provide the growing child with problems that tempt him to move on to more mature stages of intellectual development."

Though teachers will probably never know exactly the best methods for teaching all children in all situations, it has been adequately proved through experience in educating students about alcohol that crash programs—topics considered in isolation, moralizing, and the use of fear—have not been successful. Schools can continue to search for the best methods for teaching about every subject—smoking included.

Some such research in this area is going on in San Ramon Valley, Calif., under the direction of Richard Foster, superintendent of schools, and Helen Delafield, health coordinator. Financed by a grant from the Clearing House on Smoking, they are undertaking to develop and evaluate planned classroom instruction in smoking and health. Experimental and control groups of grades four through eight are included, and there are plans to follow-up students at the junior high and again at the senior high to determine what if any effects the approach has had on smoking habits. More such studies are needed.

I was fortunate enough to have an opportunity to observe what was going on in these classrooms on a one-day visit. I was astonished by the

*School Health Education Study, Curriculum Development Project. *Health Education, A Conceptual Approach to Curriculum Design.* St. Paul, Minn., 3M Education Press, 1967.

scientific knowledge that the youngsters had acquired but, more than that, by the way they were able to relate it to themselves and their families. In one class the students had investigated advertising techniques for smoking. They adapted the same techniques to create their own smoking "commercials," which they recorded. They had everything from singing commercials to testimonials and slogans. And one that stayed with me is this one: "The family that smokes together croaks together."

Schools can utilize materials and resources from a variety of sources. I have already mentioned the new New York State curriculum guides. There are literally dozens of other curriculum guides on smoking published by voluntary and professional groups. There are also excellent materials of other types made available by community agencies, particularly the voluntary health agencies with special interest in smoking: the American Cancer Society, the National Tuberculosis Association and, of course, the American Heart Association. Visual aids are especially useful to school people. There are films with almost every approach from irony to humor to fear. The importance of previewing such materials in advance cannot be overemphasized. To my knowledge the resources of such groups do not yet include ex-smokers—such as one can obtain from the alcohol and drug groups but this idea might be explored. I heard Senator Speno several times give force and meaning to his convictions, derived from a tragic experience of almost fatal illness, and I know how effective this approach can be.

Finally may I say that schools can attempt to evaluate their efforts. This is not easy, especially since the ultimate evaluation requires following up on youngsters to determine their decisions about smoking. But some things can be measured: knowledge, of course, and attitudes, to some extent.

Evaluations can be discouraging. In one such study it was discovered that the schools that emphasized education on smoking also showed an increase in the number of teen-age smokers. There is an interesting report in the February 1968 issue of the *Journal of School Health* which shows that one cannot rely on the acquisition of knowledge as the determinant of attitude and behavior. The study involved a group of 400 young male students at San Fernando Valley State College. The part of the study that dealt with knowledge revealed that smokers were more informed than nonsmokers. Findings made in this

TABLE

1) *Recall*
   a) More smokers knew that smoking was implicated in heart disease and emphysema
   b) More smokers knew that the American Heart Association advised against cigarette smoking
   c) More smokers knew that smoking increased pulse rate

2) *Analysis*
   Fewer smokers felt that carbon monoxide was a harmful ingredient in cigarette smoke

3) *Synthesis*
   Fewer smokers felt that increasing the length of the filter would prevent absorption of nicotine

4) *Evaluation*
   Even though smokers were more informed about smoking and health
   a) More felt that it was unnecessary for teen-agers to worry about cigarette smoking until more conclusive evidence is presented to indicate real harmful effects
   b) More felt that normal, healthy people can smoke cigarettes without worrying
   c) More felt that cigarette smoking is not harmful for the person who smokes occasionally
   d) More felt that at times cigarette smoking can be beneficial
   e) More felt that smoking is a sign of individualism
   f) Fewer felt that smoking is a sign of weakness

5) *Application*
   Even though smokers were more informed about smoking and health, fewer of them would advise young people not to smoke

connection are shown in the accompanying table.

What is the meaning of all this? The authors state: "This reinforces the concept that merely disseminating information about smoking and health does not necessarily alter smoking behavior, nor does the ability to utilize a range of cognitive skills." From their findings they suggest that education on smoking must become education on health that considers the multiplicity of factors related to smoking and health—physical, mental, and social.

Though much of my talk has been focused on classroom instruction that aims to influence the habit of smoking, I should be remiss if I did not mention the fact that schools can offer services that contribute to the educational goals related to smoking. I refer particularly to school guidance and counseling. Perhaps smoking could be prevented if warning against it were enhanced by concern and professional help for the special problems of individual pupils as much as by group instruction. Perhaps it would be beneficial if students who are most likely to smoke could be identified early and given individual guidance and counseling. Certainly there is growing evidence that smokers have characteristics that may be different than those of nonsmokers. Are the less academically successful more likely to become smokers? Are there other factors that have an influence—for instance, social or economic? Can such peo-

ple be identified in their youth and given help? This question needs to be considered as a basis for school services. It is possible that this may be one of the most effective things that schools can do.

Implicit in my title "What Can Schools Do?" is the implication that there are some things that schools cannot do. Lest I leave you with the comforting notion that the educational problem is well in hand through school personnel, let me dispel that thought now.

There *are* things that schools *cannot* do.

Although schools do have the advantage of having a rather complete captive audience of youngsters from kindergarten through the 12th grade, they do not operate in a vacuum, and they are not the only influence on children. In fact they may not be the most important influence on children in relation to the question of smoking. Therefore may I state unequivocally that schools *cannot* adequately counteract the "education" that is going on outside their walls. The social forces outside school buildings which encourage people to smoke are probably more powerful than what goes on inside them. The advertising that makes allusions to the contributions of smoking to athletic prowess, popularity, datability, sociability, and to sexual allure are powerful influences—more powerful than the threat of illness, disability, or death years later.

The adults who figure significantly in a child's life constitute another powerful educational force. The schools *cannot* successfully counteract the continuous example that such persons provide if they are smokers. Finally, a school cannot overcome the education that, with governmental sanction, children obtain outside its walls. Children see that cigarettes are available everywhere. If cigarettes were not safe, a child reasons, the government would ban them. Words contradicting the harmfulness of smoking are confusing not only to children but also to adults. I was recently dumbfounded by a communication I received from the U.S. Office of Education. As a result of being granted funds to undertake an Experienced Teacher Fellowship Program next year, I was invited to a national meeting of prospective directors of other such programs. The words of the invitation read as follows: "We are holding a single day's session for all directors on February 1 which will begin with a smoker on the evening before."

In conclusion, there is much that the schools *can* do.

There is also much that the schools *cannot* do—without the support of the many social forces that influence young people.