THE pediatrician is in an unusually favorable position to reduce the frequency of smoking among young people because of his interest in the prevention of disease and his special experience in dealing with children and teenagers. The hazards of smoking are well-known, and there seems no question but that smoking is etiologically related to carcinoma of the lung and cardiovascular disease. Other conditions, such as pulmonary fibrosis, other malignancies, and emphysema may or may not be etiologically related but do occur more commonly in smokers.

At least three aspects of the smoking problem relate directly to children and teenagers:

1. the short-term effects of smoking by teenagers and children;
2. the effect of tobacco smoke on nonsmokers, be they adults or children;
3. suggestions for changes in the antismoking advertising campaigns so that they are geared to prevent children from adopting the smoking habit and to recruit the non-smoker into more anti-smoking activities.

There is very little information dealing with the short-term effects of smoking on children and teenagers. There is little doubt that the earlier one starts smoking the greater his chances of developing one of the late effects, but this is not our present concern. Actually, there are data that indicate that smoking teenagers have physical symptoms associated with their habit. Children who smoke have more respiratory symptoms, cough, phlegm, breathlessness, wheezing, and colds than nonsmokers.

There are other clinical symptoms and personality traits which occur more commonly in smoking teenagers. These may have a coincidental relationship or simply reflect personality factors predisposing to smoking. For example, teenage boys have a higher incidence of traumatic injuries and teenage girls have a higher incidence of urinary infections than do their nonsmoking associates. Furthermore, the smoking teenagers had lower grades in school, were more often truant, and were more likely to have a car available to them. It is extremely important that this type of information is not misused since the basis of these relationships are not understood and any explanation of these relationships must be considered to be hypothetical. It is obvious that well-designed studies should be initiated to document the incidence and cause of respiratory or other symptoms and to understand the personality and needs of teenagers who adopt the smoking habit.

The second area relates to the effect of smoke on children and nonsmoking adults. A reasonable percentage of the nonsmoking population has an "intolerance" to smoke. The symptoms of eye irritation, rhinitis, headache, cough, wheezing, sore throat, hoarseness, dizziness, and nausea are commonly reported by nonsmokers when present in an environment of smokers. Certain pathological findings, such as spirals of mucus (although seen commonly in smokers), will also be found in nonsmokers working in "smoking" environments.

Finally, a recent report from Wayne State University indicated that children from homes where the parents smoked had a higher incidence of clinical respiratory disease than did the children of nonsmokers. It is obvious that this is an area where more data is vitally needed. Are the intolerances of adult nonsmokers primarily due to bias toward the smoker or are they really due to the induction of physical symptoms by the chemicals in smoke? Does smoking by parents affect the health of the children in that home?

The third and last point for discussion concerns suggestions for basic changes in antismoking campaigns. The present techniques recognize the importance of identifi-
cation in the adoption of the smoking habit, since it is known that children are more likely to smoke if their parents or older siblings smoke.\textsuperscript{11} Even teachers who smoke can influence the smoking habits of their pupils. A teenager who starts smoking at age 15, who has a parent or sibling as a smoker, and who feels he will continue to smoke will, in all likelihood, become a highly addicted inveterate smoker.\textsuperscript{12} The present method of advertising appeals to the smoking parent to give up smoking in order to decrease the chance that the children will adopt the smoking habit. As with any addiction, little help can be expected from the addicted since, if they will not stop smoking to protect their own health, it is less likely that they will stop smoking to protect their children’s health.

Despite the fact that teenagers and college students have rejected identifying with many other aspects of the society of the older generation, they have accepted the smoking habit. Therefore, it is probably more important to point out this to them rather than to appeal to their parents.

The fact is that teenagers could eliminate the smoking problem without revolution and without new legislation, since they hold the important key to this health problem. They smoke! Here is one national problem they could eliminate almost by themselves.

A second and important aspect of the present anti-smoking campaign is the use of fear. This approach can be expected to be ineffective. The concept of death and disease is so far removed from the mind of the adolescent that it is unrealistic to attempt to frighten teenagers. In fact, it is possible that a fear campaign might seem like a dare to the average teenager. A more appropriate attack on the problem of smoking would be to establish an advertising campaign that made fun of individuals inferring that the adoption of the smoking habit would transfer them into rich, beautiful, sexually attractive, out-in-the-country owners of a new convertible, as do most cigarette advertisements.

A third approach of an anti-smoking campaign, and one that has been given little attention, is to appeal to non-smokers. It is important to realize that the smoker has established strong defense mechanisms which allow him to give high priority to his need for tobacco. In many instances this need to smoke is placed above the need of colleagues, friends, and family to be in a smoke-free environment. The nature of these defense mechanisms is evident from the responses that were made in a recent survey.\textsuperscript{14} Although smokers were more informed about smoking and health:

1. more felt that it was unnecessary for teenagers to worry about cigarette smoking until more conclusive evidence is presented to indicate real harmful effects;
2. more felt that cigarette smoking is not harmful for the person who smokes occasionally;
3. more felt that normal, healthy people can smoke cigarettes without worrying;
4. more felt that at times cigarette smoking can be beneficial;
5. more felt that smoking is a sign of individualism;
6. fewer felt that smoking is a sign of weakness.

It can be seen that the mental attitude and elaborate defense mechanisms of the smoker present a formidable barrier to any group attempting to reduce the incidence of smoking.

What appeal can be made to the non-smoker? First of all, he can be educated to his rights of comfort and freedom from smoke. A recent editorial in \textit{Science}\textsuperscript{15} described the high levels of carbon monoxide in the smoking cars of some trains and the abuse that the non-smoker suffers when traveling in carriers that do not provide “separate but equal” facilities. The question of infringing on the rights of others is even more important when considering children, since they wield little influence over their environment. Those of you who have attempted to stop an inveterate smoker, either parent or doctor, from smoking on an inpatient pediatric service can realize the magnitude of the addiction. Thus, an effective campaign could inform the non-smok-
ing public that they have to take a more active part in preventing individuals from smoking by letting the smoker know that he is infringing on the rights of others by littering public places, polluting the air, and causing discomfort to some non-smokers. A number of clever advertisements depicting the average smoker in situations that are annoying to the non-smoker (airplane, theater, train) could be very provocative. Finally, it may be legally possible for the nonsmoking public to limit the areas and circumstances where smoking is permitted by appropriate legal means, albeit without the taint of coercive restraint or prohibition.16,17

We are certain that some of these suggestions may evoke emotional complaints from smokers as being too coercive and from the prohibitionists as being too soft. If our goal is to prevent the adoption of smoking by children, then we think all will agree that some revolutionary approaches are in order, and we all know that even minor revolutions, such as enjoining people from smoking in public places, are discomforting to someone.

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