Smoking Prevention Education for Adolescents in Japan

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Abstract: Recent studies indicate that a combination of social and personal factors are associated with cigarette smoking among adolescents. Social factors including peer pressure and media messages have a profound affect on the smoking behavior of this age group. It has also been shown that adolescents with low self-esteem and lacking in generic psychosocial skills (life skills) are likely to be easily affected by social factors and to smoke cigarettes. To prevent adolescents from smoking, it is necessary to implement effective smoking prevention education in elementary schools. In Japan, information-based education has been the most common approach to smoking prevention, but these programs have yielded no evidence of preventive effects on behavior. Recently, however, several comprehensive smoking prevention programs based on well-accepted theories of human behavior have been developed in Japan and their application is now widespread. The quality of teacher training should be improved so that teachers can implement these new programs effectively.

Key words: Smoking behavior; Adolescent; Life skills; Social factors; Teacher training

The Importance of Smoking Prevention in Adolescents

In Japan and other developed nations, lifestyle-related diseases including cancer, heart disease and cerebrovascular diseases have become a health issue of primary significance. Tobacco smoking is acknowledged to be profoundly related to the onset of such lifestyle-related diseases.

Smoking prevention particularly among adolescents is considered to be a priority health issue, because the risks to health increase proportionately with earlier onset; early formation of a smoking habit incurs stronger nicotine dependency and renders cessation more difficult; and the use of tobacco and alcohol, which are referred to as ‘gateway drugs’, from an early age is believed to enhance vulnerability to later drug abuse.
Adolescent Smoking Behavior—Prevalence and Etiology

Data from the 1989 Japan Know Your Body (J KYB) study conducted on thirteen thousand juvenile students in grades one through twelve in nine prefectures of Japan during June/July of that year, reported a rise in cigarette smoking (at least one cigarette smoked in the last month) among male students in the seventh-grade and above, reaching around 40% by the 12th-grade. Among girls, this increasing rate was manifest from the 10th-grade, with around 15% of female students having smoked by the 12th-grade (Fig. 1).1

Numerous studies conducted both in Japan and overseas indicate that smoking behavior among adolescents is formed as the result of a combination of various social and personal factors.

Social factors including smoking behavior and attitudes towards the tobacco use of parents, siblings and friends have been shown to have a strong association with adolescent smoking. Behavioral patterns and habits are reinforced as adolescents, who observe and imitate the behavior of such significant others, accumulate beneficial physical, mental and social experiences. Especially during puberty, a period when dwindling parental influence is replaced by growing peer-led influence, the smoking initiation process is enhanced in line with the number of friends who smoke (Fig. 2).1

Among adolescents, the most frequently cited reason for taking up smoking is ‘curiosity,’ and it is considered that the media plays a major role in the formation of this inquisitiveness. For example, tobacco advertisements use various techniques to attract the attention of teenagers, including the use of models that captivate the adolescent audience, thereby aiming to develop positive images of smoking. In addition, numerous on-screen smoking scenes in TV programs and movies featuring favorite media personalities are believed to be instrumental in the for-

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Fig. 1 Adolescent smoking behavior

Fig. 2 Smoking behavior of friends and smoking behavior of high school students
mation of positive attitudes towards smoking and to have a profound influence on the smoking behavior of adolescents.

Nonetheless, not all youths are affected by these social factors in the same way. It is recognized that in addition to a lack of knowledge, positive attitudes towards smoking, future intention to smoke, the lack of self-efficacy to enable them to resist peer pressure to smoke, and low confidence in their own abilities and worth, adolescents have low decision-making, goal-setting, stress-management and communication skills, i.e. the fundamental/general psychosocial skills (life skills) that are deemed necessary to facilitate the resolution of problems in everyday life, rendering them more susceptible to the influence of social factors and more likely to take up various risk behaviors, including smoking.

The Theory and Practice of Smoking Prevention Education

As has been demonstrated above, a large number of social and personal factors are associated with the development of risk behaviors among adolescents such as smoking, and it is believed that information-based education alone is ineffective in preventing adolescents from starting to smoke.

Since the 1970s, various health education programs including smoking prevention have been developed on the basis of the results of behavioral science research in Europe and the United States. Among these, rigorous evaluation studies have demonstrated that the effects of programs based on life skills training such as the Life Skills Training program developed by Dr. Gilbert J. Botvin of Cornell University Medical College (Fig. 3), and the Know Your Body program developed by the American Health Foundation, are maintained for long periods of time. Moreover, it is acknowledged that these programs are not only effective in preventing smoking, but that they are also successful in averting various risk behaviors among adolescents.

In the 1990s, a number of comprehensive preventive education programs covering smoking, alcohol and drug abuse prevention were developed in Japan predominantly targeting the nurturing of specific skills to facilitate resistance to social factors and generic personal and social skills (life skills); these are now widely used. The programs include the smoking prevention education program NICE II* (Fig. 4) developed by the JKYB Project\(^2,3\) and the Teachers Manual for Prevention of Smoking, Drinking & Drug Abuse\(^4,6\) developed by the Japanese Society of School Health.

\*NICE II: Nippon Intervention for Cigarette-free Environment-School and Community
The new national course of study which will take effect in fiscal 2002, includes the introduction of “comprehensive teaching time” to allow health issues to be dealt with in schools. The health education to be undertaken during “comprehensive teaching time” will not be solely comprised of traditional information-based components, but must link to the development of “abilities for life” whereby individuals can study, think, make active judgments, act and find better solutions to problems on their own.

In this sense, life skills-based health education, has enormous potential to contribute to the formation of “abilities for life” (Fig. 5), the fundamental goal of school education, and not merely to be effective in preventing the various risk behaviors of adolescence such as smoking, and is expected to become the model for health education in the 21st century.

Nonetheless, there are a number of issues to be overcome before this ‘new’ health education, which is based on well-accepted behavioral science theories, can be made accessible.

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**Fig. 4** Composition and content of smoking prevention education program NICE II (J KYB Project: Smoking Prevention Education to Develop Life Skills. Higashiyama Shobo Co., Ltd., 2000; 53.)

**Fig. 5** Abilities for life and life skills
at all schools. According to research conducted in Europe and the United States, for example, many teachers lack experience of the student-centered teaching styles and the teaching methods such as role-playing, brainstorming and advertising analysis utilized in the programs, which are based on behavioral science theories. Moreover, it is suggested that the absence of the necessary skills to utilize the programs appropriately and a lack of self-confidence among teachers means that there are cases in which the programs are not being implemented in line with their original purpose and are failing to yield the expected effects.

To this end, research relating to the nature of teacher training sessions (workshops) is being energetically promoted in Europe and the United States. These studies have revealed that in addition to introducing the theories that provide the framework for the program, the inclusion of practice and feedback in teacher training sessions is effective. This can be achieved via class simulations employing the teaching methods used to teach children the skills they are required to learn, acting out role-playing, and so on.

In Japan, where concern about life skills and life skill education has only just begun to bud, the quality of teacher training is considered to be key to the development and distribution of life skills-based health education.

REFERENCES