## Editorial

## Smoking in adolescence: Why do youths still smoke?

Tabagismo na adolescência: Por que os jovens ainda fumam?

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The hallmarks of adolescence are the search for knowledge, learning by experimentation, a taste for adventure, critical judgment through questioning, and rebellion against the values imposed by adults. In this unforgettable period of life, myths, beliefs, and attitudes are revisited or reinvented.

The demands of contemporary society have conditioned people to a high tech way of life, with a strong consumer appeal for brands and products and the globalization of customs and tendencies. Youths, at increasingly early ages, are enchanted with this magical world of novelties and amenities, such as social networks. This virtual world has increasingly mimicked the real world, unveiling new possibilities that can lead youths either to develop their creative potential or to seek compensatory mechanisms for dramas that are typical of their age.

Children are the perfect targets for the first addictions, such as excessive consumption of foods/beverages with low nutritional value, the so-called fast-food, being encouraged by their own parents. The same is true for drugs, especially tobacco and alcohol, which are introduced to children at the very heart of the family, when parents—the behavioral role models—use these substances.

The fertile ground for smoking initiation is favored, in addition to the influence of genetics, by social, environmental, and familial stimuli. The occurrence of smoking initiation is driven, at home or at school, by interacting with groups whose leaders, teachers, idols, or icons smoke.<sup>(1)</sup>

Although tobacco advertising is prohibited by law, smoking is effectively promoted in the media, electronic games, soap operas, TV series, and movies. According to one study, the number of scenes in which actors are smoking has increased in recent decades, and the adolescents who watch such scenes are more likely to become smokers. The tobacco industry has invested extensively in financing movie studios and their big-name actors. (2)

It is necessary to consider that the extensive and diversified network of stores that sell (among other things) tobacco products—many of which are strategically located close to schools, gyms, and clubs—increases the visibility and supply of cigarettes. Although the sale of cigarettes and alcohol to minors is prohibited by law, most such stores sell both products. These stores are usual partners in the process of attracting youths to the world of "Marlboro" or of the "Free" way of life. Another factor that contributes to smoking experimentation is the indiscriminate sale of loose cigarettes and of contraband cigarettes.

Experimentation with smoking—which is unpleasant at first—is followed by adaptation to the taste and to the pleasurable sensations, as well as by behavioral associations experienced by the young beginner in nicotine dependence. Cigarettes, smoked at recess or after school, start being smoked on nights out, including at the parties known as "raves", where anything goes. The tobacco industry has proven to be artful in hooking youths; its tactics include offering free gifts and samples, as well as selling cigarettes at low prices in such environments.<sup>(3,4)</sup>

A survey conducted in 2004 showed that smoking experimentation occurs at a very early age in almost all of the capital cities in Brazil. Smoking experimentation is associated with the search for one's identity and space in the adult world, which occurs in the prepubertal period. The tobacco industry engages in advertising and other marketing strategies that associate the act of smoking with a rite of passage into the adult world and promotes smoking as an icon of maturity and ideal self-image, thus encouraging experimentation. <sup>(5)</sup>

In a cross-sectional study involving 5,347 students in the city of Salvador, Brazil, and published in this issue of the Brazilian Journal of Pulmonology, Machado Neto et al. report that the rate of smoking experimentation was 16%, two thirds of those who had experimented with cigarettes having done so before the age of 15.<sup>(6)</sup> The determining factors for smoking experimentation were alcohol consumption, having friends who smoke, having a boyfriend/girlfriend who smokes, and coercive/aggressive anti-smoking interventions by the parents. Media influence and paternal smoking played roles in smoking initiation.

In a cross-sectional study involving 3,690 students (13-15 years) in the south of Brazil, the prevalence of smoking among youths was found to be high in the cities of Curitiba (12.6%), Florianópolis (10.7%), and Porto Alegre (17.7%). In that study, smoking was associated with having friends who smoke and with exposure to second-hand tobacco smoke outside the home. (7) In a similar study involving 2,883 10th grade students in the city of Cuiabá, Brazil, the authors found a high prevalence of smoking experimentation (30.2%). A low level of maternal education, as well as having friends who smoke, having a sibling who smokes, having been held back for one school year, and attending school in the evening were factors associated with smoking experimentation.(8) In another study, the smoking habit among siblings and friends was also implicated. (9) Age at smoking initiation has continued to decrease. Adolescents who smoke are highly likely to become smoking adults, thereby increasing the risk of morbidity and mortality from chronic diseases and preventable causes in the population. (9) Smoking initiation is a predictor of the use of other substances, such as alcohol and illicit drugs.

It is important to monitor smoking initiation among adolescents, because this can be prevented. Despite public health campaigns and programs aimed at preventing smoking initiation among youths, such as the "Saber Saúde" ("Know about Health") campaign developed by the Brazilian National Cancer Institute, reducing the prevalence of smoking among youths remains a major challenge, especially for developing and underdeveloped countries, where the tobacco industry steps up its activities of diversifying products and selling cigarettes at attractive prices, seeking to open new markets for its shady dealings.

Encouraging studies focusing on this subject area—prevention of drug use initiation—is essential for the adoption of public policies that promote inclusive measures and educational programs, as well as preventive counseling regarding risk behaviors, to which adolescents, especially low-income adolescents, are prone.

In this sense, the article by Machado Neto et al. (6) deserves special mention in this issue of the Brazilian Journal of Pulmonology because it systematically addresses an issue of considerable relevance—the pathways leading to nicotine dependence—and wisely shows that

alcohol consumption needs to be considered, because it plays a prominent role in smoking initiation. Alcohol consumption is closely associated with tobacco consumption, one being a precursor of the other, and both often lead to the use of other drugs.

In 2009, a Brazilian national school health survey revealed alarming data on alcohol consumption: 27.3% of the students had consumed alcohol in the last 30 days; and 71.4% had experimented with alcohol at least once in their lifetime. (11) The authors showed that students most often obtained alcoholic beverages at parties (36.6%); in grocery stores, in shops, in supermarkets, at bars (19.3%); from friends (15.8%); and in the home (12.6%). It is also out of note that 22.1% of the students reported having been drunk at least once. In terms of tobacco use, the results of that same survey showed that 24.2% of the students had experimented with smoking at least once and that 6.3% had smoked in the last 30 days. In approximately one third of the cases, at least one parent smoked, the highest rate being found in the city of Porto Alegre (39.8%) and the lowest being found in the city of Salvador (22.6%).(11)

The aggressive advertising by the alcoholic beverage industry attempts to minimize the damages from consumption of its most popular product—beer—recommending that consumers "drink in moderation" and linking this act of responsibility exclusively to the "Zero-Tolerance" (for drinking and driving) law recently enacted in Brazil. However, unlike tobacco advertising, alcoholic beverage advertising to youths has yet to be prohibited by law, serving as subliminal advertising for tobacco.

Chief among the recommendations of the Framework Convention on Tobacco Control (FCTC) are the adoption of 100% smoke-free public policies for indoor environments, price and tax hikes, surveillance to prevent cigarette smuggling, and making treatment available to smokers. These recommendations have been endorsed by the World Health Organization. (12)

The fourth Conference of Parties of the FCTC has recommended restricting and prohibiting the addition of flavor enhancers to tobacco, considering that flavor enhancers aim at making the product more attractive to young beginners on the path to smoking, and this has been the subject of public consultation by the Brazilian National Health Surveillance Agency.

This parade of measures is essential so that this public health treaty can have an impact on the smoking pandemic. Smoking begins in adolescence as a pediatric disease, has short, mid-, and long-term deleterious effects, and consolidates as a chronic recurrent disease, being the leading preventable cause of death and illness worldwide.

Smoking is a disease, registered in the tenth revision of the International Classification of Diseases (ICD-10; F17), and deserves our attention and special care due to its harmful consequences, including our proper training for offering treatment in our daily practice. This measure, in addition to providing a better quality of life for our patients, is crucial for the prevention of smoking initiation by their offspring, because, as shown in the study by Machado Neto et al., (6) paternal smoking increases the chances that an adolescent will start smoking.

All efforts must be made by society to fight smoking, and pulmonologists play an important medical and social role in terms of contributing to reversing this scenario. In the Year of the Lung—2010—and in the forthcoming year, we should all foster good habits, breathe pure air, and encourage the practice of healthy behaviors. Smoking is not in keeping with the principles of our art. Let this be the respiratory menu that will be presented to our patients this holiday season, with health, as well as pulmonary and mental well-being, for all.

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