

Significantly higher percentage (38.6%) of current smokers has an object with a cigarette brand logo on it than never smokers (15.8%) have (Table 6C). Similarly significantly higher percent (11.3%) of current smokers were offered a free cigarette by a tobacco company than never smokers (3.3%). Moreover significantly higher ratio of smoker boys (14.7%) was offered a free cigarette than smoker girls (8.0%).

### Access and Availability

Table 7: Access and Availability, HUNGARY, GYTS, 2003

Category	Percent Current Smokers who Usually Smoke at Home	Percent Current Smokers who Purchased Cigarettes in a Store	Percent Current Smokers Who Bought Cigarettes in a Store Who Were Not Refused Because of Their Age
<b>Total</b>	11.2 (± 2.0)	65.3 (± 2.8)	76.2 (± 4.6)
<b>Sex</b>			
Boy	12.4 (± 2.7)	71.0 (± 3.3)	72.0 (± 5.8)
Girl	10.6 (± 3.1)	61.1 (± 4.6)	81.0 (± 5.6)
<b>Region</b>			
Budapest	10.0 (± 4.5)	65.7 (± 3.4)	75.8 (± 4.4)
Other Urban	11.1 (± 2.5)	66.5 (± 3.8)	78.7 (± 5.8)
Rural	13.8 (± 3.2)	58.8 (± 9.4)	61.1 (± 16.1)

Over 1 in 10 (11.2%) of current smokers usually smoke at home (Table 7). Almost two-third (65.3%) of them bought cigarette in a store, while more than three-fourth (76.2%) of them reported, that they were never refused because of their age, when they bought cigarette.

Almost 10% higher proportion of smoker boys who smoke (71.0%) bought cigarettes in a store than girls who smoke (61.1%), which is a significant difference.

### Discussion

#### **Prevalence**

More than two-third of 13-16-year-old Hungarian teenagers have already tried with cigarette smoking and one-third of them have remained current smoker, which are extremely high proportions. These data are consistent with the previous studies (16, 18, 19) and show also that the increasing trend in tobacco use among young people in the last decade (16) have not changed about.

Almost one-fifth of ever smoker children tried smoking firstly at very young age. It also has a considerable health impact, because starting to smoke at younger ages increases the

risk of death from a smoking-related cause, and lowers the age at which death is likely to occur.

Almost one-fifth of current smokers are at extremely high risk for later tobacco-related diseases and death, because they are addicted. In addition almost one-fourth of never smokers are potential smokers. Considering that the percentage of susceptible girls is significantly higher than that of boys and that smoking prevalence among girls has increased more steeply than among boys (16), it can be concluded that girls are at higher risk than boys.

Though the most popular tobacco use form is the manufactured cigarette, about every fifth smoker adolescent use hand-rolled cigarettes in Budapest and the rural area (while consuming of hand-rolled cigarette is much lower is in the other urban area). The reason for this regional difference can be on the one hand the easier availability of rough tobacco in countryside where tobacco is grown. On the other hand availability of tobacco is easier in Budapest too, where many special tobacco stores can be found.

Few of current smoker students use other than cigarette tobacco forms: firstly cigars and in a very low ratio pipe. These kinds of tobacco consumers are mainly the boys and Budapest children (here again the availability can have a role).

These data assign the obvious task for the future: to reduce smoking prevalences among young people. The question is how. To answer this question we need to know more about young people smoking habits, knowledge, attitudes and their exposure to environmental smoke and media messages. The GYTS reveals these aspects as well.

### **Cessation**

Though the proportion of current and addicted smokers is high among young people, more than one-third of current smokers want to quit and almost two-third of them tried to stop smoking in the last year. In contrast, only slightly more than half of them received help to quit smoking. Perhaps they keep in secret that they smoke and they have no information on where and how they can get help and advice for stopping. These indicators are worse in the capital than in the rural area.

### **School Curriculum**

School-based tobacco prevention education is a unique opportunity for prevention, because it attains all children. In general, less than half of the Hungarian students were taught or discussed about tobacco use in the class during the last school year, though this topic is involved in the school curriculum related to health promotion and development from the fourth elementary grade. This curriculum seems to be implemented better in the rural area than in Budapest: the most students informed about smoking in the school were in the rural region, while the least students were in the capital.

### **Environmental Tobacco Smoke (ETS)**

Whilst not only direct smoking but also ETS has large health impact, it is important to measure the extent to which young people are exposed to others' tobacco smoke and to get acquainted their opinion on ETS. Our results show that extremely high percentage of students (even non-smokers) is exposed to others' smoke both at home and in public places. In addition current smokers' relatives and other people in their environment smoke in higher proportion than those of never smokers. Previous studies have shown

that those children whose parents smoke are at higher risk to be a smoker (20). The most striking differences are between never current smokers' best friend, and siblings, which can denote the importance of peer influence too (20, 21, 22).

Though significantly higher percentage of never smokers is aware of the harmful effects of ETS and also significantly higher ratio of them wants to be protected from ETS in public places, these proportions are not negligible among current smokers either. Accordingly banning smoking at public places may have impact on smokers.

### **Knowledge and attitudes**

Adolescents often concentrate on the short-term benefits of tobacco use neglecting its harmful effects. Smoking is mainly a social activity for them, a way of making contact with peers (including peers of the opposite sex). Moreover media also can form youth's tobacco-related attitudes into positive direction. Thus students with positive attitude toward smoking are susceptible to initiate smoking.

Both current smokers and never smokers think that smoking give more advantages for boys than girls. However, much more current smokers (especially in the rural area) think that smoking makes better looks.

### **Media and Advertising**

Children and adolescents are often affected by advertising and other media messages. Thus mass media have great responsibility in mediating both advertisement of tobacco use and anti-smoking messages.

Our results show that young people can meet significantly more frequently pro-smoking (which is an indirect advertising) than anti-smoking messages from all of the sources asked (these frequency data are high in absolute sense too). There are some gender and regional differences in reporting to see such messages. These differences are due to the gender differences in the preference of use of certain media channels and due to the regional differences in the availability of different sources.

Though more than twice as many current smokers have an object with cigarette brand logo than never smokers, we also have to attend to the latter ones, because they are potential smokers. More than one in ten current smokers have already been offered free cigarette by representatives of tobacco companies in spite of the complete ban by the law for distribution of free tobacco products.

### **Access and Availability**

Our data show that the majority of current smokers can get their cigarettes by buying in a store and three-fourth of them have never had problem with buying them because of their age, albeit selling of tobacco products to minors is prohibited. Purchase of cigarettes is proper to higher percentage of boys than girls. Girls probably get their cigarettes more often from social sources (e.g. borrow them from friends).

### **Conclusions and Recommendations**

Our findings indicate high smoking prevalences among young people in Hungary. So there is an urgent need to reduce these percentages, otherwise the high morbidity and mortality ratios due to tobacco use can even increase in the future.

To reduce prevalences among young people more comprehensive social actions are needed. The focus must be on prevention, but we would like to draw attention to the importance of cessation, because these data have revealed unambiguously its necessity. Prevention programs and policy have to be improved and disseminated in a broader field, because a huge proportion of young people has already tried with smoking and another considerable proportion of them is susceptible, so they are potential regular smokers. Thus existing tobacco control programmes, campaigns must be developed further to be more effective and/or new effective programmes are needed targeting children at the youngest possible age. Those programmes whose efficiency has proven are needed to be disseminated at national level. Tobacco control (including prevention) programmes should deal with all of the above detailed topics: prevalence, access, cessation, school education, knowledge and attitudes, ETS and media.

To achieve the above mentioned goals there are some recommendations in details below:

- It can be necessary to make some changes in the legislation (e.g. more restriction in public places for reducing ETS, better regulation of media for better forming of attitudes toward smoking), but it is even more important that the existing laws have to be complied (e.g. the banning of the sale of tobacco products to minors). The authorities should pay more attention to this problem. For instance education of merchants can be useful in reducing illegal sales of tobacco to minors. Some economical actions also will happen with the entering into the EU (e.g. the increase of taxes of tobacco products), which may have positive impacts on tobacco prevention.
- Schools have an essential role in the prevention, but even in the cessation. They are ideal settings for health education programmes on smoking. Teaching on smoking and the dangers of it are the part of the curriculum, and we have to achieve that all of our children will be taught and well informed. Hence a considerable proportion of never smoker students is susceptible to start smoking it would provide a unique possibility for the prevention of smoking. Moreover prevention has to be started in the first elementary classes, because our data showed that significant percentage of teenagers tried smoking firstly during this period.
- Peer education also can have an important role because peer group influence is dominant in adolescents' social relations. A well-trained peer educator can be especially authentic for young people.
- It would be necessary to call parents' and teachers' attention to the importance of well-organized leisure time spending. It has a general protective role regarding risk behaviours.
- Prevention and control programs must pay special attention to environmental tobacco smoking to make teenagers (and not only them but the parents, relatives, etc.) aware of the harmful effects of it.

- Further investigations are needed to reveal the causes of gender difference in the susceptibility for smoking and improve preventive programs and policy in a special attention regarding girls (e.g. focusing on special health effects of smoking on the pregnancy and baby) because our data indicate that they are at higher risk. Moreover previous studies showed that prevalences had increased more rapidly among girls than among boys.
- There is an urgent need to develop and improve effective cessation programs too, because there is a demand for this among teenager smokers. Many regular smokers intend to quit, many of them have already tried it unsuccessfully. Further investigations also need to reveal that what kind of helps, advices are provided to those who want to stop smoking. It is necessary to establish regional and/or local professional counselling ambulances (e.g. in the schools) assuring confidentiality and privacy.

Finally it is recommended that regular surveys also should be done to monitor the situation and the effectiveness of tobacco control and prevention programs, campaigns and actions. Furthermore we have to be aware that the practical implementation of research findings (even those outwardly small relationships like that smoker students see smokers more attractive, and they consider smoking less harmful than their non-smoker peers) is essential for the effective prevention.

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