

Smoking Prevention at Prague Basic Schools

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Abstract: Tobacco smoking is the most prevalent preventable cause of morbidity and mortality worldwide. Tobacco dependence is a paediatric disease: the majority of smokers light their first cigarette before they reach the age of 18. The paper evaluates anonymous questionnaires collected during 55 seminars at basic schools in Prague during 2006, where 776 students of the 3rd–9th classes took part. Lectors were specially trained medical students (4th and higher year of study) from three Medical Faculties in Prague, who additionally had experiences working as consultants of the Czech Quitline. The given structure of smoking prevention seminars is described. Almost half of children in the age of 8–15 years had some experience with smoking: 45.6% of girls (170/372) and a 47.9% of boys (189/394). Mean age of the first cigarette was 9.95 (SD 3.6) years. Those alarming data should lead to adoption of effective tobacco control measures in the society.

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Introduction

Tobacco smoking, the diagnosis No. F17 according to IDC-10 (International Classification of Diseases, World Health Organization) [1], is the most important preventable cause of morbidity and mortality in the World including the Czech Republic, killing about 5 million people worldwide and 18,000 in the Czech Republic yearly. These Czechs lose 15 years of life on average, dying because of cancer (8,000 deaths), cardiovascular diseases (7,000 deaths), respiratory diseases (2,000 deaths), and other cause (1,000 deaths) [2] (Figure 1).

Adults seldom decide to start smoking, the majority of smokers (80–90%) smoke their first cigarette when they are still children or adolescents, i.e. at the time, when we are incapable of measured and considerate decision – at the time when we lack information, expertise and ability to evaluate [3, 4]. Until recently, the age of first cigarette was between 12 to 14 years [5]. In the Czech Republic, we lack effective tobacco control legislation, e.g. smoke-free public indoor-air spaces, increase of tobacco taxes, total ban of tobacco advertising including the point of sale and all indirect marketing, the sale in specialized shops only. In schools, children should be systemically educated about the effects of smoking.

Methods

Community-based seminars on the prevention of smoking aimed at the pupils of the 3rd to 9th grade primary schools took place between January and June 2006 in schools in Prague.

Seminars in Prague 2 (supported by the grant, see acknowledgments) acted as a pilot programme for a broader programme of seminars in the rest of Prague and further development of this project.

The structure of our seminars was based on previous experiences of other authors, mainly the Czech programmes *Kouření a já* (Smoking and me) and *Normální je nekouřit* (It's normal not to smoke) [6, 7, 8] as well as the British *Quit Primary School* (here the authors permitted the use of their pictorial materials) [9].

Smoking kills 18,000 people a year, from many different diseases.

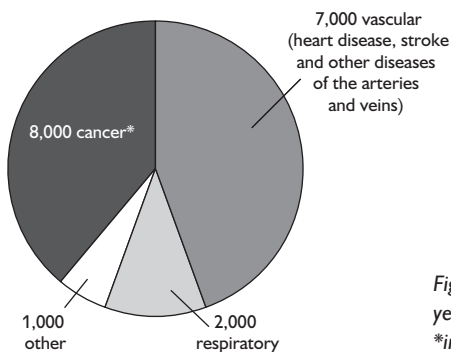


Figure 1 – Deaths in the Czech Republic due to smoking, year 2000 (www.deathsfromsmoking.net).

*includes 5,000 (87%) of 5,726 lung cancer deaths.

The final framework of the seminar:

1. *Questionnaire* – first 10 minutes are taken by the children filling in a short questionnaire.
2. *Quick Quit Quiz* – an 8-question quiz aimed at establishing rapport with the children. During the quiz children gain a basic insight into smoking and the presenters gain insight into their level of knowledge.
3. *Discussion* according to the age of the listeners.
The main topics of discussion:
 - Why people smoke? The reasons why youngsters start smoking.
 - Is tobacco addictive? How to quit?
 - Passive smoking and its consequences
 - Ban on selling tobacco products before 18 years of age
 - Advertising and tobacco industry
4. *Health consequences of smoking, composition of tobacco smoke* – in this part of the seminar children are involved in the discussion and draw a picture of a ‘smoker’. This is also where we use the materials from Quit Primary School and others like the WHO [10].
5. Time constraints permitting, we also run a *competition of teams*, evaluating what the children remembered from the seminar.
6. *Final discussion, farewell*

Duration 100 minutes (2 lessons including one break).

The programme was created in co-operation with the Centre for Tobacco Dependent at the General University Hospital, which provided the training and

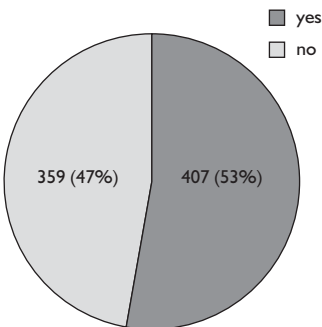


Figure 2 – Previous smoking or a smoking attempt in Prague's primary school children aged 8–15 years (n=766).

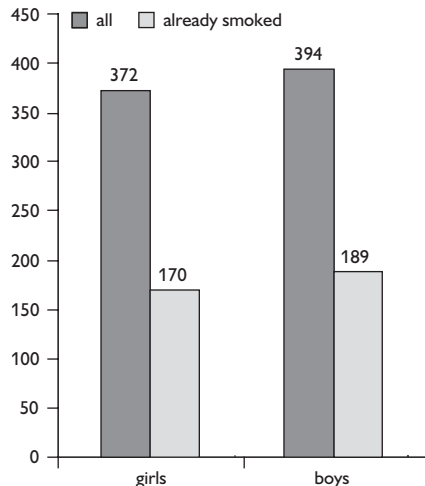


Figure 3 – Previous smoking experience according to the sex (n=766, boys=394, girls=372).

printed materials. Prague 2 is a central district of Prague. We did choose it for piloting the programme because of good cooperation with the local anti-drug coordinator Dis. Hana Šatalova, and the programme was supported by a grant from the City Council of Prague 2.

The target group was pupils of Prague's primary schools. We carried out 55 seminars for 776 pupils. Mostly the class was divided into two groups with the mean of 14 participants. From the total number of questionnaires, 10 were completed not correctly (excluded). We evaluated 766 questionnaires answered by children aged 8–15 years. The average age was 12.11 years, SD +/- 1.68. Among them, 394 (51.4%) were boys and 372 (48.6%) girls.

Results

Almost half of children had some kind of previous experience with a cigarette – 46.8% (359 of 766), 407 children never smoked nor tried to smoke. According to the gender: 45.6% of girls had previous experience with a cigarette (170 of 372) and 47.9% boys (189 of 394) (Figures 2 and 3).

Another important factor is the age at which the first cigarette was smoked. Out of those 360 pupils who have smoked previously, 277 stated the age at which they smoked for the first time. The mean age of the first cigarette was 9.95 years (SD 3.6) (Figure 4).

Discussion

While the prevalence of smoking in the adult population in the Czech Republic does not seem to increase, the prevalence of smoking among children and adolescents is rising. Also, the age of the first cigarette is lower compared to the situation few years ago [11]. The mean age of the first cigarette was 9.95 years, compared to a 1998 study, where it was 11.8 years of age [12, 13, 14]. Extraordinary, one child did light the first cigarette at the age of 3 years, 8 children at the age of 5 years.

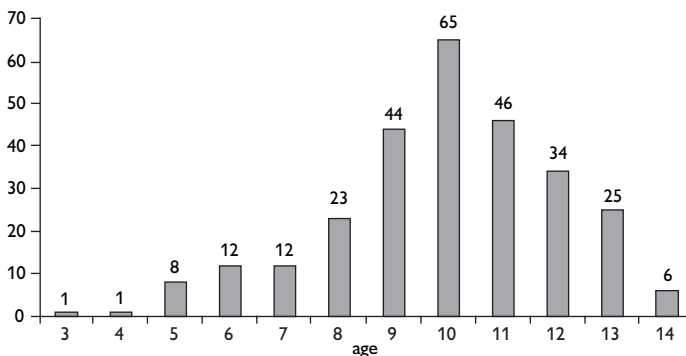


Figure 4 – Age at the first cigarette (n=277, mean 9.95, SD 3.60).

Our results from primary schools correspond to those of national and international studies. First experiences with smoking start ever earlier, without marked differences between boys and girls [5, 11, 13, 14, 15]. Our data correspond with the poor level of tobacco control in the country: cheap cigarettes, easy access to them (even if sale to minors is prohibited, the law is not enforced), no smoke-free indoor public spaces, no pictorial warnings on tobacco boxes, no basic marketing restrictions. Also, we encounter insufficient knowledge of the general public regarding the health consequences of smoking.

The effectiveness of prevention programmes in general is hard to evaluate in short time spans. According to WHO Information Series on School Health [10], the difference in the number of smokers and the initiation of smoking between groups which participated or did not participate in school prevention programmes is 25–60% and this effect lasts 1–4 years, although the number of studies with follow up longer than 1 year is small. The deciding factor for the success of such programmes is their interactivity, whilst the background of the trainers seems to play no part.

The successful prevention of smoking in children, and smoking in general, however, hinges on complex legislative effort that is still lacking in the Czech Republic, together with other social programmes, influences in the family and schools, as well as parents and teachers playing the part of role models.

Conclusion

Primary school pupils are a key target group for prevention of smoking, as 90% of smokers experience their first cigarette before their eighteenth birthday, and the age of the first cigarette below the age of ten is alarming as well as the prevalence of smoking. Our prevention programme was aimed at interactive education of children concerning health effects of smoking as well as on collection of data about their smoking patterns.

The seminars are understandable, efficient and with sufficient pictorial support. Children were active, involved, asked questions and developed lively debates.

We recorded some of the written messages from pupils:

“I found out that when somebody smokes, he can die of cancer, smoke gets into the lungs, you can get a tumour in the airways, etc. DO NOT SMOKE, you can become dependent on smoking”

girl, 10 years

“It harms the heart, lungs, stomach. So it is better not to smoke so I can stay healthy. I wish smoking did not exist. I don't want my granddad to smoke! Thank you for the help card”

girl, 10 years

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