"OUR CLASS DOES NOT SMOKE"; THE CZECH VERSION OF THE "SMOKE-FREE CLASS COMPETITION" PROGRAMME

Drahoslava Hrubá, Veronika Zachovalová, Halina Matějová, Irena Daňková
Masaryk University, Faculty of Medicine, Department of Preventive Medicine, Brno, Czech Republic

SUMMARY

The "Smoke-Free Class Competition" programme stems from a theory of the consequences of cultural and social miming in the onset of smoking addiction: it initiates non-smokers' active encouragement in supporting a non-smoking environment in class groups of teenagers.

The first experience with the programme (Our Class Does Not Smoke) in the Czech Republic was obtained from a set of 13 classes from 6 primary schools with 261 14-year-olds who had been acquainted with the programme rules and voluntarily agreed to abide by them.

Methods: Methodological instruction for teachers, school psychologists, pupils and parents providing motivation to various activities (discussion, craft projects, group therapy with smokers, demonstrations of ascertaining exposure and health consequences of smoking) were compiled to support the programme. The one-year programme schedule had a number of control points for assessing its immediate and long-term effect on the prevalence of smoking: (1) prior to programme onset, (2) after a half-year of intensive intervention, (3) after a further 3 months, (4) in the 12th month from programme onset.

Results: A complete abstaining condition in the four-months of the competition period was observed by all pupils in 31% of the classes; the number of smokers dropped in other 23% classes, remained unchanged in the same number of classes and increased in the same number of classes. In the second half of the programme, 38.5% of classes dropped out of the competition; the prevalence of smoking children was identical in 15.5% and higher in 46%, in the 12th month compared to the programme onset. However, the final prevalence of regular smokers in the competition set is only at the level of one third (10.3% versus 29.7%) compared to the same age group of the Czech population.

Conclusion: The programme successfully swayed the smoking habits of children.

Key words: Smoke-Free Class Competition, Czech Republic

Address for correspondence: D. Hrubá, Masaryk University, Faculty of Medicine, Department of Preventive Medicine, Komenského n. 2, 662 43 Brno, Czech Republic. E-mail: hruba@med.muni.cz

INTRODUCTION

On the invitation of the "Smoke–Free Class Competition" (SFC) project co-ordinators sent to the new EU countries' representatives, we enlisted in the programme called "Our Class Does Not Smoke". At present, the SFC programme is one of the most extended school anti-smoking educational projects; its author is Erkki Vartiainen (1). The programme has won very significant support on state level, too, chiefly in Germany, France and Switzerland, where hundreds of primary schools with tens of thousands of pupils aged 12–15 joined the competition. The Institute for Therapy and Health Research, IFT-Nord in Kiel (2) coordinates the international unification and co-operation.

The programme rests on the knowledge of significant pressure of peers on the smoking habits of children in puberty and adolescence and strives to support non-smokers as exemplars of model behaviour in children. The programme takes the form of a competition with the elementary rule that no pupil will smoke for 4, or respectively 6 months; the competition is open to any class where all its members agree with the competition conditions of their own free will. The school management actively supports the programme using discussions and anti-smoking activities of children, by organising continuous monitoring of pupils' smoking behaviour. Setting up a completely non-smoking environment in the school is a matter of course. Children may win interesting prizes, according to the national coordinators' possibilities (3) if they observe the competition conditions.

An informal approach and active involvement of pupils is an essential prerequisite of the programme. Different countries, more experienced in the programme, compiled sets of various interesting activities offered to other countries by means of interactive exchange of experience at Internet addresses. Media promotion, and sponsorship to award classes that successfully completed the competition are recommended on national level; the main international prize is a trip abroad for the winner class.

The programme focuses above all on second-grade school students; new participants were recommended to address a set of children of 13 to 14 years of age, i.e. 8th primary school class

pupils. Since such groups may already have regular smokers, the programme may also involve special work of educational councillors and school methodologists with such children.

Following acquaintance with the EU programme, a methodology was produced and application for a one-year project with EU support was filed in. Results obtained in a final survey (a year from the programme start) were presented in this work, with competition participants assessing its course retrospectively.

METHODS

Methodological directions were compiled for several levels: arrangement of informative manuals for school management and heads of classes, including supportive materials from the "Smoking and Me" project. Effects of smoking (mechanical smoker, model of a smoking pregnant woman) and objective assessment of exposure (test of CO in exhaled air by a microsmokelyzer, and also the urinary cotinine levels were measured in samples voluntary offered by children) were demonstrated in classes that asked for personal contact with the authors.

With respect to previous knowledge that some regular smokers in the senior classes may already be addicted to smoking and nicotine (4), the Czech programme method includes their identification with the aid of a special questionnaire and subsequent individual attention paid to these children. Individual behavioural therapy with specialist-psychologists in the first step, if that fails, broadening this therapy by family support and possible medicinal indication of some nicotine replacement therapy, with the objective control by urinary cotinine levels.

The actual one-year programme comprised of several stages divided according to the contents of the activities and monitoring: 1st stage prior to programme start, 2nd stage: assessment of the four-months competition (non-smoking) period, 3rd and 4th stages after further 3 months, and 5th stage: current smoking-related behaviour on the final enquiry, i.e. in the 13th month from the project start focused on recapping the course of anti-smoking action by competition participants. Data gained in the year-round observation were analysed in the EPI INFO programme (χ^2 test).

RESULTS

A total of 13 classes of the 8th year from 6 primary schools (261 children) was enrolled. Five classes (38.5%) dropped out of the competition after the first six months, and thus assessment of the programme's year-round course along with an immediate and long-term consequences could be performed in 150 pupils from eight classes only. Majority of children (82%) had no problems with decision-making on partaking in the competition. Another 12% thought it over a bit, the rest of participants (6%) were persuaded by their friends.

Although most students (73%) confirmed teachers' encouragement in retrospective contemplation, it is surprising that a quarter of the respondents do not recall any. This clashes somewhat with the fact that only about 10% of the children said that "nothing much happened" in response to another question, while nearly half of the children recall "some discussions" (mostly girls) and almost a third (mostly boys) valued the teachers' support as inspiring and "surprisingly good": however differences in the frequency of girls' and boys' answers were statistically insignificant.

The respondents' answers to a question pertaining to non-smokers' working on their smoking peers shows that the programme failed in this direction: only about a quarter of the children gave a positive answer, involving most often a private discussion rather than a debate in wider class group. No respondent mentioned an unacceptable manner of non-smokers' communication with smokers bordering on bullying.

Approaches to smoking expressed either by personal perception of the importance of smoking in people's lives, or "marking" admiration or criticism of smoking, are desirable, i.e. negative, for most respondents (87%). According to expectations children are less critical towards men smoking (71%) compared with women smoking (81%). However, the fact that some 15% of respondents have a positive attitude towards smoking and admire smokers cannot be omitted.

The short-term influence of the half-year intervention programme may be summed up favourably: at the beginning 16.1% of children in the set smoked (A = 13 classes), while 6.5% smoked at the end of the actual competition period. Of the 13 competing classes, 4 (30.7%) observed full abstaining of all children for the 4 month competition term, the number of smokers dropped in 3 classes (23.1%), remained unchanged in 3 classes and increased in only 3 (23.1%) classes. Unfortunately, three of the 4 most successful classes were among those that declined to take further part in the project, along with a class where the number of smokers dropped and one where it remained unchanged: the medium-term influence of the programme on smoking-related behaviour of children could not be assessed in these classes.

A new analysis of entry and continuous data to assess immediate and medium-term effects, was carried out for the reduced set (B = 8 classes) after exclusion of the dropped-out classes. No class succeeded in preserving complete abstinence after the end of the intervention competition stage, and moreover the number of smokers increased in most classes.

Analysing data from all children in the B group that carried on in the competition in the second half of the project, it may be concluded that the programme, to be precise, failed to sway the smoking of children (Table 1). In fact, the number of smoking girls (14.9% vs. 5.2% of smoking boys, $p < 0.05$) went up in the first half, including the actual four-months competition stage (identi-

Table 1. *Development of smoking in set B (% of responses)*

Assessed stage	Whole set	Girls	Boys
1. prior to programme start	9.5	11.9	6.5
2. between 2nd and 6th month	10.1	14.9	5.2
3. between 6th and 9th month	18.4	26.9	10.5
4. between 9th and 12th month	17.6	16.	18.2
Smoking – a year into the programme			
does not smoke, never did	22.0	13.2	29.5
does not smoke but tried	54.0	63.2	46.2
total of non-smokers	76.0	76.5	75.6
smokes occasionally	13.7	13.2	14.1
smokes regularly	10.3	10.3	10.3

fied as No. 2). The period following the end of the first half of the programme, incorporating the school holidays, was critical. The number of smokers almost doubled over the holidays. The frequency of smoking girls in this stage was also significantly higher than in the boys' group ($p < 0.01$). Upon returning to school, some girls stopped smoking, while the number of smoking boys increased further in contrast and the frequency of smokers gradually levelled out in both sexes.

At the time of the final conclusion, when the participants were already 9th year students, a quarter of the children smoked, of which 10% regularly (every week, or daily): no differences occurred between boys and girls in this respect. Conversely, one fifth of the children in the set (more often boys than girls – $p<0.05$) had not tried smoking yet.

Not only non-smokers but occasional smokers too differ distinctly in their approach to smoking from regular smokers: 39% of regular smokers, only 15% of occasional smokers ($p<0.01$) and no non-smokers consider it a normal part of life. A third of regular smokers and only 5% of occasional smokers ($p< 0.01$) identified smoking as a symbol of independence and self-reliance. Almost 15% of regular smokers find smoking a pleasurable activity, yet no other respondents identified it as such. Such children can be expected to be already strongly threatened with nicotine addiction. On the other hand, only about 40% of regular smokers find women and men smoking appealing, while one fifth strongly criticises such behaviour.

Smoking and non-smoking children differed significantly in their ideas of their future smoking behaviour: more than 40% of regular smokers and 10% of occasional smokers deemed themselves smokers and were determined to persist in such behaviour. More than half of occasional smokers, more than 40% of regular smokers and 15% of non-smokers admitted that they were weighing up their future smoking. Such children represent the risk group on which the targeted attention of experts with a special behavioural programme ought to focus.

DISCUSSION

The aim of school programmes focused on the restriction of smoking in children and young people is to influence non-smokers to refrain from smoking and motivate smoking children to stop smoking, before development of addiction if possible (5).

Several theoretical models that could be used in various developmental stages on children's and adolescent's smoking (6), were produced for the study of external preventable factors: social and cultural connections particularly dominate at the onset (pre-consideration, consideration and initiation stages). A person learns to smoke by observing his/her surroundings (family, peers, teachers, personalities); the social, psychological and cultural circumstances of smoking; legislative and social standards; and the tolerance and the degree of such behaviour's normality, contributed to for instance also by advertising and the availability of cigars and cigarettes (7). Cultural context of their behaviour is prominent, along with membership in a certain social group and its activities (8). The whole "Smoke-Free Class Competition" project is based on supporting cultural-social and social situations that 'denormalize' smoking, using the influence of peers applied in the class community.

A roundup of studies hitherto assessing the influences of anti-smoking educational programmes based on schools show that all, including the most successful, contribute merely to delaying the onset of smoking, not to any significant long-term prevention (9).

Countries that involve hundreds of schools in the SFC programme assess results only for a selected number of classes. The researchers will usually come across the problem of classes dropping out between the initial and final enquiry: 54% of children were missing at the final enquiry as against the initial enquiry in the German study (10). Out of the 120 initially participating classes in a Swiss study, only half completed the programme, almost 21% of classes dropped out prematurely and the teachers failed to pass on assessing information on a further 29% (11).

Assessment of the Czech set of results of the international competition programme were equally adversely affected by the fact that nearly 40% of the class groups resigned from further participation, while such teams were among the most successful in the first competition stage. Our experience resembles, in this respect, that in other European countries. The prime cause given by teachers in the Czech study as the reason for project termination after the first competition stage were activities associated with the project that they had to carry out outside the frame of their everyday duties. It is characteristic for the study to have been prematurely terminated by those classes showing better results and where the higher intervention level could have been linked to greater involvement of the teachers.

Such justifications are teachers' frequent argument: they are also quoted by H. de Vries, the author and co-ordinator of a long-term educational programme called ESFA (European Smoking Prevention Framework Approach) (12).

Non-smoking children did not accept sufficiently the importance of their effect on smokers, and teachers failed to create sufficient space for such peer pressure. Some school representatives settled for children stopping smoking in schools and thus complying with the school rules; they considered students' smoking outside school to be a problem for their families.

Unfortunately, we did not succeed in making the desirable contact with the parents of all regular smokers in implementing the programme. Such contact would have allowed us to assess objectively the exposure and propose family behavioural therapy with potential treatment by medical preparations of nicotine replacement therapy. In some cases it was the child who did not agree with us contacting the parents from fear of punishment, while elsewhere parents rejected the intervention; family anti-smoking counselling took place with four children in the course of the actual competition stage, and nicotine replacement therapy was recommended in one case.

Czech society is generally very tolerant of smoking; there is a widespread belief among politicians and people that smokers significantly support the state economy. Information from experts on the consequences of smoking on health is questioned. The fact that smoking is a high risk for development of addiction, a serious psychiatric condition, is not respected by health insurance companies who do not actually have the treatment of addicted smokers in their economic tariff scale. Limitation of smoking in public premises is still often presented as discrimination against smokers, while examples of anti-smoking measures abroad are often ridiculed. Compliance with the ban on selling tobacco products

and alcoholic drinks to children and adolescents under 18 is checked only very rarely. Direct advertising for tobacco products was partially cut down on the Czech Republic's accession to the EU, while indirect advertising in principle remains unchanged. According to the Czech Republic Global Youth Tobacco Survey (GYTS) data, 72% of smoking children under 15 years of age reported never having been restricted in cigarette purchases because of their age. Over 80% of children under 15 years of age reported the exposure to the tobacco advertising. Those authors also give a warning that smoking among children has been continually growing (13).

The reviewed literature focused on determinants of children´ and adolescents´ smoking behaviour accentuates the social and societal factors as very important influences on youth smoking (14). Nevertheless, Czech politicians have over a long period hampered implementation of more efficient measures to cut tobacco product availability (by means of progressive taxation, restriction of sales spots).

According to the final enquiry, 10% of fifteen-years olds in our set smoke regularly. Compared to the same age group in the Czech population (29.7 %) such prevalence of smokers in our set is on the level of one third only (15). If our competition programme contributed to such a result, we can consider it successful over the longer term too, in spite of the increase of smokers in most classes.

Schools' educational endeavours focused on primary prevention of smoking is gruelling and its effect is limited. Nevertheless, a reduction of smoking epidemic in the Czech Republic is one of the priorities of the National Health 21 Prigramme and the number of experts involved in specific programmes for different age groups is ever increasing.

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