EXPERIENCES IN CONNECTION WITH ORGANIZING COMMUNITY PREVENTION IN 38 SCHOOLS FROM HARGHITA AND COVASNA COUNTIES

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Abstract : This study came into existence by way of the conceptualization of the experiences gathered while organizing community prevention in 38 schools from Harghita and Covasna counties. Community prevention is a research topic within the Community-Based Prevention and Cessation of Tobacco Use among Young Adolescents project initiated by Davidson College, Medical Humanities, Davidson, NC, USA and coordinated by UMF Tg. Mureş, with a team from UBB Cluj also taking part. It is an intervention study comprising two parts: the first is a quantitative and transversal study via a self-administered and supervised questionnaire poll, while the second part had the objective of devising a prevention program adapted to the specifics of local collectivities where our sample comes from.

Methods: sample size: 1200 persons form Harghita, Covasna and Mureş counties. The intervention was done in Harghita and Covasna, while Mureş County was considered to be the control group. The margin of error is $\pm 2.9\%$ at a probability level of 95%. Data gathering: self-administered, supervised questionnaire. Questionnaires were administered between 10 and 31 March 2014.

Results: The empirical study revealed the following: out of the population of adolescents studied, 51.95% had never smoked, 30.85% only tried smoking once, 11.25% had smoked or smoke occasionally and 5.9% had smoked or smoke regularly. 43.5% of homes with children were defined as smoke-free houses. 46.8% of the children had been exposed to secondhand smoke at home for at least one day in the past 7 days prior to the study. These data prove the necessity of addressing smoking prevention in teenagers. The prevention program implemented in the 20 collectivities from our sample comprised 5 interactive activities taking place within the pupil collectivities and 5 community activities in which parents and teachers from the local collectivities were also involved.

Conclusion: we were able to successfully carry out the intervention program in the 38 schools (more than 500 adolescents) with the help of volunteers (76 persons). Qualitative assessments indicated the parts of the program that were more successful and those that were less accessible to the teenagers. The importance of inter-generational communication and the positive effect of shared parent-adolescent activities have been proved; in the latter, teenagers could experience situations in which they have responsibilities and are supported and appreciated according to the level of effort invested. We have laid the foundations of a prevention network in the two counties involved in our project. Based on the experiences gathered we have developed explanatory models with regard to community prevention.

Keywords: smoking, community prevention, local community, levels of intervention

1. Conceptualization of the research topic

Tobacco consumption can be considered a lifestyle model. On the level of the individual, it is an addiction, which is connected to the search for identity and has at its surface the function of a mechanism for adaptation, but in fact, the consumers become victims whose health is subject to great risk. On the other hand, tobacco use is associated with the effects of processes of marginalization and disadvantage as well (Poland et alii. 2006, 59). This habit is based in internalized practices and frameworks of perception and behavior; it is strengthened by the preference for its taste and unrealistic expectations (weight loss, calming, increase in self-control) as well as the association with social events. Hence, smoking has a social significance which is also determined by the attitudinal and behavioral models specific to local communities. We therefore believe that intervention too must be done by way of

communities, by anti-smoking communication and a shift in attitude towards smoking and offering positive health behavior models (Poland et alii. 2006, 59).

Tobacco can be considered a psychoactive substance which causes changes in thinking, mood, emotion and even behavior (Demetrovics 2007). It was based on the above considerations that we conceived our vision on smoking.



Fig. 1. Smoking as a collective social practice

Based on the interdependencies shown on Figure 1, we can conclude that smoking prevention must be a task for the functions of social and community forums. Since smoking is related to the search for identity, the prevention must involve the individual's family and community life as well (Albert-Lőrincz 2009). Recently, the role of community in identity forming has been overshadowed; therefore, we aim to develop this idea through our study. (Albert-Lőrincz 2013).

2. Study methodology:

Our long-term goal in this intervention study was to create smoke-free schools and environments: "A smoke-free adolescence". In order to achieve this goal, we have pursued the following throughout the intervention:

1. Overall prevalence of tobacco use in adolescents

reduce initiation of tobacco use among adolescents: increase (delay) the average age of first tobacco use,

- reduce tobacco use,
- increase the number of quitters,
- reinforce refusal skills,
- 2. Exposure to environmental tobacco smoke (ETS)
- reduce the number of nonsmokers exposed to ETS
- eliminate exposure to secondhand smoke in schools
- 3. Smoke-free and tobacco-free schools
- increase the number of tobacco-free schools

To this end, we have set out to:

- change attitudes and behaviors towards smoking,
- offer education about the immediate, as well as the long-term and undesirable physiological, health-related and social consequences of tobacco use,
- distribute information about the reasons why teens start smoking and offer them more positive reinforcement to achieve their goals,
- instruct peer-counselors and NGO volunteers in refusal skills training and development.

The study had two phases: in order to become acquainted with the situation concerning the attitude and behavior of adolescents regarding smoking, as well as certain sociocultural characteristics of the environments these adolescents live in, we began an epidemiological study (the first part), in which questionnaires were administered to 1200 persons (36 7th grade and 36 8th grade classes) form Harghita, Covasna and Mureş counties. The intervention was done in Harghita and Covasna, while Mureş County was considered to be the control group. The margin of error is $\pm 2.9\%$ at a probability level of 95%. The database was weighted according to data on school-aged population in the strata used in our sample. Data gathering: self-administered, supervised questionnaire. Questionnaires were administered between 10 and 31 March 2014.

Based on the data obtained in the study, we devised an intervention program adapted to the age and the sociocultural environment specific to our sample (the second part of the study). The prevention program implemented in the 20 communities from our sample comprised 5 interactive activities taking place within the student communities and 5 community activities in which parents and teachers from the local communities were also involved. The activities were distributed over six months, from October 2014 until the end of April 2015.

In the following, we will put forward certain details in connection with the attitudes and behavior of adolescents regarding smoking that attest the necessity of addressing smoking prevention in teenagers. Then we will describe the prevention process and a few models that may be of use to other researchers who are involved in promoting healthy behavior in adolescents.

3. Some results of the empirical study concerning adolescent behavior with respect to smoking

The proportion of those who have experienced tobacco – according to base variables: social environment, class, gender, teaching language – are shown in the table below.

		Pupils in the population	Pupils in the sample (N)	%
County	Mureș	9 759	600	50,0
	Harghita	5 972	367	30,6
	Covasna	3 793	233	19,4
Settlement size	Under 5 thousand inhabitants	7 142	439	36,6
	From 5 to 30 thousand inhabitants	6 631	408	34,0
	Above 30 thousand inhabitants	5 751	353	29,5
Grade	7 th grade	10 050	618	51,5
	8 th grade	9 474	582	48,5
Language of instruction	Romanian	8 445	519	43,3
	Hungarian	11 079	681	56,7
Total		19 524	1 200	100,0

Table 1. Universe and sample

In all, the sample comprised 1398 schoolchildren from 36 schools, but because of the incompleteness of data, there were only 1313 valid questionnaires in the end. To reduce selection bias, the sample was weighted for 1200 according to the 36 layers of the sample. The mean age of the respondents was 14.67 years (min. 13; max. 17). Gender distribution was balanced (49.5% males, 50.5% females). Data analysis was carried out using IBM SPSS 20.0.

More differentiated quantitative and qualitative analysis of the database will be performed in Mr. Grigore Barna's doctorate thesis (the statistician producing the database). For the time being, we will only advance those data which serve to conclude that smoking in adolescence is a genuine problem and prevention is needed. Similarly, we will see that the rate of smoking us much higher in Harghita and Covasna counties, which prompted our decision to have the intervention in these two counties, leaving Mureş County to serve as the control group.

The analysis of the study data shows that almost half (47.9%) of the adolescents queried had had experience with tobacco products, had tried smoking. The highest rate of those who had tried smoking before is found in: Harghita County (54.4%), in localities above 30,000 inhabitants (53.6%), among 8th grade students (50.7%), among boys (49.0%) and among the Hungarian minority (54.5%). The fact that the incidence of smokers is higher among disadvantaged social environments (e.g., villages) and among minorities is in line with the literature (Poland et alii. 2006). These data are shown in Table 2.

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		Ν	Yes	No	
County	Mureș	600	46,4	53,6	
	Harghita	367	54,4	45,6	
	Covasna	233	41,6	58,4	

Table 2. Rate of pupils who had experimented with tobacco use according to base variables

Settlement size	Under 5 thousand inhabitants	439	48,4	51,6
	From 5 to 30 thousand inhabitants	408	42,6	57,4
	Above 30 thousand inhabitants	353	53,6	46,4
Grade	7 th grade	618	45,4	54,6
	8 th grade	582	50,7	49,3
Language of instruction	Romanian	519	39,4	60,6
	Hungarian	681	54,5	45,5
Sex	Boy	594	49,0	51,0
	Girl	606	46,9	53,1
Total		1200	47,9	52,1

The average age that the adolescents queried had begun smoking was 11.7 years. The proportion of those who are still smoking in our sample – according to base variables – show the following distribution: most smoking adolescents are in Harghita County (17.2%); in environments with under 5,000 inhabitants, the rate of smokers is 15.3%; there are more smokers among 8^{th} grade students (13.3%) than 7^{th} graders (12.2%); out of teenagers belonging to the Hungarian minority, 15.4% are smoking; of the respondents, the rate of smokers among boys is 13.7%, higher than among girls. Most of these differences only represent tendencies; significance is to be found in the difference regarding social environment and teaching language. Averaging those who currently smoke, we have noted that 12.7% of the students involved in our study are smokers.

We were interested in finding out the rate of those who had smoked or smoke regularly. According to our data, 5.9% of adolescents with an average age of 14.6 years had become addicted to tobacco.

With regard to passive smoking, which poses the same danger on the health of adolescents, we have found that: 43.5% of homes with children were defined as smoke free homes. 46.8% of the children had been exposed to secondhand smoke at home for at least one day in the past 7 days prior to the study.

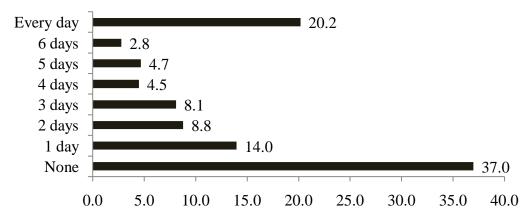


Fig. 2. The rate of children who were exposed to secondhand smoke at home for at least one day in the past 7 days

Exposure to secondhand smoke was significantly higher among respondents with no restrictions on smoking than among those with home smoking bans (69.0% vs. 17.2%). 46% of pupils report that others smoke in their presence at home, in their living area. The situation is more prevalent in small settlements.

Exposure to cigarette smoke is more intensified outside the home; 63% of respondents report the occurrence of someone smoking in their presence in a public place in the week prior to the research.

These data prove the necessity of addressing smoking prevention in teenagers. The reduction of smoking prevalence among adolescents remains a key public health priority (Hastings, Angus 2008).

4. Procedure and the conceptual models regarding the initiative of communitybased intervention

The community-based intervention had the following goal in mind: "A smoke-free adolescence". An objective which, of course, can only be achieved in the long term. The six months devoted to prevention can only represent a single step in realizing this aspiration. The intervention was performed at the end of April 2015; only in May will questionnaires be administered with the goal of evaluating the efficiency of our measures. For now, we are relying on qualitative evaluations provided to us by the teachers and psychologists who have worked in the project and on feedback received from the students.

We have adhered to the indications given by Carson and coworkers regarding communitybased prevention throughout the program, i.e.: "the intervention must be imagined as part of a continuum: individual-family-community-organizations-whole population..., and the developmental work with representative samples of those individuals to be targeted should be carried out so that appropriate messages and activities can be implemented; programme messages and activities should be guided by a combination of theoretical constructs about how behaviours are acquired and maintained" (Carson et alii. 2013, p 22).

We believed that prevention should mean universal improvement in quality of life, compensation of risk factors and strengthening of protection factors and coping potential. At the same time, it must also have a wide spectrum, ensuring that stress is coped with, self-esteem is preserved, negative feelings are confronted and self-acceptance is achieved. In its methods, it should encourage the environment-based approach and the modification of the micro and macro-environment. It should have an impact on decision-makers and politicians (measures aimed at health preservation, a well-conceived countrywide strategy), the media (what it commercializes and promotes; alcohol should not be featured in pleasant, exotic surroundings), on education (an attitude of mental hygiene), it should rely on individuals and it should encourage further research. (Albert-Lőrincz 2013).

4.1. The process and content of the activities

We began our work by contacting the boards of education, county centers for resources and educational assistance and the presidents of the county and local councils of the communities targeted in our study (Harghita, Mureş and Covasna) asking for their approval and support. We contacted social services whose mission is to promote healthy behavior in adolescents. We ensured a continued presence in the local media. Then we presented our project in the 20 schools our sample contained and organized volunteer intervention teams out of therapists, educational psychologists, social workers and teachers. We ensured their preparation for the intervention work by lectures and training sessions. The therapists, educational psychologists and social workers (mentors) were prepared for community activities, and the teachers (facilitators), for interactive activities carried out among students. We collaborated with a total of 76 volunteers. The research team that creates and coordinates the intervention is made up of

five academics out of four universities (the Cluj Babeş-Bolyai University, the Târgu-Mureş University of Medicine and Pharmacy, the Târgu-Mureş Sapientia University, the Oradea Partium Christian University). The above are shown on fig. 3.

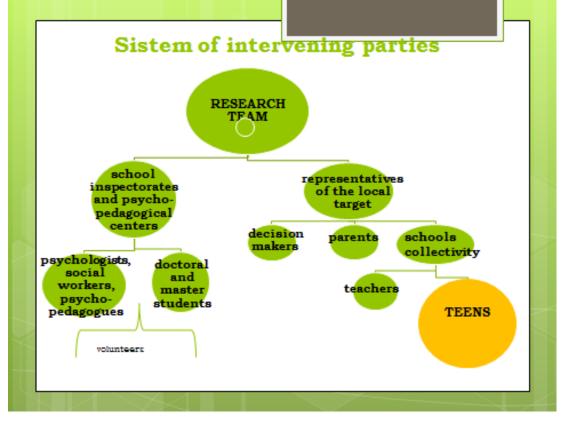


Fig. 3. System of intervening parties

During the six months, we have carried out five activities in the student communities, with the following topic: What is smoking – why do people smoke? The effects of smoking on the human body and psyche – risk factors; Reality and prejudices related to smoking; Own experiences related to smoking – habits and the attitude of the family towards smoking – illnesses of relatives that may be related to smoking; Life without smoke – advancing and discussing an alternative to smoking; Techniques for refusal, respecting one's own decision; Why is passive smoking dangerous?

During the community-based interventions, we have proposed activities such as: No tobacco! Flash mob; Sport contest; Poster contest; Family day – No tobacco! Day; Interview and film contest. In this framework, we had activities such as: competitions (posters, slogans, school radio spots); debates with children on tobacco field; flyers, banners, stickers; developing internal school regulations to restrict active and passive smoking; establishment of smoke-free zones; adoption of and compliance with local regulations; booster programs involving NGOs; compensation for the impact of media, community service, etc.

The system of activities carried out by the actors who had taken part in this project is shown on fig. 5.

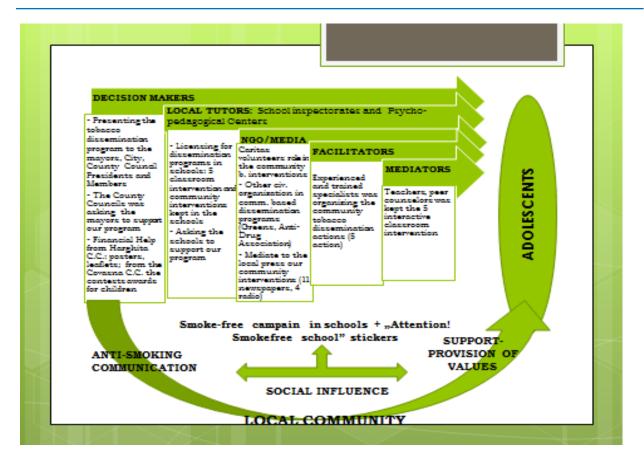


Fig. 5. Intervention levels

We can see that the intervention was done with a holistic approach in mind. The educational and support influences encompassed all aspects – interpersonal, sociocultural, emotional, spiritual – of the adolescents' life.

It was our intent that through these activities, we would impart values to the adolescents and satisfy their need for social interaction, ensuring their physical and emotional safety. The adolescents could experience how the community is able to exercise control and how it demands adherence to values and norms, but at the same time, it enables the pooling of resources and collaboration, and thereby contributes to strengthening the sense of worth. This sense of worth refers to experiencing both the value of one's self as well as the value of life. Based on the literature and our own experience, we believe that these are the very experiences that adolescents desire and can ensure their healthy development, because they contribute to improving the quality of life and to strengthening the sense of perspective. Konkoly Thege et al. (2014) have shown that on the bivariate level, both baseline and follow-up meaning in life scores were higher in stable non-smokers when compared to stable smokers.

The essence of the interventions is thus developing the culture of health – which also encompasses being informed –, as well as strengthening all protective factors which could affect the life of adolescents.

4.2. Some feedback from the participants

The most important aspect for each participant was to bring adolescent smoking into the forefront. We helped further anti-smoking communication on the part of the adults and the establishment of smoke-free areas, and, by enforcing directives, also contributed to reduce access to tobacco products (supply). We galvanized community life and helped to increase the

mutual awareness of local actors: social department employees at city halls, teachers, representatives of local organizations and the media. We had the opportunity to experience that with a joint effort, the goals we had set could be accomplished. The feedback received also revealed that both adults and students were eager to take part in the activities and the relationship between the generations was strengthened.

In their reports, teachers and students alike agreed that we had organized community activities which made it possible for adolescents to connect with the community and granted them the opportunity for collaboration, for experiencing usefulness and efficiency, for strengthening identity and autonomy, for the communication between generations and for self-expression. Adolescents felt that it was important to experience the sense of belonging and the experience of collaboration, as well as being paid attention to and being listened to by adults. The students were strengthened in their belief that they were able to accomplish tasks (organizing contests and drama performances) and that they could be efficient, which served to improve their self-image and confidence. Throughout the activities, traditions were observed and prosocial values were transmitted. Artistic activities enjoyed great success (e.g., anti-smoking pantomime scenes, arts and crafts activities, exhibits), drawing and short film contests and interviews with passersby on the topic of smoking. Another aspect deemed important by the students was formulating plans for smoking prevention in their own schools together with their teachers and the fact that their ideas and suggestions for solutions were accepted. They had the opportunity to conceive the regulations pertaining to observance and the consequences of infringement that applied equally to teacher and student. An abundance of pictures was taken, which is indicative of the pleasant atmosphere and of the fact that both adults and students identified with the programs and assumed responsibility for them.

Based on their reports, it seems that community programs had more of an effect on the adolescents, with many of them containing resolutions of never wanting to smoke; moreover, there were several who asked for help in quitting.

The usefulness of the program – as reflected by numbers – will be decided by the post-test, when we will again evaluate the opinion of adolescents about smoking and their smoking habits.

5. Conclusion

We were able to successfully carry out the intervention program in the 38 schools (more than 500 adolescents) with the help of volunteers (76 persons). Qualitative assessments indicated the parts of the program that were more successful and those that were less accessible to the teenagers. The importance of inter-generational communication and the positive effect of shared parent-adolescent activities have been proved; in the latter, teenagers could experience situations in which they have responsibilities and are supported and appreciated according to the level of effort invested. We have laid the foundations of a prevention network in the two counties involved in our project. Based on the experiences gathered we have developed explanatory models with regard to community prevention.

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