### ANNALES

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# The problem of tobacco smoking among the young people under the survey research. Part III. Secondary and technical school students

Numerous studies have revealed that tobacco smoking is caused both by pharmacological addiction to nicotine and behavioural addiction. Both addictions are complementary to each other and they interact with each other (1–3).

Tobacco smoking causes serious health risks both to active and passive smokers (4–6). Although the demand for cigarettes has decreased by 10% (7) during the last decade, new people are becoming easy victims of tobacco smoking; there are more occasional and habitual smokers also among children and teenagers (8).

One of the possibilities of effective anti-nicotine activities is the comprehensive social education. Teenagers should be mainly made aware of the negative effects of tobacco smoking, since, as it was demonstrated by our study (9, 10) and literature data (11–14), considerable numbers of young people start smoking as early as in primary school, and even kindergarten children sometimes have the first contact with cigarettes.

Knowledge of the scale of this phenomenon and of the attitudes towards tobacco smoking in a given social or age group is the prerequisite to effective anti-smoking campaigns. According to Nowakowski (15), insufficient anti-nicotine education at school is one of the reasons for teenage tobacco use. Therefore, our review is focused on the problem of tobacco smoking among secondary school pupils, whose general knowledge acquired at this education level allows them to estimate the deleterious effect of this addiction on the young organism.

#### MATERIAL AND METHODS

Survey research concerning the problem of cigarettes smoking among the secondary and technical school students involved 828 people (361 boys and 467 girls), aged 16–18, coming from different regions of southern Poland and from different environments.

Conducting research the constant proportion between sexes was tried to preserve in order to obtain the most equal material, which quaranteed comparable results. Obtained data were presented in percentage and put into tables.

The survey included 24 questions involving factors, which possibly influence taking up smoking by students, such as the place of residence and socio-economic reasons, the causes leading to giving up the habit and the level of knowledge about the harmful effects of smoking.

#### RESULTS

The present study demonstrated that 37.9% of boys and 41.3% of girls from secondary school are tobacco smokers.

The age when the boys smoked their first cigarette ranged from 5 to 17 years; the biggest number of them, however, started smoking between 12 and 15 years of age. The girls also tried smoking at the age of 5, and the oldest age was 17, but the biggest number started smoking at the age of 14–15. It should be stressed that 52.9% of the boys and 49.2% of the girls do not continue the habit.

A positive answer to the question "Does anyone in your family smoke?" was given by 67.8% of the boys and 62.8% of the girls. This indicates that a majority of the surveyed pupils were exposed to tobacco smoking in their families, had an easy access to cigarettes and had an example set by parents or other relatives.

The smallest percentage of secondary school tobacco smokers come from cities with the population over 100 thousand – 10.4% of the boys and 1.6% of the girls. In the cities with the population under 100 thousand, the percentage of smoking boys reached 41.5%, which was higher than the percentage of girls – 31.1%. Differences between boys and girls living in villages should be emphasized: approximately twice as many girls as boys smoke (62.2% and 31.9%, respectively). A reverse trend can be observed in small towns – the percentage of smoking boys was three-fold higher than that of smoking girls (16.3% and 5.2%, respectively) – Fig. 1. The study results indicate certain dependency between the teenage smoking addiction and parents' education. The lowest percentage of smoking boys is observed in families in which both parents have primary education: father – 11.1% and mother – 8.9%, while the lowest percentage of smoking girls was found when both parents had higher education – 4.8% and 9.5% respectively. The highest percentage of smoking teenagers was observed in families where the father and mother have secondary education – in the group of the boys: 71.1% and 65.2%, and in the group of the girls – 80.9% and 61.9%, respectively – Fig. 2.

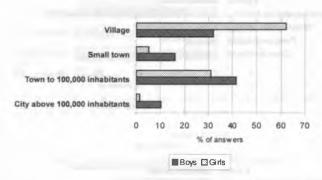


Fig. 1. Percentage of smoking boys and girls depending on the place of residence

The analysis of the relationship between teenage tobacco smoking and parents' professions revealed a bigger dispersion of the results in the case of the boys. The lowest percentage of smokers (7.4%) was reported from the families where the father is a freelancer, but it is the highest when the father is a non-agricultural manual worker. In the group of the girls, the lowest percentage of smokers was observed in families where both parents have freelance jobs (14.3% for both parents) or sole proprietorship-based work (14.3% in both cases). The percentage of smoking girls whose parents have other jobs is approximately two-fold higher – Fig. 3.

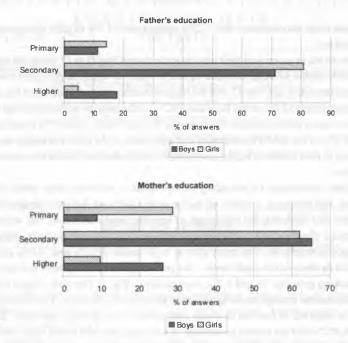


Fig. 2. Dependence between student's smoking and the level of parents' education

Father's job



Fig. 3. Dependence between smoking by students and the parents' job

The percentage of boys who smoke only in company is 26.6%, and girls 29.8%. Boys who smoke only out of home constitute 33.5% and girls 28.4%. The answer "I smoke only in specially designed places" was given by 9.5% boys and 3.3% girls. Despite prohibition signs, 30.4% of the boys and 38.6% of the girls smoke – Fig. 4.

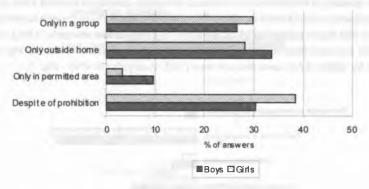


Fig. 4. Circumstances of smoking

The results obtained indicate that secondary school pupils smoke only sporadically. The percentage of the boys reaches 36,1% and the girls 39,2%. Several percent of the surveyed individuals – 19.7% of the boys and 15.3% of the girls – smoke not more than 5 cigarettes daily. 21.3% of the boys and 31.1% of the girls smoke up to 10 cigarettes, and the percentage of boys and girls who smoke more than 20 cigarettes a day reaches 7.7% and 1.5%, respectively – Fig. 5.

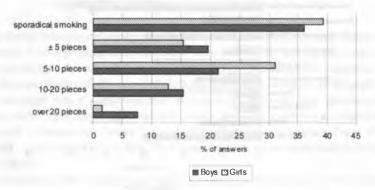


Fig. 5. Number of cigarettes smoked by students

The main reason why young people take up the habit is the example of other teenage smokers. 57.9% of the boys and 60.7% of the girls began smoking under the influence of their peers. A relatively insignificant role plays the parents' example; it encouraged the teenagers to start smoking in an inconsiderable percentage: 4.9% of the boys and 11.1% of the girls admitted this. The data obtained indicate that boys (10.3%) are more susceptible to cigarette advertising than girls (5.9%). It should be emphasized that there is a remarkable percent of pupils who started smoking in defiance of the bans -26.9% of boys and 22.2% of girls - Fig. 6.

78% of the surveyed boys and 81% of the girls want to quit the habit. The most important reason for this decision in the case of 44.9% of the boys and 48.2% of the girls is their knowledge of the deleterious effects of smoking. This is confirmed by the percentage of the answers to the

question concerning pregnancy as a motivation to cease smoking. Over 90% of the pupils agree that a pregnant woman should not smoke. Other remarkably important reasons for giving up the habit are: the influence of non-smoking friends, disease and death of a close person. Parents' encouragement is much less significant. Pregnancy is an important factor for the girls to give up smoking – 28.1% have this opinion. The question of the influence of the media prevention campaigns received a low percentage of answers – such actions would motivate only 9.7% of the boys and 8.2% of the girls to give up smoking. Almost a two-fold higher percentage of the boys (16.7%), compared to the girls (9.8%), claim that no argument will convince them to give up smoking. Reasons classified as "other" in the survey form were chosen by almost three times as many boys (30.1%) as girls (11.4%) – Fig. 7.

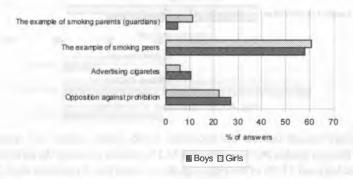


Fig. 6. Reasons for beginning to smoke cigarettes

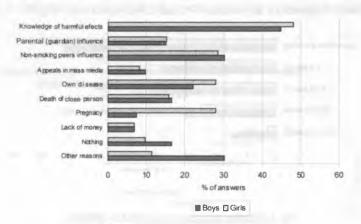


Fig. 7. Decisions of giving up smoking and their reasons

Relatively few secondary school pupils think that active smoking has no effect on health. This opinion is shared by 5.1% of the boys and 2.4% of the girls. An insignificant effect is pointed out by 19.3% of the boys and 16.2% of the girls. The highest percentage of positive answers was obtained to the question of serious health hazards – opinions about remarkably harmful effects of smoking were expressed by 75.6% of the boys and 81.5% of the girls.

Similar opinions are shared by the secondary school teenagers about the effect of passive smoking on health. No such effects are claimed by 8.3% of the boys and 4.6% of the girls. An insignificant effect is perceived by 28.8% of the boys and 33.6% of the girls. 62.9% of the boys and 61.8% of the girls admit that passive smoking causes serious health problems – Fig. 8.

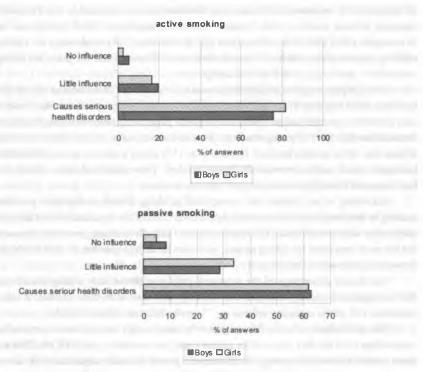


Fig. 8. Opinions about how smoking influences health

Considerable awareness of smoking hazards is visible in the low percentage of positive answers to the question "Can a pregnant woman smoke?" expressed by 8.6% of the boys and 6.7% of the girls. The percentage of pupils who persuade smokers that the addiction is dangerous for people staying in the same smoke-filled room reaches 41.8% of the boys and 48.7% of the girls.

The secondary school pupils associate the smoking habit with lung, pancreas, larynx and oesophagus cancer. They also mention cardiac diseases, including infarction and the coronary heart disease as well as respiratory system (asthma) and urinary system diseases. Some of them also include infertility as a result of smoking. Only some of the boys responded that smoking does not cause any diseases.

The secondary school teenagers are largely exposed to passive smoking – this problem involves 51.6% of the boys and 74.8% of the girls.

Opinions that anti-nicotine campaigns bring the expected results are expressed by 27.2% of the boys and 31.7% of the girls. As it was mentioned previously, media actions do not promote the decision to give up the habit, but they may be an important discouragement against starting to smoke.

## DISCUSSION

The present study demonstrates that the percentage of smoking boys and girls from secondary school is higher (several or several dozen times for boys and girls, respectively) than the percentage of smoking pupils of primary and pre-secondary school (9, 10). Therefore, a question arises: why is this addiction so common among teenagers? Smoking seems to be regarded as an evident sign

of maturity – it becomes its attribute and facilitates social contact (3, 11). Frequently, teenagers associate tobacco smoking with success, wealth and happiness – such feelings are largely related to examples set in films and commercials (3). Nowakowski (15) emphasizes the "delayed effect" of tobacco commercials, which are banned from street billboards and the press but still present in the small-sized, seemingly neutral leaflets and posters.

The high percentage of positive responses to the question "Does anyone in your family smoke?" indicates that a majority of the study teenagers had contact with cigarettes in the family environment, easy access to cigarettes and an example set by their parents and other relatives. Buczkowski et al. (16) demonstrate that 66% of young smokers (a result that is similar to ours) came from families, where at least one of the parents smoked. Hestick et al. (17) report a decline in the risk of addiction among teenagers whose neither parents nor friends smoked. These statistical data confirm the influence of the closest surroundings on initiation of teenage smoking.

According to our results, the example of smoking friends is the most prevalent reason for starting to smoke by secondary school pupils. Over 50% of the boys and 60% of the girls took up the habit under such an influence. The results obtained indicate that opinions of the closest surroundings are the most important for young people, who start smoking cigarettes so as not to be excluded from the social group which they respect.

The similar percentage of the boys and girls who smoke only during social events indicates that teenagers are equally susceptible to the influence exerted by their friends; it also confirms the enormous role of the company influence – "I smoke because others do" (18).

The percentages of secondary pupils who smoke only outside home are markedly lower in comparison with the data reported for primary and pre-secondary pupils (9,10). This may imply that some parents either allow young, 16–18-year-old people to smoke cigarettes or do not or cannot take steps to prevent it. Lack of proper parental control (parents pursuing their careers, looking for a job or emigrating) is accompanied with easy access to cigarettes. While selling tobacco products is confined to special places in many European Union countries, in Poland cigarettes are sold everywhere (15).

The most significant reason for the decision to give up smoking, both in the group of the boys and the girls, is the knowledge of the harmfulness of the habit. Moreover, as it is evident from the responses obtained, the influence of non-smoking friends, illness and death of a close person are the most important reasons for giving up the addiction/habit.

Adolescence is a period when young people tend to take up risks and experiment to test the boundaries of parental control, social tolerance to certain behaviour, and the efficiency of their organisms (19). "Standard" information about the hazards of smoking is insufficient and neither is threatening with the effects of anti-health behaviour. It is essential that the mechanisms of addiction and the complexity of the problem should be explained to young people (20). Therefore, it is the duty of parents, teachers and pedagogists to make teenagers aware of the threats and effects of smoking (21). According to Smoleń et al. (22), a good example set by adults at home and at school together with numerous anti-nicotine campaigns should persuade the young that their prestige will grow among peers when they choose not to smoke, thus showing their adulthood.

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#### SUMMARY

The aim of the study was estimation of the problem of tobacco smoking among students aged 16–18, based on a survey research. The study concerned boys and girls from schools in the southeast of Poland. The questions referred to the place of living, parents' education and professions, circumstances and the number of cigarettes smoked daily, the reasons for starting to smoke and the decisions to give up the habit as well as the awareness of the dangers of smoking. The data obtained revealed that teenagers have the first contact with tobacco smoking at the age of 5–17. They smoke

their first cigarette mainly following friends, and – to a smaller extent – parents. A strong motivation to give up smoking is the awareness of its dangers and the influence of non-smoking friends.

Problem palenia tytoniu wśród młodzieży w świetle badań ankietowych. Część III. Uczniowie szkół licealnych i techników

Celem pracy była ocena problemu palenia papierosów przez uczniów w wieku 16–18 lat na podstawie badań ankietowych. Badaniami objęto chłopców i dziewczęta ze szkół południowowschodniej Polski. W pytaniach uwzględniono miejsce zamieszkania, wykształcenie i zawód rodziców, okoliczności i liczbę wypalanych dziennie papierosów, przyczyny rozpoczęcia palenia oraz decyzji o jego zaprzestaniu, a także stopień wiedzy o szkodliwości palenia. Uzyskane dane wykazały, że pierwszy kontakt młodzieży z paleniem papierosów następuje w wieku 5–17 lat. Młodzież sięga po papierosa przede wszystkim za przykładem kolegów, w mniejszym stopniu rodziców. Silną motywacją do zaprzestania palenia tytoniu jest wiedza o szkodliwości palenia oraz wpływ niepalących kolegów.