### ANNALES UNIVERSITATIS MARIAE CURIE-SKŁODOWSKA LUBLIN-POLONIA

VOL. LXI, N1, 88

SECTIO D

2006

Institute of Rural Medicine in Lublin
Department of Animal Physiology, Maria Curie-Skłodowska University in Lublin
Technical School №1 named after Cardinal Wyszyński in Tarnobrzeg

## ELŻBIETA OSIŃSKA, KAZIMIERA GROMYSZ-KAŁKOWSKA, AGNIESZKA ZWIERZYK-KARŁOWSKA

# The problem of tobacco smoking among the young people under the survey research. I. Primary school pupils

Scientific research demonstrates that tobacco smoking results from both addictive effect of nicotine and motives of psychological and social reasons. Smoking is a habit acquired due to pharmacological addiction to nicotine as well as behavioural adduction. Both types of addiction complete and influence each other (1, 5).

Tobacco smoking leads to serious health consequences for smokers and passive smokers (6, 8, 10). Even though this habit still involves new victims, the number of both occasional and addicted smokers is increasing. The latest findings from several years prove that tobacco smoking among children and young people is escalating (2).

The aim of this study was to obtain the answer to the question what level of smoking among children and students is and what it is conditioned by. The first part of the paper is devoted to primary school pupils.

#### MATERIAL AND METHODS

Survey research concerning the problem of cigarettes smoking among primary school pupils involved 730 people (382 boys and 348 girls), aged 10–12, coming from different regions of southern Poland and from different environments.

During conducting the research, an attempt was made to preserve the constant proportion between sexes in order to obtain the most equal material, which guaranteed comparable results. The obtained data were presented in percentage in tables. The survey included 24 questions involving factors which possibly influence taking up smoking by pupils, such as the place of residence and socioeconomic reasons, the causes leading to giving up the habit and the level of knowledge about the harmful effects of smoking.

#### RESULTS AND DISCUSSION

The conducted research showed that the percentage of smokers among primary school pupils amounted to 4.97% among boys and 2.87% among girls. The age when boys reached for the first cigarette fluctuates between 5 to 12. Girls had the first contact with a cigarette at the earliest at the age of 6, and at the latest, similarly to boys, at the age of 12. It is worth noticing that 39.77% among those boys and 4.29% of girls do not continue smoking. The results presented above are not surprising if we consider that to the question "Does anybody in your family smoke?", 67.87% of boys and 68.27% of girls answered affirmatively. It is likely that an easy access to a cigarette in the family environment and the model of behaviour presented by adults lead to the very first contact with smoking.

The obtained results showed that the least percentage of smoking pupils come from small towns – relatively 5.26% of boys and 10.0% of girls. In towns of up to 100,000 of inhabitants the percentage of smoking boys amounted to 21.05% and is slightly lower than that of girls among whom 30% smoke. There are noteworthy differences between boys and girls inhabiting villages – in this environment there are three times more smoking girls in comparison to boys (relatively 50.0% and 15.97%). The opposite situation takes place in big cities – in that environment boys smoke over five times more than girls (relatively 57.89% and 10.00 %) (Fig. 1).

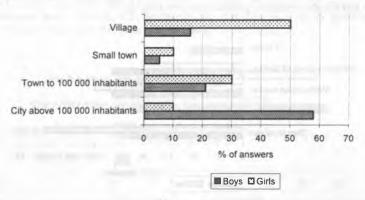
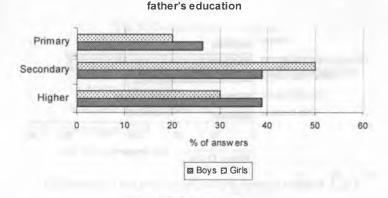


Fig. 1. Percentage of smoking girls and boys depending on the place of residence



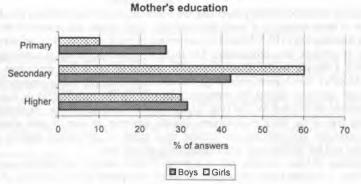


Fig. 2. Dependence between children's smoking and level of parents' education

The results of the research demonstrated a certain dependence between the habit of smoking among children and the education of their parents. The lowest percentage of smoking children occurs in families in which both parents have got primary education. It amounts 26.32% of boys (both in case of a mother and a father) and relatively 20.00% and 10.00%. The highest percentage of smoking children was estimated in case when parents had secondary education – for boys 38.84% and 42.10%, and for girls relatively 50.0% and 60.0%. The between percentage values concern children whose parents have higher education. For boys they amount relatively 38.84% and 32.58%, and for girls relatively 30.0% and 30.0% (Fig. 2).

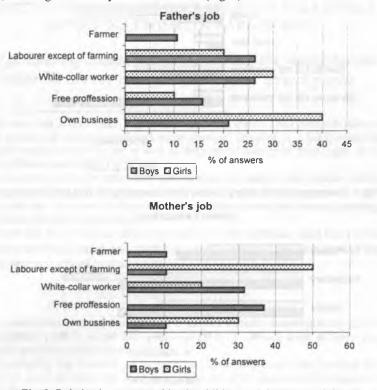


Fig. 3. Relation between smoking by children and the parents' job

Analysing the obtained results concerning the dependence between smoking by children and the profession of their parents, it is worth noticing that when parents are farmers there is the low percentage of smoking boys (10.53%) and no percentage of smoking girls. Non-smoking girls also occur in case of mothers' free professions. The highest percentage values of smoking boys was estimated when a mother works as a white-collar worker or has a free profession (relatively 31.58% and 36.84%). The highest percentage values of smoking girls occur among those whose both parents are labourers except for farming (relatively 20.0% and 50.0%) or run their own business (relatively 40.0% and 30.0%) (Fig. 3). No smokers among farmers' daughters seems to result from the fear of the small environment opinion, however, in case of girls whose mothers have free professions non-smoking can appear as a result of opposition against intensively smoking mother and her professional environment (e.g. artistic one).

The percentage of boys smoking only in a group of peers amounts to 29.17%, and of girls as many as 52.96%. It indicates that schoolgirls are more susceptible to the influence of girlfriends and boyfriends than of their peers. A high percentage of children smoking outside home – 56.25% of boys and 41.17% of girls – indicates that the majority of parents or guardians do not tolerate

smoking children, but some of them do not react or do not have a possibility of reaction as they spend a lot of time outside home. The answers "I smoke only in permitted areas" suggest the lack of reaction on adults' part, when they see a smoking pupil. Despite prohibition only boys smoke, and it hardly ever occurs as the percentage in that case amounts to 4.17% (Fig. 4).

The obtained results show that more than 60% of primary school pupils smoke only sporadically. The percentage of boys amounts to 65.79% and of girls 62.50%. A dozen or so percent of polled pupils smoke not more than 5 cigarettes a day -15.59% of boys and 12.50% of girls. Up to 10 cigarettes smoke daily 13.16% of boys and 18.75% of girls. More than 20 cigarettes a day smoke only boys -2.63%. It is worth noticing that there is a higher percentage of girls smoking 5-10 and 10-20 cigarettes a day in comparison to boys (Fig. 5).

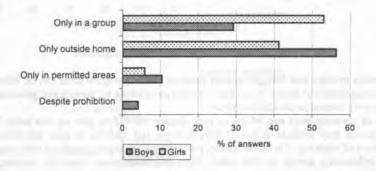


Fig. 4. Circumstances of smoking

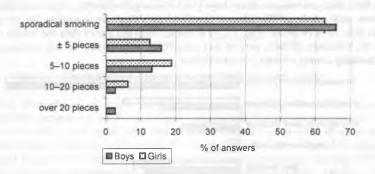


Fig. 5. Number of cigarettes smoked by children

The data demonstrated above should become an alert signal for adults and coax them into taking up actions aiming at least to limit the number of cigarettes smoked by children if the absolute nicotine abstinence is not possible.

The influence of peers is definitely the main reason of starting smoking by primary school children. Under their influence 43.55% of boys and 44.00% of girls begin smoking. The influence of parents is also quite a significant reason – it influenced the beginners in 24.19% (boys) and 32.0% (girls). The obtained data indicate that boys are more susceptible (20.97%) than girls (4.0%) to advertisements presenting cigarettes. However, girls appear to be more perverse (20.0%) than peer boys (11.29%) (Fig. 6).

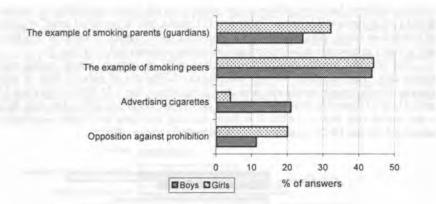


Fig. 6. Reasons for beginning smoking cigarettes

The results indicate that struggle against smoking habit among children can be effective only in case of changeability of adults' behaviour – giving up smoking by parents and guardians as well as showing more interest in the child company.

81.0% of smoking boys and 94.0% of girls declare the will to give up this habit. The most important reason they indicate is for 57.38% of boys and 58.07% of girls the knowledge of harmful effects of smoking. It is confirmed by percentage of answers connected with pregnancy as the factor influencing giving up this habit. There are three more important reasons, such as parents' influence, own disease and death of a close person caused by smoking. Appeals in mass media appeared in surprisingly little amount of answers. Under the influence of mass media only 82% of boys and 3.22% of girls declared the decision about giving up smoking. It is worth noticing than there are twice as many boys (16.36%) as girls (8.44%), who claim that nothing can make them stop smoking. The reasons classified as 'other' are important for twice more girls (18.07%) than boys (9.09%). (Fig. 7). As it results from the above data the health motivation as well as the influence of both parents and peers can be important in the process of struggling against smoking among primary school children.

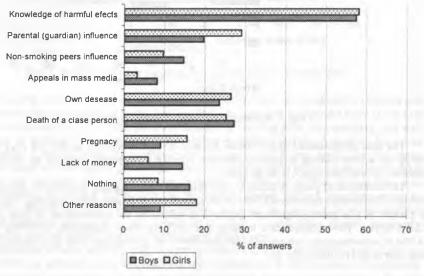
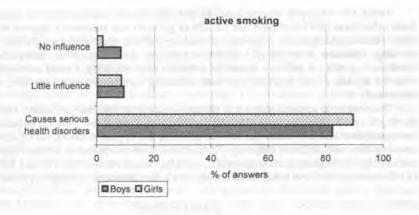


Fig. 7. Decisions about giving up smoking and their reasons



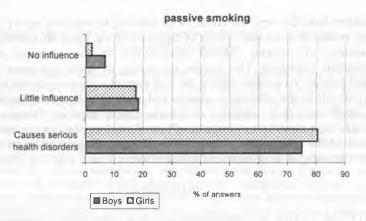


Fig. 8. Opinions about how smoking influences health

Relatively little amount of pupils claim that active smoking does not influence health. The percentage of boys amounts to 8.33% and of girls only 1.94%. The highest percentage of positive answers was obtained in connection with serious health disorders – opinions about exceptionally high harmful effect of smoking express 82.29% of boys and 89.53% of girls. Similar opinions were expressed by pupils in connection with health disorders dependent on smoking. 6.7% of boys and 2.13% of girls are convinced that smoking does not influence health. 18.3% of boys and 17.445 of girls indicate little influence, however, 75.0% of boys and 80.43% of girls think smoking has serious health effects (Fig. 8).

A low percentage of affirmative answers to the question 'should a pregnant woman smoke' indicates high awareness of harmful effects of smoking. Such positive opinion was expressed by only 4.92% of boys and 2.26% of girls. A very high percentage of pollen pupils try to persuade smokers that their habit is harmful for people staying close to them in a fumed room – it amounts to 67.36% of boys and 74.58% of girls.

It is worth noticing that children know a lot about diseases caused by smoking. They associate the habit of smoking with cancers, heart and lung diseases. Only few boys answered that smoking causes no diseases.

Under the results of this research, there can appear serious fear of the risk of passive smoking for children who do not smoke – the problem involves 40.97% of boys and 50.21% of girls.

About 50% of pupils express opinions that anti-nicotine actions bring the expected results. Such belief have 50.53% of boys and 52.42% of girls. As was mentioned, appeals in mass media little influence the decision of giving up smoking but they can encourage children not to start smoking. Opinions about harmful effects of smoking can be based on observation of adults' reactions, e.g. when a father, a mother or a relative stops smoking, a child can connect that fact with the appeals of non-smoking and facts indicating harmful effects of smoking, presented in mass media.

The conducted research shows that children reach for a cigarette very early. The early age of starting to smoke was also noticed in other studies. The report from 1994 (7) concerned smoking among children and it revealed that 18% of boys and 8% of girls at the age of 11, 13 and 15 were smoking then with different frequency. Similar results were obtained in different countries. They indicate that the beginning of quite constant smoking occurs between the 12<sup>th</sup> and 14<sup>th</sup> year of life (3). It concerns both boys and girls. At the age of 13 there are more smoking boys than girls (4,9).

#### CONCLUSIONS

Children have the very first contact with smoking between the age of 5 and 12 and it probably results from an easy access to cigarettes in the home environment. Frequency and intensity of smoking depend significantly on the place of residence and socioeconomic conditions. The impulse for starting to smoke can come from smoking peers and parents. To a lesser degree, the first contact is connected with advertisements. Health motivation, the influence of parents and peers as well as anti-nicotine actions can play a significant role in reaching a decision to give up smoking. Primary school pupils have a very high awareness of harmful effects of smoking, both active and passive, and connect this habit with cancers, heart and lung diseases. Exposing about 50% of children to passive smoking in their home environment seems to be a worrying phenomenon.

#### REFERENCES

- B i j a k M., L a s o ń W.: Neurofarmakologia. Dziś i jutro. Instytut Farmakologii PAN, 267, 268, Kraków 2000.
- Cekiera A., Zatoński W.: Palenie tytoniu: wolność czy zniewolenie? Towarzystwo Naukowe KUL, Lublin 2001.
- 3. Glynn T.J.: Improving the health of U.S. children: the need for early interventions in tobacco use. Prev. Med., 4, 513, 1993.
- Hill D.J.: Tobacco and alcohol use among Australian secondary school student in 1990. Med. J. Aust., 4, 228, 1993.
- 5. Krechniak J.: Nikotynizm. In: Toksykologia, ed. W. Semczuk, PZWL, Warszawa 1990.
- 6. Płytycz B.: Dlaczego trzeba rzucić palenie? Wszechświat, 100, 10/12, 209, 1999.
- Raport "Zachowania zdrowotne i postrzeganie własnego zdrowia przez młodzież szkolną w Polsce". Warszawa 1995.
- 8. Svendsen K.H. et al.: Effects of passive smoking of the Multiple Risk Factor Intervention Trial. Am. J. Epidemiol., 126, 3, 1987.
- 9. Vincent A.L.: The Dominican Republic and the Malboro Brand: a cigarette smoking survey and status report. Bull. Pan. Am. Health Organ., 27, 4, 370, 1993.
- Zatoński W., Przewoźniak K.: Palenie tytoniu w Polsce: postawy, następstwa zdrowotne i profilaktyka. Centrum Onkologii – Instytut M. Skłodowskiej-Curie, Warszawa 1996.

#### **SUMMARY**

Survey research concerning the problem of cigarettes smoking among primary school pupils involved 730 people (382 boys and 348 girls) aged 10–12. The poll questions took into consideration some factors, which possibly influence taking up smoking by pupils, such as the place of residence and socioeconomic reasons, the causes leading to giving up the habit and the level of knowledge about the harmful effects of smoking. The conducted research showed that young children reach for cigarettes very early. The very first contact with a cigarette takes place between the age of 5 to 12. It is likely to happen due to an easy access to cigarettes in the family environment. Children start smoking earlier as they follow the example of their smoking peers and parents. Advertisements appear to be the least important factor influencing the first contact with a cigarette. Both frequency and intensity of smoking significantly depend on the place of residence and socioeconomic status of the family. Primary school pupils have a very high awareness of harmful effects of smoking, both active and passive, and connect this habit with cancers, heart and lung diseases. Therefore, they enumerate health motives as the most important reason for giving up smoking.

Problem palenia tytoniu wśród młodzieży w świetle badań ankietowych.

I. Uczniowie szkół podstawowych

Badaniami ankietowymi dotyczącymi problemu palenia papierosów przez uczniów szkół podstawowych (10–12 lat) objęto 382 chłopców i 348 dziewcząt. W pytaniach ankietowych uwzględniono czynniki mogące mieć wpływ na podejmowanie palenia przez dzieci, takie jak: miejsce zamieszkania i uwarunkowania społeczno-ekonomiczne, przyczyny skłaniające do zerwania z nałogiem oraz stopień wiedzy o szkodliwości palenia. Przeprowadzone badania wykazały, że dzieci bardzo wcześnie sięgają po papierosy. Pierwszy kontakt z paleniem następuje między 5 a 12 rokiem życia. Wynika to prawdopodobnie z łatwego dostępu do papierosów w środowisku rodzinnym. Dzieci rozpoczynają palenie wcześniej, biorąc przykład z palących kolegów i rodziców. W mniejszym stopniu pierwszy kontakt z papierosami związany jest z ich reklamą. Częstość i intensywność palenia papierosów w znacznym stopniu uzależniona jest od miejsca zamieszkania i od statusu społeczno-ekonomicznego rodziny. Uczniowie mają wysoką świadomość szkodliwości palenia zarówno czynnego, jak i biernego i kojarzą nałóg z nowotworami oraz z chorobami serca i płuc. Dlatego też na pierwszym miejscu wymieniają motywacje zdrowotne jako powód zaprzestania palenia.