The prevalence of tobacco smoking among Public Health students at Medical University of Białystok

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Abstract

The rate of cigarettes' consumption in the world is regularly decreasing, although it remains high. In spite of the fashion for non-smoking, younger and younger people start to smoke. It is important that health related major students' behaviour is a social example. The aim of this study was to determine the number of smokers among public health major students at Medical University of Białystok, and to present the influence of socio-demographic features of respondents on their behaviour related to smoking. The results showed that among the examined students the prevalence of smoking was high – almost one-third of respondents smoked. The prevalence of smoking was significantly higher in men than in women students.

Key words: cigarette smoking, smoke, health-related majors' students.

Introduction

According to WHO, in the world, there are almost one billion smoking men and 250 million smoking women. In the year 2000, world inhabitants smoked about 5.5 trillion cigarettes [1]. Poland is one of the leading countries according to the highest cigarettes consumption. In the year 2003, the number of cigarettes per one citizen was 4.3 times higher than the average number per one citizen in 1923 [2]. Among smokers, significant percentage is health related majors' students [3-6]. Smoking is a risk factor of many diseases development, fortunately, one of the few that can be fully eliminated. Health promotion and prevention are the basis of the strategy of health threats elimination, especially the habit of smoking. The significant role in the fight against the habit of smoking is played by health care workers. That is why it is important that behaviour of health related majors' students is an example for the rest of society [7].

Aim

The aim of this study was to determine the number of smokers among public health students and to determine the socio-demographic features influencing students' habits related to smoking.

Material and methods

In March 2007 at the Department of Public Health, Medical University of Białystok we conducted the study on a group of 337 public health major students. We used the questionnaire developed in 2006 by the Chair of Social and Preventive Medicine, Medical University of Łódź. In total, the questionnaire was filled by 286 students, that is 84.9% of all students. Students of public health major filled 109 questionnaires, students of public health – specialization: paramedic – 101, and public health – specialization: dietetics – 76 students. The structure of examined students according to sex, major and specialization is presented in *Tab. 1*. The results were statistically elaborated by using descriptive methods and the methods of statistical calculations. In order to describe analyzed respondents we counted structure indexes and expressed them in percentages. To evaluate whether the relation between analyzed features was statistically significant, we used the independence test chi^2.

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Received 19.03.2007 Accepted 02.04.2007

***Table 1*. Structure of examined students according to sex, major and year of study**

Number	Major	Women		Men		Total	
		N	%	N	%	N	%
1.	Public health	95	47.3	14	16.5	109	38.1
2.	Public health – specialization: paramedic	34	16.9	67	78.8	101	35.3
3.	Public health – specialization: dietetics	72	35.8	4	4.7	76	26.6
Total		201	100.0	85	100.0	286	100.0

***Table 2*. Public Health students' habits related to smoking in January and February 2007**

Number	Habits related to smoking	Total	
		N	%
1.	Smoking	88	30.8
2.	Non-smoking	198	69.2
Total		286	100.0

***Figure 1*. Public health students' habits related to smoking in January and February 2007 according to sex (N=286)**

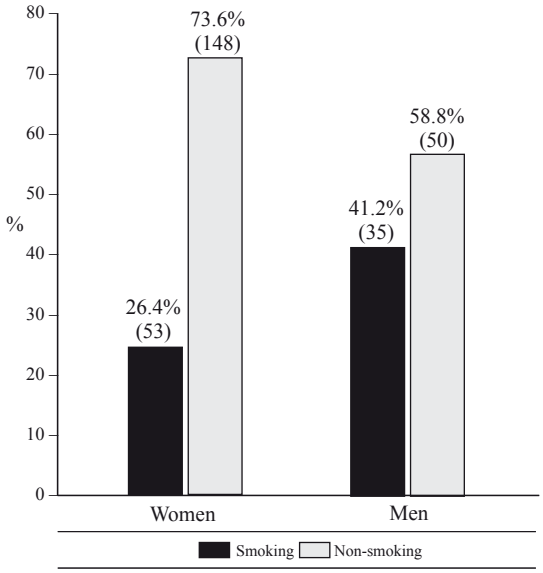
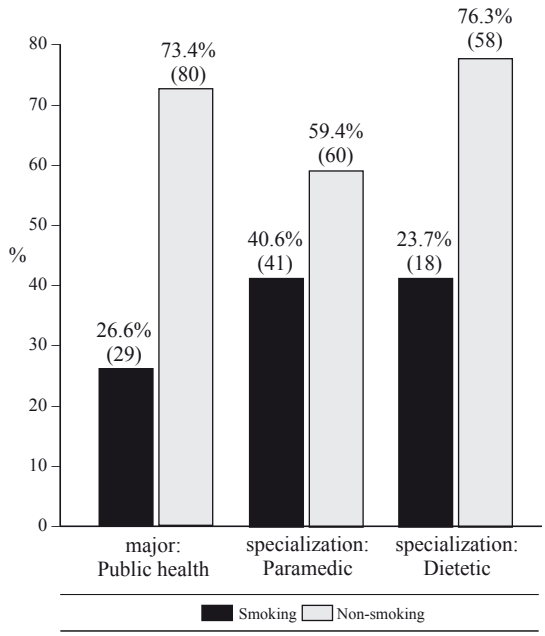


***Figure 2*. Public health students' habits related to smoking in January and February 2007 according to major (N=286)**



Results

The analysis of results showed that among 286 students, 198 people (69.2%) stated that at least in January and February 2007 did not smoke, and 88 respondents (30.8%) described themselves as smokers (*Tab. 2*). Among 198 non-smokers there were 148 women – 74.7% and 50 men – 25.3%.

In the group of women, non-smokers were 73.6%, and smokers 26.4%. Among men non-smokers were 58.8%, and smokers 41.2%. The habits of students are presented in (*Fig. 1*).

Among Ppublic health major students 29 people (26.6%) stated that they smoked during the analyzed period of time, and 80 students (73.4%) stated that they did not smoke at all. Among students of public health – specialization: paramedic 41 people (40.6%) stated that they smoked, and 60 people (59.4%) that they did not smoke at all. Among public health – specialization: dietetics, smokers were the smallest number, that is 23.7% (18 people), and 58 non-smokers – the highest number – 72.3% (*Fig. 2*).

In a group of 88 smoking respondents – 13 people (14.8%) were living in the cities with the citizens number between 50 thousand and 100 thousand, and the rest of smokers in equal groups (25 people each; each 28.4%) were living in large cities, and also in small cities with the number of citizens less than 50 thousand of people (*Fig. 3*).

In the group of smokers, the highest percent, that is 61.4% of examined have had older brothers or sisters, and in the group of non-smokers the percent of respondents with older brothers and

***Figure 3*. Public health students' habits related to smoking in January and February 2007 according to the residence place (N=286)**

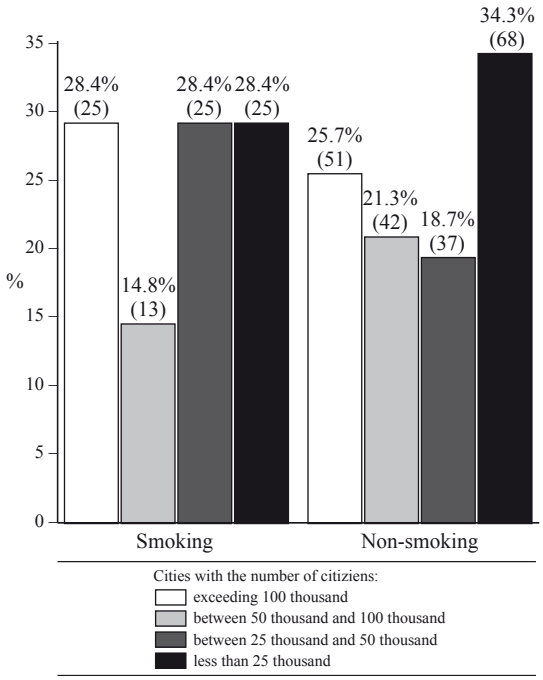
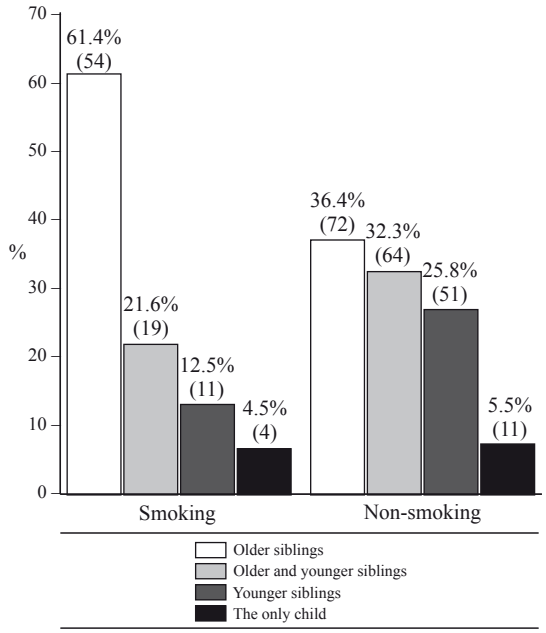


***Figure 4*. Public health students' habits related to smoking in January and February 2007 according to siblings (N=286)**



sisters was 36.4%. Younger brothers or sisters in the group of smokers were observed in 21.6% of respondents, and in the group of non-smokers – 36.4%. In the group of smokers, both older and younger brothers and sisters were observed in 12.5% of examined students, and in the group of non-smokers 25.8% (*Fig. 4*).

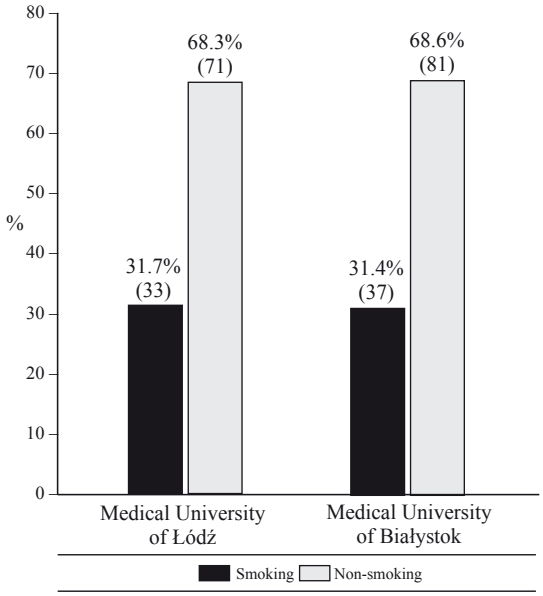
Discussion

The prevalence of tobacco smoking among Public Health students at Medical University of Białystok was high, because almost every third person in response to the questionnaire stated that he or she smoked during analyzed period of time. Students of public health – specialization: paramedic smoked more often in comparison to students of public health major and students of public health – specialization: dietetics (chi^2=7.255; p=0.026). The results of studies performed in the other research centers show that the frequency of tobacco smoking among academic students was similarly high [8-12]. The results of our study show that the frequency of smoking in the group of men was significantly higher than in the group of women (chi^2= 6.150; p= 0.013). The percentage of smoking men was higher in comparison with women by 14.8 percent points. The frequency of smoking among men students in comparison with women students was higher also at Medical University in Łódź [13], at Medical University in Lublin [8], at Medical University and at University in Poznań [12], and also among students of health related majors in Greece [14] and Slovakia [15]. The results of our study show that the frequency of smoking among students living in large cities, that is with the number of citizens exceeding 100 thousand of people, in the cities with the number of people from 25 to 50 thousand and living in the small towns was quite similar (chi^2=4.791; p=0.19). The studies performed in Lublin show that students living in cities smoked significantly more often that students from small towns [8]. Our study show that in the group of smokers, the percentage of respondents with younger brothers or sisters and both older and younger brothers or sisters was significantly lower than in the group of non-smokers (chi^2=16.119; p=0.001). During the analysis of students, we isolated first year students. As we could see, the percentage of smokers which was 31.4% of first year students of public health major, was lower by 0.3 percent point in comparison with the first year students of the Department of Health Sciences, Medical University of Łódź (*Fig. 5*) [16]. The frequency of smoking among academic students of health related majors is constantly on worrisome high level.

Conclusions

1. The prevalence of smoking among Public Health students was high – almost every third person smoked.
2. The frequency of smoking was significantly higher among men than women students.
3. The respondents with younger siblings were less frequent smokers than the group with only older siblings or than the group of the only child.
4. Worrisome high level of smoking frequency among health-related majors' students needs the implementation of directed actions aimed at lowering the number of smokers.

***Figure 5*. The comparison between first year smoking students (public health major) from Medical University of Łódź and Medical University of Białystok**



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