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The prevalence of tobacco smoking and attitudes of Polish pulmonologists towards smoking

Rozpowszechnienie palenia tytoniu i postawy wobec palenia wśród polskich pneumonologów

Streszczenie

Wstęp: Pneumonolodzy odgrywają ważną rolę w zapobieganiu i ograniczaniu palenia tytoniu. Celem pracy była ocena rozpowszechnienia nałogu palenia tytoniu wśród tej grupy specjalistów w Polsce oraz zbadanie ich zachowań wobec palących pacjentów.

Materiał i metody: Badania ankietowe przeprowadzono w 2006 roku podczas XXIX Zjazdu Polskiego Towarzystwa Chorób Płuc. Ankieta zawierała pytania dotyczące wieku, płci, działalności zawodowej, specjalizacji i stopnia naukowego oraz nałogu palenia respondenta, a także postawy wobec palenia i aktywności lekarza w czasie kontaktów z palącym pacjentem.

Wyniki: Ankiety wypełniło 498 lekarzy — 160 mężczyzn (32,1%) i 338 kobiet (67,9%). Badani stanowili 58,5% spośród 852 lekarzy, którzy otrzymali ankietę. Palaczami było 11,3% badanych (13,8% M i 10% K), 25,1% — byłymi palaczami, a nigdy nie paliło 63,6% lekarzy. Spośród ankietowanych 91,4% zawsze pyta pacjentów, czy palą papierosy, w tym 87,4% lekarzy zawsze zaleca pacjentom porzucenie nałogu, ale pomoc w tym zakresie proponuje jedynie 48% badanych. Niespełna połowa lekarzy stosuje leki w terapii uzależnienia od tytoniu (48,4%). Większość respondentów (81,1%) uważa, że postawa lekarza wpływa na postawę pacjenta. Ponad połowa lekarzy (55,7%) uważa, że palenie papierosów przez lekarza nie jest zgodne z etyką lekarską. Aż 91,4% popiera zakaz palenia w miejscach publicznych.

Wnioski: Badania pokazują niskie rozpowszechnienie palenia wśród polskich pneumonologów w porównaniu z ogólną populacją i z wcześniej przeprowadzoną ankietą oraz wskazują na wpływ osobistego palenia na postawę lekarzy wobec palenia tytoniu.

Słowa kluczowe: rozpowszechnienie palenia, praktyka kliniczna, postawy lekarzy wobec palenia, palenie tytoniu, porada antynikotynowa

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Abstract

Introduction: Pulmonologists can play an important role in smoking prevention and control. The aim of this study was to assess smoking prevalence among Polish pulmonologists and physicians' behaviour towards smoking patients.

Material and methods: The study was performed in 2006 during national congress of Polish Respiratory Society. The survey was performed using a questionnaire including questions regarding age, sex, professional activities, specialty, academic degree and respondents' nicotine status, attitude and activity towards smoking patients.

Results: Questionnaires were filled in by 498 physicians: 160 (32.1%) men and 338 (67.9%) women, out of 852 participating physicians (58.5%) who received the questionnaire. There were 11.3% smokers (13.8% men and 10% women), 25.1% of surveyed physicians were ex-smokers, and 63.6% never smokers. 91.4% of respondents always ask patients if they smoke. 87.4% physicians always advise smoking cessation to their patients, but smoking cessation support is offered only by 48%

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of respondents. Almost half respondents use drugs in nicotine dependence treatment. Majority of respondents (81.1%) think that physician's attitude influences patient's behaviour. More than a half (55.7%) think that smoking by physicians is not in accordance with physician's ethics. 91.4% support smoking ban in public places.
Conclusions: This study found a lower prevalence of smoking among Polish pulmonologists compared with the general population, and with the previous surveys and demonstrated the impact of personal smoking on physicians' attitudes towards smoking.

Key words: smoking prevalence, clinical practice, physicians' attitudes towards smoking, tobacco smoking, antismoking advice
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Introduction

Smoking cigarettes causes or contributes to the development of many mortal diseases or conditions leading to disability [1]. Statistically, each year of smoking after the age of 40 reduces the smoker's estimated healthy life period by about 3 months [2]. It is widely recognized that most smokers attempt to quit smoking many times, but the struggle against the smoking addiction is very difficult and the odds in favour of a successful attempt to quit smoking do not exceed 5% [3]. Patients with COPD are the group of smokers for whom the need to stop smoking is the most urgent. Although smoking cessation does not reverse the pathological changes, nor reduces airway obstruction, it normalizes the rate of lung function decline. Currently it is the only way to stop the progress of this disease [4, 5]. The smoking of cigarettes by patients with asthma is associated with an evidently worse response to corticosteroid treatment [6, 7]. Patients after treatment for lung cancer have a better prognosis for survival if they give up smoking [8]. Smoking also contributes to the development of several less-known diseases such as desquamative interstitial pneumonia (DIP), respiratory bronchiolitis-associated interstitial lung disease (RB-ILD) and pulmonary Langerhans' cell histiocytosis [9].

In their everyday work, lung specialists meet patients suffering from conditions directly linked to smoking and thus are burdened with the professional responsibility of encouraging and supporting their patients in efforts to give up [10]. They are often perceived as models of proper health attitudes [11]. Physicians who smoke cigarettes should quit this addiction in order to become a guiding light for their patients. Furthermore, they should play a key role in influencing their patients to change their smoking behaviour and should support them and advise them on how to give up smoking. Historical data show that physicians, as a group, generally quit smoking earlier than other people, thanks to their social and economic status. Once the risk connected with smoking became widely known, physicians started to quit smoking more frequently than the general population. In some countries the reduction of smoking prevalence among physicians was quite spectacular [11–13].

The aim of this project was to assess the prevalence of smoking among Polish chest physicians and to determine their attitude towards smoking and smoking behaviour in their clinical practices while in contact with smoking patients.

Material and methods

The study was performed in September 2006 during the XXIX Congress of the Polish Respiratory Society. Anonymous questionnaires were handed to 852 physicians when they entered the conference room and they were collected before the end of the convention.

The first part of the questionnaire concerned demographic data (age, sex, professional activities, speciality and academic degree). **The second part** included questions about their attitude towards smoking, any training regarding smoking addiction treatment and questions concerning physicians' activities and attitudes while in contact with smoking patients.

The third part was directed exclusively towards current smokers and ex-smokers. It consisted of several questions regarding active smoking (questions concerning the number of cigarettes smoked by the respondent, the date when he/she began smoking cigarettes, smoking cessation attempts or the date when he/she gave up smoking, smoking in the work place and smoking in the presence of non-smokers and in the presence of children). The questionnaire contained 22 questions which could be answered in just a few minutes.

Respondents who stated that they smoked at least one cigarette per day where categorized as smokers (in accordance with the WHO definition) [14]. Respondents who stated that they used to smoke cigarettes either on a daily basis or only occasionally in the past and, at the same time, during their entire life stated that they had smoked at least 100 cigarettes were categorized as ex-

smokers. A person who stated that he or she did not smoke at the time of the survey was categorized as a non-smoker. This category included never-smokers and ex-smokers.

Results

The questionnaires were filled in by 498 physicians: 160 men (32.1%) and 338 women (67.9%); this amounted to 58.5% of the 852 physicians who received a questionnaire.

Nearly half of the respondents (41.2%) were aged between 40 and 49, and 23.7% were 50–59 years old. Only 16 physicians (3.2%) were below the age of 30. More than a half of the respondents (52.1%) had worked in the healthcare system for 15 to 30 years. 191 doctors (38.4%) worked in a hospital, 124 (24.9%) worked in outpatient clinics and 183 physicians (36.7%) worked both in a hospital and in a clinic. The majority of physicians (93%) lived in a city, and only 7% of respondents lived in the country. Most of the respondents (387 — 78.8%) were 2nd grade specialists of lung diseases; 15.1% of them were doctors with a higher university degree.

In their medical practice, 219 respondents (44.0%) had participated in training of tobacco addiction but only one-third of the physicians (30.1%) had completed courses of smoking addiction treatment (apart from training during meetings, conferences and within the confines of their speciality course).

Tobacco addiction among chest physicians

56 physicians (11.2%) (including 13.7% males and 10.1% females) were current smokers. Among 442 non-smokers (88.8%), 316 (63.5%) had never smoked a cigarette, whereas 126 (25.3%) used to smoke in the past. Most of the ex-smokers belonged to the group of people that were over the age of 60 (38.5%) or were between 50 and 59 years old (37.3%). On average, the ex-smokers had given up smoking 12.7 ± 8.6 years ago. Half of them (50.4%) had given up smoking in the last 10 years, and only one fourth (24.0%) in the last 5 years. The highest percentage of physicians that had given up smoking (60%) was found in the group of males aged between 50 and 59. Smoking prevalence was highest in the group of the oldest patients, aged over 60 (13.5%) especially among males (20%). Smoking prevalence was highest among women that were between 50 and 59 years old (12.8%) whereas it was lowest in the group of women aged between 30 and 39. There were no current smokers among young doctors below the age of 30 and as many as 87.5% of them had never smoked cigarettes. Table 1 shows nicotine status among lung specialists with regard to their age and sex.

On average, the smokers had started smoking at the age of 20.7 ± 3.6 and smoked 13.2 ± 10.4 cigarettes a day. One fourth of the smokers smoked more than 20 cigarettes a day, and 39.3% of the smoking physicians smoked at work. More than one-third of the smokers (33.9%) smoked in the presence of non-smokers, and 14.6% smoked in the presence of children.

More than a half of smokers (51.8%) had tried to quit their tobacco addiction, making 4.3 ± 3.9 smoking cessation attempts on average, and their average total abstinence period was 3.3 ± 3.1 years.

One fourth (24.5%) of the smoking physicians admitted that they needed help in smoking cessation. Such support was significantly more frequently ($p < 0.004$) needed by physicians who had already made several attempts to quit smoking (37.9%) than smokers who had not tried to quit smoking (7.4%).

Attitudes towards smoking cigarettes

The majority of physicians (455 persons — 91.4%) supported a ban on smoking in public places; non-smoking doctors (94.8%) supported such a smoking ban significantly more often than smoking physicians (66.1%) ($p < 0.0001$).

Over a half of the doctors (277 persons — 55.7%) believed that "smoking cigarettes by physicians is contrary to medical ethics — a physician should set a good example for patients", but this opinion was shared more often by non-smoking doctors (59.4%) than by smoking ones (26.8%). Furthermore, among non-smoking physicians this opinion was supported more often by never-smokers (44.2%) than ex-smokers (15.2%) ($p < 0.0001$).

The question "do you think that the doctor's attitude influences the patient's attitude? (e.g. when the doctor smokes cigarettes, the patient will not follow his/her recommendations and thus will not quit smoking?)" was answered positively by 403 physicians (81%) and negatively by 48 physicians (9.6%), whereas 47 of them (9.4%) had no opinion.

Smoking physicians denied significantly more often that their tobacco behaviour influenced patients' attitudes. Among 56 smoking physicians, 15 (26.8%) claimed that the doctor's behaviour does not affect patients' attitudes. Whereas among 442 non-smoking doctors, such an opinion was shared only by 33 people (7.5%) ($p < 0.0001$).

Most of the respondents (459 cases — 92.2%) believed it was right to repeat advice if the patient did not quit smoking; 6 physicians (1.2%) thought that it did not matter, and 33 (6.6%) had no opinion on this topic.

Table 1. Smoking status among pulmonologists in relation to age and sex

Tabela 1. Status palenia wśród lekarzy pneumonologów w zależności od wieku i płci

Age (years) *Wiek (lata)*	Current smokers *Aktualnie palący*						Former smokers *Byli palacze*						Never smokers *Nigdy niepalący*						*Total/ Razem*	
	M/M		F/K		Total/*Razem*		M/M		F/K		Total/*Razem*		M/M		F/K		Total/*Razem*			
	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
25–29	0	0	0	0	0	0	1	33.3	1	7.7	2	12.5	2	66.7	12	92.3	14	87.5	16	3.2
30–39	7	17.1	4	6.1	11	10.3	3	7.3	11	16.7	14	13.1	31	75.6	51	77.2	82	76.6	107	21.5
40–49	6	11.8	18	11.7	24	11.7	13	25.5	33	21.4	46	22.4	32	62.7	103	66.9	135	65.9	205	41.2
50–59	4	10.0	10	12.8	14	11.9	24	60.0	20	25.6	44	37.3	12	30.0	48	61.6	60	50.8	118	23.7
≥ 60	5	20.0	2	7.4	7	13.5	11	44.0	9	33.3	20	38.5	9	36.0	16	59.3	25	48.0	52	10.4
Total *Razem*	22	13.7	34	10.1	56	11.2	52	32.5	74	21.9	126	25.3	86	53.8	230	68.0	316	63.5	498	100.0

Using minimal smoking cessation intervention

The vast majority of lung specialists (91.4%) stated that they always asked patients about their smoking status during a visit. Similarly, 87.4% of physicians participating in the survey always advised smoking cessation to their smoking patients, but less than half of them offered support in smoking cessation to their patients (48%) or used medicines in tobacco smoking treatment (48.8%). One third of them (29.3%) offered support to patients in smoking cessation only if the patient asked for it.

29.7% of physicians used nicotine replacement therapy in tobacco addiction treatment (18.3% in the form of chewing gum, 16.1% in the form of patches), 31.3% of physicians prescribed bupropion and 14.7% prescribed Tabex. Table 2 shows details of using minimum smoking cessation intervention by lung specialists.

Discussion

The results of the study showed that 11.2% of lung specialists (including 13.7% males and 10.1% females) were current smokers. Smoking prevalence among female and male doctors was lower than in the general population (39% of men smoke and 24% of women) [15]. This is a very positive effect because non-smoking physicians induce their smoking patients to quit smoking not only by counselling but also by setting a good example.

It is also a very encouraging sign that the smoking prevalence among lung specialists in Poland is lower than it was sixteen years ago. The first studies concerning the prevalence of smoking within this group of specialists, performed by Górecka et al. [16], showed that in 1990 33.2% of physicians specializing in tuberculosis and other lung diseases were tobacco smokers. This number included 38.1% men and 29.3% women. Unlike in this study, at that time the biggest occurrence of smokers was in the group of people under 30 years of age (55.8% men and 32.1% women) and in those aged between 30 and 39 (47.9% men and 41.6% women). At that time, never-smokers made up only 38.9% of all the respondents (26.4% men and 48.4% women), unlike this study, in which the percentage of never-smokers was 63.5% (53.8% men and 68% women). The group of male never-smoking physicians has doubled during the last 16 years.

The decrease of smoking among lung specialists resulted not only from the increase of the percentage of never-smokers but also that of ex-smokers. On average, ex-smokers quit smoking 12.7

Table 2. The use of minimal antismoking intervention by pulmonologists

Tabela 2. Stosowanie minimalnej interwencji antynikotynowej przez badanych pneumonologów

Question *Pytanie*	No of persons *Liczba*	%
During the visit do you ask patients if they smoke? *Czy podczas wizyty lekarskiej pyta Pani/Pan pacjenta czy pali papierosy?*		
a. Yes, always/*Tak, zawsze*	455	91.4
b. Sometimes — when a patient complains of symptoms related to smoking *Czasami — gdy pacjent skarży się na objawy związane z paleniem papierosów*	36	7.2
c. No/*Nie*	7	1.4
Do you recommend smoking cessation to smoking patients? *Czy palącemu pacjentowi zaleca Pani/Pan zerwanie z nałogiem?*		
a. Yes, always/*Tak, zawsze*	435	87.4
b. Yes, if their disease is related to smoking *Tak, jeśli jego choroba jest związana z paleniem papierosów*	62	12.4
c. No/*Nie*	1	0.2
Do you offer to help your patients in smoking cessation? *Czy proponuje Pani/Pan pacjentowi pomoc w rzuceniu palenia?*		
a. Yes/*Tak*	239	48.0
b. No/*Nie*	114	22.7
c. Only when the patient asks for help/*Tylko gdy pacjent mnie o to poprosi*	146	29.3
Do you use medicines in nicotine dependence treatment? *Czy w leczeniu uzależnienia od tytoniu stosuje Pani/Pan leki?*		
a. Yes/*Tak*	243	48.8
— nicotine replacement therapy/*nikotynową terapię zastępczą*	148	29.7
— bupropion	156	31.3
— Tabex	73	14.6
b. No/*Nie*	255	51.2

± 8.6 years ago. Half of them quit smoking during the last 10 years. Perhaps this fact is associated with the smoking cessation campaign conducted at the beginning of the 1990s, legislative regulations and the implementation of a governmental program for the reduction in the adverse health consequences of tobacco smoking [17]. The highest percentage of physicians that quit smoking (60%) was found in the group of males aged between 50 and 59. This group of physicians graduated their medical studies between 1972 and 1981, when the habit of smoking was spreading in Poland [18]. Knowledge about smoking related diseases in the general population was not very common at that time [19]. Those physicians (just after the youngest ones, below 30 years of age), when they were 30–40 years old, were those who smoked the most.

One fourth (24.5%) of currently smoking physicians admitted that they needed support in smoking cessation which means that some, of over a half of smokers that make attempts to quit smoking, are not able to do it without professional support. The need for help to quit smoking was also indicated by Siemińska et al. [20] who claimed that 23% of smoking students of medicine would like to undergo smoking cessation therapy.

The actual smoking prevalence among lung specialists in Poland today is probably higher than our figures suggest because the research was limited by the number of responses received (58.5%). Although this figure is not unusual for studies in this field [21, 22], one should bear in mind that a statistical error could have occurred (selection bias). Nevertheless, if a statistical error did occur, it is likely that the respondents represent the group of physicians who are more active in the struggle against smoking than those who did not fill in the questionnaire. As the group of physicians below the age of 30 was very small, one should draw conclusions regarding the smoking status distribution of that group very carefully. Despite this fact, in our opinion, the results that we obtained include valuable information on smoking prevalence among lung specialists.

The prevalence of current smokers among Polish lung specialists seems to be lower than in France (32.1%) [23], Italy (28.3%) [24], Germany (18%) [13], Japan (20%) [25], Greece (38%) [26] and Bosnia-Herzegovina (40%) [27], but still higher than in the USA (2%) [28], Australia (3%) [29], Great Britain (3%) [30], Finland (5%) [31], Sweden (6%) [32] and the Netherlands (8.2% general practitioners, 4.3% cardiologists, 3.5% lung specialists) [21].

The majority (91.4%) of physicians, both smokers and non-smokers, support a ban on smoking in public places, but non-smoking doctors support this idea more often. 81% of physicians believe that the doctor's attitude towards smoking influences the patient's behaviour — if the doctor smokes cigarettes, then the patient does not follow his/her recommendations and will not quit smoking. However, smoking physicians significantly more often denied that their tobacco habit influenced the attitude of their patients. Similarly, in the study performed by Bolinder et al. [32] the role of the physician as an example of behaviour for patients was considered very important by 71% of Swedish doctors. In the study performed by Górecka et al. [16] 77.7% of lung specialists believed that physicians should not smoke cigarettes.

An important role regarding the assessment of attitudes towards smoking is played by minimal intervention in smoking cessation (MI) carried out by physicians. MI [33] consists of five actions for each patient who smokes cigarettes: 1. **Ask** about their smoking status, 2. **Advise** them to quit smoking, 3. **Assess** their willingness and readiness to quit smoking, 4. **Assist** the smoker in smoking cessation, 5. **Arrange** dates for follow-up visits. The vast majority of physicians (94.1%) always assess patients' smoking status, and 87.4% of lung specialists always advise their patients to quit smoking, but less than half of them offer support in smoking cessation or use medication of tobacco smoking treatment. One third of them offer support to patients in smoking cessation only if a patient asks for it, and nearly one fourth do not help to quit smoking at all.

29.7% of the respondent use nicotine replacement therapy and/or bupropion in smoking treatment. Górecka et al. obtained similar results regarding MI application in their study on physicians working in tuberculosis and lung disease wards as well as in a study on the society of Warsaw doctors [34]. Currently, lung specialists use medicines in nicotine addiction treatment more often (48.4%) than they did in 1990 (20%). However, in the study performed by Kotz et al. [21] 67% of lung specialists used bupropion, 36.3% used patches and 18.2% used nicotine chewing gum. Similarly, two thirds of French physicians [23] advised their patients to try nicotine replacement therapy, but only 26.9% of lung specialists in Holland [21] used the strategy of minimal intervention for smoking cessation.

Our study has shown that only one third of lung physicians (30.1%) completed a course on tobacco smoking treatment. Perhaps those doctors who lose the opportunity to provide smoking cessation advice to their patients feel unprepared to fulfil such a role for them. Taking into account how important lung specialists are in promoting a smoke-free life-style among the general population, these results indicate the necessity of their further education. Perhaps nurses should also participate in these activities, just as Dutch lung specialists have arranged [21], and lung hospitals should introduce tobacco control programs to become smoke-free places [17, 35].

Lung specialists can also take advantage of hospitalisation as an opportunity to encourage their patients to quit smoking, not only because the disease or condition that caused the hospitalisation could have resulted from smoking, highlighting the fact that the patient is prone to smoking-related health risks, but also because hospitalised smokers are temporarily put in a nicotine-free environment, which offers them a unique chance to make an attempt to start treatment aimed at smoking cessation.

Physicians are aware of the importance of smoking cessation but many of them think that they can do very little if nothing at all to help their patients. Actually, the field of addiction medicine that covers smoking cessation has developed significantly and now a lot can be done to support even the heaviest smokers with smoking cessation [33].

Issues related to nicotine addiction and smoking cessation are more and more widely discussed in medical journals and at recent meetings, which indicates that lung specialists are more active in tobacco control campaigns than they were in the past. Since 1999 the National Tuberculosis and Lung Disease Research Institute in Warsaw organized courses on nicotine dependence treatment within the confines of postgraduate studies. In 2005 the Polish Society of Lung Diseases published guidelines concerning the diagnosis and treatment of tobacco dependence [33], and in 2006 the Polish National Health Fund announced Program profilaktyki chorób odtytoniowych „Palenie jest uleczalne" (Tobacco related diseases prevention programme "Smoking is curable") [36].

We hope that, thanks to these actions, smoking prevalence among lung specialists will continue to reduce and that lung physicians will become more active and efficient in the struggle against tobacco smoking, which will result in a reduction in premature deaths even among smokers who have already tried to quit smoking many times.

Conclusions

1. Smoking prevalence among Polish lung specialists has dropped since 1990 and now it is lower than in the general population.
2. One fourth (24.5%) of currently smoking physicians admits that they need help in smoking cessation.
3. Most physicians (91.4%) support a ban on smoking in public places
4. The vast majority of lung physicians participating in the survey always ask their patients about their nicotine status and recommend smoking cessation to their smoking patients, but less than half of them offer support to their patients in smoking cessation or use medicines in tobacco smoking treatment.
5. Chest physicians should participate in mandatory training courses on tobacco dependence treatment.

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