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ORIGINAL PAPER

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# ACTIONS REDUCING TOBACCO SMOKING AT THE WORKPLACE – DO LARGER AND RICHER COMPANIES SOLVE THE PROBLEM BETTER?

DZIAŁANIA OGRANICZAJĄCE PALENIE TYTONIU W ZAKŁADACH PRACY – CZY WIĘKSZE I BOGATSZE FIRMY LEPIEJ ROZWIAZUJA PROBLEM?

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#### ABSTRACT

Background: Workplaces are an important subject of state policy regarding smoking. They are obliged to comply with the prohibition of smoking in public places, except special smoking rooms - if the employer decides to create such. This paper discusses the Polish enterprises activity in relation to smoking, according to new legal obligations and principles of health promotion programs. Furthermore, the article raises the question whether companies' size and economic situation differentiate their attitude to smoking. Material: 1002 interviews (computer-assisted telephone interview - CATI) conducted in November/December 2010 (date of entry into force of the new law regarding smoking at the workplace) in a representative sample workplace employing above 50 employees. Results: A total smoking prohibition applies in 23% of companies, smoking is allowed only in special smokingrooms and outside the building in 54% of enterprises, in 23% of companies regulations are inconsistent with the state policy (for example smoking allowed in the corridors). Apart from smoking bans, companies introduce disciplinary punishments for breaking them and health education (in the absence of other activities promoting non-smoking). In one in three companies` the management does not enforce the compliance with the introduced regulations. Generally, the management does not see a connection between employees smoking and the functioning of the company. In every second company, employees to a greater or lesser extent break the smoking ban. Companies' economic situation does not differentiate their attitude to the problem, the size of employment only slightly. Conclusions: The results obtained can be used for future evaluation of the effectiveness of the state tobacco control policy and proper direction of the programs aimed at releasing companies from smoke as well as campaigns prepared for employers. Med Pr 2012;63(3):257-270

Key words: tobacco smoking, enterprises, anti-tobacco policy, health promotion

## STRESZCZENIE

Wstęp: Zakłady pracy są istotnym podmiotem polityki państwa wobec palenia tytoniu. Są zobligowane do przestrzegania zakazu palenia w pomieszczeniach, co nie dotyczy specjalnych palarni – jeżeli pracodawca takie udostępni. W artykule omówiono aktywność zakładów pracy w Polsce w odniesieniu do palenia tytoniu, ujętą w kontekście nowych obligacji prawnych oraz zasad programów promocji zdrowia. Postawiono też pytanie, czy wielkość i kondycja finansowa firm różnicuje ich stosunek do palenia. Materiał: W listopadzie i grudniu 2010 r. (wejście w życie nowych rozwiązań prawnych) przeprowadzono 1002 wywiady (computer associated telephone interview – CATI) w reprezentatywnej grupie zakładów pracy zatrudniających pow. 50 pracowników. Wyniki: Całkowity zakaz palenia obowiązuje w 23% zakładów, w 54% palenie jest dozwolone tylko w palarniach lub poza budynkiem, w 23% występują regulacje niezgodne z prawem (m.in. zgoda na palenie na korytarzach). Oprócz zakazów palenia firmy wprowadzają kary dyscyplinarne za ich łamanie i edukację zdrowotną, inne działania wspierające niepalenie nie występują. W co trzeciej firmie kadra zarządzająca nie egzekwuje przestrzegania wprowadzonych uregulowań. Powszechnie nie dostrzega też związku palenia tytoniu przez pracowników ze sposobem funkcjonowania zakładu. W co drugiej organizacji pracownicy w większym lub mniejszym stopniu omijają zakazy palenia. Kondycja ekonomiczna firm nie różnicuje ich stosunku do problemu, a wielkość zatrudnienia różnicuje je w tym zakresie jedynie w niewielkim stopniu. Wnioski: Dzięki badaniu uzyskano dane, które mogą posłużyć do przyszłej oceny skuteczności polityki antytytoniowej państwa oraz ukierunkowaniu programów uwolnienia firm od dymu tytoniowego i kampanii adresowanych do pracodawców. Med. Pr. 2012;63(3):257–270

Słowa kluczowe: palenie tytoniu, zakłady pracy, polityka antytytoniowa, promocja zdrowia

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The paper written in connection with the project topic of the Nofer Institute of Occupational Medicine 7.1/2011 "Anti-tobacco activities at workplaces in Poland in the context of amendments to the Act on the protection of health against the consequences of tobacco use" ("Działania antytytoniowe w zakładach pracy w Polsce w kontekście zmian Ustawy o ochronie zdrowia przed następstwami używania tytoniu i wyrobów tytoniowych"), financed from a state donation on statutory activity of the Institute. Head of the project: K. Puchalski, PhD.

## **INTRODUCTION**

The hereby article discusses data, collected in representative surveys in Poland, characterizing Polish medium and big enterprises' attitude towards a tobacco smoking problem. It also raises a question, whether employment size and economic situation of companies differentiate the way they address the problem. Hypothetically, better financial condition (which, among others, enhances the possibilities of action and increases the importance of health issues) means that the company would care for tobacco smoke release more. Moreover, bigger employment size may be conducive to the need of development and increased coordination of activities undertaken in connection with smoking. Research, similar to the hereby referred, conducted ten years ago (1) showed that workplaces in a better economic situation followed smoking prohibition rules introduced at their premises in a more consistent way. Furthermore, companies of a bigger employment size more often gave formal status to their internal policies regarding smoking problem regulations. In addition, more frequently, their employees who wished to quit smoking were offered three basic types of help: a possibility of medical advice, psychological training and meetings within a social support group. Research done a few years before in Toronto (2) - but based on an analysis of employees' opinions, not a diagnosis of companies like the discussed domestic ones showed, among others, that restrictions concerning tobacco smoking are less often used towards employees in smaller organizations.

Further presented findings come from the end of 2010 when the Act on the protection of health against the consequences of tobacco use with amendments came into force (3). The amendments introduced significant alterations to the hitherto-mentioned obligations imposed on companies in connection with tobacco smoking.

A previously binding tobacco smoking ban in companies was kept and at the same time the isolation of smoking-rooms was permitted (a smoking-room is defined there as "a room isolated from other rooms, halls and corridors, marked appropriately, used only for tobacco smoking, equipped with exhaust ventilation or a filtration system in the way that tobacco smoke does not penetrate into other rooms"). In this way – in the intentions of the authors who prepared the legislative alterations – the vagueness of the previous laws, which could suggest a possibility and even an obligation to prepare isolated rooms intended for smoking avail-

able in companies (with more than twenty employees), was eliminated. In those days, that was the prevailing interpretation of the law by the courts, although its validity sometimes raised experts' doubts (4). Probably, we will have to wait for the judicial interpretation of the current amended law. It allows an employer (owner or manager) to decide whether to introduce a total smoking ban at the whole workplace or to allow smoking, but only in smoking-rooms (5,6).

The reasons for making a workplace an important subject of the state anti-tobacco policy were presented in a different work (7). Data on a similar topic, collected in 2006 and the previous years, was also published there. Beside it, there is no other research showing companies' (apart from restaurants) attitude towards the smoking problem (8). However, there are many analyses concerning not organization's activities, but attitudes and opinions of particular citizens (9–11), including the points of view of the members of the society on restricting the freedom of smoking at the workplaces (12).

## The aim of the paper

The article presents findings which allow for answering, among others, the following questions: Whether and how often is tobacco smoking at the workplaces treated as a problem? How often does this phenomenon cause internal conflicts in organizations? How many companies try to reduce smoking propagation at their premises and are there solutions used for this reason consistent with the binding law? Are the introduced limitations consulted with the staff and are they formalized (do they become an element of a company's internal policy)? To what extent do employees respect internal regulations dealing with the smoking problem and to what extent does the management care for their observance? What is the attitude of external inspection authorities (in the scope of health, safety and labor law) towards the smoking problem at the interviewed workplaces? What other activities towards smoking (apart from the regulations concerning the places of permitted tobacco consumption) are taken in the examined companies? What are the motives of the workplaces to undertake the analyzed activities? Moreover, the following question addresses all the mentioned problems: does their characteristic vary due to diversified employment size at the investigated companies and differences in their financial situation self-assessment

The attitude of the workplaces in Poland towards smoking at their premises, determined at the end of 2010, may raise interest for two significant reasons.

The first one concerns a possibility of using this data for the evaluation of the state anti-tobacco policy - in this scope which refers to the activities expected from companies. Finnish research may be an example of the research done for a similar reason in other countries (13), however it was conducted among a much smaller group of companies. This is a diagnosis of the situation at a starting point - when new legal regulations came into force, they aimed at limiting tobacco consumption and exposure of non-smokers to smoke in organizations employing people. Its repetition in the future and comparison of the results will allow evaluating whether, in what direction and to what extent workplaces react to the changing legal requirements. However, the presentation scope is wider, as it also shows these activities serving smoking reduction, which are undertaken by employees, though they go beyond legal obligations. It also depicts some conditions of anti-tobacco activities - especially those which lie not on the state's (as e.g. law observance control), but on the workplaces' side. That is why the presented findings may be useful for another reason. They give premises for establishing priorities in health promotion programs (aimed at solving smoking problems) addressed to particular organizations; such programs which are not limited to the belief in the motive power of sole enforcement of the state's legal regulations, but they introduce solutions, which - apart from high effectiveness - are accepted by employees and they also stimulate smokers in a positive way to quit smoking and support them in this.

Data which allows for the improvement of health promotion programs for workplaces, aimed at releasing them from tobacco smoke, is also meaningful as smoking is the most common problem analyzed in the programs realized by voivodeship occupational health centers concerning determinants of workers' health (14).

### **MATERIAL AND METHOD**

The presented findings come from the research conducted at the end of November and the beginning of December 2010. It included 1002 workplaces (enterprises and institutions) from the whole country, employing more than 50 people (excluding health care and education facilities according to the Polish Classification of Activities). A sample was chosen randomly as a representative of all such companies in Poland. The scheme of choice took into account the sector, voivodeship and employment size category. Organizations employing from 50 to 100 people constituted 30% of the tested

sample, from 101 to 500 – 60%, whereas staff of more than 500 people was employed by 10% of the investigated companies. The economic situation in the past two years was evaluated as very good by 13%, rather good by 50%, diverse by 24% and rather or very weak by 6% of the companies (7% were unable to evaluate it). 17% of the organizations had the public form of property (state or municipal), 49% private domestic 18% private foreign and 16% mixed or another form of property.

The test was conducted by means of Computer-Assisted Telephone Interview (CATI) based on a standardized questionnaire. A workplace was a tested unit, thus, one interview was made in every randomized research subject. The respondents included representatives of the management (a board member or a person authorized by him or her – human resources structure manager, safety at work manager, etc.). The questionnaire was drawn up in the National Centre of Workplace Health Promotion in the Nofer Institute of Occupational Medicine in Łódź (it was a modified version of a tool used in a similar survey in 2006 and questionnaires conducted from 2000 and 2001) (1,7). The reported research was realized by BBS Obserwator from Kraków.

### **FINDINGS**

### Companies' interest in the problem of smoking

An important factor for the state anti-tobacco policy at the workplaces' premises as well as for the realization of all internal activities aimed at smoking phenomena, is the interest of their management bodies in these problems. The research took into account the following forms of this interest:

- a) monitoring the scale of smoking at the workplace,
- b) analyzing the effect smoking has at the workplace,
- c) evaluating the results of anti-tobacco activities performed in a company.

1/3 of the interviewed workplaces have data, at least general, about the number of smoking employees, but 2% collect more detailed information (concerning the frequency of smoking in particular groups, the number of smoked cigarettes, etc.). 13% of all companies declare that they analyze what effects smoking has on the functioning of the company. In addition to this, the effects of the introduced restrictions and other anti-tobacco activities are evaluated by 21% of enterprises, which undertake some activities of this type (this group includes 95% of the researched companies). There is no data which would make it possible to describe in detail how this information is collected and what de-

tailed issues it refers to, since the research included only general respondents' statements confirming that this is gathered and analyzed.

The bigger the organization is, the less often it declares that it knows the scale of smoking among its employees. 40% of the enterprises with the employment of up to 100 people have this information, whereas in those of more than 500 employees only every 5th one (p = 0.001). One may suppose that this difference is connected with other interpretation of the statement contained in the questionnaire "company has detailed up-todate information on the smoking scale among the employees". While the representatives of smaller companies may confirm it basing on their personal knowledge on the employees and subjective estimation of the number of smokers, in big organizations, where individual contact with all employees is more difficult, a positive answer to this point may require reference to sources other than only personal beliefs of a respondent (e.g. to the data collected systematically in periodic medical tests, results of the surveys conducted among the personnel - especially on smoking or at the occasion of other surveys). The representatives of bigger companies who could not rely on such data probably answered negatively.

The assessment of the economic situation does not differentiate any of the analyzed aspects of interest in the tackled problem.

### Conflicts related to smoking

One of objective indicators that tobacco smoking or the accepted way of its regulation at the workplace constitute a not fully solved internal problem is manifested by various types of conflicts that arise in this matter. Disagreements between employees who smoke and do not smoke (among others: exposure of non-smokers to smoke, feeling of unfair treatment of one of the groups) and – maybe slightly less important – between the management and the staff (probably concerning mainly dissatisfaction with the used smoking regulations or their lack) are especially significant in this matter.

In the past two years, conflicts between the management and the personnel in connection with smoking took place in at least every tenth company (10% declared its occurrence, 87% its lack), whereas, in at least every fifth organization, disagreements occurred between the smoking and non-smoking employees. Only 19% of the companies clearly stated that these took place, however, only 75% declared no conflicts. Neither the employment size, nor the company's financial situation differentiated the frequency of the mentioned conflicts.

## Internal restrictions concerning the freedom of smoking at work

Some methods which solve the problem of smoking are different types of bans and restrictions concerning the fact of smoking at work, as well as organizing spaces where it is allowed. In addition, the prohibition connected with smoking inside the premises (outside smoking-rooms) is legally binding for all enterprises. What may be surprising in this context is that nearly 2% of the respondents stated that at their workplaces, no internal regulations referring to smoking were introduced.

The most frequent solution in the scope of restrictions – used in 43% of the examined subjects – is the total prohibition of smoking in companies' rooms, but smoking is allowed outside in the open air. The smaller the company is, the more often this takes place, however, it is not a statistically significant dependency.

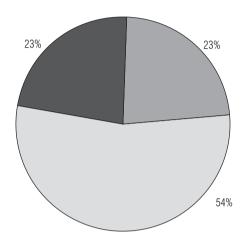
On the other hand, 30% of companies permit smoking inside, but only in closed smoking-rooms which meet the requirements defined in the regulation of the Minister of Labor (15). Nearly 1/3 of enterprises declare having this type of rooms (in the study a general declaration was obtained that they comply with the regulations, and it was not verified to what extent they meet the formal requirements). The bigger the size of the organization, the more common appropriate smoking-rooms. Smoking rooms were organized in every fifth company which employs from 50 to 100 people, in every third in those with 101 to 500 employees, and in 43% of the largest companies in this group.

Both solutions discussed above may be present at some workplaces. In general, more than every second subject (54%) allows smoking, but only outside the buildings or in smoking-rooms.

Almost every fourth organization (23%) declares that smoking is fully forbidden in working time, regardless of whether the employees are inside or outside the rooms or buildings. This situation is slightly more common in companies of smaller employment size, but it is not a statistically significant dependency.

Other regulations, inconsistent with the statutory requirements (even in their versions before the introduction of the amendments, binding before the research), are present in every fifth workplace (19%). These companies permit smoking on their premises, but organize spaces serving this purpose (e.g. in halls and corridors, waiting rooms) and equip them with ash-trays. The remaining 2% of workplaces admit even greater lack of law observance – "it is allowed to smoke in every place where it does not cause danger or problems".

If we include in this group the before-mentioned subjects which did not introduce any, even very liberal regulations or restrictions (2%), the percentage of organizations acting against the law will increase to 23%. The frequency of occurrence of this type of illegal solutions does not differ significantly with regard to the employment size of the company or its economic situation.



- Total ban on smoking at the workplace / Całkowity zakaz palenia w pracy
- Smoking allowed only in special smoking-rooms or outside the building / Palenie dozwolone tylko w palarniach lub poza budynkiem
- Regulations inconsistent with the state policy regarding smoking (for example: smoking in the corridors, in the rooms where everybody smokes or lack of any regulations) / / Regulacje niezgodne z prawem (m.in. palenie na korytarzach, w pomieszczeniach, gdzie pracują sami palący, brak jakichkolwiek regulacji)

**Fig. 1.** Places at the workplace where smoking is allowed – methods of regulation

**Ryc. 1.** Regulacje dotyczące dozwolonych miejsc palenia tytoniu w zakładach pracy

## Institutionalization of internal restrictions of the freedom of smoking

Restrictions of the freedom of smoking can be legitimized not only by the state law, but also additionally by various types of formal (laid down in documents) decisions, regulations and procedures inside organizations and less formalized settlements or social agreements.

Every third enterprise, which introduced some restrictions concerning tobacco smoking, performed it without earlier agreements with the employees. One may suppose that this group is slightly bigger, since every fifteenth respondent was not sure whether such consultations took place at his or her workplace. On the other hand, the remaining subjects consulted the planned actions with the personnel – every third company agreed on them with organizations or other representatives of employees, whereas every fourth company asked for the employees' opinion in this matter.

The smaller the organization, the more often – which seems obvious – it consults its action plans with the whole personnel, whereas the bigger the company, the more often it asks for the opinion of only representatives of its staff. What is interesting, a drop in the number of employees is accompanied by the fact that regulations concerning tobacco smoking are introduced without any agreements with the staff (p = 0.000).

Over two third (68%) of organizations which regulate smoking wrote down the introduced rules in their internal documents. Other 27% admit that they did not do it (further 5% avoid answering which may also suggest the lack of formalized regulations). Therefore, it may be stated that in nearly every third company the restrictions of the freedom of smoking have a scarcely obligatory character. The smaller the workplace, the more frequent the situation – 37% of the smallest interviewed subjects (50–100 employees) s, 23% of the medium-sized ones (101–500) and 16% employing more than 500 people (p = 0.000) declare the lack of regulation.

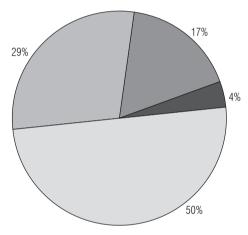
Among organizations which formalize the restrictions connected with smoking, 62% wrote them down in the regulations inside the company. In 42% of enterprises, these issues were regulated by the general manager's regulation (manager, president), whereas 6% included them in some other document characterizing the company's policy. These rules could be reflected in a few documents (that is why, the mentioned percentages are not accumulated).

The discussed documents and solutions to the smoking problem – including the restrictions indicated above, as well as other activities which will be presented later may have diverse character. They may be more restrictive (mainly referring to restrictions or punishments) or more supportive (which offer employees in exchange for non-smoking - various positive reinforcements, rewards, therapies, etc.). The vast majority of enterprises, which formally regulate smoking (more than 65%), admit introducing mainly restrictions. The documents of other 22% include activities which were evaluated by the respondents as more supportive than restrictive. Nearly every eighth company is unable to assess in which direction their formal policy concerning smoking is going (they may try to balance these two types of actions). However, it is worth reminding, that this is the assessment of the representatives of the management bodies, not the personnel of the surveyed workplaces.

Neither the organization size nor its financial situation caused any differences in the presented findings.

## Employees attitude towards the binding regulations

The management of these companies which introduced some regulations concerning the freedom of smoking – both formalized and not formally binding – usually (in nearly 80%) is convinced, or at least declares it, that employees abide by the requirements obligatory in their organizations. This view is declared strongly by every second respondent, whereas 29% believe that personnel rather complies with them, but this is not a firm statement. On the other hand, in every fifth organization the lack of this certainty is quite visible: 17% of the investigated companies state that it is a very different situation, further 4% admit that the employees rather do not abide by the introduced regulations or do not even respect them.



- Employees follow the regulations introduced in the company / Pracownicy stosują się do obowiązujących uregulowań
- Employees usually follow these regulations / Pracownicy zazwyczaj stosują się do tych uregulowań
- The situation is different employees sometimes follow the regulations introduced in the company and sometimes do not do that / Różnie bywa – czasami stosują się, a czasami nie
- Employees frequently do not follow the introduced regulations / Pracownicy często lekceważą obowiązujące uregulowania lub zdecydowanie nie stosują się do nich

**Fig. 2.** The degree of employees' compliance with the smoking regulations introduced at the workplace

Ryc. 2. Stopień przestrzegania przez pracowników uregulowań dotyczących palenia tytoniu, które obowiązują w zakładzie pracy

In every second organization, among those in which the regulations restricting the freedom of smoking were introduced, they are omitted by employees to different extent – in nearly 30% this may be only a slight insubordination, whereas in other 20% this phenomenon has a wider size. Taking into account that making the fact of insubordination of employees known to the public may be psychologically difficult for the manager,

a thesis can be made that this result does not fully show the scale in which restrictions of the freedom of smoking are disobeyed by the employees.

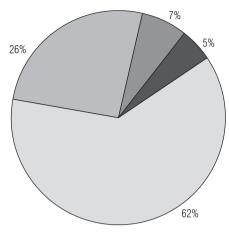
Representatives of smaller workplaces are slightly more often strongly convinced that their personnel complies with the binding regulations, whereas the bigger the organization, the more often it declares that the situation is diversified (but these are not significant differences). On the other hand, the better the financial situation of the company, the more often the respondents clearly state that the employees observe regulations concerning smoking (in extreme groups: nearly 60% among those with very good financial situation and almost 40% among those with weak financial condition). Moreover, the worse the self-assessment of the financial situation, the more visible an ambivalent attitude ("the situation is different"), as well as a negative attitude of the personnel towards the anti-tobacco regulations. At the workplaces characterized by the best economic condition, an ambivalent attitude towards the norms which regulate smoking or disobedience take place in 16% of this group, whereas in those with the weakest finances in 32% (p = 0.01).

## Internal and external supervision over the observance of the regulations

All formal regulations usually require various control activities. It may be either internal supervision, performed by the management or suitable authorities on behalf of the employer, or audits performed by external state institutions which were created for this purpose.

In 62% of organizations which regulate tobacco smoking issues, the management states that it consistently attempts to make the personnel obey the rules. On the other hand, every fourth representative of the interviewed companies assesses the situation as diversified – sometimes respecting the norms is enforced and sometimes not. Other 7% admit that this is not enforced (and 5% have no opinion on this). Therefore, in every third organization, the management at least sometimes turns a blind eye to the problem. Neither the employment size nor the economic situation differentiated the discussed matter.

In the past two years, nearly 85% of organizations were controlled by the National Labor Inspectorate, Chief Sanitary Inspectorate, fire service and other authorities. These institutions, according to the respondents, reported some remarks concerning the smoking problem in only 6% of the inspected workplaces (which



- The companies' management enforces the compliance with the introduced regulations / Kierownictwo konsekwetnie egzekwuje przestrzeganie obowiązujących uregulowań
- The situation is diversified the companies' management sometimes enforces the compliance with the regulations and sometimes does not do that / Różnie bywa czasami egzekwuje, a czasami nie
- The companies' management does not enforce the compliance with the regulations / Przestrzeganie uregulowań zazwyczaj nie jest egzekwowane
- It is difficult to say/another answer / Trudno ocenić/inna odpowiedź

**Fig. 3.** The management's enforcement of the employees' compliance with the smoking regulations in force at the workplace **Ryc. 3.** Egzekwowanie przez kadrę kierowniczą przestrzegania przez personel uregulowań dotyczących palenia, które obowiązują w zakładzie pracy

may be surprising taking into account the data presented above concerning the limited observance of the regulations).

Such inspections were slightly more often performed in bigger companies (p=0.05). The bigger the organization, the more often it received some remarks from the controlling authorities. These remarks concerned almost 4% of the workplaces of the smallest employment size (50-100 people) and nearly 10% of those with the greatest number of employees (more than 500).

## Other actions against tobacco smoking

Apart from different types of restrictions and regulations concerning the freedom of smoking – arising from the statutory law or the company's internal norms – workplaces also undertake other activities, the aim of which is to encourage employees to stop smoking and to help them in the realization of this decision. The most common activities, undertaken in the past two years in almost 95% of all the interviewed organizations, are shown in Table 1.

**Table 1.** Anti-tobacco smoking activities undertaken at the workplaces\* **Tabela 1.** Działania ograniczające palenie tytoniu w zakładach pracy\*

Activities Działania	Workplace Zakład pracy [%]	
Chastisements and reprimands for breaking the company's internal anti-tobacco regulations / Upomnienia i nagany za łamanie w firmie przepisów dotyczących palenia	42	
Dissemination of educational materials (leaflets, posters etc.) on the harmfulness of tobacco smoking / Kolportaż materiałów (ulotek, plakatów itp.) na temat szkodliwości palenia		
Trainings for employees (lectures, presentations) on smoking / Szkolenia pracowników (wykłady, prelekcje) na temat problemu palenia	18	
Dissemination of materials (such as self-help books) on the methods of quitting smoking / Kolportaż materiałów (np. poradników) na temat metod rzucenia palenia	15	
Financial punishments for illegal tobacco smoking at work / Kary finansowe związane z niedozwolonym paleniem w pracy	12	
Encouraging employees to take part in common anti-tobacco actions (such as "A tobacco smoke-free day", "Quit smoking and win") / / Zachęcanie pracowników do udziału w akcjach antytytoniowych (np. "Dzień bez papierosa", "Rzuć palenie i wygraj")	11	
Individual anti-tobacco counseling for employees / Indywidualne porady medyczne zachęcające pracowników do niepalenia	10	
Preference for non-smokers while hiring new employees / Preferowanie osób niepalących przy zatrudnianiu nowych pracowników	6	
Spreading information on various anti-tobacco therapies (quitting services) available outside the company / Propagowanie terapii antytytoniowych (usług odzwyczajania od palenia) dostępnych poza zakładem		
One-time rewards (non-cash, cash) given to employees for non-smoking / Jednorazowe nagrody dla pracowników decydujących się nie palić	3	
Trainings for groups of employees (or meetings of a self-help group) wanting to quit / Grupowe treningi (lub grupy wsparcia) dla chcących rzucić palenie	2	
Regular financial rewards for non-smoking / Regularne gratyfikacje finansowe za niepalenie tytoniu	2	

**Table 1.** Anti-tobacco smoking activities undertaken at the workplaces\* – cont. **Tabela 1.** Działania ograniczające palenie tytoniu w zakładach pracy\* – cd.

Activities Działania	Workplace Zakład pracy [%]
Sponsoring medicines stimulating quitting / Sponsorowanie pracownikom zakupu leków ułatwiających rzucenie palenia	1
Activities available to employees' relatives (such as anti-tobacco competitions for children, festivals for families supporting non-smoking) / Działania angażujące rodziny pracowników (np. konkursy antytytoniowe dla dzieci, festyny na rzecz niepalenia dla rodzin)	1

<sup>\*</sup> For each action specified in the table, the respondents declared whether it was implemented in the company in the past 2 years or not / Przy każdym działaniu respondent określał, czy było ono realizowane w firmie w minionych 2 latach, czy nie.

Most often, and invariably for years (7), two types of activities occur: restrictions for illegal smoking (chastisements and reprimands, less often financial penalties) and diversified forms of education (concerning mainly harmfulness of smoking, less often the ways of coping with this problem). Other actions, especially those of supporting nature (awards, therapies, and group mechanisms) are very rare.

The bigger the organization, the more often it realizes some of the analyzed activities, namely it: dissemi-

nates educational materials on the harmfulness of tobacco smoking and methods of quitting it, organizes trainings for groups of employees wanting to quit (or meetings of a self-help group) and spreads information on various anti-tobacco therapies (quitting services) available outside a company. It also uses chastisements and reprimands more often as well as financial penalties for illegal smoking at work (Table 2).

The financial situation did not differentiate the frequency of any of the activities analyzed in the study.

Table 2. Differences in the frequency of applied actions regarding smoking at the workplaces with different employment sizes\* Tabela 2. Różnice w częstości działań dotyczących palenia tytoniu w zakładach pracy o różnej wielkości zatrudnienia\*

Activities Typy działań	Workplace carrying out various actions in the past 2 years Zakłady pracy realizujące działania w minionych 2 latach [%]			р
	50–100 employees / / pracowników	101–500 employees / / pracowników	> 500 employees / / pracowników	
Chastisements and reprimands for breaking the company's internal anti-tobacco regulations / Upomnienia i nagany za łamanie w firmie przepisów dotyczących palenia	30	46	54	0.000
Financial punishments for illegal to bacco smoking at work / Kary finansowe związane z niedozwolonym paleniem w pracy	6	12	23	0.000
Dissemination of educational materials (leaflets, posters etc.) on the harmfulness of tobacco smoking / Kolportaż materiałów (ulotek, plakatów itp.) na temat szkodliwości palenia	19	26	31	0.010
Dissemination of materials (such as self-help books) on the methods of quitting smoking / Kolportaż materiałów (np. poradników) na temat metod rzucenia palenia	10	16	24	0.000
Individual anti-tobacco counseling for employees / Indywidualne porady medyczne, zachęcające pracowników do niepalenia	7	8	17	0.010
Spreading information on various anti-tobacco therapies (quitting services) available outside the company / Propagowanie usług odzwyczajania od palenia dostępnych poza zakładem	3	6	11	0.010
Trainings for groups of employees (or meetings of a self-help group) wanting to quit smoking / Grupowe treningi (lub grupy wsparcia) dla chcących rzucić palenie	0	1	9	0.000

<sup>\*</sup> Only those activities were included in case of which the differences were statistically significant / Uwzględniono tylko te aktywności, których zróżnicowanie było statystycznie istotne.

## Motives of taking up anti-tobacco activities in the companies

Undertaking anti-tobacco activities, companies have different motives, which may be directly connected with the personnel's health, but also with matters concerning economic-business functioning of the company or result from e.g. legalistic attitude of the employer. The answers to the question: "What are the main reasons for introducing anti-tobacco activities in your company? Please, choose up to three the most important ones" were presented in Table 3.

The motives of activities aimed at solving the problem of smoking very rarely include economic-business reasons. The most important is taking care of safety connected with fire hazard, as well as, but less often, legal obligations (only 40% of companies pay attention to it) and care for the employees' health – more often regarding those who smoke than those who do not. The negative attitude of the management board or the company authorities towards smoking is significant to only every fourth enterprise.

Neither the employment size nor the self-assessment of the financial situation differentiates significantly the reasons for activities aiming at the reduction of smoking at the workplace.

## Supporters of anti-tobacco activities at the workplace Effective realization of activities reducing smoking – both obligatory and voluntary – requires the support

from important social groups at the workplace. The groups usually mentioned in this context in companies which undertake anti-tobacco activities (based on the question: "Who is in your company the major supporter of anti-tobacco regulations and actions? Please, choose up to three most committed groups.") are presented in Table 4.

This data should be interpreted carefully due to the previously stated facts (1), namely that the respondents are inclined to choose their own group as a supporter of anti-tobacco regulations and actions. Thus, it is better not to look at the above findings as at "objective" status quo, but rather as at the state of beliefs – i.e. who is believed to be the mentioned supporter in the opinion of the company management representatives.

Every eighth organization answered that there is nobody who supports the internal anti-tobacco policy. When this result is added to the result concerning companies which do not indicate it directly and cannot identify the supporters of the discussed actions, it will turn out that at every sixth workplace there is no support of these actions.

Obviously, the role of the board as well as the non-smoking employees as supporters of solving the problem of smoking at the workplace should be underlined. The similar situation can be observed in the case of professionals dealing with health and safety at work who are in most companies responsible for anti-tobacco actions (in most cases they answered

**Table 3.** Motives of anti-tobacco activities undertaken at the workplace\* **Tabela 3.** Powody działań służących redukcji palenia tytoniu w zakładzie pracy\*

Motives Powody	Workplace Zakłady pracy N = 1002 [%]
Taking care of safety connected with fire hazard / Troska o bezpieczeństwo związane z zagrożeniem pożarem	56
$Taking\ care\ of\ non-smokers'\ health\ exposed\ to\ second-hand\ smoke\ /\ Troska\ o\ zdrowie\ niepalących,\ którzy\ narażeni\ są\ na\ wdychanie\ dymunical problem.$	42
Observing the regulations of the Polish anti-tobacco law / Przepisy ustawy o ochronie zdrowia przed następstwami używania tytoniu	41
lem:lem:lem:lem:lem:lem:lem:lem:lem:lem:	24
Taking care of the smoking employees' health / Troska o zdrowie palących pracowników	24
Diminishing the financial loss due to tobacco smoke (consequences of increased absence among smoking employees, breaks for a cigarette at work, diminished quality of services, etc.) / Dążenie do ograniczania strat ekonomicznych (skutków zwiększonej absencji palących, kosztów przerw na papierosa, obniżonej jakości obsługi klienta i innych)	6
Willingness to make use of the anti-tobacco activities in the company's PR / Chęć wykorzystania działań antytytoniowych w budowaniu publicznego wizerunku firmy	2
Other reasons / Inne	4

<sup>\*</sup> The respondents were able to choose up to 3 answers / Badani mogli wskazać 3 powody.

**Table 4.** Main groups at the workplace supporting anti-tobacco regulations and actions\* **Tabela 4.** Grupy w zakładach pracy, które wspierają działania ograniczające palenie\*

Groups interested in solving the tobacco smoking problem Zwolennicy ograniczania palenia	Workplace Zakłady pracy N = 943 [%]
Management of the company / Zarząd, dyrekcja, kierownictwo	56
Health and safety, environmental protection departments / Dział BHP, ochrony środowiska	40
The majority of non-smoking employees / Większość niepalących pracowników	20
HR department / Dział zasobów ludzkich, personalny	5
Medical professionals in a company / Personel medyczny	5
Employees' organizations, trade unions / Organizacje pracownicze, związki zawodowe	4
Smokers wanting anti-tobacco support / Palący, którzy chcą uzyskać wsparcie	3
Another group / Inna grupa	1
It is difficult to say / Trudno powiedzieć	5
There are no supporters of such activities / Brak zwolenników takich działań	12

<sup>\*</sup> The respondents were able to choose up to 3 answers / Badani mogli wskazać 3 grupy.

the questionnaire). However, what may surprise is that the respondents rarely indicated the human resources department (though a lot of people who took part in the interview worked in these structures) and medical personnel (which may be understood, as most organizations do not employ such people). Employee organizations are very rarely indicated as supporters of solving the tobacco problem.

The employment size and economic situation do not significantly differentiate the answers to the question concerning the supporters of anti-tobacco activities at the workplace.

### **SUMMARY**

In the presented findings of the research showing the diagnosis of the phenomena at the end of 2010, special attention should be paid to the following facts:

- a) hardly any despite a significant increase in the last years – workplaces' interest in tobacco smoking among their personnel; it concerns the lack of interest in even the most general scale of its prevalence among employees, and especially – what is worth emphasizing – in its results for the functioning of the company, as well as the effects of the actions taken by organizations to reduce smoking;
- b) big (23%) despite a drop by 10 points in relation to 2006 – percentage of organizations in which smoking is against the binding law, which, among

- others, exposes non-smokers to tobacco smoke to a considerable extent at the workplace<sup>1</sup>;
- c) prevalence (in more than 40% of companies) of a superficial solution to the problem introducing the prohibition of smoking inside the offices and allowing, at the same time, to smoke within the working time and the lack of interest in the conditions in which smoking takes place;
- d) a considerable number of organizations (23%) twice bigger than in previous findings – in which there is a total prohibition of smoking within the working time;

 $<sup>^{\</sup>scriptscriptstyle 1}$  The results of the population research from the end of 2009 and the beginning of 2010 shows that every third citizen of our country working outside home is exposed to passive smoking at the workplace (46% among smokers and 27% among non-smokers). Among working women, every fourth woman was exposed to it - every third who smokes and every fifth who does not smoke. Among working men, the percentage of those exposed to passive smoking was higher than 41% - more than every second one among smokers, and every third among non-smokers (11). On the other hand, on the basis of the data from February 2011, it can be assumed that nearly every fifth-seventh man and every fourteenth woman who does not smoke is at risk of passive smoking at the workplace, while among smokers - 27-41% of men and 16-23% of women (12). A conclusion can be drawn that the risk of passive smoking at work is getting smaller (however, it is difficult to state this reliably, since the data from the newer research was presented rather ambiguously). Moreover, there is no data which would allow to define the scale of the discussed phenomenon with reference to employees of entreprises with the sizes corresponding to those that were analyzed in the hereby article.

- e) no (in 40% of the workplaces) consultations with the personnel referring to the regulations connected with smoking, which is the evidence of the arbitrary problem solving method applied by the superiors;
- f) substantial scale of weak position of tobacco consumption restrictions in the internal regulations of a company (nearly one third of companies do not include these matters in their organization's documents, while among those which regulate the problem, less than 2/3 put it into their labor regulation, which is an internal document of the highest importance);
- g) dominance in the internal rules in force in most companies (2/3) as well as in the performed actions of such strategies of smoking problem solving which have a restrictive character (only or mainly bans and penalties), while supportive strategies (providing information, helping those who want to quit smoking, rewards for non-smokers) are relatively rare (less than 1/5 of companies);
- h) common (in almost 1/3 of companies) lack of management's consistency in enforcing the employees' observance of the rules connected with smoking, obligatory at the workplace;
- i) large scale of personnel's insubordination towards the internal regulations concerning smoking (occurring in nearly every second organization, visible in every fifth one);
- j) very rare interest of institutions which control workplaces (e.g. Chief Sanitary Inspectorate, National Labor Inspectorate) in a reliable assessment of the observance of law concerning tobacco smoking;
- k) large frequency (in at least every fifth organization nearly twice as high as in 2006) of smoking-related conflicts between the employees who smoke and those who do not, and between the personnel and management of companies;
- in actions which go beyond legal obligations, the focus on educating employees and punishing those who break internal bans, with deficiency of solutions positively motivating and supporting the personnel in their decisions to quit smoking<sup>2</sup>;
- m) the economic-business motivation to regulate the smoking-related problem in organizations is present in hardly a few percents of the companies;
- n) a considerable (more than ten percent) number of companies in which the internal regulation of the

smoking problem is, in general, not supported, as well as rare engagement in this area of workers' organizations<sup>3</sup> and human resources structures (which does not refer to health and safety at work departments).

A hypothesis concerning the connection of the companies' economic situation with their attitude towards smoking was not confirmed. Only one finding in this scope may suggest that in companies which have a better financial situation the personnel respect the binding labor regulations more often. There is no data to explain the reason for it - whether this results from e.g. a professional structure of people employed there4, their stronger identification with the company, greater conformity due to higher salaries, or other reasons. It may also result not from the characteristics of the personnel from the examined companies, but from those of the respondents – e.g. their level of optimism, and a tendency, common among optimistic people, to overrate the assessment (both concerning the financial condition and the level of the employees' subordination).

However, there are more findings showing the connections between the organization's attitude to tobacco smoking and the employment size. The bigger the workplace, the more often it realizes such actions reducing smoking which go beyond statutory obligations, provides employees with smoking-rooms, gives a formal status to the regulations concerning smoking inside a company, but also, what may be surprising, more often gets objections from external controlling authorities. On the other hand, the smaller the organization, the more often it has a recognized scale of the smoking phenomenon among employees, it introduces a total ban on smoking in the working time or allows for smoking only outside its offices, regulates the freedom of smoking and consults it with the whole personnel instead of only with its representatives, or on the contrary - introduces the regulations arbitrarily with no agreements and avoids writing them down in company's internal documents. Despite this, employees of smaller enterprises more often comply with the rules introduced in their company.

<sup>&</sup>lt;sup>2</sup> Such situation is not characteristic to Poland, as similar orientation of interventions against tobacco was diagnosed in the international research conducted in fourteen countries in 2007 (16).

<sup>&</sup>lt;sup>3</sup> Workers organizations' actions towards the problem of smoking reduction are sometimes made the subject of separate studies in other countries (17). It is worth making this topic recognized in Poland also in a wider scope of attitude to health – not only tobacco smoking.

 $<sup>^4\,</sup>$  For example, among builders and low-speed vehicles operators more than every second one smokes, and among engineers or primary school teachers only slightly above 10% (9).

## **CONCLUSIONS**

The data presented above is, in fact, the only systematic finding on the current attitude of enterprises in Poland to the problem of tobacco smoking on the part of their personnel. Therefore, it is hard to verify its accuracy. A similarity to the findings of earlier interviews which used a similar tool (1,7) allows to think that – taking into account the accuracy of this method – it is reliable. Obviously, it would be worth verifying it by comparison with the material collected by means of external observation, but for the time being such data does not exist.

On the basis of the presented material, one may notice a limited effectiveness of the state legal regulations with reference to both the protection of non-smokers against tobacco smoke and the reduction of smoking at the workplaces. Despite more and more restrictive legal regulations binding for years, there is still a big group of companies in which law is not respected to a lesser or greater extent or is respected only on the surface. Reasons for this lie not in the lack of appropriate statutory regulations, but mainly in the managers' attitude towards smoking as a problem at the workplace. We can observe (in comparison to 2006) (7) twicethree times higher managers' interest in the scale of smoking phenomenon, its consequences and effects of undertaken anti-tobacco actions, as well as greater consistency in making the personnel observe the binding rules, but on the other hand, the problem of smoking is not understood as concerning the fundamental area of the organization's activity, but only the health, fire hazard or legal obligations. Attitudes of this type rather do not favor a consistent and effective problemsolving in market organizations and leave the interest in these problems out (18). What is also worth mentioning is an unusually rare stimulation of employers from such institutions as National Labor Inspectorate or Chief Sanitary Inspectorate, which aims at introducing in companies internal policies concerning tobacco smoking - not only those consistent with the statutory regulations, but also constructed in accordance with the workplace health promotion programs, which are employee-friendly and more effective. It is worth noticing that the representatives of both these inspections were trained in the cooperation with the National Centre of Workplace Health Promotion in the Nofer Institute of Occupational Medicine in Łódź in creating anti-tobacco programs consistent with the health promotion concept.

This last finding, also confirmed in the previous research (7), should certainly be a challenge for animators of the state anti-tobacco policy in the aspect which concerns its realization by workplaces. In order to make statutory regulations respected in companies, it is necessary that their key partners agree on both: the way of defining the main smoking problems (i.e. finding what in the social characteristic of this phenomenon raises worry, needs monitoring, control, changes, etc.<sup>5</sup>) as well as aims of this policy, ways and conditions of its realization. It refers to agreements not only between the creators and followers of legislative changes, but also the subjects who are supposed to introduce expected actions at the workplaces, advise how to do it effectively, and finally, exact law observance. They include the abovementioned inspections and also - maybe more importantly - employers and their organizations, trade unions, and professionals managing human resources, health and safety at work and occupational medicine (and organizations which associate them). One may also postulate that the state anti-tobacco policy should take into account the opinions of experts who deal with the implementation of workplace health promotion and the conditions of their effectiveness. The experience of a few other countries suggests that such agreements may be the key issues for this type of policies (19).

The presented findings allow not only to refer to domestic policy, but also to indicate issues which are worth paying greater attention to while drawing up health promotion programs (in the scope of releasing from tobacco smoke) addressed to particular workplaces. They turn out to be an empirical confirmation of suggestions which were addressed to workplace health promotion practitioners years ago (20).

First of all, in companies (research suggests that especially in the bigger ones) there is no key element of every good program, which is a diagnosis of a situation concerning smoking. It does not only concern the recognition of the size of the phenomenon, so

For example, whether, with reference to particular workplaces the problem is to comply with the legal obligations or to reduce the frequency of smoking among the staff; whether only among employees or also among their families; does it concern only smoking at work or after work; only in company's offices or outside them; does smoke inhalation by smokers constitute a problem or is exposing the non-smokers to cigarette smoke a problem too; the costs of smoking (connected with breaks for a cigarette) incurred by an entreprise or the personnel's health risk, etc. Settling these issues in one way or another determines the aims of policies and programs, the methods used to achieve them, the criteria of evaluation etc.

the necessity of wider diagnoses connected with smoking preferences, expectations and personnel's needs, but also the recognition of worries and potential conflicts connected with the introduced regulations. It is also worth remembering here about the diagnosis of the hitherto actions aimed at tobacco smoking in organizations – in order to learn their effectiveness, circumstances, supporters and opponents and all strong and weak sides of the previously used solutions. Only then, based on the findings of this type, a program may be created, adjusted to the situation of a particular company, not limited to introducing such regulations which are later hardly respected by employees.

Second, it is worth taking into account that supporting the solution of tobacco smoking problem in an organization will be effective if it is not present only among health and safety at work representatives, and such situation was common according to the research. The lack of interest of employees' organizations and human resources management structures in smoking as a problem which needs solving may be one of the significant obstacles in its regulation in accordance with the law, and at the same time accepted by smokers and non-smokers. Thus, building at the workplace the support of the above-mentioned groups for common creation and implementation of good solutions, and then, their observance, should become one of the key aims connected with program formation.

Third, but undoubtedly the most important, it is necessary to receive strong support from the management//board of the company for solving the smoking-related problem, and this is what is missing in many examined workplaces. Not only smoking is not believed to be influencing the company's functioning on the market, but also employers do not engage in supporting its effective regulation.

Fourth, what is also precious is personnel's support for solving such problem and their acceptance of the methods of action. Consulting these activities with employees, neglected in companies, (especially in smaller organizations) should be more appreciate, as well as common agreeing on the aims of internal policy concerning smoking.

Fifth, it is important to balance the planned (and implemented) actions so that they are not limited – as it happens at many workplaces – to using restrictions towards smokers, and that they do not stigmatize these people (they should not be perceived as a fight with smokers). Restrictions ought to be complemented with diversified activities supporting the motivation to quit

smoking. It is also important that they are not limited to education (especially such which only shows health effects of tobacco consumption), but at least they should teach methods of coping with addictions individually, and make it easier to use different therapies, awards for non-smoking (but not for quitting smoking), create positive patterns of behaviors and social support for their realization – both in a company and outside it, among others, in employees' families, which also makes the scope of influence wider (21). Especially smaller organizations need greater attention in this matter.

Sixth, care should be taken at many workplaces (especially these smaller ones) for neglected formalization of the used solutions to the problem, in particular, they should be written down in the enterprise regulation. In this context, it is especially important to communicate to employees (in the form of both-way exchange of information, thus, discussion and agreements) the content of the company's internal policy concerning smoking, including its explanation, expectations addressed to them, means of controlling the observance and the potential sanctions, forms of support of motivation to restrain from smoking and principles of their use (especially if they are financed by an employer), etc. What may be also important is to receive a testified employees' consent to the implementation (acceptance of rules) of the drawn-up policy.

Seventh, regardless of the mentioned need to implement supportive actions, it is significant to assure the consistency and reliability of the management in enforcing the expected behaviors concerning smoking on employees.

Eighth, the conducted research also indicates that the evaluation of anti-tobacco actions and their effects, which is usually avoided in companies, should be planned and performed.

The presented state of phenomena connected with smoking at the workplaces and problems which concern them should be monitored in further years in order to evaluate long-term effectiveness of the introduced legal solutions, and to orient the campaign and programs concerning the reduction of smoking in enterprises and other institutions employing people. The problem connected with smoking among people who are self-employed is a separate matter. Also, special attention should be paid to those occupational groups in which smoking is most common (builders, slow-speed vehicles operators – more than 50% among them smoke) (9) and they often work outside workplace buildings that the anti-tobacco act provisions refer to.

### REFERENCES

- 1. Puchalski K, Korzeniowska E. Solving tobacco smoking problems at the workplaces in Poland. Med Pr 2001;52(6): 459–64 [in Polish].
- Ashley MJ, Eakin J, Bull S, Pederson L. Smoking control in the workplace: is workplace size related to restriction and programs? J Occup Environ Med 1997;39(9):866–73.
- 3. The Act of 8 April 2010 amending the act on the protection of health against the consequences of tobacco use (Journal of Laws of 2010, No. 81, item 529) [in Polish].
- Nycz T. Tobacco smoking in a workplace [cited 2011 Dec 20].
   Available from URL: http://www.prawo-pracy.pl/palenie\_tytoniu\_w\_zakladzie\_pracy-a-56.html
- 5. Ofierski M. The prohibition of tobacco smoking in a work-place amendments to the anti-tobacco act [cited 2012 Jan 5]. Available from URL: http://www.bibliotekakp.pl/news.aid, 867,Zakaz\_palenia\_wyrobow\_tytoniowych\_w\_zakladzie\_pracy\_nowela\_ustawy\_antynikotynowej.html [in Polish].
- Nycz TM. Anti-tobacco regulations part 4 [cited 2012 Jan 3]. Available from URL: http://www.eporady24.pl/ przepisy\_antynikotynowe\_czesc\_4,artykuly,2,79,927.html [in Polish].
- 7. Puchalski K, Korzeniowska E. Attitude of workplaces in Poland towards the problem of tobacco smoking in the scope of state policy. Med Pr 2009;60(6):439–50 [in Polish].
- 8. Manko Association. Smoking ban in public places. Manko Association study. Three months of smoking prohibition in restaurants and places of entertainment [cited 2012 Jan 26]. Available from URL: https://docs.google.com/viewer?url = http://lokalbezpapierosa.pl/wp-con-tent/uploads/2011/07/Zakaz-palenia-w-lokalach-3-miesi%C4%85ce-po-wprowadzeniu-zakazu-palenia-Krak%C3%B3w-2011-r.pdf [in Polish].
- Czapiński J, Panek T, editors. Social diagnosis 2011 [cited2011 Dec 2]. Available from URL: http://www.diagnoza.com [in Polish].
- Feliksiak M. Attitudes towards cigarette smoking. A report from studies, CBOS (Centre for Public Opinion Research), Warsaw, June 2011 [cited 2011 Oct 2]. Available from URL: http://www.cbos.pl/SPISKOM.POL/2011/K\_070\_11.PDF [in Polish].

- 11. Ministry of Health. Global survey concerning tobacco use by adults (GATS) Poland 2009–2010 [cited 2010 Nov 18]. Available from URL: http://www.mz.gov.pl/wwwfiles/ma\_struktura/docs/sondaz\_tyt\_15112010.pdf [in Polish].
- 12. TNS OBOP for Chief Sanitary Inspectorate and Manko Association (report's author: Zadrożna A). A report from Polish survey regarding attitudes towards tobacco smoking. Warszawa, February 2011 [cited 2011 Dec 6]. Available from URL: https://docs.google.com/viewer?url = http://lokalbezpapierosa.pl/wp-content/uploads/2011/07/raport\_OBOP\_2011.pdf [in Polish].
- 13. Heloma A, Jaakkola MS, Kahkonen E, Reijula K. The Short-Term Impact of National Smoke-Free Workplace Legislation on Passive Smoking and Tobacco Use. Am J Public Health 2001;91(9):1416–18.
- 14. Goszczyńska E. Activity of voivodeship occupational medicine centers in the scope of workplace health promotion in 2008. Med Pr 2010;61(3):353–65 [in Polish].
- 15. Regulation of the Minister of Labor and Social Policy regarding health and safety at work of 26 September 1997 (Journal of Laws of 1997, No. 129, item 844) [in Polish].
- 16. Halpern MT, Taylor H. Employee and employer support for workplace-based smoking cassation: Results from an international survey. J Occup Health 2010;52(6):375–82.
- 17. Mitchell RJ, Weisman SR, Erickson D. The role of labor organizations in tobacco control: What do unionized workers think? Am J Health Promot 2009;23(3):182–6.
- 18. Puchalski K. The problem of tobacco smoking in enterprises. Areas of sociology use. In: Piątkowski W, Płonka-Syroka B, editors. Sociology and anthropology of medicine in action. Wrocław: Publishing House Arboretum;2008. p. 133–61 [in Polish].
- 19. Foundation "Health promotion". To disperse smoke. 10 arguments for Europe free from tobacco smoke. Warszawa: Foundation; 2009 [in Polish].
- 20. Puchalski K. How to promote health in a workplace? Program of releasing from tobacco smoke. Łódź: Nofer Institute of Occupational Medicine; 1996 [in Polish].
- 21. Goszczyńska E: Anti-tobacco actions addressed to women, Łódź 2012. Med Pr In press 2012 [in Polish].