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The Role of Pharmacists in Smoking Cessation in Poland

Maciej L. Goniewicz^{1,2}, Elena O. Lingas², Jan Czogala¹, Bartosz Koszowski¹, Wioleta Zielinska-Danch¹, and Andrzej Sobczak¹

¹ Medical University of Silesia, Katowice, Poland ² University of California San Francisco, USA

Abstract

In Poland, 38.0% of men and 25.6% of women smoke daily. One method for expanding access to smoking cessation services is through community-based pharmacists. Surveys were administered in 2007–2008 to (a) current smokers, (b) members of a pharmacy association, and (c) pharmacy students in their final year of training. Pharmacists were the highest ranked health professionals to whom Polish smokers reported they would turn for information about pharmacological support for smoking cessation. Most pharmacists (79%) reported their knowledge allowed them to provide basic smoking cessation information to their patients. Pharmacy students reported being more able to provide information about the health consequences of tobacco smoking than to help patients quit smoking (85% vs. 61%). In Poland, community-based pharmacists are positioned to provide smoking cessation interventions to all segments of the population. To extend and promote smoking cessation efforts, comprehensive tobacco cessation training should be a required component of the pharmacy school curriculum.

Keywords

smoking cessation; pharmacists; health professionals; pharmaceutical care

Introduction

Tobacco smoking is a global epidemic. Smoking rates remain high in the European Union (EU), especially in Central and Eastern Europe countries. Specifically, data from 2004 showed that 38.0% of Polish men and 25.6% of women were daily cigarette users, in a population of 38 million (World Health Organization [WHO], 2008). Smoking rates (daily smoking) among boys and girls aged 13–15 years are 21.4% and 17.3%, respectively (WHO, 2008). By law, health care, educational, and governmental facilities are smoke free, and legislation is currently under consideration in the Polish parliament to ban smoking inside all public hospitality venues (including pubs, bars, restaurants, and clubs). Polish law also forbids advertising and event sponsorship by the tobacco industry.

On June 14, 2004, Poland signed and, on September 15, 2006, ratified, the Framework Convention on Tobacco Control (FCTC; <http://www.fctc.org>), of which Article 14 focuses on the need for signatory countries to promote cessation and treatment activities for current smokers. Physicians can be influential in helping their patients quit smoking, but other health

Corresponding Author: Maciej Lukasz Goniewicz, Center for Tobacco Control Research and Education, University of California San Francisco, 530 Parnassus Ave., Suite 366, Box 1390, San Francisco, CA 94143, USA. mgoniewicz@wp.pl.

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professionals, including pharmacists working in community settings, can also play a key role in increasing access to cessation services given their regular contact with the general population (Babb & Babb, 2003). Despite the differences in health care systems, the role of pharmacists in smoking cessation is increasing throughout the EU. In the United Kingdom, community pharmacy smoking cessation support services were recently developed, including free and low-cost nicotine replacement therapy (NRT; including gums and patches) as well as the addition of “item of service” fees to pharmacists for providing behavioral change support (Brock, Taylor, & Wuliji, 2007). In France, pharmacists are recognized as leaders in smoking cessation among young people, and in the Czech Republic, 42% of smokers who wanted to quit were interested in receiving smoking cessation counseling services from community pharmacies (Brock et al., 2007; Vavrik, Matejka, & Svec, 2005).

Counseling and educating patients is already a part of pharmaceutical care. Pharmaceutical care has been defined as the responsible provision of therapy for the purpose of achieving definite outcomes that improve the patient’s quality of life (Hepler & Strand, 1990; Rossing, Hansen, & Krass, 2003). Thus, the role of pharmacists in smoking cessation may include dispensing over-the-counter NRT and other pharmaceutical smoking cessation aids as well as counseling patients. Previous research indicates that pharmacists trained to provide counseling and support to smokers can effectively promote smoking cessation and that smoking cessation programs in community pharmacies are cost-effective (Kennedy, Giles, Chang, Small, & Edwards, 2002; Mochizuki et al., 2004; Sinclair, Bond, & Stead, 2004; Tran, Holdford, Kennedy, & Small, 2002; Zillich, Ryan, Adams, Yeager, & Farris, 2002).

In Poland, as well as in many Central and Eastern European countries, NRT products such as patches, gums, and lozenges are available over-the-counter. NRT is a baseline therapy for nicotine dependence. Prescription drugs are also available to treat nicotine dependence and include bupropion, varenicline, and cytizine. Counseling for tobacco dependence is provided only in some health clinics, hospitals, and the offices of health professionals. There is only one national quit line available. Although access to general practitioners (GPs) is sometimes limited and patients may not perceive their tobacco dependence as a serious health problem that requires physician intervention, there are no obvious barriers to access to a community pharmacist. The idea of pharmaceutical care (including the provision of smoking cessation services by pharmacists, especially in community pharmacies) is relatively new, but becoming more popular in Polish society (Panas & Kaminska, 2007).

Despite the increasing role of community pharmacists in smoking cessation in many countries, in Poland, little is known about whether smokers view pharmacists as a smoking cessation resource, how often community pharmacists actively engage in smoking interventions, and how well-prepared pharmacy students feel to assist smokers in quitting. Therefore, the current study was designed to assess (a) the smokers’ expectations about the role of pharmacists in providing smoking cessation interventions, (b) community-based pharmacists’ perceived readiness to consult with their patients about smoking cessation, and (c) pharmacy students’ perceived preparedness to address smoking cessation in their future role as pharmacists.

Method

Participants

We surveyed three groups (a) current adult smokers, (b) community pharmacists, and (c) pharmacy students. To be eligible to participate in the study, current smokers had to (a) be current smokers, (b) be at least 18 years of age, and (c) smoke more than 10 cigarettes per day for at least 1 year. We obtained a convenience sample of smokers in Southern Poland by recruiting current adult smokers from 22 locations: 8 shopping centers, 5 offices, 7 pubs, and 2 restaurants during November 2007 (2 weeks) and March 2008 (3 weeks). We approached

the people on the street outside shopping centers, briefly explained who we were (providing information about the university, department, investigators, and aims of the study) and asked whether they were smokers. If they indicated they were smokers, we continued with the study protocol. This procedure was also used inside offices, pubs, and restaurants, where we approached the managers and asked for permission to survey the workers and patrons in the building. The second survey group consisted of practicing community pharmacists attending the May 2007 assembly of the regional section of the Polish Pharmaceutical Society in Katowice. The pharmacists were approached during meeting breaks and asked to participate in the survey. The third survey group comprised pharmacy students in their final year (all classes) at the Medical University of Silesia, who were surveyed during regular lectures in March 2007. The response rates were 78% of smokers (329 agreed to be surveyed of the 420 recruited), and 100% of the community pharmacists (141) and students (123) recruited.

Surveys

Because there are no well-established instruments to examine the role of community pharmacists in smoking cessation, we created our own. Each of the three surveys (Table 1) included a maximum of 10 questions to facilitate rapid administration. The current smokers' questionnaire included eight closed-ended questions about their attempts to quit and type of expectations for pharmacists, and one open-ended question about the number of cigarettes smoked per day. The survey for community pharmacists included nine closed-ended questions about their experience with smoking cessation counseling and one open-ended question about their length of time working in a community pharmacy setting. The pharmacy students' survey included seven closed-ended questions about their education related to smoking and smoking cessation. All participants were also asked to report their age and sex. The surveys were anonymous and conducted in compliance with the requirements of the Committee for Human Research at the Medical University of Silesia.

Results

We surveyed a total of 593 participants: 329 current adult smokers, 141 community pharmacists, and 123 pharmacy students. The results of the surveys are presented in Tables 2 through 4.

Current Smokers

The average age of surveyed smokers was 39.2 ± 12.9 years and slightly more than half of the sample was female (51%). Surveyed smokers averaged 17.2 ± 9.4 cigarettes a day. The majority (81%) had attempted to quit smoking at least once in their lifetime and 83% did not seek help from a health professional. More than a half (66%) of surveyed smokers planned to quit during the next year. For future quit attempts, pharmacists were the highest ranked health professional (39%) that smokers would ask about pharmacological treatment for smoking cessation. More than half (56%) of the current smokers perceived pharmacists to be a qualified health professional to provide support for smoking cessation.

Community Pharmacists

The average age of the surveyed pharmacists was 38.1 ± 10.7 years and the average time in practice in a community pharmacy setting was 14.2 ± 11.3 years. Most of the surveyed pharmacists were females (83%), which is consistent with 85% prevalence of women among pharmacists in Poland (Central Statistical Office, 2009). Twelve percent of the community pharmacists reported they were current smokers. Most community pharmacists (95%) reported having been asked by patients for support in quitting smoking; overall 28% of pharmacists reported meeting more than 10 smokers a week. The majority (79%) of pharmacists believed they were fully qualified to provide smoking cessation services and 85% did not advise their

clients to see an addiction specialist for smoking cessation. The majority (86%) of the community pharmacists at least sometimes recommended NRT products to patients and spent at least 2 min counseling patients one-on-one; 16% reported that they spent more than 5 min per patient counseling.

Pharmacy Students

The average age of the surveyed pharmacy students was 24.2 ± 1.1 . The majority of the surveyed students were female (74%), and 32% reported they were current smokers. More than half of the pharmacy school students (60%) indicated that during their training they learned about nicotine dependence treatment and 69% learned about the pharmacology of nicotine. Pharmacy students' self-reported ability to provide information about the health consequences of tobacco smoking to patients was higher than their reported ability to provide basic smoking cessation counseling (85% vs. 61%).

Discussion

This study is a first attempt to describe the role of community pharmacists in smoking cessation in Poland. We surveyed three different groups: current adult smokers, community pharmacists, and pharmacy students to provide a broad perspective. The survey results indicate that the majority of current smokers did not anticipate seeking general counseling from a health provider to quit smoking. These results confirm existing research that smokers in general avoid counseling (Foulds, Steinberg, Williams, & Ziedonis, 2006). Surveyed smokers who might consider seeking assistance with future quit attempts ranked pharmacists first for those they would consult for pharmacological support for quitting, and second to addiction specialists as the category of health professionals from whom they would ask for supportive counseling.

We found that a high percentage of community pharmacists believed they were ready to provide cessation support to their smoking clients. These findings are similar to those from surveys of community pharmacists in Thailand and the United States (Hudmond, Prokhorov, & Corelli, 2006; Thananithisak, Nimpitakpong, & Chaiyakunapruk, 2008; Williams, Newsom, & Brock, 2000). Results published by Williams et al. (2000) also suggested that pharmacists do not routinely identify smokers and perceive several barriers to participating in smoking cessation activities. Although our study in Poland did not assess these factors, it is possible that there are existing and unaddressed barriers to community pharmacists providing smoking cessation services for their clients.

The survey results from pharmacy students indicate that tobacco-related topics discussed as part of the undergraduate curriculum have a greater emphasis on the "science" of tobacco and tobacco smoking (e.g., their toxicology) than on the "practical" aspects of treating tobacco dependence (e.g., nicotine pharmacology). These results are consistent with the results of our previous study suggesting that pharmacy education for Polish students lacks information about the pharmacological aspects of nicotine dependence (Goniewicz, Czogala, & Koszowski, 2005). Recently published data from surveys performed in universities in Germany and United Kingdom showed that medical students also lacked relevant information about smoking and health and the effectiveness of cessation methods (Raupach et al., 2009).

As previously noted, Article 14 of the FCTC indicates that to address the global tobacco epidemic, countries should increase cessation services for smokers. Community pharmacists can be a part of a country's response to this charge. In Poland, we found that current smokers are interested in quitting, as evidenced by their previous quit attempts and their intention to quit in the future, and there is receptivity to turning toward community pharmacists for pharmacological assistance with quitting. We also found that practicing community pharmacists as well as pharmacy students are willing and interested in providing smoking

cessation services to clients. To enhance the capacity of pharmacists in practice to provide smoking cessation services, the curriculum for pharmacy students may be changed to provide more practical training on counseling and advising patients on smoking cessation. Continuing education seminars for practicing pharmacists can also emphasize best practices in the counseling and advising of community pharmacy clients who are seeking help with smoking cessation.

Pharmacists in Poland could follow the lead of other EU members and expand their smoking cessation services to include information about the safety and efficacy of NRT, as well as supportive counseling to encourage pharmacy clients to quit smoking (Bansal, Cumming, Hyland, & Giovino, 2004). At present, there are no specific guidelines for community pharmacists in Poland on how to counsel nicotine-dependent patients. A good place to start might be the implementation of the 5A's strategy (Ask, Advise, Assess, Assist, Arrange), which is recommended in the United States by the Department of Health and Human Services and which has been shown to be effective in various clinical settings and primary care (Bentz et al., 2007; Cromwell, Bartosch, Fiore, Hasselblad, & Baker, 1997; Fiore et al., 2008; Gordon, Andrews, Crews, Payne, & Severson, 2007). The 5A's strategy is designed to be brief (3 min or less) and has five steps: (a) Ask the patient whether he or she uses tobacco, (b) Advice him or her to quit, (c) Assess willingness to make a quit attempt, (d) Assist him or her in making a quit attempt, and (e) Arrange for follow-up contacts to prevent relapse. Continuing education units could include practical exercises, implementation of pharmaceutical practice guidelines, and providing quick reference guides and be sponsored and supported by health professional associations (e.g., societies of pharmacists; Wick, Ackermann-Liebrich, Bugnon, & Ceriese, 2000).

As for pharmacy students, comprehensive tobacco cessation training could be a core component of pharmacy school curricula. A recent survey of faculty in 82 U.S. pharmacy schools ranked the topics of "aids for cessation," "assisting patients with quitting," and "drug interactions with smoking" as the most important areas to prepare students with training in smoking cessation (Hudmon, Bardel, Kroon, Fenlon, & Corelli, 2005). Research has shown that the addition of a smoking cessation curriculum results in an improvement in pharmacy students' perceived confidence and ability to provide tobacco smoking cessation (Corelli et al., 2005).

This study has several limitations. The surveys were developed for quick assessment of the three groups. Because there is a lack of similar tools, no construct validity was performed. Although the study was done in Poland, the surveys might easily be implemented in other European countries, particularly those with similar health systems. Another limitation of our study is the lack of objective data about the actual level of knowledge about tobacco addiction and dependence treatment among Polish community pharmacists and pharmacy students. Based on our data it is also difficult to assess whether community pharmacists think that smoking cessation is important for their patients. These issues should be studied in detail in the future.

In addition to enhancing the capacity of community pharmacists to address smoking cessation, increasing their role in smoking cessation will depend on alerting the general public to the availability of smoking cessation services at the local pharmacy. As a first step, community pharmacies could create prominent displays of smoking cessation information and available products, indicating that the pharmacists are able to provide further support for those ready to quit. Perhaps practicing community pharmacists who have received continuing education in smoking cessation could indicate this advanced training through a sign or designation within the pharmacy. Poland's national quit line could also refer callers to the pharmacists with this additional training. Through modest changes in pharmacy school curriculum, tobacco

cessation-specific continuing education for community pharmacists, and increasing awareness among smokers in the general public that community pharmacists are an accessible resource to aid in quitting, Poland can expand access to competent cessation and counseling services. Other countries may use the same strategies or adapt them as necessary.

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Table 1**Organization of Brief Surveys Used in the Study**

Question	Answers
Survey 1—Current smokers	
Age, sex	Years, M/F
How many cigarettes do you smoke per day?	Number
Have you ever tried to quit smoking?	Never/once/2–3 times/more than 3 times
Are you going to quit smoking in near future?	Yes/no
If you ever tried to quit, which health professional did you ask for any support?	GP/addiction specialist/pharmacists/psychotherapist/other/none
If you try to quit in the future, which health professional will you ask	
for general counseling?	GP/addiction specialist/pharmacists/psychotherapist/other/none
for pharmacological treatment?	GP/addiction specialist/pharmacists/psychotherapist/other/none
Do you feel pharmacist is qualified health professional to provide smoking cessation to you?	Yes/no
Survey 2—Community pharmacists	
Age, sex	Years, M/F
Do you smoke cigarettes?	Every day/sometimes/never
How long have you worked in a community pharmacy?	Years
During your work in community pharmacy do you meet patients who ask you for support in quitting smoking?	Many times per week (>10)/few times per week (<10)/rarely/never
Do you believe you are qualified health professional to provide smoking cessation to your patients?	Absolutely/partly/not at all
Do you advise your patients to see addiction specialist/clinics?	Yes/no
Do you know where addiction specialists/clinics are available?	Yes/no
How often do you recommend NRT products to your patients? (patches/gums/lozenges/inhaler)	Never/rarely/sometimes/often
Do you feel that your knowledge from undergraduate courses is satisfactory to provide basic smoking cessation counseling to your patients?	Yes/no
How long do you spend on counseling one patient for smoking cessation during your daily practice?	Less than 1 min/1–2 min/2–5 min/more than 5 min
Survey 3—Pharmacy Students	
Age, sex	Years, M/F
Do you smoke cigarettes?	Every day/sometimes/never
During your undergraduate course, have you learnt about:	
health consequences of smoking?	Yes/no
nicotine dependence treatment?	Yes/no
toxicology of tobacco smoke?	Yes/no
pharmacology of nicotine?	Yes/no
Do you feel that your knowledge from undergraduate courses will be satisfactory to:	

Question	Answers
provide basic information about health consequences of smoking to your patients?	Yes/no
provide basic smoking cessation counseling to your patients?	Yes/no

NOTE: F = female; GP = general practitioner; M = male; NRT = nicotine replacement therapy.

Table 2**Results of the Survey of Current Smokers**

Current Smokers	N	%
Past attempts to quit smoking		
Never	64	19%
Once	75	23%
2–3 times	115	35%
More than 3 times	75	23%
Plan to quit (during next year)		
Yes	217	66%
No	112	34%
Type of health professional consulted for support with past quit attempts		
General practitioner	9	3%
Addiction specialist	10	3%
Pharmacist	18	5%
Psychotherapist	9	3%
Other	10	3%
None	273	83%
Type of health professional who might be asked for general counseling in the future		
General practitioner	9	3%
Addiction specialist	55	17%
Pharmacist	26	8%
Psychotherapist	17	5%
Other	6	2%
None	216	66%
Type of health professional who might be asked for pharmacological support in the future		
General practitioner	39	12%
Addiction specialist	111	34%
Pharmacist	127	39%
Psychotherapist	16	5%
Other	7	2%
None	29	9%
Pharmacist is qualified health professional to provide smoking cessation		
Yes	184	56%
No	145	44%

Table 3**Results of the Survey of Community Pharmacists**

Community Pharmacists	N	%
Frequency of meeting patients who ask for support in quitting smoking		
Many times per week (more than 10)	39	28%
Few times per week (less than 10)	52	37%
Rarely	43	30%
Never	7	5%
Believes self to be qualified health professional to provide smoking cessation		
Absolutely	111	79%
Partly	24	17%
Not at all	6	4%
Advises their patients to visit addiction specialist/clinics		
Yes	21	15%
No	120	85%
Has knowledge about availability of addiction specialists/clinics		
Yes	23	16%
No	118	84%
Recommends NRT products to patients		
Never	7	5%
Rarely	13	9%
Sometimes	80	57%
Often	41	29%
Thinks their knowledge about smoking cessation from undergraduate courses is satisfactory		
Yes	117	83%
No	24	17%
Amount of time spent on counseling one patient for smoking cessation		
Less than 1 min	6	4%
1–2 min	42	30%
2–5 min	70	50%
More than 5 min	23	16%

NOTE: NRT = nicotine replacement therapy.

Table 4

Results of the Survey of Pharmacy Students

Pharmacy Students	N	%
Learned about the health consequences of smoking		
Yes	102	83%
No	21	17%
Learned about nicotine dependence treatment		
Yes	74	60%
No	49	40%
Learned about the toxicology of tobacco smoke		
Yes	111	90%
No	12	10%
Learned about the pharmacology of nicotine		
Yes	85	69%
No	38	31%
Feel that knowledge from undergraduate courses will be satisfactory to provide basic information about health consequences of smoking		
Yes	105	85%
No	18	15%
Feel that knowledge from undergraduate courses will be satisfactory to provide basic smoking cessation counseling		
Yes	75	61%
No	48	39%