

# A Comparison of Pharmacists' Attitudes Toward the Benefits of Smoking Cessation

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## *INTRODUCTION*

Cigarette smoking is clearly a significant health risk, and the cessation of smoking remains one of the most important measures for disease prevention and health promotion. The public cannot be told too often that smoking is the major preventable cause of death and disease in our nation. Tobacco use contributes to about 30% of all cancer-related deaths and causes 350,000 premature deaths each year (1, 2). Nonetheless, over 50 million people continue to smoke (2).

Pharmacists in the United States are the most accessible health professionals for patients to rely upon for health needs (3). Pharmacists serve as individual health resources for countless patients. They are respected authorities who know a great deal about health and illness, as well as pharmaceutical preparations. Accordingly, advice provided by a pharmacist carries significant weight.

Because of the unique medication monitoring capabilities of pharmacists, especially with regard to drug interactions, the detec-

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tion of adverse effects of the interaction of smoking and medications can be a major impetus for pharmacists to attempt to intercede in patients' smoking behaviors (4). Pharmacists are also in a position to notice the smoking-related sequelae that occur in smoking patients. Allergies, respiratory tract infections, an increase in respiratory symptoms, etc., are palpable drawbacks related to smoking that pharmacists can point to when a patient seeks relief from symptoms. These therapeutic indicators are ideal examples for pharmacists to use in their smoking cessation messages. However, some pharmacists have exhibited a paradoxical attitude toward the consequences of smoking by selling tobacco products in pharmacies. Pharmacies rank second only to supermarkets in cigarette sales, and these sales account for one-fifth of tobacco sales (5). In a statewide survey of pharmacists, Grapes and colleagues found *inter alia* that pharmacists indicated the most important cue in urging pharmacies not to sell cigarettes was the pharmacist deciding it was contrary to his or her professional responsibility to sell cigarettes (6).

In a study carried out in Canadian pharmacies, most of the pharmacies sold and displayed tobacco products, which were thought to be more important for attracting customers than for their direct profit potential (7). Pharmacists were aware of the correlation between lung cancer and cigarette smoking but were ignorant of the link between bladder cancer and cigarette smoking. In a recent evaluation of the *Lilly Digest* analysis of pharmacy operations, it was suggested that the optimum ratio of cigarette sales as a percentage of total sales was under 1% (8). Thus, the sale of tobacco products has a minimal impact on overall pharmacy sales, yet most pharmacies still sell tobacco products.

For a number of years, there has been a recurring interest in delineating the public health role of pharmacists, usually with the aim of expanding that role. In 1980, the Pharmacy Services Committee of the Medical Care Section of the American Public Health Association developed a position paper on the subject. In the paper, the committee noted that "pharmacy educators have failed to teach public health and to provide role models for pharmacy students in public health at either the macro or micro level." Two deterrents to a greater role for pharmacists, especially community pharmacists,

were lack of education (they are not taught how to perform these functions) and unavailability of financial and other incentives. One such public health function is that of a counselor regarding smoking cessation.

To further examine pharmacists' views toward smoking, this study was undertaken to assess the following research question: How do pharmacists feel about the elimination of cigarette, pipe, or cigar smoking as important in promoting the health of the average person? Furthermore, are there differences among pharmacists in varying practice sites in their view of the benefits of smoking cessation?

### ***METHODS***

Data concerning pharmacists' views toward smoking cessation and other personal health practices were collected via a mailed survey questionnaire. There are 2,230 individuals registered to practice pharmacy in Mississippi. A random stratified sample of 1,115 pharmacists was selected for the study. The stratum used was the community of practice; the sample included 50% of the pharmacists in each community in Mississippi. The subjects were sent a 1-page questionnaire containing 29 items. Of these items, 25 were Likert-scaled items with 5-point anchors dealing with health-related items (1 = very unimportant, 2 = unimportant, 3 = uncertain, 4 = important, 5 = very important). One of the items was a question in which respondents indicated their practice site (community pharmacy, chain pharmacy, or hospital pharmacy). The remaining three items were demographic questions (years in practice, sex, and size of community).

A questionnaire was provided to the sample via first-class mail. One week later, a reminder postcard was sent to encourage a response. Three weeks after the initial mailing, remaining nonrespondents were sent another questionnaire with a request for a response. Of the 795 questionnaires returned, 47 were returned with incomplete responses. Thus, the usable response rate for the survey questionnaire was 67.1%.

Statistical analysis of the data was accomplished through the use

of analysis of covariance (ANCOVA), with practice site as the qualitative independent variable; attitude toward elimination of cigarette, pipe, or cigar smoking as the dependent variable; and years in practice included in the analysis as the covariate with the dependent variable.

### RESULTS

The average length of practice was 16.6 years in the sample. A total of 76.9% of the sample were males. A total of 389 individuals (52%) practiced in a community pharmacy setting, 125 (16.7%) were chain pharmacists, and 152 (20.3%) were hospital pharmacists. The remaining 11% practiced in other pharmacy practice roles (drug companies, academe, etc.) and were excluded from the analysis.

In the analysis of covariance procedure, there were no significant differences in how pharmacists practicing in community, chain, or hospital pharmacy sites viewed the benefits of smoking cessation as helping an average person remain healthy. The results of the analysis of covariance procedure can be found in Table 1. Hospital pharmacists were followed by chain pharmacists, who, in turn, were followed by community pharmacists in viewing the cessation of smoking as most beneficial. The average response of the entire sample was a value of 4.54, which indicates the sample felt elimination of cigarette, pipe, or cigar smoking would be an important way to promote the health of the average person. The covariate variable (years in practice) was significantly related to the dependent variable. There was a highly significant and negatively correlated relationship between years in practice and attitude toward smoking cessation helping the average person remain healthy ( $r = -0.1294, p < 0.001$ ).

### DISCUSSION

The pharmacist has ample opportunity to impress on each smoking patient that smoking is the primary cause of preventable death. This is particularly true when the stage has been set by patients

TABLE 1. Results of the Analysis of Covariance Procedure

Source	Sum of Squares	DF	Mean Square	F	Significance
<u>Covariates</u>					
Years in practice	6.614	1	6.614	10.17	0.001
<u>Main Effects</u>					
Workplace	.407	2	.203	.31	.732
Explained	7.021	3	2.340	3.60	0.013
Residual	430.572	662	.650		
Total	437.593	665	.658		

appearing for prescriptions to be filled for medications to treat diabetes, asthma, hypertension, angina, or other cardiovascular diseases or by patients asking, as they often do, about cancer or bronchitis and other respiratory conditions. Pharmacists can and should make the "stop smoking" message an important part of their patient counseling activities. Pharmacists are in a unique, key position to motivate a lifesaving behavioral change in patients who smoke.

Health care settings such as hospitals and medical centers have frequently been the loci of smoking cessation programs for patients and for the general public. Hospital, community, and chain pharmacies could serve as such sites, and pharmacists could perform a major health promotion/disease prevention function that would have the potential to benefit many patients. The importance of pharmacists serving as role models in smoking cessation cannot be overstated. They can be role models in the sense of not offering tobacco products for sale as well as not exhibiting smoking behavior in the practice of pharmacy in any setting.

Studies have demonstrated that a firm message to quit smoking delivered by a physician can be effective in motivating many patients to quit or reduce their smoking (9). However, it has been noted that physicians, by their own admission, do not feel adequately prepared to counsel patients regarding smoking cessation (10). The work of Russell and Jarvis certainly suggests that minimal interventions on the part of practicing physicians can produce more cases of smoking cessation than intensive intervention by those who specialize in smoking cessation (11). Recently, a team of researchers found that smoking cessation rates doubled when counseling was followed by a letter of encouragement and provision of reinforcement materials (12). Pharmacists may be in similar situations for follow-up and encouragement of the patient striving to quit smoking. The provision of smoking cessation literature to patients is an effortless, yet vital, means for pharmacists to educate their patients in any practice setting.

Pharmacological treatment of nicotine addiction has included the use of nicotine polacrilex gum (the only FDA-approved adjunct aid for smoking cessation) and experimental agents such as nicotine transdermal patches and clonidine tablets and transdermal patches.

### ***Nicotine Polacrilex***

Nicotine polacrilex is designed to be used as a nicotine replacement therapy for a short period of time in nicotine reduction therapy. It has been shown to be an effective smoking cessation therapy in controlled studies that included measures of 6- and 12-month abstinence rates (13). Success with the therapy is dependent upon proper use and proper management of potential side effects (14).

### ***Nicotine Patches***

The use of transdermal nicotine patches as smoking cessation therapy has produced encouraging results in clinical trials. Success has been achieved at one, two, and three months in a controlled trial of a nicotine patch versus placebo (15). This form of nicotine has not yet received FDA approval.

### ***Clonidine***

Clonidine (an alpha-2 adrenergic agonist) has been shown to have a positive effect upon nicotine withdrawal symptoms (16). However, its use as a stand-alone smoking cessation therapy has not been established. Long-term abstinence from tobacco has not been shown to occur with its use alone (17). The drug does not have FDA approval for use in smoking cessation therapy.

### ***Other Therapies***

Recently, doxepin and buspirone have been studied as aids to ameliorate the withdrawal symptoms occurring after smoking cessation. Neither drug has been approved as a smoking cessation therapeutic adjunct.

The success of all of these therapies is dependent upon patients having the proper knowledge of how to use the therapies. The pharmacist is the key professional to aid the patient in understanding the proper methods to ensure that these drugs have the opportunity to work.

For smoking cessation programs to be optimally successful, the patient must clearly believe in the benefits of smoking cessation. In addition, pharmacists must be willing to actively encourage cessa-

tion. Rothert and Talarczyk have noted the difficulty of achieving a behavioral change (such as smoking cessation) and have stressed the importance of patient and professional working together to define plans and strategies to support the patient (18). However, for this to be successful, the health professional must agree that the change will be beneficial (18). If a physician-prescribed therapeutic regimen such as nicotine polacrilex gum therapy has been prescribed for a patient, the pharmacist must become involved in helping the patient realize the benefits of smoking cessation in addition to counseling the patient on the proper use of the medication.

The pharmacist clearly has a unique opportunity to serve as a health education resource for smokers. Pharmacists in all practice locations must ensure that there are no tobacco products for sale in their practice sites. Hospital pharmacists should work to eliminate tobacco products from the items offered for sale in hospital gift shops. Community and chain pharmacists must not use the sale of tobacco products as loss leaders to boost sales of other, more profitable items.

Pharmacists are in a position to affect the personal health practices of the patients they serve on a daily basis. Encouragement of pharmacist involvement in public health practices and education must be accomplished on a number of levels. Early encouragement should be instituted while the individual is a student in a school or college of pharmacy by the faculty of such institutions. Academically based public health pharmacy role models could make young pharmacists aware of the importance of this component of their professional role. In addition, practicing pharmacists need a suitable forum to discuss and share ideas on the public health component of their practices. This postgraduation component, coupled with the professional academic development of the public health view, would enhance pharmacists' perception of and possible involvement in public health issues that directly affect the health of the patient population pharmacists serve.

Regardless of practice site, pharmacists must take an active stance in helping their patients quit smoking. From the findings of this study, it is apparent that pharmacists in practice for longer periods of time need education and stimulation concerning the negative

consequences inherent in the use of tobacco products. This counseling of the counselors could go a long way in effecting a change in the smoking patterns of many patients. Regardless of the pharmacist's length of time in practice or the practice locale, the sale of tobacco products in pharmacies or by pharmacists must stop.

The sale of tobacco products, or the lack thereof, sends a powerful message to patients. People tend to see pharmacists who have stopped selling smoking accessories in a very positive light. Pharmacists who have removed tobacco from their shelves have experienced both positive and negative comments. However, even smokers have made positive comments to the effect that this was expected. After all, pharmacists are in the health business.

Many pharmacies sell tobacco products, and many have discontinued the sale of such items. But for those who continue to sell tobacco-related products, efforts must be made to influence the decision to sell such items. The question of what motivates a community or chain pharmacist to sell harmful items or items of questionable worth while espousing a negative view of the practice of smoking should be addressed in future research. Corporate policies may take this decision out of the hands of pharmacists, but if pharmacists are making the decision to sell tobacco products, they should be asked why they sell them.

Because of the prominence of smoking and its effect upon the morbidity and mortality of the American population and because of the need for pharmacists to play an expanded role in smoking cessation, continuing education programs and certificate programs related to patient counseling and pharmacist involvement in smoking cessation must be developed and promoted. Through pharmacist involvement in smoking cessation, through both therapeutic and nontherapeutic measures, patients can only benefit. These public health (health promotion/disease prevention) activities will benefit all involved. Efforts must be made to influence *all* pharmacists; however, the results of this study seem to indicate that pharmacists who have been in practice for longer periods need enhanced interventions to provide them with the information and expertise they need to see the truly beneficial aspects of smoking cessation and the dire consequences that result from the long-term use of tobacco.

Although the sample used in this study was large and representative of various types of pharmacy practitioners, caution should be exercised in extrapolating the results of this study to samples of pharmacists elsewhere.

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