Smoking Counseling Practices of Recently Trained Family Physicians

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Cigarette smoking is the number one preventable cause of death and disease in the United States today.[1] Smoking results in an estimated 320,000 premature deaths annually, including 30 percent of all cancer deaths.[1,2] Yet, over 60 million Americans continue to smoke and millions more begin each year.[1]

The literature is mixed on physician effectiveness in counseling patients to quit smoking. A variety of physician-initiated techniques, such as verbal advice, written pamphlets, warning of follow-up, demonstration of carbon monoxide in exhaled air, and the use of nicotine gum, have been examined in studies that have reported one year follow-up quit rates of 5 to 17 percent.[3–5] Other studies of patients with pulmonary disease have reported that 34 to 57 percent of patients comply with physician's advice to stop smoking.[6,7] Even higher quit rates (27.5 to 63.2 percent) have been achieved in survivors of myocardial infarctions.[8]

Despite the optimism from these intervention studies, surveys of physician attitudes about their effectiveness in helping patients to stop smoking have been disappointing. One study has shown that only 12 percent of California physicians feel effective in helping patients to stop smoking.[9] In other studies only 14 percent of physicians believed that they had ever successfully influenced their patients to stop smoking, and over two thirds doubted that their patients tried to follow their advice to quit smoking.[10,11]

There has been no previous study of the smoking counseling beliefs, attitudes, and practices of recently trained physicians. This group is important because of the current efforts to incorporate preventive medicine training as a part of medical education. In particular, family medicine programs have developed specific guidelines to include health promotion during residency training.[12,13] The present study surveyed a group of recently trained practicing family physicians to determine their attitudes toward smoking counseling.

METHODS

The eligible physicians for this study had graduated from two Iowa family medicine residency programs during the years 1974 to 1984 and were currently practicing family medicine. A total of 160 physicians graduated from these two programs during this period. Eleven physicians were excluded from the study because they were not practicing family medicine. Of the 149 eligible graduates, 23 could not be contacted. One hundred six of the remaining 126 physicians agreed to participate in the study for a response rate of 84 percent of the contacted physicians.

One of the residency programs was university-based (University of Iowa, Iowa City, Iowa), while the other was community hospital-based (Cedar Rapids, Iowa). Both residency programs provided periodic lectures on smoking during the training years (1974 to 1984). In addition, since 1979 the community-based residency has had a unique curriculum that emphasizes community health education activities based on the DOC (doctors ought to care) health promotion concepts.[14]

The data were collected using a standardized 95-item telephone questionnaire. This questionnaire included the well-studied 40-item Physicians Attitudes on Counseling About Smoking (PACS) instrument. The PACS questionnaire measures physician motivation, perceived skills, and barriers to counseling about smoking.[15–17] The remaining 55 items measured demographic information, previous training in smoking counseling, and the perceived usefulness of the community health education training.

The responses were analyzed using chi-square and analysis of variance statistics. Based on factor analyses, the PACS responses were grouped into ten multi-item attitude subscales and three global scales previously described by Wells et al, which measured categories of motivation, perceived skill, and barriers to smoking counseling.[15–17]

Submitted, revised, September 30, 1986.

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TABLE 1. PHYSICIAN SMOKING COUNSELING STUDIES

Study Year	Wells et al[9] 1978 (%)	Wechsler et al[10] 1981 (%)	American Cancer Society[2] 1984 (%)	Goldstein et al 1985 (%)
Respondents who smoke	15	—	12	2
"Counseling about smoking is important"	85	—	—	100
"Quite effective" or "very successful" in counseling	12	3	—	30
"Physicians have an obligation to counsel"	85	86	—	99
"I counsel patients regardless if they have a smoking-related illness"	52	—	89	98
Believed they had influenced patients to stop smoking	—	14	—	98

RESULTS

The recently trained family physicians in this study had universally positive beliefs in terms of the physician's role in smoking counseling. All respondents believed that counseling patients about smoking was important. Ninety-nine percent felt that physicians had an obligation to counsel. Almost all physicians (97 percent) agreed that stopping smoking can prevent heart disease, indicating a strong belief in the benefits of stopping smoking. Seventy-five percent disagreed with the statement, "Once a smoker, always a smoker," indicating a broad acceptance for the idea that patients can successfully quit smoking.

Thirty percent of the respondents agreed with the statement, "I am quite effective in counseling patients about smoking." Feedback from patients is one way for a physician to assess his or her own counseling effectiveness. Ninety-eight percent of the respondents reported that patients had returned to their office claiming to have stopped smoking in part because of the physician's recommendation (Table 1).

Barriers may prevent or decrease the amount of counseling done by a physician. Sixty-eight percent of the respondents agreed that counseling was time consuming, 54 percent agreed that it was difficult, and 53 percent agreed that physicians are not paid enough for counseling.

When examining the actual practices of the study physicians, only 2 percent claim to be current smokers and 93 percent felt that physicians had an obligation not to smoke. Ninety-eight percent reported counseling patients about smoking, even if the patient did not present with a smoking-related illness. Only 2 percent had ever avoided counseling because they were worried that they would offend a patient.

Forty-four percent of respondents reported having had formal training (ie, lecture or workshop) in counseling patients to quit smoking. The multi-item attitude subscale was used to measure the perceived skill of those respondents who admitted to having formal training (n = 46) and those without formal training (n = 59). This subscale rated the perceived level of skill from 2 to 10 with lower scores indicating higher perceived skill. Those with formal training measured 4.8 compared with those without training, who measured 5.2 (P = .0458). When asked whether training would improve their effectiveness in counseling, 77 percent said yes to training in medical school, 88 percent to training as a house officer, and 91 percent said continuing medical education would improve effectiveness. There were no significant differences in the smoking counseling attitudes of physicians in the community-based program compared with those in the university-based program.

COMMENT

There are many theoretical reasons why physicians should be effective counselors in helping patients to stop smoking. Physicians establish a personal relationship with patients, they see most people at least once a year, and they are viewed by the public as reliable sources of health information.[18–20] In addition, they have contacts with patients when they are ill, which is a time when people are most amenable to lifestyle changes.[21] A variety of intervention studies have shown that physician-initiated techniques can result in sustained quit rates of 5 to 17 percent of smokers.[3–5]

Past studies of physician attitudes about smoking and smoking counseling have shown that physicians believe that stopping smoking is the single most important health promoting behavior.[22] Most physicians also report feeling that counseling patients about smoking is important and is the responsibility of the physician, but personally feel ineffective in helping patients to stop smoking.[9,10]

In the past 20 years the physician smoking rate has decreased from 30 percent to 15 percent and to an even lower 4.5 percent in physicians under 30 years old.[23,24] These are all far below the current national average of 32 percent.[1] The 2 percent smoking rate in this study indicates the importance that the respondents placed on their serving as role models to their patients. Past research has shown that physicians who do not smoke counsel signif-

icantly more often and more aggressively than physicians who continue to smoke.[9,25]

Every physician in this study believed that counseling patients not to smoke was important. Almost all (99 percent) felt counseling was a physician's responsibility and should be done regardless of whether a patient presents with a smoking-related illness (98 percent). All of these values are higher than previous studies.[2,9,10] Each of these attitudes would obviously support a physician's motivation to counsel patients. One recent study has demonstrated that physicians who felt that counseling patients about smoking was important counseled more aggressively about this habit and to a broader range of patients.[9]

The most encouraging findings are that almost all (98 percent) reported being influential in helping their patients to quit smoking, and that there is also an increased level of perceived effectiveness, 30 percent compared with only 12 percent in a study of California physicians in 1978[9] and a rate of 3 percent of Massachusetts primary care physicians in 1981.[10] This latter finding is important because a physician's perceived level of effectiveness in smoking counseling should serve as an indicator of actual counseling practices.

The overwhelming majority (91 percent) felt that training in smoking counseling would be beneficial. Those who reported receiving training did have greater perceived skills in this area. These findings should promote further education of physicians to help them develop smoking counseling skills.

Care must be taken in generalizing these findings to either the graduates of other family medicine residency programs or to recent graduates of other primary care specialties. It must also be remembered that the data were of a self-report format; however, a well-studied survey instrument was used.

This study indicates that this group of recently trained family physicians are different from the physician groups previously reported in the literature. Compared with previous studies, the physicians in this survey have the attitudes, personal health practices, and motivation to counsel more aggressively and more frequently their patients to quit smoking. This study should encourage continued emphasis on the physician to develop skills to be an effective promoter of healthy lifestyles.

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