
Tobacco Intervention Practices of Licensed Psychologists

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Tobacco dependence is a serious public health concern. The U.S. Department of Health and Human Services has issued a practice guideline of best practices to encourage all health care providers to intervene with tobacco-dependent individuals they encounter. Psychologists may be ideally suited to implement brief tobacco interventions due to their expertise in behavior change strategies and interpersonal counseling skills. This study sought to investigate current tobacco assessment and intervention practices and perceptions of responsibility for tobacco intervention among a regional sample of licensed, practicing psychologists. Results suggest that a majority of psychologists fall far short of the ideal best practices recommended in the practice guideline, and many are unaware of the availability of the guidelines. Further, psychologists in this study perceived tobacco intervention to be a greater responsibility of physicians and other health care providers than of psychologists and other mental health professionals. © 2005 Wiley Periodicals, Inc. *J Clin Psychol* 62: 313–323, 2006.

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Cigarette smoking has an overwhelming influence on the prevalence rates of the leading causes of death in the United States (i.e., cancer, cardiovascular disease, stroke). In fact, the life spans of men and women who smoke are decreased on average by 13.2 and 14.5 years, respectively (United States Department of Health and Human Services [USDHHS], 2004).

Current users of tobacco products can, and do, successfully quit using. Most individuals do so without intensive professional assistance or treatment (Gallup, 1999; Garvey, Heinold, & Rosner, 1989), but may benefit from brief interventions aimed at prompting

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attempts to quit (Fiore et al., 2000). In 1996, the Agency for Health Care Policy and Research (AHCPR) developed a set of practice guidelines for physicians and other health care professionals to help patients avoid and/or quit using tobacco products with effective, empirically validated tobacco dependence treatments and practices (Fiore, Bailey, & Cohen, 1996). This protocol, *Clinical Practice Guideline: Treating Tobacco Use and Dependence*, was updated in 2000 (Fiore et al., 2000, hereafter referred to as "the *Guideline*"). While only about 7% of smokers successfully achieve abstinence annually without any intervention, long-term abstinence success rates can be increased to 15% to 30% by utilizing brief opportunistic interventions recommended in the *Guideline* (Fiore et al., 2000).

The updated protocol provides five main strategies that health care professionals should employ in order to help their patients with tobacco use cessation. The five cessation strategies proposed to help health care professionals intervene with patients who use tobacco are commonly known as the "Five A's": *ask, advise, assess readiness, assist, and arrange*. First, every patient should be asked about tobacco use at every visit in order to systematically identify all users ("*ask*"). Second, all tobacco users should be strongly advised to quit ("*advise*"). Third, willingness to make an attempt to quit should be assessed ("*assess readiness*"). Fourth, appropriate assistance should be provided to the patient, depending upon the patient's current readiness to quit ("*assist*"). For patients who want to quit smoking, this assistance might include behavioral counseling or referral to self-help resources. For patients not currently willing to quit, health care professionals are encouraged to use a brief, decision-making or motivational intervention. Fifth, follow-up contact with patients who use tobacco should be arranged ("*arrange follow-up*"). The maximum possible benefit to the population can only be achieved via widespread use of best practices like those described in the *Guideline* among all health care providers during all patient contacts (Fiore et al., 2000).

Do health care providers currently intervene with tobacco use? Most studies to date have focused upon physician behavior. In the case of physicians, the answer appears to be "No." Several studies have indicated that most physicians fail to counsel their patients to stop smoking (Centers for Disease Control and Prevention, 1993; Gilpin et al., 1992; Thorndike, Rigotti, Stafford, & Singer, 1998). However, the rate at which physicians advise patients who smoke to stop has increased substantially over the past several years (Gilpin et al., 1992). This increase occurred between the mid-1970s and the late 1980s: in 1974, 26.4% of smokers reported being advised to quit, in comparison to 1987, during which 50.9% of smokers reported being advised to quit.

A few studies have examined the tobacco intervention behaviors of other health care providers and found that others generally address tobacco use less frequently than physicians. For example, one study of six different health care professionals in the Midwest found all but public health nurses to be less likely than physicians to consistently assess and intervene with tobacco use (Block, Hutton, & Johnson, 2000). Chiropractors and dentists were far less likely to offer any type of intervention (Block, Hutton, & Johnson, 2000). Other studies have examined pharmacists' behaviors and found utilization of tobacco assessment and intervention practices to be widely inconsistent (Williams, Newsom, & Brock, 2000).

Psychologists have a number of potential advantages that may make them ideal participants in joining with other health care professionals to offer brief interventions to clients who use tobacco. First, psychologists are likely to encounter more tobacco users than other health professionals. Tobacco dependence is highly comorbid with many Axis I and II psychological disorders (Lasser et al., 2000; Grant, Hasin, Chou, Stinson, & Dawson, 2004). Second, the expert interpersonal communication skills required for

psychotherapy may enhance brief interactions designed to enhance motivation or decision-making for tobacco use. Third, psychologists' expertise in behavior change and behavior modification may make them effective resources for clients attempting to quit. Fourth, practicing psychologists often have more frequent, and longer, contact with clients than most other health care professionals, perhaps making time pressure less of a barrier.

Although practicing psychologists may be ideal professionals to intervene with tobacco use, little is known about current practices. Phillips and Brandon (2004) examined this question with a small national sample of practicing psychologists. They found that large numbers of psychologists ignore tobacco use among their clients, and very few engage in the variety of behaviors recommended by the *Guideline*. Further, they found that psychologists were less likely to intervene with tobacco compared to other substance use issues of alcohol or illicit drug use. Psychologists in their study cited a number of reasons for not intervening with tobacco use including it being unrelated to the client's presenting problem, concerns about client receptivity, and lack of training or skills.

The present study sought to address a number of questions with regard to the behaviors of practicing psychologists in the area of tobacco assessment and intervention. This study examines (a) the use of strategies consistent with the global strategies described by the "Five A's" among practicing psychologists; (b) the relative frequencies of tobacco assessment and intervention strategies by practicing psychologists; (c) differential frequencies of strategy use based on theoretical orientation, training experience, or personal tobacco use history of the psychologist; and (d) practicing psychologists' attitudes about professional responsibility for tobacco intervention among health care providers. This study sought to replicate and extend the initial findings of Phillips and Brandon (2004) and increase understanding of the current status of tobacco assessment and intervention practices among psychologists.

Method

Procedure

Participants were recruited by mail from a public listing of all currently licensed psychologists in the state of Oklahoma. The packet included an invitation letter, two copies of an informed consent form, a questionnaire, and a postage-paid reply envelope. Participants were asked to complete and submit the questionnaire by a deadline date approximately three weeks after the packets were mailed. A reminder postcard was mailed to all possible participants 10 days after the initial solicitation packets.

Participants

Four hundred ninety-eight study packets were mailed. Twenty-two (4.4%) of 498 packets were returned undeliverable. A total of 167 completed questionnaires were ultimately returned, for a total response rate of 34.7%. Of the returned questionnaires, 24 (14.5%) participants reported that they had not provided any direct patient treatment in the past year. These questionnaires were excluded from the data analyses. The final sample included 76 (53.1%) male and 67 (46.9%) female psychologists who had seen patients at least part-time in the past year. Most (71.3%) of the participants were engaged in private practice (independent, 53.1%, or group, 18.2%) and most spent more than half of their time in direct client treatment (69.9%). The average age was 51.4 years ($SD = 9.05$, range = 30–80). The vast majority of the sample chose "Caucasian" (96.5%) to describe

their ethnicity. Most of the sample described their theoretical orientation as “cognitive-behavioral” (46.2%) or “integrationist/eclectic” (26.6%). Furthermore, most of the participants had never been dependent upon tobacco (58.0%; as assessed by a single item “Have you ever been dependent upon one or more tobacco products?”), and only a relative few (7.0%) described themselves as currently tobacco dependent (as assessed by a single item “Are you currently dependent upon one or more tobacco products?”). Finally, most participants (83.9%) reported receiving no training in tobacco use assessment or treatment during graduate school, and few (14.7%) reported familiarity with the *Guideline*.

Measures

Tobacco Intervention Practices. One question assessed participants’ awareness of the *Guideline*. A number of subsequent questions were asked to assess tobacco intervention behaviors relative to the “Five A” strategies recommended in the guideline (see Table 1).

Professional Responsibilities Questionnaire. Participants completed a measure of perceptions of professional responsibilities created for this study. The measure lists 14 different health professions including different physician specialties, mental health professionals, medical assistants, and other specialists. Participants were asked to “rate whether you believe intervening with tobacco use is *their responsibility* in the context of their practice with patients” with four response choices labeled “always,” “almost always,” “sometimes, depending on the context,” and “never.”

Results

Guideline Strategy Domains

Ask. Only about one-third of participants ($n = 50, 35.0\%$) reported asking every patient about tobacco use using either a verbal question or self-report paper-and-pencil option. Either option is appropriate as the *Guideline* makes no specific recommendation for a more effective modality. Those who reported asking patients were more likely to use a verbal question during an interview ($n = 23, 46.0\%$) or both a verbal question and self-report question ($n = 18, 36.0\%$). Among participants who did not ask every patient about tobacco use, 37 (40.7%) reported asking some patients about use, and these participants estimated asking, on average, 34.4% ($SD = 24.5$) of patients about tobacco use. Many participants ($n = 56, 39.2\%$) did not ask any patients about tobacco use.

Assess Readiness. About half ($n = 71, 49.7\%$) of the sample reported conducting some assessment of readiness or willingness to make a quit attempt among current tobacco users encountered in practice.

Advise to Quit. A substantial portion ($n = 109, 76.2\%$) of participants at least occasionally advise current tobacco users to consider quitting. Significant differences in frequency of use of specific strategies was observed, $\chi^2(3, N = 87) = 55.9, p < .001$. Three strategies were similar in frequency of use: “personalized advice involving patient-related information” (67.9% “always” or “often”), “direct advice” (54.1% “always” or “often”), and “education about the health risks associated with smoking” (52.9% “always” or “often”). One strategy, “ask to include in treatment plan/goals,” was used substantially less frequently (26.6% “always” or “often”).

Table 1
 Survey Questions Assessing “Five A’s” Strategy Domains of Recommended Tobacco Intervention

Strategy Domain	Global Question	Specific Questions
Ask	Do you ask every patient about tobacco use? ^a	If YES, which of the following methods do you use? ^b If YES, do you assess for smoking, smokeless tobacco, or both? If NO, do you assess ANY of your patients for tobacco use? ^a About what percent? ^c None
Assess Readiness	Among current tobacco users you encounter in your practice, do you assess for readiness or willingness to make a quit attempt? ^a	If YES, how often do you use each of the following general tactics when offering advice? ^d Direct advice Education about the health risks associated with smoking Ask to include in treatment plan/goals Personalized advice involving patient-relevant information
Advise	Do you ever advise current tobacco users to consider quitting? ^a	If YES, how frequently do you use the following strategies? ^d Make discussion personally relevant to the patient Ask about or suggest risks or negative consequences of smoking Ask about or suggest possible benefits of stopping tobacco use Ask about or suggest possible barriers or impediments to stopping tobacco use Revisit issue of tobacco use at a later date
Assist	For patients who are currently UNWILLING to make a quit attempt, do you offer any type of motivational and/or decision-making intervention? ^a	If YES, how frequently do you use the following strategies? ^d Offer social support and encouragement Assist in setting a quit date Discuss behavior modification strategies for quitting Provide self-help materials (books, tapes, brochures, or websites) Make tobacco cessation part of treatment plan
	For patients who are currently WILLING to make a quit attempt, do you offer them assistance in stopping tobacco use? ^a	Provide referral to a smoking cessation group/program Provide referral to physician for pharmacological treatment Offer education about over-the-counter pharmacological aids
Arrange Follow-up	For patients who use tobacco, what percentage of cases would you estimate that you follow-up at a later date and ask about use or cessation efforts? ^c	None

^aResponse options were “Yes” or “No.” ^bResponse options included “self-report question,” “verbal question during interview,” or “both.” ^cResponse options included “always,” “often,” “rarely,” or “never.” ^dResponse options included “always,” “often,” “frequently,” “sometimes,” “rarely,” or “never.”

Assist. About one-third of participants ($n = 46$, 32.2%) offer some type of motivational or decision-making intervention to tobacco-using patients currently unwilling to make a quit attempt. No statistically significant differences were observed for frequency of using different strategies, $\chi^2(4, N = 42) = 3.1, p = .55$. The most frequently used strategy was to “ask about or suggest possible benefits of stopping tobacco use” (84.0% “always” or “often”), and the least frequently used was to “revisit issue of tobacco use at a later date” (71.7% “always” or “often”).

For tobacco-using patients currently willing to make a quit attempt, most participants ($n = 127$, 89.8%) reported offering some type of assistance. Significant differences were found in frequency of use of specific strategies, $\chi^2(7, N = 115) = 232.8, p < .001$. The most frequently used strategy was to “offer social support and encouragement” (80.5% “always” or “often”). Less frequently used strategies were to “assist in setting a quit date” (42.7% “always” or “often”), “provide referral to a physician . . . or recommend consult with physician” (41.3% “always” or “often”), and “provide referral to a smoking cessation group” (34.3% “always” or “often”). The least frequently cited strategy used by psychologists was “make tobacco cessation part of treatment plan” (30.1% “always” or “often”).

Arrange Follow-up. Participants estimated that, on average, 28.8% ($SD = 35.2$) of tobacco-using patients are asked about use or cessation efforts at a later date. Responses to this question varied widely, and ranged from 0% to 100%.

Influence of Training and Tobacco Use History

Due to small cell sizes, we collapsed across training in tobacco assessment and intervention, training in tobacco assessment only, and training in tobacco intervention only, to create a single group we called “training” ($n = 23$) to compare to the group of participants who denied any tobacco cessation training (“no training,” $n = 120$). A history of training had a surprisingly small and nonsignificant effect upon tobacco intervention behaviors. Although the trend for every strategy favored slightly more use by those reporting past training, the effect was very small. Only one significant difference emerged on the global questions for history of tobacco use, with individuals who have used tobacco being less likely to use a motivational intervention with patients who are currently unwilling to quit (21.8% to 41.5% respectively, $\chi^2(1, N = 143) = 5.70, p < .05$).

Professional Responsibilities

To evaluate commonalities among perceptions of professional responsibilities, responses to items on the professional roles questionnaire were subjected to a principle components analysis with varimax rotation (using SPSS 11.0). Professions with component loadings greater than .60 on any one component, and less than or equal to .40 on any other component, were retained on that component (Tabachnick & Fidell, 1996). Examination of a scree plot, and percentage of variance accounted for, suggested a three-component solution, and this solution was easily interpretable. As can be seen in Table 2, three components could be identified that explained 76.2% of the variance. Two components were easily understood to reflect mental health professionals (component 1) and physicians (component 3). The third component (component 2) included primarily assisting health professionals, but also included dentists, and was labeled “other health professionals.”

Table 2
Standardized Component Loadings and Average Percent Responding “Always” or “Almost Always” That Professions Responsibility to Intervene With Tobacco Use Among Patients

Profession	Component Loading			% “Always” or “Almost Always”
	1	2	3	
<i>Mental Health Professionals</i>				
Psychiatrists	.78	–	–	26.6 ^a
Psychologists	.92	–	–	27.3
Mental Health Counselors	.91	–	–	26.6
Social Workers	.89	–	–	24.5
<i>Other Health Professionals</i>				
Dentists	–	.68	–	42.0
Nurse Practitioners	–	.83	–	49.7
Physician Assistants	–	.79	–	55.3
Nurses	–	.78	–	43.6
<i>Physicians</i>				
Primary Care Physicians	–	–	.78	81.1
Cardiologists	–	–	.86	87.3
ENT or Pulmonary Specialty Physicians	–	–	.88	88.2
<i>Professions not Loading</i>				
Case Managers	.64	.51	–	23.1
Addictions Counselors	–	–	.43	69.3

Note. Component loadings $\leq .40$ displayed as “–”.

^aMean of percent of responses for all professions loading on that component.

Two other professions (i.e., case managers and addictions counselors) failed to load cleanly on any of the three components.

The three components reflect dramatic differences in participants’ perceptions of professional responsibility for tobacco intervention. A Friedman test confirmed significant differences across the 14 professions for ratings of responsibility, $\chi^2(13, N = 135) = 858.8, p < .001$.¹ The greatest responsibility was assigned to physicians, with 85.5% of participants reporting that intervening with tobacco was, on average, “always” or “almost always” physicians’ responsibility. As was the case with all three components, notable consistency existed across the different professions within each component. The least responsibility for tobacco intervention was assigned to mental health professionals (including psychologists), with only 26.6% of participants claiming tobacco intervention to be, on average, “always” or “almost always” the responsibility of mental health professionals.

Discussion

Tobacco use is a major public health crisis. Because tobacco users can quit, but repeated intervention attempts are necessary, the United States Public Health Service issued the *Clinical Practice Guideline* to mobilize all health care practitioners (Fiore et al., 2000). Among many other recommendations, the *Guideline* states that “every patient who uses

¹Potentially differential use of specific strategies within each domain was tested using Friedman tests, because the assumption of equal intervals among response choices did not seem reasonable (Friedman, 1937; Siegel, 1956). The Friedman test is a non-parametric test of ratings among dependent variables.

tobacco should be offered at least brief treatment” (Fiore et al., 2000, p. iv). The recommended brief treatment is captured by the “Five A’s” of *ask, assess readiness, advise, assist, and arrange follow-up*. The recommendations of the *Guideline* are intended for all health care professionals, including psychologists. The present study was designed to test the current use of strategies recommended in the guideline among a sample of licensed psychologists.

The data include good news and bad news. The good news is that psychologists report a high frequency of offering assistance to current tobacco users whom they encounter and identify. However, the bad news is that low rates of inquiry make it likely that many tobacco users, including many who may be willing to attempt to quit, are unidentified and the opportunity for intervention is missed. Most psychologists in our survey fail to routinely assess for tobacco use among their patients. This is the opposite pattern often found among other health care professionals, including physicians. Among other health care professionals, high rates of identification of tobacco users are typically observed, with poor rates of assistance or follow-up offered to identified patients (Block, Hutton, & Johnston, 2000; Goldstein et al., 1997; Moran et al., 2003; William, Newsum, & Brock, 2000)

The rest of the data regarding frequency of strategy implementation must be interpreted in this context of underidentification. For example, if hypothetically only one-fourth of tobacco users are identified, and if only one-half of those are assessed for readiness to quit, and if only one-half of those receive a message to consider quitting, and if only one-half of those receive appropriate assistance matched to their current readiness, and if only one-half of those are followed-up with at a later date, then only one out of 64 tobacco users would be likely to receive the brief intervention recommended for *all* tobacco users.

Further, many psychologists appear to neglect several effective strategies that could be employed to help tobacco users quit. Relatively few ever assess readiness to quit, a critical step in choosing the ideal intervention. Relatively few psychologists reported employing a motivational or decision-making intervention for tobacco users who are currently unwilling to quit. More so than any of the other strategy domains, this type of intervention is likely to require the greatest amount of patient-provider communication skills—precisely the strength of most psychologists and perhaps less of a strength for many other health care providers. Psychologists may be particularly well trained and prepared to skillfully implement these motivational and decision-making strategies, yet the data suggests that they are widely underused.

Perhaps surprisingly, only about one in four psychologists would ask to include tobacco cessation in treatment plans or goals, making it the least likely strategy to be used. Psychologists in this survey are obviously quite reluctant to make tobacco cessation a part of treatment. This finding is consistent with previous findings regarding psychologists’ reluctance to address substance use in general (Miller & Brown, 1997) and tobacco use in particular (Phillips & Brandon, 2004). While psychologists were likely to offer social support and encouragement to patients making a quit attempt—an effective strategy, to be sure—they also neglect several other simple but effective strategies, including setting a quit date, providing behavior modification advice, or providing referrals to self-help material or physicians. These interventions could be easily incorporated into practice, and are well within the training boundaries and skill set of most psychologists.

Phillips and Brandon (2004) identified a number of potential reasons for not intervening with tobacco use among patients. Our data suggest an additional barrier: the perception by psychologists that it is simply not our responsibility. Our findings make it startlingly clear that many psychologists have abdicated responsibility for intervening

with tobacco use—a behavioral problem—to physicians. Psychologists in our survey, on average, even ascribed greater responsibility to dentists and physician assistants than to mental health professionals, including psychologists. This attitude is perhaps the greatest barrier to increasing the number of psychologists who address tobacco use among their patient populations. Until psychologists see altering health-risk behaviors in general, and tobacco use in particular, as part of their responsibility as health care providers, attempts at dissemination of recommendations like the *Guideline* are likely to have little impact. Given the substantial comorbidity of tobacco dependence with psychopathology (Grant et al., 2004) and psychologists' expertise in behavior change, this abdication of responsibility is all the more ironic.

The present study includes a number of limitations. First, this study relied upon self-reports of practitioner behavior and carries all the inherent limitations of such an approach. Second, the sample is limited to licensed practitioners in a single state and generalization to psychologists in other states may be limited. However, the consistency of our data with the only known national sample of psychologists' tobacco intervention efforts (Phillips & Brandon, 2004) minimize this concern. Third, the sample lacked ethnic diversity. Although the sample reflected the diversity of the population of licensed psychologists in the targeted state, it did not reflect the diversity of the entire population of practicing psychologists. Finally, the response rate to this survey, while adequate for research of this nature and comparable to the only other published study of psychologist use of *Guideline* related strategies (26.3%, Phillips & Brandon, 2004), leaves open the possibility that these findings from the participants do not adequately reflect the behaviors of those who chose to not participate.

Integrating more extensive tobacco cessation programs into mental health care settings is a promising approach to dealing with tobacco dependence among individuals with mental health needs (Prochaska, Gill, & Hall, 2004; McFall et al., 2005). However, brief interventions like those recommended in the *Guideline* take relatively little time and, when done appropriately, can be integrated into most settings in which psychologists engage in treatment or prevention services. These interventions have a small but reliable impact upon tobacco use. To attain the largest population-wide impact possible, *all* health care providers must do their part to deliver these interventions to their patient populations. A number of other professional health care organizations have already issued position statements encouraging their members to intervene with tobacco, including physician assistants (American Academy, 2005), chiropractors (American Chiropractic, 1997), dentists (Benson, Christen, Crews, Madden, & Mecklenberg, 2000), and nurses (American Nurses Association, 1995). Further, training efforts are documented in the literature for a number of health professions, including dental students (Gordon, Severson, Seeley, & Christianson, 2004), medical students (Brown, Pfeifer, Gjerde, Seibert, & Haq, 2004; Fiore, Epps, & Manley, 1994), and pharmacists (Hudmon et al., 2004). The statement by Phillips and Brandon (2004) that "given the likely advantages that psychologists have, they are missing an opportunity to make a cumulatively large public health impact through tobacco-related interventions (p. 284)" appears very consistent given the current findings. In the future, it is hoped that psychologists will take advantage of their special skills as experts of behavior change to act with their patients and participate more fully in the nation's response to the deadly, but curable, problem of tobacco use.

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