

Factors associated with the provision of anti-smoking advice in general practice consultations

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SUMMARY

Guidelines urge general practitioners (GPs) to discuss smoking with patients as frequently as possible. Using data collected before and after consultations, this study confirms that GPs are more likely to discuss smoking in the context of smoking-related problems. Encouraging GPs to make greater use of problem-orientated opportunities to discuss smoking may have more effect on rates of advice giving than urging them to advise all smokers.
Keywords: smoking cessation; patient education; consultations.

Introduction

ONE to two per cent of smokers whom GPs advise against smoking will stop as a consequence of this advice.¹ GPs have been urged to maximise their influence on smokers by discussing smoking frequently,² but GPs report that they prefer to discuss smoking when patients present with smoking-related problems.^{3,4} Only one study investigating advice giving has used data collected from UK general practitioners' (GPs') consultations.⁵ This showed that GPs were more likely to advise smokers who had smoking-related problems and who were motivated to try stopping, but was too small to determine which of these factors was more important in influencing GPs' advice giving. This report is an analysis of data from a larger study that investigates further the factors that influence GPs' provision of anti-smoking advice.

Method

Data used in this analysis were collected as part of a study that has been reported elsewhere.^{6,7} Thirty-five GPs (out of 62 approached) from 13 general practices (out of 28 approached) were recruited and 31 participated in the study, representing 56% of the practices based in the Leicester City West Primary Care Trust. Before data collection began, all members of primary health care teams (PHCTs) were invited to attend training in methods of stopping smoking. Training involved discussion of nicotine replacement therapy (NRT) and the 'stages of change' model, but did not involve any suggestion that PHCT staff should focus on patients with smoking-related problems.

Over a period of 21 months, a researcher attended a random selection of GPs' surgeries. All patients attending these surgeries, or parents or guardians of those aged less than 16 years, were asked to complete questionnaires before their consultations. These sought demographic details, and identified regular smokers (i.e. those smoking on at least most days), and asked about smoking behaviour, whether the smoker was the patient or accompanying someone else, and whether the smoker was seeing the GP about a smoking-related problem. Smokers were asked to complete a second questionnaire after their consultations, indicating whether they had been given anti-smoking advice. Patients who could not complete questionnaires were excluded.

The researcher's records were compared with those of receptionists, to estimate the number of missed patients. There was comparison of data, including: demographic details; attitudes towards smoking; past and present smoking behaviour; and smokers' perceptions of presenting problems being smoking-related, between smokers who

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HOW THIS FITS IN*What do we know?*

GPs' anti-smoking advice promotes smoking cessation. GPs have been urged to maximise their influence on smokers by advising them to stop frequently.

What does this paper add?

GPs are more likely to give anti-smoking advice to patients with smoking-related problems. Strategies to increase rates of advice should take this factor into account.



were patients (i.e. not accompanying children or others), and who recalled anti-smoking advice and those who did not. Student's *t*-tests and χ^2 tests were used, as was the Mantel-Haenszel χ^2 test for ordinal variables. Using SPSS software (version 8.0), logistic regression was then used to determine the characteristics of smokers who were patients (i.e. not accompanying children or anyone else) that were independently associated with their recall of GPs' smoking advice (dependent variable). Variables with a *P*-value of <0.1 were entered from the univariate analysis into the model as explanatory variables. Smokers accompanying others; for example, children, were not included in this analysis, as it was thought that different factors might influence the provision of anti-smoking advice in these consultations.

Results

Of the 3525 patients who attended surgery sessions, 16 were excluded, 97 refused to participate, and 457 were missed by the researcher. Of the 2955 (83.8%) who answered the first questionnaire, 1026 (34.7%) were smokers. Nine hundred and twenty-seven (90.4%) of the smokers completed the second questionnaire, and of these, 719 (77.6%) were themselves patients, i.e. they were seeing the doctor about themselves and not accompanying a child or another person. Of those smokers who were also patients, 174 (24.2%) recalled discussing smoking with their GP. Recall of smoking advice was not associated with sex, as 107 (24.2%) of women and 67 (24.2%) of men recalled dis-

cussion of smoking (OR [odds ratio] = 0.99, 95% CI [confidence interval] = 0.70–1.42). Similarly, the mean ages of those recalling and not recalling advice were not significantly different; the mean age for patients recalling advice was 43.2 years, and for those with no recall, it was 42.7 years (95% CI for difference between means = -6.29 to 7.22), and there were no missing data.

Table 1 compares the remaining characteristics of smokers who were also patients recalling GPs' advice with those who do not, and Table 2 reports the findings of the multiple logistic regression. On univariate analysis, advice was more likely to be recalled in consultations in which adult smokers intended or desired to stop smoking and perceived that they had smoking-related illnesses. However, after multiple logistic regression, only having a smoking-related problem was associated with recall of advice in consultations where adult smokers were patients.

Discussion

This study found that GPs were more likely to discuss smoking with adult patients who had problems that they (the patients) perceived to be smoking related. Only one previous study has used data collected around consultations to investigate this aspect of clinical behaviour,⁵ and this used a simple univariate analysis that could not allow for correlation between variables. However, in the present study, the presence of smoking-related problems was the only factor independently associated with smokers' recall of GPs' advice; this new finding confirms what GPs have previously reported, and it suggests that it is the nature of patients' problems that primarily influences GPs' advice giving, rather than other factors.

Training in methods of smoking cessation increases doctors' advice-giving,⁸ and post-consultation questionnaires slightly overestimate GPs' advice,⁹ so lower rates of advice giving might be expected outside of the study. However, there is no evidence to suggest that study conditions caused participating GPs to discuss smoking more frequently in the context of smoking-related problems.

This study confirms that GPs are more likely to discuss smoking in the context of smoking-related problems. Those wishing to maximise the potential of GPs' consultations for reducing population smoking rates need to address this

Table 1. Comparison of those patients recalling anti-smoking advice with those who do not, in smokers seeing the GP about themselves.

Characteristic	Recall advice <i>n</i> (%)	Do not recall advice <i>n</i> (%)	Odds ratio (95% CI)
Tried to give up smoking in past year	75 (24.2)	235 (75.8)	1.0 (0.71–1.41)
Did not try to give up smoking in past year	99 (24.2)	310 (75.8)	
Intend to stop within one month	55 (31.6)	119 (68.4)	1.64 (1.13–2.40)
No intention to stop within one month	119 (22.0)	423 (78.0)	
Confident of being able to stop	52 (23.7)	167 (76.3)	0.96 (0.66–1.40)
Not confident of being able to stop	122 (24.4)	377 (75.6)	
Desire to stop	114 (27.6)	299 (72.4)	1.57 (1.01–2.24)
No desire to stop	59 (19.5)	243 (80.5)	
Thinking about or trying to stop	81 (25.3)	239 (74.7)	1.12 (0.79–1.58)
No thoughts about stopping	92 (23.2)	304 (76.8)	
Smoking-related problem	68 (48.9)	71 (51.1)	4.23 (2.86–6.28)
No smoking-related problem	106 (18.4)	469 (81.6)	

CI = confidence interval.

Table 2. Multiple logistic regression with recall of anti-smoking advice as the dependent variable.

Characteristic	b coefficient	Standard error	Odds ratio ^a (95% CI)
Perceives smoking-related problem	1.348	0.206	3.84 (2.56–5.76)
Intends to stop smoking within one month	0.261	0.223	1.23 (0.83–2.01)
Wants to stop smoking	0.131	0.209	1.14 (0.76–1.70)
Constant	-1.872	0.475	–

CI = confidence interval. ^aOdds ratio is exponential of b coefficient.

aspect of GPs' advice giving. This new finding also reinforces what GPs have previously reported, and guidelines aiming to increase GPs' rates of advice giving would probably have greater chances of success if they encouraged doctors to use more problem-orientated opportunities to discuss smoking. However, this strategy could result in GPs focusing even more of their advice on those with smoking-related problems, and not using other opportunities to discuss smoking with patients.

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