CIGARETTE SMOKING BY HOSPITAL PATIENTS

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It is widely accepted by physicians that it is undesirable for patients with chronic cardiorespiratory disorders to continue to smoke cigarettes. The association between cigarette smoking and the development of bronchitis and of atherosclerotic disease is well known, and it is reasonably inferred that patients who have developed these conditions should be advised to stop smoking. As compared with continuing smokers, ex-smokers are known to have a lower prevalence of bronchitis (Reid *et al.*, 1966) and a lower mortality from coronary heart disease (Kahn, 1966).

Several important questions are nevertheless at present unanswered. In the first place, we need to know the amount of benefit that can be expected when a patient abandons cigarettes only when disease is so far advanced as to have required hospital care. This benefit cannot properly be measured without a controlled clinical trial. It has been argued that such a trial, even though desirable, would be unethical on the grounds that the control group would be deprived of a probably beneficial treatment.

Even assuming that anti-smoking advice is likely to confer some benefits, the important question remains how the advice may be most effectively delivered. We are dealing with a therapeutic weapon of potentially great potency, and—just as with drug treatments—proper trials will need to be conducted in order to establish the best means of giving the treatment. But again it has been objected that such an enquiry would be inappropriate: it is claimed that hospital staff already give adequate anti-smoking advice to their patients.

With these questions in mind, the present enquiry was set up to establish (1) the extent to which high-risk hospital patients can recall having been given any anti-smoking advice, and (2) the extent to which it is effective.

METHODS

The following categories of 'high smoking risk' patients were defined (i.e., those with conditions in which it is widely believed that continued smoking may be particularly undesirable):

1. atherosclerotic disease (coronary, cerebral or peripheral)

2. chronic bronchitis

3. hypertension.

The study group consisted of 207 consecutive patients with one or other of these diagnoses who had been discharged from a hospital in the St. Mary's group within the previous two weeks to three months. Patients excluded were those aged 70 or over or those whose state of health or short-term prognosis was particularly bad. A postal questionnaire was sent to each patient enquiring about present and previous smoking habits and about anti-smoking advice given during the recent stay in hospital. If no reply was received to the first enquiry, a second letter was sent out about three weeks later.

RESULTS

Eleven of the 207 questionnaires were returned unanswered because the patient was untraceable, or had died. Replies were received from 151 (73%) of the remainder, and these form the basis of the analysis.

Table I shows the distribution of these patients by diagnostic group and the numbers reporting cigarette smoking within the two weeks before admission. Only three of those with chronic bronchitis had never been cigarette smokers.

Of the 93 'high risk' patients who smoked up to the time of their recent admission, 64 (69%) said that they had been advised by hospital staff that they should give up or (less commonly) reduce their intake. Of those reporting advice 8% said that it had been given only by nurses; in 30% it had been

TABLE I
DIAGNOSTIC GROUP AND PRE-ADMISSION CIGARETTE SMOKING HABITS OF 151 PATIENTS WHO COMPLETED QUESTIONNAIRES

Diagnostic Group	No. of Patients			Total
	Smoking in Two Weeks before Admission	Former Smokers	Never Smoked	
Atherosclerotic disease	56	15	16	87
Chronic bronchitis	29	8	3	40
Hypertension	8	6	10	24
Total	93	29	29	151

TABLE II
RELATION BETWEEN RECALL OF ANTI-SMOKING ADVICE
AND INTERVAL FROM HOSPITAL DISCHARGE

Interval (weeks) from Discharge to Receiving Questionnaire	No. Smoking in Two Weeks before Admission	No. Recalling Advice	%
<4	45	34	76
4-7	28	19	68
≥8	20	11	55
Total	93	64	69

$\chi^2(2D.F.) = 2.637$ (N.S.)

given by both nurses and doctors; but generally (63%) advice had been given by a doctor only.

The results in Table II suggest that the proportion who actually received some advice has been underestimated, since the recall rate declines a little with the passage of time from discharge.

Of the 64 patients who recalled advice by hospital staff against smoking, 42 nevertheless reported that they continued to smoke cigarettes after they returned home—a failure rate for the treatment of at least 66%. Among the 29 patients who denied receiving any advice about smoking, four nevertheless said that they had given up. This means that overall 30% of the whole group of smoking high-risk patients said they had stopped, compared with 70% who continued to smoke.

Table III sets out the results in the different diagnostic groups. The frequency of recalling advice seems to have been similar in the two main groups, but there is a suggestion that the success rate was worse in the bronchitic group. Of the 29 patients with bronchitis who were smoking at the time of admission, 25 were still smoking on discharge.

CONCLUSIONS

This enquiry has shown that among this group of patients to whom smoking may well be a particularly dangerous habit, anti-smoking advice seems often to have been omitted (or at least not to have been recalled); and, even when it was given, it was

usually ineffective. We have no means of knowing the extent to which such results are generally applicable. It is our impression that physicians at this hospital are concerned more than the average about the relation between smoking and disease, and it may be that elsewhere the situation is even more disappointing.

The findings clearly show the need for further research to discover better means of giving effective anti-smoking advice in hospitals. A number of specific questions could readily be formulated. How is success related to the status of the staff who deliver advice? How is it related to the length of time devoted to explanation, and to the giving of reinforcement on later occasions in hospital or in the follow-up clinic? Does the use of special literature help? What is the optimal balance between encouragement and fear arousal? Such questions as these should be evaluated by the traditional methods of properly designed therapeutic trials. Health advice may be at least as important to the patient as drug treatment and should be equally the subject of scientific scrutiny.

SUMMARY

An enquiry is reported into the cigarette smoking habits of patients with chronic cardiovascular and respiratory diseases recently discharged from hospital. Among the 93 who smoked in the two weeks before admission, anti-smoking advice by hospital staff was recalled by 69%, of whom two-thirds had nevertheless continued to smoke after leaving hospital. It is concluded that there should be research to find more effective means of delivering anti-smoking advice to hospital patients.

We are grateful to our colleagues of the St. Mary's Hospital Group for permission to study their patients.

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TABLE III
FREQUENCY OF RECALL OF ANTI-SMOKING ADVICE
AMONG SMOKERS IN DIFFERENT DIAGNOSTIC GROUPS,
AND SUCCESS RATES (AS % OF THOSE RECALLING
ADVICE)

Diagnostic Group	No. of Smokers	% Recalling Anti-smoking Advice	Success Rate %
Atherosclerotic disease	56	73	44
Chronic bronchitis	29	69	25
Hypertension	8	37	0
Total	93	69	34