PRACTICE OBSERVED

Practice Research

Practice nurses and antismoking education

DIANA J SANDERS, VALERIE STONE, GODFREY FOWLER, JOHN MARZILLIER

Abstract

A questionnaire on antismoking activities and education was sent to 369 nurses in general practice. The response rate was 80%. Although most of the nurses sometimes advised patients about smoking, routine antismoking education occurred less frequently. Only a few regularly referred smokers to other agencies for help, recommended aids to stop smoking, or used antismoking literature. Although the nurses thought that they had an important role in helping smokers to give up, they expressed little confidence in their effectiveness, believing that advice from the general practitioner and the smoker's personal determination to give up have more impact. The nurses expressed a need for training in antismoking education. Seventy seven per cent were interested in attending seminars and listed information about smoking, techniques for stopping, and counselling skills as priorities. If practice nurses are to use opportunities in primary care to help smokers there is clearly a need to provide further training and to establish the effectiveness of nurses in their role as smoking educators.

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Introduction

Cigarette smoking accounts for at least 100 000 premature deaths in Britain each year, at a cost of £165m to the National Health Service and inestimable costs to the individual smokers.[1] The primary health care team is in a unique position to advise and help smokers to stop: a high proportion of smokers consult their general practitioners each year; the consultation provides the opportunity for personal advice and help; and health professionals are perceived as credible health advisers.[2] Advice from the general practitioner has been shown to help a small, but appreciable, number of smokers to stop.[3,4] Nurses who are employed by general practitioners for treatment room duties are playing a greater part in prevention and health education, particularly in routine screening and health checks. Advising smokers is an obvious priority.[5] But little is known about the attitudes and beliefs of practice nurses about smoking advice, the extent to which they advise smokers, or their specific needs for further training. In addition, little is known about the smoking behaviour of practice nurses and whether this influences their advice to smokers. The present survey was designed to collect background information from nurses who work in general practices in the Oxford region.

Methods

The survey included all nurses based in general practices in the Oxford region, who were employed either by the practice ("employed nurses") or by a health authority ("attached nurses") for treatment room duties.[6] A postal questionnaire and covering letter with reply paid envelope was sent to 285 employed nurses and 84 attached nurses in 208 practices. Non-respondents were sent two further questionnaires. The questionnaire covered six items: (*i*) background information, including nurses' training and experience; (*ii*) practice policy on smoking; (*iii*) nurses' participation in antismoking activities and giving advice on smoking; (*iv*) smoking habits; (*v*) attitudes and beliefs about the value and effectiveness of antismoking agents and agencies; and (*vi*) interest in further training in giving advice on smoking. The questionnaire was based on an earlier survey of general practitioners and health visitors in Oxfordshire.[7]

Results

Characteristics of the nurses

A total of 296 nurses replied to the questionnaire, 227 employed nurses and 69 attached nurses, a response rate of 80%. At least one nurse replied from 188 practices, representing 90% of the practices surveyed. Most of the nurses were experienced and well qualified: 50% had been nurses for more than 20 years and 37% for between 10 and 20 years; 55% had worked in general practice for more than five years. Most (93%) of the respondents were state registered nurses. One third had midwifery qualifications (state certified midwife or Central Midwives Board) and 17% the family planning certificate. More attached nurses than employed nurses had had the district nurses training (53% and 13% respectively); otherwise, both groups were identical in the number of nursing qualifications held. Eighty per cent worked part time in the practices, and 78% worked with one or more other nurses. Of the respondents, 12% were current smokers and 38% ex-smokers. Of the current smokers, half smoked fewer than 10 cigarettes a day; only 6% claimed that they smoked more than 20 cigarettes daily.

Smoking policy

Most of the practices had a no smoking policy for patients and for staff when seeing patients; 92% of nurses replied that patients were not permitted to smoke on practice premises, and 87% replied that staff were not allowed to smoke while seeing patients. But 48% replied that staff could smoke on practice premises when not seeing patients.

Antismoking activities and smoking advice

Half the respondents reported that they usually recorded patients' smoking state in the notes. Table I gives the frequency that advice was given to smokers. In general, advising smokers was more likely to occur "sometimes" than "very often or always." Forty one per cent sometimes gave direct antismoking advice: nurses were more likley to advise smokers at risk—patients with smoking related illness, parents of infants, and pregnant women who smoked. Most never avoided discussing smoking "for fear of alienating the smoker." Nurses only infrequently referred smokers to other agencies for help, or recommended literature or aids for stopping; 58% occasionally or never referred smokers to the general practitioner for advice; 10% regularly recommended nicotine chewing gum as an aid for stopping, and 78% never referred smokers to other services for help. Only 31% often or always gave patients literature about smoking. Smokers groups were run in nine practices: in three by practice nurses, in four by health visitors, and in two by general practitioners.

TABLE I—*Smoking education activities (n = 296)*

Question	Very often: always (%)	Often (%)	Sometimes (%)	Occasionally (%)	Never (%)
With basically healthy adults who smoke, how often do you					
Initiate discussion about smoking?	10	21	46	16	7
Give antismoking advice?	9	16	41	19	15
Avoid the subject, not wishing to alienate the smoker?	1	4	16	17	63
Refer the smoker to the general practitioner for advice?	1	7	33	28	30
Refer to another service for advice?	1	3	8	10	77
Give literature?	14	17	25	17	27
Recommend nicotine chewing gum?	2	8	30	23	37
How often do you discuss smoking with the following					
Patients with smoking related illnesses?	28	25	30	4	4
Parents of infants or young children?	11	12	26	12	24
Pregnant women?	26	16	17	9	6

Attitudes and beliefs about the effectiveness of antismoking education

Tables II and III give the responses to questions about the participation and effectiveness of various agencies in antismoking efforts. Most respondents agreed that nurses should have some or a major concern in efforts to stop people smoking and that general practitioners have a major part to play. A large proportion of nurses thought that personal determination or willpower and smokers' personal experience of illness were important in giving up smoking, but they expressed little faith in their own effectiveness in helping people to stop smoking.

TABLE II—*Nurses' opinions of participation of agencies in antismoking efforts (n = 296)*

Question	Participation: Major (%)	Some (%)	Minor or none (%)
To what extent should the following be concerned in efforts to stop people smoking:			
Legislation to restrict smoking in public?	83	11	5
Schools?	77	20	1
Health education officers?	69	26	1
Doctors?	67	31	1
Nurses?	44	48	7
Government through control of tobacco companies?	41	32	13
Government through price control?	31	42	7

TABLE III—*Nurses' opinions of effectiveness of antismoking methods and agencies (n = 296)*

Question	Effective: Very (%)	Moderately (%)	Slightly or not (%)
In your opinion, how effective are the following in causing people to stop smoking and stay stopped			
Willpower?	71	18	10
Personal experience of illness?	65	27	6
Illness in friend or relative?	37	43	18
Advice from general practitioner?	13	58	27
Education in schools?	9	37	44
Mass media campaigns?	9	34	49
Advice from nurse?	2	22	65

Influence of nurses' smoking behaviour on giving advice and on attitudes

Table IV summarises the activities and attitudes of current smokers and ex-smokers or those who never smoked. Nurses who were cigarette smokers were slightly less likely to initiate a discussion with their patients about smoking. There was no difference, however, between current smokers and non-smokers in the frequency of giving advice. Similarly, the nurses' smoking behaviour did not influence perceptions of their effectiveness in helping smokers to stop.

Resources, skills, and training for advising smokers

The questionnaire included two open questions concerning the skills, resources, and training that was required to give smoking advice regularly. Eighty per cent of respondents listed one or more skills or resources that they would like. Literature, leaflets, posters, films, and video were mentioned often. They also requested facts about the effects of smoking and about techniques for stopping and information about smokers' groups, visual aids, skills in counselling and advising smokers, and referral agencies to help smokers.

Most respondents expressed an interest in further training for helping smokers: 77% said that they would like to attend a seminar on smoking. Of these, 43% listed topics that they would like covered in a training seminar, including information on the effects of smoking and methods of stopping, counselling and skills on giving advice, and how to run smokers' groups.

Discussion

Eighty per cent (296) of the nurses replied to the questionnaire, which indicates considerable interest in smoking education. It is

comparable to the 87% response in an earlier survey of general practitioners and health visitors.[7] As with all postal surveys interpretation depends on the characteristics of the non-respondents and on the accuracy of self reports. The characteristics of non-respondents are not known. Some questionnaires may have been sent to nurses who had moved from practices; some non-respondents may have been smokers who did not want to answer questions about smoking or may have been nurses who disagreed with the assumptions implicit in the questionnaire about the nurse's role as smoking educator.

TABLE IV—*Nurses' smoking behaviour and antismoking activities*

Question	Current smokers No (%)	Ex-smokers or never smoked No (%)
How often do you initiate discussion about smoking with basically healthy adult smokers? (χ^2=9·85, p=0·04)		
Very often or always	6 (17)	85 (33)
Sometimes	19 (54)	114 (44)
Occasionally or never	10 (29)	57 (22)
How often do you give antismoking advice? NS		
Very often or always	7 (20)	68 (27)
Sometimes	14 (40)	103 (40)
Occasionally or never	14 (40)	84 (33)
How effective is antismoking advice from a general practice nurse? NS		
Very or moderately effective	6 (20)	62 (28)
Slightly or not effective	24 (80)	159 (72)

The survey relied on self reported data, which may be slanted towards giving a favourable impression of antismoking activities. There was no attempt to validate responses against observed behaviour. Comparisons of self reported and audit data from Oxfordshire general practices show that the actual recording of patients' smoking behaviour may be less common than claimed.[8] Thus 51% in our survey may be an overestimate.

In this survey 12% said that they were smokers, whereas in previous surveys 32% of women (1984 figures) and 28% of community nurses (1982 figures) claimed to be smokers.[9,10] Although the lower figure may partly reflect a low response from smokers, it is likely that a substantial majority of nurses in general practice are non-smokers, given the low rate of smoking among general practitioners, the interest in antismoking activities in the Oxford region, and the general decline of smoking among professional women.

Overall, the results suggest that antismoking activities do not regularly occur, despite the interest of nurses in smoking education. Antismoking advice was given only occasionally rather than regularly, although there was more discussion with smokers "at risk." In general nurses did not regularly refer smokers to the general practitioner or outside agencies for help, or recommend nicotine chewing gum, or use health education literature. Though 92% of nurses felt that they should participate in efforts to stop people smoking, 65% claimed that nurses are not effective. Three factors may account for nurses' low level of participation in smoking education: the professional role of practice nurses, nursing education, and nurses' lack of confidence in their effectiveness.

Though the role of practice nurse is clearly expanding, many are employed primarily for treatment room duties, traditionally with little emphasis given to health promotion.[11-13] This is gradually changing, though, with the increasing commitment of health authorities and general practitioners to prevention and with the recognition of the value of shared responsibility for health promotion.[14]

The participation of nurses in health promotion depends not only on professional scope but also on specific skills and knowledge. Nursing education generally lacks a sound base in health education, and since most practice nurses trained over 10 years ago few would have received any training in smoking education. The results of the survey showed that nurses are interested in further education about smoking, particularly in facts on the effects of smoking and techniques for stopping and counselling skills. The topics, skills, and resources listed should provide useful guidelines for planning training for practice nurses.[15] The findings showed the lack of confidence of nurses in giving effective advice to smokers. Evidence is required to establish the effectiveness of antismoking advice and to boost nurses' confidence.

Interestingly, nurses' smoking state did not appear to have a noticeable effect on reported antismoking activities and attitudes. Whereas current smokers claimed that they were slightly less likely than non-smokers to initiate a discussion with patients about smoking, there was no significant difference between the two groups in the reported frequency of giving advice. Despite claims that health professionals have to be models of good practice, as in previous studies[9,16] it seems that smoking behaviour does not influence nurses' commitment to help other smokers. Thus a personal interest in smoking may enhance the sensitivity of nurses to the issues and problems of stopping.

Almost half the nurses claimed that practice personnel were permitted to smoke when not seeing patients. Though this is some improvement over the 62% in the 1980 survey,[7] the extent to which smoking on practice premises may undermine antismoking messages given to patients is unknown.

Nurses frequently mentioned literature, films, video, and visual aids as resources which they would like to have for antismoking education. Health education literature, however, was used surprisingly infrequently, suggesting a need for closer links between health education units and general practices to meet a practice's requirement for health education aids and to ensure that the booklets and leaflets are put to use.

With the increasing role of nurses in prevention, information on smoking and counselling skills should be given priority.

We thank Elaine Fullard and Angela Coulter for advice and the nurses who kindly completed the questionnaires. The study was funded by the Oxford Regional Health Authority. DS is supported by a grant from the British Heart Foundation. We also thank the Health Education Council for funding.

References

1 Royal College of Physicians. *Health or smoking*. London: Pitman, 1983
2 Gray M, Fowler GH, eds. *Preventive medicine in general practice*. Oxford: Oxford University Press, 1983
3 Russell MAH, Wilson C, Taylor C, Baker CD. Effect of general practitioners' advice against smoking. *Br Med J* 1979;ii: 231-5
4 Jamrozik K, Vessey M, Fowler G, Wald N, Parker G, Van Vunakis H. Controlled trial of three different anti-smoking interventions in general practice. *Br Med J* 1984;288: 1499-503
5 Fullard E, Fowler G, Gray M. Facilitating prevention in primary care. *Br Med J* 1983;289: 1585-7
6 Reedy BLEC, Metcalfe AV, de Roumanie M, Newell DJ. The social and occupational characteristics of attached and employed nurses in general practice. *J R Coll Gen Pract* 1980;30: 477-82
7 Jamrozik K, Fowler GH. Anti-smoking education in Oxfordshire general practices. *J R Coll Gen Pract* 1982;32: 179-83
8 Fleming DM, Lawrence MSTA. An evaluation of recorded information about preventive measures in 30 practices. *J R Coll Gen Pract* 1981;31: 615-20
9 Office of Population Censuses and Surveys. *Memoir. Cigarette smoking: 1972 to 1984*. London: HMSO, 1985. (GHS 15/2.)
10 Spencer JR. Nurses and cigarette smoking in England and Wales. *Int J Nurs Stud* 1984;21: 69-79
11 Mourin K. The role of the practice nurse. *J R Coll Gen Pract* 1980;30: 75-7
12 Reedy BLEC, Metcalfe AV, de Roumanie M, Newell DJ. A comparison of the activities and opinions of attached and employed nurses in general practice. *J R Coll Gen Pract* 1980;30: 483-9
13 Bolden KJ, Tickle B. *The practice nurse handbook*. London: Blackwell, 1984
14 Hart JT. Practice nurses: an underused resource. *Br Med J* 1985;290: 1162-3
15 Steering Group. *Report on training needs of practice nurses*. London: Royal College of Nursing, 1984
16 Clarke M, Brooks A, Phillips M. *Nurses smoking behaviour*. Hull: Institute of Nursing Studies, 1984. (Research report No 3.)

(*Accepted 20 November 1985*)

Multicultural medicine

Rubella immunisation—Women who spent their childhood abroad may not have been offered immunisation as is customary in the United Kingdom. They are often at an increased risk of having a child with congenital rubella. In one sample of Chinese women this risk was estimated as two and a half times as great as that in the UK population. Nulliparous women from abroad should be offered screening for rubella antibodies and vaccinations as appropriate.—PETER D TOON, lecturer in general practice, London.

Audit Report

Treatment of hypertension: review necessary after screening

In 1983-4, 1084 of the patients in our practice aged 40 or over were screened for hypertension (survey definition ≥95 mm Hg).[1] Seventy one per cent of the hypertensive patients were already known: 82% of these were on treatment and 68% of these had a diastolic pressure of <95 mm Hg and 79% <100—the practice criterion for hypertension. Thus the "rule of halves" had become the "rule of three quarters."

During the survey, 55 non-diabetic patients with a diastolic pressure of ≥100 were referred to their doctor. Twenty one were already on treatment and changes were made in two; 24 were newly discovered hypertensives, and treatment was started in eight; 10 had raised pressures previously recorded, and treatment was started in three.

Six months after the survey ended I reviewed the records of the 55 patients. Twenty three had not been treated: one had left the district; six had hypertension but were not treated because of age, other illnesses, etc; four refused to attend; and 12 did not have confirmed hypertension (a later review showed that two of these became "hypertensive" within the next few months). Thirty two were on treatment. Three of the original 21 showed unsatisfactory control, and their doctor subsequently changed treatment. Five of the 11 newly treated patients still had raised pressure, and changes were made in three. Two failed to attend for follow up or refused further treatment.

The review produced changes in treatment for six out of 32 patients. Three quarters had been adequately treated (not always with a diastolic pressure of <100). Only 55%, however, of those who were newly assessed as requiring treatment and who initially agreed to it were adequately controlled. This confirmed that regular audit is necessary after screening programmes but that 100% satisfactory control can never be achieved.—MELVIN ROSS, general practitioner, 96 St John's Way, London N19 3RN. (*Accepted 15 January 1986*)

1 Forrest RD, Jackson DA, Yudkin JS. Diabetes mellitus and hypertension in a population over 40 years of age in North London. *Diabetic Medicine* (in press).

100 YEARS AGO

A refined kind of common sense in the application of the principles of medicine and surgery, and a practical wisdom in the management of patients, have been the most striking qualities of the English school of clinical teaching. In the organisation for teaching in special departments, we have lagged behind the Continental schools, and in our arrangements for the study and teaching of pathology, we have allowed ourselves to be disgracefully beaten; but, in the teaching of practical medicine and surgery by the bedside, we have nothing to fear from comparison with foreign schools. While there is—to our shame, be it said—no properly appointed pathological institution in the whole of England, there is not a medical school which does not possess one or more clinical teachers of striking ability. Their methods are various, and no two men follow exactly the same plan; still, it may be seen that the teachers fall generally into one or other of several distinct classes, and aim at attaining their ideal by different roads.

The Socratic method has been pursued with brilliant success by some of the greatest clinical teachers who have ever lived. It has received its highest development at the hands of physicians, and is capable of being made a most efficient instrument for conveying lessons which sink deep into the mind, though, in inexperienced or unskilful hands, it may lead to unexpected, and by no means gratifying, results. It is capable of many modifications; one student may be singled out and plied with a string of questions until he has pledged himself to some diagnosis, or to some theory as to the nature of disease; if the student be dull, or careless, or ignorant, he none the less serves the purpose of the teacher, who can point out the error of his diagnosis, or the weakness of his logic, with a merciless hand. The discomfited student perhaps inwardly vows never again to expose himself to like ignominy; and now comes for the teacher the most delicate part of his task. Having exposed the ignorance of the student, he must indicate the sources of uncertainty in his own diagnosis, and define the limits of his own knowledge. If he omit to do so much, he will merely have inflicted a useless snubbing, and created for himself a factitious reputation for infallibility, sooner or later to be demolished by observations made in the *post mortem* room. If he go too far, and insist too much on difficulties and doubts, he will be liable to send his class away in a sceptical frame of mind, disbelieving equally in themselves, in their teacher, and in their art. The method, therefore, is a dangerous one to adopt; it demands a clear head, extensive knowledge, and no little tact. But, if successful, the success is complete; students of all ranks and practitioners of every nation will throng to the class, and the teacher's name will be spread far and wide as a man to be called upon for help in obscure or anxious cases.

The method is capable of modification in many directions; the most nearly allied is the system of clinical teaching by thinking aloud. It is a most valuable and popular method, but only less difficult than that last indicated; the teacher makes a systematic examination of a patient, stating his observations to the class, and drawing his deductions before it, indicating collateral facts, previous observations, and the whole train of reasoning by which diagnosis and prognosis are arrived at, and a line of treatment suggested. The method is extremely popular with some of the best teachers in London at the present time, and lectures of this kind may occasionally be heard which are models of scientific reasoning and practical wisdom; they are useful to the attentive listener, only for the matter which they contain, but for the lesson in orderly thinking which they convey; they afford a real intellectual treat, and grey hairs and the owners of well known names may not unfrequently be found among the audience.

There are teachers who imitate the Socratic method, but at a greater distance. Impressed by the obvious advantages and facilities which it affords, but impatient of the slow working or shifty expedients of the average student-mind, they do not wait for their questions to be answered. They always argue with an imaginary adversary, who is apt to start the most improbable theories, which the teacher very valiantly demolishes. The method, though it does not call for as high powers of mind as either of the former two, has distinct advantages of its own, and often attracts the more industrious of the senior students of a large school. Such teaching is particularly useful to men who have read widely, and possess some logical ability, but are not gifted with such imagination. A teacher of this class is generally successful in preparing students for the higher examinations; he earns the respect, if not the admiration, of his pupils, and is likely to be much sought after by them in their future difficulties in private practice. There is a final degradation of the Socratic method, where the teacher poses as a kind of medical Mangnall, who puts simple questions to his young charges, and helps them to answer in the proper phraseology. He loves the plural pronoun, and glories in the stock commonplace of the text-books. Still perhaps, like Mrs. Mangnall, he has his uses, preparing the youthful mind for the stronger food which more virile teachers will supply. (*British Medical Journal* 1886;i:353.)