PRACTICE OBSERVED

Practice Research

Controlled trial of three different antismoking interventions in general practice

KONRAD JAMROZIK, MARTIN VESSEY, GODFREY FOWLER, NICHOLAS WALD, GILLIAN PARKER, HELEN VAN VUNAKIS

Abstract

Of 6052 adult patients who consulted their doctors in six Oxfordshire general practices between October 1980 and February 1981, 2110 (35%) were smokers. The smokers were allocated to one of four study groups—a control (non-intervention) group; a group that received verbal and written antismoking advice from the general practitioner; a group that received this advice and also a demonstration of exhaled carbon monoxide; and a group that received the advice plus the offer of further help from a health visitor.

After one year 72% of smokers replied to a postal follow up questionnaire: 11% of the control group claimed to have stopped smoking compared with 15% in the group that received advice alone, 17% in the exhaled carbon monoxide group, and 13% in the health visitor group. Validation of these findings by assays of urinary concentrations of cotinine showed that between 24% and 40% of subjects may have misreported their smoking habits, but there was no indication that the rate of misreporting was higher in the intervention groups than in the control group.

Giving advice routinely against smoking has a useful effect, and showing an immediate, personal, and potentially harmful consequence of smoking using a CO-oximeter may improve this, particularly in lower socioeconomic groups.

Department of Community Medicine and General Practice, Radcliffe Infirmary, Oxford OX2 6HE
KONRAD JAMROZIK, MB, DPHIL, Nuffield dominion scholar
MARTIN VESSEY, MD, FRCP, professor of social and community medicine
GODFREY FOWLER, BM, FRCGP, clinical reader in general practice
GILLIAN PARKER, BA, research assistant

ICRF Cancer Epidemiology and Clinical Trials Unit, Radcliffe Infirmary, Oxford OX2 6HE
NICHOLAS WALD, MB, MRCP, deputy director

Graduate Department of Biochemistry, Brandeis University, Waltham, Massachusetts
HELEN VAN VUNAKIS, PHD, professor of biochemistry

Correspondence to: Dr Godfrey Fowler.

Introduction

The value of advice against smoking given routinely during general practice consultations in helping people to stop smoking is uncertain. Of the seven published studies,[1–7] only four incorporated a control group[1 4–6] and, of these, only two suggested that routine antismoking advice had an appreciable beneficial effect.[1 4] Even so, the largest study, a randomised controlled trial in which over 2000 general practice patients in London participated, showed that the combination of verbal advice from the doctor with written advice in the form of a booklet and a warning from the doctor that the patient's progress would be monitored increased the rate of self reported stopping of smoking one year later from 10·3% in a non-intervention control group to 19·1%.[1] The effect of advice was to increase the number of patients attempting to stop smoking without increasing the success among those who tried.

In this trial, however, as well as in two of the three other controlled studies, the outcome was calculated only on the basis of patients traced at follow up. This may have exaggerated any beneficial effect of advice on stopping smoking since non-respondents to postal follow up tend to be less successful than respondents.[8]

As antismoking advice given during routine consultations in general practice is potentially a cheap and practical way of influencing a substantial proportion of smokers, we decided to conduct a further large controlled trial to confirm that such intervention is effective, and to determine whether the most effective "advice package" used in the London study could be improved.[4]

Method

ELIGIBILITY OF PATIENTS

Six general practices in Oxfordshire, in which most of the doctors and health visitors had expressed an interest "in participating in further research on smoking" in a previous survey,[9] provided patients for the study. Eligible patients were identified by means of a questionnaire entitled "Updating of practice records" (questionnaire A), which was distributed by the reception staff to all adults over 16 years of age who were attending to see a doctor for the first time during the recruitment period. Patients who were collecting prescriptions or attending to see a nurse or to make appointments and those who were accompanying a patient who was a child were not given a questionnaire. Pregnant women who were attending antenatal clinics were eligible, but those bringing children to infant welfare or immunisation clinics were excluded. Also excluded were patients seen on home visits or at Saturday morning surgeries which, in each of the six practices, were explicitly stated to be for emergency cases only.

RECRUITMENT AND TREATMENT ALLOCATION

The recruitment phase of the study began in October 1980 and continued until February 1981. Recruitment sessions were supervised by one of us (KJ or GP), who was present in the practice reception area but did not advise patients to give up smoking.

Eligible cigarette smokers seen during the recruitment phase were allocated to a trial group according to their day of attendance by reference to a scheme that provided for a balanced treatment sequence over the four week cycle. Each doctor was provided with a small desktop card reminding him of the "treatment" to be given to smokers seen on that day, but at all times doctors were free to withhold advice to "treated" patients or give advice to patients allocated to the non-intervention control group if they thought this was necessary. For example, some women smokers attending an antenatal clinic on a control day might have received advice to stop smoking.

The recruitment procedure is summarised in fig 1. Completed questionnaires A were collected by the trial supervisor, and if the patient was a non-smoker, or smoked a pipe or cigars only, or the allocated trial group was "control" nothing further was done. On days when smokers were to receive advice they were asked to complete a further series of questions about their smoking habits (questionnaire B) and told that the doctor would want to discuss their answers during the consultation. For their part, the doctors were asked to give verbal advice that they thought appropriate, but each was given a copy of some suggestions as to what "best advice" might constitute (see appendix). Completed questionnaires B were returned to the supervisor after the consultation, and the patient was asked to answer four of the questions again (questionnaire C) to determine whether attitudes to smoking had changed as a result of the consultation. Which doctor had been seen, whether advice had been given, and whether questionnaire B had been completed before the consultation were noted at this time.

The three "active treatments" studied were:

Standard advice group—Verbal advice from the doctor plus written advice in the form of the *Give Up Smoking* booklet developed by Action on Smoking and Health and the Health Education Council, with a warning from the doctor that the patient's progress would be reviewed.

Exhaled carbon monoxide group—As in the standard advice group, with the addition of a demonstration to the patient of his or her own carbon monoxide concentration using a portable CO-oximeter (Ecolyzer, Energetics Science Inc, New York), and an explanation of how this concentration compared with concentrations seen in non-smokers. This demonstration was conducted by the trial supervisor in a corner of the practice waiting area according to standard protocol, which reminded the patient that carbon monoxide was the lethal component of "the old coal gas." Where possible, patients allocated to the exhaled carbon monoxide group participated in the demonstration before the consultation with their doctor. This was sometimes not possible, however, and the demonstration then took place after the consultation but before the completion of questionnaire C.

Health visitor group—As in the standard advice group, but a card describing how and when to contact a health visitor working at the practice for further help and information about how to stop smoking was attached to the advice booklet. The health visitors were provided with some written suggestions as to how they might deal with inquiries from patients in the study, as several had previously expressed the fear that they had inadequate knowledge to give appropriate advice. Each health visitor was also provided with a log sheet on which to record inquiries.

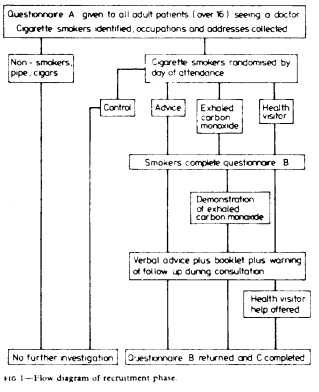

FIG 1—Flow diagram of recruitment phase.

FOLLOW UP PROCEDURE

All cigarette smokers who were originally recruited to the study were sent a reply paid postal questionnaire and covering letter one year after the index consultation. Non-respondents were sent up to two reminders at intervals of two weeks. An attempt was made to trace patients through the Oxfordshire Family Practitioner Committee, and the follow up sequence was started again if a new address was obtained.

For each smoker information was sought as to the number of attempts, if any, to stop or reduce smoking over the year, and the timing of the first attempt. Any patient who admitted smoking at the time of the one year follow up was asked to give further details as to the type, quantity, and brand of cigarettes and depth of inhalation of the smoke.

To validate smoking histories a sample of patients who claimed not to be smoking at the time of follow up was selected for an unannounced home visit by KJ. At this visit the patients were interviewed concerning their experiences since stopping smoking and were asked to provide a urine specimen for "a study of the changes in body chemistry that follow cessation of smoking." Specimens were stored by freezing before radioimmunoassay for cotinine concentrations,[10] the principle metabolite of nicotine.

Results

PREVALENCE OF SMOKING

Of the 6052 eligible patients seen (2225 men and 3827 women), 2110 (820 men and 1290 women) admitted to smoking cigarettes at the time of the index consultation. The overall smoking prevalence of 35%, was similar to the rate of 39%, found in a national sample of over 22 500 people surveyed in 1980.[11]

BALANCE OF STUDY GROUPS

The four study groups were balanced with respect to the age and sex distributions of the patients, but, despite randomisation, there was a significant imbalance of social classes ($p<0·01$) whereby the advice group was weighted towards higher socioeconomic groups and the health visitor group towards lower ones, compared with the control and exhaled carbon monoxide groups. There were no appreciable differences in cigarette consumption, type of cigarette smoked, duration of smoking, or desire or intent to stop among patients allocated to the three "active treatment" groups.

OUTCOME OF FOLLOW UP

A one year questionnaire was returned by 72%, of the smokers and the response rate did not vary appreciably among the four groups.

Attempts to stop smoking—Of the control patients who returned a questionnaire at one year, 64%, reported that they had attempted to stop or reduce smoking. The corresponding figures in the three other groups were 70% (advice), 72% (exhaled carbon monoxide), and 68% (health visitor). These data provide no statistically significant evidence of any effect of intervention on the frequency of attempts to stop or reduce smoking.

Stopping smoking—Table I gives the numbers of patients who reported that they were no longer smoking at the time of the one year follow up, and the results of the trial are shown in fig 2. Non-respondents were assumed not to have stopped smoking but, despite this conservative assumption, a significant difference between the "treatment" groups is apparent ($p<0·05$). Pooling the results for the three groups that received "active treatment" shows a clear increase in stopping smoking compared with the non-intervention control group ($p<0·02$). Table II gives the data on stopping smoking, classified both by "treatment" group and by social class. It is apparent that the influence of intervention is most impressive in social classes I to III non-manual, while there is no indication of a beneficial effect of any "treatment" other than exhaled carbon monoxide in social classes IV and V.

TABLE I—*Number of patients who reported that they had stopped smoking at one year follow up (634 non-responders assumed not to have stopped smoking)*

Study group	No in group	No (%) who reported not smoking
Intervention:		
Advice	512	77 (15·0)
Exhaled carbon monoxide	529	91 (17·2)
Health visitor	521	69 (13·2)
All intervention groups	1561	237 (15·2)
Control	549	58 (10·6)
Total	2110	295 (14·0)

Comparison of all four groups: χ^2 8·5, 3 df, p 0·05.
Comparison of pooled intervention groups with control group: χ^2 5·8, 1 df, p 0·02.
Both values adjusted for effect of social class.

TABLE II—*Rates (%) for stopping smoking by social class* and "treatment" group*

Treatment group	Social class I, II, III non-manual		III manual		IV + V	
	Patients	Per cent stopping	Patients	Per cent stopping	Patients	Per cent stopping
Control	121	9·1	176	8·5	139	11·5
Advice	136	22·8	183	12·3	124	10·5
Exhaled carbon monoxide	121	19·8	165	13·9	107	15·0
Health visitor	106	18·9	153	14·4	122	8·2
Total	484	17·8	657	12·2	492	11·2

*Social class based on occupation of head of household; 477 patients excluded head of household unemployed, pensioner, or engaged in home duties).

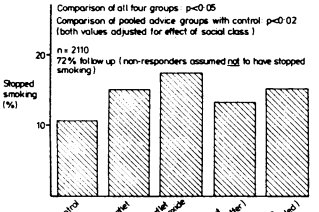

FIG 2—Self reporting of stopping smoking by patients at one year follow up.

Yield of successful attempts—In view of the conclusion by Russell *et al* that advice acted only to increase the number of attempts made to stop smoking and not the success rate among those who did try,[4] we examined our data to determine the proportion or "yield" of attempts that resulted in stopping successfully. When the three active intervention groups were considered together there was a 60% increase in the number of attempts resulting in success, while the exhaled carbon monoxide group had almost twice the yield of the non-intervention control. These differences were highly significant ($p<0·01$, corrected for social class).

VALIDATION OF SMOKING HISTORIES

A sample of 122 (41%) of the 295 self described ex smokers was selected for home visit, but 24 of these were not available for interview because of absence from home on three separate evenings (13 cases), changed address (seven cases), or refusal (four cases). Although 90% of visits were completed within three months of the follow up questionnaire being returned, 40 patients admitted to having begun smoking again, at least intermittently, since the postal inquiry. Forty six of the 58 patients who denied relapse provided a urine specimen.

Data derived from a study of men attending the British United Provident Association (BUPA) Medical Centre in London were used to determine a concentration of urinary cotinine which distinguished current smokers from non-smokers. By using a cut off concentration of 100 ng/ml all of the 148 current cigarette smokers attending BUPA were correctly identified, and only two of 221 non-smokers were wrongly classified.

In our study 11 (24%) of the 46 patients who claimed not to be smoking and who provided a urine specimen had a urinary cotinine concentration of 100 ng/ml or greater (see table III). Since it is possible that the patients who were "unable" to provide a specimen may have guessed the reason for this request the most conservative assumption is to regard all of these patients as continuing smokers. Thus a maximum of 23 (40%) of the 58 patients who stated that they had not relapsed may have been continuing smokers.

This proportion, however, did not differ significantly between the "treatment" groups (χ^2 0·73, 3 df, $p>0·5$). Accordingly, although the self reported stopping rates may have been exaggerated by between 24 and 40%, this does not invalidate our conclusions concerning the relative impacts of the different intervention regimens.

TABLE III—*Results of a survey to validate smoking history in 122 patients who claimed to have given up smoking*

Outcome	No in study group					Total	
	Control	Advice	Exhaled carbon monoxide	Health visitor	No	%
No interview	10	2	6	6	24	19·7
Admitted relapse	7	12	13	8	40	32·8
Denied relapse:						
Urinary cotinine concentration 100 ng/ml	4	11	12	8	35	28·7
Urinary cotinine concentration < 100 ng/ml	3	6	2	0	11	9·0
No urine specimen	1	1	4	6	12	9·8
Total	25	32	37	28	122	100

TABLE IV—*Comparison of results of trials of the effect of advice against smoking*

Study	Interventions compared (percentage of self reported stopping rates at one year)					
	Control	Questionnaire	Verbal advice	Full advice*	Exhaled carbon monoxide	Health visitor
London† (n = 2138) (73%)‡	10·3	14·0	16·7	19·1	—	—
Ottawa† (n = 691) (65%)‡	—	8·0	7·0§	7·5§	—	—
Oxford (n = 2110) (72%)‡	14·1	—	—	20·6	25·3	18·0

*Verbal plus written advice plus warning about follow up.
†Response rate as per cent—stopping rates for each study are based on responders only.
‡Represents pooled results for groups receiving advice on single and multiple occasions.
§Full advice in this study did not include a warning about follow up.

Discussion

Advice against smoking given during routine consultations in general practice is a cheap and simple method of reaching a very large proportion of smokers, given that two thirds of the population consults a general practitioner at least once every year.[12] The results of this study confirm that such intervention has a useful effect. In both this study and in the previous study in London advice was given in the doctor's own style and at his discretion.[1] Nevertheless, the studies differ in that they led to opposite conclusions as to the effect of advice. Whereas the London group concluded that the main effect was to increase the number of attempts,[4] the Oxford results show a difference specifically in the proportion of attempts that were successful. Our generous definition of an "attempt" as any effort made "to stop or reduce smoking" may, however, have clouded the issue. It seems unlikely that two thirds of the smokers made a serious attempt to reduce their smoking over the year, and this figure may partly reflect changing social attitudes obliging smokers to be seen at least to be trying to stop.

Table IV gives a comparison of the rates of self reported complete stopping of smoking in the three largest controlled trials of the effect of giving routine antismoking advice. The denominator in each case is the number of patients who replied to follow up at one year. Of these three studies, the Canadian one is least adequate in terms of sample size and thoroughness of follow up.[7] The results are somewhat paradoxical in that the group receiving least intervention produced the best outcome, but the differences are not statistically significant. Of greater interest is the lower overall success rate, due perhaps to the study being conducted in a single teaching hospital general practice unit with a large, mobile population of doctors.

The London[4] and Oxford studies are directly comparable, but the fact that the cohorts of patients were recruited some six years apart at a time when the trend towards stopping smoking was accelerating[11] is reflected by a higher rate of stopping in the control group in Oxford. The pooled result of 21·2% stopping for all patients who received at least the "full advice" package as designed by Russell *et al* compares favourably with the 19·1%, achieved in London.

None of the previous studies of giving antismoking advice routinely in general practice has attempted any systematic validation of patients' reports that they have given up smoking. In our study the validation survey was complicated by our inability to locate some patients and by the high rate of relapse that occurred between return of follow up questionnaires and completion of home visits. Urine samples were collected for only 16% of the original 295 patients who claimed to have given up smoking, indicating the difficulties of conducting such an exercise but providing important information on the extent of misleading reports concerning their smoking status given by patients in general practice.

The true status at the time of postal follow up of those who later admitted "relapse" cannot, of course, be ascertained. Our analysis is therefore limited to those who claimed persisting abstinence at interview; this is the key group of patients in the assessment of the effectiveness of an antismoking campaign. The results for the biochemical validation of stopping were not in principle surprising, the extent of the misreporting falling within the range that has been reported previously.[13 14] Moreover, it was reassuring to discover that the estimated proportions of people who misreported their smoking habits were similar in each of the study groups, so that the relative differences in stopping rates between the groups were maintained.

Intensive follow up, including home visits by health visitors, was associated with a very high rate of stopping smoking (62%) in a study of patients who had had a myocardial infarction.[15] In the current trial, however, only six out of 521 patients took up the suggestion that they might contact a health visitor for further advice. The low success rate of the health visitor group cannot simply be due to the social class imbalance between the "treatment" groups because the pattern was apparent in all but one of the social classes (see table II). One possible explanation for the findings is that few patients were acquainted with health visitors or their role and therefore the impact of the antismoking intervention was diminished by the confusion caused by the mention of this extra person. Alternatively, there is the possibility that doctors saw their own antismoking role being eroded through sharing it with a health visitor and gave less effective advice themselves. Whatever the explanation, this modification of the standard "advice package" must be regarded as a failure. By contrast, some patients were so affected by the demonstration of exhaled carbon monoxide that they added comments concerning it on the follow up questionnaire one year later. Also, there was a suggestion that this method was effective in the lower social class groups, among which smoking is common and which have been most resistant to other antismoking measures in the past.

Thus our findings have confirmed the value of simple advice against smoking given in general practice and shown that demonstrating to patients the concentration of carbon monoxide in their breath has an added impact. Although the magnitude of the effect, even with the best of the intervention strategies investigated, was modest, they were all simple, cheap, and safe. Widespread implementation might have a major effect on preventing diseases associated with cigarette smoking.

We are grateful to the Nuffield Dominions Trust and the Health Education Council for financial support. The cotinine assays were done with support from the National Institute on Drug Abuse, DA 2507, DA 0007. Helen Van Vunakis is the recipient of a US Public Health Service Career Award 5K6/A 12372.

We thank Maggie Dennis and Criena Fitzgerald for typing,

Paul Griffiths for advice on computing, and the doctors, staff, and particularly the patients of the study practices, without whom the project could not have been conducted.

Appendix

Suggestions concerning advice to be given.

As general practitioners and their patients show wide individual variation, it is not reasonable to expect that exactly the same anti-smoking message can be delivered to each patient who smokes.

It is to be hoped, however, that each doctor will be able to discuss briefly most or all of the following points with each patient.

(1) *Risk*—Smoking is known to cause a large number of diseases which together account for much of the sickness and premature death in the community.

(2) *Cost*—The habit costs the average smoker well over £200 a year. Unborn children and young children suffer if exposed to tobacco smoke.

(3) *Giving up*—All smokers should give up the habit if possible. Eight million Britons have already given up.

(4) *Problems of giving up*—These last for two to three weeks for most people.* Any weight gain tends to be temporary.

(5) *"Less hazardous smoking"*—If you cannot give up smoke fewer cigarettes, take fewer puffs, inhale them less deeply, and leave longer butts. But try to give up completely.

*We were a little optimistic, but there is a sizable number of patients who find it surprisingly easy to give up smoking once they make a firm decision to do so.

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(*Accepted 14 February 1984*)

Diary of Urban Marks: 1880–1949

After Jarvis, an old man from Gloucester was obtained. He carried on the work well but as he suffered from urinary trouble he smelled rather badly. He used to apologise for this and like Groves he took meals by himself. He carried on until during the last few months of my absence Soady, whom I had with me in Mesopotamia, took charge. This had been arranged between Soady and myself and he was acting for me when I returned. During these six months Soady worked hard and was very popular. He pulled the practice together and when I arrived home everything was working smoothly and normally.

Just a few words in connection with Arthur Soady. He was an Irishman from Dublin and with his father had been accountants for a big railway in Ireland. Soon after he qualified Arthur felt the call of medicine and having taken a medical degree joined the army for 12 months, as all Irishmen had that option. I did not see him at Blackpool but I was allotted a cabin with him on the boat on which we went out to Mesopotamia. He had a charming manner with him and curiously enough had not a good word for the Irish. For the rest, he had a curiously shaped hooked nose and was about 5 ft 5 in in height. He did not possess a brogue.

On my return to civil practice I tried to persuade him to come into partnership with me and open out in Port Tennant on the other side of the Swansea River, where I had a large number of patients owing to my connection with the Baldwin Works. Unfortunately, for myself and for him, he had an aunt in Dublin from whom he had great expectations. Arthur managed all her affairs and she insisted that if he settled down it must be somewhere near her. In vain he pointed out to her that he could be in Dublin in a few hours from here. It was useless, and Arthur for some time did a series of locum tenancies all over the country. He went to the West Riding of Yorkshire to take over a practice for a man who was dying from the effects of alcohol. After this doctor's death he stayed on until the practice had been disposed of and the next thing I heard was that he had married the widow. They naturally could not stay in the neighbourhood and he settled down in London in one of the east end suburbs. But the London fogs played havoc with his chest. He had never been in good health since the time he arrived in Mesopotamia. On his arrival there he had been posted to the front line well up the country. As soon as he reached there he went down with dysentery and was invalided to Baghdad. There he developed asthma and finally in the October of 1917 was sent to No 2 BGH. I remember the colonel asking me if I would take charge of an invalid officer who was fit for next to nothing. I was agreeably surprised to find that my charge was my old friend, Soady. I put him in charge of the dysentery wards. When I took over the accounts of the mess at the end of 1917 it was largely due to the accountship of Soady that we put the mess on a sound footing. He remained with us until March of 1918 when he left Mespot for home. It had been arranged between us that he should take over my practice until I returned home. When he arrived in England his old trouble asserted itself and he went down with pneumonia and it was not until late in 1918 that he was able to take charge of my practice.

He sold his first practice in London at a large profit and then went to Skegness but the cold winds of the east did not suit him and he had to retire from the place. Just about this time his aunt died and left him over £10 000. He then decided to take up a seafaring life and joined to the P & O Company as a ship's surgeon. Meanwhile, his wife went to live in London in a private house. For some year's he went backwards and forwards to Australia in the boats and on several occasions when the ship put into Swansea for cargo I had an opportunity of seeing him. He was always very delighted to come to Swansea and was never tired of telling people how I saved his life. Finally he tired of the sea and with his wife settled down into a country practice.

Rethinking Established Dogma

Trivia, triage, and treatment

JAMES D E KNOX

Some years ago senior medical students at Dundee were invited to define a general practitioner and to describe his work. From among the replies it was possible to define a common theme, best summarised by one response, which read, "The general practitioner is a triviologist: a signpost to hospital."

From the patients' point of view their presentations are seldom, if ever, trivial. In comparison, however, with, say, Mr A's acute myocardial infarction, Tommy B's sunburn pales to insignificance. By the same token, Ina C's presentation of tiredness and churnings in the stomach—coupled with a request for a tonic—could be regarded as humdrum, an everyday occurrence in general practice. Ina C's request was, in fact, the presentation of what some months later was seen to be overt exophthalmic goitre. Thus, perhaps the term "trivia" ("litter discarded at the crossroads of life") needs to be replaced by another, less emotive phrase such as "minor medicine." By this I mean "a perceived deviation from the normal, associated with temporary interference with usual functions or a greater incapacity of short (up to several days') duration." Such a definition still begs a number of questions. Ezra D, aged 75 years, attended the doctor to obtain his signature to enable him to claim from a private pension fund. The doctor noted a large swelling of the right side of his face—almost certainly a mixed tumour of parotid. Ezra declined any treatment for a condition he had had for over 40 years, and which, he claimed, had never bothered him. The definition of "minor medicine" used in this paper thus requires further qualification: the deviation as perceived by the patient and presented to the doctor.

Epidemiology of minor medicine

By such a definition I classified as "minor" approximately 60% of 649 contacts, initiated by patients and seen by me at the Dundee Medical School teaching practice from August 1982 to July 1983. Applying the same definition selectively to 439 children under 16 years of age in the same practice, the proportion of minor medicine was 80%.

Jacob applied this approach, somewhat arbitrarily, to the diagnostic labels attached by 24 family doctors to 6617 first contacts, in part of a larger study of the work of Dundee general practitioners.[1] Analysis of the distribution by age group and place of contact showed that the proportion of "non-serious" disease decreased with age and home contact compared with consulting room contact (fig 1).

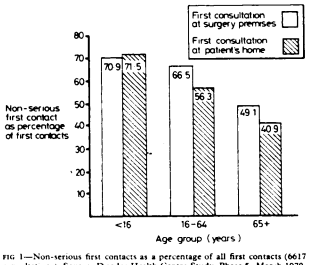

FIG 1—Non-serious first contacts as a percentage of all first contacts (6617 consultations). Source: Dundee Health Centre Study, Phase 5, March 1979, total of 16 291 contacts.

Content of minor medicine

Minor medicine covers a wide spectrum and includes many fascinating disease states. Some of these are only now becoming more clearly defined—for example, "slapped cheek" disease (fig 2) in which human parvovirus infection has only recently been incriminated as an important aetiological agent.[2] Such examples relate to relatively straightforward conditions, of interest in themselves, and, of course, far from trivial to the sufferer. Most minor presentations in general practice are of this "single problem" type. In a small proportion, however, the patient's condition is less easily defined and may be only part of more complex situations. It is possible to classify such presentations into subgroups, depending on the doctor's further knowledge of the patient and his setting. Such knowledge is often acquired over time and depends to some extent on the doctor's willingness and ability to perceive the person and the family behind the presentation.

"Mary Jane" phenomenon

In a few presentations the apparent patient, usually a child, is in reality merely an index of a disturbed family. A A Milne

Department of General Practice, Westgate Health Centre, Charleston Drive, Dundee DD2 4AD
JAMES D E KNOX, MD, FRCPED, professor of general practice

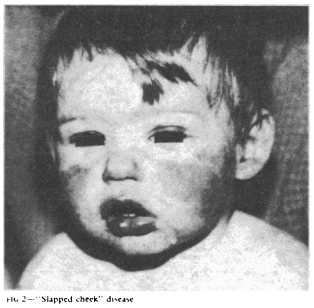

FIG 2—"Slapped cheek" disease

What is the matter with Mary Jane?
She's perfectly well, and she hasn't a pain;
But, look at her, now she's beginning again!
What *is* the matter with Mary Jane?

FIG 3—From "Rice Pudding" in *When We Were Very Young* by A A Milne, illustrated by E H Shepard, published by Methuen Children's Books Ltd, and reproduced with the permission of Curtis Brown Ltd

captures something of this in his poem "Rice Pudding" when Mary Jane is again presented with rice pudding, the resulting tantrum cannot be contained within the family.[3] So the family doctor is called upon to "cure" Mary Jane (fig 3), whose family problem may not be appreciated by its grown up members. In adults the underlying problem may be marital disharmony or alcoholism in the spouse, or the stress induced by caring for an elderly parent. The patient may not necessarily be fully aware of the nature of the problem, and there is little conscious attempt to conceal the state of affairs.

The cover story

Peggy E, a 16 year old schoolgirl, presented with a complaint of "catarrh." It was only after this had been dealt with that the true agenda was revealed—she wanted to go on the contraceptive pill. Such "collateral problems" may come to the surface as a parting shot—the "while I'm here" syndrome, and after the patient has had an opportunity to assess the doctor and judge his likely response to a second, more "serious" offer. The experienced general practitioner learns to anticipate and facilitate the disclosure by such a phrase as, "Is there anything else we should discuss?"

The frequent attender

Most practices contain a few patients who generate a disproportionately large volume of work for the doctor—well illustrated by Dickinson and Farrow.[4,5] Such patients are characterised by the high frequency of contact, and by the variety of their minor but baffling symptoms. The frustration they engender in the doctor resides not simply in the high demand but in the fact that they persistently reopen issues which the doctor has attempted to close. Freeling has coined the term "recidivist" for such a patient, recognising the pejorative nature of the term, but unable to suggest a better one.[6]

Minor medicine—a classification

So what at first appears to be a simple triviality is sometimes an elaborate affair. The proposed classification (fig 4) is not intended to be used to stick labels on people; rather it is an attempt to clarify thinking on a difficult subject.

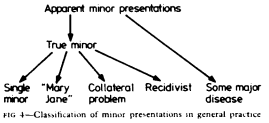

FIG 4—Classification of minor presentations in general practice

Recognition—and triage

In addition to applying common sense epidemiology along the lines mentioned above the doctor deploys many skills in dealing with this numerically important component of his work. They include pattern recognition, a sound knowledge of the natural history of diseases (both major and minor), the use of time as a diagnostic tool, and, above all, a knowledge of his patients and their illness behaviour. With experience, general practitioners acquire a kind of rank order of seriousness to apply to any given presentation: thus Hodgkin records diarrhoea as 100 trivial to 1 serious, and haematemesis as 1 trivial to 2 serious causes.[7] Laboratory investigations usually have little to offer, with the exception of the erythrocyte sedimentation rate; the finding of an otherwise unexplained raised value calls for a further assessment of the apparent minor presentation.

Much of minor medicine is not amenable to diagnosis in the sense of applying labels that indicate clear cut pathology and imply a prognosis. When diagnosis is not clear at one extreme the doctor's mental response might be "I don't know exactly what this is, but it's not serious"; at the other, "This patient requires prompt admission to hospital." Perhaps a more suitable term is "triage"—hitherto reserved for the sorting of casualties of war or major disaster. *Blackiston's Gould Medical*

Dictionary, however, has extended the definition to include the sick as well as the wounded.[8] The general practitioner in the National Health Service occupies a key position as a determinant of hospital use—an increasingly expensive prescription. It is important to the nation's economy that this resource is appropriately deployed. In addition to economical and efficient use of expensive hospital resources, appropriate triage secures the effective use of scarce specialist skills, ensuring that they are deployed to best advantage. Visitors from the United Kingdom to foreign countries lacking a strong primary care system are often struck by the extent to which the work of highly trained specialists is "diluted" by the inclusion of inappropriate case material.

Treatment

At the level of the individual patient recognition and triage of minor medicine usually have to be complemented by treatment. In this paper it would be inappropriate to attempt to give details of treatment for each condition ranging from acne to zymotic diseases. Some generalisations may be made, however.

Single minor condition

The "seriousness" of a condition is often inversely proportional to the meaning the symptom holds for the sufferer: the patient rolling in agony with colic is concerned with the immediate relief of his pain, while the patient with vague epigastric unease may well be living in fear of having cancer of the stomach. It follows that management of minor medicine has to take psychosocial considerations fully into account. Sometimes the patient feels guilty about "bothering the doctor," and a delicate path has to be trod to save the patient's face and at the same time, when appropriate, encourage self care in the future.

One of the greatest therapeutic dilemmas facing the general practitioner dealing with minor illness, especially upper respiratory tract infections, is an absence of a rational basis for prescribing antibiotics.[9] Perhaps an acknowledgment of this fact and its wide acceptance by the medical profession would lead to a reduction in what seems to be widespread overuse of antibiotics.

A proportion of single minor problems require the skills of the nurse rather than the doctor. More could—some would say "should"—be delegated to such professional staff, provided they are suitably trained for these tasks, and nursing education and training need to be more fully geared for this to happen more widely.

Mary Jane

The underlying problem with "Mary Jane" is like!, to be complex, requiring the assessment and management skills of other health professionals such as the health visitor, social worker, or marriage counsellor. The need here is for greater teamwork, including better communication.

Collateral

The doctor sometimes merely needs to listen and to use counselling skills. The time spent in dealing with the "while I'm here" presentation is, in my experience, usually well worth while, despite the irritation it may cause the doctor at the time.

Recidivist

Such people resemble psychotic patients because prolonged contact and attempts to communicate rationally are commonly unrewarding. I usually give myself a time limit on such consultations and will occasionally seek the help of consultant colleagues (suitably briefed) to secure temporary respite from the recidivist's importunings. This also calls for constant vigilance for the early presentation of major disease.

Minor presentations of major illness

It is usually necessary to consult a specialist as early as possible. This decision to refer sometimes requires positive effort: after all, some 90% of contacts do not call for such action, and often it has to be taken in the face of slender evidence. The patient's well being must take pride of place over the doctor's sensitivity concerning his reputation as a diagnostician with consultant colleagues. Among the peculiar intellectual satisfactions of general practice is the justification of such referral action in the light of subsequent events.

Triage and medical education

As long as medical education continues to be based almost exclusively on the teaching hospital, the undergraduate has little opportunity to acquire the knowledge, skills, and attitudes necessary for efficient, effective, and efficacious recognition and management of a very large proportion of health problems of contemporary society. And many of these problems remain underresearched. University departments of general practice are striving to correct this imbalance, but can we be sure that a high proportion of final year medical students will not continue to dismiss as "trivial" many of contemporary society's health problems?

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4 Dickinson KG. A difficult case: Pandora's box. *Br Med J* 1983;**287**:954–5.
5 Farrow D. A difficult case: Lesley. *Br Med J* 1983;**287**:1114–5.
6 Freeling P. In: *A workbook for trainees in general practice*. Bristol: Wright PSG, 1983.
7 Hodgkin K. In: *Towards earlier diagnosis*. 4th ed. Edinburgh: Churchill Livingstone, 1978.
8 *Blackiston's Gould medical dictionary*. 3rd ed. New York: McGraw-Hill, 1972.
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(*Accepted 23 December 1983*)

Correction

A "Taylor made" practice

In the article by Dr S Williams (14 January, p 116) the year that Dr Henry Pearson Taylor died should have read 1945.