PRACTICE OBSERVED

Practice Research

Do patients who move to a new town consult their doctor more often?

JOHN S COBB, DAVID P B MILES, ALEXANDER E LIMENTANI

Abstract

A study was conducted to measure any difference in the consultation rate of patients from two new town housing estates compared with patients from the rest of the practice. Patients from the new estates consulted 15% to 20% more than those in other areas, but newly registered patients showed no difference compared with the indigenous population. It is suggested that patients who chose to move to new town rented accommodation bring with them a more casual attitude to the general medical services.

Introduction

Since 1970 Milton Keynes has grown rapidly. By 1980 two thirds of its 110 000 inhabitants had moved to the town during the decade. Patients in a new town are said to be more likely both to consult their doctor and to move again.[1 2] But moving itself is said to increase the consultation rate,[3] and areas with a high turnover are likely to have their figures seriously distorted by inaccuracies in their population denominator, as shown by the age-sex registers.[4]

This study was conducted to compare the consultation rates of patients living in development corporation estates with patients living in other areas. Any difference had to be distinguished from the effect of different demographic characteristics of the population, as well as distortions due to the effect of moving and incorrect registration.

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Method

The study was conducted throughout 1980 from a single health centre with six doctors in partnership. There were 17 050 patients on the age-sex register (excluding patients living in institutions), and 7762 of them lived in the main town of the practice (Stony Stratford), which is now part of Milton Keynes. Most of the other patients lived in villages outside Milton Keynes. Many private estates had been built throughout the area since 1960. In 1972 two estates were built in the main town of Stony Stratford by the Milton Keynes Development Corporation.

All face to face consultations were recorded on 42 sample days of the year, providing six examples of each day of the week, or a sample of 1·8·7. For each consultation it was noted whether it was a surgery consultation or a visit and what type of consultation it was (patient initiated, doctor initiated, fertility, out of hours, or failure to attend).

The object of the analysis was to define any difference in the consultation rate in a year, firstly, between patients who lived in the corporation estates and those who lived elsewhere, and, secondly, between patients who had moved to the area recently and those who had lived in the area longer. The effect of these two characteristics on each other had to be defined, and in either case the effect of available demographic characteristics had to be taken into account.

The Oxford Community Health Project[5] processed the information and produced consultation and matched population figures for each group within each variable. For every group there was a series of tables showing the number of consultations and patients as defined by every other variable available—namely, age, sex, accessibility, doctor with whom registered, duration of registration, and areas of residence. In the main town, where a household study had been conducted, the social class of patients was also known. Direct standardisation of each area and each duration of registration group for all consultations and each type of consultation was therefore possible.

For any group the actual consultation rate is not only the result of its own characteristic but the effect of the other variables mentioned. On the basis of the known population structure in terms of the other variables the expected consultation rate of the group can be calculated. Expressing the actual consultation rate as a factor of the calculated expected consultation rate isolates the effect of the group itself, so that if the actual consultation rate is higher than the expected rate the factor will be more than one, if lower, it will be less than one. In this paper comparisons are expressed exclusively in these terms.

In the main town figures for the population structure of the incorrectly registered patients were available[4] and it was possible to make accurate corrections of the actual and expected consultation rates for this potential error. Here, patients were categorised by area according to whether they lived in the corporation estates, had moved to new private estates available since 1971, or lived in houses that had been built over the centuries to 1972. Three categories of patients were defined according to duration of registration: the new patients, who had been registered for under three years; patients who had been registered for three to 20 years; and the indigenous population, defined as the patients and their children who had been registered with any doctor in the area for more than 20 years.

The stability of the four areas of the main town was measured to see whether there was any indication of a difference between the consultation rate of patients who come and stay and those who come but move again. The measure of stability was the proportion of patients still registered with the practice three and six years after first registering.

The χ^2 test was used to test the significance of differences in consultation rates found.

Results

The total consultation rate a year for the practice was 3·08, but this figure was greatly influenced by demographic factors, notably age and sex. An increase in consultation rate with age was due mainly to an increase in the visiting rate for elderly patients. The consultation rate of young women was more than twice that of young men, half of the increase being for fertility reasons.

Consultation rates according to duration of registration showed that the practice as a whole behaved in a similar way to patients in the main town. The same was true for patients in different areas; in this case patients in the established area of the main town behaved in a similar way to patients outside Milton Keynes. In the final analysis accessibility, doctor with whom registered, and social class had a small effect on the expected consultation rate because of the mix of the populations. Information on incorrect registration was available only in the main town, and, as the effect of this was large and data from the rest of the practice contributed no further information, the tables show only results from this part of the practice.

Analysis of the total consultation rates of patients of different durations of registration showed no statistically significant differences between the groups when the figures had been corrected for incorrect registration (table I). Before the figures were corrected for incorrect registration there seemed to be pronounced differences and the figures showed a misleadingly significant high rate ($p<0·001$) for newly registered patients. Fertility consultations taken alone, however, showed differences that were greater and persisted after the correction for list inflation. In them it was found that those registered for an intermediate number of years consulted less than either the new patients or the indigenous population ($p<0·001$) and the indigenous population consulted more than the new patients ($p<0·005$).

Patients who lived in the corporation estates consulted 15% to 20% more than patients who lived in any of the other areas. The difference was significant whether the two estates were taken together or separately, or whether the estates were compared with the other groups in the main town ($p<0·001$; table II), where figures for list inflation were available, or with the rest of the practice. All other areas had nearly identical consultation rates after correction for their population structure. Patients from the corporation estates consulted more than expected for every type of consultation except doctor initiated visits, which were significantly less frequent than expected ($p<0·05$). With regard to patients from the corporation estates particularly frequent were out of hours consultation ($p<0·0001$) and failure to attend without cancelling their appointment ($p<0·01$; table III).

TABLE I—*Consultation rates of patients who had been registered for different length of time*

	Population on the register (duration of registration unknown in 227 of 7762 patients)	Actual/expected consultation rates			
		Uncorrected for incorrect registration		Corrected for incorrect registration	
		All consultations	Fertility consultations	All consultations	Fertility consultations
Indigenous population (registered for more than 20 years or born to indigenous patients)	1035	1·01	1·33	1·05	1·44
Intermediate (registered for between 3 and 20 years)	4303	0·91	0·77	0·97	0·77
New patients (registered for under three years)	2197	1·18	1·33	1·01	1·24

TABLE II—*Consultation rates in different areas*

	Population (corrected for list inflation)	Actual/expected consultation rates
Milton Keynes Development Corporation Estates (opened 1972-3):		
Estate 1	1250	1·17
Estate 2	1016	1·13
Private houses available after 1971	1246	0·98
Housing available before 1972	3826	0·98

The analysis of the proportion of patients in the main town who were still registered with the practice three and six years after first registering (table IV) showed that the corporation estates were significantly different from each other ($p<0·0001$). One was as stable as the established town, whereas the other was very unstable, with only a quarter of the patients still there six years after first registering. Another measurable difference between the two estates was that the more stable estate had a higher social class structure, with 18% classified as social class II compared with only 3%, in the less stable estate.

Discussion

The study aimed at identifying any "new town" factor in the consulting habits of patients. To do this account had to be taken of the demographic characteristics of the population and incorrect registration. Furthermore, the effect of moving itself was investigated separately by studying the effect of duration of registration on consultation rate.

No statistically significant difference in consultation rate was found between patients of differing duration of registration, with the exception of consultations for fertility, where low consultation rates were found in those registered in the intermediate years. A similar trend was seen for other types of consultation but these were not significant. These findings are similar to those of Goodman and Crombie,[7] who used a different approach. If incorrect registration had been ignored we would, like other workers,[1 2] have been misled by appreciably higher consultation rates among the recent immigrants.

The effect of area of residence showed that patients from the Milton Keynes Development Corporation estates consulted 15% to 20% more than patients from any other area. This higher rate was present in both estates, though they were different from each other in two other measurements we made: social class and stability.

TABLE III—*Effect of location on different types of consultation (corrected for incorrect registration)*

	Type of consultation: actual/expected consultation rate			
	Surgery consultation and patient initiated visits—excluding those seen by the doctor on duty (82·4%)	Medical initiated visits (5·4%)	Out of hours consultations (6·3%)	Non-attendance rate (5·9%)
Milton Keynes Development Corporation Estates	1·12	0·85	1·63	1·34
Private houses available after 1971	0·99	1·20	0·93	0·87
Houses available before 1972	0·96	1·18	1·04	1·05

TABLE IV—*Turnover of patients in the four areas*

	Percentage still registered with the practice three and six years after first registering		Population on the register		
	Three years	Six years	1971	1976	1980
Milton Keynes Development Corporation Estates:					
Estate 1	54·2	23·0	0	1180	1341
Estate 2	75·7	55·4	0	897	1102
Private houses available after 1971	91·2	88·3	0	872	1299
Housing available before 1972 (established town)	73·7	55·7	3077	3827	4010

It is not clear from published papers whether patients from new towns consult differently.[1 2] Even the conclusion by Martin *et al*[8] that there is a high incidence of mental disorders in a new town was questioned by Hare and Shaw,[1 9] who found no difference between an established and a new area of Croydon. In other reports the uncertainty is compounded because the two issues of moving, and moving to a new town, are not separated and the effect of incorrect registration not measured.[11] Our findings are clear: patients moving to new Milton Keynes Corporation estates consulted more than patients moving to other areas.

Patients from the corporation estates had an exceptionally high rate of failure to attend an appointment without cancelling it, and a very high rate of consultations out of hours. This suggests that patients from the estates have a more casual attitude to the medical service and this might well explain their high consultation rate. The reciprocal low "doctor initiated" visiting rate might mean that the patients who are less thoughtful in their use of the Health Service may find it less caring. An alternative reason for the differences is that there is a difference in the incidence of sickness. This seems unlikely. The low doctor initiated visiting rate indicated that the doctors did not think so, and a relatively small change in the reporting of illness might have a big effect on the consultation rate as there is a considerable reserve of unreported symptoms in the community.[12] Differences between communities have been shown before[13] and a general lowering of the threshold of consultation in recent years was an important finding of the two national morbidity studies.[14]

If a more casual attitude towards the medical services is the cause of a higher consultation rate the question is whether the corporation estates create a social setting that causes the differences. It seems more likely that those who select themselves to move to these estates bring with them attitudes towards the medical services that cause a high consultation rate. This attitude may run through every aspect of their life and include a different attitude to the public services in general. The differences are not big. Thirty years ago Taylor observed that 15% of patients caused 50% of the work.[15] It would require only 6% of those who seldom consult a doctor to join those who often consult to account for the differences we observed.

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References

1 Bain DJG, Philip AE. Going to the doctor—attendances by members of 100 families in their first year in a new town. *J R Coll Gen Pract* 1975; **25**:821-7.
2 Miles DPB, Rowley A. Why not pay for high turnover? *J R Coll Gen Pract* 1980;**30**:40.
3 Whitfield MJ. The relationship between years of registration and morbidity in general practice. *J R Coll Gen Pract* 1972;**22**:675-8.
4 Fraser RC. Patient movement and the accuracy of the age-sex register. *J R Coll Gen Pract* 1982;**32**:615-22.
5 Perry J. Medical information systems in general practice—a community health project. *Proc R Soc Med* 1972;**65**:241-2.
6 Cobb JS, Miles DPB. Estimating list inflation in a practice register. *Br Med J* (in press).
7 Goodman M, Crombie DL. Reported illness and change of residence. *J R Coll Gen Pract* 1982;**32**:609-13.
8 Bell J, Black IJ, McEwen J, Pearson JC. Patterns of illness and use of services in a new town: a preliminary report. *Public Health (London)* 1979;**93**:333-43.
9 Martin FM, Brotherton JHF, Chave SPW. Incidence of neurosis in a new housing estate. *Br J Prev Soc Med* 1957;**11**:196-202.
10 Hare EH, Shaw GK. *Mental health on a new housing estate: a comparative study of health in two districts of Croydon*. London: Oxford University Press, 1965.
11 Bain DJG. Patient mobility and consulting behaviour. *J Fam Pract* 1981; **12**:891-5.
12 Fry J, ed. *Trends in general practice*. 2nd ed. London: British Medical Association, 1979.
13 Royal Commission on the National Health Service. *Access to primary care*. Research paper No 6. London: HMSO, 1979.
14 Royal College of General Practitioners Birmingham Research Unit. Trends in national morbidity: a comparison of two successive national morbidity surveys. Occasional Paper 3. *J R Coll Gen Pract*, 1976.
15 Taylor SJL. *Good general practice*. London: Oxford University Press, 1954:420.

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Estimating list inflation in a practice register

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Abstract

The reason why patients were incorrectly registered in an age-sex register was studied. Whereas underregistration was caused by patient delay in registering with a doctor, the much greater number of overregistered patients were thought to be there largely because of administrative delays in removing their names from the register.

It is suggested that it would be possible for the software of a computer system in general practice to correct the population size and structure for estimated list inflation.

Introduction

However carefully a practice age-sex register is maintained it cannot exactly represent the population at risk because a proportion of the population is always moving. From a study of incorrectly registered patients we have tried to understand the way population movement produces incorrect registration. The importance of this is that to discover incorrectly registered patients directly is so laborious that it is rarely attempted, even when such figures are crucial to establish a correct population denominator.

In a stable practice the time interval caused by delay in registering with a doctor, and the resulting underregistration, would be expected to be counterbalanced by the same delay after moving away before registering with another doctor that causes some overregistration. Nearly all age-sex registers, however, have more overregistration than underregistration, and, consequently, list inflation. This is not surprising as patients' names are rapidly added to the register when they present their cards to a practice,[1] whereas when they move away and present their cards to another doctor their names have to be processed by a lengthy administrative machinery (fig 1).

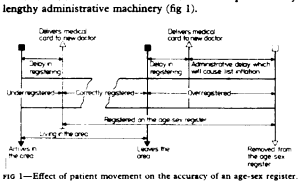

FIG 1—Effect of patient movement on the accuracy of an age-sex register.

We test here the following hypotheses:

(*a*) The underregistration rate is a consequence of the registration rate and the time patients take to present themselves to the practice.

(*b*) Overregistration is the outcome of the removal process, so that patients who are overregistered will be similar in structure to those removed. In a stable practice the structure of patients removed will be sufficiently similar from year to year to use the previous year's removals for comparison. At any one time these will be the most up to date figures available to a practice.

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Method

A single electoral district was studied in April 1980 as part of a study on consultation rates in Milton Keynes.[4] The age-sex register was in day to day use and was regularly updated and checked. Overregistered patients were identified by finding patients in the register who were no longer living in the area, and underregistered patients were people living in the area who were not registered with a local doctor. The identification process included a household study, a computer check with the electoral register, and information from the housing office, doctors, and receptionists.

Little is known about underregistered patients except their address, which limits their comparison with new registrations. The time taken for patients to register was measured by asking 670 consecutive new patients their date of moving to the practice area. As much is known about overregistered patients as other patients, and they and patients removed during 1979 were tabulated according to basic demographic data.

Finally, there was an opportunity to study the registration characteristics over several years of a small local boarding school, which had moved to the practice area (though outside the electoral district under study) at the same time as the computer register had been started. Every boy was registered on the day of his arrival and the number of boys at the school each term was known.

Results

At the time of the study 646 of the 7774 patients on the register in the electoral district were found to be living outside the practice area (overregistered); 240 people were found to be living in the town but not registered with a local doctor. As 8·3% of the town were registered with other local practices, the practice was considered to be at risk to care for 221 of them (underregistered).

Registration and underregistration—Of the 670 consecutive patients registering with the practice who were asked how long they had been in the area, 70·4% had moved to their new home less than two months before, and within a year of arriving 94·9% were on the register. Only two had been in the area for more than three years. Analysis showed that on average a patient would be in the area for three months before registering with a local doctor. This delay in registration was shown to account for all the underregistration found. A quarter (three months) of the new registrations during 1980 in each of the four areas in the district were found to be very similar to the number of underregistered patients found (table I).

Removal and overregistration—The numbers removed during 1979 was 669, and, although a different group from those overregistered, they were very similar in age, sex, type of housing, social class, and doctor with whom registered. Table II shows the number of patients in each age group for those overregistered and removed the year before. Also shown is an exception: there was a relative absence of children under 5 among the overregistered population.

The similarity in structure just described was absent when the patients were grouped according to duration of registration. Figure 2 shows the proportion of the remaining registered population that were overregistered or had been removed in each of five duration of registration groups. An unexpected pattern emerged, which is shown in fig 2. Patients are most likely to move again during the first six years after registration. As the years go on the remaining population is progressively less likely to move again. If overregistration was caused simply by delay in removal of former patients' names the pattern of overregistration would be expected to follow removals, but a few months later, reflecting the administrative delay. If this was true, and

TABLE I—*Underregistration caused by delay in registration in the four areas*

	Area				Total No
	1	2	3	4	
No of patients who registered in 1980	166	337	92	344	939
No that would be underregistered if patients registered three months after arriving in the area	42	84	23	86	235
No of patients found not registered	36	72	26	87	221
(As percentage of population):	2·77	5·35	2·34	2·17	2·84

TABLE II—*Number of patients in each age group over-registered at the time of the study and removed during the year before the study*

Age group (years)	Population registered (June 1980)	Overregistered (April 1980)	Removed 1979
0–4	711	12	62
5–9	766	55	70
10–19	1147	86	80
20–29	1280	155	171
30–39	1503	163	150
40–49	730	53	42
50–59	551	43	27
60–69	485	23	20
70–79	385	30	34
Over 80	191	24	29
Total No	7774	646	669

TABLE III—*Overregistration rate and removals a year in a boys school with 60 places*

Year	No overregistered	No removed
1971	0	0
1972	19	0
1973	37	15
1974	42	**36**
1975	51	38
1976	54	22
1977	59	35
1978	62	28
1979	57	39
1980	56	33

the administrative delay was six months, an expected overregistration rate may be calculated (fig 2). In fact, the proportion overregistered was different in two respects: firstly, after the first year there was an increasing lag in the build up of overregistered patients so that eventually the peak of overregistration was four years behind the peak of removals, a time lag far greater than any routine administrative delay. Secondly, the proportion overregistered failed to follow the fall shown by the removal rate, and remained much higher than expected. After 11 years a stable state was reached with the proportion of the remaining population overregistered about twice that of the proportion removed.

The more detailed figures available from the small boarding school made it possible to look at the same point over a period of years. During the second and third years after the school opened most of the boys who had left the school remained on the register as over-registered patients (table III). Later it is apparent that there was a consistently smaller number of boys removed than had left the year before. The result was a steady increase in the number of over-registered for six years after the school opened, after which time a stable state was reached. The school population was replaced every two years and this rapid and total turnover was associated, after six years, with an overregistration rate of about 100%.

Discussion

Even registers with a reliable updating procedure will have inaccuracies reflecting the methods used in making the changes as well as receiving outdated and incomplete, if not incorrect, information. Our findings are consistent with the hypothesis that underregistration is simply the result of the delay in registration.

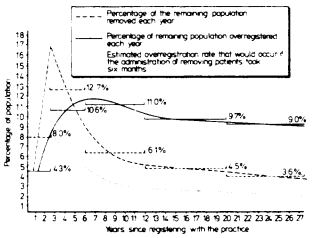

FIG 2—Percentage of the remaining population removed and overregistered each year after initially registering with the practice.

The similarity of the structure of patients overregistered and removed indicates that overregistration is the outcome of the removal process. The implication of our findings is that removed patients, in a stable practice, are sufficiently constant in population terms to describe prospectively the overregistered patients for the purposes of a population denominator.

The size of the overregistered population reflects the overall removal time. Our findings that the overregistered figure was the same as the annual removal rate indicated that the average removal time is about one year. This suggests an administrative delay of about nine months, which must be at least twice as long as the routine administrative delay. The reason for this anomaly was shown by the accumulation of patients overregistered when separated according to duration of registration, and confirmed by the figures from the small boarding school. The evidence therefore suggests that at least half the time estimated as being due to administrative delay was accounted for by the occasional name, perhaps 1 in 10, being missed or mismatched during removal and such names accumulating as overregistered patients until eventually discovered in the register. The relatively few patients aged under 5 who were overregistered supports this theory, as insufficient numbers would have time to leave and the occasional one be missed before they were aged over 5, which is the same story as the first duration of registration group.

The variations and complexity of the removal process have been highlighted by Fraser.[3] Hannay and Maddox noted the similarity in age between those overregistered and those on the move, and also cited instances of patients who had remained overregistered for 20 to 60 years on a register they studied.[4] We seldom knew when patients we found to be overregistered had left the practice. Figures are likely to vary among practices. For instance, Fraser's figures indicate that changing doctors was quicker in every respect in his area than in ours. Then the high overregistration rate found by Morell *et al*[5] might have been the result of high turnover. They also estimated an underregistration rate to equal the half yearly removal rate, which could be true in an area where patients may come and go without ever registering with a doctor.

Overregistration, and consequently list inflation, can be reduced to those inevitable from patient delays and behaviour if computerised family practitioner committee registers were linked with the practice. But if the population denominator only of the practice is needed our figures indicate that a fairly accurate correction could be made if two items of information were available: firstly, the number and description of patients removed each year, and, secondly, the administrative removal delay—that is, the date each removal registered with another doctor or left for other reasons. This date has always been known

to the family practitioner committee and attention is paid to it since the pay of a doctor may be deducted retrospectively from that date.[6] If this date can be passed on to the practice, and every time a patient's name was removed from the register, including those discovered in the practice, this date was noted, then it would be possible to calculate an estimated proportion of the previous year's removals that would be represented on the register as overregistered patients.

With computerisation it is possible to unify practice and family practitioner committee registers, but so long as they remain separate there will continue to be considerable contamination of practice registers with overregistered patients. If a practice register is computerised it would not be difficult to build into the software a system to correct any population figures for estimated overregistration.

This study was supported by the Milton Keynes Development Corporation. The work of tracing patients was done by Mrs Joan Judd. We are especially indebted to the late Mr R Burch of the Bucks Family Practitioners Committee for his advice, to Mrs E Bodill for secretarial help, to the receptionists of the Stony Stratford Health Centre for scrutiny of the lists, and to the doctors of the Stony Stratford, Wolverton, and Stantonbury Health Centres for help and cooperation.

References

1 Goodman M. Using the age-sex register. *J R Coll Gen Pract* 1975;**25**: 379–82.
2 Cobb JS, Miles DPB, Limentani AE. Do patients who move to a new town consult their doctor more often? *Br Med J* 1983;**287**:1411–3.
3 Fraser RC. Patient movements and the accuracy of the age-sex register. *J R Coll Gen Pract* 1982;**32**:615–22.
4 Hannay DR, Maddox EG. Missing patients on a health centre file. *Community Health* 1977;**8**:210–6.
5 Morrell DC, Gage HG, Robinson NA. Patterns of demand in general practice. *J R Coll Gen Pract* 1970;**19** 331–42.
6 Department of Health and Social Security. *Statement of fees and allowances payable to general medical practitioners in England and Wales*. January 1982. (SFA 79 71.3.)

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Overlapping General Practice

Samaritans: amateur lifesavers

Early this year a distraught woman poured out a long and complicated life story to a Samaritan in the Horsham centre. In our shabby sitting room, a cup of tea in her shaking hands, she explained that years ago she had been an alcoholic, at her lowest ebb, sleeping rough during "binges," and involved in minor prostitution. Now, cured of her drinking, comfortably married, but victim of occasional depressions, her doctor had been prescribing Valium for her. Concerned that she may become dependent on the drug, she planned to reduce the amounts prescribed, and our caller's fear was that her craving for alcohol to augment the diminishing supplies of Valium would become irresistible and that she would begin to drink again. Asked whether her doctor was aware of her fears, she replied that she was a gentle, kind, and sympathetic woman, far too nice to hear her sordid tale.

We Samaritans have built up a composite picture of the stereotype general practitioner from descriptions given to us by our callers. Whether man or woman, the general practitioner is invariably tall, well dressed, seated on a leather chair behind a large desk, and protected by a formidable receptionist. The general practitioner is "judged" according to our caller's reaction to him, so that a quality found to be an asset by one caller will often be deemed a disadvantage by another. Hence the general practitioner's highly professional approach and air of competence bring confidence to one patient, but feelings of his own inadequacy to another patient. The general practitioner's patience and gentleness may be exactly the key to the trust of some patients but will increase the embarrassment and reticence of patients who, like our caller, have a sordid tale to tell. When his patient is tongue tied and puzzled the stereotype general practitioner's cultured accent and wide vocabulary help only to widen the gulf between them.

Samaritan volunteers are, in contrast, supremely ordinary people, working in an entirely non-professional capacity, but with the benefit of vast collective experience and extensive individual preparation and training. Our only aim is to befriend and support the suicidal or despairing people who contact us. Different people react in different ways: a problem that has one person reaching blindly for the sleeping pills will be dealt with calmly by another. The reasons our callers give for contacting the Samaritans are many and varied—from the 9 year old who had lost his mother's change on the way back from the shops and was too scared to go home, to the drunk driver whose family died in the crash he caused and who wanted to die himself.

No rustle of paper

The unshockable and non-judgmental attitude that Samaritans maintain towards callers effectively widens the scope of the work we are able to do. Problems considered "unspeakable" by many other agencies and individuals are dealt with daily by Samaritans all over Britain. Confessions of infidelity, glue sniffing, and incest are heard without prejudice. Transvestites and transsexuals call us simply to talk. Runaway adolescents use us as a temporary bolt hole. General practitioners, social workers, Department of Health staff, and many others have a *duty* to ask questions, check facts, and fill in forms. Samaritans do not. Many of our callers undoubtedly feel far less inhibited when the officious rustle of paper is silenced, so that a Samaritan can often build up a more complete picture of the caller's entire problem, and also of the caller's ability—or lack of it—to help himself, than other more constrained agencies can. Once an atmosphere of sympathy and trust has been built up we are more likely to be able to guide our callers to the specialist help they need.

Helping our callers to seek necessary medical advice is therefore a regular part of Samaritan befriending. Working as non-professionals, and limited only by Samaritan principles, we can be guided by advice from the general practitioner concerned, so that encouraging our caller to visit the surgery and explain the *whole* problem is often only the beginning of a long partnership between doctor and Samaritan.

In line with national Samaritan policy, as part of our absolute respect for the confidentiality (and, if they wish, anonymity) of our callers, we will never contact a doctor without the prior consent of his patient. For many years, however, general practitioners have referred their patients to the Samaritans, leaving the onus on the patient to make contact, and now it is possible for the general practitioner to ask the Samaritans to contact a consenting patient to offer support. Well trained Samaritan volunteers can do this with the necessary perception, delicacy, and tact, so that help is accepted at least as often as it is refused.

Samaritans deal in emotions, some of which may have enormous bearing on a person's physical problems, but for which there are no medical remedies. Where contact is made between Samaritan and general practitioner any exchange of information on their caller-patient which takes place must be in the best interest of all three parties. The general practitioner is able to use the Samaritans as unpaid help. Samaritans are able to reduce the burden on the doctor of chronic cases—from hypochondria to terminal cancer—by being available 24 hours a day, seven days a week simply to listen to and support the patient—and thus the doctor—for however long we are needed. We can be of practical help in some small way, by encouraging our caller to keep surgery appointments, and continue with the treatment as prescribed, and by visiting him in hospital if necessary, but more importantly, we can help to ease his *mind* while his *body* is being treated.

Contact between Samaritans and general practitioners is carefully monitored for maximum effect. Only senior Samaritans are permitted to contact general practitioners, or, in fact, any other professional adviser. Even so, on occasions manipulative callers have "used" Samaritans in an attempt to discomfort their doctor: "I want *you* to call him and tell him just how bad I feel." In most cases the ensuing discussion may be of great help to both general practitioner and Samaritan in planning the continuing treatment or the befriending of their patient-caller. More awkward problems may arise, however. One occurred when a caller told us that she wanted to find another general practitioner because the one she had been seeing was an old family friend with whom she found intimate detail impossible to discuss. We supported her, but offered no suggestion whatsoever as to her choice, and were appalled later when the new general practitioner our caller chose was angrily accused of "using the Samaritans to tout for trade" by the old family friend after our caller had tried to explain her reasons for the switch. Samaritans and doctors need to be well aware of the possible difficulties of three way communication.

Often Samaritan and doctor meet at a time when their caller-patient has actually made a suicide attempt and when forward planning is essential to prevent another such attempt. The incidence of suicide and parasuicide, particularly among young people, is on the increase, highlighting a problem where liaison between Samaritan and general practitioner may be most effective. All too often lack of communication between himself and the adult world is what drives the adolescent to attempt suicide. As an organisation Samaritans Incorporated are trying hard to encourage young people in trouble to telephone for help. Horsham and Crawley Samaritans visit schools and colleges in the area talking to and with pupils and staff in an attempt to make the name and aims of the Samaritans familiar to each and every person before he or she leaves full time education. Our speakers also visit hospital casualty departments and local neighbourhood health centres so that their staff are well informed as to the range of the work of the Samaritans. Use of the Samaritans by the medical profession is increasing steadily.

One new contact we have made this year is the general practitioner mentioned earlier: the gentle, kind, and sympathetic woman our caller could not bear to tell her sordid story to. After talking her fears through with her for hours on end over a period of weeks, our caller finally gave permission for her Samaritan befriender to go with her to see the doctor. The Samaritan, sitting beside our caller in the surgery, gently helped her to explain the reasons behind her unwillingness to cooperate in reducing her Valium intake. "My God," said the doctor, "This puts a new light on the whole thing. Why on earth didn't you tell me before?"

Written by one of 115 volunteers of the Horsham and Crawley Samaritans, 21 Denne Road, Horsham, West Sussex; tel Horsham 56111 or Crawley 34549 day or night.

Papers That Have Changed My Practice

More than one source of enlightenment

PATRIA ASHER

The communication that has had the most effect on my day to day practice was a chance remark of Professor J M Malins in the diabetic clinic at the General Hospital, Birmingham. He suggested that *weighing the patient* was possibly the most useful investigation they carried out. Since then I have assiduously weighed patients new and old, and have discovered how often the patient's weight is the best measure of his progress, while a sudden unexpected loss of weight may be the first sign of serious disease.

The printed word, in fact, is not our only source of enlightenment. New ideas percolate by a kind of osmotic process. Twenty years ago many hypertensive patients were treated with reserpine; then it was methyldopa, and then came the great age of the beta-blockers, with vasodilators or, more recently, calcium antagonists added in difficult cases. I must have read articles advocating these changes in preferred treatment, but none stays in the memory. Hospital letters and clinical meetings contribute as much or more to the dissemination of new ideas. If most of my hypertensive patients on discharge from hospital seem to be taking beta-blockers these drugs are likely to become the treatment of choice in my practice; and I first heard of the adverse reactions to practolol at a clinical meeting, just before the spate of papers in the journals on the subject.

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Macrocytosis in alcoholics

To stay in the mind, as well as to influence the practice, an original article must be truly original and must deal with common clinical problems. "Macrocytosis of chronic alcoholism" by Wu, Chanarin, and Levi[1] fulfils both criteria. The authors were the first to report macrocytosis in the blood of alcoholics who were neither anaemic, folate deficient, or suffering from liver disease. Even if the serum folate was reduced, treatment with folic acid did not correct the macrocytosis, whereas red cell size returned to normal if the subjects stopped drinking. The 63 patients they studied were well nourished and generally in normal employment. They all drank at least 80 g ethanol a day—the equivalent of four pints of light ale—a small intake by the standards of many of my patients.

The authors suggested that macrocytosis, especially in the absence of anaemia, could be "a useful indicator in identifying a problem that is often concealed from the physician." I have confirmed this again and again. Formerly I had relied on liver function tests in cases of suspected alcoholism, but these are often normal until a much later stage. Now I take blood for full blood count in any case of admitted or suspected alcohol abuse. If the mean cell volume is above 90 fl in an otherwise normal blood count I suspect alcohol abuse; if above 100 fl I am pretty sure of it. Sometimes macrocytosis is a surprise finding in a routine blood count. The patient is then asked about his or her alcohol intake at the next consultation. More often the drink question has been raised already and the patient has admitted what he considers the modest intake of four or five pints a day. The result of the blood test gives the opportunity for a little gentle arm twisting: "The test shows that the alcohol has already affected your blood," I say in serious tones, and we go on to discuss the relative merits of abstinence and cutting down. At least it's a start; though it's a long, long way from the diagnosis of alcoholism to its successful treatment.

Stage fright

My second example of a truly memorable and original article is "Effect of oxprenolol on stage fright in musicians" by James, Griffith, Pearson, and Newbury.[2] This most readable article is imaginative in design and impressive in results. The 24 subjects—all aspiring professional string players—were not simply asked if oxprenolol made them less nervous (this had already been done).[3] Their performances were assessed in a double blind trial by two professional musicians under conditions as nearly as possible those of a public recital before an invited audience at the Wigmore Hall, with plenty of anxiety producing recording equipment and representatives of press and broadcasting. Each subject played two set pieces on two consecutive days, having taken 40 mg of oxprenolol on one day and placebo on the other. The players' feelings of nervousness were graded from "nonchalant" to "panicky" and their assessment of their own performances graded from "very good" to "terrible." The judges marked their performances for musicianship, vibrato, intonation, etc, and for degree of tremor. Oxprenolol produced a great improvement in self assessments and still more in the assessors' scores. The most striking improvement was in the lessening of tremor—that terrifying disorder (known to professional musicians as The Fearies) when the bowing arm seems to have a life of its own, its shaking quite out of the control of the player's conscious mind.

I seldom have to treat professional musicians for stage fright; the paper was unforgettable as I am a nervous string player myself and have personally confirmed the beneficial effects of beta-blockers in preventing The Fearies. There are, however, many other occasions when acute anxiety produces physical symptoms such as palpitation, dry mouth, clammy palms, and tremor. I have prescribed beta-blockers to patients before alarming events, such as driving tests or flying for the first time. I explain the way the drug acts and give a test dose to make sure there are no undesirable effects. I also prescribe beta-blockers in cases of anxiety with pronounced physical symptoms. Though I can quote no figures, my impression is that the treatment is helpful but less strikingly so in generalised anxiety than in the occasional frightening ordeal.

Sore bottoms

Many original papers are so erudite that they are incomprehensible to the average practitioner; the *BMJ* recognises this by setting them in miniprint in the Practice Observed edition. On the whole I learn more from review articles, and my third example of an influential paper is a signed leader in the *BMJ* on "Pruritus ani" by J Alexander-Williams.[4] This was published so recently (16 July 1983) that I can hardly claim that it has changed my practice—rather that I hope and believe it will. Pruritus ani, often thought of as so intractable, is described as "a cross between nappy rash, athlete's foot, and a self inflicted injury." A baby's bottom becomes sore and excoriated if left in contact with faeces; minute fragments of faecal material lodged in folds of adult perianal skin cause "adult nappy rash." Skin irregularities, caused by piles, imperfectly sutured episiotomies, for example, make it harder to clean the perineum. Moist conditions make matters worse: excessive sweating (tight jeans, nylon underwear), vaginal discharge, leaking urine, and local sepsis. Scratching damages the skin further and makes invasion by saprophytic fungi and bacteria more likely; skin sensitivity reactions to these saprophytes "may twist the vicious circle into a vicious spiral."

At this stage the sufferer "becomes subject to an even greater hazard—perianal polypharmacy." Typical local preparations contain "steroids, local anaesthetics, and antibiotics . . . it would be difficult to design any combination of drugs more likely to produce skin sensitivity." The first line of treatment is to stop all medication. After that "the essentials of treatment are to keep the perianal scrupulously clean and to protect it from physical trauma." Cleanliness with the minimum of trauma may be achieved by wet rather than dry wiping and the author recommends moist tissues such as Baby Wipes. "Probably the single most effective measure in the control of pruritus ani is the education of the patient in the nature of the condition and the rationale of its control" the author concludes.

The eye seizes on and the memory retains whatever confirms one's deep rooted prejudices. I am basically a non-treater, and when possible—that is, when I am feeling strong enough to battle against the public's demands for medication—I like a consultation to end without an FP10 changing hands. Hence my joy at the thought of a consultant surgeon prescribing Baby Wipes and suitable clothing rather than drugs or surgery. I have just seen a case of pruritus ani where I would certainly have treated the reddened perianal skin with ung hydrocortisone had I not read Mr Alexander-Williams's leader. Instead the poor man found himself discussing types of toilet paper (he'd always used the hard sort) and went off promising to use soft tissues followed by Baby Wipes in future. Sometimes, just sometimes, you *can* win!

References

1 Wu A, Chanarin I, Levi AJ. Macrocytosis of chronic alcoholism. *Lancet* 1974;i:829–30.
2 James IM, Griffith DNW, Pearson RM, Newbury P. Effect of oxprenolol on stage-fright in musicians. *Lancet* 1977;ii:952–4.
3 Liden S, Gottfries CG. Beta-blocking agents in the treatment of catecholamine-induced symptoms in musicians. *Lancet* 1974;ii: 529.
4 Alexander-Williams J. Pruritus ani. *Br Med J* 1983;**287**:159–60.