PRACTICE OBSERVED

Practice Research

Does home monitoring of blood glucose work in general practice?

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Home monitoring of blood glucose concentrations has been associated with improved control in patients with insulin dependent diabetes.¹⁻⁴ Many such patients do not attend hospital clinics at all or do not attend often enough to benefit from the technique. This is especially so in rural areas, where general practitioners are inevitably more concerned in the management of diabetes than elsewhere. We undertook this study to examine the feasibility and efficacy of home blood glucose monitoring in general practice in cooperation with the district general hospital.

Method

The practice is rural and serves 13 500 patients over an area of 250 square miles. It is 20 miles by road to the district general hospital. None of the eight partners has a special interest or experience in diabetes. All patients with insulin dependent diabetes aged over 16 were identified from the practice diabetes register and invited to join the study. Twenty six out of 52 responded; two were excluded on grounds of age (over 70 years), two because they were already self monitoring, and two more withdrew after further explanation, so that in all 20 patients were studied.

The practice nurse spent an hour with the consultant physician at the district general hospital for instruction in self

monitoring technique. The consultant also drew up simple guidelines on self monitoring technique and on adjustment of the insulin dose for distribution to the partners in the practice and their patients. No direct contact between the consultant and patient was planned at the outset, although advice from and referral to the consultant was available in the usual way (though not in fact used). Patients were then seen for a one hour introductory session with the practice nurse (JH-D) and a doctor (RG). After completing a questionnaire patients were examined with special attention to possible diabetic complications, including funduscopy with mydriasis and visual acuity. Venous blood samples were taken to measure full blood count and urea, electrolyte, total glycosylated haemoglobin (HbA_{1c}), and blood glucose concentrations, the last by both laboratory methods and reflectance meter. Coefficient of variation of the glycosylated haemoglobin assay was 2.2%.

Each patient was then shown how to measure blood glucose using Dextrostix and a reflectance meter (Glucometer, Ames), and had to demonstrate the technique satisfactorily before leaving with a Glucometer, instruction leaflet, Autotest, Mondel lancets, Dextrostix, and a record diary. Patients were requested to do the measurements before meals and before bed on five of the next seven days and around 3.00 am on two days. They were advised not to alter management in the first week but to see their own general practitioner with the completed diary at the end of the week. Written guidelines on adjustment of insulin dose were given to each patient. A "diabetic card" with data from the initial assessment, modelled on the antenatal cooperation card, was inserted into each patient's notes in the surgery.

Subsequent visits and the frequency of monitoring and giving advice were at the discretion of each general practitioner and patient, though it was suggested that monitoring should continue on at least two days a week with a visit to the general practitioner at least every three weeks. The diabetic card was used to record progress. After 12 weeks patients were contacted by letter and asked to complete a final week of intensive monitoring identical with the initial week. All were then seen by R.G. for the biochemical assessment repeated, and a final questionnaire completed. Patients were then asked whether they wished to keep their meters, and if so were offered them at a reduced price.

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SUBJECTIVE

The initial questionnaire showed that 13 out of 20 patients thought that their diabetes was adequately controlled and 15 were not worried about their diabetes. Eleven were unhappy with urine testing as an index of control, 15 expected to prefer blood testing, and 14 had heard about home monitoring before the study, mostly through the district general hospital and the British Diabetic Association. The final questionnaire showed a self estimate of improved understanding of

FIG 1—Glycosylated haemoglobin (HbA_{1c}) before and after three months of home blood glucose monitoring.

diabetes in 16; 19 preferred blood to urine testing and the reasons given were, in ranking order, accuracy, ease of technique, convenience, and speed; 14 thought that their diabetes was better controlled, though mild hypoglycaemic episodes occurred more often in five; 13 had sore fingers, though none bad enough to stop using the technique; 14 said that they would buy a meter at cost price (then approximately £200). All but one thought that general practitioners should be able to prescribe Dextrostix. The general level of awareness about diabetes and its complications improved among doctors, nurses, receptionists, and patients.

Discussion

Improved control in a group of patients with insulin dependent diabetes was achieved in association with home monitoring. This has been shown in several studies in hospital.¹⁻⁴ Some workers have questioned whether the improvement is due to home monitoring or to the greater contact between doctor and patient,⁵ and further surveillance of these patients should be able to test the hypothesis. The general level of awareness about diabetes and its complications improved among doctors, nurses, receptionists, and patients.

might also have been responsible for the improved control observed in our study, but the results show an appreciable improvement in control even when patients in whom this occurred are excluded. Patient selection in this study was based on willingness to participate—no participation was offered to all patients with insulin dependent diabetes in the practice—not on the desirability and practicability of improving control. It is therefore hardly surprising that not all patients improved. Overall diabetic control in the group was similar to that in a random group of 16 patients in the practice who had been studied earlier (unpublished data), as judged by a mean HbA_{1c} of 11.5%. Previous studies, however, have selected patients on the basis of demonstrated need for improving control, making successful outcome more likely.¹⁻⁴

This study is the first in which the effectiveness of blood glucose monitoring has been assessed in general practice. No attempt was made to compare the different systems available; the wealth of published evidence¹⁻⁴ suggests that all are comparable and all have advantages and disadvantages. Much of the previous work on diabetes in general practice has been carried out by general practitioners with a special interest in, or experience of, the disease. This was not so in our study, which makes the improved control achieved particularly gratifying, since 16 out of the 20 patients were already attending consultant clinics for their diabetes, 13 of them diabetic clinics.

Many hospital diabetic clinics have drawbacks, such as long waiting times, lack of continuity of care, and short consultation times, which greatly reduce their effectiveness. Several ways of tackling these problems have been suggested.¹⁰⁻¹⁴ We are not suggesting that patients with insulin dependent diabetes are best looked after exclusively in general practice: the number of patients that we studied was small, and over the short duration of a special study interest is likely to be great. Secondly, an improvement from "poor" to "moderate" control as seen in our patients still leaves much to be desired, but it shows nevertheless that blood glucose monitoring at home is feasible in general practice. We think that it is unreasonable that blood glucose testing strips are available only from hospital clinics. In rural areas, in particular, patients are often reluctant or unable to make frequent visits to hospital clinics so that the inability of the general practitioner to prescribe blood glucose testing strips deprives such patients of the benefits of this technique.

If blood glucose monitoring is to be offered in general practice two essential ingredients are a well motivated practice nurse and an efficient registration and recall system for diabetic patients. An unforeseen bonus in our study was the increased awareness of diabetes and its problems among staff and patients, and discussion continues on ways to improve diabetic care. This will include follow up studies of this group of patients to discover whether the improvement achieved is maintained with less intensive supervision.

Conclusions

The feasibility and effectiveness of home monitoring of blood glucose concentrations in rural general practice were assessed over three months with a group of 20 patients with insulin dependent diabetes. Mean (SEM) glycosylated haemoglobin improved from 11.6 (0.4)% to 10.7 (0.3)%. Mean (SEM) blood glucose concentrations over initial and final weeks of intensive monitoring improved from 10.3 (1.0) mmol/l (186 (18) mg/100 ml) to 8.4 (0.7) mmol/l (151 (12.6) mg/100 ml). Patients generally preferred blood to urine testing, and most chose to keep their monitoring equipment. With appropriate organisation, most group practices should be able to offer this service. General practitioners should be able to prescribe strips to test blood glucose concentrations.

We are grateful to all partners and staff in the Brecon group practice for their cooperation and to Ames Ltd for equipment and record cards. RLG receives financial assistance from the Nevill Hall Thrombosis and General Research Fund and the Claire Wand fund.

Twelve men and eight women participated, aged 16 to 68 years (mean 44 years). Thirteen attended hospital diabetic clinics, while four were not under consultant supervision. Thirteen were receiving twice daily short and intermediate acting insulins and the remaining seven received various regimens. Mean duration of diabetes was 18 years, range 2-38. Student's *t* test was used in statistical analysis.

Results

CLINICAL

No abnormalities were found on general examination or routine screening tests except for one raised blood urea concentration, for which consultant advice was sought, and one urinary tract infection, which was successfully treated. Evidence of previously undiagnosed diabetic retinopathy was found in two patients, both with background changes. Three patients had mild neuropathic changes and five had evidence of vascular disease, but without trophic changes. Mean (SEM) body weight was 73.8 (2.6) kg (range 52-91 kg) and was unchanged at the end of the study at 73.9 (2.5) kg (range 51-92 kg). By the end of the study three additional patients were receiving twice daily short and intermediate insulins, and there was a change in total daily insulin dosage of more than 10 units in a further four patients.

BIOCHEMICAL

The relation between random venous blood glucose concentrations estimated by glucometer and in the laboratory is shown in fig 1 ($r=0.98$, $p<0.001$). Mean (SEM) random blood glucose concentrations fell from 9.2 (1.1) mmol/l (165 (20) mg/100 ml) at the start to

8.1 (0.6) mmol/l (146 (11) mg/100 ml) (0.02 $p<0.001$) respectively and the mean (SEM) HbA_{1c} 11.6 (0.5)% and 10.8 (0.4)% (0.02 $p<0.01$) respectively. Four patients showed a fall in HbA_{1c} greater than 2%.

FIG 2—Mean home blood glucose concentrations during first and final weeks of study. Conversion: 5.17 mmol/l = 100 mg/100 ml.

Table 1 shows that improvement was largely from "poor" control (HbA_{1c} >12%) to "moderate" control (HbA_{1c} 10-11.9%). In two patients pronounced discrepancies between mean blood glucose results and HbA_{1c}, together with individual knowledge, suggested changes on the diary record. Table 11 shows that age did not reflect the ability to benefit from home monitoring, the same improvement being seen in the groups under and over 40 years of age. A weak correlation was seen between random blood glucose concentrations and HbA_{1c} ($r=0.45$, $p<0.05$).

TABLE 1—Change in HbA_{1c} in 19 patients

HbA _{1c} (%)	Initially	Finally
>12 (poor)	4	1
10-11.9 (moderate)	4	10
<10 (good)	1	8

TABLE 11—Response of different age groups

	<40	40-60	>60
No. of patients	11	6	3
Initial mean (SEM) HbA _{1c} (%)	11.7 (0.6)	11.6 (0.6)	11.0 (0.4)
Final mean (SEM) HbA _{1c} (%)	10.4 (0.6)	10.8 (0.4)	10.8 (0.4)
Improvement (%)	0.9	0.8	0.8

8.5 (1.3) mmol/l (153 (23) mg/100 ml) at the end of the study. This was not a significant difference. Sixteen patients had satisfactory diary records for analysis. Mean blood glucose concentrations for the initial and final weeks were calculated for each patient. The mean (SEM) of these means improved from 10.3 (1.0) mmol/l (186 (18) mg/100 ml) to 8.4 (0.7) mmol/l (151 (13) mg/100 ml) ($p<0.001$) (fig 2). HbA_{1c} before and after monitoring was obtained in 19 patients; one sample went astray in the laboratory. Initial mean (SEM) HbA_{1c} was 11.6 (0.4)%, falling to 10.7 (0.3)% ($p<0.001$) (fig 3). If the three patients whose regimens were changed to twice daily short and medium acting insulins are excluded the mean (SEM) initial and final week's blood glucose concentrations are 9.9 (1.0) mmol/l (178 (18) mg/100 ml)

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Image of General Practice

Me and the general practitioners

NICK ROSS

I suffer from an allergy, and always have, to queuing. But you need patience to be a patient.

Overcoming the laws

There's the Receptionists' Law to overcome to start with. According to this canon, when you telephone for an appointment you have to wait while the receptionist copes with someone queuing before her at the surgery, and when you queue before her at the surgery you have to wait while she copes with someone on the phone.

So you queue to book, and on arrival you queue to prove your presence before you queue to see the doctor. This all assumes that the general practitioner's time is more precious than my own, and I suppose to him (or her) it is. But not to me. This brings us to the second law, the Law of Physics, which is ingenious. According to this: waiting for the doctor cuts down waiting for the doctor. For queuing deters the likes of me from seeking medical advice, and by cutting down the numbers seeking medical attention it reduces waiting times.

Then there's the Law of Medical Confidentiality. As the queue breathes down your neck the receptionist wants to know the reason for your visit: "I've come about my genitalia."

"What's that? Can you speak up?"

If, though, you are determined then after five or 10 minutes on the telephone, after travelling, waiting five minutes to see the

receptionist and what seems like an hour of embarrassment while she takes notes—sometimes she doesn't bother taking notes, she was simply curious it seems—and then 20 minutes reading out of date women's magazines you are admitted to the inner sanctum. Here you encounter the fourth and fifth laws, those respectively of Tests and Specialists. These take account of the fact that since over the counter remedies can now resolve most simple ailments, you only queue to see the doctor over complex ones. And complex ones need tests to find out what they are, and specialists to overcome them. More queuing.

Don't get me wrong. I don't at all wish to blame the medical profession for all this waste of time. Some of my best relatives are doctors, and I'm well aware of the Patients' Law as well. According to this, if you can get treatment conveniently at any time you want then you don't bother to turn up at the time you say you will, which wastes the doctor's time.

Image not important

But set against the inconvenience of seeing a general practitioner, all other of my attitudes towards them pale into insignificance. For example, I really don't care how he or she is dressed, though I suspect if they wore white coats I'd naturally assume they were recently qualified and needed the status that white coats confer.

Sitting behind a desk is useful status too, of course. Now that the professions have taken over from the aristocracy desks seem to have replaced thrones, and they're certainly much more useful for storing pharmaceutical company giveaways. I suppose I might be curious about a general practitioner without a desk; where would he or she put the prescription pad?

As for the appearance of the consulting room, well again I'm not fussy. Cleared or cluttered, old or new, I don't care if I

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quite like books though. I'm a little wary of doctors (or anyone else for that matter) who look at you as though they know it all. I have much more confidence in those who look at you, or at least give the impression that they know it up when you're not watching.

In fact I'd quite like to see medical books in the waiting room. There's nothing like a little bit of knowledge to help you face a doctor. It's bad enough feeling ill without also feeling ignorant. I would like to read my notes too, I must say. Not long ago I queued to see my own general practitioner and sat tantalised by a file on his desk containing my life story. I could read upside down enough of the yellowed page to see that it was about my birth. Now as it happens I don't remember much about my

birth and dearly would have loved to read about it. But such things are secret and taboo (for otherwise my medical advisors would feel restrained in what they say about me in my notes). I didn't ask, but I'd have liked to feel I could have done and that he'd have indulged me. Nick Ross, this is your life.

I tried to read it up side down before my doctor sent me for a test. I never have found the forbearance to queue for the result; I still bear the ailment rather than bear the cross of queuing once again.

The ailment? Ah yes, doctor. I have this allergy to queuing.

Papers That Have Changed My Practice

Contributions to this series are welcome for consideration

Morbidity and prescribing

T A CARNEY

When I considered the factors that have influenced and changed my practice of medicine, scientific articles did not immediately spring to mind. I considered that audit groups, peer group review, discussions with partners, discussions with consultants, and even didactic lectures at postgraduate centres were of greater influence on my practice of medicine. But, having given the matter a little further thought, it soon became apparent that all of these very different methods of postgraduate medical education must have at their basis scientific work.

The audit group that influenced me most was the Ashington audit group described by Irvine.¹ The resources for that group, such as Julian Tudor Hart and John Fry, all depended on scientific work that they had published. While my care of hypertensive patients was strongly influenced by that group—and it seems that audit should take the credit for altering my behaviour—it should be apparent that audit has to be based on documented scientific evidence.

Similarly, both of the peer groups to which I belong have as part of their group work a journal club to discuss scientific papers and also one member of the group as a resource who reads the appropriate scientific papers on a topic. Therefore, while audit and peer groups will undoubtedly have a major influence on postgraduate education and therefore alter people's practice of medicine they can only do so by the continued publication of scientific data. Thus it is of paramount importance that scientific journals continue to publish properly evaluated scientific articles of relevance to general practice so that small group learning may be developed in all areas.

In writing this article I have limited myself to the scientific papers that I have read which have had a direct influence on my practice of medicine.

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Thirdly, the research paper of "Prescribing in general practice: pharmacological approach" by Brodie, Eccles, and Harrison² in the *BMJ* showed once more that audit through lunchtime seminars can actively alter doctors' prescribing habits. We have already sent for the pharmacopoeia that they advocate to form the basis of a pharmacopoeia for our practice.

Driven by these papers an enthusiastic trainee (training being a two way process), I have now started reading the Open University course on pharmacology.³ These four papers combined have threatened all my habits of audit and repeat prescribing. They will undoubtedly have a lasting effect on my prescribing habits for many years to come.

Scientific papers must be an active form of postgraduate education—they are necessary not only at an individual level as a teaching tool, but also at a group level so that audit means audit and not a comfortable discussion group. It is vitally important that the *BMJ*, the *Journal of the Royal College of General Practitioners*, and the *Lancet* continue to publish high quality scientific papers of relevance to general practice and that general practitioners provide high quality research papers for them to

publish, so that individuals, principals, trainers, and audit groups have the necessary resources from which to work.

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Diary of Urban Marks: 1880-1949

While at Yokohama I spent all the money I had as well as some I "subbed" off the skipper in buying presents for various people and also for myself, with an idea that some of the goods would come in useful when I had a house of my own. Shackleton was getting married on his return and bought many ornaments for the house. With him I made many shopping expeditions. I learnt how to buy in the East. Shackleton desired a pair of "kakemonos," which are small Japanese screens useful to hang on a wall. They are of various designs and finished off in lacquer. We went into a shop and selected a pair. The price asked was 25 yen—£2/10/0. Shackleton offered half that amount, and when the shopkeeper would not let it we went out of that shop into another, being watched by the proprietor of the first shop. There we selected the kakemonos again of the same design. Again half the price offered and refused. Again we walked out. Shackleton told me that it was only a matter of time and we would get them at the price offered as soon as it was known when the boat sailed. And so every day we went into the shops and did not buy anything until the day before sailing when, as Shackleton had said, the prices came down and we were able to buy at very reasonable prices. In the East they always ask double the price of the value of the goods, and this knowledge stood me in good stead when I was in Mesopotamia during the war. Among other things I bought was an eggshell china breakfast set of 64 pieces for 25; and an afternoon tea set of 15 pieces with the plates and saucers combined in each other, for 12/6. This had a bird design and two pieces of the set are still extant. I bought several puzzle sets and hand painted panels of silk. All these were enclosed with other things in a camphor chest which I brought at Shanghai.

While at Yokohama Clarke reported that the "old man" was not ill. I examined him against his bed and found that he had a large hole of the lungs. I ordered him to keep to bed but he stated that he was going ashore. We all knew that he had a fancy grish girl in Yokohama and I felt sorry for him. But I insisted that he should obey my orders

and threatened that if he did not I would wire home to headquarters. This brought him to heel, and he never went ashore on that voyage. We learned, however, that he sent one of the crew with a note to his lady love. The skipper was in bed when we sailed and Clarke of course took charge. The skipper and I were scarcely on speaking terms during the homeward run, but I did not lose weight on that account.

We arrived at Yokohama on a Thursday and on the following Sunday, Cable, the chief engineer, and myself went to Tokyo. This is 15 miles from Yokohama and there was a light rail road between the two towns. The country between was very pretty. Tokyo was a modern town with electric tramways and the emperor's palace abutted on the street. There were many fine shops, and we went in to admire the bronze work for which Tokyo is famous. The shopkeepers were most polite and spoke English well. They showed us everything but never pressed us to buy.

We spent the afternoon and most of the evening at the ishikawas. In Japan no prostitution was allowed in the streets. A compound is built outside the town and any working girl or I suppose any female can become a member and earn a little overtime. The compound was a mile square. There were entrances on each side. No richakas were allowed and everyone had to walk. There were many foreign sightseers, including Americans. Down the various streets we walked, either inspecting the women for hire in the flesh, behind a grid opening on to the street, or else inspecting photographs hanging outside the various better class houses. It really is a wonderful sight. We calculated that we had seen or inspected photos of 6000 women.

In the Yokohama "ishikawas" the house known as number 9 Yokohama was famous for the beauty of its girls, of whom there were 40. They were in the charge of an old harridan who spoke English well and one night several of our officers and myself went to this house to see the old lady produce the girls for our inspection. We drank lager beer with them and had some fun with their quaint ways and constant fan waving.

I had quite a good time in Japan and was sorry to leave the country.

and on the influence of the various diseases on the practice, the partnership, and primary care team. It influenced me greatly in three ways.

Firstly, it made me think that I could do a similar study and set me off on a path that was to lead to research of my own, not as a research worker but as a working general practitioner.

Secondly, and more profoundly, it made me look at the way that I dealt with consultations in my own practice and the time that I spent on the different diagnostic categories such as mental illness, acute respiratory illness, and cardiovascular disease. It made me look at the different disease groups as well as the sex and the age of the patients that I was seeing and how I managed these different groups and the use I made of my paramedical staff.

Thirdly, through discussions with my partners in which we used the scientific resource of this paper, we reorganised our surgeries to take place throughout the day and looked at how appointments were booked, and we reorganised them so that each partner was more accessible for acute consultations which took slightly longer than chronic consultations. We brought our district nursing sister into the surgery to cover all partners' daytime consultations so that more delegation could take place, and our health visitor, social worker liaison officer, and many others participated in regular meetings in the practice.

This paper therefore not only influenced my personal management of different diseases in the consultation in general practice but it influenced the total management of our practice and the use of our paramedical staff. Although the management of no specific disease seems to have been influenced, all of our patients benefited by the changes that were wrought by this paper.

Diagnosis

A specific disease that has been influenced by a paper, however, is acute superior mesenteric artery occlusion, described in 1979 by Fry.⁴ He showed that the common features were acute diarrhoea and vomiting in people over 70 years with abdominal pain, abdominal distension, and shock. All had a previous history of atrial fibrillation and cardiac failure.

Until I read this paper I had never made this diagnosis in general practice. Since 1979 I have made the diagnosis three times. Unfortunately, like Fry's experience, it has not influenced outcome and all three patients died. As Fry concludes, if we are to change the prognosis of this disease we in general practice must be aware of the syndrome in elderly patients with atrial fibrillation and cardiac failure, and early diagnosis and early laparotomy must be the goal. I hope that I and other general practitioners will make the diagnosis soon enough to allow embolotomy to be performed.

Clinical judgment and antibiotics

The third paper that influenced me was "Clinical judgment and antibiotic use in general practice" by J G R Howe.⁵ This paper influenced me firstly because I was one of the many general practitioners who took part in the study, and, secondly, because of the conclusions that the paper then came to.

It reported a study in which 1000 general practitioners were asked how they would prescribe in 16 cases in which they were shown a photograph of a sore throat and given a short social history. It conclusively showed that the factors that had influenced the doctors' antibiotic prescribing were social and psychological and not the clinical appearance of the sore throat. As Howe concluded his article: "The freedom to exercise independent clinical judgment is a jealously guarded right not only of general practice and general practitioners but in all spheres of medical practice. The right is misused if it is seen as an excuse for escaping from clinical or intellectual accountability. The right carries a responsibility to use judgment openly,

flexibly, and critically." I hope that since reading this article I think a little more carefully about my prescribing and the factors that influence it. I look at the clinical details of an illness as well as its social and psychological implications and then take all three into consideration. At the article says, real improvement in the quality of prescribing requires a knowledge of the thinking behind decisions to prescribe and this in turn requires a degree of dissection and quantification of the components of clinical judgment. This article made me think about my prescribing. I do not believe that it directly altered my antibiotic use for complaints of sore throat. Its implication was much wider. The pros that this article started, and which I think was so important, a change in my practice of medicine in general practice, has continued, and I will come back to it before the end of this article.

Behaviour of doctors

On a lighter note the paper by P S Byrne and C C Heath⁶ on non-verbal behaviour by general practitioners in consultations, showing that those doctors who moved more during the consultation had a better rapport with their patients, came as a great relief to me. For many years, under the influence of my former trainer Dr M McKendrick and the Northumbria vocational training organiser, Dr C Leon, I felt guilty about my inability to sit still during the consultation. I moved continuously in my chair, lent forward to my patients, often touched them, and used eye contact a great deal. For the first time this paper showed that by doing this perhaps my patients felt more at ease because of all the non-verbal communication linked with patient oriented verbal communication that it implied.

By video taping real consultations in general practice they had shown that movement of the body and eye contact were extremely important in effecting communication between patients and doctors. They also showed how silences and reflected questions could only gain the best results if they were linked to eye contact and not negated by the use of the records at an inappropriate time.

I doubt whether it greatly influenced my practice of medicine but it most certainly made me feel a lot easier about the way in which I did it.

Prescribing

Finally, what of the moment? What are the recent papers that are influencing my habits now and making me change my practice of medicine that will hopefully show up in years to come? There are four papers that continue the process started by Howe and that are making me think in a totally different way about my prescribing habits. The first papers were in the *Journal of the Royal College of General Practitioners* in December 1982: Mourin and the paper by Hopkins *et al* on "Benzodiazepine withdrawal in general practice."⁷ Both papers described withdrawing patients from long term maintenance treatment.

The first described how to check a patient's thyroid status on thyroid medication and reassess those patients who no longer required it. Having reviewed our patients on long term thyroid medication we know that most would meet modern criteria with documented low thyroxine, and raised thyroid stimulating hormone assays, and our withdrawal rate has been much lower than suggested. The concept of reviewing such patients, however, is important if we are to audit and therefore alter our prescribing habits.

Similarly, the paper on benzodiazepine withdrawal showed how one doctor putting one surgery a week to one side can use the present feeling of society in its move away from drugs and can remove well over 50% of patients from long term use of the benzodiazepine group without the side effects that are so commonly reported.

New Idea

Marriage counselling in our practice

JEAN M WATKINS

Anita Blum recently described in the *BMJ* her experience working as a counsellor attached to a general practitioner's surgery.¹ She recognises the multitude of problems that present to the general practitioner in the surgery, many of which are underlying difficulties related to emotional stresses and upsets in marriage and the home. She sees the advantages of counselling for such patients in the familiar setting of the surgery and accepts that fewer patients drop out on referral if it is available. At Thamesmead we refer patients to our paramedical colleagues in the health centre and also continue counselling patients when referral is inappropriate or refused, but with the support, guidance, and reassurance of our colleagues working alongside us.

Thamesmead is a new town, with all the problems of settling in for the population. Our patients are predominantly from social classes III, IV, and V. A high proportion are young adults and their children. The health centre serves about 90% of the population. The overall consultation rate is relatively high, and many who present with symptoms of psychosomatic disease may have an underlying problem with their marriages or relationships.

We are fortunate that since 1969 when the health centre opened the relationship among all the professional workers has been good. By 1975 it was apparent that each of us was caring for and counselling many clients with underlying marital problems. Often the same clients were attending several agencies, causing much duplication of work. Therefore, representatives from the clergy, social workers, health visitors, general practitioners, a probation officer, a psychologist, a psychiatric nurse, and two local marriage guidance counsellors, who advised us initially, met to discuss cases, and we learnt from each other's experiences and approaches.

Setting up Marriage and Self Help

After a year we decided to organise our own counselling service in the health centre, staffed by members of our group on a voluntary basis. Thus, Marriage and Self Help (MASH) was born. We provide premarital counselling, counselling for marital problems, and when appropriate counselling for separation and divorce. Clients may choose a man or woman counsellor, and occasionally a couple may be counselled by both. One hour appointments are offered at the health centre one evening a week, and when clients are unable or unwilling to attend home visits are arranged, appointments normally being offered within a week of a request for help. Two counsellors are available for appointments each week, and eight counsellors on the rota—a commitment once a month. This commitment may increase once a case is in progress. All our local agencies, including the housing office and the citizens' advice bureau,

know about the service and display a small poster. A notice also appears regularly in the local newspaper. Appointments are made through our practice manager.

Counsellors and other interested workers continue to meet once a month to give support in the discussion of difficult cases and to debate related topics. From this extended group we hope to recruit new counsellors as workers leave. Since we started counselling in 1976 196 clients and couples have attended. The average number of sessions for each client is five; 73% of the referrals have come from the general practitioners, the rest from other ancillary workers, and a handful of clients have referred themselves.

We have thus been able to provide a counselling service to our patients and to improve our skills. Some clients still refuse to accept referral, but the general practitioners who counsel are supported by the rest of the group. The "lost in transit" seems to be negligible compared with when clients are referred to an unknown agency. Not least of the benefits is that the medical and paramedical professionals work together on the same project on an equal basis. We all value the support of our colleagues in this taxing work.

Reference

- Blum A. Marriage guidance counsellor. *Br Med J* 1983;286:1619-20. (Accepted 18 July 1983)

ONE HUNDRED YEARS AGO We recently had the opportunity of inspecting, in the courtyard of Sir Richard Wallace's house in Manchester Square, a new "horse ambulance carriage," which has been presented to the St John Ambulance Association by a member of the Committee. This ambulance is intended for use in the metropolis, and will be stationed at the office of the Association, St John's Gate, Clerkenwell (within five minutes' walk of Farringdon Street station on the Metropolitan Railway). The carriage is constructed of English and American ash, varnished, but not painted; it has, at the first glance, a bright and cheerful appearance, which is in pleasing contrast with the funeral aspect too often given to ambulances. Three patients, on stretchers, can be carried in it, two on the floor of the carriage, the third suspended in a simple and ingenious manner, which permits the stretcher being run forward, without lowering, until it is sufficiently free of the carriage to be securely grasped by the second attendant on the ground. If one or two patients only be carried, two attendants can travel in the carriage. The carriage is slung on ordinary carriage-springs; no springs are introduced into the construction of the stretchers, experience having shown that their use in that situation is not advisable. The stretchers fold together in a narrow compass, and are constructed so as to fit, when open, the two-wheeled ambulance-litter used by the Association, which permits the ambulance and the hand-litters are available for the use of any person who may choose to apply at the office of the Association, and the terms of the Association are extremely moderate. In the case of the necropsy, sick or injured, the Association will make removals at reduced rates, or even gratuitously. (*British Medical Journal*, 1883;ii:1204.)

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