

PRACTICE OBSERVED

Research in General Practice

Finding funds

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In these times of financial cutbacks and increasing cost consciousness even the occasional researcher is being forced to cost and find funds for relatively minor outlays for research, such as postage and travel, and even to price his own working time and that of secretarial, reception, and nursing staff who might become concerned in his proposed research. Similarly, the worker whose activities are on a larger scale and who is seeking relatively substantial monies—usually to employ full time or part time research staff—is now finding the competition for available money tighter than for some time and risks wanting time as well as having his enthusiasm dented if applications are misdirected or poorly prepared. This paper attempts to help the general practitioner who is wondering about the financial implications of his proposed research. Firstly, to cost his project, secondly, to decide from where to seek help, and, thirdly, to prepare his case for support.

Costing research

**Personnel**—It is helpful to think of secretarial time (addressing letters, coding replies), receptionist time (drawing out files), nursing time (added clinical tests or measurements), and doctor's time (extra consultations, visits to libraries or colleagues). Much of this may be regarded as normal investment in patient care and some can be funded on this assumption; but the support of colleagues in a partnership may be more easily gained if the study being undertaken may be seen to be financially independent.

**Materials**—Where circulars require photocopying costs may mount surprisingly quickly. Where substantial amounts of data will be generated filing space may be required and items such as tape recorders and typewriters may be needed to record data. Travel costs may be included under this heading.

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**Data processing**—This is worth considering separately. In times past statistical help and computing resources were usually provided free by universities or health boards, but recently most of these services have been made to function on commercial lines and at least an element of time and overheads is liable to be charged and should be thought about in advance. When the cost is being totalled it is usual to add 25% (to cover National Insurance and superannuation) to full time salary levels and it is necessary to anticipate annual salary increments. It is not normally necessary to allow for inflation or for salary awards but wise to check with any fund giving body that increases beyond the researcher's control to be met by the sponsor.

It is a mistake to think that good research needs to be expensive. Good ideas cost nothing, and, indeed, much of the best general practice research has been financed wholly within the researcher's own resources. Looking outside one's own practice for funds has one good effect—it forces the applicant to think through what he wants to do and check whether his methods are appropriate. On the other hand, delays become almost inevitable and frustration is extremely common; the search for outside resources is like a car journey in bad weather—not to be encouraged unless really necessary.

Sources of money

The following sections discuss several sources of money available to general practitioners for research. In each some guidelines—inevitably only very general—about the quantity of funding likely to be considered is given, and some general hints on making approaches are included. It is sensible to approach the administrators of funds which seem appropriate for advice on whether to apply as well as how and when to apply. This is not regarded as canvassing and invaluable help on preparing applications is usually readily given.

The British Medical Association publishes a *Research Funds Guide* (available from the BMA, London) and the Association of Medical Research Charities has recently published the fifth edition of its comprehensive (but not exhaustive) guide to

drawn between biomedical (cause of disease and experiments in treatment) research and health services (application of existing knowledge) research. The Medical Research Council more often supports the first rather than the second of these kinds of research, although it now has a health services research panel. The Department of Health and Social Security (Chief Scientist Organisation) supports health services research rather than biomedical research. The Scottish Home and Health Department has its own Chief Scientist Organisation with one committee for each division of research activity and once again the various secretariats will provide invaluable advice and guidance. All of these bodies have regularly expressed a desire to see more funding of general practice research, but the applications have tended to be of a high standard academically and to be seen to be of potentially wide general importance.

Preparing an application

Advice on how to prepare an application is included in the further reading referred to at the end of this paper. The main points to highlight are the importance of consulting the officers of the relevant bodies in advance of starting to prepare an application and the wisdom of taking advice from experienced application writers before sending a final version to its destination.

The general format requires a short informative summary of intentions and methods of the project, leading into a statement of the problem to be investigated, a concise review of relevant published work, and a precise statement of the detailed aims of the study now being described. Applications should normally

be around 2000 words (eight A4 pages) long and these items might form about a third of the document. The main section describes the methods proposed, possibly including any pilot results obtained, and including a statement of how the results will be coded and analysed, how methods will be validated, and how non-responders will be followed up or allowed for. Mention should be made of sources of expert help (statisticians in particular) and of where patients (or records or doctors) will be recruited and how permission will be obtained, explanations given, and confidentiality protected. The expected expenditure has to be justified (allowance should be included for superannuation and national insurance and national salary scales should be used where possible). If appropriate a statement on the ethical acceptability of the study should be included.

The process is an exhausting one; although it usually leads to producing a tighter and better project, it also inevitably brings delays and frustration and risks loss of motivation.

Good research need not cost much. Where funds are required they should be costed realistically and defrayed by the simplest methods possible. Many avenues for funding are available and advice should be sought from those who have research experience.

Further reading

*Handbook of the Association of Medical Research Charities*, 5th ed. 1983. Available from The Association of Medical Research Charities, West Hill, Putney, London SW15 3SW.  
Howie JGR. *Research in general practice*. London: Croom Helm, 1979.  
*British Medical Association. Research funds guide*, 3rd ed. London: BMA, 1976.

Organising a Practice

Making an appointment system work

D N H GREIG

Appointment systems have been a feature of general practice for at least 15 years and soon most doctors will never have known anything else. Looking at practices to see if they are suitable for training future general practitioners, I have come to the sad conclusion that many doctors still do not understand what appointment systems are about. Typically, these are keen, kind doctors, they have an electrocardiograph, and may even be thinking about a microcomputer. Surgery starts at 8.30 am and patients are booked five minutes apart. There is a red line across the appointment book at 9.40 am. After this the patients have to specify that the appointment is needed "urgently" if they want to be seen by the doctor that day. Evening surgery starts at 4.30 pm and goes on until 6 pm. There are no routine appointments available for any doctor for the next two days. They are like a ship at sea pushing ahead of them a bow wave,

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but it is not a bow wave of water it is a bow wave of deferred work.

The doctors never left the building until after 11 am, as telephone calls had to be made and repeat scripts written and signed. In one such practice they had an average of four new visits per partner a day, or so they said. Even so they had allocated over five hours for house calls, an average of one call an hour and an hour for lunch. If I was one of their patients and wanted to see the doctor I would certainly try and swing it towards a visit. After all, if it is serious enough to be "urgent" it is probably serious enough to keep me at home.

I think that there are two main reasons why this situation has come about. I will deal with the most obvious one first. It is the belief that if it is difficult for patients to get an appointment they will not come for trivials. How true is this? Does having to wait for two days deter people from making appointments? I think not. Suppose you have a new symptom which you think could be the prodrome of something nasty. You decide to see the doctor and get an appointment two days ahead. You then feel better. Knowing how long you have to

funding sources (see below). Advice may also be obtained from the Royal College of General Practitioners (London, or locally from faculty secretaries), from departments of general practice, from regional health authorities and health boards, and from the Health Departments.

GENERAL MEDICAL SERVICES

In effect, financing research through the general medical services element of practice income means that overheads like postage and telephones are paid from basic practice allowance and are tax deductible and that 70% of the costs for ancillary staff (within the normal Red Book maximum staffing levels) are refundable with the balance being tax deductible. The general practitioner will have to finance or find his own research time, and although this may be done during the working day with the support of his partners, more often than not research becomes at least in part an out of hours activity. There are substantial advantages in this approach to funding because it may be initiated with minimum delay and little administrative difficulty. Not the least of these benefits is that the risks (not least to pride and enthusiasm) associated with an unsuccessful application to an outside body disappear.

Because almost any research that a general practitioner will want to fund will have potential benefits, it is possible to contribute to thinking about the organisation of health services there seems no moral objection to using general medical services funding in this way and for this purpose. Indeed, it is hard to imagine any substantial service which that invests so little in "research and development" as does general practice. At the same time the non-reimbursable and non-tax deductible expenses implied in the arrangements described above are quite manageable, a half time clerical post and 1000 circulars would mean a net financial loss to a group practice of five partners of about £100 per doctor over one year.

LOCALLY AVAILABLE HEALTH SERVICE FUNDING

Sums of money are made available by central government (Department of Health and Social Security and the Scottish Home and Health Department) to regional health authorities (England) and health boards (Scotland) to help provide small sums of money for locally organized research projects. These sums are available for competition on an interdisciplinary basis and administrative arrangements for their award or allocation should be required about in local health service offices. In general, support is given in small aliquots (from as little as perhaps £100 to roughly £3000) and will normally provide short term funding to a researcher carrying out a pilot study before making a more substantial application elsewhere. Items of equipment may be wholly or partly funded from separate funds and again local inquiries are worth making.

On the whole, these funds are competitively sought and little of the money goes to general practice. Whether this is because few good applications are made from general practice or because general practitioners rarely participate in the work of allocating committees is difficult to be sure. A good application can easily be supported—even if only to demonstrate impartiality.

ROYAL COLLEGE OF GENERAL PRACTITIONERS

The only important source of relatively protected money for general practice research is the Royal College of General Practitioners, which administers a modest budget through its Scientific Foundation Board. The total sum of money available is roughly £30 000 a year, and this is normally split into amounts between £500 and £2500. Research resources as widely as possible and still provide sufficient money to give worthwhile support. Inquiries about the likelihood of attracting support

should be made in advance of application to the Scientific Foundation Board at the college in London. Standard advice on the format for preparing applications will be provided.

CHARITABLE SOURCES

As indicated above a wide variety of charitable bodies have funds available to support research, the preferred fields of research usually being reflected in the name of the charity. The fund awarding policy varies from charity to charity and from time to time within charities as priorities and sums available change. It is a mistake to believe that these bodies represent soft touches and most of them are advised by fairly prestigious panels of experts whose leanings and sympathies seem more notable for unpredictability than any particular bias. The Nuffield Foundation, the Nuffield Provincial Hospitals Trust, and the King's Fund are important sources of (usually, but not necessarily) larger scale funding with willingness to support projects over a wide range of interests. Applications are normally refereed and research proposals from general practice are well received; priorities for funding vary from time to time and once again advice should be sought before application is made.

PHARMACEUTICAL INDUSTRY

The pharmaceutical industry has a large research budget mostly devoted to funding its own projects whether these are pharmacological or in the areas of testing efficacy and safety. Such are the difficulties of designing and interpreting clinical trials that it is becoming less and less likely that single practitioners or even small groups of doctors will be able to attract support for scientifically valid work in this field. It is, of course, common for companies to approach doctors for help with projects under their own control. Each approach should be considered carefully on its own merits and discussion of this kind of research is outside the scope of this paper. The industry is clearly willing to consider requests to help general practice research at many different levels and appreciable help has been given in funding both full time and part time posts (often field in association with university departments) and in providing sums of money for overheads and general support. Many of the projects supported have had no direct implications for the products of the companies concerned, and, once again, the importance of taking advice on where and how to apply must be emphasized. Applications are less likely to be in competition with parallel requests than is the case with most other funding bodies, and there are rarely explicit rules for submitting or assessing submissions.

OTHER NON-GOVERNMENT SOURCES

Finding a convenient way to categorise sources of funding is as difficult as raising money itself and the categories are not particularly homogeneous. The BMA offers a range of prizes and scholarships for various purposes, including research. General practice can and does gain support in this way and details should be sought from the BMA in London. The Health Education Council and the Scottish Health Education Group support research in subjects relevant to their obvious interests; small sums may be made available "at officer level," while larger applications will have to be referred with the inevitable delay that this implies.

MAJOR FUNDING BODIES

Where applications seek funds for over £10 000 the usual practice is to approach a source of national government funding, directing the application to the body most interested in the relevant type of investigation. A division tends to be

wait for another appointment would you then cancel it? Obviously not. After all, you might get symptoms again and have to restart the whole process from the beginning. On the other hand, if you knew that appointments were readily available you might have treated yourself expectantly from the start.

The second reason is to do with workload for each doctor, and it may be that this is where the trouble started. With a shared list, each partner seeing anyone's patients, the receptionists are bound to book any later appointments with the doctor who is going to finish first. Inevitably, if there is a doctor who is lazy or overwhelmed he will reduce the amount of effort he has to put in to seeing his patients. This is not back unnecessarily. If all the doctors play this game the only way out is to draw a line across the appointment book and delegate to the receptionists the responsibility for deciding what is meant by "urgent." Such behaviour by the doctors is unfair to their staff and may lead to other problems.

Accessibility

The essential qualities of a general practitioner are accessibility and continuity. How do we achieve accessibility? The patient expects to see the doctor when he is ill. When he is being seen he should also expect not to feel rushed. But the doctor has a problem, too, because he does not want to be idle between appointments. This means that traditional ideas have to be radically changed. Some years ago we agreed that all partners in our practice would have at least one open ended surgery every day. By this we meant that if a patient rang up to ask for an appointment they were offered one that morning. Thus patients can always see the doctor of their choice within 24 hours, and if it is really urgent they can be seen immediately. Each partner has to see only people actually registered with him, although when it comes to the point we are all willing to see each other's patients occasionally. This is the system of individual lists and it means that the quicker and more efficient doctor will not be penalised. It is also better for the patients as it helps to avoid a collision of anonymity. We have now gone one step further than the open ended surgery system and ask the receptionist to try always to persuade the patient to come in that morning rather than defer seeing the doctor until tomorrow. This takes the pressure off the evening surgery and also means that the appointment book is sometimes almost empty at the beginning of the morning. Then if a crisis blows up, such as a partner falling ill or even going off for a short notice for pleasure, we do not have to contact so many people to cancel their appointments.

How long should each appointment be? Whereas Thomas found that giving longer appointments at random did not reduce the chances of a patient returning with the same problem, Hughes compared two practices and found that where longer appointments were arranged fewer repeat prescriptions were written and the patients were less likely to come back within the next four weeks. So perhaps there is a case for giving longer appointments to everybody. Longer appointments in this context meaning 10 minutes rather than five, which is rigidly by North American standards. Short, however, has pointed out that one of the characteristics of a good general practitioner is the variation in the length of his consultations. A rigid appointment system does not result in good general practice.

Coping with the long morning in surgery

One thing that we have had to get used to is that we may have to spend much of the morning in surgery. Now that we have a practice nurse we have been deprived of all those helpful "catch up" appointments, such as injections or a blood pressure check; even the intermediate certificate and OSC-1 have gone long ago. Consultations are often more intense as we become

aware of the many more tasks that they may entail. The answer is to space appointments far enough apart not to feel rushed and overwhelmed by the tyranny of the time table. If gaps occur they may be used for dealing with correspondence, repeat prescriptions, or just gossiping. There is a long coffee break at 10 o'clock. Any practical procedures such as minor surgery and insertions of intrauterine contraceptive devices are slotted into the morning's programme rather than into a separate session in the afternoon. These give a welcome break when one can use one's hands instead of one's brains.

Since we are now so available in the morning we felt able to put a restriction on the evening surgery. This makes sense because the main users of the health service are elderly people and young women with small children who find it more difficult to get to the surgery after dark. What is more, the laboratory and hospital appointments tend to disappear after 5 o'clock. There are appointments available for the minority users (the working man or woman). It is surprising how little demand there is for them.

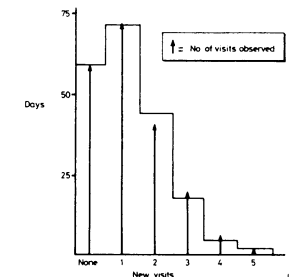


FIG 1—Poisson distribution of new visits observed for 200 days. Histogram shows number of visits expected.

How well does it work?

Whether or not you make changes in your work methods it is important to find how good a service is being provided. One of the simplest measures is the number of out of hours calls. Failure to provide a good service during the day will mean that patients will call the doctor out in the early evening, even at night. The doctor who claims that he has a lot of night calls should be looked at with suspicion. In the same way a high visiting rate might reflect a poor service in the surgery. Using the visiting rate to monitor the appointment system may be an oblique approach but it has several advantages. The numbers are smaller and there is also less difficulty in separating contacts that are doctor initiated from those that are patient initiated. Briefly, the idea is that not only should the number of new visits be few but also they should be randomly distributed and should follow a poisson distribution. If they are not randomly distributed there is the possibility that, for example, the receptionists are rationing them if the patient makes a call late in the day, or there are already too many in. Fig 1 shows 200 consecutive visiting days from my own practice and there is a gratifying close fit to the poisson distribution. Fig 2 shows the expected number of visits when the visiting rate is different. Although my own list of patients is 2300 with 13% aged over 65

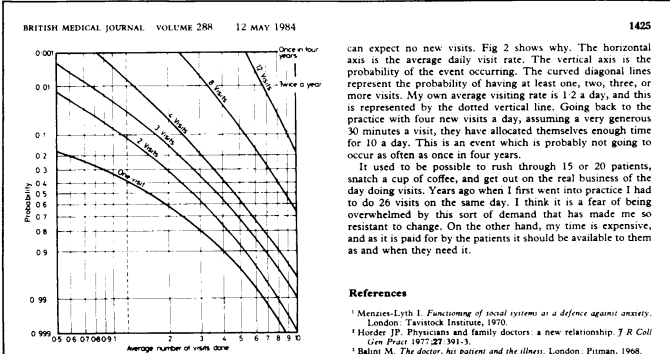


FIG 2—The probability of having at least one, two, etc. visits within different average visiting rates. (The smallest values are at the top.)<sup>a</sup>

(national average 15%), it has to be said that communications are good and it is relatively easy to get to surgery. The rates would obviously be much higher in a rural area or with an elderly population. Note, incidentally, that for three days out of five I

## Practice Research

### Mental illness in inner London

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**Abstract**  
From the perspective of general practice, hospital data indicating that the prevalence of mental illness is much higher in inner London than elsewhere in Britain may be misleading. A study in five inner London practices found morbidity patterns for mental disorder similar to those recorded in a national survey.

**Introduction**  
Figures from sources outside general practice, such as hospital and other data quoted in *A Survey of Primary Care in London*,<sup>1</sup>

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Data relating to mental disorders: five inner London practices (1980) compared with the second National Morbidity Study (1970-1) (NMS2)

Study population	Anxiety		Depression		Schizophrenia		Alcohol dependence and drug dependence	
	Study population	NMS 2	Study population	NMS 2	Study population	NMS 2	Study population	NMS 2
Consultations/1000 patients	230*	208	63*	73	94*	105	15*	6.4
No. of consultations as % of total	10	7.7	2.5	2.5	10	3.5	14*	3.1
No. of individuals consulting/1000 patients	96*	110	41*	34	41*	36	5*	1.4

revision of the International Classification of Diseases (ICD).<sup>2</sup> There were 80 893 consultations, including 3674 with temporary residents; 101 277 diagnoses were recorded, and 20 818 individuals consulted at least once. Of the 7966 consultations for mental disorder, 448 were with temporary residents.  
The table shows findings from the study population, together with statistics derived from the second National Morbidity Study, which provides the most readily comparable data.<sup>3</sup> The rates for the study population include temporary residents in the numerator but not in the denominator, a manipulation that is statistically awkward but which reflects realistically the work of the practices.

**Discussion**  
There are inherent problems in comparing the two sets of data. Neither study laid down firm criteria for diagnosis, and diagnostic fashion may well have changed during a decade. Some combining of data has been required to equate the headings of the eighth revision of the International Classification of Diseases used for the national study with those of the ninth revision. The overall annual consultation rate of the London practices was only 2.5 per patient, even with temporary residents added to the numerator, whereas that of the national sample was 3.0. The London doctors could record two diagnoses for each patient, and did so in a quarter of their consultations, but the doctors of the earlier survey were allowed only one. Despite these problems, the similarity of the two sets of data for mental disorder as a whole suggests that comparisons may still be valid. The most striking feature of the data is that anxiety and depression are found with roughly equal frequency in the two

### Child consultation patterns in general practice comparing "high" and "low" consulting families

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**Abstract**  
All children's consultations with their general practitioner over a 12 month period in a small urban practice were analysed. Overall consultation rates ranged from 2.2 per child a year for 8 to 11 year olds, to 6.8 for those under 2. Families were grouped according to their average rate

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children who show any signs of illness go through a complex process of decision making, which includes reference to past experience, the advice of others, and the estimation of risk, cost, and likely benefits.<sup>1</sup>

Blaxter and Paterson, in a detailed study of families in social classes IV and V in Aberdeen, showed that families who were more disadvantaged (in social and economic terms) were more likely to consult less than other families, and they suggested that the mothers might both perceive illness in their children less readily and also consult less readily.<sup>2</sup> Collins and Klein reanalysed data in the General Household Survey and concluded that there was no evidence for "over usage" of general practice by people in poorer socioeconomic groups, and that the reverse might be true.<sup>3</sup>

The consultation patterns of children differ from adults in apparent social gradients, and other evidence suggests that the "rules" applied to the decision to consult are different for adults and children,<sup>4</sup> so we decided to study the consultation patterns of children in a small urban general practice to identify socioeconomic factors that might be associated. The aim of the study was to relate children's consultation patterns to social factors and to attitudes expressed by mothers about their children's health.

### Method

A long established single handed Dundee practice, based in the doctor's house, was taken over by the university department of general practice in 1977 and after two years in separate premises it moved to a new health centre with two larger practices. During the study period (1982-3) three established practitioners (members of the department) and a trainee worked in the practice, which had a list size of just under 2000 patients. Out of hours calls were covered by a rota with the other six doctors in the health centre. One casualty department serves the whole of the city and sends car copies of all attendance records to the patient's general practitioner.  
All families with children under 12 years were invited by letter to be included in the study. Of 120 families, only one refused to take part. Three were excluded because the mother was not registered with the practice, and three moved away during the study.

### CONTACT RECORDING

All face to face contacts with doctors were recorded on contact sheets, noting the type of contact (doctor or patient initiated, and at home, in surgery, or in a baby clinic), and up to three problem statements. Doctors were asked to record only sufficient details appropriate to the circumstances, such as symptom, syndrome, or cause of disorder or illness, if known. Casualty attendances were recorded from the duplicate hospital notes, routinely sent after each attendance. The problem statements were coded according to the International Classification of Health Problems in Primary Care.<sup>5</sup>

The children were allotted to four age groups, based on their age at the midpoint of the study (under 2 years, 2 to 4, 5 to 7, 8 to 11). All contact data were entered on to computer file for analysis using SPSS (statistical package for the social sciences) on the Dundee University DEC-10 computer.  
Each mother was interviewed in her home during the study by JG, using a semistructured format, to obtain basic sociodemographic data and also her answers to a test of knowledge of children's illness and to a scenario instrument to assess her intention in hypothetical illnesses.<sup>6</sup> From the contact data the number of patient initiated contacts for each child was calculated. There was a clear age gradient with decreasing contacts with age (table 1) and standardized using was devised to control for age of child and number of children in the family. Age standardized consultation index (Sum of observed contacts x 100/Sum of expected contacts, where expected contacts were the average for each age group).

### Results

The problems that had been recorded on contact sheets were classified into the main ICD (International Classification of Diseases)

TABLE IV—Diagnoses used to classify families as "significant disease present"

Problem	No. of families with any episodes	Total No. of contacts	Per cent of all contacts	
			Study population	NMS 2
Acute otitis media	37	91	12.4	12.4
Bronchitis	26	48	6.3	6.3
Allergies	15	25	3.3	3.3
Earache	4	17	2.3	2.3
Allergic rhinitis	4	17	2.3	2.3
Urticaria	4	17	2.3	2.3
Upper tract infection	4	17	2.3	2.3
Croup	2	21	2.8	2.8
Behaviour disorders	2	21	2.8	2.8
Non-suppurative otitis media	2	21	2.8	2.8
Anaemia	1	3	0.4	0.4
All	61*	224	30.5	30.5

\*All families had one or more of these problems.

TABLE V—Cross tabulation of family consultation index (quartiles) with presence or absence of significant disease in any child

	Consultation index				Total
	Low	Medium low	Medium high	High	
Any significant disease present at least once	7	11	20	23	61
No significant disease present	21	16	10	5	52
$\chi^2$ 22.26, 3 df, p < 0.0001					

TABLE VI—Differences in sociodemographic variables between highest and lowest consulting families (high and low quartiles)

Variable	Mean (low consulting families)	Mean (high consulting families)	F	p
Age of youngest child (years)	1.0	0.9	0.07	NS
Sex of children	1.0	0.9	0.84	NS
Mothers' educational level (scale of 1 to 4)	2.4	1.62	3.75	0.01
Fathers' educational level (scale of 1 to 4)	2.42	2.10	1.61	NS
Economic factor <sup>a</sup>	0.25	0.54	3.18	0.02
Home ownership <sup>b</sup>	0.15	0.25	1.02	NS

<sup>a</sup>See text. <sup>b</sup>NS = Not significant.

"disease variable" was far more important a predictor of overall consulting rate than any socioeconomic variables when all variables were analysed by multiple regression. Not only do children attend the doctor when a serious illness is present, but they attend more often for other problems when a serious problem has been present.  
The relation of some of the social and economic variables to the consultation index are shown in table VI. Families have been divided into quartiles according to their consultation index, and the highest and lowest consulting quartiles compared for the variables shown. The economic factor was derived by factor analysis from three variables, an economic index (financial state, employment state), a housing index (area, standard of housing), and overcrowding, and social class (Registrar General's classification). The scenario action score was based on whether or not the mother would consult in 10 hypothetical situations. Higher consulting families were found to be statistically significantly poorer, the mothers having less formal education, but family size and age of children or mother were not significantly different. The mothers' "tendency to consult," according to the scenario score, was higher in higher consulting families, this difference being independent of all other variables on multivariate analysis.

**References**  
1. Robinson D. *The process of becoming ill*. London: Routledge & Kegan Paul, 1971.  
2. Locker D. Chapter 6. *Symptoms and illness: the cognitive organisation of disorder*. London: Tavistock Publications, 1981.  
3. Blaxter M, Paterson E. *Mother's daughters: a three-generational study of health attitudes and behaviour*. London: Heinemann, 1982.  
4. Collins E, Klein R. *Economic and social class, self-reported morbidity, access, and primary care*. *Br Med J* 1980;281:1111-5.  
5. *ICHP/PSD: International Classification of Health Problems in Primary Care*. 2nd ed. Oxford: Oxford University Press, 1979.  
6. Campion PD, Gabriel J. Assessment of mothers' intentions to consult for children's common ailments. *Br Med J* 1980;281:1111-5.  
7. Office of Population Censuses and Surveys. *Morbidity statistics from general practice*. Second national study 1970-71. London: HMSO, 1974.  
8. Howe JGR. Patterns of work. In: Fry J, ed. *Trends in general practice*. London: BMA, 1979:22-35.  
9. Office of Population Censuses and Surveys. *Morbidity statistics from general practice*. London: HMSO, 1974.  
10. Howe JGR. Patterns of work. In: Fry J, ed. *Trends in general practice*. London: BMA, 1979:22-35.  
11. Office of Population Censuses and Surveys. *Healthier child-thinking prevalence*. Report from General Practice No 22. London: RCOP, 1982:73-6.  
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