The study and evaluation of general practice

Hypotheses concerning evaluation

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THE purpose of this paper is to describe a fundamental approach to the study of general practice. This grew out of an attempt to evaluate the impact of innovations on the standard of general practice. Judgment of improvement or deterioration depends on a prior notion of what is optimal; this does not yet exist for general practice as a whole.

In published work, researchers in general practice have evaluated individual procedures or patterns of working within a system, either in terms of their relationship to other component parts of the same system (Goldberg *et al.*, 1968; Boddy, 1969; Marsh, 1972), or after making assumptions that some procedures or patterns of working are ' good ' while others are ' poor ' (Dixon, 1971; Irvine and Jefferys, 1971). Few of them have attempted to examine the workings of the whole system, and to evaluate it in terms of whatever functions or objectives it is intended to fulfil (Tait, 1971).

In collecting statements of objectives from four different practices and in attempting to translate them into measurable terms I met a further problem. Existing methods of observation of general practice do not take enough account of its orientation towards whole people, as distinct from diseases or procedures. I have therefore attempted to develop a way of observing general practice based on this whole-person orientation, and in doing so have evolved a useful approach to the original problem of evaluation.

Methods of observing general practice

Two methods of observation have been developed in the past for the study of diseases in populations and subsequently adapted for observations in general practice.

The first is the cross-sectional approach (figure 1A) which has been successfully applied over many years in general practice to various tasks such as estimation of prevalence, and simple descriptions of procedures or patterns of work. It has no place, however, in the observation of a sequence of events in time, which is an essential part of general practice.

The second is the longitudinal approach (figure 1B), which has been more recently developed and applied to the estimation of incidence, observation of natural history, and evaluation of therapeutic procedures. It is much more appropriate to the study of sequences of events, but has most often been used to observe the fate of patients upon whom the phenomenon or agency under investigation is supposed to be operating uniformly. In general practice the approach to patients is, in my experience, by no means uniform, though it may tend to be in specialised medical services; modification is therefore necessary if the approach is to be useful in examining general practice fundamentally.

I have searched for this modification as a practitioner-researcher with two large group practices, and by observing several others, with the minimum of influence from other medically-related disciplines. It was necessary initially to decide how clinical

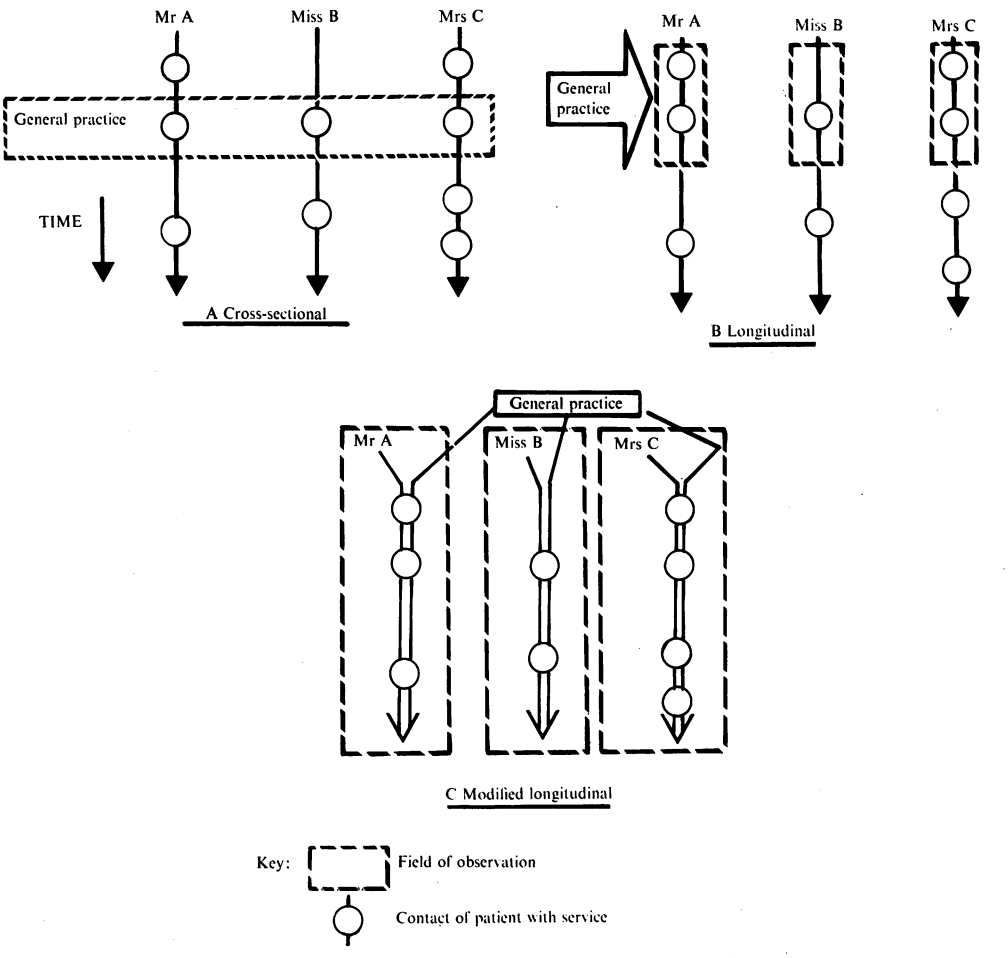

Figure 1. Approaches to the observation of general practice

information could best be collected in general practice for the purpose of fundamental, empirical research.

The significance of service records

I assumed that a mature general practitioner is most likely to record well in a patient's notes material which he may want to recall accurately to improve the subsequent management of that patient. The character of this material is likely to vary from patient to patient, and according to the clinical style of the practitioner, but in any particular case the material recorded is probably at least part of that judged important by the practitioner at the time of recording.

What matters to the practitioner deserves the attention of the research worker, rather than the reverse. It therefore seems sound in principle to use service records as the basic source documents for research purposes.

Considerable problems arise from the use of service records, in particular because of their tendency to be incomplete. The researcher can modify this little without risk of distorting the pattern of practice he wishes to observe. Methods can however be devised to estimate the completeness of recording of important items, and although important items may have been omitted, it remains likely that the material which was recorded was judged important.

Application of this principle led to the observation that the clinical notes of a patient in general practice give an account of a series of events, rather than of the physical, medical or social status of the patient at a series of points in time, which is a style more characteristic of hospital notes. This reflects the basic difference between the two disciplines—one focused on individual people, the other on disease entities.

Interplay between patient and doctor

Nevertheless this record of events seems necessarily to reflect the influence of the workers who make the notes. A patient may present the same problem to different doctors in a totally different way; the influence of the doctor (or other worker) is not only in interpretation. The account given in a patient's notes is thus conditioned by the patient and worker alike—it represents the *interplay* between them, and not any attribute of the patient alone.

This seems to be basic to the nature of general practice. It suggests that a change in approach is necessary so that fundamental research about general practice may proceed by a shift of attention from the patient to his or her interplay with the general-practice system.

Interplay between patient and worker is, of course, important in all clinical situations so that these observations are not confined to general practice; they do, however have a more fundamental bearing on person-oriented medicine than on the disease-oriented specialties.

This interplay remains as individual as the patient himself, but also takes account of the individuality of the practice. Figure 1C illustrates schematically what is implied. Application of the longitudinal approach to observation of a series of such interplays during a period of time will give the necessary balanced account of events in practice on which interpretations satisfactory to the practitioners can be founded.

Interplay is, of course, not always one-to-one; a spouse, parent or whole family may also be involved. This account is necessarily confined to the basic concept in its most simple application.

Charting contacts

In a general practice, whatever its size and however many disciplines are represented among the workers involved, contacts made by individual patients can always be disentangled from each other since that individual cannot be in two different places at once: joint consultations with several workers are rare.

So I charted, in a semi-graphical way, the pattern of contacts made by individual patients with separate workers in a practice over a period of time. It soon became clear that interplay with the practice as a whole was too simple a concept; a better approach was to separate the various strands in this interplay which were reflected in the separate continuous records used by different workers. Thus, notes on the general-practice record—made by doctors, receptionists and the practice nurse, for example—formed one sequence; notes on the health visitor's record, or the social worker's record, formed other sequences with independent continuity. Thus not one, but several interplays were discernible within the practice (figure 2).

However, attention could not be focused on these continuous records alone. In them were references to referrals made to consultants or agencies outside the practice; correspondence resulting from such a referral gave insight into the findings of the consultant, into the efficiency of the service they provided for the practice, and into any conclusions designed to influence the practitioner's management. These sequences of referral, enquiry, and report formed side-chains or loops, in relation to the ' main line ' of the doctor's continuous record; they contributed to the direction of the latter and could just as easily be observed through the patient's practice dossier (figure 3).

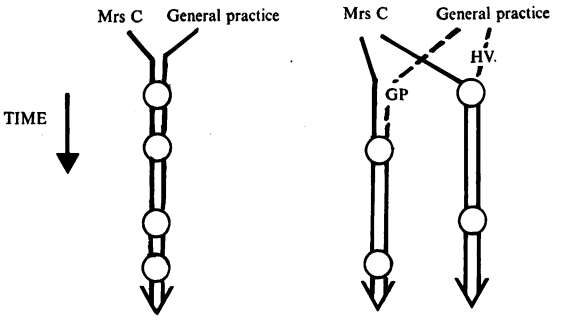

Figure 2. Interplay within the practice

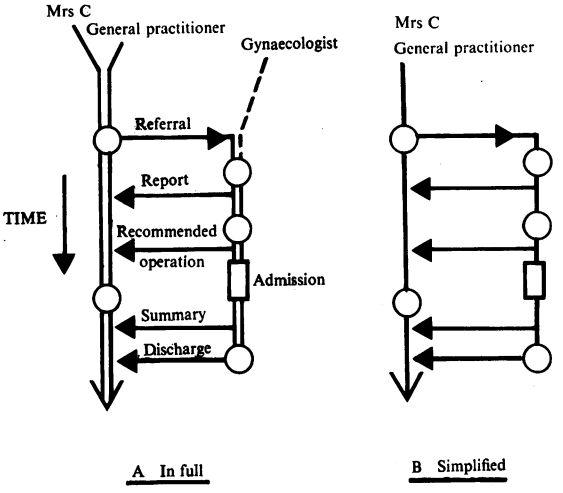

Figure 3. Interplay with practice and consultant

The result was a method of plotting for each patient every contact recorded on medical documents according to two axes on a graph: time, and agency (figure 4). In this way a long-term view of the total pattern of his interplay with the practice was obtained, which seemed to be sufficiently sensitive to express the idiosyncrasies of the individual patient and of the practice. At the same time, the detailed content of each contact was not lost, and specific topics (e.g. referrals, or patterns of treatment) could be analysed in the setting provided by the total pattern of interplay.

Interpretation

How can conclusions be drawn from material presented in this way?

There is no limit to the variety of meaning that can be assigned, depending only on the views of the interpreter. This paper is about the problem of evaluating general practice as a whole, which I believe hinges on interpreting the record of activity in a practice in relation to its main objectives for its clinical care and its organisation.

General practitioners in four practices stated their clinical and organisational objectives, and my colleagues and I found a consensus, as we expected. Clinically, all practitioners seek, like all doctors (and all professional people) to modify their patients'

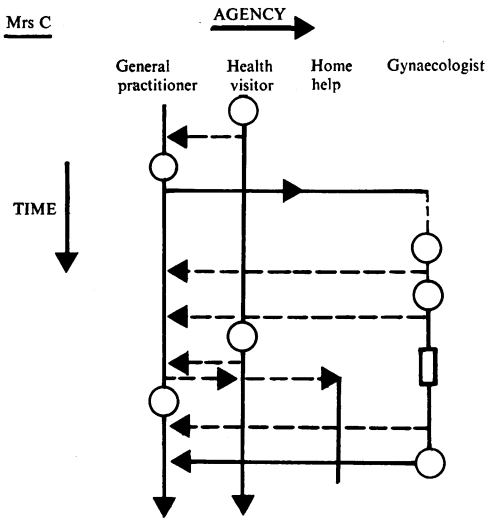

Figure 4. The charting of total interplay.

experience of life in a beneficial direction. In the organisation of their work they differ however from other doctors in emphasising the personal relationship as a basis for the clinical management of such patients (Wright-St. Clair, 1971), and to the continuity of their responsibility for each individual patient (Marsh, 1972; Barber, 1972).

General practitioners thus differ not by what they aim to do, which they hold in common with their colleagues, but rather by how they aim to do it. The essence of general practice can be expressed as the use of a continuing personal relationship with each individual patient as a basis for diagnostic and therapeutic activity.

If this is so, then it follows that attempts to evaluate general practitioners' work according to the premises, staff or equipment they use, or even according to their diligence in continuing their clinical education, are misplaced. What matters more than the size and shape of such resources is how they are mobilised and what benefit they achieve.

I suggest therefore that interpretation of activity in a practice could most usefully focus first on the clinical relationship which forms its basis, and secondly on the benefit it achieves for its recipients.

(1) Means—the clinical relationship

The importance of the doctor-patient relationship in general practice is now being reflected in the attention paid to its analysis by several general-practice scholars (McWhinney, 1972; Royal College of General Practitioners, 1972). I doubt however if any yet surpasses Michael Balint's epic contribution to the subject, either in brilliance of concept or in grasp of the essential dynamism and subjectiveness of clinical relationships (Balint, 1957). Nevertheless, since the approach of Balint and his colleagues necessarily hinges on exploration of the subjective interactions between doctor and patient, it remains fundamentally incapable of quantitative formulation or record.

Such research does, however, suggest that various measurements can be related in each case to the quality of the corresponding clinical relationship. This can be expressed in the following hypotheses:

Allegiance The more significant the relationship the patient has with any particular doctor, the less likely he is to consult others haphazardly.

Presentation The better a patient knows his doctor, the readier he is to express his problems in personal rather than medical terms.

Assessment The better a doctor knows the patient, the more likely is he to see links between different clinical episodes and the more unified will his assessments be.

Management The better the rapport between doctor and patient, the less likely will be the need to mobilise medicaments, investigations or consultant advice; conversely, the more specific will be the circumstances in which these resources are mobilised.

The method of observation described in the first part of this paper enables all four of these features to be monitored. Allegiance and management present no operational problems; inadequate systems of classification hinder the expression of presentation and assessment which are thus apt to be confused with each other, but McWhinney (1972) has made a major contribution in this field and more advances will follow. Here a simple classification of reason for contact on the one hand, and a freehand problem-oriented clinical summary on the other, have been tried.

It is worth emphasising that presentation and assessment are necessarily measures of judgment on the part of patient or doctor. There is no need, in interpreting general practice by these means, to attempt to ' objectify ' human judgments: they can be accepted as valid in themselves, subjective comments on a subjective relationship. Subsequent events provide the most reliable commentary on the accuracy of the medical judgments displayed.

(2) Outcome

Perhaps the most telling criticism that could be made about the work now being done in analysing the doctor-patient relationship is that it pays too little regard to the fact that it is a means, not an end. The same observation can be made about the present concern with deploying efficiently the community medical and social services. If we are to assess clinical relationships in general practice and the treatment or supportive services deployed through them, then it is with measures of fulfilment of their function that we must be concerned, and not simply with their existence or even use on behalf of patients.

Part of the reason for the preoccupation with means rather than ends is the great difficulty of constructing basic measurements appropriate for ends, let alone applying them.

The clinical relationship serves to enable clinical objectives to be fulfilled, and generally speaking these objectives amount to modifying the patient's experience to his benefit. Modification of experience, rather than experience itself, is therefore the measure we need—hence use of the word ' outcome '. The task is thus to identify outcome, and to determine whether or not its direction is beneficial to the patient.

The immediate problem is one of perspective. In any particular episode of clinical interplay, the patient may be deemed to benefit manifestly from the doctor's intervention, for example, by aborting an attack of tonsillitis by penicillin. However, the record of interplay over a number of years may show that several such episodes occur regularly each year, far more than could be regarded as an acceptable matter of chance. Each attack may be dealt with, but the attacks still tend to occur.

Since general practitioners concern themselves with whole persons and take seriously their continuous long-term responsibility, it is appropriate to seek measures of outcome which include continuing patterns rather than only those dealing with clinical episodes one by one. Hence the importance of the problem of identifying and measuring total outcome

during a period of interplay between patient and practice, rather than the specific outcome of each individual episode of illness.

Several measures of outcome suggest themselves, which seem to be associated with direct benefit to the patient, but it is necessary to distinguish direct from indirect benefit. Successful completion of any programme of surveillance such as immunisation which is judged to be likely to benefit its recipients is a valid outcome (so long as the underlying judgment is accepted). The benefit is however appreciated directly by the community at large, and only indirectly by the individual. The discussion here is limited to outcomes whose benefit to the individual is direct.

Frequency of contact Provided that involuntary constraints are not responsible, a declining frequency of contact with the medical services can be reckoned a direct benefit to the patient.

Problems In a problem-oriented recording system, progress with regard to any particular problem can readily be traced provided it is regularly reviewed. If so, solution of problems can be recognised and counted as direct benefit. (Inadequate review of problems invalidates this approach however, since absence of mention may imply resignation rather than resolution.)

Treatment Generally speaking, a *decrease* in the therapeutic activity required to maintain a patient's clinical condition can be counted a direct benefit. This can be expressed variously: decreased dosage or withdrawal of medicaments, stopping attendance at specialist centres, and withdrawal of supportive services are three examples.

Other kinds of change occur of which the direct benefit is debatable. The point of contact with the practice may vary rather than the overall frequency of contact, but this means more to the practice than to the patient in terms of benefit. One problem may be substituted for another; the significance of such a change will vary, but I suspect it often means a deepening of the doctor's insight rather than benefit to the patient. Substitution of one therapy for another is the most fickle change of all; it usually means that the patient gains no benefit from any of the therapies tried. Thus it is safer to assess outcome in terms of the four more concrete measures outlined above.

Nevertheless this is an exceedingly difficult task in practice. I am not however deterred from advocating that it be undertaken. Continuance of the present concern with many unrelated research topics may produce an enormous volume of analytical data, but cannot achieve its synthesis. It is on the development and application of unified concepts of the essence of general practice that interpretation of such data will depend: for as long as we lack these concepts, fundamental research in this area will fail to progress.

Summary and conclusion

This paper describes an approach to the observation and interpretation of activity in general practice which may go some way towards overcoming problems and limitations previously encountered. Hypotheses are included about the essence of general practice and the directions in which its achievements must be sought and evaluated.

Whether or not these suggestions are acceptable or workable, fundamental progress must somehow be made in the field of evaluation if judgments about the best form of general practice in the future are to be valid.

Acknowledgements

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THE PATIENT AS A PERSON

Consideration of some of the problems of medical ethics that are especially urgent in the present day. The various topics include: (1) consent as a canon of loyalty with special reference to children in medical investigations (2) updating procedures for stating that a man has died (3) caring for the dying (4) the self-giving of vital organs (5) giving or taking cadaver organs for transplant (6) a caveat on heart transplant and (7) the distribution of sparse medical resources.

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AMERICAN ACADEMY OF FAMILY PHYSICIANS

" The American Academy of Family Physicians turned 25 this year, and members . . . at the annual convention heard evidence that their organisation is ' turning on ' the current generation of medical school students and graduates. Recent growth in the number of potential recruits to family practice was described as ' phenomenal ' by the Board of Directors of the academy, now the second-largest national medical group, with more than 32,000 members.

" Among the country's medical schools, 34 have now established departments of family practice and 31 have set up family-practice divisions. Similar programs are under consideration by at least two dozen other schools.

" The expansion of family-practice residencies has been even more dramatic, the A.A.F.P. Board reported. The number of such graduate programs approved by the Residency Review Committee for Family Practice nearly doubled during the past year, rising from 73 to 133. The total number of residents also grew by nearly 100 per cent, increasing from 532 to 1,015.

Hospital Tribune (1972). 30 October.