Research in group practice—problems and possibilities

R. A. HARDMAN, M.B., Ch.B., M.R.C.G.P.
Liverpool

RECENT developments in the administration of general medical services have given added impetus to the existing trend towards the formation of larger groups. Although group practice offers many advantages to the participants, the doctor who wishes to continue his research interests may encounter difficulties. This, at any rate, was my experience. The question then arose, were these difficulties peculiar to our own group, or were they inherent in the concept of group practice? Discussion with members of the Research Club suggested that this was a problem that had been exercising the minds of many research-orientated doctors, but there appeared to be no general consensus of opinion on ways and means of dealing with it. I decided, therefore, to send a questionnaire to the majority of general practitioners who had published original work in the College *Journal* in the ten years 1960–69, inviting their comments. This selected group of doctors had had first-hand experience of the difficulties and frustrations of general practitioner research, and had been obsessional enough to carry their projects through to publication. The list included representatives from both single-handed and multiple practices and I felt that, in the intervening ten years, many would have changed their type of practice and perhaps met, and surmounted, the problems that were taxing me.

In the event, 100 doctors (representing 91 practices) were circulated. There were 66 replies, 17 from solo practices and 49 from doctors in groups or partnerships (representing 46 practices). In addition to answering the specific questions formulated in my letter, most of the respondents elaborated their replies with helpful comments. (A member of the Research Committee of Council justifiably criticized the lay-out of the questionnaire, and forecast difficulties when the replies came to be analysed: how right he was.)

The key question asked was: 'Since joining a group have you encountered any difficulties research-wise?' In their replies, 19 doctors confessed that they had had difficulties, 16 had not. Eleven did not answer the question specifically, but of these, two apparently had problems. (One doctor felt that there was no practicable method of group research, because of the crude definitions required, and the other remarked that, as his three partners had no interest, his research activities were conducted in his leisure time, which is thereby considerably reduced.) A further two would not commit themselves; as one of them put it: 'any research is looked on with amused tolerance'. All in all, about half the doctors in multiple practice were experiencing research difficulties.

The kinds of difficulty encountered vary from lack of comparability in recording (five doctors) to non-cooperative partners (nine doctors). A further three felt that to push their research activities might cause friction and upset an otherwise happy relationship.

Of the 16 doctors who had experienced no difficulties, five cited cooperative partners, three others had university connections and a further three had other 'extra-mural' assistance in their research. This seems to indicate that, if research is to thrive in a group setting, support is needed, either from within the practice or from an outside academic source.

The accompanying histogram (figure 1) relates difficulties to the size of the group. Although the figures are too small to be anything other than suggestive, research seems, if anything, to be easier to organize in the larger group. Seven of the successful doctors were in groups of six, representing five practices. On the other hand, Collinson's findings (1970 personal communication) indicate that the type of work, research, and so on, undertaken by a practice was much more related to the personalities than to the number in the group. However, as we shall see later, there is more likelihood of task rôles developing in a larger group, than in the rough and tumble of personal interaction occurring in a triad.

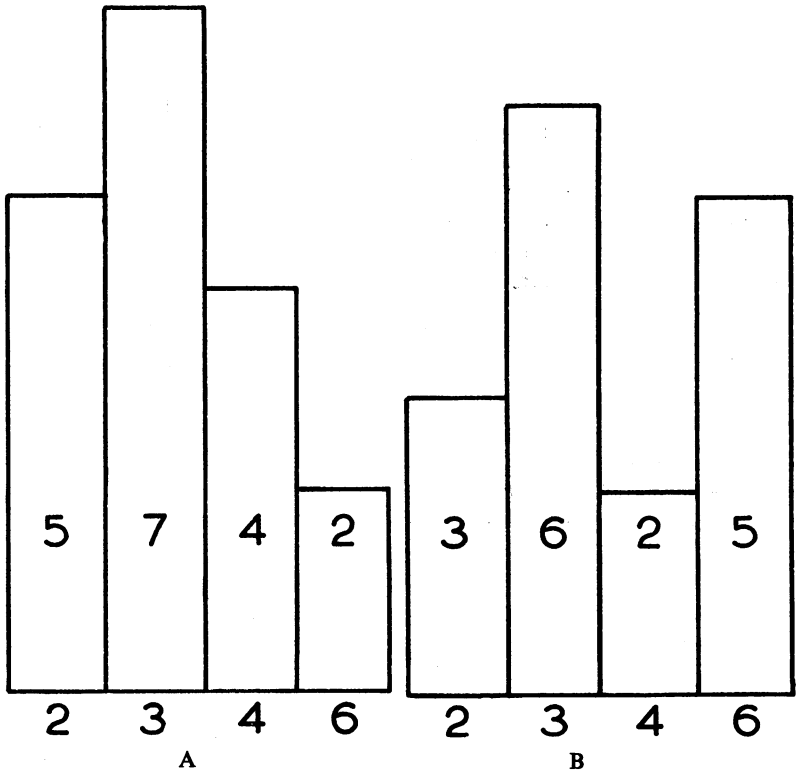

Figure 1

Research difficulties related to size of groups. A—difficulties. B—No difficulties

A further question dealt with the type of studies undertaken, *i.e.* were they studies by the group as a whole, or were they carried out by an individual within the group, or possibly both. When the answers were correlated with the difficulties encountered within the group, the following interesting table emerged.

TABLE I

	Group studies	*Individual studies*	*Both*	*Nil*	*Total*
Research difficulties	0	11	4	2	17*(a)
No research difficulties	1	10	5	0	16
TOTAL	1	21	9	2	33

*(a) two doctors did not reply to this question

There are three interesting items in this table. First, research productivity seems to be unaffected by the presence or absence of personal difficulties. Secondly, in 30 instances (75 per cent) the research was carried out by an individual within the group, and, thirdly, on four occasions a group study was brought to fruition in the face of difficulties. It may not be without significance, as we shall see later, that the four individuals who piloted the work through to completion, have all been members of Council.

It appears, therefore, that the majority of work is still done by individuals, but now within the framework of the group, and that, despite problems, group studies are possible, given the necessary qualities of leadership and perseverance on the part of the initiators of the project.

Since 1948 there has been a movement away from single-handed practice and by 1968 almost 50 per cent of family doctors worked in groups of three or more. Not all doctors are appreciative of the benefits of grouping. As one solo practitioner puts it: 'Research is easy, since I am in control of what I do . . . I have never thought it worth while to sacrifice my independence for a dubious financial gain'. A few others, having tasted the joys of group practice, have opted out. 'Originally I was in a three-man practice and had ideas about clinical and operational research, which I found my colleagues unwilling to share. My solution at that time was to go single-handed . . . I found that I was able to do what I wished to do.' And another comment from an erstwhile senior partner: 'My two former partners, though younger than I and so might be expected to be more keen and forward looking, never showed any interest in research. . . . The last 18 months, since I became single-handed again, have been much more peaceful and free from tension, than anything in the last 20 years.'

Nevertheless, the trend towards larger groupings continues and the rate of change is directly proportional to the size of the group (Royal College of General Practitioners 1970). Due to recent financial inducements, the formation of groups at the moment tends to be on a geographical, rather than a personal, basis. Providing there is no marked antipathy between prospective members of the group, the financial and organizational advantages of grouping are such that neighbouring practices are encouraged to amalgamate.

The members of the new group may have no previous experience of the strains and stresses of belonging to an 'organization', especially one where former competitors are now colleagues. During the early days of the group, members have to discover their respective rôles in the hierarchy, a struggle for status taking place among the dominant individuals (Crombie 1970). Groups of three have certain unique features. For instance, if a single-handed practitioner (C) joins with an existing partnership of two (A and B) to form a group, the relationship of A and B is changed. A and B have previously worked out their dominance relationships and the degree of intimacy that they can tolerate; C and A, and C and B have now to work out the same problem and the result may affect the original relationship of A and B. If A prefers C to B, the A—B relationship will be weakened. Two dominant personalities may exclude the weakest, or if there is one powerful and dominant member, the others may form a coalition in which they combine together against him (Argyle 1967). In larger groups, the amount of personal interaction is diluted, which makes for a more peaceful set-up; also differing types of motivation in the larger group admit of rôle differentiation, *i.e.* specialization (*see* figure 1).

Groups also develop norms of behaviour and anyone who fails to conform is put under great pressure to do so, especially if his deviation is thought to threaten the security, success, or beliefs of the group. Failure to conform may result in rejection. An important exception is found in the group's attitude to the 'idiosyncratics', whose deviation is seen as a possibly new line of action rather than a failure to attain the group standard; this type of constructive deviation is permitted by the group as a means of

finding better solutions to problems. The research worker may well come in such a category.

However, if a research-minded doctor joins a local group, it is important for him to be aware that he has been invited because of the site of his practice and not because of his research interests. If he wishes to be accepted for the latter reason, he will probably have to look further afield. 'I do not really see any answer to this, except to choose your group very carefully'. And again from elsewhere,—'I know of many doctors in our area who have changed practices, or left the region completely, because of difficulties over these problems'—an example of rejection by the group. Before accusing our colleagues of being reactionary, we should perhaps examine our own attitudes. It has been said that: 'the research worker is sometimes a difficult person because he has no great confidence in his opinions, yet he is also sceptical of others' views. This characteristic can be inconvenient in everyday life', (Beveridge 1950). It will be appreciated that to be overtly sceptical of the group's behavioural norms does not exactly make for popularity.

Once the group has settled and formed an identity and a status pattern, the research worker is likely to become restless, and he will look for opportunities of introducing some research activity into the group. The first possibility is to invite the active co-operation of his colleagues in a research exercise in which he acts as recorder. The prime essential, in the opinion of many respondents, is that the research must be tailored to suit one's colleagues, and not vice versa. The corollary to this is that projects must not be too ambitious and that recording must be simple. 'A disease which is difficult to define can be studied by an individual, but group study is almost impossible'. Even so, problems will arise with regard to both the continuity and comparability of recording; 'partners have to be encouraged, bullied and cajoled'. 'If nurses or partners are to make observations, their work has to be constantly supervized or it will be useless'. Those who have had experience of organizing faculty studies are aware of the difficulties of maintaining enthusiasm for projects; the chief problem is one of communication, and this should not be insuperable within the confines of the group. On the other hand, most faculty investigations are carried out by volunteers, who have an initial interest, at least, in the problem. In the type of group situation under consideration, we are dealing with 'pressed men', whose interest and enthusiasm has first to be aroused. A number of respondents have stressed the importance of some incentive or reward for the work involved. An operational study, for instance, might indicate ways of achieving more leisure time; even setting up an age-sex register will facilitate an enquiry into the immune state of the pre-school population, with the possible consequence of financial benefit. In other words, the project must be seen to have some relevance to the group's problems. One doctor, with much experience in research, has suggested that, once the initial inertia has been overcome and a formerly indifferent colleague has become actively involved in a project, he may well get bitten by the research bug; when this happens, the work, and its publication, becomes its own reward.

The ability to organize a group investigation depends not only on the importance of the investigation to the group's problems, but also on the willingness of the research member of the group to occupy a dominant rôle. (If he does not have an assertive personality, he may find this difficult.) If he does succeed in persuading the group to accept him and his proposals, he is faced then with the task of planning the project. As is well known by those with experience in this field, the future of the enterprise is largely determined by the skill exercised at this stage. 'If a word means one thing to some members of a group and something different to others, then the sum of their observations will mean nothing to anyone'.

The subject and aims of the research must be clearly stated. If a sample is to be studied, the sampling procedure must be beyond reproach. Any diagnostic classification used must be simple and unambiguous. Diagnostic criteria should be valid, discriminatory and reliable (Fletcher and Oldham 1959). For instance, if the subject of the

investigation is hypertension, it must first be determined what levels of systolic and diastolic pressure constitute a valid diagnostic criterion which will differentiate between hypertensives and normal subjects. The reliability of these values depends, not only on the accuracy of the sphygmomanometer, but also on the conditions under which the test is performed (which have to be standardized), and the ability of the observer to interpret and record what is being measured. The effects of observer variation and error are clearly evident in the results of general practitioner collaborative studies, even where standardized techniques are employed (Fairbairn *et al.* 1959).

To the uninitiated, as we assume the other members of the group to be, the tedious formulation of aims and terms is likely to dampen enthusiasm but, if there is to be any future for research in the group, this preliminary planning must be considered part of an educative process, as well as essential to the investigation. It is for this reason that we stressed earlier the need for the researcher to assume a dominant rôle, for it is at the planning stage that the qualities of leadership and persuasion will be most necessary. This may go some way to explaining the success of the four individuals mentioned in table I (who, by their membership of Council, have proved their ability to occupy a position of leadership).

Inability or unwillingness to adopt a dominant rôle means that prospects of research by the group are minimal. It is then up to the individual to initiate his own studies. It must be emphasized that this is not a confession of failure. It is quite clear to one senior member of College council 'that the best research brought to a conclusion in a reasonable length of time is that which is carried out by heavily motivated individuals rather than by groups'. The fact that the research is conducted by one doctor does not prevent him deriving benefit from the group situation. 'I carry out individual studies within the group and with the co-operation of my two partners, all patients for his purpose being channelled to me'. And from another group: '. . . patients were referred to me by all the other partners. Other partners have done individual research, either by dealing only with their own cases, or by asking for all cases of a particular type to be referred to them. Each project has been the responsibility of one doctor, but when participation of other doctors has been required (*e.g.* by recording cases of the subject in question), this has not proved difficult'.

Many respondents feel that operational research and most morbidity studies have to be excluded by the individual working within the group. 'Where you are a member of a group or partnership of which the other partners are not enthusiastic about research, you must concentrate on clinical investigations which do not depend for their accuracy on a knowledge of the total population at risk'. Despite the availability of material, there has been a dearth of clinical research from general practice. This type of research can be subdivided into the pure 'laboratory' type of investigation, where a relatively small number of cases are studied in depth, and applied research which includes the clinical trial and also the neglected field of the natural history of disease.

Pure clinical studies are not easily absorbed into routine practice work; material is haphazard in its presentation and opportunities have to be seized as they arise. The rhythm of the consulting session is disrupted, and the need to carry out an enquiry in depth can upset an appointments system. Arrangements have to be made for obtaining and transmitting pathological specimens, and follow-up will probably entail more attention than is clinically strictly necessary. A study of Watson's (1967) article on *Mycoplasma pneumoniae* will convey some idea of the amount of time that such an investigation can consume. Even a simple operational survey caused one contributor to complain that 'having a large practice and family, my article was entirely the result of burning the midnight oil. I very much doubt if I have the energy or enthusiasm for another'. Pure clinical research demands not only energy and enthusiasm, but also that precious commodity, time. ' The investigator may be made to dwell in a garret, he may be forced

to live on crusts and wear dilapidated clothes, he may be deprived of social recognition, but if he has time, he can steadfastly devote himself to research. Take away his free time and he is utterly destroyed as a contributor to knowledge' (Cannon 1945).

However, it is in the domain of applied clinical research that I think the future of general-practitioner research lies, and in particular, in the longitudinal study of disease. Our records at present contain a wealth of information about our patients which is unobtainable from any other source; unfortunately this information is, for the most part, irretrievable. The tools required for studying the natural history of disease are an age-sex register, a disease index and a structured, and as far as possible objective, method of recording data. Such a system, based on the ideas of Lawrence Weed, is in use in the Department of General Practice at Manchester and seems eminently suitable for routine recording (Byrne 1970). If the method can be adopted by the other members of the group, a degree of uniformity of recording will be achieved, and the records of the whole group will become valuable repositories of meaningful clinical information. With a minimum of cooperation from the doctors, the compilation of the disease index can be left to the secretary, and the groundwork for some useful research will have been laid almost without effort.

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Collecting casualties in London, 1886

"An interesting event took place at St Bartholomew's Hospital last week. An accident had occurred in some neighbouring works, and the people sent to the nearest hospital (St Bartholomew's) for help and a stretcher. They were given the stereotyped answer that there was no such means of conveyance there, and that they could attend to the case only if it were brought to them. A few students, members of the Volunteer Medical Staff Corps, heard the remark, and under the direction of Mr Hanley, Staff Sergeant in the Corps, proceeded with a VMSC stretcher to the works, found the injured man, attended to him, and carried him back to the hospital. This is the first time in the many hundred years of its existance that the hospital has sent out assistance from its walls. May we hope that it will form a fruitful precedent! At Charing Cross Hospital an ambulance litter is in readiness, a notice board is placed in the populous localities near the hospital. The litter is frequently called into use, and has done much good service already but with the exception of this hospital, no other has yet attempted anything of this kind. Whose duty is it to organize street relief?

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