Facilitating a trainee collaborative study

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SUMMARY. The Essex faculty of the Royal College of General Practitioners organized a collaborative study for trainees in Essex between October 1986 and July 1988. Of the trainees in post during the study period, 28 (46%) participated. The study was performed not only as an educational exercise for trainees in their practice year but also to assess the feasibility of collaborative study as a research tool in general practice. The authors feel that facilitating collaborative research is a faculty activity worthy of consideration.

Introduction

In 1986 the Essex faculty of the Royal College of General Practitioners (RCGP) decided to coordinate a two year study of measles in order to explore the feasibility of collaborative research by general practitioner trainees. It was thought that isolated trainees may well feel reticent about starting a project or research programme on their own and that this may be compounded by the fear that the limited time available in the trainee year for such a project could lead to inferior results and consequent dissatisfaction.

Whereas well motivated trainees may initiate their own research and produce good results, the less enthusiastic may need to be encouraged to undertake similar work by being guided and assisted through a structured project.

The Essex faculty board considered that a collaborative study in the general practice year might not only generate a corporate feeling among the trainees but also produce more useful results owing to the large volume of data collected.

The facilitators of the study set out to discover the value of such a venture by analysing the trainees’ responses and results. This paper describes the planning of the study, the standard of participation of the trainees and the impressions and reactions of the trainees and their trainers to the concept of collaboration.

Setting up the study

Aims

The primary aim of the study was to observe the activity of collaboration between trainees and evaluate this as a research tool. The subject for the trainees’ study had to be chosen carefully and the problem of measles and its prevention in the United Kingdom appeared to be the most suitable and topical vehicle. Measles is a preventable condition which is nonetheless still common in the UK and has many relatively easily defined clinical features which allow comparison of results.

It was felt that participation in this study would increase the knowledge of trainees of the natural history and complications of measles and, by so doing, increase their desire to achieve high immunization rates in their future practice. The study would help to introduce the trainees to the concept and process of audit and to the RCGP at a local level.

The study was divided into three sections and the aims of each were as follows:

In collaboration with other trainees, the trainee will:

1. (a) Observe a disease in detail, recording its clinical presentation, course and resolution.
   (b) Note complications and management of the disease.

2. (a) Consider methods of preventing the disease.
   (b) Investigate the reasons why prevention of the disease is not absolute.

3. (a) Investigate parental attitudes to prevention of the disease.

Recruitment

All training practices in Essex were identified and the designated trainer contacted. The first contact, in September 1986, was by way of a posted package which contained a letter to the trainer explaining the purpose of the study and a further letter to the trainee inviting him or her to participate in the study should the trainer be in agreement.

A bound booklet was included with the two introductory letters, explaining in detail the methods to be followed in the three sections of the study. The third section of the study required a series of patient questionnaires to be completed and these were included in the pack.

A three page information sheet was also included, stressing the size and nature of the problem of preventable measles in the UK. The contraindications to measles immunization were carefully explained and the trainee was exhorted to follow the national guidelines issued by the Joint Committee on Vaccination and Immunization. Included in the information sheet was an explanation of the risks and benefits of measles immunization and a simple chart comparing the consequences of contracting measles with those of exposure to the measles vaccine.

The indications for the use of human immunoglobulin at the time of the study were clarified, and the trainee was requested not to add to the list of myths about immunization that were commonly circulated among worried mothers. The package, therefore, not only introduced the participating trainees to the study, but also prepared most of the groundwork and standardized their approach.

Participants

There were between 35 to 40 training practices in Essex, giving a capacity for 77 trainees over the two year period. In 16 cases there was no trainee at the time of the study or ‘overlapping’ trainees, thus 61 trainees were eligible to take part. From the 31 trainees in post in 1987, 17 participated and in 1988 11 out of a possible 30 trainees took part. This gave an overall response rate of 46% which the facilitators considered encouraging.

Quality of participation

Throughout the study, the trainees were kept unaware that the quality of their participation was being analysed in order that the usefulness or otherwise of collaboration could be explored without bias.

Section 1

In the first section of the study the trainees observed and recorded in detail the clinical course and complications of up to six
cases of measles, noting their findings on a standardized proforma.

The number of cases of measles studied by each trainee varied between nil and six (mean 2.9 cases). Each case required 20 observations to be made, and by scoring these an attempt could be made to assess the care taken in completing the observation forms. For example, if the child's age was given in years, leaving out the months, this would only score one point instead of two. The range of numbers of observations for each case examined was 11–20 (mean 18.5). Eighty two per cent of forms had 17 or more observations recorded and were classified as high quality material; 10% had 15 to 17 observations and were classified as moderate quality; 9% had less than 15 observations and were regarded as of poor quality. As the form was designed so that positive observations were recorded, even poorly completed forms contributed useful information to the study results.

It was anticipated that only the more motivated trainees would produce high quality material and it was therefore gratifying to find that 23 of the 28 participants produced material of this standard.

Section 2

In this second part of the study the trainees studied the mechanism of the call–recall system in use in their practice. Trainees were also asked to calculate their practice immunization rate for measles by taking a random sample of 100 records of children in the two to five years age range. The use of an age–sex register, if available, was encouraged. Finally, trainees were asked for their observations on the practical difficulties involved in ensuring good immunization rates and for their suggestions for improving immunization rates.

All the participants answered all the five simple questions about practice organization, albeit with a varying degree of detail. Twenty three of the participants (82%) calculated the immunization rate for their practice based on the audit of 100 records.

A short paragraph describing the current immunization programme of their training practice and suggestions for improvement of that method was produced by 16 trainees (57%). Generally, those trainees who appended clear and informative comments were the same individuals who had given a clear and concise description of the call–recall system, and displayed an understanding of the concept. It was considered disappointing, however, that around 40% of the trainees interested enough to take part in the study could not demonstrate a thorough understanding of how an immunization programme should function.

Section 3

In the third part of the study the trainees assessed the reasons parents had for giving or refusing immunization for their children. During opportunistic contacts the parents completed either questionnaire A (if their child had not been vaccinated) or questionnaire B (if their child had been vaccinated). Trainees were asked to return up to 25 of each questionnaire.

In total the 28 trainees returned 127 questionnaires from parents whose children had not had measles vaccine (range 0–12, mean 4.5, median 4) and 353 questionnaires from parents whose children had had vaccinations (range 2–24, mean 12.6, median 12). The different number of questionnaires completed reflected the smaller number of children studied who had not received measles vaccine.

Impressions of trainees and trainers

Participating trainees were asked for their comments on the study in terms of its content, what they had learnt and their opinions on the concept of collaborative projects. Their impressions can be summarized as follows:

- The project was a good learning experience.
- The concept of collaboration was appreciated.
- The project provided an opportunity for discussion about measles and its prevention with parents.
- The project provided an opportunity to explore the methodology of prevention in general practice and question inadequate procedures.

It was perhaps not surprising that all the comments were encouraging because only those who were willing to participate eventually contributed data. Nonetheless, the response from the trainees has encouraged the facilitators of the project to consider further collaborative studies in the future.

Although the opinions of the trainees were not directly sought, they made a number of unsolicited encouraging comments. They particularly appreciated the structured nature of the study.

Trainees were asked to give a reason why each eligible trainee did not participate; there was no response in 10 cases. The remaining 23 responses were as follows:

- Trainee doing another project (9).
- Trainee not interested in the study (5).
- Misunderstood instructions (4).
- Mislaid literature (3).
- Trainer not interested in the study (2).

Presentation of results

At the end of each year the collated results for the year were presented to the participating trainees at special meetings and a printed summary of results was given to each participant. It was felt that the analysis of the data and its presentation was much appreciated by the trainees. The opportunity was taken to reinforce the concepts of enquiry and audit in a general practitioner's work.

Discussion

The completion of a research project within the protected time of the general practice training year is to be encouraged. Many trainees have no difficulty in identifying a subject that they wish to study, but there remain some who are new to the concepts of enquiry, data collection and audit. The concept of trainees learning and handling information themselves has been discussed elsewhere, but the idea of collaborative study appears not to have been explored.

Our study has demonstrated that a significant proportion of a county's trainees are willing and able to produce work of a high standard in such a venture and the fact that trainees did not receive individual recognition for their work did not appear to dampen their enthusiasm.

Concern has been expressed in the past that trainees may not have been exposed to audit and project work in their training year. Collaborative study seems to go some way to addressing this problem and may be an approach which other faculties could consider using for research in general practice.

References


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