

Giving feedback to questionnaire responders — an essential task?

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SUMMARY

Giving a quick feedback to responders of questionnaires, indicating how responders' views are similar to or different from the views expressed by their peers, could be considered good practice. It is relatively easy to produce feedback by using the research database and mail-merging a document with conventional word-processing software. Producing this type of feedback is likely to increase the respondent's involvement in a project and may even improve the quality of response.

Keywords: questionnaire; feedback.

Introduction

QUESTIONNAIRES are an irritation to most clinicians. They are received almost every week from colleagues, students and from many other organizations and individuals. Doctors react to them in different ways, some fill them in to the best of their ability, some complete them in a cursory manner, and some simply 'bin' them. General practitioners (GPs) are often considered poor responders to questionnaires,^{1,2,3} possible reasons being their increased workload since 1990, their reputed cynicism about the impact of their views on service planning and provision, and that they are given insufficient knowledge before completing the questionnaire and insufficient feedback afterwards.⁴

Questionnaires are sent to GPs for many purposes; sometimes to determine views on current medical practice, sometimes to determine how doctors would manage certain clinical states, and often to determine which pharmaceutical preparations are prescribed. Although some researchers send a reprint of articles generated from research, most doctors never hear about the results of such surveys unless they happen to read about them or see an abstract in a free medical newspaper. This lack of feedback could be considered insulting to those who spend time filling in questionnaires.

Proposals for feedback

Over the past two years I have told doctors who have received questionnaires from me that they would be given feedback within about a month of their answers being superimposed on the collective answers of other respondents. This has been done by using a database into which the results of questionnaires are entered to create a personalized mail-merged document to all respondents listing their response against the results of the rest. Respondents are given the chance to reflect on their stated view and can determine whether they really support it, or whether the observation that a high proportion of their colleagues state a different opinion is a good reason for modifying their original view.

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Simple mail-merged response letter

The simplest form of feedback is a personalized letter that includes the overall results of the survey against which the respondent's opinion is automatically printed, i.e. that he or she agreed (or disagreed) with the statement, or would (or would not) do the test described. These statements are generated from the database held on the researcher's personal computer using conventional word-processing software. One study gave feedback to local GPs on their views about how to manage asthma in a given scenario (Box1). Doctors were asked what further questions they would ask, what further examination and investigations they would carry out, and what treatment and possible referral they

A 10-year-old asthmatic boy who has been maintained on regular inhalations of beclomethasone (100 micrograms twice daily) and occasional salbutamol is brought to see you because his asthmatic state has dramatically worsened. His father states that it started with a heavy cold two days ago and a slight fever. He has a peak flow rate of 160 and is coughing a lot. On examination he has a respiratory rate of 40/minute, some subcostal recession, and is using accessory respiratory muscles. He is afebrile, but clearly having difficulty in speaking because of his dyspnoea.

BOX 1. Clinical scenario.

would advise.

The feedback letter was worded as follows: 'A few doctors were concerned that this child had developed an infection, with 18% wanting to know whether the boy was coughing up purulent sputum (*you would not*) and 25% who might treat him with antibiotics as well as other medication (*you would not*). The small number of doctors doing this indicates the awareness of the limited value of this intervention by the majority of doctors.'

Developing and distributing a mail-merged document using information contained in the research database takes about two days of secretarial and researcher time. Costs depend on the size of the personalized feedback letter and the number of respondents.

Mixed mail-merge and charted response

The second study, which examined the views of GPs on the appropriate management of hypertension,⁵ was also able to identify individual doctors' views. These were superimposed on a chart, with arrows indicating which investigations would be chosen by the doctor concerned when examining a person with hypertension.

The feedback letter that was sent to GPs to show how their response related to the findings of the survey as a whole includes the following:

The last question in this section related to a 70-year-old woman with a blood pressure of 180/100 on many occasions, who complains of frontal headaches and in whom there were no signs of target organ damage. She has no family history of cardiovascular disease and doesn't smoke. You were asked whether you would suggest hypotensive drug therapy. Three-quarters (75.3%) of Avon's GPs who replied, said that they would do so. You answered that you would do so.

Treating patients of 70 years or more who have mild hypertension has been shown in many trials to prevent between one cardiovascular event per year, per 35 treated patients, and one for every 90 treated patients (see *BMJ* 1993; **307**: 1541). If you do not treat such people you might like to reflect on these figures.

The second section of the questionnaire related to investigations. Most of you agreed that patients with hypertension must have information relating to their family history and their habits recorded in the medical records, but views on the investigations that ought to be performed on a 40-year-old male patient with a blood pressure of about 180/110, and in whom no abnormality was detected on examination, varied widely (see Figure 1 — your choices indicated by arrows at the right hand side.)

(Other tests included liver function tests, body mass index, ambulatory blood pressure monitoring and thyroid function tests.) I wonder why there is such variation — do ‘good’ doctors use more or fewer investigations? You will note that less than half would investigate lipid levels, yet hypertension is one of the risk factors for cardiovascular disease — why not find out whether the patient has this risk factor?

Reaction to the feedback

The reaction from the doctors on getting a feedback letter have not always been positive.

One doctor stated:

I am irritated by your letter with regard to my response to the Asthma questionnaire. I completed this quickly whilst doing repeat prescriptions and giving patients telephone advice. This response is biased by pressure of work and is not accurate as to our everyday practice. I did not realise it would be treated as a mini examination...and feel that some of the percentages reflect what people feel they should be writing rather than what is occurring in their usual general practice.

However, another in the same practice stated:

I found it fascinating reading...I was particularly interested in the case 2 child and the fact that only 25% would treat him with antibiotics.

A further doctor stated that:

I suppose it is possible (with apologies) that I filled in the questionnaire a bit quickly, possibly preoccupied with something else. My failure to review any of the patients is NOT what happens in our practice...it makes me wonder about the quality of data recorded in questionnaires.

The great majority of reactions were positive and clearly indicate the respondents’ increased involvement in the project. Even the negative comments must mean that the respondents are questioning their attitude towards the completion of questionnaires: if a questionnaire is completed again, it is likely to be done a little more seriously. This educational spin-off of a research project is a bonus, especially as nowadays many questionnaire results contribute to guideline development. For guidelines to be effective, end-users must be involved in their development. This method may be a useful way of achieving this.

The use these feedback letters have within a practice remains conjectural: some partners may show them to others, some will treat them confidentially. Of the practices within Avon that received the questionnaires in the two studies, at least one doctor in most of the group practices returned a questionnaire and therefore there was at least one feedback letter within the practice (Table 1). However, many of the single-handed practices missed the opportunity for such feedback.

Discussion

This method of providing early feedback of the results of questionnaire findings has become feasible because of the recent development of sophisticated and readily available computer support. The validity of such feedback and the value to the respondents needs further research, but some indication of its potential value can be seen in studies using more traditional feedback methods.

Feedback of questionnaire results to respondents has been used infrequently in other areas of research. In a study of sec-

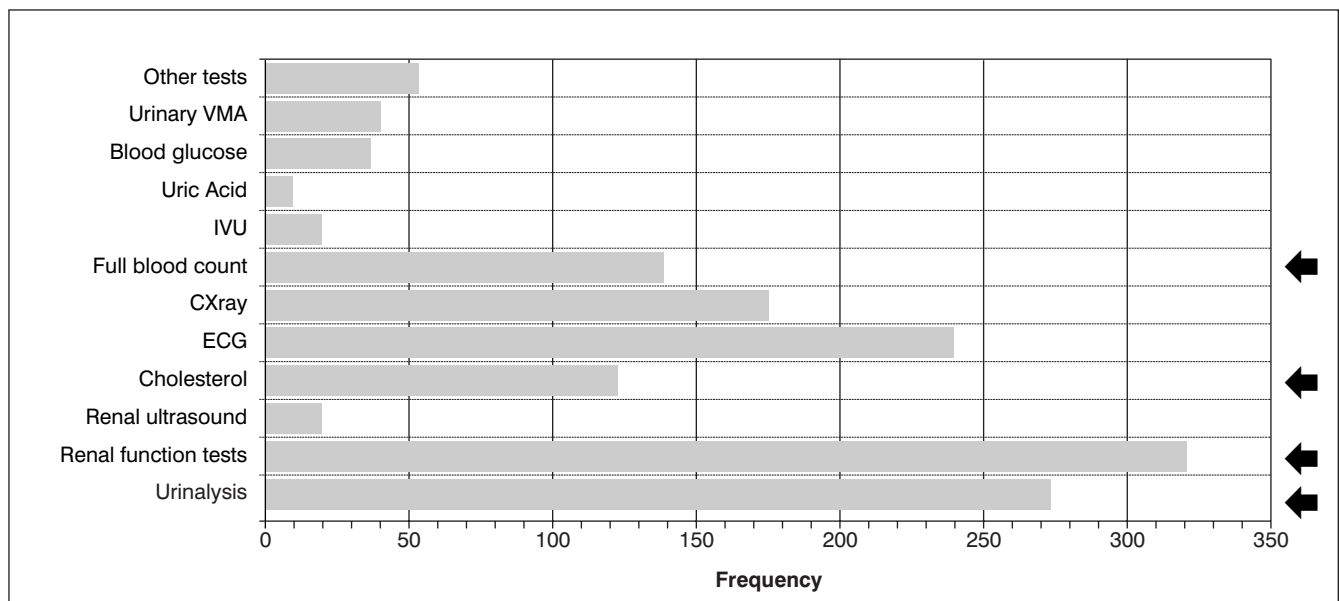


Figure 1. Investigations for hypertension.

Table 1. Numbers of practices where no doctor replied and where the practice therefore did not receive feedback.

Number of partners in each practice	1995 BP study: Number of practices	1995 BP study: Number not receiving feedback (%)	1996 Asthma study: Number of practices	1996 Asthma study: Number not receiving feedback (%)
9	1	0	1	0
8	0	0	1	0
7	5	0	8	0
6	14	0	15	1(7)
5	24	0	25	2(8)
4	21	1(5)	16	3(19)
3	23	1(4)	24	5(21)
2	20	3(15)	15	9(60)
1	16	11(69)	19	14(74)
Total	124	16(13)	124	34(27)

BP = blood pressure.

ondary school students in the United States, it was found that offering feedback on questionnaire results had a significant positive effect on response rate, but the magnitude of this effect was slightly less than the increase in response rate resulting from a shorter questionnaire, and considerably less than a follow-up contact with non-respondents.⁶ A later study, where feedback was offered to participants in a health survey in Finland, reported that 'many of the women receiving the feedback were delighted' and commented that feedback influences the way the relationship can be formed between participants and researchers.⁷ Developing such links between respondents and researchers can only help to improve response rates to questionnaires and, in the area of general practice research, can build on other initiatives such as the establishment of research networks.⁸

The effect of feedback on behaviour change in physicians has often been used as a form of continuing medical education (CME). In 1992, a review of 50 randomized controlled trials looking for evidence of the effectiveness of CME found that feedback often effected a positive performance change, such as improving drug prescribing in primary care,^{9,10} but this did not always occur, and when it did the changes were often small.¹¹

There is, therefore, some evidence that promising feedback to respondents of questionnaires is likely to improve the response rates, and that such feedback may be effective in altering the behaviour of the respondents. Is the effort worthwhile? I believe it is. First, it will usually improve the relationship between researchers and the GPs at the 'coalface'.¹² Secondly, it may improve the quality of the responses: when the respondents have seen the results of their own hastily and inaccurately completed questionnaires superimposed on the responses of their colleagues, they may resolve to improve the standard of future responses. There is a risk though, that in promising such feedback, social acquiescence bias may be introduced, with respondents answering in the way that they assume the majority will reply, rather than giving their own behaviour or opinion. The quoted responses of two of the GPs who received feedback are certainly disturbing and indicate how important it is to improve the relationship between researchers and the recipients of their questionnaires so that responses are made appropriately. Finally, I believe that it is only courteous to give feedback to those who spend time helping researchers with their job. We have a long way to go before we achieve the apparently satisfactory situation that exists between researchers and GPs in the Netherlands.¹³

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