## **ORIGINAL ARTICLE**

## Research in general practice: Why the barriers? A study of doctors' and patients' perceptions

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#### Abstract

*Aim*: To explore patients' and general practitioners' (GPs) attitudes to participation in research in general practice; to identify barriers to participation; to explore GPs and patients views about how research participation affects the doctor-patient relationship.

*Methods*: Patients and GPs who had participated in a trial examining the effectiveness of a psychological treatment in general practice participated in qualitative interviews. Twenty-eight interviews were conducted. The participants included: 14 GPs and nine patients who participated in the original trial, and were either active or passive participants or withdrew from the original study; three patients with depression and two GPs who did not participate in the trial but had similar profiles to those who entered the trial.

**Results:** Generally informants held a positive view of research in general practice. Concerns raised by the GPs as barriers to participation in research included: lack of time; financial remuneration; lack of training in research methods and conduct of research in general practice; and aspects of research protocols. Issues influencing patient participation included privacy, confidentiality, and the nature of the disease under study. Overall participation in research had a positive impact on the doctor–patient relationship.

**Conclusions:** Research in general practice should be promoted. Possible solutions that were identified as barriers to GP participation included: the use of research nurses and the inclusion of research skills training. Patient barriers should also be addressed.

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Key words: attitudes, general practice, mental health, research.

### Introduction

Research is not commonly undertaken in general practice. In order to generate more research in general practice the Australian Federal Government invested over \$13 million, between 1990 and March 2000, into general practice research through the General Practice

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Accepted for publication 25 October 2002.

Evaluation Program (GPEP).<sup>1</sup> This program facilitated the 'evolution of research within Australian general practice in two distinct areas: clinical issues commonly seen in general practice . . . and framework and organizational issues . . .'<sup>2</sup> Over this time approximately 250 projects were funded.<sup>3</sup> Of these 13% were intervention studies and only 8% were randomized trials.<sup>4</sup> However, this injection of funds has not stimulated the production of publications in peer reviewed journals, which measures output of research projects in other medical disciplines.<sup>5</sup>

The GPEP has recently been replaced with the Primary Health Care Research, Evaluation and Development (PHC-RED) program, a \$50 million 4–5 year

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national strategy. The aim of this initiative is to foster a research culture in general practice by promoting research, development and evaluation to ensure high quality patient care.<sup>6</sup> However, unless this initiative addresses some of the concerns raised by GPs this aim will not be achieved.

Lack of research leadership, time, skills, knowledge, administrative assistance, and motivation are frequently cited in the published reports as barriers limiting the involvement of clinicians<sup>7</sup> and GPs in research.<sup>8–10</sup> Another barrier is the level of personal interest in the topic.<sup>7,11,12</sup>

Several initiatives have been tried in an attempt to address these barriers. The use of medical peers has appeared to promote doctor participation in research.<sup>13</sup> Simplified protocols that consider the time constraints in general practice, the use of research assistants for data collection and a limited number of planning meetings is also thought to help.<sup>14</sup> One randomized comparison study showed that survey response rates were incrementally related to levels of financial payment.<sup>15</sup>

Barriers to conducting research in general practice are not restricted to those impacting on the GP. Hunt *et al.* found that unease with the process of randomization was a barrier to patient recruitment.<sup>16</sup> The authors noted that unless clinicians adopt the role of the scientist-practitioner, it is unlikely that they will feel comfortable using conventional research protocols. This approach has not been widely adopted by GPs.

Lack of research in general practice is problematic. Research conducted in the tertiary sector is criticized as not being applicable to general practice as the patient populations differ. In the field of mental health, this is particularly an issue, as most patients with mental health problems receive treatment from a GP and not from specialist mental health services.<sup>17</sup> The GPs are increasingly expected to have the knowledge and skills to care for these patients. While there is ample evidence about the efficacy of pharmacological and psychological therapies for a variety of mental health problems,<sup>18</sup> few studies demonstrating efficacy or effectiveness have been done in the general practice setting.

The present paper aims to explore patients' and GPs' attitudes to participation in research in general practice; to identify barriers to participation; and to explore perceptions of the effect participation might have on the doctor-patient relationship.

### Method

A sample of patients and GPs who had previously participated in a study to evaluate the effectiveness of a psychological therapy in general practice participated in a qualitative study based on in-depth interviews.<sup>19-21</sup>

The previous study was a randomized controlled trial of a drug (venlafaxine) and the usual treatment versus the drug and a new psychological therapy program – the Focused Education and Psychotherapy Program (FEPP).<sup>21</sup> For the study, 92 GPs were enrolled, but only 13 of these recruited patients. In total 32 patients participated in the trial.

## **Participants**

Twenty-eight in-depth interviews were conducted with 14 GPs and nine patients who participated in the original trial, either in the intervention or control group. Three patients with depression, who did not participate in the trial but had similar illness and demographic profiles to those who entered the trial, and two GPs, who were not in the study, were also interviewed. The 14 GPs and nine patients who were in the original trial included 'active' (i.e., those who enrolled in the trial and participated in data collection) or 'passive' (i.e., those who enrolled in the trial but did not pursue data collection activities) participants. The purpose of dividing the participants into several groups was to ensure a cross section of patient views was explored.

### Interviews

Semistructured interviews were used to explore participants' opinions about scientific research being undertaken in general practice; issues influencing their willingness to participate in research and the effect of research participation on the doctor-patient relationship. All interviews were tape recorded and fully transcribed. The interviews with patients were conducted in the work place or the home of the informants. None of the informants requested or were given any reimbursement for their participation in the present study.

## Data analysis

Thematic analysis of the data was conducted over four stages (by authors AC and M-TD).<sup>19</sup> The first stage involved a vertical reading of each interview to identify the main emerging themes. The second stage involved the creation of two Coding Manuals, one for GPs and one for patients, based on the emerging themes. The Manuals consist of a list of codes to be applied horizontally to all the interviews. The third stage consisted of coding and double coding of all the interviews to ensure accuracy and reliability. The fourth stage involved grouping the information for each code under thematic headings.

#### Table 1 Attitudes towards research in general practice

#### **Patient attitudes**

I think the more research that is done the better. It does not matter how many rats you've tried out, you have still got to get out, try it on people ultimately. I do think that's a good idea. I think it's important for doctors to understand how patients feel and understand what's happening for patients.

#### **GP** attitudes

Hospital based medicine is only the tip of the iceberg of health care in Australia. Trials need to be done where people are living and behaving and working and that's the community.

I think it is very important. I think a lot of the most useful research has come out of general practice lately. It is not always possible to do the research yourself but someone needs to be doing it.

### Results

#### 1. Attitudes to research in general practice

Informants were asked their opinion on scientific research being undertaken in general practice. Despite patients being derived from several different groups they all generally held a positive view of research in general practice and identified research in general practice as an important element in a doctor's training. They saw research not just as a way of discovering or testing new things, but also as a way to improve the GP's skills. Patients also recognized an advantage in research conducted in general practice, compared to research in hospital settings, which they described as research in a 'lab' (artificial) situation.

Patient and GP quotations about their attitudes to research in general practice are found in Table 1.

## 2. Barriers to participation in research in general practice

#### **GP** perspectives

Although the GPs expressed positive opinions about research in general practice, they raised a number of practical difficulties (Table 2). The time involved in research was viewed as the most problematic area. Lack of financial remuneration and training in research methodology were identified as other barriers to participation in research.

Research protocols that require GPs to digest a large quantity of information were identified as a 'daunting prospect' in which a GP may lack confidence and time.

Finding sufficient patients who met the patient inclusion criteria was raised as an issue for some GPs.

**Table 2** Barriers to participation in research ingeneral practice

#### GP

The pressure in terms of your earning power, research does not pay.

We are not expected or trained to do research in general practice – apart from audits which are now becoming quite common.

I think you felt threatened when you looked at the whole program in what you had to actually do and maybe didn't sell it correctly to the patients because you didn't feel adequate to deal with it.

Sometimes they [GPs] see a very skewed population and they just never get enough patients.

This whole issue of being paid to recruit patients, that creates something . . . what's your best interests, what are you trying to do? I think that is a difficult issue. I think it is open to abuse.

I don't like to impose it on patients. It [research] is asking too much of them, am I treating them like experimental people, I'm not giving them the quality that they should be having. I think some of them [patients] do not like being involved in experiments and stuff.

Some patients actually love it because they feel you're taking an extra interest in them. and they also feel that you are developing your skills.

#### Patient

Some people may believe that there is something more severe happening to them which they are not ready to face

Depressed people are often very difficult to approach, to make a decision to go into a program because of their depression itself.

One of the main concerns given by GPs was the inclusion/exclusion criteria; for example, concerns about patients being in the control arm and the implications for their treatment. One GP was concerned about research involving payment to the medical practitioner to recruit patients, such as in a drug study. Another two GPs raised concerns about the imposition research placed on their patients. These included the formality of signing the consent form.

One GP felt that the other GPs (who did not recruit patients) might not have explained the process clearly enough to the patients and this may have affected the patients' interest in the study. Another felt that patients may be concerned about increased billing, as research often necessitates seeing the doctor more often.

Other GPs felt that patients may refuse to be involved in the study because of the length of the trial, because 'patients want quick results' and patients may also have concerns about the GP's skills in psychotherapeutic interventions (specifically of relevance to participants in the present study).

#### **Patient perspectives**

Patients identified several issues influencing their willingness to participate in research. They mentioned that people may be suspicious about the usefulness of participating in research and uncertain about how the information collected would be used. This suspicion may be accentuated when people are asked to participate in research that involves taking medication. Other patients raised privacy issues and the need to trust the doctor to be able to disclose personal issues.

Some patients felt that people are willing to participate in research because they receive more attention from their treating doctor.

The type of research conducted was raised as a determining factor in patients' willingness to participate. For example the nature of the depressive illness (the present study) may also prevent patients from wanting to participate in research. Patients may feel less comfortable about involving themselves in research regarding mental illness as opposed to research where less personal issues will be raised, such as blood pressure studies. Patients also said that the nature of the illness meant that they would not have the motivation to participate in research.

## 3. Effects of research participation on the doctor-patient relationship

The informants were asked about the effect of research participation on the doctor–patient relationship. Table 3 summarizes quotations relating to this theme.

#### **GP** perspectives

Generally the GPs interviewed felt positive about the effects of being involved in research on the doctorpatient relationship. One potential benefit of involvement in research, that GPs identified, was that patients might, as part of being involved in research, feel more able to tell the GP that they are dissatisfied with aspects of their treatment. One GP who was unable to recruit patients commented: 'I think it [the doctor-patient relationship] certainly would have improved because you're taking a different kind of interest in them as well, not just a physical interest.' By contrast one GP suggested that patients might be made to feel guilty if they did not participate, thus having a negative effect on the doctor-patient relationship.

#### **Patient perspectives**

Most patients said that research had a positive effect on the doctor-patient relationship. Comments revealed that they felt they were considered a special **Table 3** Effect of research participation on doctorpatient relationship

#### Patient

I know for myself that it made me feel like he cared more, I suppose, like I was not just another patient coming in.

I think the doctor, if he is really interested in the study, you get a little bit more, you know, time with you and feedback. I was able to be more honest and once you talk about it, you get closer.

I did not find the doctor of any value at all. He did not really know what study I was doing. He would read the papers and then he got it all wrong. He is a really nice doctor and he's very supportive, very kind and very approachable, but I do not think he had a clue what was going on.

#### **General Practitioner**

I think with our practice it has been worthwhile. If they can see that it is going to improve their care, they see the doctors here as being very up to date. So they are quite accepting.

For people who do not mind it is probably enhancing and they respect the doctor for trying to learn more . . . If they are the other type I think it often can damage the relationship.

I got to know him extremely well and he probably got to know my personality quite well. I think we will have a lasting relationship. I think he will continue to see me. It is accelerated the usual process which is a patient would come to see you a few times with their acute issues and then eventually start trusting you more, but that can take several months or years sometimes.

patient. They also felt they received more attention from the GP, which resulted in them feeling that their GP gained a better understanding of their situation. These effects resulted in the patients having increased trust in their GP.

Patients identified two aspects of participation in research that detracted from their communication with their GP. These included a GP being poorly informed about the research objectives and goals and poor organizational skills of the GP.

## Discussion

#### 1. Attitudes to research in general practice

It is surprising, given so little research is conducted in general practice, that both the patients and the GPs interviewed felt that research in general practice was important. All patients, regardless of the group from which they were derived, recognized research as an aspect of GP training and strongly expressed the view that participation in research studies is a new way of increasing GP's knowledge and skills. Interestingly patients did not echo the perception of the GPs that they may feel like a 'lab rat'. The patients were not concerned about the intrusiveness of research, as long as they felt the information was being sensitively handled and they trusted their GP.

## 2. Barriers to participation in research in general practice

The GPs, while recognizing the importance of research conducted in general practice, identified several logistical issues that influenced their ability to participate. The main concerns related to the availability of adequate time to participate in research trials and financial remuneration. This echoes the findings of a survey conducted in the UK by Robinson and Gould exploring GPs attitudes towards research in general practice.<sup>10</sup> The authors found that 61% of respondents wanted protected time and 50% stated money would help them facilitate research. A study conducted in the UK found that financial incentives can result in increased GP participation in research. However, patient attitudes about some of their paid consultation time being used for research should be explored.

Research in general practice, even with the assistance of research nurses or research assistants, is difficult to carry out in the average 13 minute consultation.<sup>22</sup> Therefore, the concerns of the GPs are understandable in the current Australian fee-forservice funded system. However, financial incentives or reimbursement for time spent participating in research alone may not stimulate GP research participation. Furthermore financial incentives are not without controversy.<sup>23–25</sup>

Efforts also need to be devoted to improve the skill of GPs to participate in research. While specialties such as psychiatry have research training as part of the fellowship training program, this is lacking in general practice training programs. Improving the skills of GPs will increase their understanding of the research protocol and their responsibilities. Enhanced confidence should assist the promotion of patient recruitment and explanation of research goals and procedures.

Finding sufficient patients who meet inclusion and exclusion criteria requires several strategies. One strategy is to see large numbers of patients. This is not always practical, especially for GPs in part-time practice. Another strategy is for researchers to target GPs with an interest in the research topic, as they may be more willing to participate and may have a 'suitable' patient population.<sup>12</sup>

Reimbursement barriers may operate at various levels. The pressures exerted from employers or practice partners, who are often the small business owner attempting to balance patient throughput with business viability, is not conducive to developing a research culture in general practice. The two GPs in the present study who encountered employer concerns about the amount of time they spent with one patient during the trial chose to continue participation in the research and saw these patients out of their usual working hours. This is unlikely to be an option for many GPs, either in part-time or full-time practice.

# 3. Effects of research participation on the doctor-patient relationship

Unlike other studies examining factors influencing participation in research in general practice, the present study gathered data about the effect of research on the doctor-patient relationship.

The GPs and patients recognized there were effects on the doctor-patient relationship from participation in research. The patients involved in research felt that the GP was focussing on their situation more carefully and that they had been elevated to the role of a 'special patient'. They described these effects as a distinct benefit. The patients also valued their GP increasing their knowledge through research. However, they were critical of GPs who lacked understanding of the research protocol, which interfered with doctorpatient communication resulting in a negative impact on their relationship.

The GPs agreed that there were positive effects, particularly highlighting the increased understanding of the patient's situation and the increased trust between the patient and GP.

## Conclusion

The GPs and patients had a positive view of research in general practice. Major barriers to conducting research in general practice were centered on the GP's lack of research skills training and on practice (time/reimbursement) issues rather than the patient. This is not surprising as most 'specialist' research is conducted in the public sector, where these issues are of less concern to individual practitioners, rather than in private practice. Research participation seems to have a positive impact as long as the GP understands the protocol and procedures.

Strategies to improve research in general practice include the use of clearly defined protocols that GPs understand. Training should also be provided for those GPs who would be willing to participate if the conditions fostered research. A system of 'reimbursement' should be addressed via government initiatives to foster research in general practice.

## Summary of implications for GPs

- 1 Major barriers to conducting research in general practice were centered on the GP's lack of research skills training and on practice (time/ reimbursement) issues rather than the patient.
- **2** Strategies to improve research in general practice include clear protocols, which GPs understand.

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- **3** Training should also be provided for those GPs who would be willing to participate if the conditions foster research.
- **4** A system of 'reimbursement' should be addressed via government initiatives to foster research in general practice.

#### Acknowledgments

The authors gratefully acknowledge the assistance of the GPs and patients who participated in the present study and Wyeth Pharmaceuticals who provided the funding.

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