

Jane Gunn

MBBS, FRACGP, DRANZCOG, PhD, is Chair, Primary Care Research Unit, Department of General Practice, The University of Melbourne, Victoria. j.gunn@unimelb.

Zoë McCallum

MBBS, FRACP, is Consultant Paediatrician, Royal Children's Hospital, Melbourne, and Senior Lecturer, Department of Paediatrics, The University of Melbourne, Victoria.

Lena Sanci

MBBS, PhD, FRACGP, is Senior Lecturer, Primary Care Research Unit, Department of General Practice, The University of Melbourne, Victoria.

What do GPs get out of participating in research?

Experience of the LEAP trial

Background

Maximising the health of our communities requires a strong foundation of clinical research. Undertaking community based clinical research requires an understanding of what motivates practitioners to participate in research and how they experience the process. It has been suggested that a primary care sector with a strong research culture and evidence base is crucial to getting evidence into practice, yet general practice research has been criticised for ignoring clinical research. This article examines why a group of general practitioners took part in clinical research.

Methods

Participants completed surveys before and after involvement in the Live, Eat and Play (LEAP) study, a randomised controlled trial to reduce childhood overweight.

Results

Thirty-four GPs enrolled in LEAP and completed the baseline survey: 30 delivered the intervention and 29 completed all surveys. Sixtyone percent (17) of the GPs agreed that their expectations of their participation in the project had been met. Twenty-eight of 29 GPs stated they would participate in similar research if asked again. Responses to open ended questions indicated that the most highly valued reason for participating in research was to learn new clinical skills, update knowledge and reflect on practice.

Discussion

General practitioners were driven to participate in research by altruism, the desire to update their knowledge and clinical skills, and the opportunity to reflect on their practice rather than the promise of 'rewards' such as quality assurance and continuing medical education points.

Maximising the health of our communities requires a strong foundation of clinical research. However, community based clinical research is a difficult undertaking. Clinical research has been described as 'a fragmented cottage industry constituted of multiple stakeholders... with no overarching vision', particular problems being noted with lack of ownership of the research around translation of effective interventions into clinical practice.1 Overcoming this 'second translation block'1 is considered essential to the provision of cost effective health care. It has been suggested that a primary care sector with a strong research culture and evidence base is crucial to getting evidence into practice.2

In the United States, the National Institute for Health (NIH) is promoting better integrated networks of academic centres that work on clinical trials, with community based physicians able to recruit appropriate patients.³ The United Kingdom is also fostering the development of networks and partnerships.^{4,5} Australia has noted the need for support of clinical research⁶ and has established the Primary Health Care Research Evaluation and Development Strategy and the National Collaboratives Program. However, there has been no major commitment of funding for networks to increase the amount of practice based clinical research.7

If we are to meet the challenges laid down in these UK, USA and Australian reports, we need to understand what motivates practitioners to participate in clinical research and how they experience the process. This article is particularly interested in clinical trials undertaken in the primary care setting. The study team had the opportunity to collect the views of the general practitioners recruited to take part in a randomised controlled trial testing a behavioural intervention to reduce childhood overweight.8 The study team sought to determine why GPs became involved and the benefits they enjoyed from their involvement in the study.

Bibi Gerner

BA, GDipAppPsych, MPsych, is Project Manager, Centre for Community Child Health, Royal Children's Hospital, Melbourne, Victoria.

Claire Harris

MBBS, MSc, GDipChildDev, FAFPHM, is Director, Centre for Clinical Effectiveness, Monash Institute of Health Services Research, Melbourne, Victoria.

Melissa Wake

MD, GDipEpiBiostats, FRACP, MBChB, is Director, Research & Public Health, Centre for Community Child Health, Royal Children's Hospital, Associate Professor, University of Melbourne, and Research Fellow, Murdoch Childrens Research Institute, Royal Children's Hospital, Victoria.

Methods

Study design and setting

Full details of the LEAP study have been published elsewhere.^{8,9} Briefly, LEAP was a randomised controlled trial involving 163 children aged 5–9 years, conducted in general practices in Melbourne, Victoria. General practitioners were trained to deliver a clinical intervention consisting of lifestyle education, motivational interviewing techniques and solutions focused therapy. The project was approved by the Royal Children's Hospital Ethics in Human Research Committee.

GP recruitment

The sample size required for the study was 160 children.⁸ Five hundred and ninety-eight letters of invitation were sent to members of the Health for Kids Network (a large GP paediatric special interest group spanning five divisions of general practice in the northern suburbs of Melbourne) and one other large division of general practice in southeast Melbourne.

Data collection

Once recruited, GPs were sent a survey that included knowledge and demographic items, and a section on the GP's experience, expectations and motivations for undertaking research. The participants then attended training sessions at which they were presented with information about the 'stages of change' model,¹⁰ provided with brief training in solution focused family therapy¹¹ as an approach to tackling overweight and mild obesity in children aged 5–9 years, and briefed about the research design and their role in the randomised trial. The GPs completed similar written surveys on completion of the training sessions (3–4 weeks after the first survey) and again on completion of the trial 9–12 months later.

Design and content of surveys

Survey items seeking responses from GPs included:

- their participation in research in the past year
- their level of training in formal research methods
- · why they take part in research
- what they value most about research participation
- what they contribute to a research study
- whether their participation changes their understanding of research
- their expectations of participating in the study and whether their expectations were met, and
- whether they would participate in the study again.

Some survey items were presented as open questions, eg. 'What do you hope to get out of this project?' Others were closed questions asking the GPs to choose from predetermined response categories, eg. 'Below are some reasons why GPs may take part in research projects. How valuable

is each of the following to you?' The response categories for this item are shown in *Table 1*.

Data analysis

Responses from open ended questions were entered verbatim into a computer file and the statistical package SPSS for Windows (release 11.5) was used to calculate frequencies for precoded items.

Results

GP participation and characteristics

Of the 598 GPs invited to participate in the study, 53 (8.9%) attended the information evening and 33 (62.3% of attendees and 5.5% of those invited to participate) were recruited to the study. A further eight were recruited via personal networks. Thirty-four GPs enrolled in LEAP and completed the baseline survey, 30 GPs delivered the intervention and 29 completed all surveys. Unless otherwise specified, this article presents data from the 30 GPs who delivered the intervention.

Research experience

Most of the GPs (18 of 29) had not participated in a research project in the previous year and most (28 of 30) had no formal training in research methods. No GP had a higher degree in research at Masters level or above.

What GPs hoped to get out of their involvement in LEAP

In response to the question, 'What do you hope to get out of this project?', most of the GPs reported their desire to gain knowledge and clinical skills. Only five GPs mentioned their desire to contribute to or learn about research.

Sixty-one percent (17) agreed that their expectations of their participation in the project had been met. Reasons for nonfulfilment of expectations included uncertainty about expectations (14% [4]) and the need for more practice in new techniques (14% [4]). One GP reported that the experience had been more enjoyable than expected. Five GPs expressed difficulties with their involvement, mainly around the delivery of the intervention, eg. 'I was surprised none of the three families returned for review', 'Found a lot of difficulty in putting knowledge into practice', 'I felt negative and was unsure how to conduct consultations'.

The most highly valued reason GPs gave for participating in research was to learn new clinical skills, update knowledge and reflect on practice (*Table 1*).

GP participants as contributors to LEAP

The study team aimed to engage GP participants as valued contributors

to the research, and surveyed the participants to assess the extent to which this contribution occurred (Table 2). While most comments concerned the GP's role in facilitating the research at the practice level, many GPs played a role in developing the family materials and the intervention itself.

GP investigators – building research capacity

The study team was interested in capturing data on the ways in which participating in the LEAP project changed the GPs' understanding of research in general. General practitioners were asked, 'How has your participation in the LEAP project so far changed your understanding of research in general?' One GP commented strongly that 'Research is not for me!'; another that the experience had 'Not changed my understanding of research'. However, 22 other GPs commented on their improved understanding of the processes, practical challenges and usefulness of research, eg. 'Lot of work - but at the end this will help us to understand and plan for the future. Complex, time consuming, but ultimately rewarding'.

Would the GPs participate in LEAP again?

Perhaps the most telling question about the experience of

participating in a randomised trial of a complex intervention in the real world setting is whether or not the GP would participate again. Twenty-eight of the 29 participants who completed the question stated that they would participate in a project such as LEAP again.

Discussion

The LEAP study was a trial of an intervention that introduced a new, brief strategy for tackling childhood overweight in primary care. A striking finding of this research is the small number of GPs who expressed interest in being involved, despite being listed as having a special interest in paediatrics.

What does this finding say about the research culture of Australian GPs? It should be noted that the study team used minimally intensive recruitment methods due to funding and time constraints - GPs had to be proactive in responding to an invitation, and only a few options for participating GPs were available. Also, the trial required only 30-40 participants. Despite the low numbers recruited, all GPs were retained over the 2 years of the study.

The findings indicate that while only a small number of GPs actually take part in research, those who do participate find the experience worthwhile. This research indicates that GP

Table 1	Reasons	for	taking	nart in	IFAP*

Reason for taking part in research	Degree to which this influenced decision to take part	At recruitment (%)	At follow up (%)
'I provided the research team with knowledge and expertise from the "real	Very	7 (24)	3 (10)
	Quite	11 (38)	13 (45)
	A little	6 (21)	8 (28)
world" of general practice'	Not at all	5 (17)	5 (17)
	Very	16 (55)	15 (52)
It allowed me to reflect on the way I	Quite	10 (34)	3 (45)
oractise'	A little	3 (10)	1 (3)
	Not at all	0	0
	Very	14 (48)	18 (62)
Lundatad mulimandadaa'	Quite	13 (45)	10 (35)
I updated my knowledge'	A little	1 (3)	1 (3)
	Not at all	1 (3)	0 (0)
	Very	14 (48)	20 (69)
	Quite	13 (45)	6 (21)
I learnt new clinical skills'	A little	2 (7)	3 (10)
	Not at all	0	0
	Very	12 (41)	6 (21)
I enjoyed collaborating with other	Quite	10 (34)	18 (62)
professionals (both GPs and non-GPs)	A little	4 (14)	5 (17)
or	Not at all	3 (10)	0
	Very	17 (59)	11 (38)
	Quite	10 (34)	13 (45)
It helped my own patients'	A little	2 (7)	5 (17)
	Not at all	0	0
	Very	10 (34)	9 (31)
	Quite	14 (48)	16 (55)
In time, it will help patients elsewhere'	A little	3 (10)	4 (14)
	Not at all	2 (7)	0
	Very	4 (14)	1 (3)
It enabled me to fulfill my CME	Quite	8 (28)	5 (17)
equirements'	A little	14 (48)	17 (59)
oquii omonto	Not at all	3 (10)	6 (21)

Table 2. General practitioner self report on contribution to the research

Contribution	N	%
'Responsibility for inviting, informing and involving the practice staff in the research process'	21	65.6
'Influencing the decision as to how the measurement component will be conducted in my study (eg. GP was only measurer, or several measurers in the practice)'	20	62.5
'Providing feedback on the content of the family materials'	12	37.5
'Providing own experience of barriers/enablers in clinical management of childhood overweight to assist design of educational materials'	11	34.4
'Involvement in discussion on research design'		21.9
Other	2	6.3

participation in research is driven by the desire for updating knowledge and clinical skills, the chance for reflection, the opportunity to do something to help current patients, and by altruistic views about helping others in the long term, rather than the promise of 'rewards' such as quality assurance and continuing medical education points.

The study was limited by the small sample of GPs and the fact that the majority of those invited to participate declined. Nonparticipants may have been more negative in their attitudes toward research than those whose views are reported here.

Research does not play a major role in the professional lives of current Australian GPs, yet community based clinical research relies upon GPs such as those who undertook the LEAP study. Finding ways to support this involvement is essential if Australian general practice is to be guided by high quality community based clinical research. Researchers should ensure that they clearly articulate how their research project links to clinical benefits for GPs and patients, and research should offer the chance for reflection on current practice. Until dedicated funding is available for community based general practice research infrastructure such as practice based research networks⁷, Australia will not have the strong clinical research culture that a cost effective health care system requires.

Conflict of interest: none declared.

Acknowledgments

The authors would like to acknowledge the participating GPs and their practice staff, and contributing members of the research team — Professor Louise Baur, Associate Professor Geraldine Naughton, Ms Kay Gibbons, Dr Colin Riess, Ms Jane Sheehan, Ms Sharon Foster, Dr Denise Findlay and Professor Elizabeth Waters . Dr Zoë McCallum was funded via a NHMRC Public Health Postgraduate Scholarship (ID number 216745). The LEAP study was funded by the Australian Health Ministers' Advisory Council, administered by the Murdoch Childrens Research Institute and the NHMRC.

References

- Crowley W, Sherwood L, Salber P et al. Clinical research in the United States at a crossroads. Proposal for a novel public-private partnership to establish a National clinical research enterprise. JAMA 2004;291:1120–6.
- Mant D. R & D in primary care. National Working Group Report. Wetherby (UK): Department on Health, 1997. Report No.: 97CC0138.
- National Institutes of Health. NIH roadmap for medical research: re-engineering the clinical research enterprise, 2004. Available at www.nihroadmap.nih.gov/clinicalresearchtheme.

- Academy of Medical Sciences. Strengthening clinical research, 2003. Available at www.acmedsci.ac.uk/p99puid22.html.
- McNally N, Kerrison S, Pollock A. Reforming clinical research and development in England. BMJ 2003;327:550–3.
- National Health and Medical Research Council Clinical Research Working Group. Clinical research in Australia. Report of the NHMRC Clinical Research Working Group, Canberra: NHMRC, 2001.
- Gunn J. Should Australia develop primary care research networks? Med J Aust 2002:177:63–6
- McCallum Z, Wake M, Gerner B et al. Can Australian general practitioners tackle childhood overweight/obesity? Methods and processes from the LEAP (Live, Eat and Play) randomised controlled trial. J Paediatr Ch Health 2005;41:488–94.
- McCallum Z, Wake M, Gerner B, et al. Outcome data from the LEAP (Live, Eat and Play) Trial: a randomized controlled trial of a primary care intervention for childhood overweight/mild obesity. Int J Obes 2007;31:630–6.
- Prochaska J, Clemente C. Stages of change in the modification of problem behaviors. Prog Behav Modif 1992:28:183

 –218.
- Turnell A, Hopwood L. Solution-focused brief therapy. Case Studies in Brief and Family Therapy 1994;8:39–51.

