

Building a culture of research dissemination in primary health care: the South Australian experience of supporting the novice researcher

Karin Ried and Jeffrey Fuller

Abstract

The Primary Health Care Research Evaluation and Development (PHCRED) program in Australia aims to build research capacity in primary health care. In South Australia, the program (PHCRED-SA) has addressed skill building in dissemination of research findings by providing support for peer reviewed publication. The support included comprehensive advice and feedback for novice and inexperienced researchers and writers in the publication process of the program's 2003 Conference Proceedings. This paper describes the South Australian experience of supporting novice researchers in research dissemination by applying the PHCRED-SA capacity building support model.

Aust Health Rev 2005; 29(1): 6–11

THE BUSY HEALTH CARE PRACTITIONER often sees engagement in research as an insurmountable challenge. Lack of research skills, time, funding and isolation from academic support have been identified as common barriers to research activity in general practice.^{1,2} Dissemination of research findings through peer reviewed publication is essential to continuous improvements in the quality of health care. Yet, practitioners new to research can often be inexperienced in writing

Karin Ried, PhD, MSc, GDFP, State Coordinator and Program Manager of the Primary Health Care Research Evaluation and Development (PHCRED) Program
Department of General Practice, Flinders University,
Adelaide, SA.

Jeffrey Fuller, PhD, MSc, BN, Associate Professor
Northern Rivers Department of Rural Health, University of
Sydney, Lismore, NSW.

Correspondence: Dr Karin Ried, Department of General Practice, Flinders University, GPO Box 2100, Adelaide, SA 5001. karin.ried@flinders.edu.au

What is known about the topic?

Health care practitioners who are new to research often have limited experience with the publication process.

What does this paper add?

This paper describes the process used in the 2003 Primary Health Care Research Evaluation and Development State Conference to assist inexperienced researchers through the paper submission and peer review process. Experienced editors and reviewers assisted inexperienced authors in preparing their submission to the Conference Proceedings.

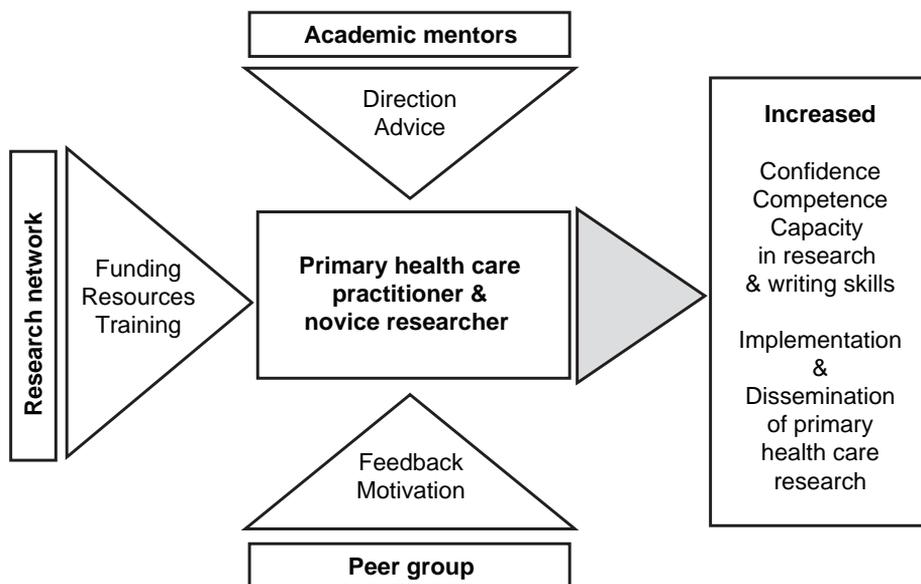
What are the implications for practitioners?

The authors outline a process to encourage the participation of inexperienced researchers that can be incorporated by other conference organisers.

and might be overwhelmed by the publication process.

The Primary Health Care Research Evaluation and Development (PHCRED) program in Australia aims to build research capacity in primary health care. The Research Capacity Building Initiative is one component of the PHCRED program that was initiated in 2000 and funded by the Australian Government Department of Health and Ageing until 2005. This Initiative has enabled University Departments of General Practice and Rural Health to implement strategies to help health professionals overcome barriers to research and publication.³ In South Australia, the Capacity Building Initiative supports primary health care practitioners in the uptake of research skills through training, mentoring, network and peer support and advice on resources (see Box 1). The principles of the model have been outlined by Farmer and Weston,⁴ and further details on model components, for example the South Australian

I The PHCRED-SA Capacity Building support model



The publication process of the PHCRED-SA Conference 2003 Proceedings exemplifies the support model. Conference delegates and authors of the proceedings had access to activities and resources of a state-wide research network and the editorial team provided academic mentoring and peer group support.

Research Network (SARNet), have been described by Waters et al.⁵ and Farmer et al.⁶

As a part of the support model, the Initiative, through a state collaboration, held a state primary health care research conference in 2003. In this paper we describe our experience in providing support to novice researchers to publish an article in the peer reviewed conference proceedings.

The PHCRED-SA State Conference 2003

In 2003, the inaugural PHCRED-SA State Conference 'Growing Research in Primary Health Care' gave novice as well as experienced researchers the opportunity to present their work, to network with peers and experts and to build capacity in research and evaluation. The audience consisted of 135 health professionals, academics, students and consumers from metropolitan and rural South Australia and interstate. Thirteen of the 39 conference presenters were novice researchers. These novices

were offered assistance in abstract writing and power point or poster preparation from the more experienced PHCRED coordinators and directors involved in the state collaboration.

Comments from delegates confirmed that the conference had contributed to knowledge transfer and confidence building in primary health care research and dissemination (Box 2).

Publications in the peer reviewed Conference Proceedings

The conference organisers invited all presenters to submit their paper for peer review and publication in the Conference Proceedings.⁷ Novice writers were particularly encouraged by the extra support offered in the review process in the form of comprehensive feedback, advice and mentoring by the editor and co-editor. This editorial team were both PhD qualified and experienced in submitting publications to peer reviewed journals. The editor (JF) was a senior academic with

2 Feedback from conference delegates (Source: evaluation forms)

"Thanks for providing the opportunity to learn about other people's work."

"A fabulous experience. Great to see PHC in action. Great to be with positive people who value health and wellness."

"Good that the issue of the desirability of research being conducted by health professionals in their own discipline rather than just by outsiders came across."

"Very open and friendly atmosphere, lots of sharing. You really are capacity building in research and PHC."

"I'm only a newcomer to PHC and found the whole experience excellent. Really has encouraged my enthusiasm to be a participant in PHC research. Thank you for this wonderful experience."

"More opportunity for people to see my research."

"This conference was very worthwhile and increased my understanding and knowledge in current research."

"Re conference proceedings: I find this part of the conference a truly valuable inclusion."

"The conference has built my confidence to write a paper; RED Snapshots⁷ are a brilliant idea."

over 20 years' experience of practice, teaching and research in primary health care, and the co-editor (KR) had 15 years experience in health research, both as a medical scientist and public health researcher.

Initially 25 presenters expressed their interest in publishing, but 8 withdrew due to time constraints and 3 decided to publish elsewhere. A total of 14 papers were submitted to the Proceedings, of which 13 were finalised for publication and one withdrawn as the author was not able to complete the considerable revision in a 2-month timeframe. One third of the authors were new to the publishing process, a third had some writing experience as co-authors of journal articles, and a third were experienced to very experienced writers with five or more first author publications in peer reviewed journals. These data were obtained either from authors' publication records or personal communication.

Comprehensive guidelines for authors were developed based on current peer reviewed primary health care journals. These guidelines were distributed 2 months before the submission deadline for papers, which was set for 2 weeks after the conference. The strict submission deadline enabled a smooth review and publication process, which took 6 months in total. Each manuscript was reviewed by two independent experts in the field related to the content or method of the paper. The evaluation form (Appendix) for peer reviewers was developed from the templates used by four contemporary Australian peer reviewed

primary health care journals (medicine, rural health and primary health care).

The PHCRED conference organisers and editors drew up a list of potential academic and practice reviewers. Reviewers were approached who were known to have content and method expertise in primary health care, either through research, practice or both. Of the 30 potential reviewers contacted, 20 took part in the review process. Eighteen were academics and two were senior health bureaucrats. All but two of the academics were PhD qualified, of whom seven were employed at the level of associate professor or above. Each reviewer was allocated papers for blind review based on their indicated content and method expertise.

All authors were invited to revise their papers in accordance with the comments from reviewers and the editor. Authors were encouraged to discuss any issues in detail with the editorial team. Detailed feedback and advice was primarily sought by novice researchers/writers. Repeated one-on-one sessions of 30 to 60 minutes were arranged to discuss the progress of revision, mainly with the co-editor. If required, expert advice on statistical or Indigenous issues was arranged with University staff affiliated with the PHCRED program.

All first authors received a bound copy of the Proceedings in addition to online publication on the PHCRED-SA website (www.phcred-sa.org.au/REDSnapshots2.htm). Some authors stated that the prospect of adding their publication to the

3 Summary of writing deficiencies that required support

Structure of the written text

Title that did not adequately reflect the content of the article or the in-progress nature of the research.

Abstract and conclusion that contained content that was not in the main body of the text.

Editing to correct spelling mistakes, clumsy grammar and to remove repetition.

Illogical sequencing or placement of content that detracted from the flow of the argument.

Discussion section that canvassed issues much wider than what the results of the study warranted.

Inadequate or incorrect referencing.

Scholarship

Inadequate reference to other peer reviewed literature that would then place the current research into context.

Greater description about the study method, data collection instruments and analysis needed.

Difficulties in knowing how to best display data (both quantitative and qualitative) to substantiate claims.

Insufficient acknowledgement of the limitations of the research.

Argument

A lack of clarity in the main argument because of the following:

The purpose and argument not articulated in the introduction.

Inadequate focus through an illogical flow of ideas.

Too much material provided across a wide range so that the reader 'could not see the wood for the trees'.

The conclusion did not synthesise the key points of the argument.

The implications were not stated.

Quality of the work

Assistance was required for some authors to:

Reconceptualise that the research question(s) remained consistent with what their data enabled them to report with rigour.

Understand and acknowledge the methodological limitations of their work while still recognising its value.

- being of national significance (contributions to the Proceedings were made by authors from South Australia and Victoria);
- had undergone a complete peer review process; and
- are publicly available on the PHCRED-SA website as well as at the National Library of Australia (ISBN 0 646 43618 X).

What we learned from the process

In order to describe the writing difficulties that required support we thematically analysed the 28 peer-review evaluations and the editor's resubmission instructions to authors. These themes related to the structure of the written text, scholarship, argument and quality (see Box 3).

Because of our own experience with critique that can be 'ego bruising' when the process of peer review is not familiar, we encouraged reviewers to find a balance between being critically helpful while also encouraging. In one case, however, a pair of authors still reacted angrily to a reviewer who had wanted to be helpful by conducting a thorough evaluation by providing lots of feedback. While this may have been a case of too much feedback at once, the editorial team then helped these authors to work through their initial anger and to focus the reviewers' feedback into a resubmission.

After the publication of the Proceedings the co-editor (KR) conducted interviews with three of the four authors who were new to publishing. These interviews sought to ascertain the value of the extra support from the editorial team and to further identify issues regarding the review and mentoring process for future capacity building activities in research dissemination. All three interviewees had never published in a peer review primary health care journal; two had only limited experience with abstract writing and one had some experience with a peer review process in another scientific field.

All interviewees regarded the extra support provided as highly valuable, particularly the continuous motivation for a timely revision and the one-on-one discussions on issues raised by the

annual university data collections had been a crucial motivational factor to submit a paper to the Proceedings. The Conference Proceedings attract funding from the Australian Government Department of Education, Science and Training (DEST E1 category),⁸ as they conform to the requirements of:

reviewers. These new researchers stated that the process boosted their confidence in writing and increased their capacity to build a structured framework for a research article. Furthermore, they learned not to take reviewers' comments personally, and that different viewpoints can add clarity to the research article. All interviewees viewed their publication as beneficial for further career development. In relation to potential barriers, two interviewees admitted the need to up skill in statistical methods and not to shy away from seeking expert advice.

Peer support furthers research dissemination

The PHCRED-SA experience with the peer reviewed Conference Proceedings has shown that support through feedback, motivation, advice and direction can increase research dissemination. In the Proceedings process this support was mainly provided by the editorial team. Yet other settings of support, such as peer-supported writing groups, have been reported as being successful in furthering research output. For example, a physician peer support group in Canada reported a substantial increase in the publication rates of regular writing group attendees.⁹ Seven out of ten attendees published ten articles over 3 years, compared with one article over 3 years before the establishment of the writing group. Likewise, with the engagement of a writing coach the publication output in a US School of Nursing increased considerably.¹⁰ Also, the PHCRED team writing group at Flinders University produced four peer reviewed journal articles and 11 conference presentations over 12 months. The writing group, which meets on a monthly basis, has benefited from its members' multidisciplinary backgrounds (3 PhDs, 3 GPs, 1 PhD candidate, 1 allied health professional) and various levels of writing experience ranging from minimal experience in writing for peer reviewed primary health care journals to very experienced multiple first authors. Guided support, encouragement, intellectual and social exchange are crucial to novice, as well as advanced, research writers. The

PHCRED-SA support model offers support in a variety of ways as illustrated in Box 1.

Conclusion

The support provided by the PHCRED program to novice researchers appears to have increased confidence in research publication. Support appears to have eased the often daunting and 'ego bruising' process that can be associated with peer review critique. Our experience in the Australian Government PHCRED Capacity Building Initiative has highlighted the need to maintain this form of publication support to further build a culture of research dissemination in primary health care.

Acknowledgements

We would like to thank all authors and reviewers for their contributions to the PHCRED-SA Conference 2003 Proceedings as well as Ms Tuesday Udell for editorial assistance. We would also like to acknowledge those authors who provided valuable feedback in the interviews. The PHCRED program is funded by the Australian Government Department of Health and Ageing.

Competing interests

Jeffrey Fuller was paid an honorarium as editor-in-chief of the Conference Proceedings.

References

- 1 Askew DA, Clavarino AM, Glasziou PP, Del Mar CB. General practice research: attitudes and involvement of Queensland general practitioners. *Med J Aust* 2002; 177: 74-7.
- 2 Jones A, Burgess TA, Farmer EA, et al. Building research capacity. An exploratory model of GPs' training needs and barriers to research involvement. *Aust Fam Physician* 2003; 32: 957-60.
- 3 Commonwealth Department of Health and Ageing. Primary Health Care Research Evaluation and Development. Canberra: DoHA; 2002 [cited 2004 Dec 2]. Available at: <<http://www.health.gov.au/hsdd/gp/phoresch.htm>>.
- 4 Farmer E, Weston KA conceptual model for capacity building in Australian primary health care research. *Aust Fam Physician* 2002; 31: 1139-42.

- 5 Waters R, Weston KM, Farmer EA. Linking primary health care researchers in South Australia: a network strategy, SARNet. In: RED Snapshots, Issue 2, PHCRED-SA Conference 2003 Proceedings; Fuller J and Ried K, editors; PHCRED State Collaboration; Adelaide; 2004: p. 13-21. Available at <<http://www.phcred-sa.org.au/pdfDocs/Proceedings/Waters%20R%20et%20a.pdf>> [cited 2004 Dec 2].
- 6 Farmer EA, Waters R, Weston KM. Research networks: enhancing change in Australian primary health care. In: RED Snapshots, Issue 2, PHCRED-SA Conference 2003 Proceedings; Fuller J and Ried K, editors; PHCRED State Collaboration; Adelaide; 2004: p. 7-11. Available at <<http://www.phcred-sa.org.au/pdfDocs/Proceedings/Farmer%20E%20et%20a.pdf>> [cited 2004 Dec 2].
- 7 RED Snapshots, Issue 2, PHCRED-SA Conference 2003 Proceedings; Fuller J and Ried K, editors; PHCRED State Collaboration; Adelaide; 2004. Available at <<http://www.phcred-sa.org.au/REDSnapshots2.htm>> [cited Dec 2004].
- 8 Australian Government, Department of Education, Science and Training. Higher Education Research Data Collection. Specifications for the collection of 2003 data. Available at: <<http://www.dest.gov.au/highered/research/documents/specs2004.pdf>> [cited 2004 Dec 2].
- 9 Grzybowski SC, Bates J, Calam B, et al. A physician peer support writing group. *Fam Med* 2003; 35: 195-201.
- 10 Baldwin C, Chandler GE. Improving faculty publication output: the role of a writing coach. *J Prof Nurs* 2002; 18: 8-15.

(Received 31 May 2004,
accepted 17 Nov 2004)



Appendix

PHCRED-SA Conference 2003 Proceedings Referee Evaluation Form

Title of paper:

Please rate the paper [1 = poor to 5 = excellent] and comment in your report on the following:

1. Context
 - The paper is set within the wider context of primary health care research
2. Presentation
 - The purpose of the paper is clear
 - The ideas in the paper are well organised and presented
3. Scientific content
 - The design is appropriate for the research question
 - The methods are adequately described
 - Relevant level of rigor is attained and limitations are acknowledged
 - Relevant ethical considerations are addressed
4. Quality of Illustrations
 - Tables, figures and/or graphs are clearly presented
5. Interpretation
 - The conclusions are justified from the data/evidence presented
6. References
 - The references are comprehensive and up to date
7. Redundancy/Length
 - Can the paper be shortened? Are all illustrations necessary, can parts of text be dismissed or combined? Do some parts need to be expanded to add clarity?

Overall rating:

- The paper addresses an issue of national significance in primary health care research
- The paper contributes to the development of knowledge and/or practice in primary health care research
- The paper is well presented with appropriate language and style

Recommendation:

(Please select one)

- Accept
The paper can be accepted for publication in its current form or with minor corrections to be supervised by the editor.
- Accept with amendments
The paper can be accepted for publication but will require some rewriting or re-organisation according to the comments provided by the reviewers
- Topic is suitable, but needs significant assistance from editorial team to rewrite before resubmission
- Reject
The paper is not suitable for publication in the PHCRED-SA* Conference Proceedings

(*PHCRED-SA: Primary Health Care Research Evaluation Development-South Australia)

Referee Report/Comments to the Editor:

IMPORTANT NOTE:

The paper to be reviewed has been presented at the PHCRED-SA conference (www.phcred-sa.org.au/ConfHome.htm) and may incorporate the work of early career researchers. Some authors have been funded by PHCRED to undertake the research presented. The papers may therefore range from small research projects to discussion papers on potential research/evaluation methods and potential capacity building strategies, and can include work in progress.