

PROJECT REPORT

Unique issues in research and evaluation in rural and remote locations: Is there a place for specific research training?

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ABSTRACT

Background: There is increased interest in building research capacity in rural health research in Australia and internationally. In Australia, the Primary Health Care Research Evaluation and Development program funded by the Australian Government has supported this move. Overall this program aims to build the quantum of primary healthcare research to underpin clinical practice, health systems improvement, and policy. In order to achieve this objective, one strand of the program aims to build research capacity among practitioners. In implementing this program in rural and remote areas of the west of South Australia, the Spencer Gulf Rural Health School has identified methodological and research design issues faced by practitioners who are researching in their communities. These issues include problems encountered in living and researching in the same location and accessing small-scale statistical information. We were interested to know whether there was interest in a formal course (Rural Research and Evaluation) that would address these issues and provide information about community-based research designs.

Methods: A cross-sectional anonymous survey was designed and sent to 141 organisations in the health, human service, and local government sectors in regional South Australia. Respondents were asked to evaluate the demand and interest for a new course – Rural Research and Evaluation. The term ‘rural’ was used to refer to both rural and remote locations. Information was sought on



the respondent's role in the organisation, current level of research participation, views about the proposed course content, and factors that the respondent thought would facilitate or inhibit their participation. The majority of questions were close-ended.

Results: Sixty surveys were returned giving a 42.5% response rate. Data were analysed using descriptive statistics. A high level of research and evaluation activity was reported with 80% of respondents undertaking research or evaluation as part of their professional role. There was also agreement that all the proposed topics were important to be included in a course. Each of the topics was ranked at four or five on a five-point scale by at least 58% of respondents. The topic 'understanding evaluation methodologies' was ranked at four or five by 85% of respondents, making it the most highly ranked topic. There was also consensus about the features respondents thought would make the course attractive for them to study. Over half (62%) of the respondents ranked having lecturers with a broad rural research background at five, very important, on a five-point scale. Almost half (48%) of the respondents ranked online delivery at five, a very important factor in making the course attractive to study.

Conclusions: Those interested in research and evaluation may have been more likely to return the survey and there may have been respondent bias in this regard. Therefore the results must be interpreted with caution. However, the level of agreement with the proposed course topics may suggest that these reflect important issues in undertaking research and evaluation in rural and remote locations. If this is the case there is value in discussion about how these issues are dealt with in different contexts in order to overcome some of the barriers to effective research.

Key words: research capacity building, research education.

Background

Primary Health Care Research Evaluation and Development

Together with an increasing emphasis on rural health research as a distinct entity there is an awareness of the need to develop relevant research education initiatives to ensure that some of the methodological issues that arise can be overcome¹⁻³. A recent project report identified the limited opportunities for undergraduates to receive specific research education and training about rural health research in Canada⁴. Additionally, an Australian report considered methodological issues when metropolitan researchers undertake research in rural and remote areas⁵. It would seem, however, that to date there are few university courses specifically on this topic.

The need for innovative research education strategies has been emphasised by the growing numbers of health practitioners, consumers, and communities who are getting

involved in research and evaluation. <http://www.health.gov.au/internet/wcms/publishing.nsf/Content/health-pcd-programs-pcprograms-collab.htm>. The Australian Primary Health Care Research, Evaluation and Development (PHC RED) has contributed to this. This strategy, designed as a program to support the general practice and primary health care research community, aims to develop and enlarge the spectrum of knowledge that underpins the evidence base for general practice and primary health care health services. There are a range of PHC_RED initiatives designed to increase research capacity including post-graduate research programs, provision of seeding grants and bursaries, research networking, for example SANet (<http://som.flinders.edu.au/FUSA/GP-Evidence/SARNet/default.htm>), and research methodology training events. All of these initiatives, in various combinations, have been useful in the Spencer Gulf Rural Health School (SGRHS) PHC_RED program⁶.

Since 2000, the SGRHS located at Whyalla, at the top of the Spencer Gulf in South Australia, has funded 25 small research or evaluation projects in the region. Health practitioners,



consumers, and communities are increasingly questioning clinical practices and the way in which these are delivered as a basis for improving healthcare delivery. Additionally, health service delivery models and systems are being evaluated in order to ensure they remain relevant and accessible. Aboriginal communities and organisations are increasingly using research and evaluation to advocate for improved healthcare⁷. Some practitioners are using the PHC_RED program to 'seed fund' their research. This is one stimulus promoting increased research and evaluation activity within rural and remote regions in South Australia.

Problems facing researchers in rural and remote locations

Rural, remote and regional communities provide unique research contexts but pose challenges when planning research. Our experience has been that researchers, both academics and practitioners, face specific issues in designing research in rural, regional, and remote locations. For example, in some small locations it may be difficult to access demographic data about the health of the population, and the research may have to be designed with this in mind. Often researchers are researching a community in which they live and this poses particular ethical issues. There is always a need to maintain anonymity of research participants and this may lead to some loss of data when a respondent may be able to be identified in a small data pool. Researching 'taboo' topics in small communities also poses significant challenges⁸.

To date, in assisting practitioners with their research, we have used a 'one-off' approach to deal with these issues, resolving them in each particular situation. However this approach does not enable collaborative learning or debate more broadly. Following discussion with experts in research and evaluation in rural, regional, and remote locations, a number of issues appeared to be common practical stumbling blocks. These issues do not appear to be included in standard research training programs available within Australia

Additionally, there are research designs, such as participatory action research (PAR), that are particularly useful to rural

and remote communities who wish to take action about a particular health issue⁹. Case study designs are often appropriate when wanting to examine phenomena as they occur in a community context^{10,11}.

Recognition of the unique characteristics and challenges proposed by planning and conducting research within rural and remote localities provided the impetus to propose a new research training course specifically to address these needs. We considered both the issues in undertaking research in rural and remote locations, and the research designs we have found useful, and proposed the following topics to be included in a course on rural research and evaluation:

- Contextualising research and the implications for research and evaluation methodologies
- Constructions of rurality and their practical applications
- Ethical issues in remote, regional, and rural research
- Locating and accessing research resources
- Community-based research designs
- Understanding evaluation methodologies within the context of small regional locations.

Do rural and remote health professionals perceive a need for specific context related research training?

Prior to further developing and offering this course we were interested in obtaining practitioners' views on whether or not a new research and evaluation course would be of value. A university course (subject) within the University of South Australia is a component of study taken as part of an academic program (degree). A number of assumptions were made concerning the development of this new research training course. These included:

- The need to develop a course which was relevant to a wide range of health and human service personnel
- That a high percentage of professionals were actively involved in research activities as part of their employment



- That access was likely to be an issue; therefore, an online mode of delivery would be appropriate
- That any course needed to be undertaken as a single stand-alone course or as part of a program of study.

Methods

A cross-sectional survey approach was selected because we wanted to obtain the views of people working in the health, human service, and local government sectors. Three broad areas were canvassed in the survey: (i) current levels of research and evaluation activity; (ii) views about a proposed new course specific to research training in rural and remote locations including proposed main topics; and (iii) features that might make the course attractive to study. The anonymous survey (Appendix 1), with an introductory letter and reply-paid envelope, was forwarded to the CEO (or equivalent) of 141 organisations in rural, remote, and regional locations across South Australia. Organisations included:

- Divisions of General Practice
- Local government and human services
- Regional health services
- Aboriginal community controlled health services.

Most of the survey questions were close ended. A five-point Likert scale was used to rank each proposed course topic and the features that might make the course attractive to study.

The survey was conducted in early 2004. No reminder notices were issued. Data were collated in Statistica vers. 6 (Statsoft.Inc; Tulsa, OK, USA) and analysed descriptively for each question.

Limitations

It is possible that there was a responder bias within this sample, given that people more active and experienced with

research processes and practice may have been more likely to return the survey. Additionally, because it was an anonymous survey and respondents were not asked to identify their organisation, the variety and representativeness of different sectors, for example Divisions of General Practice, could not be determined in the sample.

The use of the five-point Likert scale may have resulted in neutral responses being represented by the score of 3. Therefore, responses of 4 and 5 have been accepted as indicating a positive response while responses of 1 and 2 reflect a negative response.

Results

The survey was returned by 60 people representing a 42.5% response rate. Table 1 presents respondents' occupation and location (using Accessibility/Remoteness Index of Australia¹² category) at the time of the survey. The ARIA classification measures remoteness through access by road between populated localities and relevant service centres.

Results of the survey are presented in four areas:

- Current level of participation in research and evaluation activities
- Views about the proposed course topics
- Features that would make the course attractive to study
- Comments about organisational factors that might impact on uptake of the course.

Current level of participation in research and evaluation activities

There was a high level of research and evaluation undertaken by these respondents. Eighty-two per cent undertook research and evaluation personally and 80% undertook these activities as part of their professional roles. However, approximately half (53%) reported that the organisation they



worked for regularly undertook research activities. Respondents' research areas included program evaluation, needs assessments, secondary analysis of data, population health research, research to support tenders, and client satisfaction surveys.

Table 1: Respondents' location and occupation (n = 60)

Respondents' location [†]	No. respondents
Highly accessible	11
Accessible	22
Moderately accessible	16
Remote	6
Very remote	5
Total	60
Respondents' occupation	No. respondents
Nurse educator, clinical nurse	6
Director of nursing (DON)	4
Executive officer (EO)/DON	13
EO (health)	3
CEO/director/manager	15
Research manager	2
Social worker	4
Allied health worker	9
Staff development coordinator	1
Local government community development officer	1
Unknown	2
Total	60

[†] Using ARIA¹².

Views about proposed course topics

There was consistency in respondents' views that the proposed course topics were appropriate. Respondents rated topics on a five-point scale from 'of little importance' (1) to 'very important' (5). The results are presented (Table 2). The topics 'understanding evaluation methodologies' and

'community-based research design' received the greatest number of 5 (very important) rankings. The topic 'constructions of rurality and their practical application' received the fewest.

Features that would make the course attractive to study

Overall 53% of respondents said that they would be interested in studying this course and 79% thought it was of interest professionally. Eighty per cent thought that the course would be of interest to their organisation.

Respondents identified the factors that were considered to be important in making the course attractive. The factors which received most ratings at 5 were 'relevant content that relates to my work' and 'lecturers with broad rural research background'. Respondents' ratings are presented (Table 3). The factors that received fewest rankings at 5 (most important) were 'flexible fee paying options' and 'doesn't assume any prior knowledge'. Almost half (48%) of the respondents ranked online delivery at 5, very important, in making the course attractive to study.

Other comments

Finally, respondents were asked for comments on issues that might impact on uptake of the proposed course. In all, 15% (18/60) of respondents provided additional comments and the majority of these of these were about the broad ranging budget and time constraints that faced their organisation in planning for professional development of staff. Of those who made comments about barriers to uptake (18/60), 70% mentioned organisational constraints such as the availability of financial resources and other resources to support employees undertaking further training. Additionally, a small number of comments were made about the lack of value placed on research in the respondent's organisation and a lack of overall strategic research direction.



Table 2: Respondents' ratings of the importance of the proposed course topics (n = 60)

Topic	Rankings at 4 (%)	Rankings at 5 (%)	Rankings at 4 or 5 (%)
Understanding evaluation methodologies	39	46	85
Community-based research designs	27	54	81
Locating research resources	38	43	81
Ethical issues	33	38	71
Analysing rural contexts and their implications for research and evaluation methodologies	48	20	68
Constructions of rurality and their practical application	47	11	58

Table 3: Respondents' views on factors that would make the course attractive to study (n = 60)

Factor	Rankings at 4 (%)	Rankings at 5 (%)	Rankings at 4 or 5 (%)
Lecturers with broad rural research design experience	33	62	95
Lecturer support and timely feedback	50	45	95
Relevant content that related to work	26	67	93
Available online	38	48	86
Course can be counted towards postgraduate degree studies offered by UniSA	29	53	82
Affordable up-front fee	38	40	78
Employer support	40	38	78
Flexible fee payment options	23	21	44
Doesn't assume any prior knowledge	18	21	39

UniSA, University of South Australia.



Discussion

The information from this small survey must be used carefully in answering questions about the demand for a course focused on research in rural or remote locations. First, there was a low response rate (42.5%), and it is possible that those people interested in research and evaluation were more likely to return the survey. Respondent bias then may account for the reported high rate of participation in research and evaluation activities. Second, although respondents represented a range of occupations, it is not known if similar levels of need and interest exists across the health and human services and local government sectors. Third, even where respondents reported that such a course was of interest, whether personal interest would translate into course enrolments remains to be seen. While half (53%) of the respondents indicated their interest in studying the course, agreed that proposed course topics were important, and identified features which would make it attractive to study, a number of comments suggested that less than half of the respondents would actually enroll.

However, there are some findings that may assist in developing appropriate research training initiatives for rural and remote practitioners. There was consensus that the proposed course topics were important, that online delivery was appropriate, and among these respondents at least, there was an interest in research and evaluation from people in different types of occupations.

Consensus about proposed course topics

The issues identified as being most commonly problematic or unique in research within small and remote communities were suggested as the framework for the proposed new course. There was a high level of agreement from the respondents that these proposed topics were important and relevant. This may be an indication of the issues overlooked in standard research training programs which require attention for those working within rural and remote locales.

In Australia currently, the majority of programs funded to community-based health and human service organisation require an evaluation be costed into the program. This emphasis on evaluation may have led to this being the most highly ranked topic. The other topic that received a ranking of 5 by over half (54%) of the respondents was 'community-based research design'. This may reflect interest in designs such as participatory action research (PAR), community-based case studies, and designs for community needs appraisal. The PAR cycle of information gathering, planning, action, and reflection as a way to inform and modify health programs is gaining recognition in Australia.

Online delivery

Online delivery has been used in Australia to enable students to access courses from their home. Because almost half (47%) of the respondents lived in locations that were, using the ARIA¹², classified as moderately accessible, remote, or very remote, it is not surprising that online or modes of delivery that were not dependent on travel or relocation were promoted. Eighty-six per cent of respondents ranked online delivery at 4 or 5 on a 5-point scale as a feature that might influence their decision to undertake such a course. The assumption, made in proposing the course, that online delivery would be highly regarded was supported by the respondents.

Interest in research

The respondents to this survey were from a range of positions in their organisations. Greater than 50% (36/60) of the respondents were from non-clinical or management positions in the organization, and a high percentage (80%) indicated that research was part of their professional role. However, in many rural and remote locations in Australia, management and clinical roles may co-exist, and it is unclear from these results whether or not there is a greater interest in research amongst managers, rather than clinicians.



Conclusions

Implementing the PHC_RED program in our region has meant that some methodological and design issues in researching in rural and remote locations have been identified. We have proposed that these issues are dealt with in a formal research training course made available to personnel in the health and human service sectors and local government. There is consensus among those who responded to our survey that these are important issues and should be included in a research training course.

However, further debate and discussion needs to occur nationally and internationally to advance knowledge about research design in these locations. Mounting a specific course may assist this process. Education about these unique issues may result in increased and more rigorous research and evaluation and, in the longer term, this research may contribute to increasing the evidence-base about rural health.

Acknowledgement

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Appendix 1

Rural Research and Evaluation Questionnaire Introduction and explanation

- Thank you for participating in this course demand questionnaire
- The purpose of the questionnaire is to evaluate the demand and interest for a new course – Rural Research and Evaluation, by prospective clients in the human services, allied health and nursing sectors of regional parts of South Australia.
- The questionnaire should only take about 10 minutes to complete. While the majority of questions only require you to tick the relevant box or circle a number, if you would like to add other comments then feel free to do so on the back of the page quoting the number of the question. All answers will remain confidential.
- Please place your completed response in a stamped addressed envelope and return to Cathy Hughes – UniSA Marketing Officer, at Whyalla Campus, by the 30 April, 2004. Thank you.

Name:.....
Organisation:.....
Position in organisation:.....
Address:.....
.....Postcode.....

Research and Evaluation duties

For the purposes of this questionnaire **Research** is defined as activities that encompass seeking an answer(s) to a problem via qualitative and quantitative data collection. **Evaluation** activities encompass reviewing the outcomes and worth of programs.

- 1.1. Do you personally undertake research and evaluation activities?
Yes No
- 1.2 Do you undertake research and evaluation activities as a part of your normal professional activities?
Yes No
- 1.3 Does the organisation you work for undertake regular research activities?
Yes No

Please describe briefly.....

Course aims

The aim of this course is to provide students with the capacity to understand contextual factors that influence research and evaluation in rural and remote Australia and to apply appropriate community - based research designs to conduct research.

On completion of this course students should be able to:

- Analyse rural contexts in considering appropriate research or evaluation designs
- Understand different types of evaluation
- Understand community based research designs
- Understand where to locate resources to undertake research and evaluation.



2. Course content

2.1 Please use the following scale of 1-5 and circle or highlight a number in each box to represent the priority and degree of importance to you/your organisation for each component of the proposed course – Rural Research and Evaluation. Please place a rank next to each entry. Thanks.

1.....2.....3.....4.....5
of little importance *very important*

Rural Research and Evaluation	Priority Ranking
Analysing particular rural contexts and their implications for research and evaluation methodologies	1 2 3 4 5
Constructions and categorisations of rurality and their practical applications	1 2 3 4 5
Ethical issues in rural research	1 2 3 4 5
Locating resources to assist with research evaluation	1 2 3 4 5
Community based research design approaches, including: Participatory Action Research Rapid Appraisal Needs Assessment Case Study Design	1 2 3 4 5
Understanding evaluation methodologies	1 2 3 4 5

2.2 What other topics would you like to see included in the course? Please provide a brief description of why the topic is important to you?

.....

3 Undertaking further study

A 'course' is one subject/module, and equivalent to one semester of study, with a value of 4.5 units within a degree program. As a postgraduate course the fees are charged at a full fee rate, which equates to approximately \$900 per course.

3.1 Is this proposed course of interest to you personally?
 Yes No

3.2 Is this course of interest to you professionally?
 Yes No

3.3 Is this course of interest to your organisation?
 Yes No

3.4 Would you be interested in studying this course as a stand alone course/subject? (ie you are not committed to completing a degree program)
 Yes No

3.5 Please use the following scale of 1-5 and circle or highlight a number in each box to identify what factors will influence your decision to undertake any further study. Please place a rank next to each entry. Thanks.



What features would make the course attractive to study?	Priority Ranking
Available on-line to study at any time of day/evening	1 2 3 4 5
Affordable up-front fee	1 2 3 4 5
Fee payment options (including access to student loan schemes)	1 2 3 4 5
Support of study by employer	1 2 3 4 5
Lecturer support and timely feedback	1 2 3 4 5
Lecturers with broad rural research design experience	1 2 3 4 5
The course content is current, relevant and relates to my work context	1 2 3 4 5
Course can be counted towards specific postgraduate degree studies offered by UniSA	1 2 3 4 5
Doesn't assume any prior knowledge	1 2 3 4 5

4. Other comments reflecting the issues your organisation faces in deciding what training will occur.
 (Please use the back of pages to provide additional comments).

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Thank you for taking the time to complete this questionnaire. Please place in a stamped addressed envelope and return to **Cathy Hughes, Marketing Officer, UniSA – Whyalla Campus, Whyalla Norrie SA 5608, before 30 April, 2004.**
