

RURAL HEALTH SUPPORT, EDUCATION AND TRAINING PROJECT

FINAL REPORT

OVERCOMING ISOLATION THROUGH KNOWLEDGE

AND

SUPPORT NETWORKS:

- Maternity Care in the Bush
Resource Library
- Remote Links
Communication Forum
- Birthing Business in the
Bush Website
- Primary Health Care Guide
to Planning Maternity
Services

April 2004



UNIVERSITY OF
TECHNOLOGY SYDNEY



Australian Government
Department of Health and Ageing

This project was funded by a Rural Health Support, Education and Training (RHSET) Grant, and the project was administered by the Centre for Family Health and Midwifery at the University of Technology Sydney.

Project Director: Professor Lesley Barclay

Project Officer: Ms Sue Kildea

Project Manager: Ruth Worgan

Professor Lesley Barclay and Ms Sue Kildea take sole responsibility for the content of this report and the resources that have been developed as a result of this project.

For further information please contact the:

Centre for Family Health and Midwifery

University of Technology Sydney

PO Box 123

Broadway

NSW 2007

Australia

Tel: 61 2 9514 2977

Fax: 61 2 9514 1678

Web: www.familyhealth.uts.edu.au

ACKNOWLEDGEMENTS

The resources from this project have been developed with the assistance of many people. Firstly, the women of Maningrida and its outstations have generously shared their time and allowed their stories and photos to be placed on the Birthing in the Bush Website (their names can be viewed under acknowledgements section on the CD Rom and Website <http://www.maningrida.com/mac/bwc/index.html>). The project would not have existed without the support, contribution and leadership of the women who were a part of the project team (Molly Wardaguga, Deborah Wurrkidj, Margaret Dawumal, Elizabeth Gandabuma, Mary Mason, Dora Daiguma, Phyllis Dungudja), the interpreters and the remote area nurses, doctors and support personnel. Although principally a women's project there have also been Aboriginal men who have assisted with the project and at time have offered their opinion. Many of the organisations in Maningrida have assisted with the logistics of the project, in particular: The Bawinanga Aboriginal Corporation, The Mala'la Health Centre, The Malabam Health Board, The Maningrida School.

The Bawinanga Women's Centre, Maningrida, and the Centre for Family Health and Midwifery, University of Technology, Sydney have been joint partners on this project. Additional support has been received from the Council of Remote Area Nurses of Australia, in particular their Webmaster Wayne Driver, and the Women's Health Strategy Unit in the Department of Health and Community Services, Darwin, in particular Jenne Roberts the Women's Health Advisor.

Many remote area nurses and midwives have given their time and feedback particularly the Women's Health Educators for the NT (esp. Sandy McElligot, Sharon Weymouth and Glenda Gleeson), the Health Centre Staff in Maningrida (esp. Hellen Matthews, Suzanne Peel, Leonie Conn, Abbey Harwood and Christine Haigh), Ree Dunn and Jeanette Boland. Lesley Barclay was the project director, Sue Kildea the project officer and Ruth Worgan the project manager. Sue Kildea and Molly Wardaguga were co-researchers on the project with the Participatory Action Research Team, which included Maningrida women, Aboriginal Health Workers, Remote Area Nurses and Midwives, Local Medical Officers, Women's Centre Co-ordinators (Kim Short, Genevieve Meehan, Jill White and Carol Holt), Women's Health Educators and an ex-Remote Area Nurse Midwife.

The project was funded by the Australian Government Department of Health and Ageing through a Rural Health Support, Education and Training (RHSET) grant.

Artwork: The website and guide were designed by Liquid Rain using photos of Screen Prints designed by Belinda Guringa, Kate Muwulga and Lena Guriniya.

All photos taken by Sue Kildea unless otherwise stated.

Spelling: The spelling of names and places was something that was difficult at times. There were many different spellings across languages and we decided to spell the names they way the women wanted them spelt. We had additional assistance from Katie Cooper for the Burarra language, Murray

Garde and Hellen Matthews from the Health Centre. We sincerely apologise if any mistakes have been made.

This website, CD Rom and guide were written and developed by Sue Kildea and Molly Wardaguga through the Centre for Family Health and Midwifery, University of Technology, Sydney. Molly Wardaguga and Margaret Dawumal have been the cultural advisors involved in checking the contents of the Website. Some women who shared their stories have passed away during the course of the project. Discussion have been held with the family members to ensure they are happy for, and give permission for these women's voices, stories and photos to be shared on the website. We have covered their photos with a box so that they will not cause distress and only by placing the mouse over the top of these boxes will people be able to view the photos of these women. The families felt this was important so that they could still see the photo if they chose to. The website has been located on the Maningrida Arts and Culture website so that the community have control over the site and are able to add, update or remove sections as they wish, or if they need to for cultural reasons.

The Birthing in the Bush CD Rom and Website and the Primary Health Care Guide were designed by Sue Kildea and Liquid Rain Design.

The Maternity Care in the Bush Website was designed by Sue Kildea, Driver Web Designers and Liquid Rain Designs and the Communication Forum was designed by Sue Kildea and Driver Web Designers.

TABLE OF CONTENTS

Table of Contents.....	1
List of Figures	2
List of Tables	2
ABSTRACT.....	1
EXECUTIVE SUMMARY.....	2
Background	2
Part One	3
Part Two.....	3
Process.....	4
Results	5
Conclusion.....	5
Key Recommendations	6
RHSET OBJECTIVES PERTINENT TO THIS PROJECT	7
FINAL REPORT.....	8
Introduction.....	8
Background	8
The 'Maternity Care in the Bush' Navigator (Resource Library)	9
The 'Remote Links' Communication Forum.....	10
Birthing in the Bush Website.....	10
A Primary Health Care Guide to Planning Local Maternity Services.....	11
PART ONE	12
Project Proposal.....	12
Results	13
Process	13
Ethics.....	15
Outcomes	16
Evaluation.....	20
Barriers	20
Hardware Inadequacies	20
Access.....	20
Technical Difficulties.....	21

Speed	21
Teething Difficulties.....	22
User Difficulties.....	22
Costs	23
Facilitators	23
Reach	23
Agency Affiliation	25
Content.....	25
Richness	27
Summary	28
PART TWO	29
Project Proposal.....	29
Results	30
Process	30
Ethics.....	32
Ownership	33
Women’s Business.....	33
Outcomes	35
Evaluation.....	41
Reach	41
Internet Access.....	41
Finding the Time	41
Management Support.....	41
Agency Affiliation	42
Orientation.....	42
Cultural preparation	42
Clinical relevance	42
Richness	43
Summary	43
DISSEMINATION.....	44
PRODUCTS.....	45
ATTACHMENTS.....	46
REFERENCES.....	46

LIST OF FIGURES

Figure 1. The Action Research Cycle	13
Figure 2. Maternity Care in the Bush on the CRANA Website.....	16
Figure 3. Sections Available on the Website.....	17
Figure 4. Birthing Business in the Bush Website.....	17
Figure 5. Example of Links on the Website.....	18
Figure 6. Remote Links Communication Forum on CRANA Website.....	19
Figure 7. Hits to the Maternity Care in the Bush Website	23
Figure 8. Communication Forum: New Users, Posts and Threads	24
Figure 9. Icon Leading to the 'What's New' Section	27
Figure 10. Front Page of the Guide.....	35
Figure 11. Birthing Business in the Bush Website	36
Figure 12. Preparing Bush Medicine	40

LIST OF TABLES

Table 1. Participants Developing and Testing Website and Forum	14
Table 2. Reflection and Action Used to Improve Agency Affiliation	26
Table 3. Participants Developing and Testing Birthing in the Bush Website	31
Table 4. Participants Developing and Testing the Primary Health Care Guide ...	31

ABSTRACT

The RHSET funded project '*Overcoming Isolation through Knowledge and Support Networks*' aimed to: 'Strengthen Remote Area Maternity Services in Australia'. A participatory action research (PAR) approach was utilised for this project.

The project has seen the development of four different resources:

- The *Maternity Care in the Bush* Resource Library – www.crana.org.au
- The *Remote Links* Communication Forum – www.crana.org.au
- The *Birthing in the Bush* Website – www.maningrida.com/mac/bwc/index.html
- The *Primary Health Care Guide to Birthing Business in Your Community* – incorporated on the Birthing in the Bush website.

Part One of the project saw the development of the first two resources '*Maternity Care in the Bush*', and the '*Remote Links*' web based Communication Forum. These were developed with a PAR group, which included remote based practitioners and health professionals who support these practitioners in the field. Collaboration between Professor Lesley Barclay and Sue Kildea at the Centre for Family Health and Midwifery (CFHM) and The Council of Remote Area Nurses of Australia (CRANA) was an underlying principle throughout this project.

Part Two of the project involved the development of the '*Birthing in the Bush*' Website and a '*Primary Health Care Guide to Birthing Business in Your Community*'. These were developed with collaboration between: The Centre for Family Health and Midwifery; the Bawinanga Women's Centre, Maningrida; and the Department of Health and Aged Care in the Northern Territory. Mrs. Molly Wardaguga is a retired Senior Aboriginal Health Worker who was a co-researcher on the project with Ms Sue Kildea. The PAR team included Indigenous elders from the Maningrida community and outstations in Arnhem Land. The website is hosted on the Maningrida Arts and Crafts website. The Primary Health Care Guide has been produced to draft stage. Further testing, evaluation and refinement is occurring at present, in the Maningrida Community, as a part of Ms Sue Kildea's doctorate.

The barriers and facilitators of using web-based material for offering support to practitioners in the remote setting have been explored and recommendations have been included.

EXECUTIVE SUMMARY

BACKGROUND

There are many challenges to providing safe and comprehensive maternity services in the remote areas of Australia. The difficulties in recruiting and retaining staff are influenced by the isolated nature of providing clinical services in remote areas with reduced access to additional expertise, current educational resources and communication with peers[1-4]. An additional barrier is the health care service provider is not always well prepared for the diverse cultural setting in which they are working and many have not been trained in community consultation and primary health care [1, 5, 6]. Anecdotal evidence suggests that despite the best intentions of management, some staff are working in communities having received minimal cultural awareness training and orientation, and have limited access to educational support, current health research and new national guidelines.

A national rural and remote nursing summit aimed at strengthening rural and remote nursing services recommends multidisciplinary networking of isolated practitioners for professional support and education [7]. Linking newly arrived practitioners (through a communication forum) to colleagues in other remote locations could allow the more experienced workers to assist with educating, mentoring and supporting the new arrivals. The above recommendation is also one of the priority areas for RHSET funding. This project addressed this recommendation. Further work in this area, 'Action on Nursing in Rural and Remote Areas, 2002-2003' suggested increasing the use of technology to support education, networking and mentoring in particular for after-hours support [8].

THE PROJECT

The project has seen the development of four different resources:

- The *Maternity Care in the Bush* Resource Library (Part One)
- The *Remote Links* Communication Forum (Part One)
- The *Birthing in the Bush* Website (Part Two)
- The *Primary Health Care Guide to Birthing Business in Your Community* (Part Two)

PART ONE

Educating and training remote practitioners is difficult. It is often expensive to leave the community and relief staff are not always available. One of the cheapest and easiest ways of providing education, and networking the practitioners, could be through Information Technology (IT) and the Internet. The Northern Territory is pursuing the goal of providing IT to all remote Health Centres and some practitioners already have access to the Internet either in their homes or at the health centres. Part One of this project tested the accessibility and practicality of offering education and networking via the Internet.

This report describes the development and evaluation of the navigator¹ *'Maternity Care in the Bush'*. The evaluation of this navigator has included its performance on: 1) Reach, 2) Agency Affiliation and, 3) Richness; which are the key points that will effect the sustainability and utility of such a resource [9]. This report also describes the development and evaluation of the *'Remote Links Communication Forum'* aimed at networking remote practitioners. The evaluation of these resources includes the 1) Barriers and, 2) Facilitators that influence the utility of an IT strategy aimed at supporting remote area maternity service providers.

PART TWO

Service providers in remote areas often have difficulty providing care that is socially or culturally appropriate and this is thought to be related to poor birth outcomes [5, 10-12]. The lack of (or limited) cultural awareness training, and not knowing how to access resources and knowledge already present in remote Aboriginal communities, can result in health service providers who are not always working collaboratively with community members. Ignorance rather than lack of motivation may result in poorly directed effort, misunderstanding, frustration and 'burn out'. Inadequate understanding of the Aboriginal world view and their cultural knowledge base, together with communication difficulties, are suggested to be central features of the inability of service providers to provide effective cross-cultural communication and health services [13, 14].

Aboriginal Health Workers are frequently the most valuable resource in the health centres; their knowledge combined with the knowledge, support and guidance of the elders in the community has been used to develop the *'Primary Health Care Guide to Planning Maternity Services in Your Community'* and the *'Birthing Business in the Bush Website'*. The use of these resources should assist remote practitioners to increase their understanding of the cultural issues important to child birthing practices in the community in which they are working. Concurrently this process engages the community in health planning, making the service more

¹ In computer terminology examples of navigators are databases (eg. Ebay) or search engines (e.g. google) that assist in guiding people through the immense amount of information that is available on the Internet to targeted areas.

appropriate to those who use it and increasing investment and ownership of the service by the community. The Primary Health Care Guide will assist to identify the women in the community who are experienced in childbirth knowledge and practices. This is important for all communities but particularly those without a resident midwife or doctor. The website is being hosted on the Maningrida Arts and Craft website and the Primary Health Care Guide has been produced to draft stage, needing further testing, evaluation and refinement prior to use. This report documents the development and evaluation of these resources.

PROCESS

The project was undertaken using a participatory action research (PAR) approach. This approach is increasingly being recommended for research in the Australian Indigenous context [15]. This project has built in several of the principles necessary for sustained improvement in Aboriginal and Torres Strait Islander (ATSI) health as identified by the National ATSI Health Strategy [10]. These principles include:

- 'Using a holistic approach to health issues',
- Training the service providers on 'cultural security: ensuring that the legitimate cultural rights, views, values and expectations of ATSI peoples are respected' for maternity services, and,
- 'Building the capacity of health services and communities to respond to health needs and take more responsibility for health outcomes' pertaining to maternal and child health. 'This includes equipping staff with appropriate cultural knowledge and clinical expertise' [10].

RESULTS

The aims of Part One of the project were achieved with the development and production of the navigator *Maternity Care in the Bush* and the *Remote Links Communication Forum*.

The overall evaluation of the '*Maternity Care in the Bush*' resource library was excellent with the major problem identified being difficulties in gaining access to the Internet. The *Communication Forum* was not as successful, though we believe if there were resources within CRANA to lead it, and assist with the training and education necessary for use, then it has potential to fulfil the stated goals. CRANA are perusing funding to provide active support and management for the forum and to maintain and increase the size and scope of the resource library.

The aims of Part Two of this project were achieved with the development and production of the website '*Birthing Business in the Bush*' and the '*Primary Health Care Guide to Birthing in Your Community*'. Early evaluation has shown, that if utilised, these resources should assist to better prepare the non-Indigenous health practitioner to working in this cultural environment. Additionally the Guide will assist the health service providers to work collaboratively with community members in the development of a culturally appropriate model of maternity care for their local community.

Two major barriers to the use of all the above resources are the stated difficulties remote practitioners experience with accessing the Internet and having the time available to do so. Education and training on computer use, prioritising primary health care activities in the health centre, and attention to computer hardware are all key factors that will influence the utility of these resources.

CONCLUSION

We believe the outcomes of this project have met RHSET's objectives and the project objectives we set, and that were approved. The project was completed with a slightly extended timeline and within budget. Our evaluation to this point has confirmed the importance of this project contributing to strategies to recruit, support and retain staff in the remote setting.

KEY RECOMMENDATIONS

1. All remote area Health Centres have the hardware, and necessary computer support, to access the Internet.
2. Training and education for Information Technology use, by remote based practitioners, is required. This recommendation will require promotion in organisations that have responsibilities in this area, both Commonwealth and Territory.
3. The Department of Health and Aged Care in the Northern Territory ensure there is management support, across all levels of the workforce, to enable Internet access for education and networking of health practitioners.
4. CRANA employ someone to expand, manage and refine the Navigator function of their website and the Communication Forum. (It is expected this will occur if CRANA's application to the Commonwealth for secretariat funding for the next three years is successful).
5. To further test, evaluate and refine the 'Primary Health Care Guide to Planning Maternity Services in Your Community' prior to it being rolled out in other remote areas. (The research team are currently applying for further grants to be able to achieve this).
6. The Department of Health and Aged Care in the Northern Territory ensure there is management support for primary health care activities to occur in remote communities.
7. Wide distribution of this report through the Department of Health and Aged Care in the Northern Territory, the Commonwealth Department of Rural Health and other appropriate organisations.
8. Further publications and conference presentations to ensure the results of this project are even more widely distributed (This will be undertaken by the project officer Ms Sue Kildea, the project director Professor Lesley Barclay and the Centre for Family Health and Midwifery).

RHSET OBJECTIVES PERTINENT TO THIS PROJECT

The objectives of the RHSET funding include training and support projects that promote a **primary health care** focus in assisting individuals and communities to promote healthy lifestyles, prevent illness and manage their health problems. Training and support to health professionals should emphasise **community development** and **community participation** and the importance of **local collaborative networks** as a key approach to **collectively addressing** the health care needs of the community.

This particular round of funding targeted projects that:

Are innovative and may set out to challenge current thinking or current practice, propose new methods of collaboration, or new models to support, educate or train rural or remote health workers;

Focus on building links and collaborative partnerships, across disciplines and across sectors, leading to more flexible and responsive approaches to meeting the health care needs of the rural and remote communities; and/or

Focus on a local health issue, and can demonstrate a model for finding local solutions to local problems, with potential for broader application.

Additionally all projects were to target rural and remote health workers; focus on support, education and training development and enhancement rather than on direct service provision; have potential for broader application; have a timeframe of no more than twelve months and a budget of \$70,000 or under (exclusive of GST); and demonstrate sustainability of outcomes beyond the funding period. The priority area for 2001-2 that was addressed with this project was developing strategies to overcome isolation of health workers in remote communities, eg: forming networks; and building health worker capacity.

FINAL REPORT

INTRODUCTION

The RHSET funded project 'Overcoming Isolation through Knowledge and Support Networks' has been a part of a larger project being completed as a PhD, with the aim of 'Strengthening Remote Area Maternity Services in Australia'. The RHSET component involved the development of the resource library '*Maternity Care in the Bush*', the '*Remote Links*' web based communication forum and the development of the '*Birthing Business in the Bush*' Website with the '*Primary health Care Guide to Birthing Business in Your Community*'. We believe the outcomes have met RHSET's objectives (as in the box above), and the project objectives we set, and that were approved. The project was completed with a slightly extended timeline and within budget. Our evaluation to this point has confirmed the importance of this project contributing to strategies to recruit, support and retain staff in the remote setting and identified recommendations that could assist support the utility of what has been produced.

BACKGROUND

There are many challenges to providing safe and comprehensive maternity services in the remote areas of Australia. The difficulties in recruiting and retaining staff, related to both a national and international shortage of midwives [1, 16-18] are well known. Other barriers include the isolated nature of providing clinical services in remote areas, with reduced access to additional expertise and resources [1-4], and the relationship between pregnant women and the health care service provider [1, 5, 6].

Across Australia higher fertility rates and increased maternal and perinatal morbidity and mortality are found in remote areas, particularly in the Indigenous population [3]. These statistics are particularly pertinent to the Northern Territory where 35% of women giving birth are Indigenous [10] and two thirds of these women reside in rural and remote areas [19]. Service providers who work in these areas are faced with many challenges that are not seen in the urban setting.

The staffing situation in many of the remote Health Centres of the Northern Territory is reaching a critical level. Some communities do not have trained resident providers of maternity care and others have a very high turnover of staff [20]. A CRANA survey showed that more than one third of respondents did not have a peer of the same profession in their community and 13% worked alone [21]. Anecdotal evidence suggests that despite the best intentions of management, some staff are working in communities having received no cultural awareness training, minimal orientation and have limited access to regional educational support, current health research and new national guidelines. A national rural and remote nursing summit aimed at strengthening rural and remote nursing services recommends multidisciplinary networking of isolated practitioners for professional support and education [7]. *Overcoming Isolation Through Knowledge and Support Networks* addressed this recommendation. This recommendation is also one of the priority areas for RHSET funding. Further work in this area, 'Action on Nursing in Rural and Remote Areas, 2002-2003' suggested increasing the use of technology to support education, networking, mentoring and clinical

supervision in particular for after-hours support [8]. However these reports suggest the lack of infrastructure is a barrier to this at present [8].

A lack of infrastructure and training was also highlighted by the survey of CRANA members (2000) with 74% of 100 practicing RAN's saying that the quality of telecommunications effected their ability to access the Internet [21]. Forty eight percent of the 102 respondents suggested they needed training in IT and only 4% had received professional training in IT in the previous 12 months [21]. Not surprisingly, the need for IT training was greater in remote areas [21]. One person explained that they were going to leave their current location because of difficulties accessing library services for studying and high Internet costs. When asked about access, 39% of 101 respondents did not have email with major reasons being due to management decisions, or not having the lines or a computer and 56% said they could not access the Internet at work for similar reasons [21]. Overall 57% had Internet or email access at home [21].

Education and training remote practitioners is difficult. It is often expensive to leave the community and relief staff are not always available. One of the cheapest and easiest ways of providing education and networking the practitioners could be through IT and the Internet. The Northern Territory is pursuing the goal of providing IT to all remote Health Centres and some practitioners currently have access to the Internet either in their homes or at the health centres. This project tested the accessibility and practicality of offering education and networking via the Internet by establishing four different resources:

- The *Maternity Care in the Bush* Resource Library (Part One)
- The *Remote Links* Communication Forum (Part One)
- The *Birthing in the Bush* Website (Part Two)
- The Primary Health Care Guide to Birthing Business in Your Community (Part Two)

The 'Maternity Care in the Bush' Navigator (Resource Library)

The explosion of information available on the Internet has provided vast choices and a bewildering number of possibilities, which made navigating through these choices extremely difficult [9]. These difficulties lead to the rise of the tools known as 'navigators', examples of which include: search engines such as Google™ and Yahoo®; databases such as Ebay™ and the Cochrane Collaboration [9]. Navigators have made surfing the Internet quicker and easier than it was initially. Navigators need to be competitive on reach, agency affiliation and richness [9]. The further navigators reach the better, as those reaching the furthest would probably become the most popular. Agency affiliation refers to meeting the needs of the target audience and richness involves delivering quality information [9]. Where agency affiliation and richness are targeting a particular field then reach does not have to be broad but needs to be targeted.

This report describes the establishment and evaluation of one such navigator called 'Maternity Care in the Bush'. The evaluation of this navigator has included its performance on: 1) Reach, 2) Agency Affiliation and, 3) Richness; as these are the key points that will effect the sustainability and utility of such a resource [9]. An additional component of

the evaluation of documents the 1) Barriers and, 2) Facilitators of the IT strategy aimed at supporting remote area maternity service providers.

The 'Remote Links' Communication Forum

Linking newly arrived practitioners (through a communication forum) to colleagues in other remote locations could allow the more experienced workers to assist with educating, mentoring and supporting the new arrivals. Being able to discuss local issues and problems that are unique to maternity care in remote areas will assist to avoid the 'learning by trial and error', which is so often the norm. The communication Forum was to be multidisciplinary allowing the different experience, expertise and worldviews of Aboriginal health workers, midwives, nurses and doctors to inform and support each other. Preliminary discussion with service providers suggested they would find this kind of resource valuable as long as it is easy to access and navigation is easy. Discussions with CRANA suggested they would be interested in hosting a site such as this. A CRANA evaluation had identified communication as an important theme throughout [22], and they had planned to develop alternate forms of communication that are more efficient in cost and time [23].

Regional support positions (Women's Health Educators, District Medical Officers, Strong Women Coordinators, Specialist Outreach Obstetricians and Nutrition Workers) would be able to use this resource to communicate with the remote area workers, and with each other, to share ideas and resources, offer support and discuss local issues with the isolated practitioners. A possible future use of this web site is for case review. This will be investigated in 2004-7 as a part of the larger project (if funded) and, if feasible, will be an added feature of *Remote Links*. Resources that have already been developed specifically for this population will be added to the *Remote Links* web site for greater accessibility and distribution.

Birthing in the Bush Website

Service providers in remote areas often have difficulty providing care that is socially or culturally appropriate and this is thought to be related to poor birth outcomes [5, 10-12]. The lack of (or limited) cultural awareness training, and not knowing how to access resources and knowledge already present in remote Aboriginal communities, mean the health service providers are not always working collaboratively with community members. Ignorance rather than lack of motivation may result in poorly directed effort, misunderstanding, frustration and 'burn out'. Inadequate understanding of the Aboriginal world view and their cultural knowledge base, together with communication difficulties, are suggested to be central features of the inability of service providers to provide effective cross-cultural communication and health services [13, 14].

This report described the development of the Birthing in the Bush Website that details information on remote area maternity care specific to Indigenous women. It includes: stories from Indigenous elders and remote area nurses, information on cultural practices important to maternity care, clinical information and attached will be the 'Guide To Planning Maternity Services In Your Community' when the evaluation is complete.

A Primary Health Care Guide to Planning Local Maternity Services

Many midwives, nurses and doctors have not been provided with knowledge or skills to work within a community development framework and some are unaware of how they can adapt their practice to engage community members to enhance community capacity and find local solutions to local problems.

To help improve the health status of their communities, health professionals need skills in cultural sensitivity and in public health and primary health care approaches to health issues. Skills to work collaboratively with community members and interest groups are necessary if shared development plans are to be successful. (Healthy Horizons, Goal 5. Maintain a Skilled and Responsive Workforce) [4, pp.18].

Part B of this project addressed the above goal, which is considered a priority area for RHSET.

Aboriginal Health Workers are frequently the most valuable resource in the health centres, their knowledge combined with the knowledge, support and guidance of the elders in the community has been used to develop a 'Guide To Planning Maternity Services in Your Community'. This Guide and the above described website will assist remote practitioners to increase their understanding of the cultural issues important to child birthing practices in the community in which they are working. Concurrently this process engages the community in health planning, making the service more appropriate to those who use it and increasing investment and ownership of the service by the community. The Guide will assist to identify the women in the community who are experienced in childbirth knowledge and practices. This is important for all communities but particularly those without a resident midwife or doctor.

This project has built in several of the principles necessary for sustained improvement in Aboriginal and Torres Strait Islander (ATSI) health as identified by the National ATSI Health Strategy [10]. These principles include:

- 'Using a holistic approach to health issues',
- Training the service providers on 'cultural security: ensuring that the legitimate cultural rights, views, values and expectations of ATSI peoples are respected' for maternity services, and,
- 'Building the capacity of health services and communities to respond to health needs and take more responsibility for health outcomes' pertaining to maternal and child health [10].

The report is divided into two parts, which describe the original project proposal and the development, evaluation and final results of the project.

- The *Maternity Care in the Bush* Resource Library (Part One)
- The *Remote Links* Communication Forum (Part One)
- The *Birthing in the Bush* Website (Part Two)
- The Primary Health Care Guide to Birthing Business in Your Community (Part Two)

PART ONE

PROJECT PROPOSAL

Part One: 'Remote Links'

Goal:

To develop the *Remote Links* web site to provide learning, guidance and a support network for maternity service providers in remote areas. Information technology will be used for interactive peer support, education on Indigenous beliefs relevant to maternity care, links to new national guidelines, current research, articles of interest and other relevant web sites.

Objectives:

To achieve this goal we will:

- Design the *Remote Links* web site for remote maternity service providers,
- Link practitioners to knowledge and skills specific to remote maternity services;
- Include education on Indigenous beliefs relevant to maternity care, bush tucker in pregnancy, cultural safety in childbirth and current research in this field;
- Provide links to other relevant websites;
- Develop an online forum (accessed by password through the *Remote Links* web site) to network remote maternity service providers (multidisciplinary), and,
- Provide a tool (the forum) that enables support, education and mentoring for maternity service providers.

Target Group:

Remote maternity service providers (midwives, remote area nurses, Aboriginal health workers, GP's and obstetricians).

Scope:

The *Remote Links* web site will be accessible to anyone with access to the Internet. The *Remote Links On Line Forum* will be piloted in the Northern Territory and made accessible to other remote areas of Australia following the initial evaluation and modifications if necessary.

The *Remote Links Web Site and On Line Forum* will be maintained by the CFHM during the development work. Ongoing management and sustainability will be by another appropriate body such as the Council of Remote Area Nurses of Australia (CRANA), the Australian College of Midwives Inc.(ACMI), or the National Rural Health Alliance (NRHA). From 2003 onwards the CFHM will add the new resources (completed as a part of the larger project '*Strengthening Remote Area Maternity Services*') to the website as they become finalised.

RESULTS

PROCESS

This project was undertaken using a participatory action research (PAR) approach, which involves cycles of planning, acting and then reflecting prior to further planning and acting again. This is shown diagrammatically below.

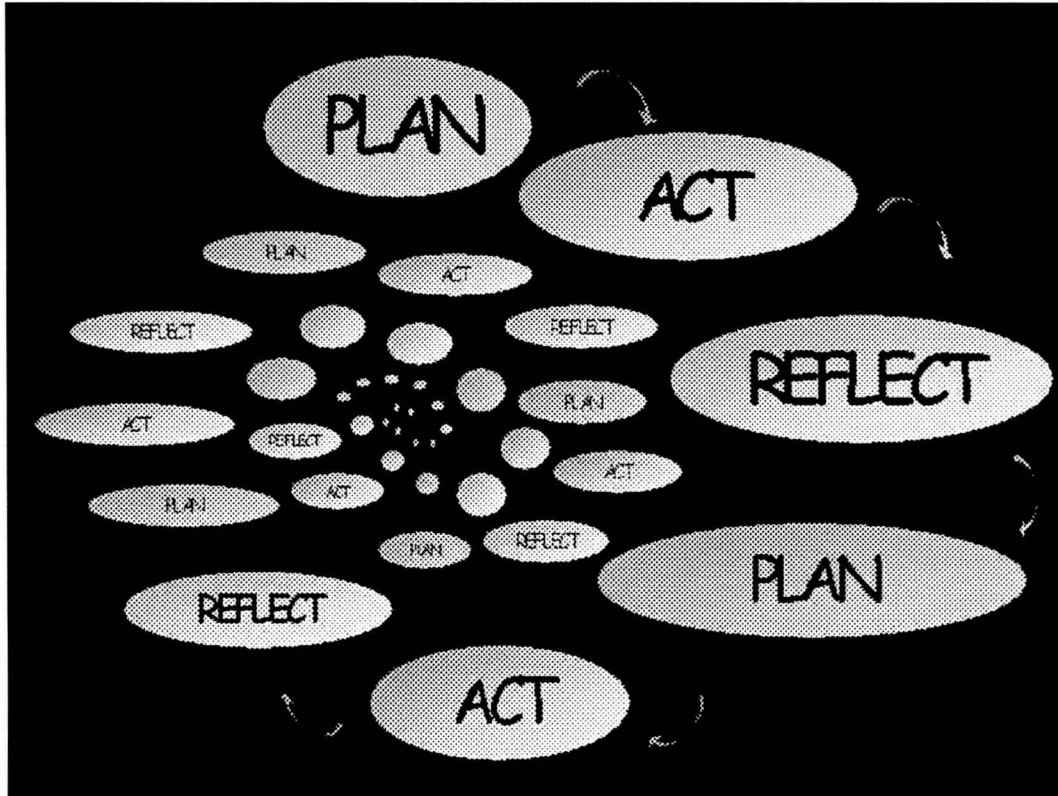


Figure 1. The Action Research Cycle

The PAR team was composed of a group of self-selected and targeted midwives and doctors who were involved in the delivery of remote area maternity services. The table below shows the professional groups who participated in the research. They have been divided into five groups, though individuals were included into more than one group at various times throughout the research [24]. This multiple representation is commonly seen in PAR. People were categorised according to where they spent the most time:

The PAR team included: practitioners who had extensive experience in remote area women's health service provision (remote area midwives and doctors, and remote support staff), and the project officer (Sue Kildea).

The Researched: this group included remote area practitioners for whom the Website and Forum were being developed.

The Critical Reference Group (CRG): consisted of practitioners who advised and assisted the project. The critical reference group (n=6) were all a part of the PAR team bringing the total in the PAR team to n=12.

The Stakeholders: those who have some involvement in the support and provision of remote maternity services. This group included: Women’s Health Educators, staff development and orientation personnel, Policy Analysts and District Medical Officers.

Attrition: These had all been in The Researched group and the reasons for leaving included: moving interstate (4); being unable to get Internet access (1); leaving the position (1); partner became ill (1); and, expressed interest but never participated (1).

Maternity Care in the Bush Website and Communication Forum					
	PAR Team	Critical Reference Group	The Researched	The Stakeholders	Attrition
Medical Officer	1		2	2	1
Student (midwife and doctor)			2		
Remote Area Midwife (RAM)	5	2	5		4
Remote Area Nurse (RAN)	1		1		1
Policy Advisor				3	
Support Staff	4	4	1	4	2
Women’s Centre Co-ordinator	1				
Sue Kildea	1				
Total	13	6	11	9	8

Table 1. Participants Developing and Testing the Maternity Care in the Bush Website and Communication Forum

The PAR team were involved in planning and evaluating the resources from the beginning with data being taken directly from the Communication Forum, email, phone contact, and a questionnaire which had been developed for this purpose. Most of the changes suggested by the team were incorporated into the Website or Forum as they were recommended so that ongoing evaluation, reflection and then further planning and action could occur.

Interviews were held with the CRG and statistics measuring hits to the Website and Forum (number of visitors) were collected. Additional data were gathered from: the Webmaster; direct feedback from the Website; and other direct feedback from other interested parties who were accessing the site. Field notes were kept during this time and face-to-face discussions with interested individuals and stakeholders (in particular CRANA members) were also recorded.

ETHICS

Ethics approval was given by the University of Technology Sydney (UTS) Ethics Department, the Top End Human Research Ethics Committee of the Northern Territory and the Central Australian Human Research Ethics Committee.

OUTCOMES

The results of the project have been presented against the overall objectives.

- Design the *Remote Links* web site.

In 2002 we approached the Council of Remote Area Nurses of Australia (CRANA) to see if they were interested in hosting the navigator 'Maternity Care in the Bush'. This involved hosting the resource library for remote area maternity service providers on the CRANA website. CRANA were very supportive of this as it fitted well with their strategic plan. We then worked with the CRANA Webmaster to design the site. The site went live in November 2002 and can be accessed on www.crana.org.au.

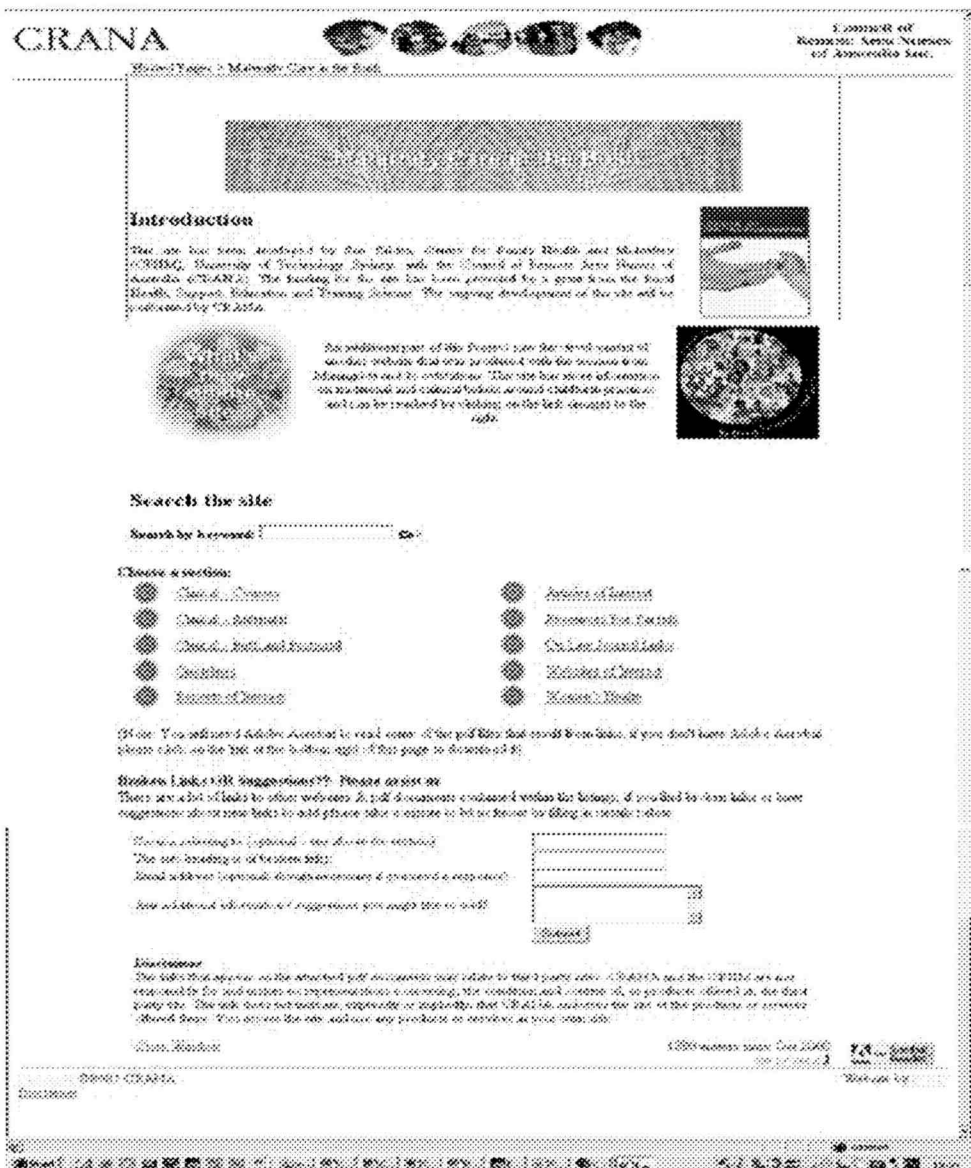


Figure 2. Maternity Care in the Bush as it Appears on the CRANA Website

- Link practitioners to knowledge and skills specific to remote maternity services.

The research group assisted in planning what information would be appropriate for their needs and this was catalogued under different sections. Currently the sections on the Website include:

Choose a section:

- | | |
|---|--|
| Clinical - Courses | Articles of Interest |
| Clinical - Antenatal | Resources For Parents |
| Clinical - Birth and Postnatal | On Line Journal Links |
| Guidelines | Websites of Interest |
| Reports of Interest | Women's Health |

Figure 3. Sections Available on the Maternity Care in the Bush Website

- Include education on Indigenous beliefs relevant to maternity care, bush tucker in pregnancy, cultural safety in childbirth and current research in this field.

Information related to Indigenous beliefs has been provided in the resource library 'Maternity Care in the Bush'. However this component was further strengthened on the Website 'Birthing Business in the Bush' which is described in Part Two of this report.

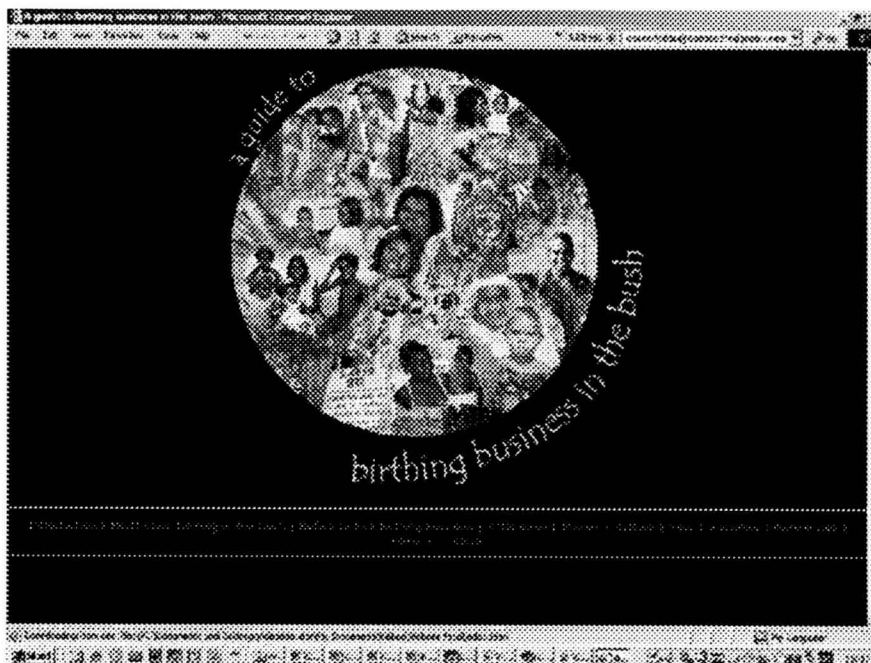


Figure 4. Birthing Business in the Bush Website

- Provide links to other relevant websites.

To date many links have been made (example below) with descriptions against each link to allow easier searching of the site. Additionally the Maternity Care in the Bush Website has reciprocal links with most of these sites and others.

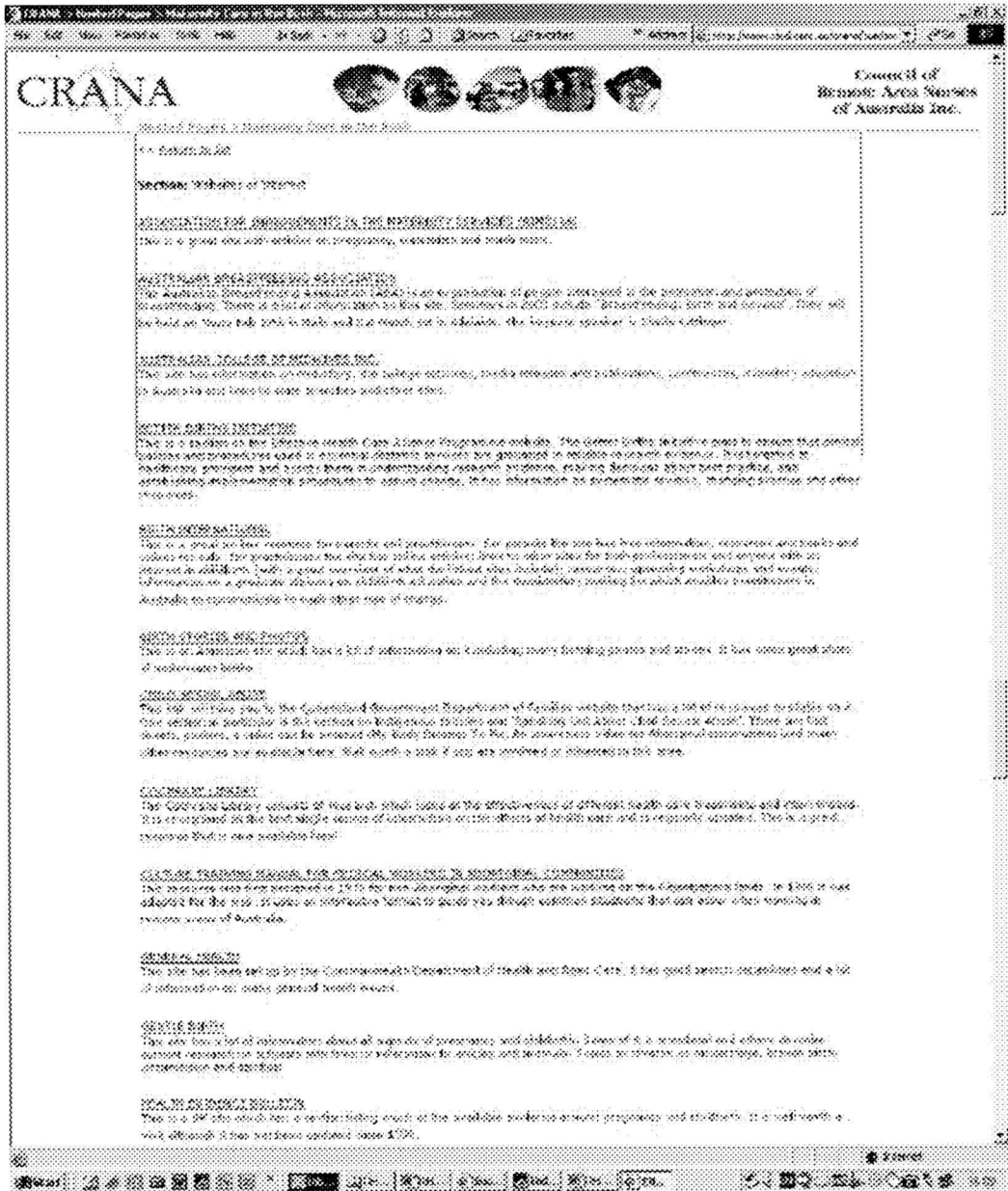


Figure 5. Example of the Links Available on the 'Maternity Care in the Bush' Website

➤ Develop an online Forum to network remote maternity service providers. This communication forum was also supported by CRANA. The Remote Links Communication Forum was developed and went live in June 2002, also hosted on the CRANA Website (see example below).

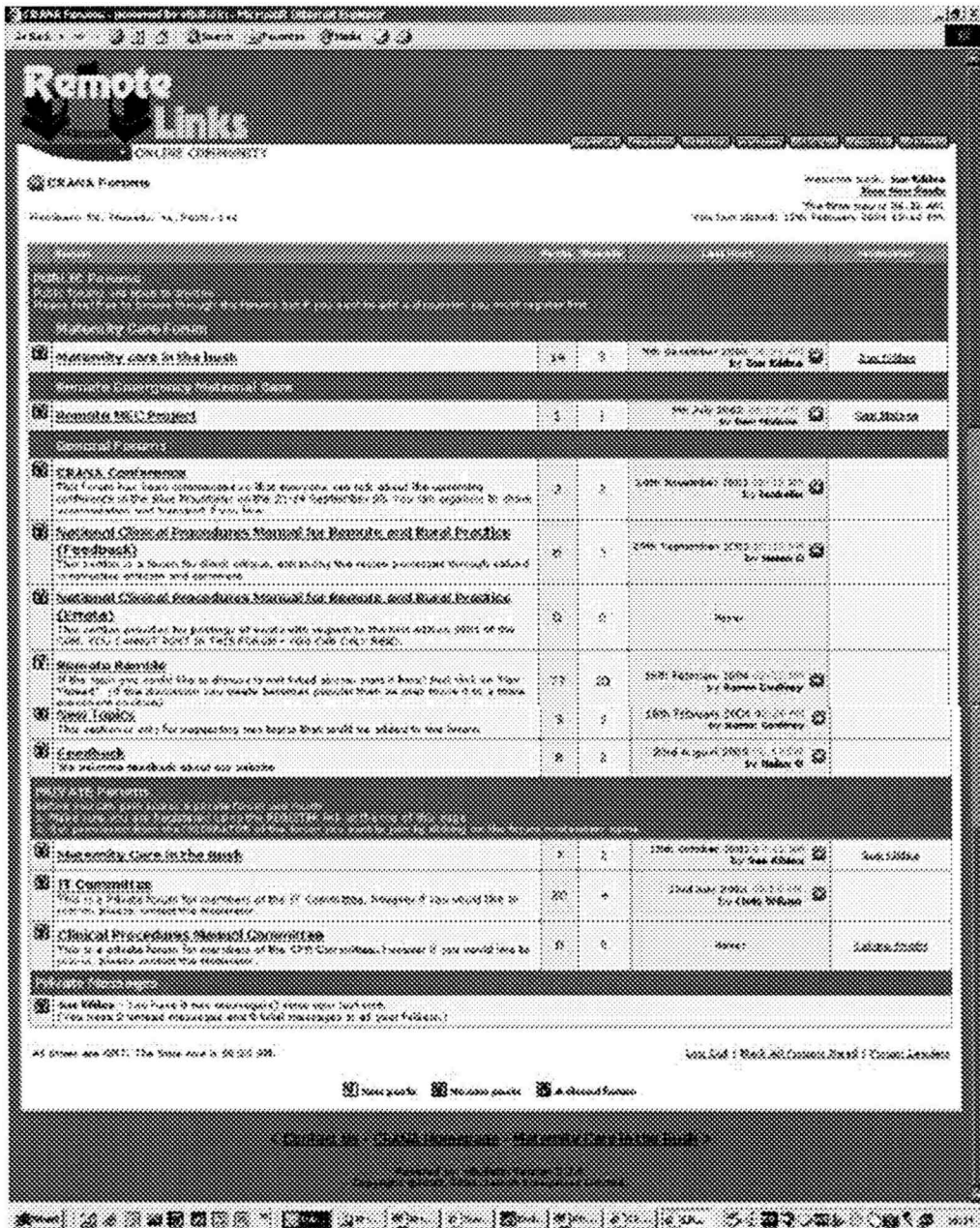


Figure 6. Remote Links Communication Forum as seen on the CRANA Website

- Provide a tool (the Forum) that enables support, education and mentoring for maternity service providers.

The Forum has the potential to provide all of this, however there are a few difficulties that will need to be overcome for it to be fully effective. These are discussed in the evaluation section below.

EVALUATION

Providing support and education to remote area practitioners via information technology is a new and emerging field and to date there is little published data on the efficacy of such initiatives or even techniques that are likely to be most effective. Therefore the evaluation was considered a very important part of the project and has been ongoing since the beginning. The major areas of importance are discussed in more detail below; overall the feedback on this resource has been excellent.

BARRIERS

Hardware Inadequacies

One of the problems encountered by remote practitioners was the inadequacy of computer hardware in many of the remote communities. The IT situation in the remote areas seemed to be quite dynamic with improvements happening throughout the course of the research. One member of the research group did not have access when travelling in remote areas initially but by November 2003 she stated that

the remote health centres here have just got computers with email but things are not going smoothly (Women's Health Educator [WHE]).

Two remote communities had been paying for the lease on computers for two years and they were still in their boxes. Some centres have computers but no satellite and others have had the satellites delivered but not installed. Reasons for this included buildings that were not strong enough to hold the satellites and trees needing to be cut down. These extra costs had not been budgeted for and no one was prepared to pay for these unforeseen difficulties.

Access

Lack of Internet access was one of the common problems stated when asking people about this resource and this was reinforced by the comments that were made by the PAR team:

No, we have email accounts, but only the Director of Nursing has Internet access (Rural midwife)

(I have) no Internet access at work where I need this information, not a fault of the website (Rural midwife)

... only med students have access, the midwives aren't allowed unless you are a consultant (Rural midwife, July, 2002)

... access at work, yes after a lot of work and many requests to acquire it (WHE)

... sharing log on access ... no good as if someone gets onto porno sites you can't track who it was ... and they have access for 4 hours after logging on and this can be a problem if you walk away from it – others may get onto it and cause problems (Field Notes)

We've had the satellite dish on the roof for a year now and only just had it connected Remote area Midwife (RAM)

We have no Internet access or emails yet Remote Area Nurse (RAN).

Technical Difficulties

In the initial phase of the project the research team needed to register and obtain passwords to enter the Forum and the Website. This made the process of logging in more difficult and time consuming. Additionally occasional corrupted files, cookies² needing to be disabled and old operating systems that had difficulties in viewing the sites, caused problems. Although usually repaired fairly easily and quickly, participants who were not particularly familiar with computers and had a busy work environment, found these factors affected the utility of the resource. This is particularly so in the remote setting as highlighted in the comments below:

The recent viruses have caused problems with people not being able to get them off and no budget for flying people out to get them fixed. Telstra have wanted to close some with viruses down due to the spam problems ... tried to send out a CD for fixing it but people couldn't access it (Field Notes, November 2003).

... the remote health centres here have just got computers with email but things are not going smoothly (WHE).

I'm really concerned about the lack of use of the Forum. It does seem a little complicated to use, which may put some people off (Rural Midwife)

Speed

Some of the group were using standard phone lines for Internet access and this made the download speed very slow at times. During the set up phase the site was produced in portable document format (PDF) for ease of use with the research group, but this made it very slow to access. So in September 2002 the format was changed to HTML³ which made it quicker

² A collection of information, usually including a username and the current date and time, stored on the local computer of a person using the World Wide Web, used chiefly by websites to identify users who have previously registered or visited the site.

³ A language used to structure text and multimedia documents and to set up hypertext links between documents, used extensively on the World Wide Web.

for the users. Still, many of the resources needed to be in PDF format and this could not be avoided:

Sometimes the PDF files are very slow to download, but I think this is more the problem of the department computer system. I had to get Acrobat reader installed (WHE July 2003)

Tends to be a little slow (RAM, July 2003)

Teething Difficulties

As with most new technology there were teething problems in the beginning:

... the website did not recognise me again and I have just had to re register to get in. Also the forums page did not accept my password for some reason so I have just reset it, is there a cookie for it to remember my password when I register my name with the forum?? I did not get an email telling me of the latest post to the forum (Project Officer to the Webmaster July, 2002).

Most of these were sorted out fairly quickly and this was because the Webmaster was so responsive and easy to contact.

User Difficulties

Some people are not comfortable with computers – many say they have no time to deal with them and others say they have no support or training (Field Notes, November 2003).

This response is not surprising given the results of the survey of CRANA members in 2000 showed that 48% suggested they needed training in IT. Only 4% had received professional training in IT in the previous 12 months [21].

I felt a little perplexed by it - no idea what cookies etc are- so I guess I need some coaching, preferably on the phone/in person or what ever (RAN)

... also my lack of knowledge of how to access these different sites (it took time to work my way through it). This was compounded by the fact October was a very chaotic month for my work with me being out bush or interstate so time to roam the Net was almost zero. Also I have never used a forum before so it is not really in my mind to communicate this way with people. However I can see how it could be a very valuable means of sharing knowledge & resources. From my experience few midwives would access this type of resource partly due to time factors to access the net, also due to lack of computer access for private work and the other factor like myself never having used a forum before (WHE Nov 2002).

I admit that I haven't used the Forum very much but it is easy to use. I forget my registration as we live with too many codes and numbers and I access this area rarely (WHE).

Costs

The costs of accessing the Internet was another thing that was seen as a barrier for use in remote areas:

My phone bill has gone up by \$60 a month because of line dropouts (RAN September 2002)

There are cost constraints for middle managers and at \$18 per month for access per staff member with a 50 meg download it can get very expensive (Field Notes).

FACILITATORS

There was also a lot of positive comments about the Website:

I utilise the site prior to courses for updated information and if an inquiry comes from a RAN about a particular subject. I can either send the link information or print it and send by snail mail. The links are good if I need to extend my search. It is on my 'favourites' list (WHE)

A very valuable resource if able to access the Internet (RAN)

Very user friendly (RAN)

REACH

Reach refers to the number of people who are sharing the information that is available [9]. The figure below shows the reach for the 'Maternity Care in the Bush' resource library, which went 'live' in November 2002. The figure shows the cumulative amounts of hits that the site has received between the 1.11.02 and the 31.11.03. The range was 62-222 hits per month and the mean was 134 hits per month.

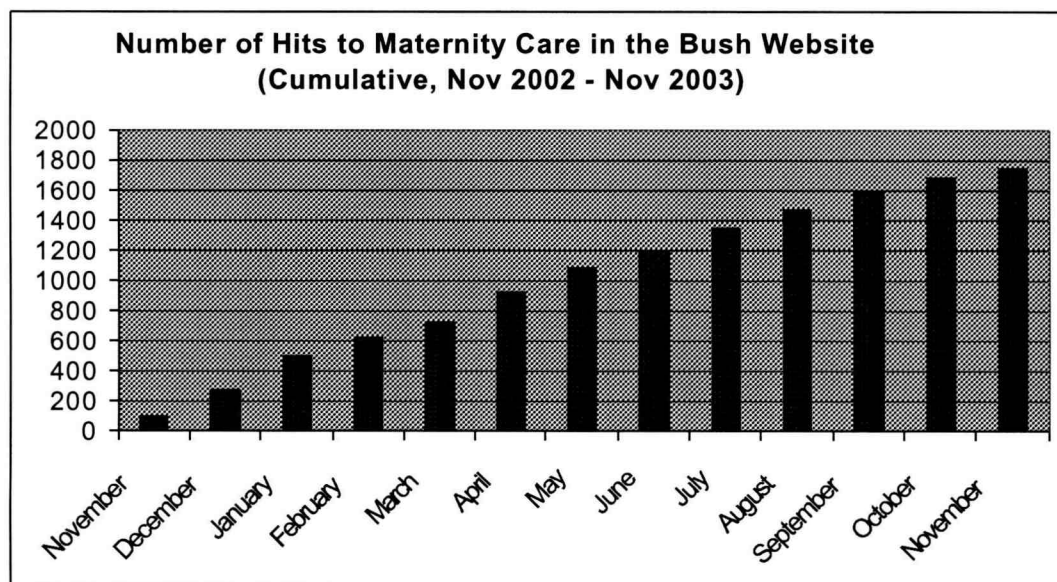


Figure 7. Hits to the Maternity Care in the Bush Website

The Forum was established five months prior to the Resource Library (June 2002) to enable the research group to use this as a tool for communicating with the project officer and each other. However communicating via this method did not really occur as many of the group had difficulties understanding the processes involved in using a forum, difficulties with logon, limited Internet access and did not feel comfortable using this medium for communication. However, despite these challenges, remote practitioners did access the Forum and new threads⁴ were commenced. The Forum statistics showed that from June 2002 to December 2003, 38 major threads were created (7 by the project officer), 57 new users registered on the site, and there were 138 postings⁵. The feedback suggests that the communication forum could be valuable but requires easier access and someone to manage and support it (see Technical Difficulties below). CRANA are very keen to take on this role if they can secure the funding to do so and hope to incorporate education and training into it.

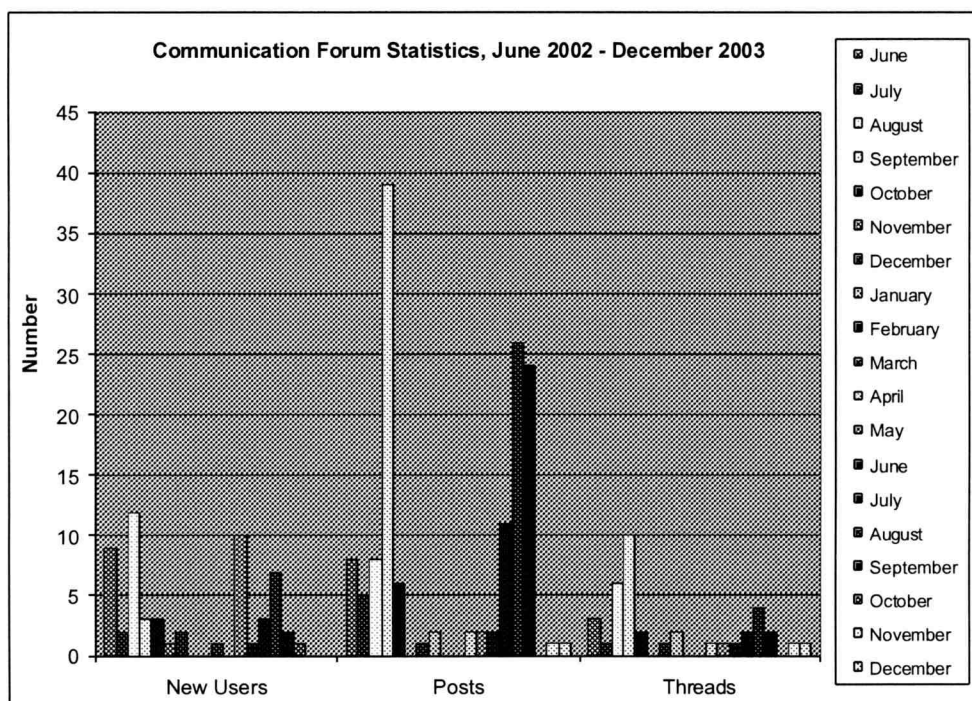


Figure 8. Communication Forum: New Users, Posts and Threads

⁴ A thread refers to a set of posts on a forum, composed of an initial post about a topic and all responses to it, eg. Maternity Care in the Bush and CRANA Conference are two of the threads on the Forum.

⁵ A posting is an electronic message that is posted on the Forum in response to a thread, eg Posted in June 2002 from someone in Broken Hill - NSW Health will be introducing auditory tests within the first 24 hours of birth for neonates before the end of this year. What implications will this have for the remote or rural nurse in the Far West?

The further a navigator reaches the better, as those reaching the furthest are likely to become the most popular. Given the discussed barriers to accessing these resources the following suggestion could be a very good way of increasing the reach (though the potential to accomplish this has not yet been investigated):

It would be really good to get a link onto a government site so that staff who don't have access to the Internet could still utilise parts of the site. This could be impossible, but knowing how many places and staff don't have Internet access it might be worth looking at (WHE).

One remote area nurse commented that he found the forum provided:

Fast access to peers and answers to questions (RAN).

AGENCY AFFILIATION

Content

Agency affiliation refers to meeting the needs of the target audience [9]. Where agency affiliation is targeting a particular field then reach does not have to be broad but needs to be targeted. This is the case with both of the resources and using an action research approach allowed the research group to directly assist to ensure agency affiliation would be met. The changes that were suggested were incorporated as much as possible as the project progressed:

I think the mat care in the bush is a great idea - there is a lot of useful information that would be otherwise difficult to access in remote areas - could add Pituri, contraception, petrol sniffing - (RAN)

I believe this Website is an important link for remote practitioners; the information is targeted at the audience and very relevant to their practice (WHE).

Seems like the information on your site would be essential to anyone thinking of working up here (Medical Student)

Some of the remote workers have said they would like clinical info - updates on new drugs for prem labour etc (WHE)

There were a number of requests for clinical information such as seen above. In response we placed two clinical sections on the site, one for antenatal and one for birth and postnatal. Additionally we added a large clinical section onto the 'Birthing Business in the Bush' site (Part Two) focussing on the issues that are particularly pertinent to remote Australia (preterm labour and birth, urine and sexually transmitted infections in pregnancy, post partum haemorrhage are examples).

This following table describes some of the suggestions from the group and the changes that were made to the Website as a result during the period November 2002 to November 2003.

Reflection	Action
Need something about the project your doing (WHE)	Explanation added to front page of the site
ALSO course – what it is about, how to get into it (RAN)	ALSO brochure scanned and added to site and link added
Counselling for triple test (RAN)	Genetic screening link added
Ask for remote area nurses stories (WHE)	Some were placed on the Birthing Business in the Bush site
More clinical would be good – PND, immunisation, video clips on examining a baby, pathology testing (WHE)	All added either directly or via links
More women's health would be good – also HPV, contraception, Implanon!!!	Women's Health Section added to site
Domestic Violence	Article, screening flow chart and Power Point presentation added
Fetal monitoring in labour	An interactive CTG tutor was placed on the site
How to set up antenatal education in a rural community	Information on this was placed on the Birthing Business in the Bush site with a remote focus and a section was created in the Forum

Table 2. Reflection and Action Used to Improve Agency Affiliation

Other topics that were mentioned and have yet to be added include: infant resuscitation courses; ultrasound courses for midwives; antenatal for AHW's (for example the safe birthing course); how to measure fundal heights; how to talk about reduced fetal movements; would be good to have a few power point presentations on pap smears in pregnancy; where to get grants (for example the law society or healthy community grants for sport and recreation); and, information about courses for midwifery training, how to get into it, what the different states offer and what is required. To be able to maintain this site and respond to these requests dedicated support is required.

RICHNESS

Richness involves delivering quality information[9]. Most of the comments that were received indicated that this was occurring:

I think it will be very useful the wide variety of sites & articles (WHE)

Site is good and interesting (RAN)

Contemporary, relevant reports and articles, which are often quicker and easier to access than going through journals (RAN)

Women's health site is great for checking on management options out bush (RAN)

Clinical – antenatal – very good information for quick browsing

I found some the articles linked on your CRANA site useful to present writing of Maternity Coalitions WA's "Implementing National Maternity Action Plan in WA" Thank you (email sent to Sue Kildea, Project Officer)

Some thought the site was 'a bit boring' visually. Initially this was intentional to make it easy to access and download as use of high quality graphics effect opening and download speed. There was then a long delay in getting the designer to change it. However changes were made to improve the look of the site:

... I hate the white spaces on the web, the front page is boring and needs to be more interesting, also you need road signs to know where to go. You could get free animations from the web (WHE)

First page buttons to broken links – shouldn't have to scroll down ... make buttons more interesting (WHE)

How often would I need to check the website is it constantly changing (WHE, October 2002)

Following this last email I talked to the Webmaster to see if we could have some sort of an alert 'what's new on site' and this was done.

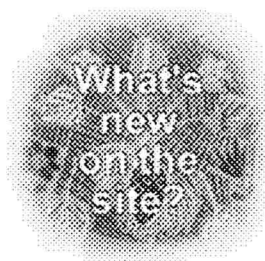


Figure 9. Icon Leading to the 'What's New' Section

SUMMARY

Overall the evaluation of the Maternity Care in the Bush Resource Library was excellent with the major problem identified being difficulties in gaining access to the Internet. The Communication Forum was not as successful though we believe if there were resources to lead it and assist with the training and education necessary for use then it has potential to fulfill the stated goals. CRANA are perusing funding to provide active support and management for the Forum component and to maintain and increase the size and scope of the Resource Library.

PART TWO

PROJECT PROPOSAL

Part Two: A Primary Health Care Guide to Planning Local Maternity Services

Goal:

To develop skills of the health service providers to work collaboratively with community members in the development of a culturally appropriate model of maternity care for their local community. The skills will be using a community development approach and will be able to be adapted to other program areas in the remote setting.

Objectives:

To achieve this goal we will:

- Develop, test and refine a guide to assist maternity service providers develop local maternity service plans using a community development approach,
- Incorporate education on cultural safety, primary health care and community development into the guide,
- Include Aboriginal health workers as an integral part of the design team,
- Employ Aboriginal elders as consultants and co-producers of the guide,
- Provide examples of cultural and ceremonial practices, bush tucker in pregnancy and bush medicine, but it will not be specific, instead it will guide the service provider in a step by step approach to discovering these in the community in which they are working,
- Outline ways the service providers can engage the local community to work collaboratively to plan and manage the maternity service so it is more appropriate for those who use it, and,
- Guide practitioners on how to involve community members in finding local solutions to local problems (eg. how to fund escorts to go to the regional centre with all women who want support in labour from someone they know).

Target Group and Scope:

Aboriginal Health Workers, elders and service providers from several communities in the NT will be involved in developing, testing and evaluating the guide to maternity service plans.

The guide will be developed and trialled over the 12 months period of the RHSET grant. Evaluation and refinement of the guide will occur in the following year as a continuation of the doctoral work. Once trialled, modified and evaluated the guide will be added to the *Remote Links* web site for any remote area service provider to access. The larger project '*Strengthening Remote Area Maternity Services*' will work towards incorporating the guide into a distance learning module, successful completion of which could be recognised as prior learning by universities for community development/primary health care studies. The guide could also be recognised by postgraduate nursing and midwifery courses. Specific distance education technology will be built into the guide from the outset.

RESULTS

PROCESS

This component of the project also used a participatory action research (PAR) approach. This approach is increasingly being recommended for research in the Australian Indigenous context [15]. As the project progressed it saw the development of two different resources. One was the 'Birthing in the Bush Website' and the other was the 'Primary Health Care Guide to Birthing Business in Your Community'. Participation in these projects (which often overlapped) is described below in text and the following two tables.

The PAR team included: Aboriginal women and Health Workers from the Maningrida community; this group included practitioners who had extensive experience in remote area women's health service provision (remote area midwives and doctors, and remote support staff), the Women's Centre Co-ordinator, (this position was filled by four different people over the course of the project, all participated when they were involved and one continued after she left, two were midwives and one was a teacher), and the project officer (Sue Kildea).

The Researched: this group included women from the Maningrida region and remote area practitioners for whom the resources were being developed.

The Critical Reference Group (CRG): included Molly Wardaguga, and Margaret Dawumal, both retired Senior Aboriginal Health Workers. They assisted in evaluating and checking all the cultural and community information in the Website and Primary Health Care Guide. Additionally the CRG included several practitioners for whom the Website and Primary Health Care Guide was being developed. Once again the critical reference group were all a part of the PAR team and had extensive experience in remote area maternity service provision.

The Stakeholders: those who have some involvement in the support and provision of remote maternity services. This group included: Women's Health Educators, staff development and orientation personnel, Policy Analysts and District Medical Officers.

Attrition: These had all been in the Researched group or the Stakeholders and the reasons for attrition included: being unable to get Internet access (1); leaving the position (1); and, expressed interest but never participated (1).

Birthing Business in the Bush Website	PAR Team	Cultural Reference Group	The Researched	The Stakeholders	Attrition
Aboriginal Women from Maningrida	4		52		
Aboriginal Health Worker	3	2			
Medical Officer	1		1	2	
Student (midwife and doctor)			2		
Remote Area Midwife (RAM)	3	2	1	4	
Remote Area Nurse (RAN)			2		
Policy Advisor				2	
Support Staff	4	3		3	2
Women's Centre Co-ordinator	1				
Sue Kildea	1				
Total	17	7	58	11	2

Table 3. Participants Developing and Testing Birthing in the Bush Website

The Primary Health Care Guide	PAR Team	Critical Reference Group	The Researched	The Stakeholders	Attrition
Aboriginal Health Worker	2	3			
Medical Officer	1		1	2	
Student (midwife and doctor)			2		
Remote Area Midwife (RAM)	3	2	1	4	
Remote Area Nurse (RAN)			2		
Policy Advisor				2	
Support Staff	4	3		3	2
Women's Centre Co-ordinator	1				
Sue Kildea	1				
Total	12	7	6	11	2

Table 4. Participants Developing and Testing Primary Health Care Guide

The PAR team was involved in designing and performing the research and ensuring the knowledge systems, cultural protocols, research process and issues surrounding childbirth were acknowledged, incorporated and appropriate for this particular community [The Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS), 2000]. The team worked together with women from the Maningrida Community and its outstations in Arnhem Land to explore what cultural knowledge they would like to share with the service providers, to assist them to increase their understanding of the cultural issues important to child birthing practices in this community. The team developed the guidelines and stories that are presented in the Website 'Birthing Business in the Bush' and 'A Primary Health Care Guide to Birthing Business in Your Community'.

ETHICS

Ethics approval was granted from the University of Technology Sydney (UTS) ethics department, the Top End Human Research Ethics Committee of the Northern Territory and the Central Australian Human Research Ethics Committee. All of these institutions have Aboriginal Subcommittees that approved the research. Factors mentioned in many documents available on ethical research with Aboriginal communities for example The Australian Institute of Aboriginal and Torres Strait Islander Studies [The Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS), 2000; National Health and Medical Research Council, 1991; Ivanitz M, 1998; Kelly R, 2001] that were important in gaining ethics approval for this project included:

- The researcher was well known in the community
- Appropriate consultation occurred prior to funding and ethical applications
- The project had the support of local Aboriginal leaders
- Letters of support were obtained from local Aboriginal organisations and individuals (the Bawinanga Aboriginal Corporation, The Maningrida Council, The Malabam Health Board, The Bawinanga Women's Centre and Molly Wardaguga who is a retired senior Aboriginal Health Worker [SAHW] and agreed to be a co-researcher on this project
- There was to be a two way transfer of research skills and knowledge
- Aboriginal people were to be employed on the project: the project employed Molly Wardaguga as the co-researcher, and paid the PAR team, interpreters, designers and women who were interviewed during the course of the project
- Reimbursement of expenses for research participants and organisations that assisted with the project were included in the project budget
- Discussion about intellectual ownership and joint publications were held at the outset of the project
- The PAR team were the producers of the Website and Guide and as such were properly acknowledged on all material that was, or is yet to be, produced as a result of this project

- The research would benefit the Maningrida community and hopefully be of benefit to Aboriginal people outside the community.

OWNERSHIP

Aboriginal ownership and control of research results is one of the major guidelines for research with Aboriginal communities as described in the Australian Institute of Aboriginal and Torres Strait Islander Studies Guidelines for Ethical Research:

Continuing ownership of the cultural and intellectual property rights in the materials on which the research is based should be recognised and acknowledged in the design of a research project [The Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS), 2000]

It is acknowledged that the community members are the custodians of the cultural knowledge and it was their choice as to how much of this knowledge was discussed and then incorporated into the Website and Guide [The Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS), 2000]. The Birthing Business in the Bush Website has been placed on the Maningrida Arts and Crafts Website and they hold the copyright to it. This enables the community to access it at any time, change or add to it, or remove it if they want to. Additionally, the research team are hoping to reproduce the stories in a book, with copyright resting with the Women's Centre in the Maningrida community.

WOMEN'S BUSINESS

Cross cultural research in such a sensitive area as childbirth beliefs, practices and understandings requires particular care and transparency. We were particularly concerned about placing women's stories on the Internet where anyone could access them and this was the basis of many discussions over the life of the project. We address this issue in the 'Introduction' to the Website:

This Guide has been prepared by Aboriginal women, with Sue Kildea, to be used as a resource for maternity service providers working in remote communities. The contents are 'Women's Business' and as such should not be read by men. We knew we could not monitor this once it is available on the Internet and rely on each individual's honesty and integrity to follow these wishes. The Aboriginal women involved in the project were not concerned about this as they said that Aboriginal men would not even try to look if they knew that it was women's business. The women were very happy to think that women all over the world would be able to read their stories. Aboriginal communities all vary from each other and the messages here are about one community only. However the local wisdom and experience provides lessons that could be applied universally in many different settings.

Additionally, this comment, which was made in a group of three women, was echoed many times throughout the research:

Aboriginal men will not look at it (Molly, Phyllis and Dora).

Discussions were held with one of the Aboriginal men from Maningrida who had been involved in developing the Maningrida Arts and Crafts website. His thoughts were:

It's about preserving culture, you've built up a relationship of trust working with the women in the community ... it's good for different cultures around the world to read these stories ... our own ladies get their voices heard. (Talking about men looking at the site) ... it's more of a thing about Aboriginal people ... it's a good way of educating Balanda people on women's issues (Field Notes, 17.12.04).

OUTCOMES

The results of this part of the project have also been presented against the overall objectives.

- Develop, test and refine a Guide to assist maternity service providers develop local maternity service plans using a community development approach

The 'Primary Health Care Guide to Birthing Business in Your Community' has been developed (see below) and is currently being piloted and evaluated. This process will be completed as a part of the project officers' doctoral work.

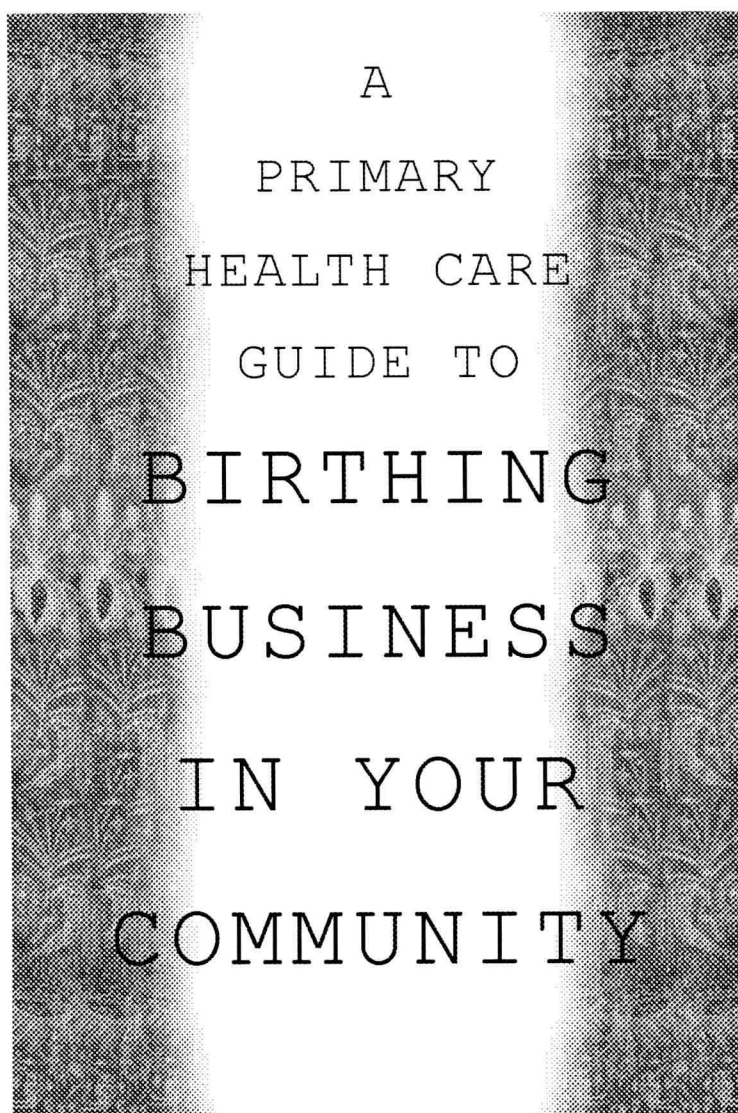


Figure 10. Front Page of the Guide

- Incorporate education on cultural safety, primary health care and community development into the Guide

This has been incorporated (Attachment 1 CD which contains the Website: www.maningrida.com/mac/bwc/index.html).

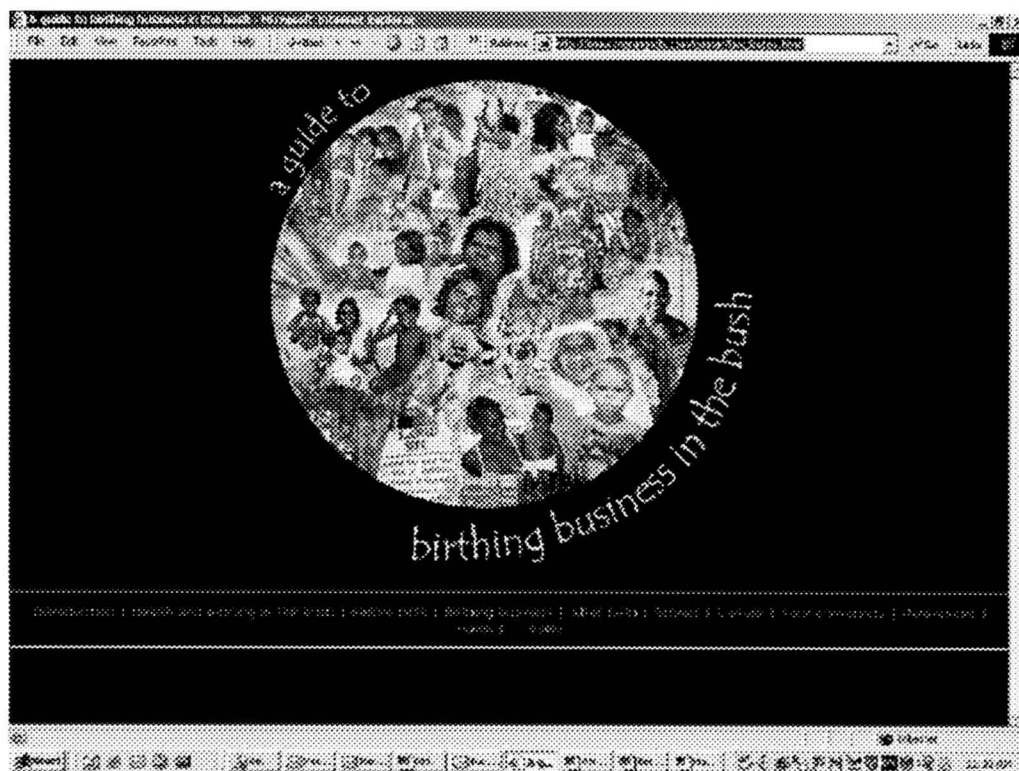


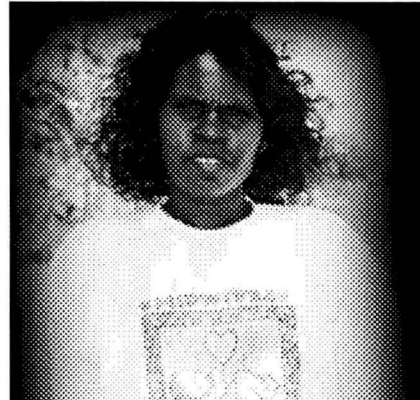
Figure 11. Birthing Business in the Bush Website

- Include Aboriginal Health Workers as an integral part of the design team

The team included Aboriginal women (Molly Wardaguga, co-researcher, and Margaret Dawumal are retired health workers and Mary Mason is currently a health worker) a non-Aboriginal nurse midwife (Sue Kildea) and the project director (Lesley Barclay). The team worked together with women from the Maningrida Community and its outstations in Arnhem Land. The research team can be seen below.



Phyllis Dundudja



Deborah Wurkidj



Elizabeth Galabuma



Lesley Barclay and Molly Wardaguga



Molly Wardaguga and Sue Kildea



Margaret Dawumal



Dora Diaguma



Mary Mason with her daughter Kylie

- Employ aboriginal elders as consultants and co-producers of the Website and Guide.

Additional to the research team described above Aboriginal elders and interpreters were employed on this project and are acknowledged in the Primary Health Care Guide and Website Some are seen in photos below.



- Provide examples of cultural and ceremonial practices, bush tucker in pregnancy and bush medicine but it will not be specific, instead it will guide the service provider in a step by step approach to discovering these in the community in which they are working

Strong use of cultural ceremonies and beliefs can be found in both the Website and the Primary Health Care Guide.



Figure 12. Preparing Bush Medicine

- Outline ways the service providers can engage the local community to work collaboratively to plan and manage the maternity service so it is more appropriate for those who use it.

This has been addressed in the Primary Health Care Guide. Further evaluation will occur during Sue Kildea's doctoral work to test its effectiveness.

- Guide practitioners on how to involve community members in finding local solutions to local problems (e.g. How to fund escorts to go to the regional centre with all women who want support in labour from someone they know).

These issues are addressed in both the Website and the Primary Health Care Guide.

EVALUATION

The following section is extracted from the evaluation data and demonstrates our identification of key issues. The barriers and facilitators were much the same as those mentioned in Part One. Additional comments have been included under the headings of reach, agency affiliation and richness.

REACH

Internet Access

One of the major things that impacted on the evaluation was the limited access people had to the Internet (as seen in Part One of this report):

'I would love to have a look at it, but guess what - I have not got Internet access, surprise, surprise' (Strong Women, Strong Babies, Strong Culture, Program Coordinator)

Finding the Time

The other major concern was the time:

Sorry Sue I haven't had a look yet, holidays mixed with a few weeks of straight training -I have been really busy but I am very interested and will get back to you ASAP (Remote Area Educator)

It's madness here, relievers and orientating all the time - no time to look at the guide but you know it would help if you did ... always taking the long way round (RAM)

Management Support

The necessity of management support to ensure time is made to use these sort of resources was repeated many times, for example:

It would be great to have support from management to step outside the square and be given the time to do this kind of thing (Midwife)

I'm sorry Sue I just haven't had time, I took it on holidays and never had a chance to look at it. I am going into town this weekend and will look at it then. The problem is if we don't have time we have to make time, as making time will save time in the end - but we need management support to do it (Midwife)

This comment highlights the necessity of management support for staff to be able to use resources such as these. For this to happen the managers must see the value in it. The fact that the midwife took the Primary Health Care Guide on holidays to review it was not unusual. Very few were able to do this in the workplace. Several nurses felt the Primary Health Care Guide was important enough to be a part of the business planning for the health centres across the region.

AGENCY AFFILIATION

Orientation

Many of the respondents suggested the Website and Primary Health Care Guide should be used as part of an orientation to a community for midwives, nurses and doctors:

I believe that this is an essential document for orientation of remote staff. Medical and Nursing ... I wish it was around when I started out there (WHE)

Great as an orientation awareness of the community. Time frame would be months due to taking on all new programmes, learning curve, etc, but the programme design does allow a person to set their own pace. Even for a skilled remote area nurse taking up a new post gathering the information would enable her/him to establish communications with key personal that live in the community hence enabling them to get to know the RAN. Getting the stats established so it would be there to make comparisons for the following year and the future would be great (WHE)

This should be essential for orientation of all remote staff (medical and nursing). I think it makes staff really think about their surroundings, and the reality of where they are going to work, as well as the community and the people they are to work and interact with. It actually forces/encourages them to be inclusive which so many are not. Especially of AHWs. The direction to contact specific people is good (WHE)

I've been up in Katherine for a couple of weeks now and have visited a couple of communities. Seems like the information on your site would be essential to anyone thinking of working up here (Medical Student)

Cultural preparation

The cultural learning and engagement was mentioned by many:

The cultural questions are excellent and particularly important. From my experience the dominant focus on health care is medical. There is minimal if any focus on cultural aspects particularly foods, ritual etc. Some of the older women are very concerned about this however unless the health service and workers choose to focus on this it will be lost. As the people need support to continue to encourage cultural knowledge and understanding in the young women (WHE)

Could move the clinical audit (in the guide) a bit later as if they stop there they will miss out on the cultural standards, which are so important. I think this is important for both midwives and nurses as it gives them such good orientation to the community (WHE)

Clinical relevance

Additionally the following comments are examples of responses:

The clinical questions before pregnancy are also good, particularly the point of Health Education and School Screening. I had not thought before of incorporating Hb testing in school screening, Nganampa doesn't do this. I think the barriers to this being used are the RAN's/RAM's become very preoccupied with general nursing issues. If they are midwives there may be a stronger interest in these issues. We are getting less midwives working on the Lands as I expect elsewhere in Australia. The statistical information is also important. Our nurses/midwives get these reports annually however I can expect in some health services this is not so. I think this is suitable both for Nurses and Midwives also important document for Medical Staff, but once again depends on their interest. I would value this document if I were starting in a community. It is also of value to me right now in prompting me to consider some new aspects to cover in orientation of new female staff (WHE).

The Website provides far more insight into the issues that are real for people (and the otherwise mysterious smoking ceremony) than any description or summary of people's views could. Think the Guide is a fabulous idea and that in it's current format it would be extremely useful for anyone heading out to a community to work. In particular the level of detail and coverage of issues in suggested questions seems really thorough, and would be very encouraging for someone coming in without any experience in a community. (Dr. Katherine Region)

RICHNESS

The layout is simple and easy to follow which should make it user friendly. (RAN)

Impressed with the beautiful colours, serene and easy on the eye. (WHE)

SUMMARY

Overall the aims of Part Two of this project were achieved with the development and production of 'A Primary Health Care Guide to Birthing in Your Community' and the Website 'Birthing Business in the Bush'. If utilised, these resources should assist to better prepare the non-Indigenous health practitioner to working in this cultural environment. Additionally the Guide will assist the health service providers to work collaboratively with community members in the development of a culturally appropriate model of maternity care for their local community.

The major barriers to these resources are the difficulties remote practitioners experience accessing the Internet and having the time available to do so. Education and training on computer use, prioritising primary health care activities in the health centre and attention to computer hardware are all key factors that will influence the utility of this resource. We will distribute this report plus a copy of the Guide to managers to help inform them of the value of the work so they can support their staff.

DISSEMINATION

The following details the dissemination to date. Further dissemination is planned during the course of the doctoral work.

2004

Invited Keynote Address: 'You Mob Just Don't Listen' Sue Kildea and Molly Wardaguga, Keynote address - Perinatal Society for Australia and New Zealand 8th Annual Conference, 'Integrating Science and Perinatal Practice: Controversies and Dilemmas' Sydney, 15-18th March, 2004.

Invited Speaker: Indigenous Issues Symposium: 'Stories from Maningrida' Sue Kildea and Molly Wardaguga, 8th Annual Conference, 'Integrating Science and Perinatal Practice: Controversies and Dilemmas' Sydney, 15-18th March, 2004.

Invited Speaker: 'A Case Study from the Northern Territory', Sue Kildea and Molly Wardaguga, 'Healthy Aboriginal Mothers and Babies: Improving Indigenous Outcomes' The Perinatal Indigenous Network, Special Interest Group of the Perinatal Society for Australia and New Zealand, 19th March 2004.

CRANA Newsletter February 2004

Saturday News Extra, 3 page article in the NT News, 20th March 2004

Women's Business Poster sold through Bawinanga Women's Centre, Birth International, Capers Bookstore and the Centre for Family Health and Midwifery

2003

Kildea S, Kruske S. Myths and Realities: Challenging the Risk Equation for Birthing in the Bush The National Association of Childbirth Educators (NACE) 2003 Conference, Coogee Beach, Sydney. 21-23 February 2003

CRANA Newsletter, February 2003

Kildea S. (2003) Birthing in the Bush. Invited Panel Speaker for the Rural Procedural Medicine Symposium at the 7th National Rural Health Conference, The Art and Science of Healthy Community: Sharing country know-how. Hobart 1-4 March 2003

Kildea S, Barclay L. (2003) Risk and Childbirth in Rural and Remote Australia. 7th National Rural Health Conference, The Art and Science of Healthy Community: Sharing country know-how. Hobart 1-4 March 2003

Maningrida Newsletter, May 2003

Article in the Koori Mail 'Bush Birthing - Women's Lore is Documented' 4th June 2003

Article in UTS News 'Birthing in the Bush' by Anne Sarzin, 12-15 June 2003

UTS News article reproduced in Midwifery Matters, Vol. 21, No 3, September 2003.

Kildea S. (2003) Birthing in the Bush: The Great Debate! Australian College of Midwives Incorporated 13th Biennial Conference: Frontiers of Midwifery, Darwin, 2-5 September 2003

Flier distributed to all attendees at the CRANA conference, September 2003

Maningrida Newsletter, September 2002

Maningrida Newsletter, October 2003

2002

Maternity Coalition Newsletter Volume 6.4, 'Maternity Care in the Bush and Remote Links Forum'.

Flier to Top End division of GP's and the Remote Workforce Agency – Top End October 02

PRODUCTS

Remote Links Communication Forum www.crana.org.au - Forum, Commenced June 2002

Maternity Care in the Bush Resource Library www.crana.org.au - Hosted Pages, Commenced November 2002

Women's Business Poster, October 2003

Birthing Business in the Bush Website and CD Rom
www.maningrida.com/mac/bwc/index.html

A Primary Health Care Guide to Birthing Business in Your Community (Orientation and Planning Package)

•

ATTACHMENTS

Attachment 1

CD Rom – Birthing Business in the Bush

Attachment 2

A Primary Health Care Guide to Planning Local Maternity Services in Your Community

Attachment 3

Financial Report

REFERENCES

1. NSW Health Department, *The NSW Aboriginal Perinatal Health Report, Draft*. 2000.
2. Roberts, C.L. and C.S. Algert, *The urban and rural divide for women giving birth in NSW 1990-1997*. Australia and New Zealand Journal of Public Health, 2000. 24(3): p. 291-296.
3. Australian Institute of Health and Welfare, *Health in Rural and Remote Australia*. 1998, AIHW: Canberra.
4. A Joint Development of the National Rural Health Policy Forum and the National Rural Health Alliance for the Australian Health Ministers' Conference, *Healthy Horizons 1999-2003: A Framework for Improving the Health of Rural, Regional and Remote Australians*. 1999.
5. NT Department of Health and Community Service, *Review of Birthing Services in the Northern Territory of Australia*. 1992, Australian Government Printing Service: Darwin.
6. Roberts, J. Where two worlds collide - maternal health services for Indigenous women in remote communities. in Public Health Association of Australia National Conference 2000. 2000. Canberra.
7. NSW Health Department, *Rural and Remote Nursing Summit Report*. 1998, Nursing Branch: Sydney.
8. ANF AARN and CRANA, *Action on nursing in rural and remote areas, Draft Issues Paper*. 2000.
9. Evans, P. and T. Wurster, *Blown to Bits, How the New Economics of Information Transforms Strategy*. 2000, Boston: Harvard Business School Press.
10. National Aboriginal and Torres Strait Islander Health Council, *National Aboriginal and Torres Strait Islander Health Strategy, Consultation Draft*. 2000, NATSIHC: Canberra.
11. Fitzpatrick, J., *Birthing Choices in Far North Queensland*. 1993, Department of Health, Housing and Community Service: Brisbane.
12. Kildea, S., *And the women said... Report on birthing services for Aboriginal women from remote Top End communities*. 1999, Territory Health Service: Darwin.
13. Trudgen, R., *Why Warriors Lie Down and Die*. 2000, Darwin: Aboriginal Resource and Development Services, Inc.
14. Eckermann, A., et al., *Binan Goonj: Bridging Cultures in Aboriginal Health*. 1998, Armidale: University of New England Press.
15. Pyett, P. and VicHealth Koori Health Research and Community Development Unit, *Towards reconciliation in Indigenous health research: The responsibilities of the non-Indigenous researcher*. Contemporary Nurse, 2002. 14(1): p. 56-65.
16. Barclay, L., et al., *Australian Midwifery Action Project Final Report*. 2002, Centre for Family Health and Midwifery: Sydney.

17. Tracy, S., L. Barclay, and P. Brodie, *Contemporary issues in the workforce and education of Australian midwives*. Australian Health Review, 2000. 23(4).
18. Brodie, P. and S. Tracy. Rural and remote midwifery: What are the issues? in Proceedings from the 'Childbirth in Isolation Conference' 2-4.11.00. 2000. Kalgoorlie, Western Australia.
19. Women's Health Strategy Unit, *The Health Status of Women in the Northern Territory*. 1999, Territory Health Service: Darwin.
20. Women's Health Educators, *Remote Area Maternity Staffing Levels*, S. Kildea, Editor. 2001: via email.
21. MI Taylord Services, *CRANA Member Survey 2000*. 2000, CRANA: Alice Springs.
22. Walker- Jefferies, M., et al., An Organisation Wide Evaluation of the Council of Remote Area Nurses of Australia Inc. (CRANA). 2003, Spencer Gulf Rural Health School: Adelaide.
23. CRANA IT Committee, *Terms of Reference*. 2002, Council of Remote Area Nurses of Australia.
24. Wadsworth, Y., What is Participatory Action Research?, in Action Research International, Paper 2. 1998.