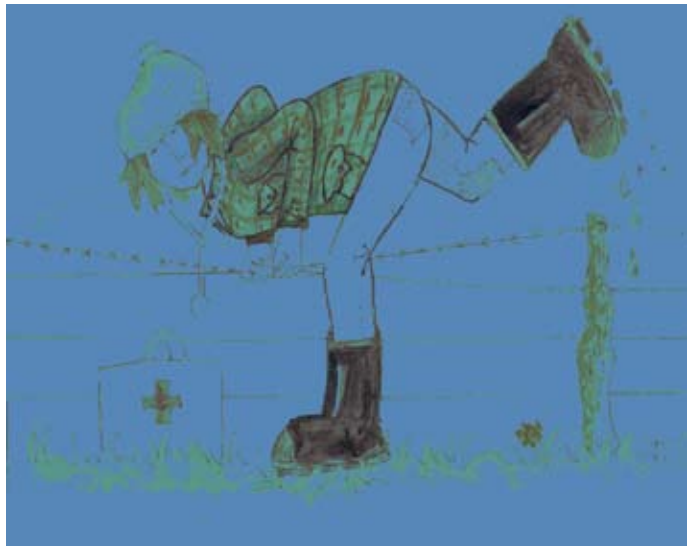


Rural Nursing: *Aspects of Practice*



Edited by Jean Ross

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Your comments on this book are welcome at
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DEDICATION

This book is dedicated to all past, current and future rural nurses
as a way of acknowledging their practice,

and to Edi

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FOREWORD

Hon Minister Damien O'Connor

A strong primary health care system is central to improving the health of all New Zealanders, including rural communities.

The Primary Health Care Strategy released by the Government in February 2001, has placed a greater emphasis on the broader multidisciplinary primary health care team – GPs, nurses, pharmacists, allied health professionals and disability professionals – so that people will have direct access to a range of primary health care providers.

The Strategy identified primary health care nurses as crucial to its successful implementation. The development of some services delivered through PHOs, such as Services to Improve Access initiatives and Care Plus, have enabled more effective use of nursing skills. The move towards greater population focus and emphasis on a wider range of services increased the need for well trained primary health care nurses.

Rural Nursing: Aspects of Practice is an interesting series of postgraduate studies on current rural nursing and demonstrates how nurses pursued their professional development. It is the first comprehensive publication on rural nursing in New Zealand.

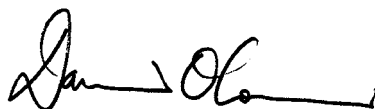
The definition of rurality and the Rural Framework Wheel are explored and nurses' experiences and stories highlight the diverse aspects of rural nursing practice. Such as mobile theatre services, telephone triage, emergency response, care for tourists, on call work and more.

The publication highlights the valuable contribution nurses are increasingly making in rural health service delivery.

The reference section is a valuable asset containing a list of key research documents that have influenced rural nursing in New Zealand. Even though we continue to learn a lot from countries such as United States, Australia and Canada, it is important for us to get a better understanding of our own context.

The development of this publication has been made possible through a Rural Innovation Fund grant from the Ministry of Health. The intention of this annual fund is to support innovative pilots that will enhance rural health service delivery.

I'm sure that Rural Nursing: Aspects of Practice will greatly contribute towards our knowledge on rural health service delivery in New Zealand, public debate on rural health and in particular, create more visibility, recognition and understanding of the diversity of nursing practice work.

A handwritten signature in black ink, appearing to read 'Damien O'Connor', with a stylized flourish at the end.

Damien O'Connor
Associate Minister of Health
Minister of Rural Affairs

FOREWORD

Dr Alison Dixon

I am delighted to see rural nursing come of age in New Zealand. The completion of this first New Zealand text on rural nursing came from the vision, integrity and commitment of Jean Ross, whose successful application for a rural innovation grant from the Ministry of Health facilitated the process to completion. It is very pleasing to see the scholarly work of rural nurse colleagues captured in this book. Its availability makes visible the practice worlds of these rural nurses and it will influence future policies and health care delivery to New Zealand's many rural communities. Rural nurses have reached a maturity that few would have thought possible a decade ago. Their voice is powerful, strong, and unequivocal as they advocate and work with their communities to ensure New Zealanders in rural areas have ready access to health care.

Several key influences have contributed to the development of the rural nurse. The first is Jean Ross. Jean worked as a nurse in a rural practice and has led the workforce development of this group of colleagues for over a decade. Her name has become synonymous with rural health and rural nursing as she has sought ways to develop the rural health workforce to deliver better health care to their communities. This journey saw her work in collaboration with medicine to establish the first recognised postgraduate multidisciplinary diploma in rural health at the Christchurch School of Medicine, University of Otago, in the 1990's. Through this programme, rural nurses commenced their engagement with tertiary study to explore and develop the knowledge, attributes and skills they required to work both with and in their communities. In addition, as a co-director for the Centre for Rural Health, Jean and colleagues secured research funding which led to the production of some significant publications relating to rural health, which can be found on the Ministry of Health website (<http://www.moh.govt.nz/moh.nsf/indexmh/centre-rural-health>).

The publication of the New Zealand Government's Primary Health Care (PHC) Strategy in 2001 identified that "rural problems need special consideration - further work is needed"(p.23), especially in relation to access to health services and ensuring a viable rural workforce. The PHC strategy gave a commitment to developing a coherent policy and package of assistance for rural communities. The Rural Expert Advisory Group

(REAG) was established by the Ministry of Health to undertake this work to develop a rural primary health care strategy (MoH, 2002). Their report has given recognition to the rural nature of much of New Zealand and the health needs of the people who live there. Focused resources to develop the rural nursing workforce for advanced practice roles were made available. These resources included the rural nursing scholarships from both the Ministry of Health (MoH) and Accident Compensation Corporation (ACC); PHC scholarships from the Ministry of Health; postgraduate educational programmes on rural nursing; and the rural innovative nursing grants for practice initiatives; funded by the Ministry of Health. The recently published evaluation of these 11 projects makes fascinating reading (MoH, 2007) and again demonstrates the pioneer nature of advanced nursing practice by rural nurses.

One of the outcomes of all this focused resource to develop the rural nursing workforce is this book. Many of the contributors undertook their early studies with Jean at the University of Otago. Several had a Ministry of Health or ACC rural nursing scholarship that paid a full time salary equivalent, which enabled them to leave their rural place of work, engage as fulltime students and complete their Master of Nursing. These scholarships came with the expectation that the rural nurses would eventually apply to become a Rural Nurse Practitioner with prescribing rights. Other contributors had primary health care scholarships that met their fees for postgraduate study while still others began their postgraduate journey through the Rural Nursing programme of the University of Auckland, funded by the Clinical Training Agency arm of the Ministry of Health. Some are now Rural Nurse Practitioners. Nine of the contributors completed their postgraduate journey to Masters through Otago Polytechnic, where Jean Ross is currently employed. Jean's newest challenge is working with colleagues to integrate rural health through the undergraduate-nursing curriculum. No one can doubt Jean's commitment, influence and focus on rural health, rural nurses, and rural nursing. Her vision to advance rural nursing practice has culminated in the publication of this important book.

This book celebrates rural nurses' scholarship. Some contributors have chosen an aspect of rural nursing practice from their completed Masters work and presented it as a chapter for the reader's consideration. Others have written from their practice experiences. Presenting scholarship through publication takes courage. I believe it is their commitment to their rural communities which has enabled these contributors to take this step and make their practice visible. Their scholarship offers insights into how it maybe possible to achieve "accessible and appropriate primary health care services for people living in rural New Zealand" (REAC, 2002. p. ix).

This book's strength is in its diversity. These contributors are or have been rural nurses, with rural nursing practice experiences that they want to share with all people who have

an interest in rural health. Their commitment to being nurses who live and work with rural communities comes through in the text. I anticipate this book will be well received, both nationally and internationally, and will stimulate dialogue and debate. It gives me personal confidence that rural nurses, practising at an advanced level, do meet the health needs of the rural communities they serve. I warmly congratulate Jean and the contributors for this book that extends the existing knowledge on rural nursing.

Dr Alison Dixon, Academic Leader
School of Nursing, Otago Polytechnic
March 2008

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ACKNOWLEDGEMENTS

Rural Nursing: Aspects of Practice would not have been published without the commitment of many people, in particular, the rural nurse contributors who agreed to edit their individual research (a component of their Master's degrees) for inclusion. Thank you, to each of you for taking time away from your busy professional and personal lives while working on your contributions. Above all, thank you for trusting me to orchestrate the knowledge you have generated through your research into this book.

Without Rural Innovative Funding (through the Ministry of Health) this project would not have eventuated, and the book could not have been published. I gratefully acknowledge the Ministry of Health for this funding, and for believing in the project.

Editing a book with seventeen chapters from contributors throughout New Zealand was a major undertaking. Contributors never met face to face, either with each other or myself. Through the advances of technology we worked collaboratively.

I am grateful to Claire Stevens for her diligent editorship throughout the whole of the project. Thank you also Anthonie Tonnin, Hugh Macmillan and Elaine Ross, for your critical assistance with editing the final drafts. Many thanks go to Raeleen Thompson for donating the artwork by Morfydd Neilson on the front cover.

Thank you to the School of Nursing, Otago Polytechnic (my employer) for providing me with designated time during early 2008 to complete this project.

Finally, special thanks to my children, Chris, Catherine and Carlin (especially to you Carlin at this time of loss; your Dad too was a Rural Nurse) for understanding my commitment in the development of rural nursing over the years, of which this project has been one. Your support is tremendous.

ABOUT THE EDITOR

Jean Ross (RN MA Nursing) PhD Candidate is currently a principal lecturer in the School of Nursing at Otago Polytechnic, Dunedin. Culmination of her work in the development of rural nursing over the past 12 years has led to the publication of this Rural Book. This work began in 1994 with the setting up of the National Centre for Rural Health, of which she was co-director and led a number of national research projects, until 2003. During this time, as member of a rural academic team she established and developed, the first interdisciplinary Postgraduate Diploma Primary Rural Health Care, through the Christchurch School of Medicine & Health Sciences, University of Otago. Since 2003 her work has focused on the educational development of Rural Nurse Practitioners, and the generation of knowledge relating to Rural Nursing.

PREFACE

Rural nursing in New Zealand is no longer a concealed speciality of nursing practice as it was in the early 1990's. During the past decade, the nature of rural nursing has been revealed. Multidisciplinary research assisted in generating new knowledge associated with rural nursing practice. These studies have led to an improved understanding of rural nursing, which has influenced nursing practice; education; government legislation; policy development and consumer interest. During this time, rural nursing has been left exposed, challenged, and misunderstood. This has stimulated rural nurses to take a lead role in their professional development, through education; research and developing innovative models of practice.

Rural nurses have been acknowledged as pioneers of advancing nursing practice. Advancing practice delivered to diverse communities with differing geographical locations, populations and health requirements has become the norm for rural nurses. Practicing within these domains necessitates personal courage, enthusiasm, professional adaptability, flexibility, and above all to BE with the community. A number of personal attributes such as listening, respecting and honouring the unique features of communities are essential if a relationship is to be effective between community people and the rural nurse. Effective rural nursing is what this is about, and hopefully what this rural book attempts to deliver to you, the reader.

The delivery of rural health care is a national topic of concern and debate. Government strategy and funding to ease barriers for the retention and recruitment of healthcare practitioners, and to assist with improved access to health services led the Labour government in 2004 to offer substantial educational scholarships to rural nurses. The objective of these scholarships was to assist rural nurses to complete their Masters of Nursing and become Nurse Practitioners with prescribing authority. Many rural nurses have taken up these educational scholarships or juggled work, study commitments to complete a Masters of Nursing.

I realised as rural nurses completed their Masters degrees there was going to be a large pool of up to date research evidence relating to an array of elements concerned with the delivery of rural health care. Rural nurses were in a prime position to contribute to the growing body of national and international knowledge. I considered this to be an

opportunity to harness their individual research into a collective volume of related work. With the contributors' agreement, I planned to facilitate this project (assisted by a successful application for Rural Innovative Funding from the Ministry of Health) to develop a book related to rural nursing.

The idea to publish a book founded on research based evidence relating to rural health care delivery, and rural nursing is not unique. America developed their first edited volumes in the early 1990's (Bushy 1991a, 1991b) followed by Lee's (1998) initial research on the conceptual bases of rural nursing in 1998. Bushy continued to advance her initial work and produced a third edited rural text in 2000. Likewise Lee and Winters (2006) published new evidence on the conceptual bases of rural nursing in a follow up text in 2006. As yet, no published texts dedicated to rural nursing have been developed from Australia and Canada. However, authors from both countries have contributed to international texts by writing individual chapters in edited volumes. These texts have helped shape the groundwork of rural nursing practice and have guided the foundations on which this book is built.

My objective for producing this book is to make more readily available research based evidence to the nursing profession, policy makers and those concerned with the provision of rural health care. A published book is more easily obtainable as a collective volume of research, than individual unpublished thesis and dissertations.

Rural Nursing: Aspects of Practice is a first for New Zealand. It contributes to the national and international rural nursing knowledge. This book aims to provide a broad overview relating to rural nursing theory base, adapting nursing practice to changing provision of health care, aspects of clinical practice and future considerations for practice. This book describes and expands on these issues offering dynamic recommendations for effective, sustainable practice. The book attempts to inform the reader about the wealth of experiences, knowledge and positions adopted by the contributors. It is hoped this will stimulate debate about the similarities and differences experienced by rural nurses in their practice. The book reveals more than distributing knowledge, it also encourages alternative views, and new knowledge to be debated. I hope the material offered is a catalyst for further discussion.

This book primarily will be of interest to clinical nurses, including rural and urban nurses who provide services to rural populations, nursing undergraduates as well as postgraduate nursing students, nurse educators and researchers. Also all rural focused allied health –related disciplines and researches in anthropology, sociologists and geographers. This book could also be of interest to the rural workforce, policy development and academic institutions as well as international rural colleagues. I hope this book adds a resource which aids an understanding and appreciation of rural nursing

in New Zealand. Many rural nurses including the contributors of this book are playing a significant part in shaping their own rural nursing history. I hope this book stimulates and excites you the reader, and if you take from this book a thought, concept or idea you had never previously considered, and you peruse it, the objective of this book will have been met.

This book has seventeen chapters which have been ordered into themes to make up six main sections. These sections relate to contexts of practice; describing rural nursing practice; aspects of rural nursing practice within the secondary health care setting; adapting rural nursing practice to the changing health care environment; selected aspects of rural clinical nursing practice and future considerations for rural nursing practice. The title of each of the seventeen chapters is self evident. Each chapter explores a single issue. However, there are numerous themes and common factors which run through the book. Common to all chapters is rural health care and rural nursing practice linked with government strategic policy or direction for rural health delivery and advancing nursing practice.

The majority of the chapters have been contributed by rural nurses in clinical practice from throughout New Zealand. Each of the contributors are aware of imposed space limitations on individual chapters in order to include a diverse overview of topics. All chapters have been abridged into a readable chapter size from the contributors' original Masters thesis, or dissertation. All contributors' original research is fully referenced at the end of the book. As the majority of this work has been undertaken as a component of a Masters degree caution needs to be acknowledged by the reader, that the authors are beginning research practitioners, expert in their clinical practice and much of their focus relates to their own clinical practice reality. I am confident that sufficient voices have been captured to convey to the reader, the wealth of diversity which exists and shapes rural nursing.

Structure of the book

Chapter 1 Rural Society and Culture by *Leonie Howie* provides the foundation on which the content of this book is built. This knowledge is essential in order to begin to appreciate how rural nursing practice is shaped by its context. Context is a concept which comes up time again within the chapters. Context is a notion that no two rural communities, their population, industries, physical location, health service and funding structure are the same. Although there are a number of core characteristics related to practising in a rural context, differences as much as similarities are a given amongst rural health care practitioners. This contextual information has laid the foundation to critically analyse how nursing practice is shaped by the rural context.

Deborah Dillon in *Chapter 2* builds on the content from the previous chapter, and

provides an opportunity to consider one other geographical context in which rural nurses provide health care, that of islands. The topic of islands is considered in relation to providing appropriate health care to island people.

As context shapes rural nursing practice, the second section of the book reveals ways of defining rural nursing. Firstly, a framework comprising a number of systems have been developed by *Leonie Howie* in *Chapter 3* to describe rural nursing. While storytelling has been used by *Elizabeth Roulston* in *Chapter 4*, and *Raeleen Thompson* in *Chapter 5*, to describe their individual rural nursing practice, through the medium of stories.

Secondary rural hospitals and rural nursing practice is the focus of the third section of the book. Three separate areas of rural nursing practice are discussed. *Isabel Jamieson* in *Chapter 6* introduces the development of a mobile operating theatre, and discusses the process and findings of a research project undertaken with the purpose of evaluating a perioperative (theatre and recovery) reskilling programme for rural secondary care nurses.

Carole Pederson in *Chapter 7* offers background information into the development and functioning of a nurse-led telephone triage service, in a rural secondary hospital. Carole discusses the process and findings of a research project, which was undertaken to identify and describe telephone callers' reported outcomes after using a rural based telephone triage service.

In *Chapter 8*, *Sue Challis-Morrison* provides information relating to the management and guidance of resuscitation within secondary rural hospitals. She discusses evidence related to issues concerning resuscitation, and not-for-resuscitation, and then presents the findings through an implementation, and evaluation plan.

Section four comprises two chapters, these chapters exemplify two critical areas of how rural nurses are adapting their practice to meet the changing provision of emergency health care and rural tourism. *Christine Horner* in *Chapter 9*, focuses on the provision of emergency health care provided by rural nurses, and the impact this has on maintaining competency. While in *Chapter 10*, *Anne Fitzwater* highlights the changing practice of rural nurses to accommodate the transient visitor (the tourist and seasonal worker) in a rural area.

The fifth section highlights four aspects of rural nursing clinical practice; *Rachel Hale* in *Chapter 11* discusses her research findings associated with rehabilitation for the older person, and the implementation of transitional care, a rehabilitative model based in the smaller, predominantly rural communities to enable the older person to actively work towards recovery of functional ability within their own environment.

Adele Ferguson in *Chapter 12* focuses on an international epidemic, type 2 diabetes, as it relates to one rural Maori community within New Zealand. This chapter provides an in-depth discussion relating to diabetes; it discusses the process and findings of a research project to ‘map out’ the food environment within the research context.

Karen Campbell in *Chapter 13* offers background information in relation to rural palliative care, and the role of rural women as providers of care in the home setting. Karen shares insights into the requirements of caring for a dying person at home.

As discussed in previous chapters, rural nursing is complex and is shaped and supported by the rural context with nurses working in these areas having interconnectedness with, and commitment to, their communities that directs their practice. *Adele Robertson* in *Chapter 14* highlights the benefits to women of providing maternity services in isolated rural areas. Adele is concerned about the recent split between the professions of midwifery and nursing and the consequences this potentially has on maintaining a midwifery health service within a rural context.

The final section by way of conclusion, attends to focus on future aspects of rural nursing. Three chapters provide detailed accounts of individual, however related issues concerned with the future development and practice of rural nursing in New Zealand. *Heather Maw* in *Chapter 15* and *Anna Higgins* in *Chapter 16* provide thought provoking discussions, stimulating further debate in relation to government policies and strategic direction, associated with primary health care and advancing nursing practice. The former chapter provides a detailed account of the benefits of establishing Nurse Practitioners in rural areas, and offers sound advice on the considerations to make this a successful endeavour. While the latter chapter promotes the notion that inter-disciplinary collaboration is a means of providing better access to health care for all communities, but the theory and practice reality are not always in sync.

Sharron Armstrong in *Chapter 17* describes the findings from her research study as she explored the nature, and the quality of interactions between sole on-call primary health care rural nurses and secondary care doctors. Her findings highlight a fragile relationship, directed by government policy which encourages a collaborative model of health delivery, as well as promoting professional conflict through changing nursing roles.

Rural nurses have reached a stage of consolidation of knowledge relating to their practice, it is timely to now ponder over this knowledge, and take meaning from it for the future endeavours. I welcome further discussion.

Jean Ross, Editor
Rural Nursing: Aspects of Practice

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Contexts of Rural Nursing

Rural Society and Culture

LEONIE HOWIE

This introductory chapter provides the foundation on which the content of this text is built. This knowledge is essential in order to begin to appreciate how rural nursing practice is shaped by its context.

Introduction

This chapter is in two parts: the first examines how ‘rural’ is defined, taking a multidisciplinary approach. It distinguishes the characteristics that define its uniqueness as a locality descriptor. The disciplines of nursing, medicine, sociology, anthropology and geography define rural in varied ways (Hugo, 2002; Smith, 2004; Williams & Cutchin, 2002). There is also diversity between nations based on historical reference, density and locality. The disparate definitions are critiqued in an endeavour to make sense of the term ‘rural’. Before clarifying these, there needs to be a clear understanding that ‘difference’ concerns not only the distinction between urban and rural, but also recognises the heterogeneity of rural (Valentine, 2000).

The second part of the chapter investigates the way researchers speak about rural people; the individuals, families/whanau and communities who occupy this space. Nursing as a discipline is concerned with ‘people’, and it is this human aspect of defining rural that is considered of most interest and concern to nurses (Bushy, 2000). In an endeavour not to limit difference, the chapter considers only the broad concepts and themes relevant to rural daily life experiences. This chapter also introduces the Rural Framework Wheel, which is described in detail in Chapter Three. The Rural Framework Wheel illustrates how the rural context impacts on nursing practice. The first step resembles a central hole of the wheel and represents how rural society is defined (Figure 1). Successively in step two, four inter-related broad systems which characterise ‘rural’ are introduced to the wheel (Figure 4).

However, understanding the complexity of rural geographical definitions first, in order to distinguish exactly who ‘rural people’ are, is critical to any discussion on rural society and culture.

PART ONE: Defining Rural

Rural researchers agree that it is difficult to universally define the nebulous concept of ‘rurality’ (Bushy, 2000; Cloke, 1997, 2003; Ross, Jones & Litchfield, 2000). There is no conceptual clarity to unite the definitions. Even within disciplines, the notion of rural is viewed from different positions. Hugo (2002) argues that no clear consensus has emerged internationally due to the inability to combine into a single classification multiple, complex and variable elements. This diversity makes comparative research challenging because it limits the ability to generalise the findings (Pitblado, 2005). Despite this, an awareness of the different approaches to defining ‘rural’ is warranted, due to the ongoing important implications in regard to health planning and resource allocation. Wakerman (2004) holds the view that this knowledge provides a useful focus on which to develop inter-sectorial policy. In defining ‘rural’ in this chapter, literature has been limited to the United Kingdom, North America, Australia and New Zealand because there are commonalities in health care delivery, industrialisation and language that make comparisons relevant and credible.

There is, in fact, no one truth that fits all rural circumstances and a multitude of alternative definitions can in fact co-exist (Henson, Chafey & Butterfield, 1997). According to Racher, Vollman and Annis, (2004) the differing delineators that describe ‘rural’ can be categorised under four headings: descriptions, dichotomies, typologies and indices. Ranging from simple to complex in detail, this method of classification creates an order to aid understanding. The classification commences with the first category – descriptions of rural (see Figure 1).

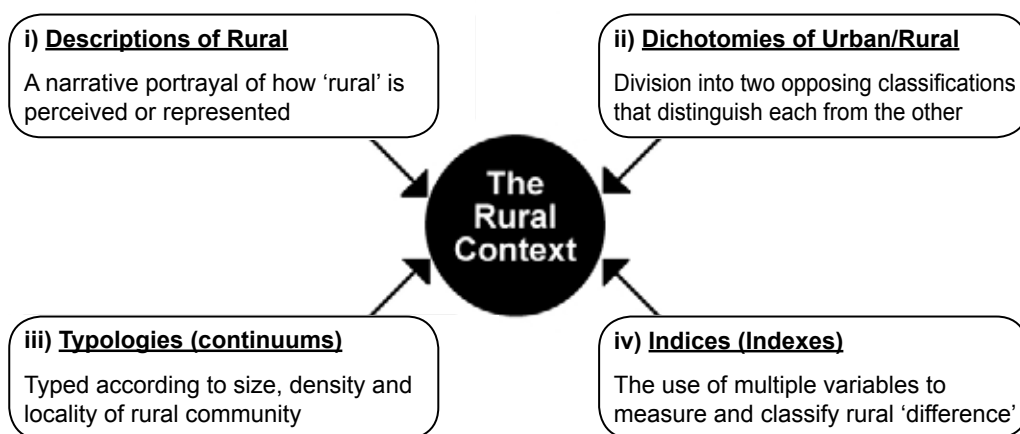


Figure 1: Step one of the Rural Framework Wheel
A method to categorize rural contextual definitions

i) **Descriptions of rural**

'...being rural means being a long way from anywhere and pretty close to nowhere' (Scharff 1998, p. 21).

Bidwell (2001) clarifies, describing rural areas as those with fewer people, separated by greater distance. The term 'rural' has been portrayed historically as referring to a small number of people, living a homogeneous way of life, in relative isolation and pursuing agricultural occupations. Murdoch and Pratt (1997) argue that academic texts frequently forget that rural, as a social space, can no longer be described as being the same and existing in an idyllic timeless zone. Rural studies are moving away from this 'sameness', towards a new centrality of 'difference' (Cloke & Little, 1997). There is a realisation of intra-rural heterogeneity (Panelli, 2001). The outdated research based on quantitative methodology has recently been replaced by qualitative texts which give voice to rural 'hidden others'¹ (Philo, 1992). Cloke (2003) proposes that 'rurality' now needs to be understood as a phenomenon which is socially and culturally constructed. This infers that descriptive methods merely characterise rural and do not define it. Differentiating between rural and urban may help to address this deficit (see Figure 1).

ii) **Dichotomies of urban/rural**

Valentine (2000) contends that historically, social geographers have endeavoured to distinguish 'rural' from its polar opposite 'urban' in an attempt to define 'rurality'. The terms 'metropolitan' and 'non-metropolitan' are likewise interchangeable with these two designators. To distinguish between the two, rural has been conceptualised as having a strong sense of community and being closer to nature (Cloke, 2003; Liepens, 2000). Rural people are said to know each other well, co-operate and mutually support one another. Life is perceived as existing at a slower pace. Urban, on the other hand is viewed as impersonal, individualistic and frenetic. Such socio-cultural definitions, Halfacree (1993) suggests, imply falsely that population density affects behaviour. There is no simple division between rural and urban. Differences between the countryside and city are being blurred in this contemporary age. Bushy (2000) contends that the polarisation that occurs between the terms 'urban' and 'rural' ignores the gradations and richness within both communities. Continuums are better able to address such perceived limitations (see Figure 1).

iii) **Typologies (continuums)**

Internationally the notion of a rural-urban continuum has been evident since the 1940s (Halfacree, 1993). Settlements have been positioned along a spectrum from the very remote to the highly urbanised. Size, density and locality factors are considered when establishing such degrees of rurality. Statistics New Zealand: Tauranga Aotearoa (2006) asserts that it is difficult to discern the complex gradations of rural existence, and bases its definition on a rural area's dependence on an urban centre. Utilising census

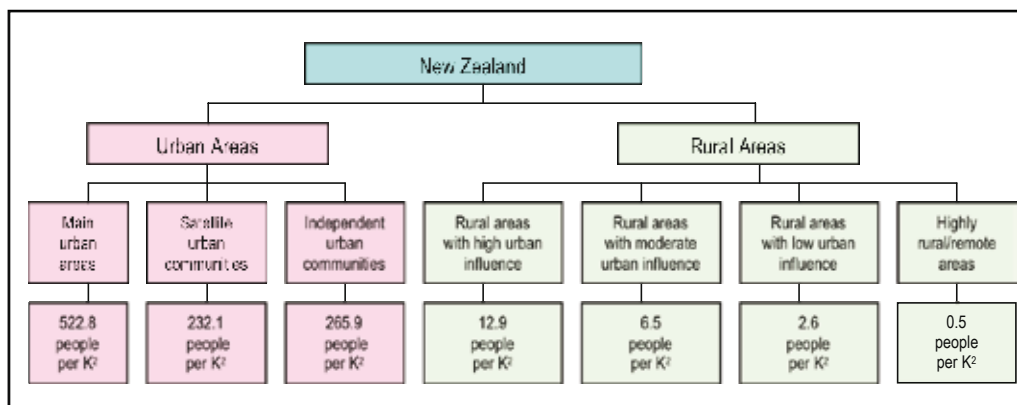


Figure 2: New Zealand: An Urban / Rural Profile Classification
(Published with permission from Statistics New Zealand, 2006)

data, the 'Urban/Rural Profile Classification' is based on a person's usual residential and workplace address (see Figure 2).

This classification limits rural settlements to a maximum population of 10,000. It is noteworthy that in the New Zealand 2001 census, 14.3% of New Zealanders lived in rural areas (see Figure 3) (Statistics New Zealand: Tatauranga Aotearoa, 2006). This population consists of a higher proportion of children (aged 0-14 years) and older adults, with a lower proportion of young people (aged 15-24). Comparable demographic patterns occur internationally (Crosato & Leipert, 2006; Hugo, 2002).

A similar rural typology is used by Statistics Canada. It describes seven categories outside commuting zones of a larger urban centre (Du Plessis, Beshiri, Bollman &

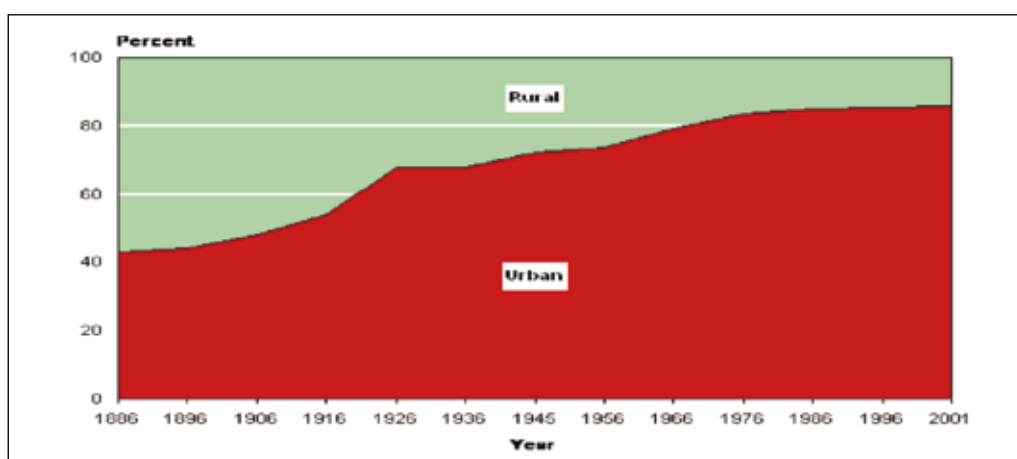


Figure 3: Numbers of people living in urban and rural Areas
1886–2001 Censuses of Population and Dwellings
(Published with permission from Statistics New Zealand, 2006)

Clemenson, 2004). Typologies are regarded as one of the more accepted methods of defining rural and remote (Hugo, 2002; Smith, 2004). Despite this there can be an inherent clumsiness when using large geographical units to discuss research findings, analyse health policies or in the development of programmes. It has been suggested by Wakerman (2004) that the more complex nuances of 'rural' are best reflected using indexing methods.

iv) **Indices (indexes)**

Measuring 'difference' in the degree of rurality has been viewed as having greater flexibility and comprehensiveness (see Figure 1). Although Cloke (2003) has deconstructed his earlier thoughts in later publications,² his creation of an Index of Rurality for England and Wales (1977) used statistical indexation techniques. Sixteen variables were used to objectively quantify different types of rural districts. This index remains a popular precursor of contemporary indices being employed internationally.

Such an index is the Accessibility/Remoteness Index for Australia (ARIA). It was designed in 1999 to define remoteness according to access to goods and services, locality and service information (Smith, 2004). In the United States, the Montana Rurality Index was developed using two variables: population and distance to emergency care (Bushy, 2000). Other socio-cultural and/or economic characteristics have been proposed. Variables that make sense to rural people in terms of resources and their lifestyle are more likely to be acceptable and relevant. Halfacree (1993) indicates that such emphasis could suitably tailor rural definitions to the task at hand.

An example of a tailored rurality gradient health incentive index is the Rural Ranking Scale, developed by the New Zealand Rural General Practice Network to redistribute Rural Bonus³ funding (Ministry of Health, 2002a). Rurality points are allocated based on distance from main urban centres, medical on-call rosters, availability of practitioners to attend emergencies, distance from colleagues, the size of geographical territory covered and the number of peripheral clinics. Janes and Dowell (2004) explain those scoring 35 points or greater were deemed rural, while those nearer to the total 100 points, increasingly remote. Similarly, in New Zealand the Ministry of Education has utilised targeted funding for rural schools since 2002. The rationale of this isolation index is that there are financial implications with regard to goods and services the further a school is from a larger population centre.

Overall comments

Smith (2004) challenges all attempts at precise locality definitions because, she argues, bureaucratic demarcations often impede appropriate allocation of resources to the most disadvantaged people. Such a notion is rejected by Pitbaldo (2005) who believes the time is ripe for health professionals to create and develop an over-arching definition of 'rural'. As evidenced, a sole definition of 'rural' is indeed not realisable or desirable, as heterogeneity precludes such an endeavour. If the concept of 'rural' evades explicit

technical geographical defining, can clarification occur by observing the society that inhabits the space? Part Two of this chapter addresses this question.

PART TWO: Rural Society

Part Two cannot hope to contain the wealth of literature addressing rural society across the health, anthropological, sociological and geographical disciplines. The scope is therefore limited to broadly acknowledging the following aspects i) socio-cultural, ii) occupational, iii) ecological, and iv) health (see Figure 4). The Rural Framework Wheel is reintroduced from Part One (refer back to Figure 1). Each system is introduced and detailed separately, but interwoven to contribute to the whole schema of the rural context.

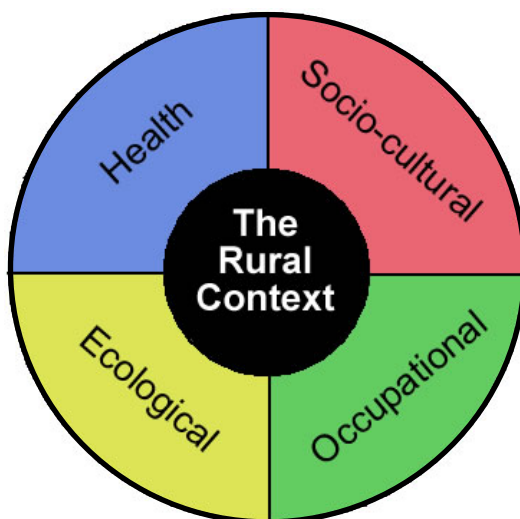


Figure 4: Step two of the Rural Framework Wheel
The four fundamental systems which describe the rural context

i) **Socio-cultural**

This system relates to human societal behaviours and interactions (McMurray, 1999). Bushy (2000) acknowledges that socio-cultural variety impacts on characterising 'rural'. Each community is different and yet there are commonalities internationally. Before investigating the commonalities it is pertinent to review the dominant historical, rural cultural constructions which have imprinted upon the national psyche of the following country descriptions. In England, it is of the nostalgic rural idyll and being closer to nature through living in picture-postcard villages (Cloke, 2003). In the United States of America, the 'wilderness' represents frontier life, hardship and backwardness. It is

suggested by Valentine (2000) that the obsession with jeans and cigarettes are a by-product of this. In Australia the 'bush', country-mindedness,⁴ and mateship,⁵ all evolved from the rugged predominantly masculine history of settlement (Smith, 2004). In New Zealand, it is of the pioneer battling with nature to 'tame the land' (King, 2003). Self-survival within the rural context is the dominant construct in each example.

Self-reliance, independence and hardiness are common attributes described as necessary to survive a rural lifestyle (Bales, Winters & Lee, 2006). Hardiness, coexisting with an optimistic outlook, enables a person to cope with the stressful life and risky environment. Bushy (2000) suggests that this is because hardy individuals take decisive action to learn about change and then weave this knowledge into their belief system for future reference. This engenders autonomy and resourcefulness. Smith (2004) contextualises such values to the Australian concept of 'she'll be right mate'. In essence the belief is that with hard work and stoicism one can be optimistic and survive through adversity.

Despite attitudes of hardiness and the development of coping strategies, rural people believe they are under-resourced when compared with their urban counterparts (Larson, 2002). This assertion is supported by research (Bushy, 2000). Educational levels and income tend to be lower, with indigenous populations faring considerably worse than other cultures (Green & Gregory, 2004; Tarlier, Johnson & Whyte, 2003). These socio-economic factors, combined with the non-availability of material resources, influence deprivation indices (Salmond & Crampton, 2002). Such indices demonstrate what position individuals or groups hold within the structure of society/nation. Wakerman and Lenthall (2002) confirm that socio-economic wellbeing/deprivation indices deteriorate internationally with increasing rurality and remoteness.

There are rural communities which consider increasing remoteness and isolation positively, believing it promotes community cohesion, support and collective action (Findholt, 2006). Liepins (2000) identified this conception of community, for which rural areas have traditionally been renowned, as based on origin kinship, proximity and an emotional connection. However, it was also noted that isolation and distance contribute to a sense of loneliness and disenfranchisement. Of concern is the higher rate for homicide, suicide, alcohol consumption and smoking with increasing distance from a major urban centre (Humphries, 1999). The concept of 'insider and outsider'⁶ is well documented in rural community studies. This remains a source of tension in community acceptance and corresponding individual wellbeing (Valentine, 2000). Cloke (2003) as well as Holloway and Kneafsey (2004) propose that the xenophobic notion of 'otherness' (outsider) differentiates the lives of those who become marginalized. As depicted in the first part of this section, contemporary social geographical studies are increasingly interested in the 'other,' the darker, marginalized or dystrophic character of rural culture. No longer is the dominant view of rural seen through the lens of white, masculine farming stories. This has reverberated through rural society and has impacted specifically on rural 'work' (Little, 2002).

The Rural Framework Wheel is drawn therefore at this juncture to the occupational system (see Figure 4). An overlapping can be observed between the two systems due to 'community welfare' being inextricably bound to the socio-cultural as well as the occupational system.

ii) **Occupational**

Traditionally 'ruralness' had its beginnings in agriculture, a masculine occupation which dominated rural life. Overall rural work remains a labour of primary production: farming, fishing, forestry and mining (Bushy, 2000). It is often seasonal and cyclical in nature. Securing employment in such a limited occupational environment is difficult and unreliable. There is an international trend for women to 'out-work' in nearby urban areas, to use whatever skills they have to maintain the economic viability of the family (Little, 2002). Rural people value a hard-working lifestyle.

Panelli (2006) posits, when analysing rural labour and property, that 'the family' is key. This is due to agricultural work being so closely integrated with rural life. In Australia 90% of farms are family owned (Smith, 2004). Family/whanau⁷ in these situations become the fulcrum around which the farm rotates. Obviously this differs markedly from urban studies where extended-family members do not necessarily live in such close proximity nor are so economically enmeshed. Gendered divisions of labour are changing (Little & Panelli, 2003). Formerly the females performed the household and child-rearing duties whilst the males were involved with production. A more egalitarian relationship now prevails. Despite this, Little and Jones (2000) believe women remain disadvantaged, economically and socially, in a rural environment due to the strong relationship between masculinity, policy and governance.

The young (15-24 year age group) are also disadvantaged. With increasingly restricted employment opportunities a downward social spiral is taking place (Alston & Kent, 2004). Globalisation⁸ has resulted in fundamentalist government economic policies; regionalisation,⁹ rationalisation¹⁰ and privatisation are all policies that have negatively impacted on rural people (Bowler, 2005). Services have been withdrawn from communities. These processes have led to the loss of local expertise, knowledge and networks, accelerating rural population mobility and instability (Francis, 2005). The most vulnerable group is the young. Urban encroachment in some areas has resulted in the loss of productive agricultural/horticultural land and depopulation especially of this age band. Although urban employment and social opportunities do exist, the lack of educational resources retards occupational advancement (Crang, 1998).

Those rural people who remain, in order to survive economically, have diversified (Bowler, 2005). Diversification into tourism has been heralded by central government as a possible saviour, injecting finance and new possibilities into declining rural communities (Warren & Taylor, 1994). A gamut of occupations exist from the entrepreneurial tourist operators through to those involved in menial accommodation duties. Valentine (2000) believes that New Zealand, in particular, is creating an attractive

image for adventure tourism. The beautiful untouched wilderness is being marketed as a place for self-discovery and personal growth. Tourists thereby not only observe the environment but participate in activities to experience and relate to it. To allow further exploration of the relationship between 'people' and the rural environment, ecology, the third system within the Rural Framework Wheel is now introduced (see Figure 4).

iii) **Ecological**

Both tourism and counter-urbanisation¹¹ are examples of people relating to the rural environment. It is argued that both are contemporary reactions to industrialisation and a new environmentalising in which urban people seek to defend nature (Bunce, 2003). Especially in the United Kingdom and United States of America this is played out in a desire to reproduce the rural 'idyll' by purchasing country estates. Similarly in New Zealand is the acquisition of the ten-acre block.¹² Interestingly, while seeking 'rural' experiences, urban exiles can bring with them urban expectations and thinking, creating dissonance with rural social norms. For within rural environments, residents traditionally identify closely with 'the land' and its life-sustaining capacity (McMurray, 1999).

Internationally 'the land' covers a diversity of geographic terrains and this presents locality-specific implications. Extreme opposing examples are living at high altitude in snow-bound areas or the searing heat of the arid Australian outback. It is a common rural assertion, confirmed by Winters et al. (2006) that a conscious life choice decision is made to live in a rural place. There is an emotional 'connectedness' to, or intimacy with, living on the land. Attachment to place is understood to be important to one's sense of identity, safety and life satisfaction (McMurray, 1999). Rural life, as explained previously, is closely integrated with rural work and weather. Thereby the orientation towards, or affinity with, the geographical environment is a natural progression.

Distance and isolation characterise rural ecology. The terrain determines an environment where there is a less dense population and greater spaces between places (Bushy, 2002). Therefore the dispersed and historically diminishing population impacts on the availability of, and ability to, provide services (Bowler, 2005). Increasingly isolation is being countered by access to communication technology. It is envisioned that remoteness will, in the future, be measured by the ability to be actively engaged in the information economy rather than by geographical considerations (Wakerman, 2004). Despite this intention, technology remains expensive and access is difficult. Compounded by limited public transport, distance creates lower employment, educational and training opportunities (Chenoweth, 2004). The tyranny of remoteness is characterised by increasing diseconomies of scale. Government funding mechanisms are often inadequate and not based on need or equity, but rather on population numbers. Rural communities lack the critical mass to support diversity in services and public infrastructures that are economically viable (Francis, 2005). This is mirrored by rural health provision concerns.

iv) **Health**

The remaining system referred to within the Rural Framework Wheel is health (see Figure 4) which is constituent to all the former systems. The relationship between 'health' and 'place', in this instance rural, is a poorly researched area (Elliott-Schmidt & Strong, 1997; Humphreys, 1999). It is widely recognised that when considering the role of rural place, both the selected characteristics of the people who choose to live there, as well as the features of the physical environment impact on health status (Thurston & Meadows, 2003). Previous rural health research has typically focused on agriculture and its health hazards: farm machinery accidents, pesticides/toxic chemicals and exposure to the elements of weather. For this occupational grouping, the rates of disabling injuries and mortality are dramatically higher than in the urban population (Henson et al., 1997). While accurate, this type of occupational health research presents only a narrow glimpse of rural life and suggests rural is not conducive to good health. In fact Dixon and Welch (2000) go further and regard it as health hazardous.

Rural people dispute that the rural lifestyle is a health hazard. They perceive the rural setting as health-enhancing and believe it impacts positively on their holistic view of health (Averill, 2003). Although because of heterogeneity there is a wide variation in how health is defined, the meaning and symbols of rurality pervade responses when rural people are questioned on what is important to their health and wellbeing. Clean air, a slower pace of life, the allure of nature, a close-knit community life, the presence of wild and domesticated animals are all detailed as positive elements (Thurston & Meadows, 2003). From research of older rural women, De la Rue and Coulson (2003) assert that wellbeing is conceived in a more holistic, subjective qualitative way, rather than viewed through the usual objective biomedical lens.

Winters et al. (2006) reinforce the widely held view that rural people define health as the ability to work and play. Again, this embraces the holistic perspective of physical, mental, spiritual and social wellbeing. The emphasis on being 'productive' has traditionally resulted from the close relationship between rural life and rural farm work (Long & Weinert, 1989). As 'rural' evolves and changes, this functional definition appears to be less valid. The influence of the media, urban lifestyles and preventive health campaigns are eroding an illness-based view of health and encourage instead, health-seeking and health-promoting behaviours.

When considering health-seeking behaviours amongst rural people, there is a reported greater reliance on self-care (Lee & McDonagh, 2006). Bushy (2000) believes rural people place less concern on physical wellness than their urban counterparts. The rural values of hardiness, autonomy, diligence and perseverance foster this. Chafey, Sullivan and Shannon (1998) define self-reliance as a learned, decisional choice of independence. It is more evident the longer an individual lives rurally.

There is also a conception of 'informed risk', of knowing that taking care of themselves in the absence of a nearby health service is acceptable in order to remain living a rural lifestyle (Bales et al., 2006). Family health is often considered a woman's

responsibility. Women emphasise adaptation and coping when discussing health (Bushy, 2000). Extensive personal networks and an informal helping system of family, friends and neighbours assist rural individuals/families to cope with illness. A wide spectrum of human experience and a rich cultural history means there is a wealth of knowledge and wisdom within remote communities of caring holism and social ecology (Averill, 2003).

Seeking care outside this informal system can be fraught. Fragmented rural health services, poor transportation, long-distance travel on poor roads and inadequate telecommunications sometimes leave rural dwellers with little choice (Smith, 2004). The perceived lack of privacy of personal information remains a barrier of concern (Thurston & Meadows, 2003). The lack of anonymity has specific consequences for sensitive health issues such as mental illness or sexual matters. The health practitioner or health centre receptionist may be a friend or neighbour. Often help from 'outsiders' is sought only for episodic evaluation or when a child is involved (Bales, 2006; Huttlinger, Schaller-Ayers, Lawson & Ayers, 2003). However, the action of accessing care through formal resources and health professionals not personally known is improving. Rural people are emerging as 'conscientious consumers', where the decision about where to seek care depends not on the availability of a known, trusted provider, but on the type of illness or injury (Bales et al., 2006).

Rural illness and injury statistics are in a dismal state according to Strasser, Hays, Kamien and Carson (2000), who indicate rural people frequently present late when the disease or injury has become more complicated. Phillips (2002) relays, of the Australian experience, that with increasing remoteness there is increasing mortality, increasing age-specific death and increasing death by poisoning and injury. Remote populations consume higher levels of alcohol and tobacco which impacts on these statistics (Hegney, McCarthy, Rogers-Clark & Gorman, 2002). The rural environment also presents geographical difference in disease patterns. Rural people are intimately involved with the habitat of insects, reptiles and animals and therefore have to contend with more bites, stings and zoonoses.¹³ There is a greater exposure to occupational injury in the primary and extractive industries. Influenza cases peak later and longer due to the scattered nature of the population (Simmons & Hsu-Hage, 2002). As previously stated, to live rurally equates with a lower socio-economic status and a higher deprivation index. This has a strong correlation with a worsening health profile (Ministry of Health, 2002b). Poverty is a predictor of mortality for all racial groups (Dixon & Welch, 2000). Consequently it is postulated that if rural socio-economic factors were improved, standardised mortality and morbidity could equal urban statistics.

Worldwide the rural decline of the 1980s has had a profound impact on health (Mahnken, 2001), especially the mental health of rural dwellers (Alston & Kent, 2004). There is a reported decline in optimism (Puskar, Tusaie-Mumford, & Boneysteele, 1996). This has negatively influenced adjustment and achievement. The urban drift of the young in search of opportunities has left the older ageing members without family

support, exacerbating the difficulties. Stereotyping and traditional generalisations about rural areas have created ineffectual health policies and services that are not responding to these trends (Hugo, 2002). In New Zealand a Rural Expert Advisory Group has constructively addressed these concerns by publishing a report on ways to implement the Primary Health Care Strategy¹⁴ in rural New Zealand (Ministry of Health, 2000, 2001, 2002a).

Meanwhile the two striking differences between rural and urban health service delivery are accessibility and affordability. Poor accessibility is due to time-consuming distance considerations, compounded with rationalisation of services and a maldistribution of health care professionals (Bidwell, 2001). The ability to afford to travel long distances, on roads of a lower standard, also impacts on people who are economically struggling and limits attendance at those health services still available. Cost in such situations becomes a major barrier (Averill, 2003; Ministry of Health, 2002a). It therefore remains a moral imperative to plan and deliver equitable, accessible and affordable rural healthcare.

Conclusion

Rural health care is not just a health service in a rural location but rather health care in a complex matrix of socio-cultural constructions that each require separate consideration (Bourke et al., 2004). I have claimed in Part One that in fact there is no one rurality. Rather, the concept of 'rural' is variable and evolving. That which Ross, Jones and Litchfield (2000) postulated in the (New Zealand) Centre for Rural Health's initial research on rural nursing still holds currency. Where geographical or conceptual boundaries between urban and rural are delineated, using descriptive, dichotomy, typology or indexing methods there remains no overarching international consensus. This lack of a conclusive, agreed definition has been perceived to restrict development of appropriate services. Despite this, 'rural' is clearly different as a locality descriptor. It is this intangible concept of 'difference' that sets it apart.

Rural society with its heterogeneous, yet shared socio-cultural, occupational, ecological and health systems is concrete in defining 'rural'. Step two of the Rural Framework Wheel provides a visual representation of context. Analysis has revealed rural society and culture as a discernible but ever-evolving construct. Rural life is different from that lived out in an urban context. This contextual information has laid the foundation to critically analyse how nursing practice is shaped by the rural context.

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Footnotes

1. Hidden others: the other, often darker hidden side of rural life where age, gender, sexuality, economic position and disabilities can marginalise and exclude.
2. Cloke questions his earlier quantitative work and now avoids the treatment of 'rural' as a static phenomenon. He suggests that 'rural,' being dynamic, changes over time.
3. The Rural Bonus was previously a 10% extra payment on the New Zealand Ministry of Health's General Medical Subsidy paid to rural general practitioners.
4. Country-mindedness is an ideology where rural people see their hard work as primary producers being the explanation for the Australian high standard of living.
5. Mateship is a uniquely Australian social behaviour, where intimate camaraderie exists with a companion.
6. Insiders are long term residents; acceptable, with power and with a voice. Outsiders are perceived as new or leading a more urban-orientated or non-acceptable lifestyle.
7. Whanau: a New Zealand and Maori word denoting a close kinship relationship.
8. Globalisation: a term referring to the change in relationship between space, economy and society.
9. Regionalisation: centralising services to main centres.
10. Rationalisation: allocating services based on supply and demand principles, not equity of access.
11. Counter-urbanization: resurgence of the rural population based on net in-migration.
12. Ten-acre block is a life-style farm unit. It is estimated that there are between 90,000 and 110,000 units averaging 3.7 hectares in New Zealand (Statistics New Zealand, 2006).
13. Zoonoses are infections transmitted to humans from animals.
14. Primary Health Care Strategy: a new approach taken by the Ministry of Health (2001) to facilitate improved primary health care and to reduce inequalities.

Rural Contexts – Islands

DEBORAH ROSE DILLON

This chapter builds on the previous, while providing an opportunity to consider one other geographical context in which rural nurses provide health care, that of islands. This chapter focuses on the topic of islands in the hope of bringing to the reader's attention important issues which need to be considered when providing appropriate health care to island people.

Introduction

The topic of 'island' interested me and I wondered what defines an 'island.' Could there be 'mainland islands,' what are the health needs related specifically to island people and how does isolation affect health provision? Growing up in a remote rural community has influenced my longstanding interest in the ideas of islands and 'islandness,' and in the concepts of isolation and community survival. It generated in me an understanding of the structure and functioning of rural communities, the old-timer-newcomer and kinship aspects (Long & Weinert, 1998), and the intrinsic culture. It also helped me develop personal autonomy and responsibility, independence and an optimistic outlook that anything can be achieved if tackled creatively enough. This in turn has greatly influenced my nursing practice.

The Concept of 'Island' in New Zealand

The concept of 'island' is particularly relevant in New Zealand, an island nation where approximately 25% of the population is rural or remote from urban areas (Ministry of Health, 2002). New Zealand is made up of two main islands and numerous outlying smaller islands. Stewart Island, off the south coast of the South Island, is the third largest in land mass. Information relating to Stewart Island is used throughout this chapter to exemplify island life. Stewart Island has a permanent population of 403 (Statistics New Zealand, 2006), and can have up to 30,000 visitors (tourists) annually (personal

communication with local Department of Conservation staff, 2006).

All New Zealanders can be considered islanders but the rural and remote areas in New Zealand experience a higher degree of isolation and smallness, or 'island-ness'. An island dweller sees his/her ecosystem stretching far beyond the bounded-ness of their shoreline (McCall, 2002a). The resources of the sea are regarded as their ecosystem and McCall argues that continental people only become islanders when they view the sea, not the land as their home. Exclusive Economic Zones (EEZ) stretching 200 nautical miles off island shores greatly increase an island's area of influence, and islanders often navigate far from their shores and use their skills to control access to trade routes and resources (McCall).

Examining the rural and remote areas within New Zealand in terms of their links, isolation, bounded-ness, and looking from the inside of these areas towards the outside, gives a clearer view of the way these communities function. 'Resource communities' (such as Stewart Island) stand at the interface between a society and its natural resources and are subject to economic cycles of boom and bust (McClintock, Baines & Taylor, 2000; Moore, 1998). This growth and decline, both economic and social, can result in a relative disadvantage compared to the total population of New Zealand (McClintock et al.) and understanding of the community function enables this inequity to be addressed.

Understanding islands is therefore important to us as New Zealanders and islanders, living in a world where one in nine people live on an island and, both within our own island nation and internationally, have to deal with the effects of structural separateness and relationships with our perceived 'mainlands'. Islands contribute two thirds of the earth's resources, and the boundaries of islands stretch globally, in the sense of immigration and maritime influence (McCall, 2002a), and thus exert powerful influence over our planet earth and its future sustainability.

Islands

An Island is defined as: 'A piece of land surrounded by water; anything resembling this e.g. a street refuge' (Webster 1989, p.201). Royle (2001) states there are two distinct factors that render an island as special: these include 'isolation' and 'boundedness.' First, isolation may be physical (by water, mountains or fence) or social (by language, type of community activity or culture). Isolation in an island sense has been referred to by Baum (2001) as a 'fact of difference' (p.11), and as an island becomes more homogenized and integrated with the nearby community, i.e. mainland, this fact of difference decreases. Royle's second factor is boundedness which gives a mind's eye picture of wholeness or completeness, giving the feeling of a complete ecology (Baldacchino, 2004).

An island could be defined as an 'intuitive concept of a relatively small land mass, generally without strong land-based connections to a larger land mass', or an island

refers perhaps to ‘the experience of isolation and smallness which may derive from various causes’ (Kelman, 2004a, p.2) which is similar to the experiences of people in ‘small’ rural and remote communities on the mainland (Gould & Moon, 2000), and the maritime environment where large numbers of small, isolated communities are present in the form of ships, submarines and oil rigs (Bull & Boyle, 1998).

Issues to be considered in relation to islands

Islands:

- are not always sparsely populated (Gould & Moon, 2000; Hotchkiss, 1994).
- may undergo political and economic change that can occur very quickly (Baldacchino, 2004).
- may not be remote in distance but financial cost, and commitment, involved in managing transport systems, weather conditions and technical difficulties may make the cost of separation higher than that of the rural areas. This unavoidable cost, referred to as the ‘island penalty’ (Gould & Moon, 2000) is supported by the situation on Stewart Island where the Health Committee estimates costs of an extra \$400 per month/per household compared to Invercargill, for freight and energy.
- individual economies have been portrayed negatively as **MIRAB**, i.e. centering on **M**igration, **R**emittances, **A**id and **B**ureaucracy, intimating dependence and fragility (McCall, 2002a).

There are many commonalities between islands, island-ness, and the way rural and remote areas are viewed by urban neighbors, which could be conceptualised as ‘mainland islands’. Islands are viewed from a distance; rurality is also viewed mythologically from a distance (Logan, 1997), and there is a sense of a complete ecology and the effects a ‘bridge’ may have, both physically and metaphorically.

Similarities include:

- that climate and seasons have a direct bearing on island and rural culture and economy. This in turn brings different demands on the service and supply industries, and can also impact on resources (Gould & Moon, 2000).
- migration, a common feature of island life (Hotchkiss, 1994) and rural life (Bushy, 2000), can affect the gene pool, and ethnicity, either by colonization or general immigration.
- dis-economy of scale is experienced by both island and rural communities (Gould & Moon, 2000), for example, an island’s small population raises the costs of transport, communication and service provision per person but statutory and legislative requirements of the ‘mainland’ must be met. This runs counter to the urban needs-based assessments of expected service provision levels (Gould & Moon).

Nissology is the term given to island studies, an emerging academic field, which is defined as '*the interdisciplinary study of islands on their own terms*' (McCall, 2005, p. 418). This study paradigm involves the following eight characteristics: clear land borders; sea resources – especially the Exclusive Economic Zone (EEZ); a tendency to be claimed by continental states; perception of land scarcity and scarce terrestrial resources; a sense of limitation to social and cultural ecology; more intense relationships; and migration – both in and out – as a major preoccupation '*built into the nature of their ecological and social system*' (McCall, 2000a, p. 730).

Island People (Islanders)

Island people are regarded as hardy, self-reliant, resilient, capable of hard work, resourceful, and stoic in the face of adversity (Bushy, 2000; Leipert & Reutter, 2005; Long, 1998; Sansom, 1970; Wirtz, Lee & Running, 1998). The lifestyle promotes prepared-ness (Boaz, 2004), a sense of contentment, belonging, and a sense of human scale.

Small island locality involves social aspects of bounded-ness and difference, as well as those of geography and resources (Royle, 2001). Lack of anonymity and a lower threshold for intimacy in a small community makes social relations that are more intense (McCall, 2005). The community's personal relationships involve complex interaction between proximity, social class, occupation, gender, ethnicity, kinship, length of residence, age, and religion to varying degrees, and also involves conflict and change management woven into aspects of past, present and future (Taylor, 1988).

Accepted aspects affecting the islander are a sense of belonging, kinship, concepts of outsider/insider, new comer/old-timer, lack of anonymity, familiarity, lay care networks, local sense of time, local language and appreciation of the status individuals hold within the community (Bushy, 2000; Hotchkiss, 1994; Lee, Hollis & McClian, 1998; Smith, 2004). H. Levine and M. Levine (1987) conducted a social study of the Stewart Island community whilst living on the island, identifying characteristics of harmony, cooperation, civility and community spirit which exist alongside competitive and individualistic characteristics. This attitude enables the fishermen to compete directly for resources at sea but also exist as friends, neighbours and kinsmen in the community (H. Levine & M. Levine).

Women in rural communities are also known to have involvement in social, land, education and health issues and they are politically active (Rural Women New Zealand 2001; Smith, 2004). This was evidenced in H. Levine and M. Levine's (1987) findings that Stewart Island women have a specific role in supportive social networks, group activities and are conceptualized as a group of elite decision makers in the community; Moore (1998) states that Stewart Island women have considerable decision making power and dominate most committees (Moore).

Aspects to consider in relation to Islanders

Islanders:

- maintain an awareness of both mobility and migration, whilst maintaining a strong sense of insularity (Baldacchino, 2004), a ‘co-presence of *roots* and *routes*’; a contradiction between ‘*openness* and *closure*’; which may result in separation anxiety, the concept of ‘islands or ‘locality’ within a global world (p. 274).
- face restrictions such as ‘timetabling’, meaning they can only leave or return to their island homes at scheduled times of ferry sailings or plane flights, and only then if weather permits. Conceptually, ‘timetabling’ is a type of boundary, constraint or limitation which in theory greatly increases the degree of separation, relative-ness and perception of isolation (author’s own theory).
- travel time increases time away from work and family, and additional accommodation and transport costs on the mainland. Islanders can experience a sense of isolation (Lee et al., 1998) as getting to the mainland or town requires organisation, forward planning and adaptability as plans can change rapidly due to weather conditions.

Islanders and Rural People – the links

Rural identity

Many aspects of ‘island identity’ are parallel to ‘rurality’ (Gould & Moon, 2000), such as islanders and rural people having multi-roles in their community, locals knowing the resources they have amongst their people, and functioning as ‘generalists’ because they have a diverse and broad knowledge base (Long, 1998). Islanders and rural people see themselves as different to people from urban areas (Strasser, 1999; Fraser-Wilson, 2005). An example of this difference is a pervasive sense of preparedness (Boaz, 2004), hardiness (Wirtz et al., 1998), self-reliance (Bushy, 2000) and resilience (Leipert & Reutter, 2005) which is essential both for individual survival and for maintaining community sustainability, which in turn supports individual survival (Boaz). In other words if resources are not managed well by the individuals in the community then the survival of the community is at risk (Moore, 1998).

Rural isolation

‘Island-like’ isolation has some features in common with rurality in general, and more specifically with ‘rural-ness’ and ‘remoteness’. Lee et al. (1998) have identified separation, relative-ness and perception as a way of measuring the sociological attributes of isolation. As a consequence of isolation, people have fewer interactions and communications with others which can lead to physical, social, political and professional isolation (Lee et al.). This in turn leads to increased vulnerability (Bushy, 2000) of both individuals and communities.

Another phenomenon of isolation is 'islanditis' which relates to entrapment and perhaps a loss of power. 'Islanditis' manifests as aggression, moodiness and social withdrawal, and has especially been noted in public servants living on an island trying to uphold mainland policy in an island environment (McCall, 2002). Rural people may refer to this as cabin fever or bush fever.

Health provision

In both Australia and New Zealand small rural communities have identified health service provision as vital for community security, and reduction of services attributes to increased vulnerability, and possibly community decline (Farmer, Lauder, Richards & Sharkey, 2003; Strasser, Harvey & Burley, 1994) while appropriate health care increases resilience and strengthens communities. It is generally accepted that rural people tend to conceptualize health using a role performance model and have a health belief based around their ability to perform their activities of work and family life (Elliot-Schmidt & Strong, 1997; Long, 1998; Smith, 2004). Their stoic hardy attitude is also demonstrated in small island communities (Swain, 1970). Islanders and rural people become attached to long serving health providers, mistrust non-islanders or non-locals (Gould & Moon 2000; Strasser et al.), and prefer to be cared for by someone they know (Long).

Island and rural peoples' health

It is evident that islanders, like rural and remote communities, exist in the context of some degree of isolation and smallness of scale. Extreme environments and, in some cases, inherent danger, economic challenge, as well as limitations on political power, jurisdiction and choices for further development, add to the challenge of isolation and smallness. It is in this context that the health of island people is created. 'Health depends on our ability to understand and manage the interaction between human activities and the physical and biological environment' (World Health Organization 1992, as cited in McMurry, 2003, p. 9).

Island health care involves workable communication systems, collection of good information, transport and appropriate access to specialist services enabling accessible acute and primary health care (Scottish Health Services Advisory Council, 1995). Appreciation of local skills and culture, locally devised solutions and a generalist approach to health care provision have been identified as features specific to island populations (Hotchkiss 1994; Royle 1995; Ministry of Health 2002; Scottish Health Services Advisory Council, 1995) and are also parallel to the health service needs of rural and remote communities (Bushy, 2000; Lee et al., 1998; Ministry of Health, 2002; Rural Women New Zealand, 2001; Smith, 2004; Strasser, 1999).

Kelman (2004b) explains that island communities by nature have increased vulnerability or susceptibility and this is paralleled in rural communities (Gould & Moon, 2000). The World Health Organization states that 'health is created and lived by people in settings of their everyday life: where they learn, work, play and love' (World

Health Organization 1986, as cited in Wass, 2000, p. 270). The World Health Organization acknowledges that island communities are vulnerable to socio-economic and environmental change and this poses ‘enormous threats to the health and environment of island communities’ (cited in Galea, Powis & Tamlin, 2000, p. 178). This can lead to health issues due to infectious disease, economic challenge, damaging social and political insularity, strategic significance and the consequences of this, environmental factors such as water and food provision, and natural hazards (Kelman, 2004b; Lewis, 2001). These issues lead to specific health outcomes and service needs requiring provision of emergency and primary health care (Gould & Moon).

Positive features of island health care, noted from a review by Hotchkiss (1994) include: a local orientation towards primary care, easy access to local services, care from generalists, respect for local practices and recognition of the need to establish and maintain links with larger centers for professional development and service provision.

Balance and potential are stated as ‘two important elements of health’ by McMurray (2003, p. 10) who maintains that when people are healthy they are in harmony with the physical, social, emotional and spiritual aspects of life, and this is a socio-ecological approach to conceptualizing health. A socio-ecological approach examines a deep ecology of collective questioning of basic assumptions about our world, culture, life and our relationship with the environment (McMurray).

The World Health Organization proposes healthy islands are places where ‘children are nurtured in body and mind, environments invite learning and leisure, people work and age with dignity and ecological balance is a source of pride’ (World Health Organization, as cited in Galea, 1997, p. 2) and this is achieved through primary health care.

The New Zealand Primary Health Care Strategy (Ministry of Health, 2001) focuses on generalist first level services, community participation, health promotion and prevention, timely and equitable access and a high performing system which engenders confidence to improve health status and reduce inequality in health care. Primary Health Care also encompasses subsequent ongoing management of the person’s condition, but then extends to encompass a broad spectrum of activities with the goal of building community capacity to achieve sustainable health and wellness, aiming to maintain a high level of wellness overall (McMurry, 2003).

Gould and Moon (2000) state ‘although islands may generally appear undeserved [in regards to small scale populations], particularly when they are in rural or remote locations, there is a minimum core of [health] services which must be provided in order to met the day to day primary and emergency care needs of island populations’ (p. 1082). Island communities have unique health needs and require the local health professionals to acquire specific competencies to meet the needs of the island population. Health care in island communities is usually provided by nurses, and they demonstrate advanced nursing practice (Bushy, 2000; Galea et al., 2000; Long, 1998; McMurray, 2003; Ministry of Health, 2002; Scottish Health Services Advisory Council, 1995; World Health Organization, 2001).

Rural nursing practice on an island

Most communities experiencing isolation and smallness in rural, remote and island locations receive their primary and emergency health care from a nurse (Bushy, 2000; Long, 1998; McMurry, 2003; Scottish Executive, 2003; Strasser, 1999; World Health Organization, 2001), and some New Zealand examples of these nursing roles are found on the West Coast of the South Island and on Stewart Island.

Nurses providing this care are regarded as 'extended generalist' (Bushy, 2000; Long, 1998; Galea et al., 2000; McMurray, 2003; Ministry of Health, 2002; Scottish Executive, 2003; World Health Organization, 2001). This 'extended generalist' role requires the practitioner, in this case the nurse, to provide aspects of care expanded or extended from that which has traditionally been the domain of other disciplines and allied health care providers, such as medicine or social work (Strasser, 1999).

Thompson (2005) has researched some aspects of the boundaries of New Zealand rural nurses and states 'rural primary care nurses negotiate the boundaries between nursing and medicine, those within nursing itself, and also paramedic work. Nurses perform this boundary work by negotiating self-governing 'appropriate' and 'safe' professional identities' (p, ix). The focus of a generalist involves individual, family and community health care, and they practice comprehensive models of care by assessing, diagnosing, planning, intervening and evaluating (Ervin, 2002).

Rural nursing competencies

Specific competencies related to the provision of health care by island nurses have been identified and include advanced emergency care, advanced assessment and diagnosis, community assessment, health promotion, health prevention, health screening, curative skills including minor surgery and pharmaceutical treatments, management for specific populations (such as pregnant women), critical thinking and problem solving skills (Bushy, 2000; Lee et al., 1998; Scottish Executive, 2003; Wilkinson & Blue, 2002; World Health Organization, 2001).

Rural competencies have been developed by Jones and Ross (2002), involved in research commissioned by the Centre of Rural Health, who identified broad categories of 'distinctively rural competencies' related to the following areas: 'distance and isolation, managing professional and personal self in a small community, managing nurse patient relationships', and 'independence and interdependence with other health professionals' (p. 12). These competencies are particularly relevant to nursing in a rural context.

A Rural Nurse's Experience on Stewart Island

Swain (1970) wrote of her experiences as a nurse on Stewart Island, explaining her varied and complex nursing role. The nurse was required to have integrity, strength under adversity, and impeccable confidentiality and reliability (Swain). She pointed out

strongly how lack of competency affects both patient and nurse, the issue of decisions being made by the District Health Board without adequate understanding of the competencies required and her frustration at being sent a nurse who ‘very obviously knew nothing about medicine or dispensing’ (p. 107). This is supported by the challenges the researcher’s relief nurse encountered on taking up the position on Stewart Island.

Swain’s (1970) description of establishing and training a St John service of local volunteers to assist with emergencies is similar to today’s practice where the nurse on the island works closely with the New Zealand St John ambulance service. The competencies that Swain exemplified are echoed in the obituary written as tribute to the exemplary career of Jemima Sutherland, a nurse who worked on small islands, mainly the island of Unst, in the United Kingdom (Stickle, 2005).

These island nurses’ positions described here demonstrate advanced nursing competencies, and involve specialisation in the context of rural and remote, and expansion in the form of skills and knowledge acquired as a generalist nurse (Ervin, 2002). Advancement of practice indicates synthesis of both specialization and expansion by integration of practical knowledge and research based theory within a scholarly course of study (Ervin). Advanced nursing competencies are internationally acknowledged by the International Council of Nurses and the World Health Organization and nationally by the Nursing Council of New Zealand as high level clinical nursing skills, and endorsed with the legislative and competency level of Nurse Practitioner (Schobar & Affara, 2001; Nursing Council of New Zealand, 2006; World Health Organization, 2001). The Nurse Practitioner is defined by the International Council of Nurses as ‘a primarily community-based, professional nurse who works collaboratively with individuals, families and other health care providers in a framework of primary health care. This nurse may be a key entry point into a healthcare system and may practice in a variety of settings’ (Schobar & Affara, p. 5-6).

Core competencies described by the International Council of Nurses for the Nurse Practitioner indicate that the nurse demonstrates diversity, collaboration, critical thinking and problem solving, leadership and organisation within a diverse range of settings involving family and community settings (Schobar & Affara, 2001), and are similar to those competencies already identified as specific core competencies demonstrated by the extended generalist practice of island, rural and remote nurses.

Future issues to consider in relation to health provision include:

- Emphasis is placed on island studies as part of the New Zealand education curriculum so we as a nation understand ourselves better, and our place in the world, from a nissological perspective.
- New research is undertaken on the health beliefs and health status of rural New Zealand communities using a nissological approach, that is, the view from the ‘island’ of the community from the inside looking towards the mainland.
- Further research is undertaken into the scope of practice, competencies, and intensive

community and professional relationships that are currently evident in New Zealand advanced rural nursing practices, as there is a paucity of knowledge in this area.

- National support is given to all twenty one District Health Boards to ensure Primary Health Care endorsed Nurse Practitioners, with prescribing rights, are available in all rural and remote areas in the island nation of New Zealand.

Conclusion

The topic of 'island' and 'islandness' is important to the understanding we have of ourselves as New Zealanders as we will always be a small geographically isolated nation needing to cope with the issues of structural separateness and smallness. Our physical, social, emotional and spiritual health results from our relationship with our environment and culture, therefore we need to acknowledge our 'islandness' and study it from an 'island' or nisslogical perspective. This understanding and knowledge will enable nurses to further reduce the vulnerability and disadvantage experienced by rural, remote and small 'island'-like populations by providing informed health care delivery.

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Describing Rural Nursing Practice

THREE

Contextualised Nursing Practice

LEONIE HOWIE

This is the first chapter of three in this new section describing rural nursing practice. This section utilises a framework to describe practice, whereas the following two chapters take a storytelling approach.

Introduction

Nursing in a rural environment is shaped by its context (Puskar, Tusaie-Mumford & Boneysteele, 1996). If rural nurses are to be effective practitioners it is necessary for them to be saturated with contextual knowledge and possess the competencies required to practise rurally (Jones & Ross, 2003). Due to the heterogeneous nature of 'rural' there is extensive variance in the nursing practice required to meet the individual community's needs. This chapter is therefore confined to a comprehensive overview rather than an in-depth discourse.

The rural context was discussed in detail in Chapter One through analysis of four fundamental systems, while being introduced as step two of the Rural Framework Wheel (refer back to page 8). The Wheel is further developed within this chapter to illustrate how the rural context impacts on nursing practice. Each of the systems (described in chapter one) are expanded to incorporate multiple nursing practice subsystems (Figure 1, see page 34). Each subsystem is based on a concept or element of nursing practice which I propose has arisen as a direct response to rural societal needs. This assertion has resulted from critical analysis of rural nursing texts and is supported by national and international literature.

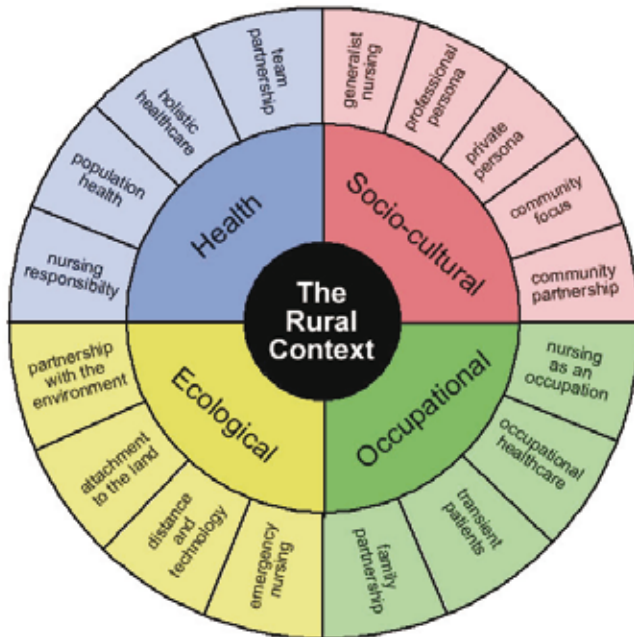


Figure 1: Step three of the Rural Framework Wheel illustrating conceptual subsystems of rural nursing practice

Conceptual Analysis of Rural Nursing Practice

i) Socio-cultural

The first system within the Rural Framework Wheel is socio-cultural. Tailoring practice to the socio-cultural issues inherent in rural communities has been identified as the most common issue faced in everyday practice by rural nurses in Canada (MacLeod, Brown & Leipter, 1998). I consider that examination of the following five subsystems will demonstrate how practice has been shaped by the socio-cultural system (Figure 2.) I have named them: *generalist nursing*, *professional persona*, *private persona*, *community focus* and *community partnership*. Each term is explained as the subsystem is introduced.

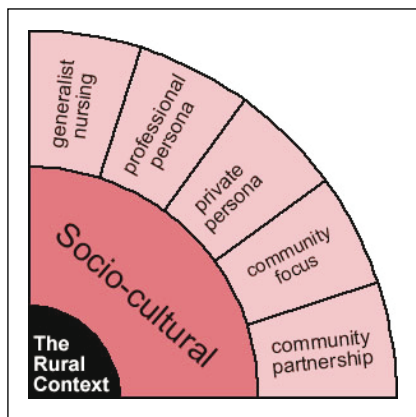


Figure 2: A section of the Rural Framework Wheel illustrating conceptual subsystems of the socio-cultural system

Generalist nursing encapsulates a practice where knowledge and competence are broad but specific in-depth expertise is limited to a few areas. Due to the fact that the population is sparse and fewer nurses work in rural settings there is a need for a primary health care service to offer comprehensive and continuous care to patients across the health continuum and throughout the lifespan (Bigbee, 1993). Chenoweth (2004) notes that often there are only limited personnel or services to respond to a range of human and social contingencies. Roles overlap with other disciplines and this can create greater flexibility in planning and delivering care but also highlight the distinctly challenging aspects of generalist nursing (Long & Weinert, 1989). Scharff (1998) and Rosenthal (2005) both emphasise the ability of rural nurses to move fluidly from one role to another as circumstances demand, as being uniquely rural. The degree of rurality/remoteness affects the breadth and depth of skills which a practitioner requires.

Attention to how a nurse conducts his/her *professional persona* as an advanced nurse in the rural context is just as important to rural people as the depth or breadth of clinical skills and experience. A community-orientated practice such as this, Chenoweth (2004) contends, requires the establishment of a credible professional identity. Gaining acceptance and trust is necessary before effectiveness can be realised (Smith, 2004). Practising ethically and confidentially, together with being culturally safe, is essential in rural healthcare due to the lack of choice for patients to access different or culturally specific services (Bourke et al., 2004). Active involvement in the community, through participation in events and being a member of various organisations, fosters ‘belonging’. Rosenthal (2005) considers ‘belonging’ as the cornerstone to achieving acceptance as an ‘insider’ practitioner. The rural cultural expectation to be cared for by a known and accepted ‘insider’ is a salient dynamic that can impact positively on healing. This intensity is unique to the rural context (Bigbee, 1993; Scharff, 1998). Such high public visibility of the nurse brings with it not only esteem but also a lack of privacy (Hegney & McCarthy, 2002).

The lack of anonymity in a small community impacts on how a practitioner conducts his/her *private persona* (Bushy, 2000; Strasser, 2002). Rural practice emerges as a lifestyle, not merely an occupation. Professional and personal selves are entwined and may come into conflict. A nurse, along with his/her family may be scrutinised in either role by the community (Chenoweth, 2004; Lee & McDonagh, 2006). Long and Weinert (1989) describe this visibility as a sense of always being on duty. There is a perception of constantly being viewed as ‘the nurse’. Consequently the need to establish clear boundaries will involve careful negotiation as the nurse moves in and out of professional versus personal relationships (Jones & Ross, 2003). Likewise ‘rural’ requires nurses to provide professional care with confidence to those they know well, due to the absence of other practitioners. Rural medical researchers, Rourke, Smith and Brown (1993), consider the depth, complexity and entanglement of the two types of relationships as challenging but the richness is one of the joys of rural practice.

Another aspect of satisfaction drawn from rural practice is the development of a

community focus. This term describes a nursing approach where interventions are based not only at the individual level, but respond to social and environmental factors that are known to be important determinants of health (Loos, Oldenberg & O'Hara, 2001). Simplistically a community focus can be defined as the nurse treating 'the community' as the unit of service. To foster this focus, when rural nurses first practise in a community they are encouraged to extensively profile the setting. Wilkinson and Blue (2002) support such integration strategies, stating that social, economic and political rural contextual knowledge is more important than microbiological process knowledge. This transition into 'rural' has been described as 'evolving' into context and shifting to a Primary Health Care¹ orientation (Tarlier, Johnson & Whyte, 2003). Once community dynamic knowledge is gained, a community focus places nurses in a better position to respond effectively to health concerns. To describe such co-operative advantage Scharff (1998) coined the term 'knowing'; "knowing rural means that knowledge can mean the difference between perishing, surviving and thriving and, therefore knowing is inextricably connected to being when one is rural" (p.22). This term remains in common usage in rural nursing texts.

As community 'knowing' is achieved, **community partnership** can occur. Emphasis on Primary Health Care creates the natural progression for nurses to be involved in community development as partners (McMurray, 1999). Such community partnership requires the professional role to adjust from official to partner and the community role from passive recipient to partner (Courtney, Ballard, Fauver, Gariota & Holland, 1996). Meanwhile community development is a process/project/philosophy whereby communities are empowered to define their needs and to actively participate in addressing them. Rural communities are especially exposed to inequality, which impacts on health as discussed in Chapter One. Williams and Labonte (2003) argue that health determinants can be changed through professional involvement in community development projects. Ross (1998, 1999, 2002) makes the point that rural practice involves association with projects that traditionally were viewed as outside nursing. Two such examples are upgrading an airstrip to facilitate emergency night-time evacuations and creating a community vegetable garden in a disused school pool. Community partnership is a recurrent theme in rural nursing literature (Bushy, 2000). Its impact on practice underlines how rural socio-cultural factors shape nursing practice. Occupational factors likewise impact on practice.

ii) **Occupational**

Occupational is the second system within the Rural Framework Wheel. The fact that rural 'work' and rural 'life' are symbiotically merged results in a greater emphasis on the occupational aspects of healthcare, than that which is experienced in the urban context (McMurray, 1999). Paton and Cuckson (2004) warn that without the lived experience of rural, this symbiosis is difficult to comprehend. Yet understanding its impact on practice is important because many seemingly good urban health approaches can become

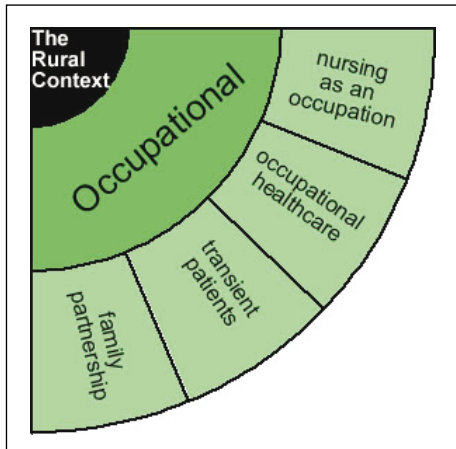


Figure 3:
A section of the Rural Framework Wheel
Illustrating conceptual subsystems of the
Occupational system

frustrated with scarce resources being wasted in the rural setting. I have identified the following four occupational subsystems which I regard as shaping rural nursing practice. I have labelled them: *nursing as an occupation*, *occupational healthcare*, *transient patients* and *family partnerships* (see Figure 3). After the subsystem is introduced I explain how it impacts on practice.

A commonality of factors among those who choose rural *nursing as an occupation* have been identified. Research discloses that a high percentage of these nurses are of rural origin or drawn to the area through their partner's work, and there is a trend towards 'greying' or ageing (Bushy, 2000; Hegney, McCarthy, Rogers-Clark & Gorman, 2002; Stewart et al., 2005). Adjectives such as intelligent, creative, determined and resourceful are attached to successful rural nurses. The role diffusion, community involvement, and autonomous nature of their work are considered to be personally satisfying (Tarlier et al., 2003). Although, obviously, rural nurses differ, the picture emerges of nurses who mirror rural people, in that they possess traits orientated towards all things rural. These traits impact on how they perceive their nursing role and hence on how their practice is shaped. Jones and Ross (2003) consider those 'self-directed' in their own development survive the challenges and responsibility the position engenders. I expand this by suggesting their inherent 'rurality' is the reason they survive so well. This has implications for workforce recruitment and retention.

The 2005 Workforce Survey reveals a snapshot of New Zealand rural nurses (New Zealand Institute of Rural Health, 2006). 72% were aged over 40 years with the majority in the 46-50 year age band. These nurses were almost entirely female (98%) and 85% were trained in New Zealand. These figures correlate with those originally published by the Centre for Rural Health (Ross, Jones & Litchfield, 2000). Rural nurses who have remained become absorbed by their rural lifestyle and utilise a range of skills to care for people across the occupational spectrum.

Occupational healthcare concerns not only acute emergency care skills (discussed

later in this chapter), but also nursing intervention through prevention and education (Henson, Chafey & Butterfield, 1997). As discussed in Chapter One the extraction industries of farming, fishing and forestry are considered high-risk for injury. Due to sparse resources there is not always immediate access to health services and so preventive strategies are required to limit the devastating effect these injuries can have. This, coupled with the perceived strong rural work ethic and dismissal of injury as interfering with 'what needs to be done', impacts on how nurses interface with rural people. Often a change of venue from the health clinic or base to meeting patients where they are, at times suitable to their working schedules, allows appropriate intervention to occur. Bushy (2000) describes the nursing role in such a scenario as that of educator and counsellor. The rural decline, impacting negatively on both the occupational and social systems, as discussed in Chapter One, has resulted in a greater need for mental health care.

Given this evidence, rural practitioners with foundational mental health knowledge and mastery of assessment skills are better positioned to meet mental health needs. Armitage and McMaster (1999) declare that although rural nurses work occasionally outside the margins of their formal education, this can be an advantage to patients. A health service which attaches meaning to i) lifestyle, ii) self-direction, iii) preserving the psyche, demonstrates a rural and humanistic orientation. This creates an ethical respect for autonomy and informed choice, and places less reliance on technological, psychological and pharmacological therapeutic support (Gibb, 2003). An area of health care 'risk' can therefore be transformed into one where individual needs are able to be met.

Transient patients are likewise at special risk of unmet health needs (Bushy, 2000; Henson et al., 1997). The migrant, the seasonal worker and the tourist are categorised as transient patients in the rural context. Health care is often episodic and nursing interventions occur on a treatment needs basis for these patients. Migrant workers often subsist on low incomes, experience profound physical and cultural isolation complicating a lack of access to necessary preventive health services. This can impact negatively on individual health and well-being. Responsive nursing practice requires rapid relationship-building skills akin to that of the urban nurse (Tarlier et al., 2003). Effective relationships promote the uptake of preventive strategies. Tourists are included in this category as similar skills are needed along with cultural dexterity to combat the anxiety and disorientation when patients face the need for health care. Transient patients can equate distance from an urban centre with a poorer health service (Bushy, 2000). Scharff (1998) makes the point that often these patients are positively surprised at the competence and quality of the individualised care they receive. Expeditious relationship-building or partnering is a hallmark of these interventions.

Family/whanau partnership relies on a similar, yet integrative relationship between the nurse, patient and the family members who carry the burden of health care. The traditional professional role is transformed into one where family members are empowered and collaboration occurs. Keyzer (1998) draws attention to defining 'care'

in rural nursing, as not merely carrying out technical tasks but of supporting a shared responsibility for well-being of all the society's members. In the rural context, the family (however that is diversely conceived) are often the caregivers (Crosato & Leipert, 2006; Panelli, 2006). Nurses are involved as the resource people, providing support in non-judgemental, non-controlling ways and in a manner which recognises and enhances family capacity. Hegney (1996) draws attention to the previously described rural nursing concept of 'knowing' as giving nurses the tool, or knowledge base, with which to achieve this.

The challenge for rural nurses is to be alert to the negative consequences when the family is involved in care-giving. These include intergenerational stress and physical or psychological illness which in a rural context can be amplified because of distance and isolation from resources. McMurray (1998) recommends putting in place positive support mechanisms to ensure that the health needs of all family members are respected, to dilute the effects of distance and isolation. When considering how 'distance' impacts on other areas of practice it is apposite to examine closely the third system within the Rural Framework Wheel, the ecological system.

iii) **Ecological**

The rural environment can be demanding and unforgiving. Distance is a modifying factor. A perceptive rural researcher, Bigbee (1993) spoke of "the continual interaction of the rural environment, the nurse and his or her practice" (p.132). It is within these influences that I further my argument as to how practice has been shaped, in this case by the ecological system. The following four subsystems are a vehicle to accomplish this: *emergency nursing, distance and technology, attachment to the land* and *partnership with the environment* (see Figure 4). As each subsystem is introduced the concept and its impact is discussed. The first is *emergency nursing*.

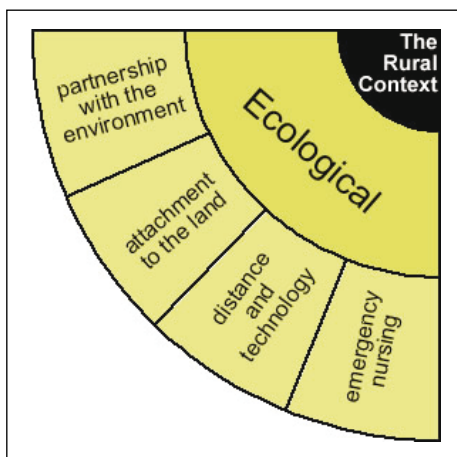


Figure 4:
A section of the Rural Framework Wheel illustrating conceptual subsystems of the Ecological System

Ecology impinges on *emergency nursing*. Evidence suggests that rural nursing services are most threatened in the area of emergency response because of this (Jones & Ross, 2002). O'Meara, Burley and Kelly (2002) indicate that rural communities internationally rank access to urgent care services to be of the utmost concern. Chapter One discussed the high rate of rural injury, mortality and morbidity. Delay in receiving emergency care impacts upon prognosis (Ministry of Health, 1999). These factors shape the emergency skill set and knowledge required. Smith (2004) asserts that it is often the health practitioner's combination of advanced skills - assessment, triage and co-ordination of resources that can make the difference between life and death. In New Zealand rural nurses and doctors are especially trained alongside the Order of St John² to provide an immediate, co-ordinated and quality service for rurally situated residents (Hore, Coster & Bills, 2003). The service, named the 'Primary Response in Medical Emergencies' (PRIME) was rolled out nationally in 1999. It provides rural communities with certainty of access to timely emergency services diminishing the effects of distance and isolation (Ministry of Health, 1999).

In the rural context there is a beneficial relationship between *distance and technology* which impacts on practice (Hegney, 2000). Telephone and radio consultations have long been a tradition in rural communities. Increasing investment in information and communication technologies to support the delivery of care can reduce the isolation which distance can create. The use of satellite phones, the internet, e-mailing and telehealth (the transmission of diagnostic images, video and/or information) have been promoted as an innovative and effective way to lessen professional isolation (Medical Council of New Zealand, 2006; Ross, Stewart & Baldwin 2006). However technological progress is variable internationally in rural locations (Chenoweth, 2004; Janes et al., 2005). Unlike urban areas many rural people face poor or no access to these technologies. To achieve coverage, telecommunication infrastructure – hardware, speed, reliability, accessibility, cost and maintenance needs to improve (Kildea, Barklay & Brodie, 2006). Interestingly, Ellis (2004) cautions nurses to be aware of the negative effect telecommunications can have on the therapeutic relationship and argues that it does not replace the primacy of face-to-face caring. To prevent such a scenario, nurses are encouraged to be involved in planning, ensuring that both a nursing and rural perspective is represented in technological provisions (Bushy, 2002).

Access to communication technology assists professional nursing development, when distance or isolation is a barrier. Smith (2004) encourages rural practitioners to be involved in life-long learning, stressing the need to maintain and update levels of knowledge, skill and competence. Access to appropriate education has traditionally been difficult, due to the far-flung location of nurses away from urban-based tertiary institutions. Computer-mediated technology opens the possibilities for educational support whilst a nurse remains resident in a rural community (Ross & Kemp, 2006). International studies confirm that access to such continuing education affects recruitment and retention of nurses to rural areas (Betkus & MacLeod, 2004; Francis, 2005; Richards,

Farmer & Selvaraj, 2005).

However, the use of technology supporting urban-based care can clash with the rural concept of *attachment to the land* (as discussed in Chapter One). It conditions nursing practice because rural people have traditionally wished to be cared for by those ‘known’ to them and have resisted being transferred to an unfamiliar environment (Long & Weinert, 1989). This rural cultural barrier although changing, still influences the healthcare decision-making processes (Lee & McDonagh, 2006). Gibb (2003) notes that nurses delay hospitalisation of patients in remote communities until all other resources have been considered due to the social dislocation it creates. Secondary and tertiary facilities while technically efficient, are often distant and can be perceived by rural people as impersonal and frightening. Stamp, Miller, Coleman, Milera and Taylor (2006) in their research on Australian Aboriginal people (transferable to most rural peoples), concluded that patients feared an alien environment, with no accompanying family members and no support for their kinship structure. This equated to a spatial separation from the land, and seemingly, the greater the distance from ‘the land’, the greater the estrangement. Rural nurses acknowledge this connectedness and understand that remaining rural in many instances is the holistic therapeutic choice to aid healing (MacLeod & Zimmer, 2005).

Creating a *partnership with the environment* to support positive healthcare outcomes, in such instances, shapes how nurses practise. The other facet of this partnership is the need to be orientated to, and cognisant of, the natural environment, its weather and terrain. Wakerman and Humphries (2002) consider the pre-eminent characteristic affecting rural health is geography. Geographical locality factors impinge on community health needs and therefore how nurses seek to meet these (Lauder, Sharkey & Reel, 2003). Such skills as manoeuvring a four-wheel drive vehicle, handling water craft, or tramping into an inaccessible area during sand storms, snow or searing heat often involve resourcefulness and resilience. Through coping with environmental conditions, Bushy (2002) contends, historically adventurous traits have been attached to rural nurses, traits such as creativity, adaptability, physical and emotional robustness. Comparatively, Castledine (2001) warns against being bewitched by the romanticised notion of nursing against a scenic backdrop. It is this that can render invisible the multiplicity and complexity of how ecological, the third system on the Rural Framework Wheel, shapes rural nursing practice.

iv) **Health**

The fourth and final system to consider within the Rural Framework Wheel is health itself. Hegney, McCarthy and Pearson (1999) contend that rural nursing practice is an abstraction of the rural construct of ‘care-giving’. Based on the previous three systems of the framework, where a picture emerges of a community-embedded practice, I would agree. I consider that examination of the remaining four subsystems will substantiate this claim and demonstrate how practice has been shaped by the ‘health’ system of ‘rural’. I have named them: *nursing responsibility, population health, holistic healthcare*

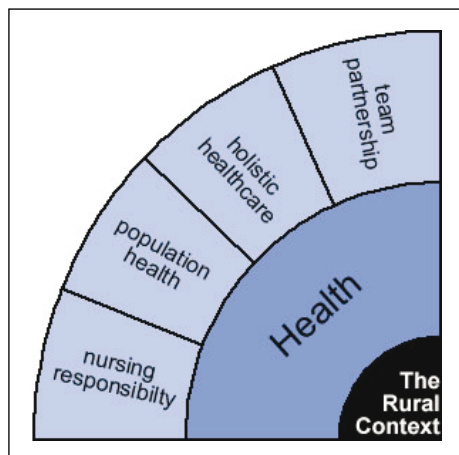


Figure 5:
A section of the Rural Framework Wheel illustrating conceptual subsystems of the 'Health' System

and team partnership (Figure 5).

Nursing responsibility equates with an autonomous role and being accountable for nursing interventions without direct clinical oversight (Bushy, 2000; MacLeod, Browne & Leipert, 1998). Because each rural community is unique, a variety of factors impinge on the level of responsibility any particular nurse might have. The Model of Variation in Rural Nurse Practice (Jones & Ross, 2003), lays out concisely those factors which produce the gradient of lesser to greater responsibility. Living and working in isolation requires confidence and courage to function as a practitioner (Gibb, 2002). Likewise the 'Distinctively Rural' competencies (Jones & Ross, 2003) demonstrate the areas where responsibility differs from nursing in an urban context. Responsibility is the overarching factor that defines rural nursing practice. Gibb (2003), when exploring rural mental health care identified the nature of this responsibility as being linked with 'honour'. A relationship of mutual respect or 'honour' undergirds rural community life and nursing practice. Rural nurses acknowledge the rural value of 'connectedness' and use this as a therapeutic tool (Henson et al., 1997). This connectedness in turn supports the nurse professionally to cope with the burden of responsibility (Hegney et al., 2002; MacLeod et al., 1998).

On-call is part of the responsibility that rural health practitioners have, to provide a 24 hour, 7 day service. Collaboration can produce efficiencies if work is shared across professional boundaries (Taylor, Blue & Misan, 2001). Traditionally on-call has been provided mainly by medical practitioners, but more recently nurses have been increasingly involved (Eckhoff, 1996). In New Zealand in 2005, 28% of rural nurses were engaged in a diverse range of on-call arrangements (New Zealand Institute of Rural Health, 2006). Decision-making support includes practice guidelines, backup medical telephone support and standing orders.³ The nurses are sustained professionally through an array of mentoring or supervisory support mechanisms (Mills, Francis & Bonner, 2005) and ongoing nursing education ensures that rural nurses are committed to professional proficiency (Ross & Mote, unpublished). Nursing involvement in on-

call is just one part of population healthcare provision, when the 'population' is considered as the unit of service.

Walker (2002) contends that *population health* involves analysis of health determinants, health status, health behaviours, healthcare utilisation and availability of community resources. Health needs and inequalities are targeted and are linked to a public health focus of sustainability, aiming to protect and promote health and prevent disease collectively (Smith, 2004). This goal is especially relevant to rural. Population health is broader than the traditional concepts of community care as practised within an individual general practice. Changing societal and economic issues are driving the wider focus and the New Zealand Primary Health Care Strategy (Ministry of Health, 2001; 2002) with its population-health emphasis is a response to this. Such dynamics shape nursing practice, by encouraging nurses to stand back from the minutiae of daily schedules and to be involved in assessing practice population health overall. Stevens & Gillam (1998) make the point that the creation and ongoing development of a 'population health-needs assessment' enables health practitioners to gather the information required to bring about beneficial change. Health gains are achieved by utilising this macro focus to appropriately allocate personnel, resources and services (Ministry of Health, 2003).

When services and resources are reconfigured under such a focus there is a positive impact on the ability to provide individual *holistic healthcare*. Holism supports the overriding rural perspective that wellbeing involves physical, mental, spiritual and social parameters. Understanding rural dwellers' healthcare decision-making processes assists nurses in providing care appropriate to patient needs and lifestyle (Sullivan, Weinert & Cudney, 2003; Winters et al., 2006). Bushy (2000) encourages rural nurses to view themselves as expert clinicians and case managers, resources to empower the individual. Collaborative skills are required in this partnership so that rural people can participate in solving their own personal health-related challenges (Crosato & Liepens, 2006; Faresjo, 2006).

Robertson and Minkler (1994), indicate that health is enhanced by the extent to which a person feels in control of his / her situation. Nowhere is this more keenly observed than with the self-reliant, hardy, independent rural character. Forging partnerships allows the control to rightly remain with such individuals. Averill (2003) argues convincingly that rural nursing needs to return to the cardinal principals of caring, holism and social ecology in order for rural people to be more receptive to health promotion messages. The ability to give holistic care, Henson et al. (1997) identify as one of the positive aspects of rural practice along with the development of collegial relationships through teamwork.

Geographical isolation has an impact on creating an environment for interdependence and *team partnership* (Strasser, 1999; Toop, Nuthall & Hodges, 1996). In New Zealand rural health teams do not necessarily just consist of health professionals. Ross (2001) describes three interrelated teams. The first is the rural community team, consisting of those with a participative stake in health; two examples are a health trust and an

emergency services team. The second, an expanded (secondary) team, whose multidisciplinary members may not live within the community but who contribute to its healthcare delivery. The third is the health professional team nucleus.

Hegney et al. (2002) reinforce the notion that the goal of working cohesively together as a health-team promoting quality cost-effective healthcare, creates satisfaction. The perception of connectedness in rural communities favourably influences inter-professional communication and collaboration. Sadly, this is not always so. Murrell-McMillan (2006) suggests when nurses' roles are undervalued and medicine dominates, a negative tension can develop. Inter-professional competence often requires inter-professional education (Faresjo, 2006). Individual personality, rivalry and conflict can fracture teamwork. Ross (2001) argues that successful rural teams are those whose members: possess mutual respect for skills, support a team approach, personally participate in team planning processes and embrace the collaborative solution. The resultant synergy is greater than the sum of the individual team members' input. The New Zealand Primary Health Care Strategy (Ministry of Health, 2001) calls for increased coordination of services. The challenge for rural teams is to provide competent, equitable, affordable and accessible services similar to those enjoyed by urban dwellers (Francis, 2005). To enable nurses to respond to such team work there needs to be an understanding of the competencies required to function as an advanced nurse in this context.

The Rural Framework Wheel is not an exhaustive account, nor is it exclusive. It is rather a beginning work to consider a conceptual model of how the rural context shapes nursing practice. I anticipate that in the future this framework or its successors could be useful for critiquing the practice of rural nurses, from an educational, employment, research and political perspective.

For now, I advocate that this framework be used by advanced rural nurses to describe their practice and so to express the distinctiveness of the rural nursing identity.

Conclusion

Although there were conclusive statements in the literature that the rural context shaped nursing practice, there was no succinct account as to how this occurred. I approached answering this question through an overview of international and national literature. I was able to sift out and critique those nursing elements or concepts that arose directly from rural societal health needs.

What is difficult and complex for rural nursing is to integrate the dimensions of the nursing profession with the rural context as it evolves. The Rural Framework Wheel is recommended as a suitable vehicle to demonstrate this assimilation. It visually depicts the substantial demands that 'rural', because of its specific health needs, places on nursing. The nursing concepts describing practice on the framework are identified as:

generalist nursing, professional persona, private persona, community focus, community partnership, nursing as an occupation, occupational healthcare, transient patients, family partnerships, emergency nursing, distance and technology, attachment to the land, partnership with the environment, nursing responsibility, population health, holistic healthcare, and team partnership.

Rural nursing is thereby presented as a unique, creative and challenging field. The two binding themes which characterise practice are ‘partnership’ and ‘nursing’ per se, and these mould the way nurses live and work within the goldfish bowl of small, sometimes isolated communities. Nursing as a discipline in such a context manifests a distinct identity. Although the tasks performed are similar to those of the urban nurse there is uniqueness which is clearly demonstrable and different.

Just as the bird in the following Maori proverb seeks enlightenment rather than merely satiety, there is a need for rural nursing to stand in its position of knowledge as it moves into the future, equipped to articulate and make rural nursing visible.

*Te manu e kai ana i miro
No na te ngahere
Te manu e kai ana i te matauranga
no na te ao*

*The bird that eats of the miro tree
the forest is his
The bird that eats of the tree of knowledge
the world is his.*

I commend the Rural Framework Wheel as an instrument to do just that.

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Footnotes

1. Primary Health Care: a model of health care delivery developed by the World Health Organisation (1978) at Alma Ata, USSR. It is a declaration incorporating concepts of disease prevention, health promotion, population health and community development/participation. These principles were set down internationally.
 2. Order of St John: a non-governmental organization engaged in the delivery of first response care in illness and trauma emergencies.
 3. Standing Orders: Formulated by medical practitioners for named nurses to allow specific dispensing of medications in defined circumstances.
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Storytelling

Storytelling as a Medium to Describe Nursing Practice

A storytelling approach describing rural nursing practice is the focus of the following two chapters. A brief summary of storytelling by Elizabeth Roulston and Raeleen Thompson introduces this section, followed by their individual stories. The first describes advancing nursing practice and the second volunteering as a rural nurse. Each story relates to the individual contributors practice and is shared with the reader as a means of describing rural nursing practice.

From what we know and can surmise from history, it seems that humans have been telling each other stories since time began. Through language the storyteller relays an original event, encouraging the listeners to become involved in the story, follow and discuss how events may have been different if they had taken an alternative turn.

Stories of struggle and survival have been passed down from generation to generation, each with their own elements of wisdom and knowledge. This has enabled people to build on the past, and move forward into the future.

Once the listener becomes interested in the substance of a story, they can become immersed in the detail surrounding the event being related (Geanellos, 1996). This engagement can lead to the story being used in a variety of ways, for example, the content of stories may be suspended at any time. What better way to encourage nurses to learn, by not completing the detail, and asking, "So what do you think should have happened next?" We have found this to be a most useful strategy in our role as nurses. Thus stories are useful for discovering different levels of meaning and understanding of situations in order to reflect on and develop practice.

While the value of stories can not be over-estimated, there are pitfalls that need to be recognized by those involved in using storytelling for nurse education. It is important to take into consideration safety and ethical considerations of storytelling. The setting of the usual ground rules of confidentiality and anonymity, even if widely known and readily accepted from past experiences, needs to be reiterated prior to each storytelling session.

There may be times when the event being related may involve the listener in reliving a traumatic event, thus resurrecting previously unresolved emotions. This may lead to others forming incorrect opinions from their observations of that person. At this time peer support is crucial, and the value of debriefing in the professional realm could be

suggested, enabling issues to be addressed in the correct forum.

Benner (1984) provided landmark research by using examples from nurses' stories and exemplars to help illustrate the journey from novice to expert. Diekelmann (2001) concurs, asserting that the lived experience of those who teach and practice nursing will assist the whole learning process by using and valuing case studies in nurse education in general.

Storytelling provokes thought, providing both the teller and the listener with a tool to encourage learning and self knowledge. During the process of telling a story, previously held assumptions may be challenged, and may even encourage a change in practice.

Reflective Practice – an essential part of self care

Reflective practice is an interesting and important concept as it involves thinking about, and learning from individual practice and the practices of others, in order to gain a new perspective of practice. It can assist in identifying dilemmas, improving professional judgment, and increasing the probability of taking informed actions if situations are complex or uncertain.

Reflective practice begins with a critical reflection of one's own practice from both positive and negative perspectives. Initially, the reaction to any incident which is recorded will be rich in thoughts and emotions as well as details of the experience. This may relate for example, to fear or excitement, trauma, a death or birth, or unsafe practice.

From this experience the practitioner articulates the 'how' of the situation. When it is revisited it may be possible to see the 'why,' and how a different approach could be taken should a similar event arise in the future. Because of personal biases the practitioner may not see a situation clearly, but every life situation is like this; can one ever see a situation clearly or accurately in times of stress? Should a practitioner choose to take the issue to professional supervision, they may undertake the necessary steps to make the experience a valuable one in terms of learning.

There are many authors who advocate the practice of reflection, for example, Taylor (2000) strongly recommends its use, giving details of types and methods of reflection and the ways to overcome obstacles from both practical and theoretical perspectives. Schön (1983) describes the way in which reflective practice is a valuable tool in the armoury of practice, arguing that it encourages one to learn from experience. This moves learning into the realm of practice. Reflection arises from what is both consciously seen and from what is unconsciously known. We hope you enjoy reading our rural nursing stories in the following two chapters.

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Storytelling: The Story of My Advancing Rural Nursing Journey

ELIZABETH ROULSTON

Introduction

Historically, people have always told stories as a way of handing down knowledge, information and tradition to others. This is also true in the nursing profession, as through the years many aspects of nursing practice have been learnt from nursing stories which have been written to inform readers about nurses' experiences and to describe in-depth nursing practice realities. In New Zealand there has been little written on the development of rural nursing from an historical and reflective aspect. I decided to take a storytelling approach to describe my advancing practice as a Registered Nurse in the rural context and add to the growing knowledge of rural nursing practice in New Zealand.

Stories in Nursing Literature

New Zealand rural nursing stories include, for example, those written by Wise (1949); Rutherford (1953); Ancott-Johnson (1973); O'Connor, (2000, 2003a, 2003b, 2003c, 2004); Ross and Jones (2000) and articles about storytelling written by Jones and Rawson (2004).

Although set in different rural areas and different eras, these rural nursing stories do inform the reader about rural life and rural nursing practice with their common themes and constitutive patterns which we can reflect and learn from (Diekelmann, 1992).

In all of the above-mentioned stories each rural nurse tells of their experiences of living and working in small, rural communities, where both physical and collegial isolation has to be dealt with. Rural nurses often face difficulties when working with rural people, as they will often not ask for help unless it is urgently required. Rural nurses are expected to always be prepared and be able to cope in an emergency in their rural community, where weather conditions can adversely affect their practice. Rural nurses care for all age groups as well as caring for farm animals during routine rural practice. They may also be expected to undertake extra responsibilities from judging

baby contests and supervising primary school pet days to being involved in community projects.

Storytelling Framework

I adapted a theoretical 'reflective learning through storytelling' framework from the informative, scholarly book 'Learning through storytelling: Using reflection and experience in higher education contexts' by McDrury and Alterio (2002) to share my nursing story and demonstrate my advancing practice as a Registered Nurse. McDrury and Alterio's framework includes the concepts of reflection, learning, knowledge and experience which is related to professional practice and one's self. Critical reflection is an important part of the storytelling process as is its effect on change. When the concepts of learning and reflection are combined with knowledge from past experience, new meaning may be found. The context where this occurs plays an important role as does 'self' when thoughts and inner feelings are recognised.

Reflective Practice and Storytelling

The educational content of postgraduate study introduced me to reflective processes which have helped me determine how I practise whilst learning the necessary clinical skills to become an advancing practitioner. I learned how to become a critical thinker and to reflect on my practice in a scholarly manner. Utilising this reflective learning process enabled me to look back upon my nursing practice, to deconstruct it and then reconstruct it to find new meaning and therefore new understanding about my practice. In this way I was able to advance my nursing practice journey. I learnt to recognise not only what was on the surface but also the deeper, hidden layers of meaning as a reflective and critical thinker with my thoughts and feelings being an integral part of this insightful process. I believe that other nurses may learn from my reflections as a rural nurse and may also be able to utilise the storytelling framework as a way to learn, construct and inform their own practice.

I utilised concepts of the storytelling framework (Figure 1) to tell my story related to my nursing journey commencing as a newly-qualified Registered Nurse in the rural context. I developed this story further and shared aspects of my nursing journey over the years to my present role as a rural nurse specialist. By combining my practical experiences with clinical-based postgraduate nursing education my nursing practice has evolved progressively from traditional to that of an advancing nursing role as a rural nurse specialist.

The individual components which make up the Reflective Learning through Storytelling Framework are based on a number of theorists/educators work. How I have come to utilise these in this framework will now be discussed in turn.

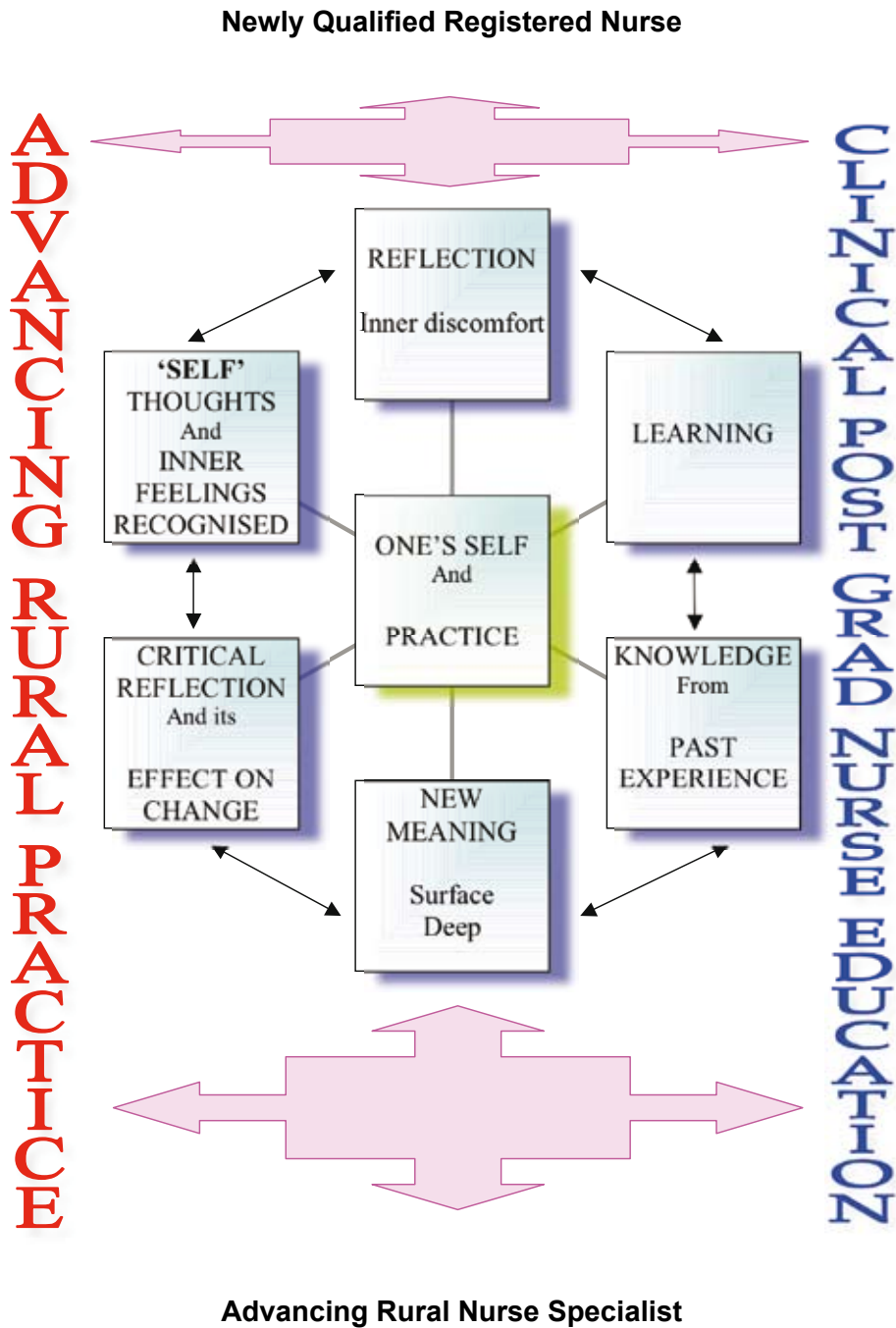


Figure 1: Reflective Learning through Storytelling
 (adapted with permission from McDrury & Alterio, 2002)

McDrury and Alterio's (2002) Learning through Storytelling Framework

McDrury and Alterio (2002) adapted Moon's Map of Learning (1999) when developing their storytelling framework. Moon had been influenced by Entwistle's (1996) description of different approaches to learning and the different levels of reflective learning which could be achieved. Entwistle's three levels of learning include:

- Deep approach – to understand ideas for yourself
- Surface approach – to cope with course requirements
- Strategic approach – to achieve the highest possible grades.

I have adapted these three levels of learning to tell my stories later on in this chapter. Meanwhile, I make comparisons in Table 1 below between Moon's original Map of Learning and McDrury and Alterio's Learning through Storytelling.

Map of Learning (Moon, 1999)	Learning through Storytelling (McDrury & Alterio, 2002)
• Noticing	• Story finding
• Making sense	• Story telling
• Making meaning	• Story expanding
• Working with meaning	• Story processing
• Transformative meaning	• Story reconstructing

Table 1: Links between Learning and Learning through Storytelling

- *Story finding stage (noticing)*: a storytelling culture is created. Stories are often highly emotional and need to be told (McDrury & Alterio, 2002).
- *Story telling stage (making sense)*: students gradually progress from listening to other practice stories to actually telling stories about their own emerging professional practice experiences. The objective is making sense of the story at a surface level (Entwistle, 1996). The next step at this stage is the writing of exemplars, or creative pieces of work, which are based on practice experiences and are written in a particular way for a specific, clearly outlined purpose (McDrury & Alterio, 2002).
- *Story expanding stage (making meaning)*: questions are asked, especially those dealing with the 'why?' of a story. Important aspects are drawn out and expanded upon with feelings also being addressed. Meta-analysis of stories is introduced, also reflection to encourage both storytellers and story listeners to begin reflecting on their practice (McDrury & Alterio, 2002).

- *Story processing stage (working with meaning)*: ideas about formalised storytelling are developed. Accounts of how focused reflective dialogue on and around practice stories can lead to significant learning occurs when different perspectives of stories are critically reflected upon (Entwistle, 1996). Deep learning occurs as opposed to surface learning ‘when meaningful and reasoned connections are made and there is evidence of a holistic approach to shared events’ (McDrury & Alterio, 2002, p.48). The tellers and listeners will have a deeper understanding of how possible changes may have wider implications to their practice and to themselves.
- *Story reconstructing stage (transformative learning)*: a group storytelling process is outlined in order to gain multiple perspectives on practice events. Tellers and listeners critically and constructively ask questions about the stories. Answers are also critically and constructively evaluated as are any implications to self and nursing practice (McDrury & Alterio, 2002).

Table 2 below advances the links made between Moon’s (1999) Map of Learning, McDrury & Alterio’s (2002) Learning through Storytelling and my conceptualisation of their work and utilisation of this reflective storytelling process to share my nursing stories. Hence I offer a third column comprising a number of additional concepts which I have found valuable as a component of this storytelling process. These concepts are colour coded and correspond to parts of two of my stories I share as examples of reflective learning through storytelling.

Map of Learning (Moon, 1999)	Learning through Storytelling (McDrury & Alterio, 2002)	Reflective Learning through Storytelling Framework (Roulston, 2006)
• Noticing	• Story finding	• Story finding Story telling Writing exemplars
• Making sense	• Story telling	
• Making meaning	• Story expanding	• Story expanding
• Working with meaning	• Story processing	• Story processing
• Transformative meaning	• Story reconstructing	This has not occurred as yet so has not been included in my story

Table 2: Links between Learning and Learning through Storytelling with my Storytelling Framework (Roulston, 2006)

- **My Story:** Story finding; Story telling and writing exemplars (**violet**)
- **Story Expanding:** questions why and reflection (**blue**)
- **Story Processing:** deep and surface learning (**green**)

Examples of how I applied the ‘reflective learning through storytelling’ framework to tell my advancing rural nursing journey:

STORY ONE

Insider/outsider; newcomer/old-timer

In my first rural area, over the course of time, I was accepted both as an ordinary community member (insider) and the nurse (outsider) (Long & Weinert, 1989). As with other members of the small, rural community, I had a variety of roles besides that of the nurse (Bushy, 2000). I lived there for many years and was well-known and respected as the nurse in the community, being readily accepted as an old-timer rather than a newcomer (Long & Weinert).

When I moved to a second rural community as the rural nurse I already knew what was involved in becoming accepted into community life – time, patience, mutual respect and having the same, or similar, rural values as the very people I care for as the nurse.

Exemplar: Out of my depth

I remember my first call as the new district nurse in my first rural area very well. I received a phone call late one Sunday afternoon from a station-holder’s wife – her new neighbour needed to see the doctor. As he lived over an hour away from her I was asked to go and visit – I had to travel many kilometres.

The neighbour was a new mother with a post-partum infection. She had had one after the birth of her first baby, so knew what was wrong. After talking to the patient and then with the distant General Practitioner on the phone, he prescribed a course of antibiotics.

I organised someone to come down and pick them up from the medical centre in the community and duly deliver them back to the patient. Luckily, the station-owner’s wife said she would help look after the new family until the mother started feeling better.

STORY EXPANDING

Out of my depth

Although the job got done, I felt out of my depth as a nurse. My nursing training had not prepared me for this sort of work – I had the responsibility of caring for people in a community which I had just started to know reasonably well and was working on my own. I had little in the way of resources. Only common sense and knowing the basics helped me through those early days and months. Fortunately I had trained at a rural hospital, so had a broad background of nursing experience.

STORY TWO

Rural nursing roles

I have had various roles as a rural nurse - district nurse, practice nurse, public health nurse, PRIME-trained nurse, and well child nurse. There are clearly-defined boundaries, procedures, written protocols and expectations with all of these. I am a proficient and advancing nurse in these roles (Benner, 1984). As an experienced registered nurse I am well-used to practising autonomously in sparsely-populated, vast, geographically-defined remote, rural areas (Bushy, 2000). I practise as a generalist rural nurse as the *rural* context requires my scope of practice in these roles to be broad. I provide essential primary health care to remote, rural communities, caring for those patients across the whole life span who may require my nursing expertise. By utilising my extensive clinical nursing experiences and personal knowledge from past experience I am able to treat everyone with respect while maintaining their privacy.

From necessity, in my first rural area, I had to expand and extend my scope of practice and work in a more advanced role as a rural nurse even though my official role was that of district nurse and supposedly working within pre-determined boundaries. I was filling a gap, as there was no sustainable role for a resident doctor – the community was too small and too isolated for this (Bushy, 2000; Schmidt, Brandt & Norris, 1995).

STORY PROCESSING

Advanced practice

As in other rural areas world-wide, equitable access to health care is a real problem. To help fill this gap, rural nurses have had to expand their scope of practice and work in advanced roles (Bushy, 2000; Turner & Keyzer, 2002). ‘I was it’ in the way of medical expertise as there was no resident Doctor. This expanded role was necessary because of local circumstances – the lack of local support services as compared to those present in a larger community (Hegney, 1997). This advanced role was not actively sought-after but was due to lack of other health professionals (Ross & Jones, 2000). I cared for many patients who should have been seen by a doctor had there been one available: cardiac arrests, major road accidents, anaphylactic reactions, suicide, pneumonia, broken bones, children with cuts, abrasions, burns, beads up nostrils ... the list goes on.

STORY EXPANDING

Socio-political context

In my first rural area the fragmented delivery of primary health care did not meet the needs of the rural community. As the only health professional the demands made on me as the district nurse were many and varied due to my autonomous role and the remoteness of the area. As a remote rural nurse I often had to make my own decisions about patients’ health care. The nearest doctors were sole practitioners and on-call for long periods of time so were often not available for after-hours calls or referrals from me, the nurse, as they also had to take time out. The town district nurses did not have the opportunity to

respond to any of this type of primary health care and were quite envious of the variety of work I had. I did care for patients with ‘ordinary’ district nurse visits, for example, removal of sutures, wound care, palliative care, etc. which is the type of work the town district nurses were used to doing.

I practised independently from the other health professionals in the area - I often did not know health care was being provided by either of the medical practices or vice versa. In the early days I did not know any of the other local health professionals. I was isolated from them professionally as well as the other, mainly town-based, district nurses. I was too far away to go often to the monthly district nurses’ meetings, which were not particularly relevant to me because of the hugely different type of work I was doing to the town nurses. I couldn’t afford to travel all that way - there was no travel reimbursement and I used my own car.

Conclusion

I adapted McDrury and Alterio’s (2002) five-step ‘reflective learning through storytelling’ framework to a condensed version of three main steps which I then utilised to tell my nursing stories. By doing this I have been able to reflect on my nursing practice and to deconstruct and then reconstruct my practice. In so doing I have been able to find new meaning and develop a deeper understanding of my nursing practice.

By using a storytelling framework which includes the concepts of reflection, critique, and critical reflection I have been able to describe my advancing nursing practice as an experienced rural nurse. I have been able to develop an understanding of how I can learn about myself and also how I can learn about my nursing practice by including the concepts of surface learning and deep learning. The storytelling framework has allowed me to use reflective learning processes to facilitate my learning from my real practice experiences rather than in the classroom situation.

I wanted to tell my story as a way to describe the progression of my rural nursing practice. I also wanted to publicise the often-forgotten nature of rural nursing; the often taken-for-granted or unrecognised role rural nurses have in caring for people in remote, rural communities. One single voice cannot be well heard, but many voices may make a difference. To make that difference, other rural nurses must also write their own stories to share their experiences.

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On Call But Not Rostered

RAELEEN THOMPSON

Introduction

Stories are often used to describe nursing practice. My story is not about the paid role of the rural nurses; it is about compassion and using one's knowledge to voluntarily care for friends, neighbours and strangers, when other help is not readily at hand. In order to explain my stance, I am often the first person contacted in an emergency, sometimes working alone for some time before emergency services arrive. This informal role often presents ethical and legal conflicts arising from dealing with the expectation of one's community. My story is set in the rural context which brings with it unique pressures and stresses. These will be discussed in relation to the practice of both the paid Registered Nurse (RN) and those like me, who are volunteers.

When undertaking a literature review to ascertain whether there were stories of volunteer RN practice in New Zealand in recent times, I discovered that there is no recent literature regarding this particular role. Therefore, in order to illuminate the practice of the volunteer RN in New Zealand, I have chosen the experiences of paid rural New Zealand nurses Menefy (2000) and O'Connor (2000) who tell their stories in editions of Kai Tiaki Nursing New Zealand. The themes that emerged from these stories, such as constantly being 'on call', lack of privacy, and the need for keeping current with new trends, will be used to discuss the practice of voluntary RNs.

A search of overseas literature about voluntary rural nursing located a study undertaken in rural Alberta, Canada by Skillen, Heather, and Young (2001) entitled 'What are the effects of agriculture, and health sector restructuring for rural Alberta women's health and work environments?' (p.9). Many of the women interviewed were nurses who worked in both farming activities and as health care providers: their professional involvement included public health nursing, home care nursing, or health related work i.e. physiotherapy. Most of those interviewed had a lifestyle similar to mine, involving unpaid work on the farm, voluntary work in the community, and fulltime employment off the farm. The themes that emerged were of considerable interest, as they identified strength of character, maintaining values and struggling for control and balance in life.

I have identified the following concepts from the literature as integral to the practices of a registered nurse in the rural setting:

- maintaining personal and professional boundaries
- maintaining values and a high standard of care
- commitment to ongoing education
- accepting accountability for one's actions

These will form the basis of the discussion in my role as a RN volunteer.

Dress Codes – does anyone notice?

The public image of nurses is often linked to uniforms, however the meaning of the uniform is dependent on the context in which it is worn, but what about the attire a volunteer may present to a call-out in wet and cold miserable weather? I believe the identity of the person providing client care is probably more important than what is worn, but should impart a professional image. In the rural setting, it appears that those who matter (the people in need of assistance) say nothing about 'uniform' or identification nor do they ask for a Practising Certificate or where the nurse's 'medal' is. However, it would seem that in clinical settings a formal uniform would be appreciated. Broussard, (2002) reviews Paul Fussell's thoughts on uniforms and their importance to the wearer. She reports that Fussell, as a hospital patient, wondered where all the nurses had gone, because he could not identify them by uniform. When Fussell enquired as to why nurses did not wear uniforms any more, he was told that it was because uniforms scared people. On further investigation, the head of a school of nursing told him that nurses did not like them.

To meet Emergency Services' safety standards what I wear will depend on which service calls me out- the high visibility vest with 'First Aid' printed on the back supplied by St John, or the hard hat and fire-fighter's boots to be worn if called out by the Fire Service. Although I make every attempt to dress 'professionally' when asked to assist at short notice in bleak and wet conditions on a farm in midwinter in response to a personal phone call, there is nothing to compare with pulling on the 'swannie' (commercially known as a Swannndri™) and 'red bands' (Red Band gumboots™). No one has ever complained or even noticed.

Therefore, I believe that I blend into the community - perhaps inadvertently - by wearing a similar 'uniform' to those people I am called upon to assist. It would appear that clothes do not 'maketh the man' (or woman). It is the assistance provided that is important, so it seems that I am judged for the deed rather than how I dress. However, it may further complicate boundary issues.

Can a Community exist without the Volunteer?

The term 'voluntary' according to Curzon (1989) means that something is 'Proceeding from some exercise of the will and involving an act of choice' (p. 463). All communities,

however large or small, rely on volunteers to provide assistance in time of need. The type and timing of the response may require considerable input of resources or may be a simple act of one's presence to provide comfort in a stressful situation. Globally, people respond to disasters with amazing generosity. Locally, some people respond to those affected by flooding or fires both with financial and personal support, while others give expertise in the form of support to victims of criminal activity or personal loss.

The culture of the volunteer is changing with men and women often choosing or needing to work outside of the community. The wider community is also recognising that voluntary services are diminishing. Rodger Anderson, chairman of the Clutha Agricultural Development Board is quoted by Wallace, (*The Otago Daily Times* p. 14, August 8, 2003) as expressing real concern with regards to 'the decline in the number of rural people able to work in voluntary organizations such as Federated Farmers, St John Ambulance and Fire Brigades'.

The Relationship between a Nurse and the Community

From the first contact the interaction between a nurse and the community may well determine whether or not he or she is seen to be 'user friendly'. However, what a practitioner is prepared to undertake as 'community service' needs to be clearly articulated if they are approached, otherwise a blurring of intentions and expectations may arise. Having a sense of community, and having a role in the community is an important part of my being. Initially, a keen interest in rugby led to this voluntary role – one that seemed innocuous at first, yet one that has had a huge impact on my private life and which has also given me enormous satisfaction. Rural life is rewarding, fulfilling and tiring. Having worked 'off the farm' for a number of years now, I continue to be part of the community through involvement as a sports medic for the local rugby club, and as a member of the local volunteer fire brigade.

Public Perception of Nurses

Chiarella (2002) believes that the public still has the perception of nurses as 'ministering angels' (p.47) who care for people. A comment I hear in the community, in employment and as a volunteer, is that the work nurses do is not appreciated enough. My voluntary role is frequently under cover of darkness because I am only available through the week from 7pm to 7am, and at weekends or holidays twenty four hours a day. In contrast, Ross, Jones and Litchfield (2000) report that paid registered nurses who are described as 'rural nurses are highly visible members of the community' (p.8). Of course they are. These nurses work from a designated place, and are seen 'out and about' by the public. They both work and socialize (if they wish) with the community in which they live.

My experiences have taken me from hospital trained nurse, heavily reliant on medical input for advice, to one who has complete autonomy as a volunteer – a practice that I would never have dreamed of several decades ago. As a volunteer I am asked to assist at many and varied situations and can do so with confidence, knowing that I need to take advice from others. I will be respected for my honesty and integrity, by the people I am helping and by those from whom I seek assistance. This helps to maintain what I believe is the public perception of nurses as honest and caring individuals. Honesty is a virtue which arises from early development of values, but an understanding of the ethics involved in nursing requires study and active participation in dialogue in order to expect ethical practice to be maintained.

Ethical Decision Making

My hospital-based training ensured that legislative requirements were understood, but there was very little dialogue on ethical issues. Nurses had not yet gained any degree of autonomy from the medical influence, so it was indeed a brave soul who presented her (there were no male student nurses where I trained) viewpoint to the ward sister, and an extremely foolish soul who voiced dissent to the medical profession! From what I remember the level of nursing care was also prescribed by the medical profession. On reflection, it seemed that nurses may have been shielded from responsibility for the overall well-being of their patients, and may have even been happy to operate within this system.

Postgraduate education has provided me with a deeper understanding of ethical practice. Struggling to define terms such as ethics, rights, duties and obligations was a challenge, but one that I am pleased to be making. While the Code of Ethics and Standards of Practice advise how to act, they do not fully equate with the practice of the Ethic of Care which I believe informs my practice as a volunteer in the community. Burkhardt and Nathaniel (2002) discuss in detail what the term Ethic of Care means. Simply, it means that when a decision is made, it has an ethical underpinning based on both context and on the interaction of those within the relationship. Noddings (1984) contends that the Ethic of Care ties us to the people we serve, rather than to the rules by which we serve them.

The Ethic of Care reflects nursing philosophy. Benner and Wrubel (1989) argue that caring is being devalued, and that caring is subject and subordinate to individuals' desires and needs. An emerging Ethic of Care is seen as a moral ideal, necessary for the protection and enhancement of human dignity, and a commitment to alleviating vulnerability for both the carer and the cared for. (Gadow, as cited in Hodge 1993; Watson 1988).

Community Service and Legal Implications: the Duty of Care

One of the most common questions I am asked concerns whether or not I have a duty to assist at an accident as a volunteer. Johnson (2000) advises that a health care provider is under no obligation to assist those who are injured in an accident, just as a member of the public is under no obligation either. However if a health care professional does assist, then they owe a 'Duty of Care' to those assisted (Wallace & Johnson 1995). This means that when someone provides care for another person every reasonable effort must be made to avoid any further harm to that person. Should a matter come before the courts, an expert witness or witnesses would be called to give their opinion on the outcomes. I believe that if voluntary RN service to the community is undertaken, there is a duty to ensure that high standards of professionalism, care and practice are maintained as would be expected in a paid role.

Privacy issues are paramount. Most small rural communities have a 'bush telegraph' that is extremely efficient and has full twenty-four hour coverage. At first it was not uncommon to be telephoned with a request to confirm the gossip, but that stopped fairly quickly, as the standard 'No comment' reply was recognised as exactly that. I still find it incredible that today many people still do not understand the meaning of the word 'confidential'.

In a rural community it is likely that, at any incident you respond to, you will know the person/people involved. It has been, and will always be, a major concern that I will be called out to a motor vehicle accident where my own family or close friends will be the victims. I am fearful that my normal sound practice might be compromised if I was emotionally involved. While I do not have the privilege of riding in the fire engine, (I am required to take my own vehicle to a call out as per regulatory requirements), I am able to access debriefing through the New Zealand Fire Service (as an auxiliary member of the local volunteer fire brigade) or as the police advise, through Victim Support. I arrange for professional supervision on a private basis when the circumstances dictate.

Boundaries of Practice

Forrester (2001) discusses boundaries of professional practice for nurses and asks questions as to when genuine concern turns to over-involvement when, in reality, the relationship is usually designed to provide what is best for the client. Forrester writes of relationships that have the potential to be unprofessional, including the tendency of some nurses to become over-involved with clients. This could be interpreted in many ways. For example, nurses may confide in their client, or begin to regard them as a friend rather than a client or become romantically or sexually involved.

While I believe that I have high moral and ethical standards, I can relate to the over-involvement with the community issue, because of my personal tendency to put

community before self. This trait has led to much criticism from my ‘townie’ colleagues, as they appear to operate from a stance that I personally do not understand – that of not having or wanting a sense of community. Neither are they prepared to become involved in the first response incidents that I do, preferring to recommend calling the duty doctor or ambulance service. I stress that this is how I interpret the situation.

Therefore, the responsibility for setting boundaries sits firmly on my shoulders, rather than the community’s. When I began to provide informal care to the community I knew nothing of boundary setting. Even today I am still not good at setting boundaries within the context that I am reflecting upon and, unless my health dictates changes, I probably won’t be either! My sense of duty won’t allow me to stop doing something that serves humankind.

Curtis and Hodge (1994) provide a visual description that I consider particularly appropriate, given several decades of commitment to the local rugby club, when they liken the difference between ethics and boundaries to a sports field. They believe that ethics could be seen as the rules of a game, whereas boundaries establish the area a game will be played on, describing situations that could be considered fair or foul participation. The sum total of this is that the game will proceed effectively if all parties are in agreement with what has been set down, providing that everyone has been consulted. I wonder if I am strong enough to call for a rule-change, or if I even want one.

A reality of living in the country, but working ‘off the farm’, is that other people will not know what you have been doing for the past hour or the past twelve hours. If they need some advice or first aid, they will ring you or even come to your house unannounced, as their need may seem greater than yours for privacy or relaxation. This section of the community may not think of asking whether you have the time available or guests for dinner. But if they do arrive, I reason ‘why send them away?’ At least they are concerned enough to seek help, even though I may be a little put out about intrusion on personal time, and ask them to join us for coffee if further care is not needed. This illustrates quite well a prior comment regarding my tendency to put community before self.

Safety Issues

Personal safety with regard to going to situations that could prove dangerous has never been a reality for me, unless I have been called to what I would consider to be a ‘lonely’ part of the district. In that case, if a member of my family is home, I take them with me. If there is nobody at home, I will ring my neighbour and tell them if they haven’t heard from me within a certain time, to look on my kitchen table for a note saying where I am. This is a potential breach of privacy, but one that I consider necessary. This area still does not have reliable cell phone coverage, so I cannot always contact home to advise them of my whereabouts even if I wanted to. Mostly though, the emergency services are also involved and are only a short time behind me, and messages can be relayed via their systems.

Practice Issues in the Community

– are they the same, yet different for the paid practitioner?

Stories presented by O'Connor (2000) and Menefy (2000) highlight the multiplicity of roles undertaken by nurses in rural areas. These roles encompass public health, district, well child, and practice nursing, providing palliative care and counselling work. Both writers cite tiredness, constantly being on call, and isolation of practice as being barriers to practice, also noting high stress levels coupled with a never-ending paper war. The reality for these practitioners is that work is an extension of their private life, indeed of family life.

A significant factor is that their communities are highly appreciative of their work. O'Connor (2000) writes of the intimidation felt by a newcomer to the rural practice. Arriving as the Rural Nurse Specialist and stepping into the shoes of the previous long serving nurse, evoked the perception that initially every move was being watched, and that the practices of one were being compared to the other. While O'Connor is writing in a nursing context these factors are common to all community volunteers. My own recollection remains vivid! Everyone it seemed knew who I was married to, where I lived, and almost what I had eaten for breakfast. O'Connor describes the realities of working in the rural sector as a rural nurse specialist that appear to be in direct contrast with the one outlined in the previous paragraph. Here, patients acknowledge the value of the nurse even though they may see them daily, both formally at work, and informally in various community settings. They recognise the fact the nurse is never 'off duty'. Menefy's (2000) account of her practice in the mid North Island provides a perspective of a huge workload, yet one that is obviously carried out with compassion and commitment, accepting the impositions on family life as 'part of the job'. Menefy's account is probably the closer description of the two writers to the unpaid role that I have found in regard to my personal philosophy of practice, one of ongoing commitment to the local community.

Pressures of Practice

Lack of communication and personal contact is an issue for these nurses quoted above. Nothing can replace the face-to-face interaction which means so much to all RNs in our daily work, both when requesting assistance in our work, and for debriefing after significant incidents. Fortunately, communication services have improved enormously providing a more reliable telecommunication network. The advent of the Internet is of huge importance when accessing reliable and up-to-date data. When possible Menefy (2000) and her colleagues attend workshops for updating knowledge as practice demands dictate.

The tiredness that some days bring to nurses in general is not helped by the fact that on some days the work seems endless. For those in the rural sector, this is fuelled by the

knowledge that after work as well as home and family to attend to, there are sometimes farm duties (feeding lambs or calves in the 'season'), perhaps study, along with the possibility of being called to an emergency situation. In my community, I may also be invited to be the guest speaker for the play centre or at the Lions Meeting. If I oblige, the result is tiredness, which in turn raises the question, 'Are you fit for duty'? You alone are responsible for your actions, and you alone can answer truthfully. I have found that in emergencies I run on adrenaline, and hope that I can catch up on some extra rest within the next twenty four hours.

Keeping 'up-to-date' with Practice Issues

In line with the need for the ongoing education that O'Connor (2002) and Menefy (2000) write of, I spend countless hours reading literature, both for my work as a Nurse Educator, and to keep current in trends of sports injury treatments, sports massage and general first aid. The difference between the paid and unpaid roles would be how soon I would use the information which could depend on the time of the year and sports being played, or what topics I was researching for my teaching programme. The practice issues that these nurses explore will either be for immediate use or their own professional development.

The Nurse Employment in the Rural Area

Litchfield and Ross's (2000) report on rural health practitioners supports newspaper claims that there is indeed a shortage of rural doctors, but in most cases ongoing care is available through a dedicated rural nursing service that provides 'cover' in the absence of medical practitioners. I have found no evidence to suggest that there is a shortage of nurses in general practice in the rural community. Ross, Jones and Litchfield (2000), notes the valued contribution that nurses make in the rural health setting, and over a period of time in combination with rural GPs, there has been an effective health care system for many rural people. It was strongly indicated that RNs eased the workload of many GPs in the rural area. Dawson (2002) observes rural nurses often work under considerable difficulty. This does not appear to be reported alongside the rural doctors' concerns in the media however, perhaps because this is seen as a different issue.

A Personal Perspective of the Nurse who may be or become a Rural Nurse

I agree wholeheartedly with Litchfield and Ross (2000) who have proved beyond reasonable doubt that nurses committed to a rural lifestyle have job satisfaction and a

resourcefulness that could well be the envy of their town dwelling colleagues. In my opinion, the following ‘list’ describes a rural nurse’s practice and may provide a ‘clue’ as to why they stay in their position, regardless of whether or not their partner is employed in this setting. Rural nurses have:

- an enthusiasm for autonomous practice.
- the ability to deliver an excellent standard of care.
- postgraduate experience in several fields of nursing, (e.g. public or child health, or accident and emergency work).
- a commitment to ongoing education.
- a sense of belonging to a community.
- a sense of humour.

The Volunteer Rural Nurse and the Rural Community

The role of volunteer is vastly different to that of nurses working in paid employment, as this is a first response or an ‘offering of advice’ service, but I think that the list I have compiled above may also apply to the volunteer. Prior to this I would never have thought of comparing myself to those nurses, apart from stating that many of the stresses in our lives and demands on our time, are similar. Several times I have been asked if the community needs me more than I need them, an issue I had given little thought to up until now. My perception is that they need me more than I need them. I have skills that may save a life or a trip to the doctor, and I believe I should use them on anyone who needs to be cared for. I also believe that it is an individual’s right to seek initial advice from a practitioner they feel comfortable consulting, in order to make an informed decision regarding their health status. Is this a reasonable perception or deception that I choose to follow? I believe that the answer lies somewhere between the two options.

Does the Volunteer Complement the Paid Rural Practitioner?

I firmly believe that this is a situation entirely dependent on the location of the rural practice. The actual physical location of the paid practitioner could well be a considerable distance from an emergency situation. Therefore, if there is a RN who is confident and competent in, and willing to, undertake basic first aid administration until the doctor or the paid rural practitioner arrives, then there is no debate, ‘we’ do complement each other. I see this as a collaborative role, with remuneration for services being the major difference.

Personalities or opinions must not be permitted to stand in the way if there are difficulties in relationships between the volunteer and the paid professional. Certainly it would be highly unethical for differences of opinion to be exhibited in the public arena.

Indeed, if this should occur, I believe professional supervision is appropriate. All issues could then be explored and solutions sought to ease the situation. Personal perspectives of another's practice are just that, and unless unsafe or unethical practice is observed, the matter should be dealt with in a mediated setting. Should the situation involve professional care and behaviour, then the correct procedure for concerns to be addressed must be followed through.

The role of the volunteer RN is relatively uncomplicated – to provide an initial assessment of a situation and provide basic emergency care, which can be compared to what is known as 'The Good Samaritan concept' (Maclaren 2002, p.14). This is a situation in which victims of an emergency situation are given assistance by members of the public. This concept protects one from potential liability. For the volunteer RN there may be actions taken that are more advanced than basic first aid, but scope of registered nurse practice must be remembered and adhered to.

When describing the situations I am involved in, I must point out that I am known by the GPs, practice nurses, police and ambulance staff alike – they all know my nursing career history and this situation is unusual if not unique. If for example I was called out, and once the emergency services had arrived and assessed the situation, it may well be that when my handover of the victims is complete, I could ask to continue to provide nursing care. This is where caution must be taken to ensure that I do not breach scope of practice. A change in role could occur if there were several victims in a road accident and I was asked to undertake insertion of an intravenous line. I am not certificated to undertake this task and would be operating outside of my scope of practice. However I consider 'doing dressings' to be well within my scope.

Future Directions for the Volunteer

Given the fact that nurses are accountable for their practice and the role of volunteer may be formalised, these are the questions that I think need to be answered:

- Would this become a private sector role?
- Who would employ him/her or make funding available for a private contract?
- What sort of 'basic training' would be expected/required?
- Who would decide the rate of pay – would the nurse be valued financially for experience gained, or get an on-call allowance?
- Would there ever be scope to complete prescribing papers, so that certain treatments could be prescribed.

For example, it would be a 'luxury' when treating some of the rugby injuries that are relatively straight forward, instead of having to drive an hour to a town with a hospital but no Accident and Emergency department and six GPs, none on-call, to another township where the on-call doctor resides, as frequently happens, all just to get a potentially infected wound cleaned, sutured and antibiotic cover prescribed which could

be done easily by the nurse practitioner. As well, on arrival, having rung to 'warn' the practice of how many players and what you suspect the injury will require, the triage system is in full swing, and you may wait for hours, and then face the long drive home.

- How would the nurse prove previous community involvement? What sort of portfolio would be required?

Part of the attraction of living in a rural community is that one's neighbours will help in times of crisis, something that does not always happen in urban areas. But as the trend towards people looking for a lifestyle change and shifting into country areas increases, this attitude may change. Anderson's (2003) prediction that volunteers are becoming a scarce commodity could well extend to this district.

Still wondering ...

I believe that it would be interesting to find out to what extent other communities rely on the RN willing to undertake a voluntary role. I wonder what the differences are in the expertise, training, and currency of practice that any such RN has. How would these people describe their practice, and do they think that there should be legislation to cover such practice? I really want to know, why is it that voluntary practice is so anonymous? And why hasn't someone written about it?

Conclusion

As New Zealand becomes increasingly open to lawsuits and litigation, then one of my biggest concerns for the future is for the volunteer nurse in the rural community. Hence the long list of questions posed which may well form the foundation for a future research project. In spite of this pondering though, I believe I have been able to demonstrate that the volunteer nurse and other health care providers can, in the main, work together in harmony in the rural sector.

So ends my story – one that is important to me – following part of the path that I have trodden for over three decades. It is one that I will continue to tread until the last gate is closed, the Red Bands™ and 'Swannie' have worn out and I've lost my stethoscope. Will the community miss this service, and will I miss them? Who will replace me? Who knows?

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Aspects of Rural Nursing Practice

The Mobile Operating Theatre Project

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This chapter introduces this new section on aspects relating to rural nursing associated with secondary rural hospitals and is the first of three concerned with this context of rural nursing practice.

Introduction

This chapter firstly offers background information in relation to the development of a mobile operating theatre. Secondly, it discusses the process and findings of a research project undertaken with the purpose of evaluating a perioperative (theatre and recovery) reskilling programme offered to 42 rural nurses from nine secondary hospitals, conducted over nine months in 2001, prior to the introduction of a mobile operating theatre service.

The Development of the Mobile Operating Theatre Pilot Project

The concept of mobile surgery was influenced by the successful implementation of the mobile lithotripter service, run by Mobile Medical Technology New Zealand Limited, which had provided lithotripsy services New Zealand-wide since 1995. Aimed at sharing expensive resources and technology, this service was used as a model for the mobile operating theatre concept which would allow rural people to access publicly funded day-stay surgery in their own district. The utilisation of new technology was also expected to improve the quality of life for patients directly, through increased access to health care, or indirectly through increased efficiency of health care systems (Jamieson, 2000a; National Health Committee, 2002).

Related Background Information

In 1991-2001 rural communities experienced a sense of loss when rural hospitals suffered reduction of surgical services and closure due to the government's health

restructuring and economic rationalism. These changes were initiated by the 1990s National Government's health policy to curb spending on governmentally perceived non essential health services (Upton, 1991). As part of their detailed planning for the proposed mobile operating theatre service, Mobile Surgical Services New Zealand Limited (MSS), a private company based in Christchurch, New Zealand, conducted lengthy consultation with community groups, Maori health representatives and rural hospital management teams. Consultation included a meeting of 35 New Zealand nurses and doctors from rural and metropolitan backgrounds, invited by MSS to discuss mobile surgical concepts. The consensus at that meeting was that rural communities would welcome and support a mobile surgical service.

In June 1999 MSS presented a proposal document to the New Zealand government (Mobile Surgical Services, 1999) proposing provision of a mobile operating theatre service to rural New Zealand hospitals for day-stay surgery. MSS believed that local health professionals (including rural nurses) should be part of the surgical team. While they had considered the merits of using a skilled and established (metropolitan based) dedicated surgical team to travel to the rural hospitals, they rejected this model when the rural communities consulted noted that being cared for in their own community and by local health professionals who they knew and trusted was their preferred option. The MSS Proposal Document argued that the social cost of travelling to city hospitals for surgical treatment had contributed to an increased sense of isolation of rural populations, as well as of their rural health professionals.

In December 2000 the New Zealand government awarded a five-year contract worth \$25 million for MSS to undertake a pilot project to build and operate a mobile surgical service for rural day-stay surgery. One aspect of the service included the provision of perioperative nursing education and training for rural nurses working with the service.

Implementation of the New Zealand Service

This mobile operating service began in March 2002, initially servicing seven rural hospitals throughout New Zealand on a one day in every five weeks basis, for day-stay surgery. Three hospitals were located in the lower South Island, one on the west coast of the South Island, two in western parts of the North Island and one on the east coast of the North Island. In addition two hospitals in the lower South Island planned to utilise the service in late 2002. MSS intended to offer the service to three additional rural hospitals in 2002. These hospitals were located in the North Island, two in the far north and one on the east coast.

Rural perioperative nurses who completed a reskilling programme were to work with the service when it was at their hospital. The majority of these nurses had previous perioperative nursing experience. The surgical team at each rural hospital was to consist of three smaller teams and regionally based surgeons and anaesthetists were to travel to

the rural hospitals to provide their services. A MSS employed charge nurse and an anaesthetic technician were to travel with the unit to support the locally based rural perioperative nurses. In addition, the patient's general practitioner would be asked to attend the theatre session if the patient wished them to do so.

Expected Project Benefits of the Mobile Operating Theatre Service

The proposal document (Mobile Surgical Services, 1999) detailed the expected benefits of day-stay surgery for patients, health professionals and rural communities:

1. Patients would be offered the choice as to where they wished to have their surgery performed, either locally or at their nearest city hospital.
2. Costs of associated travel, accommodation and lack of earnings would be reduced
3. Family members would have greater access to and involvement in the patient's care.
4. Rural health professionals, nurses and general practitioners would have the opportunity to expand their skill base by working in the perioperative clinical setting.
5. The wider community would benefit from other services that MSS could provide.
6. The mobile operating theatre would also have the capacity to carry additional equipment that health professionals in rural areas might need, but to which they had little or no access.

In evaluating the efficacy of the programme designed specifically to reskill rural New Zealand perioperative nurses to work with the newly established mobile operating theatre service, several key issues were reviewed:

Key Changes in Health Care relevant to Programme Design

A move away from ritualistic nursing practice (Hicks & Hennessy, 1999) to evidence based practice (Muir-Gray, 1997). Jamieson (2000b) noted that ritualistic practice has been commonplace in the perioperative setting and Redfern (2001) confirmed that outmoded practices affect best practice and inhibit positive patient outcomes. The increasing use of technology (Surkitt-Parr, 1997) has resulted in the need for relevant educational programmes to be designed for health professionals (Edmondson, Winslow, Bohmer & Pisano, 2002), and publicity about patient care benefits has produced increased patient demand; for example, for minimal access surgery. While an increasing nursing shortage has been noted globally (Canadian Nurses Association, 1997; Casey, 1996; Cleary, Lacey & Beck-Warden, 1998; Hegney, Pearson & McCarthy, 1997; Jenkins, 1996; Lipley, 1998; Warr, 1999) the recruitment and retention of nurses is

another problem. It was envisaged that the reskilling programme would contribute to the retention of current rural nurses and provide a recruitment tool for new nurses (Jamieson, 2000a).

Mobile Theatre Services

Limited literature was found about mobile theatre services. Burden (2000) noted that a mobile theatre service was an innovative solution for surgical care in unique settings but no critique was offered about the concept of mobile surgery or the requirements of perioperative staff working with the service.

Rural Nursing: A Global Perspective

International literature identified key issues relating to rural nursing. Bushy (1998) noted:

- the need for rural nurses to be multiskilled and flexible practitioners.
- the high profile nature of rural nursing.
- conversely, the invisibility of rural nurses' work.
- rural nurses often cared for friends and family, which may place them under undue pressure due to issues of a confidential and ethical nature.
- the lack of educational opportunities.

Also identified was the unpredictable workload, requiring flexibility and adaptability (Rosenthal, 2000), the professional and geographical isolation (Hemman, McClendon & Lightfoot, 1995; MacLeod, Browne & Leipert, 1998; Paulson, 1996) and the scarcity of research related to rural nursing (1998 Hegney et al., 1997; MacLeod et al.).

In New Zealand Ross, Jones and Litchfield (2000) and Litchfield (2001) echoed international authors by noting that rural New Zealand nurses were multiskilled practitioners, working in isolated locations and that the rural nursing workforce reflected an overseas trend of being an ageing workforce (Carter, Ehrhardt, Jurrus & Sommerville, 2000; Warr, 1999) with the average age of these nurses being forty-six years.

Litchfield and Ross (2000) recommended that a career structure supported by higher education would assist with recruitment and retention of future nurses. They believed rural nursing in New Zealand had developed in an ad hoc manner and the role of rural nurses working within a health system in a state of major change had become fragmented. This increased the need for these nurses to specialise and had begun to move their clinical focus away from the generalised specialist.

Teamwork

Perioperative nursing has been described as a team orientated, highly technical and constantly changing role (Beck & Utz, 1996). The teamwork required is unique due to wide ranging levels of nursing expertise and a make up of health professionals from other disciplines such as surgeons, anaesthetists and technologists all working in an enclosed environment, often isolated from the rest of the hospital. Day-stay (ambulatory) perioperative nursing was unique due to its complex nature, fast pace and the necessity for the nurses to be knowledgeable across a wide range of surgical disciplines (Burden 2000; Connor, 2001). It differed from an in-patient setting in that the patient was assessed, offered education, recovered and discharged by the perioperative nurses rather than by a variety of staff.

Educational Issues

Barriers to education faced by rural nurses included funding, cost, family commitments, lack of staff cover, lack of courses and lack of flexibility with course timetables (Anderson & Kimber, 1991; Hegney et al., 1997; Ministry of Health, 1998; Wade, 2001). Other specific barriers were professional and geographical isolation, ad hoc rural education programmes, distance, travel and accommodation costs (Dusmohamed & Guscott, 1998; Hill & Alexander, 1996; MacLeod et al., 1998).

Little published literature was found about the learning needs of perioperative nurses but one survey identified issues such as the legal aspects of perioperative nursing, malignant hyperthermia, medications, new equipment, new surgical procedures, teamwork and communication as learning needs (Piatkowski, 1995).

Adult Learners

Knowles (1980, 1985, 1990) suggested that the characteristics of adult learners were their awareness of self, readiness to learn, and the ability to be proactive problem solvers. Two other aspects he noted were recognition of prior knowledge and the need to be self-directed learners. He suggested that adults learn best in groups, have a rich reservoir of experience and knowledge to share, are performance orientated and desire immediacy of knowledge application, a view supported by others (Dixon, Horden & Borlan, 2001; Furze & Pearcey, 1999; Hewitt-Taylor, 2001; Sparling, 2001).

Mackway and Walker (1999) suggested that adults learn best when the programme content is relevant, meaningful to their work environment and allows active involvement. Hence, they suggested that programme design should include interactive lectures, skill stations and workshops. A discussion paper by Welle-Graf and Hansman (1999) on the

needs of adult learners also noted that elements of choice and being actively involved should be considered when developing learning programmes for adults.

Technology and its Influence on Nurses' Learning

McConnell and Hilbig (2000) utilised a questionnaire to discover how perioperative nurses learned about technology and what impact this had on patient care, concluding that perioperative nurses must be educated on the use of new technology to prevent patient harm. Edmondson (2002) noted that the implementation of new technology could become a further barrier to learning.

The dynamic and interactive nature of CD-ROMs make them an effective tool to use for learning at a distance (Mangan & van Soeren, 2000). Some caution should be applied to information accessed via the World Wide Web, since publication of material without peer review is significantly easier (Segal-Isaacson, 2002).

Several authors (Buckner, Miller & Kris, 2002; DeBourgh, 2001; Zimmerman, Barnason & Pozehl, 1999) noted that cat rooms had the potential to reduce the perception of isolation of the participants of educational programmes while others documented their disadvantages (McAlpine, Lockerbie & Beaman, 2002), such as the loss of non verbal cues from participants and lack of personal contact.

The Development of the Reskilling Programme

Rural perioperative nurses were recruited from rural hospitals that planned to use the mobile operating theatre service. The key focus prior to the service beginning, in late 2002, was to design, deliver and assess the merits of a specific in-service programme for participating nurses. In my position as Clinical Nurse Specialist for MSS, I, and a nursing colleague (also from MSS), visited 13 potential rural secondary hospital sites around New Zealand to discuss the concept of the service and to seek input from managers and nursing staff. All these hospitals had had working operating theatres in the past and had retained their perioperative nursing staff in other nursing roles.

The selection of the nurses, and the selection process, was the prerogative of each rural hospital's management team, who were asked to select four nurses, (two theatre and two recovery) to work with MSS on the days that the mobile operating theatre service would be at their hospital (one day every five weeks). Four nurses from each hospital would ensure safe staffing levels, as suggested by the New Zealand College of Perioperative Nurses. Some hospitals chose to include more than four so that potential annual leave and sick leave days would be covered. The nurses remained as employees of their respective hospitals. Forty nurses completed the entire reskilling programme while two completed part of the programme.

Nine hospitals (Balclutha, Buller, Clyde, Gore, Hawera, Oamaru, Queenstown, Taihape and Te Puia) decided to host the mobile operating theatre at their hospitals. In consultation with their managers, 3½ days were allocated to specific study related to the service (two single study days held at the individual hospitals and a combined national weekend workshop). The primary aim of the reskilling programme was to update the knowledge and skills of the rural perioperative nurses so that they could work with the mobile theatre service, with the secondary aim of familiarising the nurses with the concept of the mobile theatre service. The programme was targeted at a returning to practice/beginning practitioner level.

Developing the Programme

Between February and June 2001, while the mobile operating theatre was being designed and built, the potential rural nurses and management teams to work with the MSS service were met and consulted. A formalised needs assessment had been considered but for various reasons, was not undertaken. Instead an advisory group of expert perioperative practitioners, representing a typical surgical services team, was set up and consulted via phone or e-mail. They approved the proposed topics to be included in the programme. The topics chosen were based on perioperative standards of practice published by American, Australian and New Zealand perioperative nursing associations.

Mandatory topics covered in this course were informed consent, standard precautions, patient code of rights, scrubbing and gowning, anaesthesia, aseptic technique, patient safety, blood and body fluid exposure, occupational safety and health and recovery room scoring.

The Reskilling Programme Content

Study day one covered:

- an overview of the mobile service.
- sessions on ambulatory surgery.
- expected nursing competencies.
- an overview of aseptic technique.
- group discussion sessions on informed consent and The Patient Code of Rights.
- a reintroduction to scrubbing and gowning.
- an open forum to discuss, and dispel, potential myths and rituals surrounding perioperative nursing.

Study day two concentrated on:

- patient management issues: booking patients on to a theatre list.

- group work to develop a patient care plan for day stay surgical patients.
- occupational health issues such as management of diathermy smoke and latex allergies.

The national weekend workshop held in November 2001, consisted of:

- skill stations (defibrillator, patient simulation).
- lectures (malignant hyperthermia, post operative nausea and vomiting).
- group discussion (patient management).
- practical group workshops (clinical procedure packs, crated instruments).

MSS funded the cost of the workshop, travel, food and accommodation for all of the perioperative rural nurses. A variety of resources were offered throughout the programme:

1. a copy of 'An induction in anesthesia', a collection of articles written by anaesthetists from Middlemore Hospital, Auckland, was given to each hospital.
2. Copies of the Dissector (the Perioperative Nurses College of New Zealand Journal).
3. handouts on scrubbing and recovery scoring systems.
4. draft copies of the MSS manuals (operating theatre, infection control, recovery, health and safety) were left with each nursing team.
5. a skills and knowledge assessment package given to each nurse identified levels of skills and knowledge that MSS expected the nurses to acquire after working with the service for some time.
6. each team of nurses was sent copies of a patient care pathway incorporated into a patient information brochure. This information had been presented to the nurses in draft form at the education sessions. Critique was sought from the rural nurses about this document to ensure that the patient care pathway reflected what was realistically expected to happen at their respective hospitals. Minor adjustments were made.
7. a MSS newsletter was sent to all the nurses to inform them of mobile theatre developments.
8. a specifically designed CD-ROM the content of which was in five sections, each being subdivided into specific topics:
 - (i) the resource document section contained text related to information presented at the study days with active links to other areas of interest such as relevant World Wide Web sites or MSS policies.
 - (ii) the policy manual section allowed access to four MSS manuals – infection control, operating theatre, recovery and health and safety.
 - (iii) the presentation section contained nine Microsoft PowerPoint presentations from:

- the study days, on asepsis and standard precautions, day stay patient selection and pre operative patient issues, informed consent, occupational health and safety.
 - the national workshop, including an anaesthetic overview and anaesthetic emergencies.
 - other Microsoft PowerPoint presentations developed to support the resource document including Hepatitis C, surgical scrub solutions and surgical site infection prevention.
- (iv) the website section offered twelve World Wide Web sites from which further information that was not available in the resource section, could be obtained, such as The Center for Disease Control in Atlanta, USA.
- (v) the image section allowed access to photos of the mobile theatre unit, surgical instruments and a map of New Zealand showing the hospitals accessing the service.

Evaluation of the Reskilling Programme

Ethics approval for this research was granted by the University of Melbourne, Health Sciences Human Subcommittee on 22 January 2002.

A postal questionnaire, which allowed for collection of both quantitative and qualitative data, was used to evaluate the efficacy of the reskilling programme. The questionnaire was developed specifically for this study, as no appropriate tools were located in the literature. The aim of the questionnaire was to elicit information related to:

- demographic data about the nurses.
- the usefulness of the teaching sessions.
- the nurses' theoretical knowledge.
- the nurses' level of confidence with the performance of important perioperative and/or recovery skills such as scrub procedures, adherence to standard precautions, the use of operating theatre equipment and the clinical assessment of patients transferred to the recovery unit.
- the nurses' attitudes about the introduction of a mobile operating theatre service.

Results

Forty-two questionnaires were distributed to rural New Zealand perioperative nurses who were domiciled across both islands and who worked at nine rural hospitals. These nurses had completed all or part of the reskilling programme. Only 13 complete questionnaires were received.

Demographic Data

The ages of the nurses ranged from 30 to 60 plus years. Five nurses were aged between 30 - 39 years, three 40 - 49 years, four 50 - 59 years and one 60 years plus. All nurses were female. No male nurses were enrolled in the reskilling programme. Ten nurses identified as registered nurses and three nurses identified as enrolled nurses. Eight nurses were employed as staff nurses, one as a charge nurse, three as enrolled nurses and one as a midwife. Years of experience in the perioperative setting ranged from no experience (one new graduate staff nurse) up to 27 years in the perioperative area.

The Teaching Sessions

The majority of nurses agreed the teaching sessions were well organized, well presented, easy to grasp and intellectually stimulating. They considered that the aims of the programme were clearly articulated and the content was appropriate for their learning needs. Despite the nurses agreeing with the length of the study days they felt more equipment sessions would be useful.

Knowledge and Skills Acquisition

The results showed that the majority of nurses agreed that they were confident in key areas of perioperative nursing practice. For example those nurses who were to work in the operating theatre felt that they would be able to:

- maintain aseptic technique.
- adhere to standard precautions.
- correctly use the 'closed glove' technique after scrubbing.
- comply with the MSS policy regarding patient consent.
- adhere to the New Zealand Patient Code of Rights.
- complete a perioperative check list.

Results also showed that the majority of recovery nurses were confident about their knowledge and skills acquisition related to:

- assessing for airway patency.
- identifying and managing the patient with hypoxia.
- managing a patient with post-operative nausea and vomiting.
- accurately assessing pain levels and correctly administering pain medication
- assessing the patients' readiness for discharge.

All the nurses ($n=13$) strongly agreed or agreed that they were familiar with the

concept of MSS, and were excited about working with MSS. However, most nurses ($n=9$) agreed that they felt apprehensive about working with MSS. The majority of nurses ($n=7$) felt more confident about working with MSS after the reskilling programme. The majority of nurses ($n=9$) stated that the reskilling programme had equipped them to assist the MSS.

Overall, analysis of the results revealed that the reskilling programme had been a positive experience for the participants and had largely met their learning needs. The programme had been designed to meet the needs of adult learners within a rural health care setting. Consistent with current thinking the programme content was underpinned with current literature and evidence to support practice as suggested by Muir-Gray (1997) whilst past ritualistic practice was discouraged (Redfern, 2001). Consideration was also given to the potential barriers to education that exist for rural nurses such as professional and geographical isolation, ad hoc rural education programmes, distance, travel and accommodation costs (Dusmohamed & Guscott, 1998; Hill & Alexander, 1996; MacLeod et al., 1998). The programme was delivered on site to more isolated hospitals. Five rural hospitals within a two-hour drive of each other had the programme delivered at a central location at their request. The programme content was the same at all locations. There was little cost to the nurses as travel expenses were refunded by their employers and few if any nurses lost salary, due to the support of their employers.

Comments from the Nurses on the Resources Offered

From the comments received in the questionnaire to the open ended questions, it appears that the resources provided during the reskilling programme were well received. The most useful resources were the newsletters, the CD-ROM and the World Wide Web sites. Twelve of the nurses felt that the newsletters were a useful means of being kept up-to-date with the project developments. The specifically designed CD-ROM was well received as a learning tool by those nurses who had access to a computer. This is consistent with the literature (Agre, Dougherty & Pirone, 2002; Mangan & van Soeren, 2000; Sheppard & Mackintosh, 1998). A factor that added to the usefulness of this CD-ROM was that it had been specifically designed for the reskilling programme and its content related directly to the programme.

The least useful resource provided was the e-mail based chat room; no use was made of this resource. Only six nurses replied to this question, all identifying that it was of little use to them. The literature supported the use of chat rooms, especially for rural health practitioners, as having the potential to overcome the perceived isolation of learning in rural locations (Buckner, Miller & Kris, 2002; DeBourgh, 2001; Geibert, 2000; Watson, Bannon, Clarke & Timmerman, 1999; Zimmerman et al., 1999). However, McAlpine et al. (2002) noted that chat rooms might be problematic for students. Throughout the reskilling programme, the chat room was made available for the nurses

to use. The intent was that the nursing teams who were geographically isolated from one another could have easy access to one another to discuss issues. Insufficient questions were asked in the questionnaire to elicit more data about why this resource was of little use to the nurses which is a contradiction to the literature. It is possible to speculate as to why it was not useful; it may have been a new and unfamiliar concept for the nurses, which was not explained well. Most of the nurses had an e-mail address, however some of these addresses were at work sites. It is possible therefore, that access to e-mail was restricted. Further speculation suggests that the nurses were anxious about reskilling to meet the demands of this new mobile theatre service. Learning to use a chat room presented yet another stressor, which may have been perceived to be of little use as a learning tool.

Discussion

The primary aim of the reskilling programme was to update the knowledge and skills of the rural perioperative nurses so that they could work with the mobile theatre service. A secondary aim was to familiarise the nurses with the concept of the mobile theatre service.

The literature was helpful in identifying rural nurses as highly skilled health practitioners with a broad skill base who work in complex and diverse settings worldwide. The literature also suggested that specific barriers to education existed for rural nurses such as professional and geographical isolation, ad hoc rural education programmes, distance, travel and accommodation costs.

The needs of adult learners were also well defined in the literature. Needs that were pertinent to the reskilling programme design were recognition of prior learning, self directed learning, the desire for the immediacy of knowledge application, relevant programme content and the need to be actively involved.

The literature was also helpful in identifying the move away from ritualistic to evidence based practice. In addition, the literature reviewed highlighted that nurses needed to be educated about new technology to ensure patient safety.

Other helpful information elicited from the literature review was identifying the use of new learning tools such as CD-ROMs as useful resources to enhance learning, hence the development of the CD-ROM resource.

The nurses felt confident about the knowledge and skills that they acquired through the reskilling programme. However, one nurse expressed concern about being able to complete a perioperative check. This nurse had less than one year's experience in theatre nursing. Knowles (1980) noted that adult learners desire immediacy of knowledge application. When the questionnaire was administered this nurse had not had the opportunity to work with the MSS service hence the lack of opportunity to apply knowledge to practice.

The recovery nurses did not express any concerns about managing patients in the recovery room or asking for assistance when required. These results may be the reflection of the day to day practice of these nurses dealing with trauma patients, which supports knowledge and skill retention (Mackway & Walker, 1999) as well as their prior knowledge in this area of practice (Knowles, 1980). Three of the five recovery nurses had previous experience working in this area ranging from five to forty years. In addition the programme offered self-directed learning opportunities as suggested by several authors to assist adult learners (Dixon et al., 2001; Furze & Pearcey, 1999; Hewitt-Taylor, 2001; Knowles, 1980; Sparling, 2001). Other factors that may have influenced the apparent confidence of the recovery nurses is the independent and flexible nature of rural nursing as described in the literature (Bushy, 1998; Hegney et al., 1997; Paulson, 1996; Rosenthal, 2000, Ross, et al., 2000).

Limitations of this Research

The sample size of forty-two theatre and recovery nurses was small. This, combined with a low return rate of thirteen questionnaires (31%), means that caution should be used when interpreting the results.

One limitation of the project was the lack of time and opportunity to conduct a needs assessment due to the need to develop an appropriate education programme for the rural nurses to be completed by November 2001. Grant (2002) noted that a learning needs assessment is an essential tool to use to enhance programme planning and student learning.

Another limitation was the lack of pre- and post-testing of the nurses' knowledge to show a difference because of the reskilling programme. Information obtained in this way may have given a clearer picture about what content to include in the programme (Burns & Grove, 1993). It would have also have been easier to gauge the success or otherwise of knowledge attainment and skills acquisition directly relating to the programme.

A further factor was timely delivery of the programme. Offering the programme too soon would potentially make knowledge and skill retention difficult (Dent & Harden, 2001; Ward & Daley, 1993). Offering the programme too late would potentially increase the anxiety of the nurses and place increased pressure on them to gain new knowledge quickly. Most nurses completed the reskilling programme four months before the service began at their hospital. For two of the hospitals, the service had not yet begun seven months after the completion of the reskilling course. This was due to delays in management decision making at District Health Board and local levels.

Research Implications

There is a paucity of published research concerning the design and implementation of educational programmes for perioperative nurses per se. Hence, there is little to guide programme development. A paucity of literature also exists for educators needing to reskill rural perioperative nurses returning to practice.

This evaluation of a reskilling programme for rural perioperative nurses has contributed to the literature relating to the learning needs of such a group. A needs analysis is recommended prior to conducting any similar programmes.

Another area for consideration is the ongoing learning needs of the nurses to retain skills and knowledge when working only occasionally (one day every five weeks) with the mobile service.

Practice implications

Whilst the evaluation revealed an increase in knowledge acquisition one of the areas that was not well evaluated was the rural nurses' skills acquisition. Therefore, to ensure that the programme had met their learning needs, a skills self-assessment package was developed for the rural perioperative nurses following the reskilling programme. All rural perioperative nurses working with MSS will be required to work through this package to enhance their clinical practice and to highlight learning needs.

Conclusion

The literature reviewed identified several key concepts relevant to the design of a reskilling programme. Current changes in health care delivery have necessitated the move towards evidence based nursing. The worldwide shortage of nurses and the greying of the global nursing workforce highlighted the necessity to retain nurses in the workforce. Rural nurses were found to be multiskilled practitioners who face unique barriers to education such as professional and geographical isolation, ad hoc rural education programmes, distance, travel and accommodation costs. Little literature was found relating specifically to New Zealand rural nurses. The role of perioperative nurses was found to be team orientated, highly technical and constantly changing. The literature also noted that adult learners have unique learning needs such as recognition of prior knowledge, the need to learn relevant information and to be actively involved in their learning. Technology was also noted as an influence on learning needs, especially for perioperative nurses. CD-ROM's were also noted to be a useful learning resource.

However, literature was lacking in several key areas. The term reskilling was not found in the literature, and was coined because it best described a programme being

offered to nurses to relearn old skills and obtain current knowledge relevant to the perioperative clinical area. There is a dearth of literature about rural New Zealand nurses. Little literature exists on the specific learning needs of perioperative nurses, hence the establishment of an advisory group to assist with programme design. No literature was found concerning programme design and content for currently practising nurses returning to an area of practice after several years. The lack of literature on programme design also meant that no suitable evaluation tools were found or resources available. Therefore, a specific evaluation tool was designed. A specifically designed CD-ROM was developed as a resource.

The results of the questionnaire reveal that the reskilling programme had met the learning needs of the nurses. Key concepts relevant to the programme, as identified in the literature, had been incorporated into the programme design: adult learning needs of group work, programme content relevant to their work place, the recognition of prior learning (having the nurses' help to develop the patient education brochure) and the opportunity for networking. Potential barriers to learning were eliminated by offering the programme close to their place of work. No costs were incurred by the nurses

Strengths of the programme were the attendance of all of the nurses who were to work with the newly established service at all or part of the programme. A weakness of the research was the low response rate to the questionnaire, which means that no generalisations may be made. Inherent strengths of questionnaires are that questions are presented in a consistent manner thus minimising opportunity bias. Mailed out questionnaires are easily administered to respondents in geographically dispersed areas. All nurses who attended the reskilling programme received a questionnaire. Inherent weaknesses of questionnaires include poor response rates (as indicated by a 31% return rate), the risk of leaving out important responses and the risk of obtaining data from respondents who have no opinion on the subject.

Despite the limitations of the study, the results have added to the body of nursing knowledge by contributing to the discussion of learning needs of rural perioperative nurses returning to perioperative practice.

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Nurse-led Telephone Triage Service in a Secondary Rural Hospital

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This chapter continues this section on aspects relating to rural nursing practice within a rural secondary hospital.

Introduction

This chapter firstly offers background information into the development and functioning of a nurse-led telephone triage service in a rural secondary hospital. Secondly, it discusses the process and findings of a research project undertaken to identify and describe telephone callers' reported outcomes after using a rural based telephone triage service.

Rural Context

In the changing face of health delivery in New Zealand the emphasis on quality, equity and cost has influenced a focus on regionalisation (closure of small rural hospitals) and specialisation of hospital services (Ministry of Health, 1999). This has led to a decrease in patient bed numbers, and has increased the emphasis on preventative health and disease management in the primary health care setting. These dynamics have further led to increased pressure to provide access to health care information and innovative methods of providing the delivery of health care services in an already stretched primary health care service.

This shift of health paradigm has also led to greater workloads in medical general practices worldwide. New Zealand is no exception with a corresponding problem of recruitment and retention of general practitioners in rural areas and a decrease in the provision of after hours primary medical care (Ross, 1999). As a consequence a global and national response has been a revolutionary change in access to after hours health care advice that has seen the expansion of nurse-led telephone triage services.

Telephone Triage

The art of triage is a process used to sort patients into groups depending on the severity of their illness or injury to decide the need for urgent medical care (Hughes, 2003). Telephone triage is based on the same premise; however the decisions are made without visual assessment of the patient. The provision of health services via telephone triage is provided by a range of providers in a variety of settings in many different countries. In New Zealand Healthline is similar to the United Kingdom's National Health Service Direct, both 24 hour government funded telephone advice lines that have registered nurses recommending the appropriate health care service to the callers. There are some services that are specific to defined populations such as Kids Kare Line in Australia. While in the United States there are many commercial telephone call centers (Patterson, 2005).

The concept of nurse-led telephone triage has never been intended to replace the face to face consultation between patient and health professional. It is an enhancement to augment the health service by providing immediate contact with a health care provider (Nursing World, 1996). In New Zealand, the need for such a formalized telephone triage advice service led to a pilot telephone health information and advice service, Healthline, being launched in 2000. This free service now successfully operates nationally (Ministry of Health, 2004) with some health centres, general practitioner practices and emergency departments diverting their after hours call to it (personal communication Moriarty, 2006). However, there are other nurse-led telephone triage and advice services operating in New Zealand which are delivered from various sites and are tailored to the needs of their local communities, such as this one being studied (Ministry of Health, 1999).

Clearly the benefits of telephone triage incorporate convenience to patients and clinicians alike. There is utilisation of the potential to assist patients/caregivers with routine complaints to manage at home as well as identifying when further medical or emergency care is required (Quallich, 2003). This can reduce unnecessary or inappropriate visits to already reduced after-hours primary medical services, and over stretched emergency departments. The over arching aim of telephone triage is more efficient use of health care resources and services while maintaining a high degree of patient satisfaction.

The central aspect of telephone triage requires the registered nurses who answer the calls to sort and prioritize presenting health problems over the telephone. It is a service that relies extensively on the communication skills of listening, questioning and building a rapport with the caller in a short time (Wheeler, 2000).

Assessment of health problem

An organized collection and interpretation of both verbal and non-verbal information is required to determine the urgency of the problem (Smith, as cited in Clapperton, 2000). Much successful triage is about the skills of the registered nurse to decipher relevant

information about signs and symptoms from descriptions given that are usually subjective (Quallich, 2003). Once a decision has been made about the level of care required it is essential for the nurse to give clear advice and confirm that the caller understands it. This ensures the patient gets the right care from the most appropriate source at the right time (Larson-Dahn, 2001; Manchester, 2001). Therefore the registered nurse on the other end of the telephone is gathering and interpreting data to build a mental picture of the patient and pathology being described (Edwards, 1996) in order to make safe and appropriate triage decisions and thus give appropriate advice. Guiding principles and standards of telephone triage combined with use of clear algorithms, protocols and documentation assist in this process. Notwithstanding that, the clinical experience and skill base of the nurse taking the call and giving advice are of paramount importance. There are times when it is the nurse's experience and 'knowing the patient' (which occurs in a rural service such as the one being studied) that guides the decision making and this may not be following a set algorithm. Therefore, there must also be some flexibility in such systems to allow nurses to also use their clinical judgment skills (Manchester).

Communication

Communication is one such clinical skill which is a critical and challenging aspect of telephone triaging. It is an interactive process that influences judgments and decisions made by the nurse. This communication (which occurs in a relatively short amount of time), guides appropriate assessment, relaying of health care information and eventual outcomes. All of this process can be based on incomplete subjective information given by the caller and is without a physical assessment (Quallich, 2003; Wheller, 2000). Walhberg and Wredling (1999) and Smith (1999) identify that 55% of communication is non-verbal, and of the 45% verbal 7% is derived from spoken word and 38% from sound. These aspects of communication can portray intended as well as unintended messages through the sound of the callers' voice, silences, or background sounds such as a child crying and will influence nurses' decisions (Arnold & Boggs, 2003). Thus listening is crucial and takes over the visual and physical components in telephone triage. Interpretation of what is heard, feedback to the caller and requests for validation of the information are vital to ensure the two way messages are understood thus guiding the decision making of the nurses, the urgency of the caller's health needs and reducing the potential for adverse outcomes (Arnold & Boggs).

Assessment, planning and evaluation of care

The most crucial end point of the telephone triage and advice call is that of outcomes. Without exception it is agreed that the ultimate aims of telephone triage are satisfactory resolution of the problem for the patient, whether it means self care, visiting a health professional or getting emergency care. With telephone triage the ultimate outcome depends on the decision the nurse makes at the end of the assessment of the information provided and the action the patient chooses to follow.

For the telephone triage nurse the data collection for assessment is auditory and may not be given by the person who is the patient. The nurse guides the planning of the care required but the responsibility for implementing it is the caller's. The process of evaluation or follow-up is difficult for telephone triage nurses but it is nevertheless important in providing safe, effective phone care delivery (Smith, 1999).

Considering safety issues

There are however, implied risks and legal implications involved with assessments and decision making within such systems where the health professional can not see the patient, and relies solely on verbal communication and the creation of a mental picture (Edwards, 1996; Thomas, 2006). There are inherent risks and safety issues relevant to both the caller and the telephone triage nurse relating to inappropriate advice given and subsequent outcomes (Thomas). To minimize the risk and establish utmost safety in this type of health service specific protocols of documentation, algorithms, computer software programmes and importantly professional standards have been developed. While not foolproof these processes support and guide nursing staff who are giving the advice by providing some consistency, standardisation and 'safety nets' in the process of decision making (Manchester, 2001; O'Cathain, Sampson, Munro, Thomas & Nicholl, 2003; Rutenberg, 2000). In 2000 the Professional Standards for Telenursing were implemented in New Zealand to guide the professional nurse in the level of competence and accountability expected within the context of telenursing (Nursing Council of New Zealand, 2000).

Background to this Research Study

In 1999 rural Central Hawke's Bay experienced restructuring of its hospital and health care provisions. The national trend was to provide acute and high level care from regional hospitals and to close small hospitals. This led to a reduction in hospital bed numbers in the region and to more primary health care being provided in the community. In Central Hawke's Bay this meant the reduction of medical ward beds and a shift from a hospital status to that of a Health Centre with limited inpatient beds, and no accident and emergency department.

At this time there was also a decrease in the number of general practitioners in the area and difficulty in recruiting any replacements. An increased workload during the day led to a situation where after-hours call was becoming unmanageable for the four general practitioners providing it.

Subsequently the Hawke's Bay District Health Board and Registered Nurses established the after-hours telephone triage and advice service from the ward in the Health Centre. This was predominately to help relieve some of this general practitioner burden but also to continue to provide access to health services and advice for this rural

population which they indicated at community meetings was a high need.

Although the nursing staff had many years experience, education was required for this new skill to support them and to maintain a safe and efficient telephone service. Critical to the implementation of this service, all staff were required to undertake a professional development programme to fulfill the role and responsibilities of telephone triage (Nursing Council of New Zealand, 2000). The emergency department nursing staff from Hawke's Bay Regional Hospital provided study days, triage policy guidelines and algorithms for telephone triage. This enhanced the development of effective and safe decision-making and appropriate documentation of the telephone triage and advice calls.

This rural DHB service provides the telephone triage and advice service after normal general practitioner hours. The general practitioner nursing staff provides their own triage systems during their working hours. Generally the telephone triage services in the comparative studies provide a twenty four hour service, however as Munro, Nicholl, O'Cathain and Knowles (2000), St George (2002), Hanson et al. (2004) and O'Connell, Stanley and Malakar (2001) indicate, an increased use of their twenty four hour services occurs after hours (that is evenings and weekends) and over holiday times. This service has now become an integral aspect in the provision of after hours health care advice to the community from the Central Hawke's Bay Health Centre registered nurses.

The Registered Nurses at this centre provide a unique service as telephone triage is done in conjunction with providing care for up to six inpatients. The ward is staffed twenty-four hours a day, seven days a week by six Registered Nurses and six Care Associates (who work under the direction of a Registered Nurse). These nurses work independently of the doctor's surgeries during the weekdays. Most of the registered nurses have been working within this rural setting for nearly twenty years.

Telephone calls are taken in the ward office to ensure privacy and confidentiality with few distractions. The information gathered is documented with the name of the caller and the relationship to the patient, the patient's age, telephone number and the nature of the problem with advice that has been given. Patients are directed to the most appropriate level of health care that is required at the time, either for self care at home, immediate medical care from a general practitioner, requiring an appointment with a health care practitioner at a later time/next day or referral to ambulance or the emergency department at the regional hospital. If they are given home care management advice there is always the opportunity given to call back if the condition changes, and at times the registered nurse will call the patient back for follow up.

Purpose of the Research

There is minimal research regarding the varied outcomes following the advice given in the telephone triage call, particularly from a rural non-dedicated service.

Research Methodology

The use of descriptive evaluative research design provided a framework to achieve the aims of this research. The orientation was outcome based (what happens after the call). As the literature indicated other variables related to outcomes, a quantitative research design was explored, allowing gathering of objective data that could be analysed and measured to describe the outcomes and effectiveness of this service.

Target participants were those who had called the health centre for after hours advice between February and June, 2006, totalling a population of 372. Potential participants were selected from the documented information kept in the ward. An attempt was made to contact all who were recorded as having made a call, whether they were the patient or not. Each caller was telephoned by the researcher who explained the research and requested consent to have a questionnaire sent to them. It was discussed that replying to the questionnaire would imply informed consent to participate in this study; this was reiterated in the covering letter sent with the questionnaire. Several callers had used the service many times during this period but only one response relating to the last episode of care was requested.

Participants were reassured of confidentiality, there being no identifiable link between their personal information and that provided on the questionnaire, and no method of identifying the respondent with the documentation of the telephone call that is kept in the ward. Consequently, those who had had an unsatisfactory experience or outcome would still be encouraged to participate.

Ethical approval was sought and gained from the Central Regional Ethics Committee and the Eastern Institute of Technology Research Committee.

Data collection was undertaken using a postal questionnaire. A lack of appropriate models resulted in a new questionnaire being developed. Its validity was examined through a pilot study and feedback resulted in alteration to some questions and the questionnaire format.

The questionnaire captured data and information through open and closed questions. Each section included clear instructions. Quantitative data was derived from 5 demographic questions which required ticking of appropriate boxes. The questions relating to outcomes following advice provided nominal data with 'yes', 'no' or 'partly' responses. A series of questions related to attitudes and perceptions of the nurses' understanding of the problem and clarity of advice from the caller's perspective were asked. There were also questions pertaining to satisfaction of the advice given and of the overall telephone triage service.

To maintain anonymity of the respondents there was no allocation of coding prior to the questionnaires being sent. All questionnaires received by the due date were reviewed and coded for analysis.

Quantitative results were coded and analyzed for differences in responses to each question. Data related to satisfaction aspects of the telephone triage service were

collected from the Likert scales and entered into Excel to provide central tendency analysis. The demographic and Likert scale questions were evaluated to determine means, modes and standard deviations.

Qualitative data was captured through an open question at the end of the section, so respondents could clarify or comment on their experience relating to the closed question. A general comment section was provided at the end of the questionnaire. Interpretation involved content analysis of central themes.

Descriptive statistical analysis of the data was used to summarise measures of central tendency and dispersion of data.

Quantitative results, derived from the raw descriptive data that included 'yes', 'no' and 'partly' questions, were coded and entered into an Excel programme for analysis of differences in responses to each question. Data related to satisfaction aspects of the telephone triage service were collected from the Likert scales and also entered into Excel to provide central tendency analysis. The demographic and Likert scale questions were evaluated to determine means, modes and standard deviations.

Outcome Results

This survey demonstrated that of the respondents 84% were female, and that 50% were aged between 21 and 40 years of age. This correlates with the finding that 56% of calls were made seeking advice for children and their illness and that the calls were made by the mothers of the children. (Due to confidentiality and identifying issues it was not ascertained what the illness was, however this could be done in another study reviewing the telephone triage call sheets). It was interesting to note that the Maori population for this rural area is similar to the national average of 21% (Central Hawkes Bay District Council, 2001), but only 14% of calls were identified as from Maori, which was not consistent with St George (2002) where Maori usage of Healthline was proportionate to population studied. This is an area of further potential study to ascertain if the local service is as accessible to Maori as we envisage, or if there are health access issues that require addressing.

Attitudes and perceptions

A high level of confidence in the local service was portrayed by 56% of respondents who had used this service two or more times. There were many comments such as:

'I have had to use the CHB Centre on many occasions ... and have no hesitation in using the service.'

'I have used the service several times and have been happy with the outcome each time.'

Over half the callers (55%) were given advice on managing the situation at home. Of these 39% reported they were able to manage without any medical intervention at all

for the same health problem. The majority of the other patients who required some medical input, but not urgently, were satisfied with advice on how to manage at home in meantime or to call back for reassessment if the problem did not settle. Consequently they were then able to wait and see their general practitioners the next day, which decreased the after hours callout the general practitioner had to do for less urgent cases.

There were 30 of the 116 respondents (25%) who did receive advice to see a general practitioner, mostly within the next two hours. Fortunately, from the perspective of most of these callers there was medical cover in this rural area at those times, otherwise for many of the rural residents there is travelling for an hour or more to the regional hospital or medical clinics in Hastings. There were comments made such as:

'I was pleased I didn't have to go to Hastings for a simple thing like a cut on the head.', *'... preferred to go straight to Waipukurau, rather than have to drive so far in pain.'*

For some who did have to travel there were comments reflecting dissatisfaction:

'how unacceptable it is that we do not have any doctors available after hours in CHB, but reassuring to have a knowledgeable nurse on the telephone who is able to give advice.'

'It would be preferable to have 24 hours medical service in CHB.'

However, as there is no accident and emergency facility provided at this rural Health Centre there is a high reliance on the local St Johns ambulance service to attend emergency and urgent health situations. This survey reveals that of the 22 respondents who were referred to ambulance service, 17 required admissions to hospital. This demonstrates an efficient use of this service and accurate interpretation of the callers' information by the registered nurse taking the call and giving advice.

During the period of this survey there were very few callers who required direct referral to the emergency department at the Regional Hospital as there is either an after hours general practitioner locally or at a medical centre in Hastings, or referral by ambulance service. There were those who stated they self presented to the emergency department as they perceived that was where they should have gone. This research shows that the telephone advice service however does reduce the number of people who would have gone directly to the emergency department if they had not made the call to this centre. 31% of callers reported they would have rung or gone directly to the emergency department. This represents a saving in time for the patients waiting in a busy department with non urgent health problems and it frees the emergency department nurses from having to take telephone triage calls. What is not known is how many of this local population take themselves to the emergency department without any consultation. Another emerging issue is a reduction in the hours that medical centres in Hawkes Bay are available for after hours health care and the potential impact this will

have on the numbers presenting to the regional hospital emergency department with non urgent health or accident problems.

The outcomes of the telephone call and advice given can differ from the original caller intention or perception of the problem. This research shows that 84% of the respondents reported that the outcome was as had been discussed during the call. (Interestingly 11% answered with a 'partly' answer which was identified related to the expectation of an immediate appointment with general practitioner).

Satisfaction and compliance

Overall the majority of respondents (89%) reported high satisfaction levels with the advice given. A most important issue in this faceless system is that the respondents felt the nurse at the other end of the phone understood the information they were portraying and the consequent advice and information that was given to them was also easily understood. Some comments included,

'the nurse had a friendly, understanding manner...'

'I was impressed with the courtesy and empathy of the staff I spoke to.'

'a professional opinion is what we were looking for so we can make our decisions and help our little ones ...'

There were however those who were not satisfied, such as:

'I was disappointed that my concerns did not appear to be taken seriously enough.'

This however, gives opportunity to reflect on the service and advice given to continue to strive for positive quality health and referral outcomes.

A total of 95% of respondents reported compliance with the advice given, which is a positive indicator of the quality of relationship, communication and outcomes between caller and nurse (Larson-Dahn, 2001).

Discussion

The 1990s were a dynamic time of health reforms. Restructuring of location and delivery of health services had a major impact on rural areas. The shift from secondary care to primary health care in the rural areas and specialisation of hospital services to regional health units meant many of the 'perceived' essential health services were lost from rural hospitals. In effect these changes meant the closure of many small hospital units, and discontinuation of surgery and specialist services. This also had a flow on effect with medical and nursing professional staff that lost 'confidence' in their acute patient management skills, therefore directed patients more often to regional hospitals and emergency departments.

This shift in promoting primary and home health care influenced a greater workload for general practitioners in these rural areas. This was compounded by an emergent theme throughout this country of poor recruitment and retention of rural general practitioners and eventually also experienced nursing staff. This was also experienced in this rural area of Central Hawke's Bay. Increasingly, the general practitioners were voicing their desire not to do as much after hour call out work as workloads during the day had increased.

Within this rural area the late 1990s saw many public and ministry discussions regarding provision of health services to ensure that the commitment of government policy, that rural areas would not be disadvantaged by health reforms, was adhered to. It was mooted that a 'one stop health shop' centre should be a primary health care centre located in this area to provide as many services as possible (but would exclude an accident and emergency department). The public by now had accepted that it made sense to have surgery and specialist health services located at the regional hospital in Hastings – which for some of the rural population was one and half hours away.

A previous survey of health and social needs of the Central Hawke's Bay rural community (Pedersen, 1999) essentially portrayed the desire of this rural public to have realistic and appropriate access to general practice and this included the strong need for after hours general practice care for illness and injury. It was not acceptable for this rural public that they should travel up to one and half hours to alternative care, hence the inception of the after hours telephone triage and advice line delivered from the local health centre by the registered nurses who were on duty covering twenty four hours a day, seven days a week.

This new system met with general practitioner approval, as it meant they (or their partners) did not have to take patient calls at home and resulted in a decrease in call out time as potentially many of the health issues could be dealt with over the phone by the nurses. As the DHB was employing the registered nursing staff, and had an obligation to continue access to services for this public as well as to try and retain the general practitioners who were left in the area, they were also in favour of this local telephone service.

The years have gone by and the local telephone triage and advice service has continued in this rural Central Hawke's Bay area. There is still a recruitment issue for attracting rural general practitioners, and potentially experienced registered nurses. There is an after hours general practitioner service during the week but it is very limited on weekends. A reduction in the availability of X-ray and laboratory services has also occurred which can influence the need to travel to the emergency department in Hastings. However, it did appear on the surface that the telephone service was advantageous to this rural public in timing and access of after hours care and that callers seemed to be satisfied with the system. The time was right for a survey to determine if this was indeed the case and what impact this service had on the community, general practitioners, the ambulance service (as it was predicted this would be used even more since the

restructuring locally), and the emergency department in Hastings.

The main focus of this research was to measure the outcomes for callers/patients following the telephone call and subsequent action taken from the advice given by the Registered Nurse to the caller. To further assess these outcomes it was appropriate to compare results with research from New Zealand and from similar after hours telephone triage systems throughout the world. A second aspect of this research was to demonstrate its effectiveness and efficiency and public desire to maintain this as a local service as there had been some talk of transferring it to a national system (personal communication, 2006).

Outcome measurements were comparable with Australian and English studies such as Keatinge and Rawlings (2004), Munro et al. (2000), New Zealand Healthline by Kalafatelis, Fryer, Harsnat, Cunningham & Taite (2002) and St George (2002). These outcomes included information about whether the advice was for home care, referral to a general practitioner (and when), referral to an emergency department or ambulance service and if this advice was adhered to. It also included measurement for levels of satisfaction with both advice and the local service itself, as well as what service would have been used if this local telephone advice was not available.

Conclusion

The results of this survey show that for this rural community the preference is overwhelmingly positive to maintain a local after hours telephone triage and advice service. Common issues were raised validating this and included the rurality of the population, time and travelling distances. The callers also felt reassured that the advice was coming from an experienced registered nurse who knew the area, often the patient and their history, and the services that were available. There was a high level of satisfaction, and high compliance to advice. This is indicative of advice provided being understood and followed which subsequently resulted in the outcome being as discussed during the call.

Another advantage is that this rural health centre has the registered nurses on site who are trained and able to provide the after hours telephone triage service without extra cost to the district health board. This gives efficient and effective outcomes for all involved – the patients in the community having a local service, the general practitioners having fewer after hours call outs, the nurses maintaining skills and satisfaction of providing an important service, and the district health board providing a vital rural service, meeting the needs of its rural community. The objective to provide the right clinical advice direct to the caller, to the right level of care at the right time to give positive health outcomes for this rural community has largely continued to have been met.

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Management and Guidance of Patient Resuscitations within Secondary Rural Hospitals

SUE CHALLIS-MORRISON

This section concludes aspects of rural nursing practice relating to the secondary rural hospital.

Introduction

This chapter firstly offers background information relating to the management and guidance of resuscitation within secondary rural hospitals. Secondly, it discusses the evidence related to issues concerning resuscitation and not-for-resuscitation, and thirdly, it presents the findings through an implementation and evaluation plan.

Rural Secondary Hospitals

Rural secondary hospitals are usually a public health service under the umbrella of a District Health Board (DHB) providing in-patient (and often community) health services to a population located in small towns or living in scattered, often isolated areas. The isolation affects not only patients' accessibility to the service but also the rural facility's relationship with the DHB. Many factors are positive, such as sharing resources and skills, often by way of visiting services, but some are more challenging, such as the need to adapt DHB wide policies and procedures for use in the rural situation. This has been called 'rural proofing' (Swindlehurst, Deaville & Mitchinson, 2005), and relates to the need for generic policies, but it could also be legislation, to be relevant to, and able to function in, a rural environment where the usual city amenities and resources are not available.

Rural hospitals have a need to manage whatever presents itself at the door, without immediate access to highly specialist services. To do so staff have developed a broad range of skills to ensure they can provide some care from nearly every medical speciality. Focusing on a wide skill base rather than developing specific medical expertise has given rise to a new specialty. Generalist specialists (O'Malley & Fearnley, 2007),

sometimes referred to as expert generalists (Bigbee, 1993) are health care professionals, either nurses or doctors, who are jacks-of-all-trades (MacLellan, 2006). Additionally rural nurses regularly bridge the interdisciplinary boundaries of physiotherapy, occupational therapy and social work, as those disciplines' availability can be variable in rural areas. Being consistently present enables nurses to provide continuity to these services during weekends, or when short staffing is a problem. These realities mean the rural health team might work together in a more interchangeable way and take roles not generally necessary in a larger facility.

Resuscitation

Resuscitation, especially cardiopulmonary resuscitation (CPR) is an action taken to prevent or defer death (for this discussion 'resuscitation' means only CPR and does not include other death deferring interventions.) The goal of CPR is to restore life to patients dying unexpectedly, and is used when there is a reasonable likelihood of patient recovery and benefit. As technology has advanced, end of life decisions have become more complex because the demarcation line between avoidable death and unavoidable death has blurred. It is noteworthy that for some, if resuscitation occurs, good recovery is unlikely and being kept alive when terminal illness is present may not even be desired.

The population of New Zealand has undergone change in recent years. Communities are comprised of increasing numbers of older persons with some areas having up to 21% of the population already over 65 years of age, and these figures are predicted to rise. Many within the community, including older persons, suffer from chronic illnesses. As a consequence most deaths occurring are those where resuscitating to restore life confers little benefit and may indeed cause harm. In hospital, do-not-resuscitate orders are the alternative to aggressive life saving care and are managed by a signed not for resuscitation (NFR) order.

Hospitals manage resuscitation and NFR situations through policies. These would generally expect CPR to be undertaken unless there is a signed NFR form available in the clinical notes; however situations occur where the anticipated documented NFR is not present. This absence requires staff, often nurses who are the health professionals frequently present at imminent death, to take the appropriate course of action and make decisions that may be in direct contradiction to institutional policy (Bickley Asher, 2002). Anecdotal examples, compassionate but not legal, include responding slowly to a collapse, being somewhere else so it is too late to do anything, and non aggressive resuscitation have evolved to manage these situations.

With the introduction of the New Zealand Code of Health and Disability Services Consumers' Right Regulation in 1996 came the ability to use an advanced directive to plan future health care for the times individuals are unable to speak for themselves. If present, an advanced directive would guide a resuscitation decision as this would record

the course of action an individual desired if they could not indicate that for themselves. Currently advanced directives are not widely used.

Documenting a resuscitation status for every patient admitted to hospital might be a way to overcome these difficulties. If this requirement does not already exist, revising or replacing existing policies would be needed and this might provide a number of opportunities:

- To incorporate the Maori perspective into hospital death and dying.
- Encouraging nurses to take an extended role especially in the NFR process.
- To increase community awareness of how an advance directive can speak for them when they cannot, enabling the individual to remain in control of decisions taken.

Literature Search

So what evidence exists about this issue? A literature search revealed that problems related to resuscitation or the decision not to resuscitate identified in the New Zealand environment were also issues for other countries. The literature proposed various remedial actions but no definitive solution, suggesting perhaps, that there is no perfect answer. A gap relevant to New Zealand was the lack of evidence related to the significance of resuscitation and advanced directive use to Maori (Wareham, McCallin & Diesfeld, 2005), perhaps fertile ground for future research.

No studies on resuscitation were identified that used randomised controlled trials, [the gold standard of clinical studies (Sackett, Rosenberg, Gray, Haynes & Richardson, 1996)], to investigate aspects of resuscitation orders. However death is a subjective experience and therefore difficult to quantify, making qualitative and retrospective studies appropriate for this subject.

Studies were located that covered a range of issues, with a considerable number related to applying NFR orders. It was around this issue that most challenges arose. A 'good death' (Woods, Craig & Dereng, 2006) is one free from avoidable distress and suffering, which respects a patient's decisions and is reasonably consistent with clinical, cultural and ethical standards. On this basis evidence was evaluated and selected as indicated in the following headings:

The evidence as it related to the health care team/environment

In the United Kingdom staff were questioned about aspects of their existing resuscitation policies. This revealed they wrongly over-estimated their facility's CPR survival rate (real rate was 15-25%). Clinical notes documentation was inconsistent and confusion existed regarding the role of next-of-kin in NFR decision-making (Smith, Poplett & Williams, 2005).

Another retrospective cross-sectional study was conducted using multivariate logical regression to predict NFR use by using the hospital characteristics of institutional

culture, physician practice patterns and technology use. The findings were that these characteristics appeared to be associated with the use or non-use of NFR orders (Zingmond & Wenger, 2005). Relating these characteristics to New Zealand rural hospitals shows similarities as most rural hospitals do not have trainee doctors and technology plays a smaller role in the health care provided. According to the study, completing NFRs should be easier in this environment and there will be fewer situations requiring resuscitation.

The Liverpool Care Pathway is an English best practice clinical pathway for end of life care in hospital (Liverpool Care Pathway, Nov 2005 – version 11). Once on the pathway, not for resuscitation documentation is required removing any ambiguity from end of life direction for patients at this stage of their illness. This allows the focus to return to that of facilitating a ‘good death’ (Woods et al., 2006).

The evidence as it pertained to medical staff

The evidence suggests that resuscitation/not-for-resuscitation policies are interpreted and used in ways contrary to the intention of the policy. Most policies require a signed statement to the effect that resuscitation will not be carried out for this patient. The presence of an NFR form indicates that the patient and/or their preferred support person(s) and medical staff have made a considered decision. However medical staff often do not complete this form (Tulsky, 2005), the results being that when attending a resuscitation event, staff have to guess what the lack of form means. Is resuscitation intended or has the form just not been completed? Medical priorities are treatment and cure so requests to consider an NFR have been interpreted as admitting a failure to cure (Storch & Dossetor, 1998).

Completing a NFR is regarded as a low priority task. Not having a documented NFR order in the United States is frequent (Tulsky, 2005), even when the patient has articulated this to be their preference. Additionally, doctors are reluctant to initiate discussion around NFR (Bickley Asher, 2002) possibly because assumptions are made that patients/families are unwilling to participate in these discussions and do not want to or cannot make an NFR decision (Ramsey, 2004).

The evidence as it pertained to nursing staff

The nurse presence in a not for resuscitation event was the focus of a number of studies that suggested a nurse’s role in obtaining an NFR was under-used. Being consistently with a patient during a hospitalisation positions nurses well to facilitate end of life discussion. This close therapeutic relationship and nurses’ acknowledged advocacy skills (Mogg, 2006) would help ensure patients’ needs are stated and inclusive decision-making has occurred.

People are reluctant to talk about end-of-life issues and health professionals find it a hard conversation to initiate (Bickley Asher, 2002). During end stage illness nurses often have considerable contact with the patients. One study felt that nurses may be

better placed to make NFR decisions than their medical colleagues because of this (Hayes, 2004). A nurse survey showed that 37% believed they should be responsible for facilitating NFR discussion and decisions taken (Lofmark & Nilstun, 1997). Although nurses are seen as helping patients come to terms with their death, they feel excluded from key conversations with patients about these issues (Bickley Asher, 2002; Lofmark & Nilstun, 1997). Nurses already hold clinically grounded conversations about healthcare options with chronically unwell patients. Facilitating planning to meet end of life needs, leads naturally from many of these conversations and could not only help to make dying a part of the life experience (Mogg, 2006) but allow the patient to be more active in the decisions made at this time (Haddad, 1996; Mogg, 2006). The impact on the health team if nurses became more active in this process could improve communication with medical colleagues (Cox et al., 2006).

The evidence as it related to the patient experience

Many older patients do not want to make end of life decisions and neither do relatives on behalf of family members unable to do it themselves (Ramsey, 2004). In Chicago a Do-Not-Resuscitate (DNR) Policy was revised to allow physicians to write a unilateral DNR order at times when resuscitation would confer no benefit (Anderson-Shaw, 2003). After a required ethics consultation the consultant wrote these in the absence of any advanced directive and without the consent of the patient or family. The New Zealand norm is that patient/family acknowledgement is required in these decisions (Ramsey, 2004), quite different from a unilateral policy.

Inpatients are starting to request resuscitation or not for resuscitation information and out in the community advanced directive interest is growing (Wareham, et al., 2005). The United States' Self Determination Legislation requires all patients admitted to hospital to have or sign an advance directive. However even when required by legislation, compliance is variable with physicians frequently disagreeing on what procedures the advanced directive applies to (Marco, 2005), or they decline to follow a patient's advanced directive (Storch & Dossetor, 1998). New Zealand has the Health & Disability Commissioner Consumers' Rights Regulation that covers informed choice and consent and provides for consumer use of advanced directives (Health and Disability Commissioner, 1996). This regulation allows end-of-life decisions to be made by a competent consumer if they have made an informed choice, free from discrimination, coercion, harassment and exploitation. Unlike America, New Zealand law does not require a resuscitation status for patients on admission to hospital.

The evidence as it relates to culture

In New Zealand, cultural commentators warn that Kaupapa Maori challenges the notion that universal policies suit all New Zealanders regardless of ethnicity (Wareham et al., 2005). Many end-of-life decisions are made quickly in response to the impending situation. Requiring a prompt decision by a patient or designated family member does

not meet Maori need. These issues are important when considering advanced directive/resuscitation decisions (Wareham, et al.), because for Maori, time to consult so that whanau are a part of the decision making would be essential for end of life discussions (ACC, 2004). Cultural norms and beliefs that do not align well with advanced directives were demonstrated in London where it was found that they had little or no relevance for black and minority ethnic groups (Cox, Cole, Reynolds, Wandrag, Breckenridge & Dingle, 2006). The study argued that as populations became more culturally diverse, end-of-life information needs to be communicated in culturally appropriately ways, a timely comment as New Zealand's immigrant population becomes more heterogeneous. Not only Maori beliefs but other cultural beliefs need consideration, for example some Europeans believe that a dying person should not be told about their impending death (Hayes, 2004), Islam welcomes death because the after life is paradise, Russians are cheerful towards the dying to avoid distress and the Truskes of Micronesia start preparing for death at age 40 (Gire, 2002).

The evidence related to appropriate documentation

A retrospective chart audit reviewed the notes of patients who had died in a New South Wales (Australia) facility, where one of the issues reviewed was NFR orders. Out of 110, 61 had NFR orders, 91% of which were written shortly before death. The conclusion was although older persons have multiple admissions in their last year of life, NFR orders were rarely documented prior to a last admission (Chan, Ong, Zhang, Li, Ledema & Braithwaite, 2003). The authors believed a documented advanced care plan was necessary earlier.

Another evaluated compliance with the facility's NFR guideline. Compliance rated only 61%. It was felt that further work was needed to involve nursing staff and patients more (Lowe & Kerridge, 1997) if this was to improve.

A further study was a chart review looking at 71 Toronto patients who sustained a cardiac arrest with attempted CPR whose life support preferences had been previously documented. Of these 62% had an end-of-life discussion at some stage, (43% after one CPR episode), and 38% had no discussion at all. The conclusion was that optimal care included addressing and documenting life-support preferences for high risk patients early in their hospitalisation, a standard infrequently met in this study (Kernerman, Cook & Griffith, 1997).

A prospective chart audit looked at current DNR order documentation of 156 patients in Cardiff, United Kingdom. Documentation was poor but had improved with the introduction of a standardised order form (Butler, Pooviah, Cunningham & Hasan, 2003). No comment was made if the improved documentation level was acceptable.

The last was an analysis of existing data from two inpatient studies from five United States teaching hospitals that tried to determine if older or seriously ill patients preferred to have their family or physician make resuscitation decisions for them rather than having their own preference followed if they became unable to make these decisions

themselves. Over half of the 2203 patients strongly disinclined to have their preferences followed unconditionally and the observation made was that advancing age and severe illness reduced patient autonomy (Puchalski, Zhong, Jacobs, Lynn, Harrod, Galanos, Phillips, Califf & Teno, 2000) suggesting that older very ill patients preferred someone else to make resuscitation decisions.

The evidence of CPR success

Studies that have quantitatively measured the success of inpatient resuscitation have found varying results from 0-16% (Marco, 2005), 15-25% (Smith et al., 2005), 6.5-15% (Biegler, 2003), but it seems that general perception puts the odds of successful resuscitation much higher than the reality. The chance of success needs to be weighed carefully so that resuscitation is provided for those situations most likely to be successful; others should be managed differently. The reality is that non resuscitation deaths account for most deaths in hospital (Medscape Nurses, 2006) and of all patients who die, less than 10% die suddenly and unexpectedly.

Resuscitation incurs a dollar cost, as does all healthcare. Health dollars must equate to value for money so overall costs and benefits to the patient need to be assessed. Resuscitation costs are greater than just the event, and include staff salary, training, drugs, equipment and equipment maintenance. The costs include length of stay after the event plus any intensive care time, however statistics show many initial survivors do not leave hospital alive (Lee, Angus & Abramson, 1996). Resuscitation is an invasive high cost labour intensive activity (Biegler, 2003; Marco, 2005) so NFR orders could be seen as a way to limit the use of CPR for patients (Lowe & Kerridge, 1997). Although cost and resource utilisation are of interest (Teno, Lynn, F, Wenger, Phillips, Alzola, Murphy, Desbiens & Knaus, 1997), American costs are hard to relate to New Zealand because of their for-profit hospital environment. Care in for-profit hospitals is associated with higher costs and greater care intensity without necessarily better outcomes, and has been associated with less incentive to institute NFR orders (Zingmond & Wenger, 2005).

Evaluating the Evidence

The PARIHS [Promoting Action on Research Implementation in Health Services] framework (Rycroft-Malone, 2004), which helps to identify and score factors that influence the ability to convert evidence into practice, was used to determine the usefulness of the evidence. As well as evidence, the framework considers contextual and facilitation aspects that also need consideration. This scoring helps to establish evidence credibility (Rycroft-Malone), and is achieved by reviewing the research against specified criteria and scoring it on a high to low continuum. This gave confidence that the papers selected provided insight into the subject, the conclusions drawn were useful,

the methods used were appropriate for the subject and possible shortcomings were acknowledged.

Discussion and Recommendations

Evidence points to an increasing incidence of chronic illness and an ageing population. This means that in a resuscitation situation good recovery from aggressive cardiopulmonary intervention is less likely (although unrealistic expectations regarding survival rates still persist). Of even more significance is the possibility of patients in the terminal phase of their illness being kept alive against their wishes. The literature suggests that frequently patients do not realise they have reached the end stage of their illness or even they are dying because the discussions that lead to these conclusions are not easily initiated by medical staff. The result is a lost opportunity to plan for end-of-life care. Proposing a resuscitation status be documented for all inpatients would require these discussions to be held.

Often resuscitation consideration is only raised during an inpatient crisis and this requires a prompt decision. In hospital it is expected that not for resuscitation situations are identified then signed off by the patient or their nominated support person usually, although not always, a family member. It is unfortunate that one of the most important decisions a person will make has to be completed in hospital, in a hurry and often in a culturally inappropriate way as Maori decision-making is a considered consultative process that requires time. Obtaining a resuscitation status for all patients documented on admission would not avoid crisis decision making, as for many the act of admission itself, is a crisis. Shifting consideration of this question into the community and using the advanced directive to indicate resuscitation decisions has the potential to improve on this.

The other issue this process would raise is that of enduring power of attorney. Again this is not well understood or often completed, the consequence being that when enduring power of attorney input is required (again in a situation where the patient is unable to speak for himself or herself, or is deemed mentally incompetent), expensive and often lengthy court intervention is required to appoint one. If this decision is taken in advance the patient can appoint the person/family member of their choice to speak on their behalf at times when they cannot. Advice advocates a different spokesperson for personal issues and property matters. Enduring power of attorney progresses naturally to the advanced directive and both are a part of end-of-life care planning. If this occurs in the community, questions about mental competence could also be determined early as mental competence is a pre-requisite for the completion of both enduring power of attorney and the advanced directive.

Nurses have a constant presence both in community and hospital settings where they care for persons with chronic illness, many of whom are elderly. This involves building

therapeutic relationships with those reaching the end stage of their illness so that care provision and continuity can continue over time. Increasing nurses' responsibility especially in situations where resuscitation is not indicated falls within an expert nurse's scope of practice. An expert practitioner practises at an advanced level (Benner, 1984), understands their patient and gets to know their support persons. Expert nurses are strategically placed to initiate discussion about end-of-life decisions, something the evidence suggests is not well facilitated by medical staff. This does not mean that no medical input is needed; on the contrary, it is a situation that benefits from a strong doctor/nurse partnership.

A hospital requires resuscitation if there is no documentation for NRF. Lack of a form is no guarantee that this was the intention, leaving the staff present to best-guess what was intended at an unexpected collapse. Requiring a documented resuscitation status for all patients would serve to identify clearly if active resuscitation is indicated or not. However, coming into hospital with an advanced directive to guide would assist. It then would be a matter of confirming the validity of that decision in light of their current admission.

Advanced directive understanding and use is not currently widespread within New Zealand communities. Discussions pertaining to death do not happen easily, in the same way that talking about abortion and sex has caused unease in the past. Health care was a service provided by experts who undertook the best course of action on a patient's behalf. Being asked to plan for end of life care is not something that especially older persons feel they need be involved with. The baby boomer generation seem to have a different approach and for many, maintaining control of their life is important. Advance directives use may change in time as this group find and use it to document their expectation for the times they cannot articulate this for themselves.

Recommendations

- Health professionals learn from the current evidence which shows that the process to ascertain a resuscitation status for patients is not well done. Action is needed if improvement in the way that resuscitation/not for resuscitation decisions are taken, is to occur. Decisions are often hastily obtained and driven by the immediacy of the situation.
- Inpatient facility documents a resuscitation status for all patients to remove ambiguity, uncertainty and reduce indecision, should collapse occur. This would ensure that staff had a clearly documented course of action to follow avoiding any well intentioned best guessing. This has the potential to improve what currently exists but even better might be the wider use of an advanced directive.
- Shifting initiation of end of life discussion (resuscitation and enduring power of attorney) into the community would allow time to share information and discuss

appropriate options, both necessary to obtain informed consent. Decisions taken should be documented as an advanced directive. Advanced directive planning must be an activity undertaken while a person is mentally competent therefore it should occur in the community. The New Zealand Code of Patient Rights supports the use of advanced directives and it is a process that aligns well with the completion of an enduring power of attorney.

- Expert nurses take increased responsibility for discussion initiation and follow through activity, in not for resuscitation situations. Nurses are active in community and inpatient end-of-life care and could reasonably take a leadership role in this process. Although not for resuscitation deaths are the majority of deaths occurring in hospital, staff education and support do not match the focus on resuscitation. The Liverpool Care Pathway for palliative patients may herald the beginning of change of emphasis.
- Maori perspective of death and dying be investigated and considered to ensure that any policy or process is culturally appropriate.

Conclusion

Evidence suggests that rural hospitals probably share many of the same issues and problems related to resuscitation or not-for-resuscitation decisions as their urban counterparts. While documenting a resuscitation status on admission for all patients would identify those for whom resuscitation would not confer benefit, it does not resolve the difficulties, including cultural difficulties, inherent in pressured decision making. Shifting end of life considerations into the community and using the Code of Patient Rights endorsed advanced directive (a tool that already exists) offers an opportunity to improve on this reality. This would also meet health care providers' responsibilities under the Code of Patient Rights. The nature of rural health team relationships makes it possible for expert nurses to take a leadership role, especially in not for resuscitation situations. Health professionals need to become entrepreneurial in offering this process to patients who wish to remain autonomous for those times they are unable to speak for themselves.

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Adapting Rural Nursing Practice:

- Emergency Care
- Tourism

Emergency Health Provision and Maintaining Competency

CHRISTINE HORNER

This chapter focuses on issues associated with rural nursing and the provision of emergency care; in particular the maintenance of competency for the rural nurse providing emergency on call health care that includes managing medical and accident emergencies in the absence of a medical practitioner.

Introduction

This chapter focuses on the provision of emergency care provided by the rural nurse who is responsible for the care of patient(s) located remote from secondary hospital services. There is pressure for the nurse taking on extended roles beyond usual practice responsibilities to gain and maintain competency associated with emergency health services. This responsibility is compounded by the fact that rural emergencies are sporadic and infrequent and like all emergencies have diverse characteristics.

The Definition of Emergency (rural)

An emergency can be defined as a sudden potentially dangerous, unforeseen injury or illness that constitutes an immediate threat to a person's health or life and requires urgent attention (Medical Emergency, 2005). Emergency and trauma care 'is the care of people who require immediate and acute interventions following an accident, injury or medical condition' (Nursing Council of New Zealand, 2001a, p. 18). Describing what 'emergency' is may be difficult due to how it fits into everyday life. Assuredly life is loaded with potential and inevitable emergencies.

Rural and remote practice can span a wide spectrum of situations with possible actions and outcomes. It is acknowledged that timely access to trauma services and prompt treatment for all acute health needs is essential to achieve good health outcomes for all emergencies that occur out of a hospital (Ministry of Health, 1999). Delay in

receiving trauma care is one of the major factors contributing to risk of traumatic injury and death in rural environments (Ministry of Health).

Emergencies cover a diverse and wide spectrum of events and conditions; a feature common to all emergency practice. For the rural practitioner an emergency call could be to an abandoned crashed car or a fainted pregnant woman at the local supermarket or a child with a minor scalp wound injury sustained while skateboarding. In contrast the emergency call could be to a cardiac arrest or a crash site involving tourists with serious life threatening injuries or the farmer whose tractor has rolled on him/her. The difference for the rural practitioner is the 'rural phenomenon,' the sole practice, the professional and geographical isolation and the lack of regular experience.

Teamwork and support amongst rural emergency services are important for the rural practitioner when providing on call emergency care. There may or may not be an ambulance available to respond to emergencies. The ambulance availability depends on prior work requirements for the ambulance. There are emergencies the nurses respond to by themselves. The fire brigade and the police respond to road crashes and for the majority of emergencies the on call emergency nurse works as a team member with the St John ambulance personnel to help the injured victim(s). As with every emergency the protocol remains that the practitioner protects self, the victim, the scene, and the public at the same time and this is generally managed well by the rural emergency team.

The pre-hospital care of accidents and medical emergencies is an integral and vitally important part of rural health care. New Zealand's Ministry of Health's 'Roadside to bedside' strategy (1999) acknowledged the special needs of rural communities and identified the need for an organized trauma system. The 'Roadside to bedside' strategy which incorporates the Primary Response in Medical Emergencies (PRIME) will now be discussed in detail.

Primary Response in Medical Emergency (PRIME)

The concept of PRIME developed in 1995 based on the pre-hospital emergency care recommendation of the Royal Australasian College of Surgeons Trauma Committee. The Southern Regional Health Authority (SRHA), the governing division managing the lower South Island excluding the Nelson Marlborough health service, funded the creation and development of the PRIME scheme as Stage One of their regional Trauma Service Plan (Hore, Coster, & Bills, 2003) in the mid 1980s. According to Hore et al., prior to the 1993 health reforms, the management of medical emergencies in the pre-hospital setting was often dependent on finding the best local solutions through the knowledge and goodwill of concerned rural community members and local health professionals. Hore et al., continued saying that with competitive contracting and the ensuing undermining of cohesiveness and goodwill of the rural emergency team, inconsistencies in standards and practises between different regions were highlighted,

and apparent fragmentation of the resources resulted. Issues were identified such as the ambulance services' reluctance to acknowledge the GP roles citing the inconsistency of training, knowledge and skills (Hore et al.).

The PRIME scheme was developed for the purpose of consistency and coordinated response of trauma and medical emergencies in rural communities and includes 'primary assessment, essential resuscitation, followed by the rapid and safe delivery of patients to the appropriate place of definitive care' (Hore et al., 2003, p. 2). It has incorporated General Practitioners (GPs) and primary care nurses into the pre-hospital emergency team, who attend emergencies with standardised training, emergency equipment and supply kits. These practitioners work with the St John Ambulance Service to improve outcomes of rural emergencies (Ministry of Health, 2002). Accordingly the PRIME scheme was trialled in 1998 in the Southern Regional Health Authority region, and in 1999 it was extended to the rest of rural New Zealand.

PRIME was incorporated in the Ministry of Health's 'Roadside to bedside' strategy published in 1999 for integrating acute management systems, its aim being to ensure the best possible outcome for people who need to access emergency services, stating 'it is essential that people get the right care, at the right time, in the right place from the right person' (p. 4). While acknowledging the special needs and difficulties accessing health care for rural communities the strategy targeted effective front-line care, organising services around the people and their needs, increasing the use of technology to reduce the isolation and establishing provider alliances and networks which are aspects of the Government's rural health policy (Ministry of Health, 1999). The strategy was seeking an emergency service that was patient-focused, and provided a seamless service incorporating all hospitals and providers involved in emergency care without stifling local solutions or the introduction of innovative practice. The aim for best practice was achieved by nationally consistent and agreed protocols, guidelines and standards with all professionals provided with appropriate formative and ongoing clinical education and training (Ministry of Health).

PRIME Education

The ongoing clinical education and training associated to maintain PRIME provider status is proceeding (Hore et al., 2003), preparing rural doctors and nurses responding to emergency call-outs for their role in the pre-hospital emergency care. The training includes knowledge of the PRIME system and the process of pre-hospital care, an understanding of the clinical conditions likely to be encountered with the ability to perform effectively in an emergency situation using critical action checks followed by secondary survey and critical skills required in pre-hospital emergency care (Bills, 2005). The course content includes training for scene management and safety as well as specific skills to recognise and manage airway, breathing, circulation, damage to the

brain and spinal cord and environmental injuries in the pre-hospital emergency setting (Bills). Training comprises an initial five day course followed by two day refresher courses at two yearly intervals. A study undertaken by Hore et al., to ascertain the level of acceptance of the PRIME scheme by rural GPs in New Zealand showed that the GP PRIME providers were extremely satisfied with the quality of the training and equipment provided. However, rural nurses practising in isolated areas and who are on call for emergencies without on-site GP back up were not included as participants in the survey for unspecified reasons.

Therefore at this time there was limited evidence in New Zealand from nurses involved in PRIME. However, anecdotal evidence from personal communication with nurses, participating in on call emergency care as PRIME providers is positive. These nurses say the training has demystified the nurses' scope of practice at roadside emergencies - bench marking and unifying the procedural skills required by nurses, and augmenting the individual nurses' advancing practice. J. Peacock (personal communication, 18 June, 2005) believed the benefits of the PRIME training were twofold; one was the advanced clinical skills gained and second, the increased confidence she had to cope with road side accidents. Peacock voiced concern regarding competency maintenance of advanced clinical skills not often required in clinical practice, claiming the biennial revalidation was not adequate. As well, there continues to be debate and ongoing discussion to achieve national agreement on protocols, guidelines and standards. The rural nurses are utilising their individual services protocols, guidelines and standing orders along with the St John Ambulance Service PRIME protocols formulated for the St John advanced paramedic practice. This enables the nurse to provide on call emergency care including the administration of essential emergency medication treatment for life saving purposes when there is no other qualified health professional to do so.

Rural Nursing

The practice of rural nursing encompasses a wide range of individuals of all ages and a broad range of health matters and diseases, including health promotion and education, acute emergency care and disease management to end stage of life cares. This is correctly described in my view as the 'generalist rural nurse' and is illustrated in a set of distinctively rural competencies common to all rural nursing roles and practice. These competencies were formulated by researching rural nurses of New Zealand (Jones & Ross, 2002).

Internationally rural nurses have extended or expanded their practice into the domain considered within the traditional boundaries of other health professionals (Hegney, 1997). This practice fills the gaps of health service that would otherwise go unmet in rural communities. Hegney affirms that rural nurses often possess unlimited knowledge about nursing care, are multi-skilled and work in an extended practice role. This

extension of the nurses' role means extending the wide range of knowledge and skills necessary to provide competent and confident practice in rural areas. These areas include the domain of medicine, pharmacy, radiography and other allied health disciplines, areas of which vary depending of availability of support services in a rural area (Hegney). However, as rural nurses extend and advance their knowledge and skills to support the health needs of the community they are expanding their scope of practice, perhaps crossing, as Scharff (1998) describes, the 'nebulous, unseen, tangible lines of demarcation' (p. 23). Hegney affirms, saying 'if a rural nurse is required to have cannulation, defibrillation ... skills to provide nursing care to a community, then this is advanced rural nursing practice, it is not adopting another discipline's role' (p. 26).

In rural New Zealand this extended knowledge and clinical skill based practice has developed over a period of time to meet the needs of the community (Eckhoff, 2002; Jones & Ross, 2002, Litchfield, 2001). A rural nurse in 1998 was interviewed and explained that her practice required an extended role with no formal training, having to use previous experience from other jobs to manage the practice situations (O'Connor, 1998). The interviewer indicated that the interviewee at the time was completing a postgraduate clinically focused Masters education through an advanced rural primary nursing course which not only benefited advancing practice, it formalised the practitioners' practice (O'Connor). This interview aligns with Lee's (1998) description of postgraduate degree programmes in America claiming it prepared 'nurses as generalists with advanced knowledge for understanding and addressing rural health care needs' (p. 46).

Postgraduate education for rural nurses in New Zealand has developed since Ross's (1996) initial research identified the lack of any provision of support or post-registration education for rural nurses. In 1998 the designing and development of a clinically focused Masters education commenced with study scholarships attached from the then Health Funding Authority administered by the Clinical Training Agency¹ (Ross, 1998). Further to the early beginnings the clinical focused Masters level postgraduate education is now available from a number of education institutions throughout New Zealand. Availability and accessibility is facilitated by technological advancements with the development of distance learning programmes.

It has been well documented within the literature that a rural nurse encompassing a broad generalist role requires a vast array of nursing skills to manage the broad spectrum of health needs (Ross, 2002). Hegney (2000) concurs describing the rural nurses' role as 'jack of all trades' or 'multiskilled' (p. 209). The need for competency in rural health care is crucial for safe practice considering the rural distinctiveness of rural practice. Rural nurses frequently practice beyond their competence because there is no one else to do it (Siegloff, 1995). Long, Scharff & Weinert (1998) argue that rural nurses must be flexible, comfortable with uncertainty and challenged by diversity.

How rural nurses maintain skill and confident competency to manage sporadic emergency situations will now be considered in relation to rural nurses' practice.

Competency

The report of the Ministerial Taskforce on Nursing in 1998 was a review of nursing in New Zealand to realise the nursing profession's full potential with respect to health service delivery. In the report one obstacle identified was that there was no statutory requirement for ongoing competency after registration (the skill standard required for registration as a nurse), and this was considered a barrier for nurses' advancing practice (Ministry of Health, 1998). The report defined nursing competencies as '*Competencies or measures of competency* are descriptions of the skills and knowledge required to perform a given task effectively and to work safely in a particular area of practice' (p. 34). Since then there has been considerable progress and development regarding advanced practice particularly in primary health care where it has been identified that nurses can make a difference to the health of communities (Ministry of Health, 2003).

The Nursing Council of New Zealand (NCNZ) is the statutory authority governing the practice of New Zealand nurses, produced advanced nurse competencies in response to 'inconsistent interpretation of the level of education and competency required for advanced nursing practice' (Nursing Council of New Zealand, 2001b, p. 9).

Today the Health Practitioners Competence Assurance Act 2003 (HPCAA), introduced in September 2004, requires individual health practitioners to have a defined scope of practice, part of the requirements set down to ensure fit and competent practitioners and subsequent safety for the consumer of health services. Furthermore the Act requires the NCNZ, to ensure the continuing competence of registered nurses. The NCNZ has the responsibility for the implementation of the Act for nurses, and therefore has formulated scopes of practice (Nursing Council of New Zealand, 2004), conditions nurses are required to fulfil. The NCNZ has developed the Continuing Competence Framework (Nursing Council of New Zealand, 2005) requiring all registered nurses to comply with all three aspects of the Framework including meeting their designated scope of practice, completing a minimum of 60 days or 450 practice hours in the last 3 years and participating in 60 hours of professional development.

To gain insight for maintenance of competence for emergency situations additional emergency service providers other than nursing have been sought. The New Zealand Armed Forces recruit personnel with no prior medical experience and train the recruits to be Defence Force medics, in-house on a time and rank based career progression to Diploma of Military Medicine qualification (New Zealand Defence Force, 2003) followed up with 2 yearly revalidation examinations. Ongoing competency for the medical personnel, including doctors, nurses and Defence Force medics, is managed by gaining exposure to trauma situations working in specific New Zealand hospital emergency departments, ambulance crews and with the Veterinary School at Massey University in New Zealand. Personnel participate in regular practical field manoeuvres to prepare for operational deployment and undergo pre-deployment competency and certification processes ensuring preparedness for operational medical duties and specific

training exercises (New Zealand Defence Force).

The Defence Force medics are trained in emergency care and follow Defence Medical Treatment Protocols similar to standing orders according to Senior Medical Assistant Flight Sergeant D. McLuckie (personal communication, July 1, 2005). McLuckie adds the Defence Force medics follow treatment management plan flow charts signalling situations that need medical doctor intervention or alternatively proceed to autonomous management plans.

Similarly the New Zealand St John Ambulance Service operates under a National Certificate at the New Zealand Qualification Authority standards level. They have levels of qualification and have a two yearly revalidation system to maintain their current qualification level involving scenario and written examination and the completion of logged operational time (Gallagher, J. personal communication July 1, 2005). Similarly to the Defence Force the St John service follows nationally standardised protocols for management of emergency situations. It appears both services are committed to qualification levels backed up with frequent experiential practice to maintain competency. The rural St John service personnel are volunteers who are qualified to national standards. To maintain their competencies the station personnel aim to have weekly meetings with regular scenario practice to maintain their basic skill levels. A local paramedic ambulance officer and station manager believes the frequency and experience of real emergency situations influences their ability to progress to higher qualification levels understanding that they are held at qualification levels that correspond with frequency of skill occurrences in the area (Milligan, R. personal communication, 20 July, 2005). This supports the impression that event frequency influences and maintains their competency.

Evidence from an American study on retention of knowledge among paramedics who completed a paediatric resuscitation course found rapid decay of acquired knowledge (Su, Schmidt, Clay Mann & Zechnech, 2000) despite written and skills testing interventions within 12 months of attending the course. Paediatric emergencies were an infrequent component of the paramedics' practice similar to emergency situations for New Zealand rural nurses. This highlights the difficulty to maintain competency. The Su et al., study identifies a need for minimum (annual) revalidation of skills infrequently required for emergency situations. When considered in relation to infrequent use of skills, supporting anecdotal evidence suggests that rural nurses struggle to maintain confidence to confidently manage rural emergencies.

There is evidence to suggest that the individual nurses' understanding of competency maybe less clear. The concept of competency can be a nebulous term with no singular definable meaning (Pearson, Fitzgerald & Walsh, 2002). With the increasing emphasis of competency and safety, in relation to the HPCAA and NCNZ requirements, it is essential for nurses to identify clear terminology regarding what competency means.

There are two concepts leading to its perplexity, one of competency and one of competence. According to the Penguin Dictionary (Allen, 2004) competency or

competence means ‘having or done with adequate ability’ and ‘legally qualified to deal with a particular matter’ (p. 95). A clear analogy of clinical competency is ‘the ability to function adequately or to demonstrate sufficient knowledge and judgment skills while in the clinical setting’ (Myrick & Awrey, as cited in Kramer, 1996, p. 1). It is clear and understandable that nursing registration is regarded as the basis of competency. On the other hand it is the continuing competency and advancement of practice that is the perplexity. Nurses’ elusive view of competence appears to be more about the quality of the nurse and how one perceives one’s own ability, the development of skills, knowledge, appropriate attitudes and experience for successful performance. Judgment and adaptability are the key words for nurses’ competence, to recognize and react to situations which require modification of plans, to think and function beyond the confines of protocols and adapt to local situations. The study in Australia by Pearson et al. (2002) of nurses’ views regarding competency identified the theme of insight; ‘the individual’s ability to be accurately aware of her/his own expertise or limitations’ (p. 38).

Benner (2001) through her descriptive research of experiential learning in nursing practice identified five levels of competency in clinical nursing practice. From the novice beginner with initial registration and no experience of the situations through the levels of advanced beginner, competent, and proficient to the expert nurse with immense background experience and a deep understanding of the total situation. Benner focuses on the meaning of experience as being the key to competency, saying ‘refinement of preconceived notions and theory through encounters with many actual practical situations that add nuances or shades of differences to theory’ (p. 36). Benner’s research found the competent nurse has sufficient experience and has gained confidence to perform activities satisfactorily without supervision and assistance. It is apparent that competency is the attainment of a qualification and one practises as a novice until attaining experience to a level whereby the nurse is flexible, creative, and able to think critically and with the courage for autonomous practice incorporating the theory bound in the qualification with the related experiential practice. In rural practice it appears that it is the individual nurse’s confidence regarding their competency within the erratic rural context that is the issue, not their level of competency.

Likewise Jones and Ross (2002) developed the concept of competencies further with four specific categories of competencies which they called ‘distinctively rural’ competencies. These competencies covered four areas of practice specific to rural practice; isolation and distance, availability of back up, managing the professional and personal self in a smaller community, nurse/patient relationships, and independence and interdependence with other health professionals. These competencies identify the distinctiveness of rural practice and the detail of each section identifies the scope of rural practice enabling individual nurses to judge their own ability to meet the criteria.

Competency and Rural Nursing Practice

The infrequency of emergency situations can be identified as a source of apprehension for the rural nurse that he or she will not be able to manage an emergency situation. Jones and Ross (2000) identified rural nurses' confidence reservations which depended on the situation one was facing given the broad nature of rural practice. Despite rural nurses' practice at an advanced level, the nature of the generalist practice can mean the nurse will be confronted with a presentation of which they have little experience, negating the claim of proficient or expert practice temporarily (Benner, 2001; Jones & Ross, 2002). Eckhoff (2002), an experienced rural nurse, describes her self doubts while practising on call emergency care, 'will I manage, will I make the right decision, will someone die? I have never lost that feeling of anxiety' (p. 27). Likewise, during debriefing sessions it has been identified that nurses feel concerned about their ability to retain competence and confidence to manage the skills that may be required, particularly during emergency situations when they occur spasmodically and infrequently, limiting the nurses' clinical experience (Peacock, J. personal communication, 20 June, 2005). Scharff (1998) reassuringly points out that 'a little knowledge can be a lifesaving thing' and that the 'demarcation between danger and safety is the difference between having knowledge and using knowledge' (p. 21). Though as Kramer (1996) reminds us, the risks for the rural nurse are substantial, those of legal liability, personal embarrassment, lowered self-esteem and job satisfaction when placed in situations they are not prepared to manage. Nurses who have been residents in rural communities for many years are generally attributed significant expectations of successful outcomes from their community, reinforcing the ethical requirement for expertise in every situation. This highlights the moral obligation rural nurses bear because they are involved in communities professionally and personally. As Scharff says 'being a rural nurse means when a nurse saves a life, everyone in town recognizes that she or he was there, and when a nurse loses a life, everyone in town recognizes that she or he was there' (p. 21).

Maintaining Competency – Recommendations

Maintenance of competency for emergencies is an issue for the rural nurse. Issues of concern can be aligned to the diverse nature and unpredictable practice, requiring the rural nurse to be prepared for a whole spectrum of situations including emergencies. Rural nurses providing care in rural communities have modified their practice to meet the needs of the community, available health personnel and the changes to rural industry. To be effective the nurses have taken on the moral obligations that are inherent in practising in rural communities. The structured PRIME training was established in rural New Zealand, training and equipping rural health practitioners including nurses for rural emergency care, with an aim to improve outcomes of rural emergencies and patient care. PRIME has impacted significantly with respect to appropriate training. Regular

revalidation has been highlighted as being an important component in remaining competent with skills infrequently used. Rural nurses are indicating that the present biennial PRIME revalidation is inadequate. As shown by other health professions (St John Ambulance Service and the Defence Force) regular experience in practice is an important component of revalidating competency. As a result of these findings my first recommendation is for the increase of PRIME revalidation from biennial to annual. This will enable access to appropriate practice situations and connect likeminded emergency care practitioners.

Postgraduate education is a requirement of NCNZ for advanced nursing practice. Equally, continuing education is strongly represented in the requirements of NCNZ competencies and the HPCAA. Advanced practice is an essential component of rural health care because of its distinctive nature including sole practice. Having insight of one's own expertise and limitations is essential for advanced practice particularly for rural nurses practising in professional isolation. The isolation of rural practice is a barrier for ongoing education for rural nurses. Therefore my second recommendation is for continuing development of education pathways such as Jones and Ross's (2002) career development framework available for rural nurses and backed up with financial support. I would suggest collaboration between the employer and the rural nurse contractually recognising the individual nurses' requirements to avoid resource wastage when the advanced practitioner is required to revalidate unnecessarily with familiar skills and knowledge. This can be facilitated by such practice as participating in professional supervision and active involvement in reflection and critiquing the practice of self and others.

This brings forward the essence of rural nurses' predicament when addressing maintenance of competency; access to education, access to other health professionals and access to information when it is needed. Today's Information Technology (IT) advancements and availability to rural areas are providing some solutions. I recommend fast tracking development of the use of these advancements into rural practice, for example the provision of new technology to access health professional advice using video and audio appliances such as a stethoscope/telephone attachment allowing a patient's chest sounds to be identified at a negotiated backup general hospital from a distance. With facilitation IT can provide an extensive virtual community between professionals at international, national and local levels. Opportunities such as participation in professional supervision, peer networking, case reviews and even debriefing activities can take place using audio and, more effectively, video conferencing (Ross, Stewart & Baldwin, 2007a, 2007b), fulfilling many of the requirements necessary for the maintenance of advanced practice competency as set down by the Nursing Council of New Zealand (2001).

Conclusion

The rural environment is unique regarding risks to health and the need for good access to emergency care for residents (Ministry of Health, 2001b). Focusing on maintaining competency and confidence for the infrequent occurring rural emergency has highlighted competency as a requisite for rural nursing practice, with the present legislation aiming to provide protection for the public requiring all registered health providers including nurses to ensure continuing competence. Rural nurses are advancing their practice to provide an integral and comprehensive health service. Rural nurses require increased recognition of the uniqueness of rurality and the impact access to services has to managing ongoing maintenance of competency. Rural nurses are charged with providing safe effective rural health care. For future provision of health care services the evidence is convincing that adjustments are required regarding access to and provision of education to enable ongoing competency maintenance for rural nurses.

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Footnote

1. The Clinical Training Agency (CTA), a unit within the Ministry of Health, was established in 1995 as an independent organisation to purchase post entry clinical training for health professional in New Zealand to facilitate the continued development of the workforce (Ministry of Health, 2001a).
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The Impact of Tourism on a Rural Nursing Practice

ANNE FITZWATER

This chapter focuses on the transient visitor, which refers both to the tourist and to the seasonal worker, as evidenced through tourism. In a rural community where tourism has now become a major industry, rural nurses face new and unique challenges to their practice.

Introduction

The unique nature of each rural nurse's practice is shaped by the communities in which they live and work (Bushy, 1998; MacLeod, Kulig, Stewart & Pitablo, 2004; Hegney, 1996; Ross & Jones, 2000). Factors common to rural nursing practice worldwide include geographical and professional isolation, and living and working in a small community (Bushy, 1998, 2000; Ross 1999). Within New Zealand a recent factor which has an impact on the practice of rural nursing has been identified - that of the transient visitor.

Tourism

Tourist health forms a significant part of the rural nurse's practice. Tourism is now New Zealand's largest single export industry; it is predicted that by 2010, there will be over 3 million international visitors a year (Tourism NZ, 2005). A boom industry such as this, imposing onto the culture of a remote rural community, is likely to result in changes to many aspects of the community culture.

Tourism influences the economic, cultural, political and resource development of small rural communities (Dogan, 1989; Duffield & Long, 1981; Milman & Pizam, 1988; D. Snepenger, Reiman, Johnson & M. Snepenger, 1998). Tourism brings an influx of people, both the tourists themselves, and the seasonal workers who service the industry. Businesses providing accommodation, food, and tourism activities change and increase to cater to the tourists needs (D. Snepenger, et al.).

Tourism contributes to socio-cultural change within the community including changes in values and beliefs, relationships, lifestyles, community traditions and organisations (Milman & Pizam, 1988). Essential services that have in the past catered adequately for a small population can become stretched. An example is the provision of health services in rural areas that have evolved traditionally to meet the health needs of a small rural population. Providing health care for the tourist may exceed the resources of the local service, while some tourists' expectations of the health care offered may exceed the service provision.

Tourists seek health care across the full spectrum of health problems. A comprehensive literature review on the health of international travellers by Rogers and Reilly (2000) has identified that 36% to 54% of travellers experience physical health problems. Routinely, health problems experienced by tourists include diarrhoea, insomnia, respiratory and skin problems (Thompson et al., 2003). Research into the health problems in tourists visiting Jamaica found that reported illnesses were gastrointestinal (11.6%), cardiovascular (6.3%), drug abuse (5.2%), respiratory (4.3%) and 'other' (19.1%). Travellers' diarrhoea was the most common reported illness in a study of Canadian travellers (Bryant, Csokonay, M. Love & E. Love, 1991). Other health problems reported were fever, skin rashes and a category of other symptoms which included problems related to accidents. Only 63% of travellers who reported having diarrhoea had sought treatment, indicating that many travellers self-treated their complaints. Gastro-intestinal disorders were also identified as the most common complaint in travellers returning to Scotland from abroad (Cossar et al., 1990).

Rogers and Reilly (2000) report that 6% to 18% of tourists report accidents and injuries. It is difficult to find reports of tourist deaths in the literature. One study reporting on pre-hospital deaths caused by trauma on a tourist island in Greece (Gatsoulis, Tzafestas, & Damaskinos, 2000) found that road traffic accidents caused the majority of deaths. Thompson et al. (2003) also reported that the most common health complaint of tourists was accidental injury.

A survey undertaken to assess the safety of adventure tourism throughout New Zealand, indicated the incidence of serious client injury was very low (Bentley, Page, & Laird 2000). Highest incidence of injury was found for activities that involved a risk of falling, for example cycle tours, horse riding and white-water rafting. This corresponds to results from the practice studied, where slips, trips and falls on level ground were commonly reported. A significant number of accidents and injuries were found to be related to the client, particularly from client failure to attend to and follow instructions.

It is claimed by Thompson et al. (2003) that the growth in international tourism is due to people aged 50 years and over, many of whom have taken early retirement. Individuals in the older age group had a higher occurrence of respiratory, cardiovascular problems and death, whereas the younger age group had more incidents of drug abuse and gastrointestinal problems.

The Impact of the Tourism Industry on Rural Nursing Practice

The impact of the tourism industry on rural nursing practice includes the increasing volume of work that challenges the viability of the service, the advanced scope of nursing practice required to meet the health needs of tourists and challenges to personal and professional safety. Francis (2005), reports that personal safety and security have become issues for rural health professionals. Tourism brings people who are strangers to the rural community and culture. Safety, based on the concept of knowing everyone, no longer applies. It is suggested that the primary care provider seek assistance from Ambulance, Police and Fire Brigade for security (Ministry of Health, 2002a).

Rural nurses tend to know their local community population and they use this knowledge to enhance the care of their patients. However, when providing health care to tourists, the rural nurse encounters complete strangers and has no knowledge of their previous health problems, medications or allergies. The nurse needs to have an approachable manner and effective communication skills in order to develop a trusting relationship during the consultation. This will assist in accessing sufficient personal and health background information from the patient to enable safe and appropriate treatment to be given. This can be further complicated if there is a language difference. For many of these people English is a second language and some may have a very limited understanding and vocabulary in English.

Seasonal Workers

Although tourists and their health care needs are a significant factor in nursing practice the health care needs of the people who service the tourist industry make an equally significant impact on this nursing practice. The young age of migrant and seasonal workers, and the issues associated with this, creates another facet of rural nursing in a tourist area.

Analysis of my experience in 2004 demonstrates that there were approximately 300 permanent residents plus 130 temporary/seasonal residents living in the tourist town. Of these 130 temporary residents, 105 (81%) are under the age of 30 years. This imposes a significant number of young people on a population that already had a younger average age than New Zealand as a whole. These younger people bring a youth culture into the rural community.

Seasonal Workers' Health Issues

Health care is sought for accidental injuries that are usually the result of excess alcohol consumption, and for sexual and women's health issues. Mental health problems and suicide attempts have accounted for a very small number of presentations, in contrast to

New Zealand documents such as the Youth Health Status Report (Ministry of Health, 2002b), Youth Health: A Guide to Action (Ministry of Health, 2002c) and Sexual and Reproductive Health (Ministry of Health, 2003). This may be because young transient workers usually stay less than six months.

More commonly these young people seek the nurse's help for respiratory and urinary infections. It is my experience that young women frequently present with urinary tract infections which are normally assessed, diagnosed and treated by the nurse, with medication being dispensed under standing orders.

The seasonal workers eat on the job, have long and disruptive hours of work, reduced sleep, and a tendency to party on their day off rather than participate in exercise, all factors that tend to contribute to developing upper respiratory tract infections. The prevalence of cigarette smoking is another contributing factor. There appears to be a culture of 'binge' drinking among young seasonal workers. Injuries that have occurred as a result of intoxication are one of the most common reasons that seasonal workers seek health care from the nurse. Nursing involvement is initially attending to the injuries that result from alcohol and drug indulgence and education on safe use of alcohol is opportunistic.

The challenge for the nurse is to use the expertise available at a distance to promote educational opportunities on alcohol and drug use and abuse, otherwise the nurse attends to these educational requirements. The challenge for all primary care health professionals in meeting the needs of a large group of young people is to minimise the barriers to accessing health care identified by young people and to make health care accessible and acceptable to them. For a nurse working in isolation in a small community, the challenges are personal, professional and political.

As the demand for health services increases, the nurse has less time for community population health work. Health promotion initiatives that involve considerable time in planning and execution are less likely to be undertaken. This has implications for the future of this diverse nursing role. For example it is the tourism industry that brings diversity into the community and to the nursing practice. 'Community demographics make a great deal of difference in what the rural nurses encounter in their practice, and influence the development of their skill set and knowledge'. MacLeod, et al., 2004, p viii). Demographic changes in a small community can disrupt the informal networks, and create a need for new services to be delivered locally (Bushy, 1998).

Rural Nursing and Advanced Practice

The nature of rural nursing, made more unpredictable by the influence of tourism, requires a nurse to be adaptable and flexible. Not only is a broad and generalist knowledge necessary, but also advanced skills in assessment, diagnosis and treatment of patients are required. Research skills are needed to discover the unique health needs of the tourist

community and critical reflection is vital to identify issues and gaps in practice knowledge.

Rural nursing practice can also be identified as advanced. In this advanced role, nurses have intersected with the boundaries of other health professionals such as medical practitioners, midwives, pharmacists, pre-hospital emergency care providers. Scharff (1998) writes about rural hospital nurses making decisions and initiating treatments that are normally the prerogative of doctors. Hegney (1997) argues that this is advanced rural nursing practice rather than nurses practising medicine. However, Hegney found that this role was identified as stressful for many nurses, due to lack of appropriate education and training.

Education

The challenge for education is to equip future rural nurses with the technical and scientific knowledge required for the diversity and complexity of rural practice as well as the skills of enquiry, reflection, autonomy and collaboration. It is clear that retention of skills, up-dating knowledge, and acquisition of new skills, orientation and education are essential components of providing nursing and health care to a community where tourism is the major industry. The geographical isolation of the area makes accessing postgraduate education a challenge, at considerable financial and personal cost. The impact of tourism on nursing in a tourist region illustrates the multi-faceted and complex nature of practice that is the reality for rural nurses.

Conclusion

Nurses are practising as primary care health providers in remote and isolated settings. In a rural community where tourism has now become a major industry, nursing faces new and unique challenges. Yet the number of rural nurses in New Zealand is still very small compared to the national population of nurses and so the voice of the rural/remote nurse tends to be lost within the larger group. It is hoped that this chapter will in some small way contribute to the overall knowledge and awareness of the unique and diverse practice that is rural nursing in a tourist rural New Zealand context.

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Selected Aspects of Rural Nursing Clinical Practice:

- Older Person – Perception of Transitional Care
- Diabetes Prevention: Nutritional Environment for Māori
- Experiences of Rural Women who have cared for their terminally ill partners
- Rural Women & Maternity Service

Older Patient Perceptions of Transitional Care

RACHEL HALE

Introduction

Rehabilitation for the older person is becoming increasingly important to governments, service providers and policy makers (Ministry of Health, 2001). In New Zealand the rapidly growing demographic population of older people is placing often unsustainable fiscal pressures on the current health care systems, especially acute, tertiary, and secondary in-patient systems (Ministry of Health, 2002a, Ministry of Health, 2002b).

Transitional care (or intermediate care as it is commonly known in the United Kingdom) is reported by international research to supply a viable alternative to secondary hospital inpatient care (Department of Health, 2002). Transitional care occupies centre stage because it fulfils the crucial function of supporting people transitioning between acute health care (inpatient) and primary healthcare (home). People who may otherwise face prolonged stays or inappropriate admission to acute in-patient or long term residential facilities should be admitted to transitional care (Andrews, Manthorpe, & Watson, 2004). Transitional care has an advantage in rural communities as it empowers those communities to provide the appropriate rehabilitative care within these small-localised environments, by utilising services already available to their maximum. The patient perception or satisfaction of transitional care is scarce or unknown especially in rural New Zealand (Nygren, Iwarsson, Isacson, & Dehlin, 2001). Patient perception is important in ensuring that patients can assess overall quality of their care and at the same time providing a discriminating assessment of the individual components that identify and comprise the global values of satisfaction (Seibert et al., 1999).

This research highlighted several themes as they related to transitional care within the Waikato District Health Board (WDHB) health care environment. These themes identify transitional care and its applicability to the rural environment in the Waikato (Ministry of Health, 2004), patient and caregiver satisfaction with this model of care (Minnick, Young, & Roberts, 2000) and identify a model of care that matches services already available in an innovative way (Ministry of Health, 2006; Waikato District Health Board, 2006; Waikato District Health Board Older Persons Steering Group, 2002).

The WDHB is responsible for planning, funding, providing and monitoring health and disability services for the Waikato population of approximately 330,000 (Waikato District Health Board, 2006). This population is divided approximately into two thirds rural and one third urban populations (Statistics New Zealand, 2003; Waikato District Health Board, 2006).

AREA BY DISTRICT	POPULATION
Thames-Coromandel	73,900
Waikato	41,000
Hamilton	117,100
South Waikato	94,400
Total	326,400

The urban population is centred on Hamilton and the rural population is spread from Taumaranui and Mokai in the south to Pokeno and the Coromandel peninsula in the north, Raglan in the west to Matamata and Tokoroa in the east. Geographically this area is huge and the rural centres are small and isolated.

In the next the 20 years, Waikato All Ethnicity 65+ age group is expected to increase by approximately 34,730 persons. This represents an 83.3% change from the current (2005) population level for this group. In 2005 WDHB reported 475,000 patient bed days utilised by the over 55-year population in all health events. This figure includes the 65+ European and 55+ non-European groups. All patients that require inpatient rehabilitation enter the health care system via the tertiary hospital based in Hamilton. Once admitted to Hamilton's hospital facility they usually stay within this facility until discharged home and this provides an untenable burden to both patients and family. This number of inpatient bed days is a financial drain on health care services and in-patient services, in a tertiary setting cannot continue to sustain this pressure. Transitional care provides for the patient to return to their own communities to receive their rehabilitation from local health care providers.

The Rural Perspective

The WDHB has one major tertiary hospital based in Hamilton and 5 small community hospitals called 'T' hospitals (Taumaranui, Te Kuiti, Thames, Te Awamutu [maternity and geriatric] and Morrinsville [maternity and geriatric]). These hospitals cater for uncomplicated and basic health care but most of the WDHB small rural communities have non-government health care providers already established in providing support for the over 65 population. These health care providers/facilities provide long and short-term residential care and home care for their communities but more importantly have the trained health professionals to assist and formulate rehabilitation for the people of

their rural communities. The WDHB has implemented transitional care within these small communities to provide dedicated specific targeted rehabilitative support for people from their own community within their own community. This allows the person to receive the care and support required both professionally and socially from family and friends. This enhances the recovery and rehabilitation outcome by improving satisfaction, and provides a reduction in the burden on secondary and tertiary health care services as well as enabling small communities to assist their own populations to provide the support and care they require.

Patient and Caregiver Satisfaction

Patient satisfaction is widely recognised as a predictor of quality patient health care. Satisfaction is a by-product of expectation and experience by the patient of the services they receive. When older people are asked about satisfaction with care, they implicitly review their experiences and compare them to their expectations. When experience exceeds expectation then satisfaction is expressed (Cassel, Besdine, & Siegal, 1999; Edwards, Courtney, & Spencer, 2003; Kane, 2001; Wolosin, 2005) Interpretive methodology used in this research inferred that there is no barrier to achieving a complete view of the phenomena being studied; it offers a strong view of the participant's reality offering a multi-faceted individual perspective (Meetoo & Temple, 2003; Thomas, 2004).

When interviewed, the participants and caregivers were very vocal about their perception of satisfaction with transitional care. They identified four major themes associated with satisfaction relating to this specific type of care. The themes identified were interpersonal relationships, environment, equipment, and global interpretation. The most important factor that impacted on satisfaction for the older person and families was the interaction with the staff of the facilities that they were admitted to or who provided the rehabilitative care. All participants had a positive view of staff interaction. Comments like 'staff were amazing' or 'how nice the staff are' were frequent in every interview. Specific carer characteristics influence the service user's satisfaction especially the relationship between positive attitude to help and expected care (Chesterman, Bauld, & Judge, 2000).

When admitted to any health care facility for health support the general population is generally unaware that there may be more than one level of skilled attendant care available. These skill levels range from the advanced Nurse Practitioner (expert registered nurse) to the aide or caregiver who has a minimal level skill base. A problem arose in this research as all care staff were identified as nurses with no differentiation made as to the variance in skill base between health care assistants (aides), registered nurses and second level nurses (nurse assistants) (Nursing Council of New Zealand, 2006). Satisfaction with skill varied between older people, based on the participant's

perception of what was expected from this model of care and not the actual skill level of the staff involved.

Rehabilitation is a complex but critical intervention for older people. Restored functional capacity and regained independence are important to the older person and this improved functional ability impacts on their perception as it removes the older person from the situation and distances them from this negative outlook (Nygren et al., 2001). This removal or discharge from the facility reinforces the belief that the older person is significantly more able than those whose functional ability requires permanent placement in a residential facility. The older the person, the less the expectation of recovery of total functional ability after acute illness, therefore the increase in satisfaction in achieving functional or near functional independence (Bowling, 1998; Bowling & Grundy, 1997; Edwards et al., 2003). This statement is supported by this research, as the older people who achieved the transition from hospital to home were all very satisfied with this model of care.

Satisfaction with transitional care by both the participant and the caregivers was definite and only small adjustments to procedural matters need to be undertaken. Both participants and caregivers stated that being able to return to their own communities enhanced the outcomes for them and enabled a support structure of family and friends to continue to impact positively on their daily lives, thus ensuring that the negative health event was minimized and not maximized by being separated by huge distances.

Innovative Services

Transitional care is based on an active rehabilitation philosophy. All older people who were involved in this model of care had one main goal in mind: to return home to live as independently as possible for as long as possible. The individual processes of care which the older people described, appeared to be based within the rehabilitation philosophy, designed to allow the older person to practise self care tasks in a supportive environment before returning home (Elavsky et al., 2005).

Based on the World Health Organisation's (WHO) philosophy, rehabilitation is an individualised treatment process, characterised by active, positive and planned interventions aimed at reducing the effects of functional consequences of disease or injury that allows older people, working at the extremes of their physical and functional capabilities, to achieve independence and social reintegration (Nygren et al., 2001; World Health Organisation, 1980; Young, Brown, Forster, & Clare, 1999). By emphasising functional ability and independence, this enables the older person to return home, reducing the burden on expensive health services by preventing or delaying admission to residential care (Young et al.).

Transitional care is an innovative health care service supporting older people while they rehabilitate within their own communities, with the ultimate goal of returning them

home with minimal support. Older people should not be seen as a homogeneous group, especially within the rural environment (Owens & Batchelor, 1996). The need to provide services where they are most effective is important to any health care strategy. Teaming this with a method to identify a quality service that has measurable outcomes ensures an innovative health care solution. Older person satisfaction must be specific to the industry or sub-specialty within the health field (Seibert et al., 1999). The need to identify satisfaction, underscored by the rapid growth and changes to health care models, is a requirement to analyse any new service as a quality service and to provide workable models to support stretched services.

Conclusion

As the age demographics of New Zealand change towards 2050 the burden on the health system intensifies with the increase in the population of older people. Waikato is an area that is well in advance of the current New Zealand demographic profile, so health care models that are acceptable to funders, providers, older people and their families/whanau are essential. Moving away from traditional hospital based models has been identified as a cost effective solution (Department of Health, 2002; Naylor, 2004). The Waikato District Health Board has implemented transitional care, a rehabilitative model based in the smaller, predominantly rural communities to enable the older person to actively work towards recovery of functional ability within their own environment. Review of the people involved with this model of care has identified that it is applicable to both the rural situation and the group of people whose health outcome this care model is dedicated to improving. An investigation of satisfaction levels of the participants has provided a basis for optimism, because their satisfaction identifies this as a quality service that is an appropriate model for the older population of the Waikato.

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Diabetes Prevention: What is the nutritional environment for Maori in the Southern Lakes District (North Island)?

ADELE FERGUSON

This chapter continues this section on aspects of rural nursing clinical practice.

Introduction

This chapter focuses on an international epidemic, type 2 diabetes, as it relates to one rural Maori community within New Zealand. First, it provides an in-depth discussion relating to diabetes; second, it discusses the process and findings of a research project to ‘map out’ the food environment within the Southern Lakes District (research context).

The impact of diabetes

An epidemic of type 2 diabetes is occurring in New Zealand, as in other developed countries, driven mainly by the increasing prevalence of obesity (Ministry of Health, 2002a). Reducing the incidence and impact of diabetes is one of the thirteen population health objectives and one of three disease priority areas identified in the 2000 New Zealand Health Strategy (Ministry of Health, 2000). By reviewing existing literature, the aim is to determine how the environment impacts on diabetes.

The burden of Type 2 diabetes in New Zealand

The prevalence of type 2 diabetes varies among populations due to differences in genetic susceptibility and social risk factors such as change in diet, physical inactivity, obesity and possibly factors relating to intrauterine development (Rizvi, 2004; Zimmet, McCarty, & de-Courten, 1997). Bramley, Herbert, Jackson, and Chassin (2004) compared the indigenous disparities in disease-specific mortality in New Zealand, Australia, Canada, and the United States, finding diabetes to be a powerful determinant of health outcome and that diabetes-related mortality was high. The prevalence of obesity is increasing in indigenous populations, predicting a rise in diabetes-related mortality in the future.

While there are no recent data available for New Zealand, it is estimated that the overall prevalence of diagnosed diabetes is 3-4% for Pakeha, compared to over 8% for Maori (Durie, 2003). Previously Simmons, Gatland, and Fleming (1994) found that the prevalence of known diabetes in South Auckland was 6.9% among Maori compared with 2.8% among Europeans. The New Zealand Multiracial Workforce Survey identified the prevalence of known diabetes as 5.3% among Maori compared with 1.1% among Europeans (Scragg, Baker, Metcalf & Dryson, 1991).

In New Zealand, information on the prevalence of impaired glucose tolerance (IGT) and impaired fasting glycaemia (IFG) was limited until recently (Scragg et al., 1991; Simmons, et al., 1994; Simmons, Thompson, & Volklander, 2001). Tipene-Leach et al. (2004) found that not only is diabetes a common disorder among Maori, but that insulin resistance is even more prevalent. Age-specific insulin resistance rates were high among younger age groups with the highest rate (44.3%) occurring at 30-39 years. People identifying as insulin-resistant reported higher rates of gout and family history of diabetes, and had a higher waist circumference, blood pressure, and lower high-density lipoprotein (HDL) cholesterol than those without a glucose metabolism disorder. The low response rate may have caused selection bias, but given that responders are usually healthier than non-responders, the survey may have under-estimated the prevalence of insulin resistance (Scragg, 2004).

Statistics and observations such as those made by Tipene-Leach et al. (2004) showed a comparable proportion of adult Maori living in a rural environment have type 2 diabetes, IGT, or insulin resistance, endorsing Mann, McAuley and Taylor's suggestion (2004) that all New Zealanders should be screened for type 2 diabetes and pre-diabetic states (males by age 45 and females by age 55) with high-risk groups such as Maori screened earlier. With current health care costs relating to type 2 diabetes expected to rise to more than NZ \$1,000 million annually by 2021, the need to prevent diabetes is essential (Mann, et al., 2004).

Prevention of type 2 diabetes: reality or dream

The impact of diabetes is substantially preventable (Ministry of Health, 2003b). Obesity and weight gain are major risk factors for type 2 diabetes, and on average, every one-kg increase in weight is associated with a 9% relative increase in the prevalence of diabetes (Mokdad, Ford & Bowman, 2000). Recent trials (Knowler et al., 2002; Pan et al., 1997; Tuomilehto et al., 2001) have shown that type 2 diabetes may be prevented by weight control, balanced diet, and sufficient physical activity.

Although in the study by Pan et al. (1997), diet and/or exercise interventions led to significant decreases in the incidence of diabetes over a six-year period, generalising these results is uncertain as social, economic, and cultural forces that influence diet and exercise can vary from one society to another (Tataranni & Bogardus, 2001). This is of concern in the United States where diabetes is especially frequent in certain racial and ethnic groups, including American Indians, Hispanics, African Americans, Asians, and

in New Zealand, Maori and Pacific Islanders (Tuomilehto et al., 2001; Zimmet et al., 1997).

The Diabetes Prevention Programme Research Group conducted a large randomised control trial to determine if a lifestyle intervention or treatment with metformin, a biguanide antihyperglycemic agent, affected the onset of diabetes. The results (Knowler et al., 2002) support the hypothesis that type 2 diabetes can be prevented or delayed in persons at high risk of the disease. The incidence of diabetes was reduced by 58% with lifestyle intervention and 31% with metformin, as compared with placebo. It also supports the applicability of this finding to the ethnically and culturally diverse populations of the United States (Knowler et al., 2002).

The Finnish Diabetes Prevention Strategy (Tuomilehto et al., 2001) in a similar diabetes prevention study with a smaller group of high-risk subjects found that diabetes does not develop in any high-risk participant who managed to achieve moderate lifestyle goals (reduction in weight and dietary total and saturated fats, and increased dietary unsaturated fats and fibre and physical activity).

Drury and Gatling (2005) emphasised that the Diabetes Prevention Programme (Knowler et al., 2002; Tuomilehto et al., 2001), and the Finnish Diabetes Prevention Strategy (Tuomilehto et al.) are short-term studies, all performed over three to five years with people with IGT, required considerable resources and have so far only shown delay rather than permanent prevention. This is relevant in today's climate with limited funding available for health. Although the concept of prevention is to stop the development of a disease before it occurs, it has now come to include measures aimed at preventing or slowing down the progression of an established disease (Hjelm, Mufunda, Nambozi & Kemp, 2003).

A detailed analysis of the Diabetes Prevention Programme (Knowler et al., 2002) data to estimate lifetime cost-effectiveness of the interventions was performed by Herman et al. (2005) whose findings suggest that compared with the control group, lifestyle intervention delayed the development of type 2 diabetes by 11 years and reduced the absolute incidence of diabetes by 22% in high-risk participants. The corresponding estimates for metformin treatment were three years and 9%, respectively. Herman et al.'s analysis of the cost of lifestyle intervention, is the first study to show that diabetes prevention is cost-effective. However, this analysis is limited in that the adherences to interventions were not considered. What is needed now is cost-effectiveness data from other diabetes prevention studies to compare the results with these from the Diabetes Prevention Programme (Tuomilehto, 2005).

The diabetes prevention discourse in New Zealand is limited, The implementation of a successful lifestyle intervention programme for New Zealand Maori to reduce the risk of type 2 diabetes and cardiovascular disease by McAuley et al. (2003) and Murphy et al. (2003) are the first studies of their kind to address both issues.

While it has been shown that lifestyle modification reduces the risk of progression from IGT to type 2 diabetes through a healthy diet, resulting in reduced energy intake

and increased energy expenditure (Herman et al., 2005; Hjelm et al., 2003; Knowler et al., 2002; McAuley et al., 2003; Tuomilehto et al., 2001), there is growing evidence that modifications in the physical environment and in social policies will be required to fully accomplish this goal (Hill, Sallis & Peters, 2004; Kumanyika, 2001).

Obesogenic environments and diabetes prevention

Although an individual's risk of developing diabetes is influenced by a genetic predisposition, the disease development is closely linked to lifestyle related factors (King, Aubert & Herman, 1998; Puska, 2002). The results from recent diabetes prevention studies (Knowler et al., 2002; Pan et al., 1997; Tuomilehto et al., 2001) reinforce this, especially with regard to nutrition and physical inactivity, factors that have their roots in social and physical environments.

Educational, behavioural, and pharmacological approaches to obesity have met with limited success to date. Swinburn, Egger & Raza (1999) recognised that these approaches are necessary, but are not sufficient to reduce obesity because people struggle with environments that increasingly encourage a high-energy intake and sedentary lifestyle. The challenge is to create supportive environments for making the healthy choices, which are promoted by education messages. Durie (2003) supported this by explaining that for more than a century food and food products have focused on the safety of food rather than standards of nutrition.

Of many factors involved in the obesity epidemic, a key influence is probably the 'obesogenic' environment, which facilitates both the overeating of energy dense food and physical inactivity (Maher, Wilson, & Signal, 2005). The marketing of high fat-, salt-, sugar- and energy dense foods of poor nutritional value is now seen as a cause of disease (Quigley & Watts, 2005).

Maher et al. (2005) after conducting a pilot study measuring the extent and content of outdoor food advertising and food availability from outlets in the vicinity of secondary schools, suggest the reason that food outlets were significantly closer to secondary schools may be because their location provides extra sales.

The extensive marketing of energy-dense foods and fast food outlets is a probable cause of obesity according to the World Health Organisation (2003). However, Simmons et al.'s (2005) study in rural Victoria, Australia found the obesity epidemic related to consumption of, or access to, takeaway foods was not significant. The prevalence of obesity in the six rural communities was found to be higher than the general Australian population. Physical activity was found to be the major identifiable risk factor for the high prevalence of obesity, suggesting that the implementation of strategies which increase physical activity is urgently required (Simmons et al.).

A risk factor in the obesogenic environment is the amount and intake of saturated fat in food. Replacement of saturated fat with monounsaturated fat reduces insulin sensitivity (Mann, 2002) and one way to facilitate reducing saturated fat is through food pricing, a determinant of food purchasing (French, 2003).

Wilson and Mansoor's (2005) study in Wellington, New Zealand, to determine if pricing influenced saturated fat consumption, suggests that current pricing favours consumption of higher saturated fat content food. However, a more detailed and comprehensive analysis of total energy, protein content and monounsaturated may be required. Wilson and Mansoor consider this pricing gradient as providing another explanation for inequalities in health in New Zealand. Nevertheless, caution is needed in drawing conclusion from these results due to the small sample size.

Drewnowski (2004) also found that high-energy dense food, in particular foods high in sugar and or fat have become relatively less expensive, both in terms of money and time (preparation). Thus it is not surprising that people are consuming greater quantities of food, contributing to increasing obesity rates and therefore, IGT and type 2 diabetes (Finkelstein, French, Variyam & Haines, 2004). Swinburn (2002) believed that until the obesogenic environments promoting obesity are addressed, individual-based interventions would remain modest in effectiveness.

The literature review shows that there is major deficiency in research into the 'obesogenic' environment. Without a supportive environment, diabetes prevention programmes are likely to be restricted to mass education strategies (Egger & Swinburn, 1997; Swinburn, 2002).

Research Methodology

To create supportive environments, healthy food choices need to be made affordable, available, and accessible. A descriptive/survey research method was used to map the food environment in the Southern Lakes District of the North Island. The aim of this non-experimental design/ecological scan was to explore relationships or differences between variables; milk, bread, bottled water, sugary drinks, sugar, butter, low cholesterol spread, chicken, beef and pork, unhealthy and healthy snacks, using a template developed by Professor David Simmons, lead investigator for Te Wai O Rona: Diabetes Prevention Strategy, based on Lee, Bailey, Yarmirr, O'Dea and Matthews' (1994) work.

Low-risk ethical approval for this research was obtained from the Massey University Human Ethics Committee and from the Lakes District Health Board Research and Ethics Committee.

Purposive sampling was used to survey 124 supermarkets, dairies, service stations, takeaway food outlets and alcohol stores within the Southern Lakes District. Mapping was done through observation and using the directories of local information centers and local councils, with food outlets being contacted by phone and/or in person. One form was completed for smaller outlets and nine for the larger outlets, including cost comparison forms which compared prices between brands of milk, bread, drinks, sweeteners, spreads, chicken, beef, and snacks. An availability form was completed for each community to provide an impression of the overall availability and variety of

healthy food in the area.

Simple descriptive analysis was used; the central tendency, 95 percentile, 5 percentile, variance and standard deviation for each subgroup were analysed. All subgroups were then further grouped together, analysed and graphed to illustrate mean prices for food and drinks.

Discussion

The results of this ecological scan confirm that the obesogenic environment within the Southern Lakes District exists for Maori, with barriers such as the majority of healthy food and drink options being more expensive than that of unhealthy options. What is required is the communication of health information and skills to people, arguing for health changes and providing social and environmental support for such changes. From a health policy point of view this calls for a sound policy framework that is based on careful analysis of the local environment and on relevant, research-based theoretical approaches, that leads to appropriate policy decisions (Puska, 2002; Swinburn, 2002).

Maori and food

One hundred and fifty years ago after settlers arrived when hapu moved from hilltop pa (fortified place built by Maori) to low-lying kainga (a native town or village), major dietary changes occurred. Fern roots, kumara, fish, birds and berries which are all difficult to obtain but nutritious and protein-rich, gave way to flour, sugar, tea, potatoes and salted pork. Bread and potatoes became the mainstay for many whanau, often leading to malnutrition. However, with urbanisation came new patterns of nutrition, with malnutrition being less of a problem than overeating, and the balance of adding natural food resources to the diet was lost to an almost exclusive reliance on foods readily available from fast food outlets and supermarkets (Durie, 2003).

The combination of factors associated with type 2 diabetes, including lifestyle, cultural and social factors create a 'diabetic environment' (Durie, 2003). Type 2 diabetes is largely associated with the environment that promotes both overeating of energy dense foods and physical inactivity, the 'obesogenic environment' (Maher et al., 2005; Simmons et al., 2005). It appears the lifestyle factors that lead to diabetes have developed, even flourished, despite the known risk. Health promotion experts have emphasised the importance of better public information and education about diet though without any major breakthrough (Durie). Nevertheless, whether an individual chooses a healthy diet is much more influenced by the availability, affordability, and accessibility of food rather than the individual's knowledge about healthy food choices (Quigley & Watts, 2005).

The diabetes environment

The diabetes environment is characterised by an abundance of cheap food, compared to

the old environment for Maori which was characterised by scarcity and the need to conserve food (Durie, 2003). Maori society was also affected by the loss of mahinga kai (traditional food-gathering areas), especially with the pollution of coasts, lakes, rivers, and the destruction of forest (Ministry of Health, 2002b). Contemporary consumers prefer foods that are tasty, inexpensive and convenient that tend to be energy dense foods that are high in fat and sugar (Swinburn, 2002). Maori are over-represented among the most deprived groups in New Zealand. In general, people in such groups face problems in obtaining the quantity and quality of food needed for a healthy diet, which is shown in the strong association between socio-economic deprivation and obesity (Ministry of Health, 2002a).

Geography and availability of foods in the Southern Lakes District

The ecological scan undertaken for this study found that all areas had access to bread, milk and butter except one (which had one takeaway store). Some had a wide-ranging selection of food outlets, service stations, dairies, fruit shops, butchers and supermarkets. The mean prices and availability of foods were comparative to the larger town of Taupo. One had limited availability to healthy food options and the prices of these were found to be more expensive than energy dense foods. Results from other studies (Maher et al., 2005; Skerratt, 1999) support these findings, that rurality and socio-economic status can adversely affect access to healthy foods.

Milk

Although milk was found to be cheaper than both bottled water and sugary drinks, it is known that households in New Zealand of lower socio-economic groups tend to have a diet lower in dairy products (Ministry of Health, 2004). Milk and milk products provide important nutrients at all stages in life and are particularly important sources of protein and calcium. As some milk and milk products are major sources of total and saturated fat intake in the New Zealand diet it is recommended that people choose low-fat milk and low cholesterol spreads (Russell, Parnell & Wilson, 1999). However it is difficult to advise people to eat low-fat foods, when the food supply supporting such diets is restricted, indicating a need to increase availability of foods that are low in fat and low in energy density.

Sugary drinks and bottled water

Increasing consumption of sugary drinks, carbonated beverages (soft drinks), sports drinks and fruit juices have contributed to the increase in carbohydrate and increased total energy intake. The increased availability and consumption of highly palatable, sugar-based drinks has also been linked to increasing the energy content of the diet and a contributing factor in the obesogenic environment (Chacko, McDuff & Jackson, 2003; Ministry of Health, 2002b). Although the overall mean for all areas found no difference in price between bottled water and sugary drinks, sugary drinks were found to be more

expensive in the larger towns, than in the smaller areas, where bottled water was more expensive than sugary drinks. However, the mean price similarity may well be due to supply and demand, which has been associated with the decreasing cost of sugary drinks due to the consumption in New Zealand having increased by approximately 45% in the past five years (Ministry of Health, 2003a).

Bread

Wholemeal bread was available in all areas except one, yet white bread was cheaper in all areas. These results support previous studies (Maher et al., 2005; Wilson & Mansoor, 2005) that low fat options are not favourable in relation to pricing and availability. Less than one-sixth of all New Zealanders eat the recommended servings of breads and cereals. Yet, consumption of bread is higher among Maori in more deprived areas (Ministry of Health, 2002b). Encouraging people to buy wholegrain bread requires the price to be less than white bread. French (2003) confirms that food pricing is a determinant of food purchasing.

Butter and low cholesterol spread

About 44% of discretionary fat (calories that a person adds to food) is from butter or margarine, most of which is added to bread products (Ministry of Health, 2004). To decrease this percentage people need to use low cholesterol spread, which has less saturated fat content compared with butter. However, low cholesterol spread was more expensive than butter, with the highest prices in smaller rural areas.

Chicken, pork and beef

Historically, the New Zealand diet has been high in the consumption of red meat. To help reduce total and saturated fat intake, meat and chicken should be lean (Ministry of Health, 2004). Availability of lean beef, pork and chicken without skin is limited to larger towns. Trim pork and beef was generally a similar price to regular pork or beef, but chicken without skin was double the price of that with skin. The answer may lie in educating people to remove the skin from chicken, as the price per kilogram is a great deal cheaper.

Healthy and unhealthy snacks

Energy-dense snacks have been linked to the rising obesity rates (Drewnowski, 2004). The mean price of healthy snacks was found to be greater than unhealthy snacks. This relates to added sugars and fats being easier to produce, process, and transport than perishable foods and fresh produce. Similarly Wilson and Mansoor (2005) found that foods with the highest saturated fat were cheaper than low saturated fat equivalents for eight out of the nine comparisons.

Takeaway outlets

Water was the healthiest option available in all outlets, with diet drinks the next most accessible healthy option. In addition most outlets had available different portion sizes, which was a positive finding as food companies have long known the commercial benefits of promoting larger portion sizes. Low calorie dressings were also common, however grilled vegetables, meats and seafood were the least available.

Although the World Health Organisation (2002) acknowledged that extensive marketing of energy-dense foods and fast food outlets is a probable cause of obesity, Simmons et al. (2005) identified there was no such association between the choice and availability of takeaway and restaurant food and adult obesity. In a society where there is easy availability of food, the key to the obesity epidemic relates strongly to reduced physical activity and not to the consumption of takeaway food. Haslam and James (2005) support Simmons et al. (2005) claiming the dominant factor that precipitates the obesity epidemic in the United Kingdom was a decline in physical activity, rather than excessive intake.

Study Limitations

As this was a small study in the Southern Lakes District of the North Island the results are not able to be applied to the rest of the country. Nevertheless, the pricing gradient and availability of low fat options has been shown to be poor, especially for the smaller towns.

'Unhealthy' snacks were never defined; therefore the inclusion of food into this category was at the research assistant's discretion. Future studies need to reflect nutritional recommendations recently developed in the United States, although a definition of unhealthy foods was not given (U.S. Department of Health and Human Services and U.S. Department of Agriculture, 2005). Nevertheless, the inclusion of unhealthy foods surveyed appeared to have been the same throughout the data collection.

Recommendations

Altering the environment to encourage behaviours that prevent obesity may appear an insurmountable challenge. Historically epidemics have only been controlled after environmental factors have been modified. Similarly, reductions in population levels of obesity seem unlikely until the environments that facilitate its development are modified. A paradigm shift to understanding obesity as normal physiology within a pathological environment signposts the direction for a wider public health approach to the obesity epidemic (Egger & Swinburn, 1997).

The pricing gradient shown in this ecological scan could provide another explanation for the inequalities in health in relation to food. The major economic influences are the costs of food production, manufacturing, distribution, and retailing. These costs are largely determined by market forces, but some opportunities exist for public health interventions (Swinburn et al., 1999). A number of approaches have been put forward by various authors (Durie, 2003; Maher et al., 2005; Swinburn, 2002; Wilson & Mansoor, 2005) to cure the obesogenic environment. Without a supportive environment, treatment programmes are likely to be ineffectual and diabetes prevention programmes will be restricted to mass education strategies (Swinburn). Put simply, we need to focus more on the causes of the causes, and less on the individual (Quigley & Watts, 2005).

Conclusion

Obesity and its co-morbidities, especially type 2 diabetes, have reached epidemic proportions in New Zealand and globally. There is no doubt that an environment that promotes excessive food intake is a major contributing factor to the obesity epidemic (Mann et al., 2004). Despite the limitations of this study an individual's choice for a healthy diet is influenced more by the availability, affordability, and accessibility of food than by the individual's knowledge about healthy food choices. Obesity is difficult to treat, therefore public health efforts need to be directed toward prevention (Hill & Peters, 1998). Trials in China (Pan et al., 1997), Finland (Tuomilehto et al., 2001), and the United States of America (Knowler et al., 2002), have shown that among high-risk individuals close to 60% of type 2 diabetes cases could be prevented by modest changes in diet and physical activity. Reducing the 'obesogenic' environment would contribute to this.

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Experiences of Rural Women who have cared for their Terminally Ill Partners

KAREN CAMPBELL

Introduction

This chapter firstly offers background information in relation to palliative care and the role of women as providers of care in the home setting. Secondly, it discusses a study that evolved from a trend I observed as a district nurse providing community palliative care in rural New Zealand and from New Zealand literature; that the majority of carers of the terminally ill in home-settings are women. The aim of this research study was to offer insights into the requirements of caring for a dying person at home and provide information to assist nurses working in the community and other women who take on the caregiver's role.

Review of the Literature

While limited international research on carers in rural settings and rural nursing is available, I was unable to find any studies undertaken specifically on or identifying this topic in New Zealand.

The New Zealand Palliative Care Strategy states, 'In New Zealand, palliative care is mainly delivered to people in the home' (Ministry of Health 2001, p.34). The Ministry of Health noted that 'People who live in rural areas may often have significantly reduced access to palliative care' (p.45). While a palliative client in a city area may have access to a number of palliative care services however those in a rural area often have reduced access. Access problems are reported in a number of rural areas, including Northland, Waikato, Nelson/Marlborough, the West Coast and Bay of Plenty. Often those in rural areas rely on their GP, practice nurse and district nursing services. Not all these providers have had palliative care education and they are often in short supply. With ongoing nurse shortages in New Zealand, and internationally, problems of recruitment and retention will only get worse.

It has been noted that in New Zealand there will be an increase in cancer over the next decade, for both genders and in most age groups. Of those diagnosed, approximately 50% will die from it (Ministry of Health 2002). While most people express a desire to die at home, there are issues associated with this that are recognised in national policy. 'Patients who do not have sufficient support at home may have to be admitted to a

hospital, hospice or rest home' (Ministry of Health 2001, p.44).

International research supports the view that people wish to die at home for a particular stated reason. 'Most terminally ill patients embrace a desire to die at home rather than in a desolate and sterile institutional environment' (Where will terminally ill elderly die? 1999, p.1). It could be argued that it is not so much that the dying person does not want to be in an institution, as they fear being away from that which is familiar. Handing over control, a change of routine, and separation from the support of friends and family must be very frightening.

In a cost contained environment, a hospice service interested in saving money might well put pressure on families to care for their loved ones at home, whether or not they are prepared and supported to undertake this. Costs of hospice care in New Zealand could be similar to a North American setting, where cost savings of 39% to 51% have been made when terminally ill patients are nursed in a home hospice service rather than in institutional hospice care (Carney & Burns, 1991). Boland and Sims (1996) noted that there had been tremendous growth in the number of patients being cared for at home, and argued that one of the main reasons was the pressure to contain health costs.

With this pressure, the need to support the carers is highlighted. Boland and Sims (1996) acknowledged this when they argued; As home-health care and the pressure to reduce health cost increases nurses should support those who care for people at home. High quality care must extend far beyond the boundaries of hospitals into the lives and experiences of caregivers at home (p.58).

Women as Providers of Care in a Home-setting

A review of international literature centred on home-based care demonstrated that in the home setting the majority of carers are women. 'It is not unusual for wives to act in a caregiver role. In fact, women are socialized to make personal sacrifices and care for their families' (Schott-Baer, 1993, p.234-235). Canadian research further supports this; it is estimated that 72% of family caregivers are women (Gaynor, 1990). For male patients who are married, responsibility for the care tends to fall on their wives. This is a 24-hours-a day responsibility, which may continue for years (Ross & Graydon, 1997, p.24).

Boland and Sims' (1996) study set in America around the experience of care-giving for ill family members found that of the 17 caregivers interviewed, 14 were women. These women were caring for varying age groups and the medical problems related to a variety of illnesses. A Canadian study by Weitzner and McMillan (1999), looked at quality of life issues for family caregivers of people receiving home hospice care. Of the 238 caregivers involved in the study 75% were women, while all nine carers in a study carried out in Scotland by Gall, Atkinson, Elliot and Johansen (2001) around supporting carers of people diagnosed with schizophrenia, were women. According to Emlett cited in Bergs (2002), 'it can be assumed that the supportive person for critically ill men is usually the wife...' (p.613).

Locating New Zealand literature specifically identifying women caring for their terminally ill partners proved difficult, however Niven noted the need for further study on kin as caregivers. 'As the chronicity of cancer increases, the issue of the effect on kin as caregiver will need further study' (Niven, 2001 p.76).

The Impact of being a Carer at End-of-Life

An Australian article by Aranda and Hayman-White (2001) reported that in a phenomenological study of 42 family caregivers involved in home-based palliative care, the family caregivers were involved in symptom management, therapeutic interventions and took on almost total responsibility for household tasks.

Navaie-Waliser et al. (2002), reported that reliance on family caregivers, without considering their ability to provide that support, could create a stressful and potentially unsafe environment for the caregiver and the receiver of the care.

Bergs (2002) highlighted that wives neglect their own health, and uncovered health problems that they experienced such as physical fatigue, sleeping difficulties, frail mental health and feelings of depression. Gaynor (1990) also noted sleep deprivation, depression and stress-related disorders, specifically hypertension and heart disease, were common among female caregivers. The same problems were noted by Munro and Sexton (1985), who collected data to determine the impact of a husband's chronic illness on the spouse's life.

It appears as a consequence of stress that lifestyle changes occur for the wife who cares for her husband. Ross and Graydon (1997), reported these changes in the actual phrases used by those studied – such as being housebound, decreased visitors, I have to do everything and I miss the help around the house indicated the state of being. Not only had they become the main carer, they were now responsible for all the running of the household. The demands placed on these women were extensive.

It is therefore evident that women are the main carers and that female partners of those who are terminally ill provide the majority of care in a home-based setting.

Research Methodology

Approval was sought from the Nelson Marlborough District Health Board's Ethic Committee prior to commencing data collection. This research was conducted in a rural setting in the participant's homes in semi-structured interviews guided by Van Manen's (1990) framework for interviewing, using the four women's experience as a starting point. To ensure trustworthiness and rigour, Lincoln and Guba's approach (as cited in Gilles & Jackson, 2002) was used.

Heiddeger's interpretive phenomenological approach was used to guide this research. The phenomenological paradigm appears less concerned with the issues of control, as Benner (1985) stated: 'Heideggerian phenomenology generates forms of explanation

and prediction that offer understanding and choice, rather than manipulation and control' (p.10).

Once participants' information had been collected and the narratives transcribed, participants were given the transcriptions to read and validate.

After re-examination of the transcripts, significant phrases and statements were extracted to formulate meaning and identify similar themes and patterns borne out by the researcher's assumptions and by pre-study literature. The writings of phenomenologists Van Manen (1984, 1997) and Benner (1984), both influenced by Heidegger, helped guide integration of the data into an exhaustive description of the phenomenon.

After data was gathered, the findings were analysed using a framework of Colazzi (1978). In interpreting the participants' words, it was important to maintain connection with the original descriptions of the phenomenon, and to illuminate the hidden meanings of the women's experiences (Campbell, 2004, p.42).

The literature indicates many negative aspects of caring for an ill family member (Ayres, 2000; Bergs, 2002; Boland & Sims, 1996; Bull, 2001; Gaynor, 1990; Hinton, 1994; Neufeld & Harrison, 2003; Perreault, Fothergill-Bourbonnais & Fiset, 2004; Ross & Grayton, 1997).

Despite these, I had observed that some of the women appeared to gain pleasure and satisfaction from providing care for their terminally ill husbands. There was however always an underlying sadness; knowing they were going to lose their partner and witnessing their deterioration and eventual death was distressing and this distress was quite clearly an essence or pattern experienced by the majority of women who care for terminally ill partners.

As I began to re-read and listen again to these women's conversations it was obvious that my assumptions and the findings borne out by the pre-study literature search echoed similar themes and patterns. In looking for patterns, two themes emerged from the interviews: responses to health issues and the topic of inner strength.

Response to Health Issues

With regard to health issues, similar themes and patterns between findings described in the literature and this study became evident. These related to mental health and physical health.

Mental health issues covered the two emotional issues of (i) depression as sadness, and (ii) burden as distress. B. Given, C. Given and Kozachik (2001) noted, 'most caregivers are plagued by anxiety, depression and caregiver burden' (p.222). They also suggest that home-care has a greater impact on emotional health.

Depression as Sadness

The four women did not talk about being depressed but there appeared an overriding impression of sadness.

... And of course you tried not to be depressed so what would I do, I would go into another room and have a good howl. It was so sad, heartbreaking, you know, it breaks your heart.
... I had a lot of tearful days and I still do at times.

The sadness expressed, highlighted the emotional demands of caring. Witnessing their partner approaching death heralded a range of strong emotions – overwhelming sadness; fear, hopelessness and anxiety were expressed throughout the interviews. These emotional responses are predictors of stress. Scott (2001) noted ‘The stressfulness of the carer’s role in contributing towards meeting palliative care needs of an individual cannot be disputed’ (p.324).

Burden as Distress

‘Caregiver burden is the distress that caregivers feel as a result of providing care’ (Given et al., 2001), who also noted, ‘most caregivers are plagued by caregiver burden’ (p.222). Although the four subjects did not mention the burden of caring for their partners, it was expressed through phrases that highlighted the obvious distress of witnessing their partner’s suffering.

Much of the literature speaks of the burden of providing care, but the writer’s observations suggest that burden can also involve having to ‘see’ their husband dying.

It wasn’t something I would ever like to see anyone have to go through, it’s a nightmare that every now and then bounces back at me. It was the most horrible thing I have ever had to do and I was determined to see it through, because he asked me to, and I thought I’m not going to dive out of here and say I can’t take anymore, but I did find it very very hard to stand there and get through those hours. I just think everything, really couldn’t give him much relief and that seemed cruel. So not the sort of thing I would like to go through again. Yeah, it was a shocking day, you know, it just seemed so cruel to me that he had to go through all that, he had been through enough. It would have been easier to accept if he had just gone into a coma, but to have to go that way, fighting to your very last breath. It was one of those horrendous times that I wouldn’t wish anyone to witness or have to go through with a loved one, not a very good time for me.

Costello’s (1999) argument that ‘the emotional reactions that take place prior to death may be seen as anticipatory grief’ (p.230) was evident in this study.

Physical Health Issues

Given et al. (2001) and Burton, Newsom and Schulz (1997) noted that physical health issues emerge as more care is required, particularly if the caregiving time is extended.

Burton, Newsom and Schulz (1997) state that family members who take on the caring role forget to take their prescribed medication was evidenced by one subject in this study, highlighting how existing health problems have the potential to cause major issues for those in the role of carer if left untreated.

I did absolutely neglect my own health, I didn't take any of my blood pressure pills for about two months and for all that, my health stood up quite well but oh, it was a pretty hard time really.

Rosenman, Le Brocque and Carr (1994) noted, 'caregivers have the potential for exacerbation of existing health problems but by the time treatment can be arranged, serious health problems may have worsened' (p.444). This is borne out by two of the subjects in this study who supported their husbands for a number of years throughout their illness, suffered severe physical problems and continued to ignore them, appearing not to consider their own health important and perhaps feeling their health issues were insignificant compared with those their partners were experiencing.

... I was pretty sure I had a lump but with David getting sick ...

Inner Strength

Rose (1990) identified an 'essential' revealed in her study of women's inner strength – that of 'having capacity.' For example, the ability to heal, to solve problems, to stay present, to face pain, and to recognise when one does not 'have capacity', also noting that the women in her study recognised an ability to continue with an apparent reserve of energy in spite of adversities or disadvantages.

This study supported Rose's (1990) findings as all participants were surprised at how they coped and talked about some form of inner strength taking over. While recognising times when they did not 'have capacity' they did not actually say they couldn't cope. All four made caring for their partners their priority and made a commitment to do this.

I don't know where it came from, I think I just had this inner strength that just came in and took over. If anyone had said to me before this that this is what you are going to do, I would have said, no I couldn't do that ...

In their study of family carers of people with a life-threatening illness Scott, Whyler and Grant (2001) noted that, 'There are many challenges for carers of people with life-threatening illness. Their contribution toward, and experience of caring is an area worthy of investigation' (p.290).

Robinson (1990) stated that, 'the close marital relationship may have served as a form of intimate support' (p.199). All the women in this study showed determination when faced with being both wife and carer of their partner. Through their frequent use

of 'we', not 'I', it was apparent that their husbands still played a significant part in their lives. One talked about her marriage as a partnership, highlighting the inclusion of the children as part of the relationship.

I think in my mind he had always been the doer and the provider and everything else, meant all of a sudden I could do something for him and I think I actually said that to him once, you know it's my turn now. I think it was like a partnership so what I was doing ... was trying hard to be part of the partnership ... So I did it. I also had to be there for the kids as well ... I think for both of us we also wanted to make sure that the kids would be all right. You know I was just there for him.

Irrespective of how the participants viewed combining the roles of partner and caregiver, all experienced multiple role demands such as the caring tasks of bathing, dressing, administering medications, wound care, as well as giving considerable emotional support to their husbands. None had any training in attending to these complex needs but not one of them felt they could not or would not undertake their partner's care.

Three themes emerged from the women's accounts of their experiences:

'Whatever he wanted and needed'

Altruism: the desire to provide whatever was needed and to do whatever was demanded of them.

None were angry about this; it appeared to be rewarding and something they could do in the context of their merging role as carer and wife. Despite times of physical fatigue, the emotional reward was positive and their unselfish concern for their husband's welfare was a demonstration of pure altruism – nothing was expected in return and there was no sense of being a martyr. If he wanted to do something he wanted to do it then and if it involved me I would just drop things and go and do whatever it was he wanted. I would just walk off and leave everything ...

'Taken for granted'

There is an assumption that our own values provide the basis for meaning (Farran, Keane-Hagerty, Salloway, Kupferer & Wilken, 1991) who further suggest that some values are based on experience:

Experiential values focus on relationships and feelings that persons have toward others. Caregivers' experiential values are expressed as they appreciate relationships with others in their life, and focus on who the care receiver was in the past, while at the same time enjoying the person for who he or she still is (p.483).

Reflecting on things taken for granted enabled the women to express their experiential values. All indicated that they had taken for granted that their husbands would always

be around and lost expectations of future plans were expressed with considerable sadness. Focusing on their husbands' pasts but at the same time acknowledging the pleasure in being able to care for them suggested that they found meaning in this experience.

... I would just take for granted he'd always be there and then all of a sudden... I think in a way I was lucky we went through that...we got a life time in those few weeks that we hadn't had for a lot of years of our marriage. So even though we had been married for so long those last few weeks were what we would have, you know what I would have liked for the rest of our life, but we did have it, you know, we did actually have that so we were lucky ...

Intimate Support

The theme of intimate support, which appeared to benefit both the wives and their partners, was highlighted in various ways. The first related to attending to the intimate tasks of personal care for their husbands which none of the women found difficult.

I wanted to be the one to do all the very private stuff that has to be done. Anything that had to be done like that, I wanted to do it but it wasn't for a very long time really, not really ...

The importance of communication in a therapeutic relationship is well documented (Benner, 1984, 1985).

When we first heard about it ... I remember going back to his room and we just talked and talked like we had never talked for years. I don't know what we talked about but it was just like opening the gate. You know that was the beginning, it was like that from then on. I suppose my biggest regret was that we waited until he was so sick until we were able to have that experience because it was beautiful; it really was you know it was lovely.

Being open to intimate conversation, talking of personal issues and how the illness would progress were important, but not always possible for all the women.

He was always pretty irritable and if we could have talked about things, but I couldn't, he wouldn't ... he was so shocked when she said something to the effect that he was dying and I realized that I could never talk to him about it really.

Lack of verbal communication did not prevent them from providing intimate care

and support or from finding other ways of providing support.

The roles of wife and carer were not seen as two different roles but seemed to merge, and were linked to the roles of being a mother and member of the family.

It just felt right, that it should be me looking after him, no doubt about that. I think the two roles just merged really.

In the interviews, significant words were partnership, marriage, belonging, family, and we and closely joined; there was an overarching sense of synergy. Family support was significant, as the family were clearly an integral part of the informal support network.

I think that they all gave their Dad all they could as well you know. For us it was happy times to be together, you know, I mean unfortunately he was sick but it was really good all being together ... We just automatically slipped into a system where everybody helped everyone else.

Family support was seen as just as important, if not more important, for their husbands than it was for their wives.

They actually gave him lots of loving energy yeah, so he was able to give it back to them. He adored the grandchildren and they adored him. They would come and talk to him ... and yeah they were really important ...

The meaning the women found in this experience was the emotional reward, value, usefulness and validation that they experienced. It needs to be acknowledged that these assumptions around the meaning the participants made of their experience of intertwining the role of carer and partner, are the writer's. As Farran et al. (1991) state, 'Although general assumptions about finding meaning can be identified, it is important to note that meaning is individually determined. No one can find meaning for someone else' (p.484).

Discussion

The participants in this study indicated that palliative care nurses' responses to the needs of women who are caring for their partners, matters immensely. Nurses need to discover how to converse and draw on a woman's awareness and value the ways they can plan together.

It is important that palliative care nurses recognise the isolation many women in this role experience, and validate the wisdom and knowledge they provide. Nurses rely on

their information, e.g. about their partners' symptoms, appointments, moods, fears and worries that they don't necessarily share with other health professionals. Validation of their input is essential.

Nurses can become so familiar with the tasks of caring that they may expect carers to be able to attend to and deal with activities of daily living that they take for granted. Assistance and education can mean the difference between coping and not coping. Being sensitive, thoughtful and making time to engage with those taking on the role of carer is an essential part of the care provided by the palliative care nurse.

Even after time had passed, participants were struggling to deal with the emotional pain of losing their partner. All acknowledged the importance of the emotional support provided by the visiting palliative care nurse. Costello's (1999) ethnographic research project on anticipatory grief explored the role of the nurse in providing support; he argues, 'Giving emotional support is a key component of the nurse's role in anticipatory grief experiences as well as post-death bereavement' (p.230).

Healing and recovery from loss often include a time for conversations that often reveal things that people want to reflect on or share, including feelings of loss and bereavement, or concerns about regrets, faults or mistakes. The insights gained in this reflection can be built into the fabric of nurses' practice, revealing how care might evolve in our communities.

Bergs's (2002) phenomenological study of women caring for their husbands with COPD reported that wives felt dissatisfied with the lack of support from health care providers. While participants in this study had a variety of experiences, the importance of advice and support provided by health professionals was apparent. In general all were satisfied with the help they received but two negative areas that emerged were undervaluing the women's knowledge and not responding quickly to cries for help.

Silveira and Winstead-Fry (1997) noted that in rural areas caregiver needs are less likely to be met than patient's needs. All participants acknowledged that at times they needed practical help from health professionals. Distance from base-support meant patients' symptoms and the treatments offered were not always monitored well enough, not because of lack of knowledge or skills but because of a lack of service provision. Due to constraints of time and resources, some monitoring and support was offered by telephone, perhaps not the best way to communicate with someone requiring help.

In addition, nurses have to rely on the patient's doctor to prescribe the appropriate medications. An isolated pharmacy may not stock these, potentially causing delays before medication arrives.

The participants saw the provision of equipment and practical support such as home help and assistance with personal care as invaluable. These provisions have long been recognised as part of the palliative care service and it is hoped that as provision of funding becomes more acute these services can be maintained.

A deeper assessment of carers in a home setting is essential for good quality care outcomes that assist the person dying. Key components are independent assessment of

the carer's support needs from those of the patient, and knowledge of the relationship between the patient and the carer. Nolan, Grant and Ellis (1990) noted in their quantitative data analysis:

Such knowledge is unlikely to be gained from a cursory assessment but requires a degree of trust between carer, dependant and the service provider. Such trust is best established where there is a sharing of tasks and regular contact between all parties. Given the high dependency and levels of disability with which many carers are faced, this places nurses in the unique position of providing care of an often very personal nature to the dependant, whilst also having the professional knowledge and expertise to give the carer advice, support and training (p.552).

Visiting palliative care nurses should not think that because these women appear to be coping and managing, that the assessment and provision of appropriate physical and emotional support can be neglected.

Nurses need to take time to listen, and not just converse with a series of closed questions to acquire nursing information. What is needed is the information that is shared with, and by, the primary care giver and the palliative care nurse. By doing this the carer knows what is happening and is supported, and begins to build up confidence and trust with the nurse so is more likely to share their own concerns and worries. The role of nurse as main support person can be demanding and providing this level of support requires support for the nurses. Issues of time out, supervision and training for nurses need to be addressed further.

There remains the all too common problem of patients not being referred to the palliative care service. Grande, Todd and Barclay (1997) suggest that the accessing of services and timely introduction to palliative care services are essential for ensuring adequate home care support. Further research on carers who did not access available palliative care services may be of value.

While family support for carers was shown to be significant, the role of the palliative care nurse was identified as an integral part of the practical and emotional support needed. The study identified similar themes experienced by carers globally and reinforces the value of women who care for their terminally ill partners.

Hospice services in New Zealand rely greatly on fundraising and donations, so possible links between patterns of care and styles of funding would make an important future study.

As far as I am aware, there has been no pressure in the local area from health services to care for terminally ill people at home, however there appears to be a social and cultural expectation that this will happen. There may be a need for future research to see if an economic imperative does in fact drive the increased numbers of people dying at home. If there is a trend for those dying to want to remain at home, then it is crucial to examine the experiences of those providing the care in order for services to discover if what they are providing is appropriate and adequate. It is also important that nurses know if they are able to sustain the need for care of the terminally ill at home, the cost

of which is uncalculated in New Zealand. The training for this as a specialised role is acknowledged as needing postgraduate education in the UK (Expert Advisory Group on Cancer, 2004) and is supported by the Clinical Training Agency Funding for the Postgraduate Certificate in Palliative Care Nursing in New Zealand.

Conclusion

The information in this chapter has been taken from the author's thesis (Campbell, 2004). The research demonstrated that rural women have an ability to cope, make do, improvise, self-manage and just get on with the job. What I did discover was that the women did not notice that they neglected their self-care. This was not deliberate, but that is common when women are faced with caring for their terminally ill partners and turn their full attention to their dual role of partner and carer, ignoring their own health. The women in the study exhibited an 'I can manage attitude' and all four talked of inner strength taking over to deal with the demands of the position they found themselves in.

Rural women in the study all found meaning in their need and desire to care for their husbands. This was identified by the positive emotional reward they experienced as they intertwined the role of partner and carer. The women felt that being both wife and carer were not two different roles. The dual roles just merged, the marriage was seen as a partnership and 'we,' not 'I,' was important.

The role of the palliative care nurse was identified as an integral part of the support network. Practical and emotional support by the nurse were both seen as vitally important. If we are going to rely on family to provide the majority of care in a home setting then it is essential that their needs and health be assessed independently. Further research in a rural New Zealand setting would usefully identify issues and generate knowledge pertinent to the New Zealand situation. Given the statistical projections for cancer, which indicate increases and the community desire to die at home, home-based care looks likely to increase. Nurses are the ideal researchers to examine the concerns and issues raised by female partners as carers to help support them in this role. By enriching our understanding of these women's experiences we will be better able to provide this support and develop appropriate specialised palliative care services in rural settings.

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Rural Women and Maternity Services

ADELE M. ROBERTSON

As discussed in previous chapters, rural nursing is complex and is shaped and supported by the rural context with nurses working in these areas having interconnectedness with, and commitment to, their communities that directs their clinical practice.

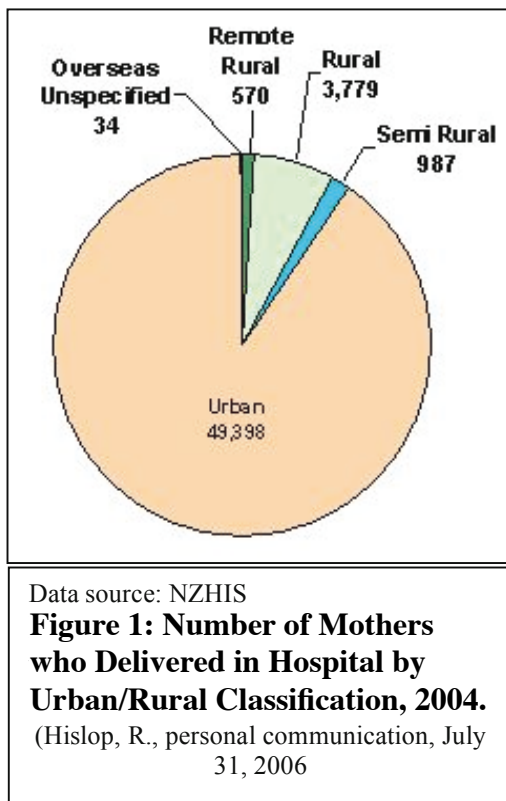
Introduction

This chapter discusses the roles nurses undertake in response to rural communities' health needs. Therefore changes to services that benefit urban communities may impact negatively on rural communities, due to their contextual differences. One community need that has importance in sustaining the health, social and economic stability of rural communities is the provision of maternity services (Klein, Johnston, Christilaw & Carty, 2002; Roberts & Algert, 2000).

Maternity services in New Zealand have undergone many changes in recent years during an evolution into a unique and internationally respected model of care (Calvert, 2002; Guilliland, 2006a). It is time to expand this model to incorporate specific rural issues if we are to heed the international literature, identifying rural maternity services as being under threat (Nesbitt, 1996; Rogers, 2003). This will require the establishment of clear definitions of rural, and recognition of the effect of diseconomies of scale along with the provision of support packages for rural women and the professionals involved in their care. This chapter highlights the contextual issues in New Zealand that need to be considered for this to occur.

New Zealand Rural Profile

Application of 2001 census figures and data from Statistics New Zealand (2006) provides a picture of the changing face of rural New Zealand (Table 1, p.181). In terms of maternity services, those people living in rural areas with a high urban influence, and some from areas with a moderate urban influence (commuter populations) would be



expected to access urban services. However the expected growth in these areas, of twice the national average, may put pressure on the smaller maternity units in urban centres, in the numbers of midwives required to service the areas, and the distances that they may need to travel for home visits. Already 15-18% of births in New Zealand take place in small primary maternity or birthing units (Hendry, 2005; New Zealand Health Information Service, 2006; New Zealand Institute of Rural Health, 2006). Maori women and women living in New Zealand's most deprived areas rely heavily on primary units, in both rural and urban settings (New Zealand Health Information Service, 2006). Figures from the 2005 Rural Health Workforce Survey (New Zealand Institute of Rural Health) indicate that during 2003, 31% of mothers were classified as having rural domiciles and 16% gave birth in a rural primary maternity facility. An assumption was made that 51% of rural women gave birth in their local facility and the remainder gave birth in a base hospital or at home (New Zealand Institute of Rural Health). The report estimated that nationally 1015 births (1.8%) were conducted at home, however, midwives with a rural domicile reported a home birth rate of 10% (these birth figures may involve a combination of urban and rural).

According to Statistics New Zealand (2006), women residing in the highly rural, low

	High Urban Influence	Moderate Urban Influence	Low Urban Influence	Highly Rural/Remote
Residence/ Workplace	Significant & work in main urban area	Large % work in minor secondary urban area. Has both urban & rural characteristics	Majority work in rural area	Minimal dependence on urban or very small employed population
% NZ Population	2.6%	3.6%	6%	2%
Number Population	95,799	135,306	224,391	76,499
% NZ Total	2.8%	8%	(mostly North Island) 33%	53.1%
Land Area Population	12.9	6.5	2.6	0.5
Density (sq m)	(Nat av 14.4)			
Ethnicity	9:10 European 1:10 Maori	9:10 European High areas Maori (ie Gisborne 47.9%)	9:10 European 19% Maori	9:10 European High areas Maori
Population (2002-2021)	34% growth (Predicted national growth=16.8%)	21% growth	2% growth	9% decrease
Births per 1000 Pop (Nat Average 15.1)	15.2	11.1	15	9.3
Income	Highest portion in average & median range	Lowest of any rural area	Variable – close to national average	Above average Most self-employed

Table 1: New Zealand Rural Areas: 2001 Population Census
(Table produced with reference to Statistics New Zealand (2006) census data).

urban influenced and a portion of moderate urban influenced areas involve 11% of the New Zealand population (376,000 people). The data from Table 1 (above) indicates that this would equate to approximately 5579 births per year, a similar figure to that reported by the New Zealand Health Information Service of mothers who gave birth in 2004 in hospital by urban/rural classification (Figure 1, p.180).

Rural Health Perspectives Related to Rural Women

A growing body of international literature purports that rural people have different perceptions of health and that meeting their health care needs requires different approaches from their urban counterparts (Lee & Winters, 2006).

Long and Weinert's original research (1999) on rural dwellers of Montana, USA, found that people described themselves as healthy provided that they could work, therefore they suggest that rural people perceive health in a 'role performance model', where health is related to the individual's ability to perform usual roles in work and family responsibilities. Emphasis is on maintaining functional ability and independence in order to meet obligations at work, home and in the community (in contrast to the urban model of health that is related to the absence of disease or dysfunction and which focuses on prevention and symptom relief.)

Greenwood and Cheers (2003) describe the impact of this belief in a qualitative study of Australian women on isolated pastoral stations, finding that male-female relationships in remote areas follow traditional patterns with women mostly associated with nurturing and caring roles, and that a surprising number of women developed symptoms of post natal depression after returning home from hospital (symptoms often masked, and so undiagnosed). Mental health issues were avoided and the need for support in the post natal period was unrecognised.

The women interviewed cited distance and isolation as factors that affected their health and well-being. Birthing options can be limited to home or travelling to a major centre to await the birth, sometimes without the support of family and friends. The later option can be costly as well as risky, and can add additional stressors such as isolation from social networks, worry, and cost of travel and accommodation (Elliott-Schmidt & Strong, 1997). An appropriate model of maternity care would provide support for pregnant women from rural and remote areas to access care.

The characteristic of self-reliance is present in most of the literature about rural people and their health-seeking behaviours (Lee & McDonagh, 2006). In his study of rural women in northern Canada, Leipter (2006) found that they responded to health risks by developing resilience which included the strategy of becoming hardy. A part of hardiness was establishment of self-reliance; associated with self-reliance is the ability to control one's circumstances. In New Zealand women have clearly identified continuity of care and power and control as an important framework for their childbirth experience (Abel & Kearns, 1991; Guilliland & Pairman, 1995). These principles are severely undermined if complete maternity services are unavailable in local communities.

A study exploring everyday experiences of rural nursing practice in remote Canada highlighted the interconnectedness of rural nurses and their communities (MacLeod, Kulig, Stewart, Pitblado & Knock, 2004). The nurse may have extensive knowledge about many of the individuals who are being cared for and in turn is known by them as well. Travelling out of the area for the birth, to be cared for by strangers, results in considerable stress for women and their families (Klein et al., 2002). The benefit of knowing in rural practice is helpful when operating under a partnership model of midwifery as proposed by Guilliland and Pairman (1995). Elements of the principles of this model are inherent in rural nursing practice: independence of practice, continuity of care, building trusting relationships, and woman centred care, shared responsibility,

empowerment, and informed choice and consent. Such partnerships for the nurse and midwife are strengthened by, but not limited to, the maternity episode as they will continue over time in a diversity of nursing roles.

1990 Amendment to the Nurses' Act 1977

Introduction of the 1990 amendment to the Nurses' Act 1977 enabled midwives to prescribe medicines directly related to the pregnancy and post partum period, to order laboratory tests, and to claim maternity benefit payments at the same rate as general practitioners. In 1996 the culmination of a review of services, driven by cost containment resulted in a new Notice concerning the provision of maternity services under Section 51 of the Health and Disability Services Act (1993) (as cited in Health Funding Authority, 2000). As well as providing comprehensive service specifications and reporting requirements, which allowed for monitoring and analysis of services provided, the Notice also introduced the concept of a Lead Maternity Carer (LMC). Under the Notice one practitioner nominated by the pregnant women, after fourteen weeks of pregnancy, was deemed to be the LMC. This practitioner held a fixed budget for the pregnancy, birth and postnatal period. If a general practitioner was registered as LMC he/she was required to pay for any midwifery input out of the fixed fee. The result was that the majority of general practitioners exited maternity care because they considered continuing practice to be economically unsustainable (Simmers, 2006).

Effect of these Changes in the Rural Context

The funding changes made in 1996 were problematic as they introduced a climate of professional rivalry and competition between midwives and general practitioners (Toop & Hodges, 1996). As well there was a perceived risk of loss of autonomy by midwives when working with doctors. A study of interdisciplinary contact and collaboration between urban primary care workers found that midwives considered that teamwork was desirable but not at the expense of their autonomy (Toop & Hodges). More recently government health policy is supportive of a cooperative, coordinated and local approach to primary health care although remnants of the acrimony between medicine and midwifery continue to surface in the media (Guilliland, 2006b). A competitive and non trusting atmosphere is at odds with the goal of the Ministry of Health (2002a) to develop partnership teams that are co-operative, co-ordinated and collaborative.

Teamwork

Although research has shown that there is a unique professional bond between the rural nurse and other rural health care providers (Ross, 2001; Thornton, as cited in Hegney, 1996), Strasser (2000) proposes that interdisciplinary co-operation and teamwork occur more in the rural setting and are encouraged by the rural culture. There is a focus on collaborating to do whatever is necessary to get the job done as well as a special 'trusting' relationship between rural practitioners and their communities. An example of the difference in attitudes between urban and rural was reflected in comments made by urban midwife participants in the research conducted by Toop and Hodges (1996, p.54):

GPs can't provide [full service] ... they need our collaboration, whereas as midwives we don't need theirs to the same extent. That's why I don't want full collaboration ... because I've been there. We're a profession in our own right, and when we require assistance it's from obstetricians.

These urban midwives may have the luxury of access to obstetrician care but in some rural and remote areas in New Zealand and overseas this is not the case (Nesbitt, 1996; Rogers, 2003). Hendry (2003) noted that six of the South Island facilities in her study had weather dependent road transfer relying on occasional air transfer in winter. Rural midwife respondents in a workforce survey recorded transfer times of 90 minutes or less (61%), however, the range was listed as 29 to 1440 minutes (New Zealand Institute of Rural Health, 2006). In an isolated context a team approach to rural maternity services would recognise the midwife as the guardian of normal birth and the general practitioner would extend him/herself into the role of obstetric specialist. A co-operative relationship between doctors and midwives without loss of autonomy is possible. Stirling (as cited in Abel & Kearns, 1991) reported that at smaller hospitals in the North Island of New Zealand, such as Rawene, co-operation between the professions led to 91% of births being free of complications.

Funding of Maternity Services

The 1996 alteration in funding distribution made it difficult for those general practitioners with an interest in maternity services to continue to provide the services. A service review in 1999 (Ministry of Health, 2001b) found that 75% of women had registered with a midwife, 13% with a general practitioner and 12% with an obstetrician. The report stated that approximately one third of women surveyed were unable to secure the type of lead maternity carer that they wanted, however, by 2002 only 1% of the women surveyed commented negatively on the lack of general practitioner or obstetrician LMCs

LMC Type	At First Registration		At Birth	
	Number	Percent	Number	Percent
General practitioner	3,376	7.9	4,990	9.0
Midwife	33,531	78.1	42,228	76.1
Obstetrician	3,342	7.8	4,509	8.1
Other/Unknown LMC types	2,657	6.2	3,772	6.8
Total	42,906	100.0	55,499	100.0

Table 2: Number and Percentage of LMC Registrations by LMC Type at First Registration and at Birth, 2003. (Reproduced from New Zealand Health Information Service, 2006)

(Ministry of Health). The trend in midwife-led care is increasing. Table 2 shows that during 2003 the majority of women (78.1%) registered with a midwife compared to a general practitioner (7.9%) or an obstetrician (7.8%) (New Zealand Health Information Service, 2006).

Lead Maternity Carers

In the rural arena a 2001 study conducted by Hendry (2003) found that in the 12 months prior to data collection, general practitioner LMCs attended 40% of births in the nine rural facilities under study and that by 2003 it was estimated that all but one facility would have 100% midwife births. Facility births, however, did not increase because the general practitioners were seeing women ante-natally and post-natally and sending women to a secondary hospital for birth. One aspect of choice is the ability for women to be cared for in an appropriate setting (Medves & Davies, 2005). It is suggested by Smith and Askew (2006) that choice is decreased if women are forced to seek maternity care outside their own local community. The rift between medicine and midwifery is often played out in the media in New Zealand with aspersions cast against the quality and safety of midwifery-only care (Guilliland, 2006b).

Smith and Askew (2006), investigated factors that influenced rural women's choice of childbirth provider location. The researchers found that although there was a range of reasons influencing choice, one that was listed by all participants was that of safety (actual and perceived) for themselves and more importantly for their baby. The reality is that low risk women at term are best served at home or within their own community. Comparison of midwife attendance with birth at home or in a local birthing unit, with physician attendance in hospital by Janssen et al. (2002), found similar rates of perinatal mortality, five-minute apgar scores and meconium exposure, however, they also reported that the midwife-attended cohort had fewer procedures (induction, augmentation,

episiotomy, epidural analgesia, and caesarean sections). Klein et al. (2002) also warn of the danger for low risk women in secondary hospitals where the tendency to use technology places them at risk of unnecessary interventions. In a suitable model of care fiscal viability would be a secondary consideration to supporting initiatives for women to be cared for within their own area.

The 1990 Amendment to the Nurses Act 1977 created an environment that has enabled midwifery to flourish, however, it has been at the expense of the general practice obstetrician. A suitable rural model of maternity care would be financially supportive of professionals in those areas that needed, for safe practice, to work collaboratively. It appears that the government also recognises this need as changes to the Section 88 notice for primary maternity services have been proposed and, after discussion, are aimed to take effect 1 July 2007 (Ministry Of Health, 2006). One aspect of the proposed changes is to give recognition to a widened concept of LMC that incorporates the reality of the group practice approach to primary maternity care in New Zealand. Specifically for rural areas it also makes for provision of payment for labour and birth support provided by a non-LMC practitioner. It is possible that a new climate is emerging that may begin to mitigate the division between medicine and midwifery. Nevertheless, the rural professional workforce has been affected by more than this division; there are also ramifications from the separation of nursing and midwifery.

Nursing/Midwifery Split

The political process to regain autonomy involved collaboration of women's groups and midwives. Pairman (2002) stated that this created an awareness of the interdependent nature of the midwifery relationship with women and an understanding that active involvement of consumers in the profession provided strength. More had been gained by alignment with consumers than had ever been gained by alignment with nursing. Therefore, in 1989, midwifery separated from nursing and the National College of Midwives was formed with a constitution that recognised the equality of midwives and consumers at every level (Guilliland, 1989).

Pairman (2002) argues that this separation is generally accepted as being good for both midwives and the women consumers of their care. This may be so in urban areas, however, it poses many difficulties for those practising in rural areas and is likely, eventually, to limit choices available to women in isolated communities. Of necessity, due to small population numbers spread over a wide geographical area, the rural context relies on health professionals that are multi-skilled (Bushy, 2002; Ross, 1999). In small rural hospitals, and in the community, a midwife who is also a nurse has a diversity of skills, often described as 'expert generalist' (Bushy) or 'multi-specialist' (MacLeod et al., 2004) that enables utilisation in a number of different health care provision areas. They are, therefore, likely to be more cost effective and efficient than personnel from a

single profession. In spite of this, I believe that the professional midwifery climate in New Zealand does not value nurses who are midwives, questioning their ability to operate autonomously. Midwifery defines its difference from nursing in its autonomous practice and its special relationship with the women consumers of their care (Calvert, 2002).

The concept of partnership with, and commitment to, consumers is not new to rural nursing and is demonstrated in the special way that rural nurses are connected to their communities. Scharff (2006) describes a rural nurse as having:

both an ontological sense of being and an epistemological sense of knowing that connects the nurse with the surrounding community, and through which the rural nurse creates a reality of rural professional nursing practice. In no other setting is a nurse's practice so thoroughly and integrally a constant factor in a nurse's life.
(p.195)

Scharff (2006) purports that rural nursing is distinctive in its nature and scope from urban practice and provides a definition of rural nursing as:

A special variety of nursing in which the nurse must have a wide range of advanced knowledge and ability, in combination with commitment, to practice proficiently in multiple clinical areas simultaneously along the career trajectory.
(p. 195)

Rural nursing theorists agree that diversity of specialist knowledge and skills is necessary when care is provided to a community over a continuum from birth to death (Bushy 2002; MacLeod et al., 2004; Ross, 1999; Scharff, 2006). Scharff also notes another distinction in that the scope of rural nursing is fluid and as such often intersects the realm of other health care disciplines. It could be argued that aspects of a nursing scope of practice would be beneficial to a midwife with a small case load and limited backup. Conversely aspects of a midwifery scope, such as the ability to prescribe, could bring knowledge and confidence to a nurse prescribing under standing orders. When the practitioner is acting as a nurse and midwife simultaneously, as can happen in the rural context, there is a unique opportunity to build a continuing and effective partnership in family health care provision that will not be limited to the maternity episode but will continue in a diversity of nursing roles over the family lifespan. The introduction of direct entry midwifery training and professional competency requirements along with an ageing rural workforce, for both nursing and midwifery, is likely to affect maternity services as nurses and midwives, able to operate across both scopes of practice, slowly become unavailable to the rural workforce.

Rural Workforce Issues

The Rural Health Workforce Survey (New Zealand Institute of Rural Health, 2006) rural workforce data indicates that 68% of the rural LMC and 76% of the core midwives also held nursing qualifications. It would be interesting to know how many of these dual trained professionals are also working in a nursing capacity. According to this survey, 72% of primary health care nurses, 76% of LMC midwives and 60% of core midwives were older than 40 years indicating that the rural workforce is aging. Replacement, recruitment and retention will become increasing issues for rural communities as these experienced nurses and midwives retire. If rural maternity services are to survive nurses and rural women must be encouraged and supported to train also as midwives or, conversely for rural nursing, midwives also be encouraged to train as nurses. It is not the intention of this paper to dispute the value of direct midwifery training in preparation of midwives; however, it is intended to highlight the subsequent dilution of the skill mix available to rural communities. Small numbers of pregnant women in remote areas combined with less available professional support, reduction in ability to earn a sustainable income, and higher costs of service provision provide barriers that make rural an unattractive option for practitioners. One such financial barrier is the cost of maintaining and demonstrating adequate professional competence.

Health Practitioners' Competence Assurance Act (2003)

As a result of the Health Practitioners' Competence Assurance Act a separate Midwifery Council was established on 18 December 2003, and came into full effect on 18 September 2004. The Midwifery Council was to take over the functions relating to midwifery that were previously undertaken by the Nursing Council of New Zealand. A midwife seeking registration as a nurse will also be required to meet the competency requirements set down by the Nursing Council. While I argue that there is added value and economic viability in the employment of a nurse who is also a midwife, there is also added pressure for a practitioner undertaking a diverse role. The maintenance of competence over a diversity of practice requires the ability to prioritise skills required as well as a financial and time commitment. A rural nurse and midwife, with a small maternity case load, could spend up to 20% of income generated from maternity care on direct professional compliance costs. This figure would not include indirect costs such as time spent on portfolio development and maintenance, attendance at standards review, continuing education and on locum cover, all of which combined can make practice financially prohibitive.

Maintaining Competency and Education

An essential aspect of demonstrating competence to practice requires involvement with continuing education. Rural nurses and midwives can experience logistical barriers accessing traditional forms of continuing education due to their isolation and distance from centres of learning (Ross, Stewart & Baldwin, 2007a). Distance to travel has been the most commonly identified factor acting as a deterrent to participation in continuing education (Fahey, 2005; Hendrickx, 2006; Ross et al., 2007a; Ross, Stewart & Baldwin, 2007b). In spite of this, Fahey found that midwives from remote locations in Australia felt strongly about the need to keep up to date with practice skills in order to provide a quality service. Fahey also found that these midwives displayed extra motivation to remain competent and ready for emergencies, because their isolation and limited back-up support from other health professionals increased the likelihood of dealing with an obstetric crisis alone.

As an alternative to traditional forms of continuing education, Australian research demonstrated the potential to strengthen remote area maternity services by reducing isolation from educational resources using an internet-based resource library (Kildea, Barclay & Brodie, 2006). Overall feedback was positive, however, logistical issues presented barriers. These barriers were related to telecommunication infrastructure (hardware, speed, reliability, accessibility, cost, support and maintenance), contextual factors (time available, management constraints, knowledge of availability), and human factors (comfort with technology, education and training, motivation and interest). In Dunedin, New Zealand, the School of Nursing at Otago Polytechnic piloted a project of video conferencing for rural nurses and midwives (Ross et al., 2007a, Ross et al., 2007b). The pilot duplicated and used the technology set up in the Otago region by the Ministry of Education for high school students. Feedback from both groups (nurses and midwives) was positive and, although in the early stages of development, it was determined that video conferencing has the potential to enable peer participation and minimise the barriers of isolation.

Discussion

New Zealand has a model of midwifery care that is respected internationally (Calvert, 2002) however, similar to international trends, the rural workforce, including midwives, is suffering from acute staff shortages. For midwifery some of the changes, that resurrected their autonomy and role as guardians of normal birth, have also created barriers for retention and recruitment of rural midwives. It also appears that New Zealand does not know who, how many, or where their rural midwives are operating. This is a challenge for their professional body if women in New Zealand are to be offered true choice in place of birth and carer. As well, international literature about rural maternity services

is sparse and often not relevant to the New Zealand situation due to the uniqueness of our model of care, however, research conducted about rural nurses, their relationship with rural communities and the other professionals working within them has much to offer midwifery. Although the government has attempted to offer rural support in the areas of travel and payment for the rural general practitioner obstetrician's (GPOs) attendance at births there are other unaddressed issues (Simmers, 2006). A suitable model of care needs to recognise the diseconomies of scale, inherent in rural, by providing a support package addressing some of the costs such as competency compliance, dual registration and insurance, telecommunication, continuing education, locum support.

At the core of rural maternity services are pregnant women and their families who, according to government policy, are entitled to the same quality of service available to women in urban areas (Ministry of Health, 2001b). The three aims of the Primary Health Care Strategy in Rural New Zealand (Ministry of Health, 2002a) provide a framework that would enable this to occur: openness to and support of locally devised solutions; equitable and effective access within the rural community or within acceptable travel times and; development, maintenance and recruitment of a skilled multidisciplinary workforce able to work in a co-operative, co-ordinated and collaborative environment.

Equity of Access

A maternity services consumer satisfaction survey, in which 28% of respondents defined themselves as rural, reported access and choice to be two interlinked areas of dissatisfaction for rural women (Ministry of Health, 2002b). The women reported that there was no choice due to limited availability of practitioners; therefore there was also limited access to maternity services. Interventions aimed at recruitment and retention of a rural maternity workforce and maintenance of birthing and primary facilities would improve access for rural women. From a consumer perspective evidence supports the safety of women birthing in their own communities rather than travelling to another larger centre where they may be at risk of unnecessary interventions (Nesbitt, Connell, Hart & Rosenblatt, 1990). The New Zealand College of Midwives database on home and primary facility births supports this evidence. The data shows that these births tend to be non-operative, use less pharmacological pain management, have better birth outcomes and higher breast feeding rates (Hendry, 2005). Rural women birthing in their local area can be disadvantaged by the cost of accessing screening procedures easily available to urban women. It is acknowledged that for some women the safest place for birth is at a secondary hospital with access to specialist services. For these reasons:

- 1. Funding assistance for travel and accommodation would reduce the financial burden on (primarily) young, low income families who need to access screening**

or who are either unable, or for safety reasons, unwilling to birth in their local community.

An unrecognised role that rural midwives provide, ensuring that women have access to appropriate care, is that of care coordination. Rural woman unable to birth in the local area usually stay with friends and family for the birth and this is not necessarily in an area adjacent to their home. Recognition is required for the time and effort involved by local midwives linking women with appropriate professionals in an area of their choice, transferring notes and arranging split payment of the maternity fee.

2. Introduction of a single payment for midwives co-ordinating care for women giving birth with an LMC (excluding secondary hospital team) outside the rural area but receiving the majority of their ante-natal and post-natal care in their rural setting would provide such recognition.

Access, however, involves more than travel to services. The services that rural people are accessing need to be effective and appropriate to the rural setting.

Locally Devised Solutions

A growing body of international literature recognises the distinctiveness of the rural context and culture (Lee & Winters, 2006). Therefore there is a need to have a distinctive rural approach to maternity services, however, there is a dearth of research specific to women giving birth in rural communities. The study of rural obstetric services has mainly been conducted in Australia and Canada, countries with a different service structure (medical-led) to our own. As well Australia's indigenous population is largely represented in rural statistics and are known to have greater risk factors than the non-indigenous population thereby making outcome comparisons difficult (Roberts & Algert, 2000). Despite New Zealand's unique model of maternity care, there is limited midwifery research highlighting the plight of rural services. Until more data is available we need to look to other professions' research on rural and obstetric care.

A rural nursing approach, which can be applied to midwifery, incorporates an understanding of rural health perspectives and the impact of isolation and distance. As well the trait of self-reliance, the lack of anonymity and the importance of 'knowing' for both consumer and professional, need to be considered. Greenwood and Cheers (2003) described the plight of women in a rural society where their needs are ignored to a point where their health and well-being are at risk. Areas highlighted in their qualitative study were aloneness, lack of support and post natal depression. A specific action to help mitigate isolation and provide support would be:

3. Provision of at least one week funded post-natal domestic home help for all women birthing at home or returning home within the two weeks after birth.

If administered in the form of a carer support payment the woman would have discretion and control over how she could best be supported thus reducing the emotional stress of being cared for by a person not known to them.

Also well documented are diseconomies of scale issues (Nesbitt, 1996; Ministry of Health, 2002b). This occurs when the cost of providing services is more than what simple economic analysis indicates is justified. Two examples of this in maternity service provision are the cost of staffing and maintaining small local birthing units with low birth numbers and the cost of competency, registration and compliance for midwives practising in rural areas compared to their limited earning potential from service provision. Some of these costs could be mitigated by:

4. Provision of an allowance for rural nurses and midwives to assist with costs of dual registration and professional body fees as well as those associated with technical skills training to meet competencies.

5. Continuing District Health Board support of local birthing and primary units that make allowance for diseconomies of scale issues.

Hendry (2005) reports that 15-18% of rural women are birthing locally and suggests that more could do so. Smith and Askew (2006) found overriding concern for all study participants when choosing to birth outside of their rural area in Australia was that of safety (actual and perceived). They concluded that measures to increase the number of rural births to prevent further withdrawal of obstetric services must address actual and perceived safety issues to be successful. Patterson (2003) maintains that a challenge for rural midwifery in retaining a rural birth option is in the ability to attract women back to local services. It is suggested that this can be done by raising the local midwifery profile by advertising and networking. As well, Patterson suggests that the knowledge that the midwife has established links that facilitate referral and transfer in an emergency will assist in overcoming safety issues for women. The ability to address these issues requires:

6. A positive and more united approach by midwives and physicians to promote safe local birthing options through the media.

Local solutions to maternity care rely on the availability of, and access to, appropriate professional support to enable birth to take place safely within rural communities. However, rural professionals also require support for safe practice.

Collaborative Model

Rural practitioners recognise the ability of functional teams to offer an improved health care service of higher quality than a non-functioning team or a single discipline (Ross, 2001). The philosophy underpinning teamwork, espoused by Ross (1999), of the ability to work independently but in collaboration, with each team member being valued for their contribution, knowledge and clinical expertise fits well with rural maternity service provision. Unfortunately there have been political and financial barriers impeding such collaborative practice. Financially general practitioner obstetricians (GPOs) have been discriminated against by the structure of the Section 88 payment system that does not recognise their role of providing elements of secondary care to other LMC's clients (Simmers, 2006). Rural GPOs usually know and are known by the woman, are aware of the vagaries of the rural environment, and have a skill set complementary to midwifery. Urban midwife respondents, in a study conducted by Toop and Hodges (1996) indicated that, due to volume of births and proximity to specialists, they were able to build a relationship with a specialist obstetrician, however, this is more difficult in the rural environment. Simmers, suggests that LMC midwives would find it impossible to continue to provide maternity services in the local rural community without some form of accessible specialist backup. A rural model of maternity care would be supportive of the expertise provided by GPOs by:

7. Amending the Section 88 Maternity Notice to incorporate an adequate payment for GPOs acting in an LMC support role in rural areas and making available to them the same rural travel allowance as is allowed to LMCs.

Another area of concern for rural midwives with small practices is that of locum cover (Patterson, 2003). Barriers to time out are payment, accommodation and transportation of locum relief. In extreme circumstances potential locum midwives can be deterred by the isolation, remoteness and size of the geographic area. Recognition of the contextual impact of the rural environment on practice has been given to general practitioners by additional support packages based on a rural ranking scale. Such support could be modified to suit the rural midwife:

8. Development of a rural ranking scale for midwives with an attached support package including assistance with locum coverage, recruitment and retention, and a financial incentive to practise in an area that otherwise may not be economically viable.

Continuing education is another area of difficulty for rural practitioners in terms of available technology and the time and ability to access suitable material (Kildea et al., 2006). It was noted by Hendry (2003) that none of the nine rural maternity facilities in

her study had a dedicated computer to store data or access the internet. Support in this area would help with safety and retention issues:

9. Provision of technological and educational support for rural areas.

Finally, in order to combat the effects of an aging rural workforce encouragement needs to be given to those nurses and midwives with an interest in rural practice, as well for those already in practice by:

10. Making available rural midwifery and nursing training scholarships for those nurses and women committed to rural practice.

Conclusion

Since 1990 the New Zealand model of maternity care has undergone many changes in response to both provider and consumer need. Its dynamic nature is reflected in the fact that some of the ten suggestions for change in the rural sector are already beginning to be addressed by the New Zealand government.

However, the research raised some basic questions that need to be answered before a specific model can be designed. It appears that there is no clear definition of what constitutes either rural (in regard to maternity services) or what is different about a rural (versus urban) midwife. Therefore it is not known how many rural midwives exist or which areas in New Zealand are suffering from a shortage of maternity care. The rural workforce survey sent forms to 420 midwives whom the NZCOM determined lived in rural locations and only 122 were returned – a response rate of 29% (New Zealand Institute of Rural Health, 2006). The survey forms were sent to those midwives who were domiciled rurally. It was speculated that the possibility that not all rurally-domiciled midwives practice rurally may have contributed to the low response rate. Also unclear yet is the effect of competency requirements and registration on those nurse and midwives operating in a dual role. How many nurses intend to allow their midwifery registration to lapse and what the potential flow-on effect may be for rural areas? Similar to the rural nursing workforce the midwifery workforce is aging (New Zealand Health Information Service, 2004). Workforce projections are required to enable strategies to be put in place to mitigate the effects, in 10 years time, of a large percent of midwives who will be retiring from practice. Very little recent research was found that was specific to the experiences of New Zealand rural women using maternity services. Therefore assumptions have been made based on research conducted overseas and from what is known about rural people. If we are to develop a rural model of maternity care specific to New Zealand the voices of our own rural women need to be heard.

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Considerations for the Future Practice of Rural Nursing Practice

- Developing Primary Health Care Nurse Practitioner Roles
- Collaboration to improve Primary Health Care
- Collaborative On-Call Primary-Secondary Interface

The Challenge of Developing Primary Health Care Nurse Practitioner Roles in Rural New Zealand

HEATHER MAW

This chapter is the first in this section focusing on 'Future Aspects of Rural Nursing'. This and the following two chapters provide a detailed account of issues which relate to the future development and practice of rural nursing in New Zealand.

The Nursing Council of New Zealand (NCNZ) introduced a new level of nurse, the Nurse Practitioner, in 2001. Nursing in New Zealand began a process of transition and transformation. The Ministry of Health (Ministry of Health, 2001, 2003) anticipated that Nurse Practitioners would benefit rural communities by improving access to care and improving health outcomes. Rural nurses recognised this as an opportunity for career advancement and begin educational preparation for the Nurse Practitioner role.

Factors Influencing the Development of Rural Nurse Practitioner Roles in New Zealand

The evolution of rural nursing education in New Zealand in the last decade illustrates the importance of preceding events and processes and recognises rural health issues that have led to the development of pioneering rural Primary Health Care Nurse Practitioner roles.

Key Events

- The concepts of advanced nursing practice, Nurse Practitioner (NP) and nurse prescribing had been debated in New Zealand for many years (Brash, 1986; Carryer, 2002). Reports such as Brash's discussion paper *Exploring the possibilities for independent NPs in New Zealand* and Hawken's (1989) research report for the NZNA, *Nurses who see themselves as independent practitioners* were forerunners in

identifying the concept of independent nursing practice and the NP concept in New Zealand.

- 1998: The Ministerial Taskforce on Nursing, commissioned by the Ministry of Health (1998), recommended that the Ministry of Health direct the Nursing Council of New Zealand to develop advanced nursing practice competencies, and that NP roles be developed in New Zealand, citing international literature to support this recommendation. This appeared to be congruent with developments in Australia at that time (Appel & Malcolm, 2002; Carryer, 2002; G. Gardner, Carryer, Dunn, & A. Gardner, 2004) and a logical progression of professional nursing development as had been seen in the United States and the United Kingdom where NPs had been practising successfully for many years (Ministry of Health, 1998; Nursing Council of New Zealand, 2001).

The report on nursing (Ministry of Health, 1998) focused on the ‘... untapped potential of the nursing workforce...’ (p.4) highlighting the plight of nurses with advanced clinical and leadership competencies who were inhibited in their development and utilisation, by legislation, funding shortages, and the lack of ongoing clinical career pathways (Ministry of Health, 2001) and offering vision for improved career pathways.

- 1999: the New Zealand Government’s amendment of the 1981 Medicines Act, the 1999 Medicines Amendment Act, paved the way for the introduction of nurse prescribing (Nursing Council of New Zealand, 2005a, 2005b).
- 2001: following widespread discussion and consultation, the Nursing Council of New Zealand released what was described as a blueprint for NP (Nursing Council of New Zealand, 2001). The Nursing Council of New Zealand envisaged the NP role would involve academic preparation of NPs at Masters level with an expectation that NPs would demonstrate clinical excellence (Nursing Council of New Zealand).
- the New Zealand Government released the New Zealand Health Strategy (Ministry of Health, 2000) and the Primary Health Care Strategy (Ministry of Health, 2001) that were to impact on health policy and provision of health services, providing opportunities for nurses to develop NP roles.

The Primary Health Care Strategy (Ministry of Health, 2001) focused on:

- finding local solutions to health disparities by local people
- better coordination of health care provision by health service providers
- the promotion of wellness models, including the maintenance and restoration of health and
- the need to develop the Primary Health Care workforce.

By emphasising the health of Maori and Pacific Islanders, and those in rural communities (Ministry of Health, 2003), the Primary Health Care Strategy has the potential to reduce health inequalities and improve outcomes by improving access to

affordable health care at the first point of contact. Within the rural sector evolutionary work was being carried out by the Centre for Rural Health.

The Influence of the Centre for Rural Health on Rural Nursing Development in New Zealand

In 1994 the Centre for Rural Health (CRH) was established and a forum was founded for research on rural health issues. The CRH was commissioned to carry out a series of projects to support rural health services, community involvement and rural nursing and identified a need for advanced rural nursing education to support the developing roles of rural nurses (Litchfield, 2001; Ross, 1997, 1998, 1999). Until now nurses had struggled to access appropriate educational opportunities (Ross, 1997, 1998) in an effort to serve the growing needs of their communities.

In 1998 inaugural papers were offered in the interdisciplinary Postgraduate Diploma in Primary Rural Health, developed by the CRH in conjunction with the Christchurch School of Medicine, University of Otago. This diploma was innovative in that it recognised and promoted the need for collaborative teamwork in this area of practice (Ross, 1998) and offered an opportunity for rural nurses to gain a 'tailor-made' postgraduate qualification in their area of practice while continuing in their clinical roles (Brown, Maw & London, 2001; Ross, 1988).

Between 1998 and 2001 the CRH made submissions to the Ministerial Taskforce on Nursing (Ministry of Health, 1998). The New Zealand Health Strategy (Ministry of Health, 2000) was an effective voice in driving change in health policies such as the Primary Health Care (PHC) Strategy (Ministry of Health, 2001). CRH co-director Jean Ross was influential in establishing a Rural Nurse National Network (RNNN) through the CRH, whose work helped provoke action on wider rural health issues (Ross & Murrell-MacMillan 2006).

In 2000 and 2001 CRH directors lobbied the Ministry of Health to examine the wider issues of rural recruitment, retention, and advanced education (London, 2001).

In late 2002 the CRH was disbanded (because of funding issues) but one of its legacies is the recognition of the advancing roles of rural nurses, and subsequent development of postgraduate education to meet their needs. All of the project work undertaken by the Centre for Rural Health is available on the Ministry of Health web page www.moh.govt/cfh

New Zealand Rural Health Professional Workforce Crisis

Health professional workforce shortages were causing concern which was evident at all levels and particularly in rural communities (London, 2000, 2001, 2002). In addition to General Practitioners (GPs) and nurses, pharmacists, physiotherapists and dentists were also in short supply (London, 2000).

The Rural Expert Advisory Group (Ministry of Health, 2002a) expressed concern about the declining and ageing rural workforce. London (2002) advised that 69 GPs left

rural practice in New Zealand in 2002 and some were not replaced. The resultant decline in GP numbers left many rural communities and regions medically underserved,

The New Zealand news media, particularly regional newspapers, were powerful in highlighting and influencing public concern and policy on issues such as doctor and nursing shortages, indicating that individual communities were not alone in their problems of recruiting and retaining health professionals.

In 2002 the Ministry of Health responded by offering a substantial financial package for recruitment and retention of rural health professionals, to stem the flow of GPs and experienced nurses who were leaving New Zealand to practise overseas (London, 2002). It was recognised that the shortage of nurses was an international problem (College of Nurses Aotearoa [NZ] 2001).

Barriers to Rural Nurses becoming Endorsed as Primary Health Care Nurse Practitioners

Between 2002 and 2003, some advanced nurses, aware that NP endorsement in New Zealand was likely to become a reality, explored the NP role (O'Connor, 2003a). Some reasons for their not seeking NP endorsement were:

- the perception that there was no guarantee that a role would be available should they gain endorsement
- the burden of studying postgraduate education while working fulltime in rural communities. (O'Connor, 2003a)
- some rural nurses who had applied for NP endorsement had been unsuccessful and had wondered if endorsement as rural PHC NPs was truly achievable. (O'Connor 2003a)

There are many documented reasons why the first rural NP applicants to Nursing Council of New Zealand were unsuccessful:

- being educationally ill prepared, although highly experienced, some did not have a clinical Master's degree and could not demonstrate educational equivalency, a requirement for NP endorsement (Nursing Council of New Zealand, 2001).
- being poorly supported through the application process. The Nurse Practitioner Advisory Committee (NPAC-NZ) responded to the concerns that nurses had not been adequately prepared for the NP application process, by developing a mentoring process to support nurses seeking NP endorsement.
- O'Connor (2003b) suggested that the nurses who had applied were unhappy, as they believed they were already fulfilling a NP role, apart from prescribing .
- alteration of regulations: the original NCNZ NP framework required applicants to meet five competencies (Nursing Council of New Zealand, 2001), amended in 2002 to include a sixth, related to nurse prescribing (Ministry of Health, 2002b).
- the process of proving equivalency: although not ruling out those nurses who could apply for educational equivalency without postgraduate education until 2010, proving

equivalency without academic grounding appeared for some to have moved NP endorsement beyond reality.

Primary Health Care Nurse Practitioner (Rural) Scholarships

Early in 2003, nursing leaders in rural health lobbied the New Zealand Ministry of Health on behalf of rural nurses to gain financial support to complete their Master of Nursing degrees and seek NP endorsement (Harris, 2003). The Ministry of Health responded in September 2003 by inviting applications from suitably qualified rural nurses to apply for six Primary Health Care Nurse Practitioner (Rural) scholarships which would enable successful applicants to complete their Master of Nursing degree (Harris; Ministry of Health, 2003). This included funding to replace income whilst studying and the Ministry of Health later announced a continuation of the Rural Primary Health Care NP scholarships for 2005 and beyond. The vision of these scholarships was to offer rural communities a highly skilled expert practitioner.

What Rural Primary Health Care Nurse Practitioners can offer

Cost effective health care: Venning, Durie, Roland, Roberts and Leese (2000) concluded that the NPs were more cost effective than the doctors; NPs provided greater patient satisfaction, had no differences in clinical or health outcomes and that both groups had similar prescribing patterns. However Horrocks, Anderson and Salisbury (2002), noted that there were increased costs associated with NPs (consultation time higher and more tests/referrals) and indicated the need for further research to clarify the way in which NPs might work most effectively for the health outcomes of the PHC population.

The public: Kinnersley, Anderson, Parry and Clement, (2000) concluded that there was no significant difference in care provided by NPs and doctors, there was high patient satisfaction with NPs and that the NPs provided more information to patients. Mundinger, Kane, Lenz and Totten, (2000) concluded that there was no difference in short term health outcomes between patients seen by NPs or doctors, and the NPs and doctors in this study worked under identical conditions. Horrocks et al. (2002) concluded NPs in primary care lead to increased levels of patient satisfaction and improved quality of care, and identified no difference in health outcomes.

Improved Health Outcomes: Pinkerton and Bush (2000) highlighted that NPs managing patients whose health care needs were as complex as those managed by GPs, showed similar health outcomes.

Collectively, these studies indicate there is some evidence that NPs contribute to improved health outcomes in Primary Health Care and perform at least as well as GPs on a range of measures. This evidence has positive implications in a New Zealand context, particularly in medically underserved rural communities, however caution needs to be used when comparing the two professions (nursing and medicine), because of the inherent differences in these disciplines. Julia Cumberledge, in the foreword to a 1989 report on a review of community nursing in the UK (Cumberledge, Carr, Farmer

& Gillespie 1989) suggested to seek medical advice is not necessarily to seek a cure for illness, rather a search for health, and argues that the two concepts are different. This theory, when applied to nursing, epitomises the essence of the rural Primary Health Care NP role in New Zealand; that of a wellness focus of care and the maintenance of health. As well, it is important that we remember that the comparisons (of NPs and GPs) in the literature are comparisons of a small aspect of commonality in the roles of the two disciplines, such as patient centred tasks of diagnosing, prescribing, and treating.

Collaborative practice: Shortages of GPs in rural communities and funding shortfalls have the potential to constrain DHBs from meeting the goals of the Primary Health Care Strategy (Ministry of Health, 2001). NPs would be well positioned to alleviate this situation by practising in this area. Rural Primary Health Care NPs will practise autonomously but collaboratively, and their success will be underpinned by their prior nursing experience in New Zealand. This experience ensures that these NPs are familiar with the concepts of collaborative practice (Ross, 2001). The competencies for NP endorsement require NPs to collaborate, consult, and refer appropriately, especially regarding serious health issues (Nursing Council New Zealand, 2001). *Collaborative practice is discussed more fully in the following chapter of this book.*

Improved access to health care: Rural Primary Health Care NPs have the potential to offer improved access to care, particularly in medically underserved areas. This view is supported in a USA study by Martin (2000), who suggested access to care continues to be a problem in rural areas, and that NPs are well positioned to alleviate this problem. Armed with expert and in depth knowledge of their communities from their previous practice experience, rural Primary Health Care NPs are also likely to offer the District Health Boards a commitment to continuity of care.

Community acceptance: For the rural Primary Health Care NP, gaining community acceptance will be important and pivotal to the success of the role. Bidwell's (2001) review of international literature of successful models of Rural Health Service Delivery and Community Involvement in Rural Health indicates that 'successful rural health services require community involvement' (p.29). I would progress this opinion by suggesting an 'unsuccessful' nursing model would likely demonstrate some form of consumer resistance or lack of community 'buy-in'. If this happens and a new service is not utilised, there is the potential for it to fail.

A key challenge for new NPs is how a rural Primary Health Care NP would gain acceptance in a community. This challenge has potential ramifications and needs to be explored, particularly for Primary Health Care NPs who may practise in areas that have traditionally had the services of a GP and are no longer able to attract GPs to practise in their communities. For the aspiring Primary Health Care NP this situation represents an opportunity to establish a NP role. This role may, or may not, be acceptable to the community. The inception of a Primary Health Care NP role in any rural community in New Zealand would be a 'change' from the status quo, or the expected or usual and recognised form of health care provision; communities may question the competence of

a nurse to provide a level of service that GPs have previously provided.

Bidwell (2001) suggested rural communities are traditionally conservative in their approach to health services, becoming vocal mostly when service closures are threatened even if those services have been underutilised. McMurray (2003) suggested rural people access health care, and view health and health promotion in different ways to people in urban settings. This view is supported by several authors who consider health for rural people is measured by a person's ability to work or do their job (Brown et al., 2001; Bushy, 2000; Litchfield, 2002). Nurses working in rural communities recognise this concept and historically know their communities well, as they are often long-term residents of the community (Bushy, 2000) and are aware of the stoicism of rural people (Brown et al.). Communities also desire continuity of health care (London, 2001) and Bidwell suggested communities also want security of health care. London suggested nurse-led services provide continuity of service in rural communities facing loss of GPs. Similarly, Ross (1998) suggested nurses in rural areas of New Zealand are already providing what are recognised as advanced PHC services to the more remote rural communities. In some cases such as Stewart Island, Taranaki, and some parts of the West Coast of the South Island the services are already nurse-led (Litchfield, 2004; London, 2002). These nurses are practising in areas that have historically had nurse-led services only, and I would suggest the nurse-led services have grown and evolved in response to the needs of the community.

A change of title from rural nurse or Rural Nurse Specialist to NP, and the resultant anticipated improvement in service delivery within these communities, would likely cause few ripples despite what Harulow (2000) describes as ongoing medical resistance, and concerns about the NP role from outside the community. For communities who have previously had GP led services, it may prove harder to introduce Primary Health Care NPs. The question arises, despite the shortages of GPs in rural communities, are rural communities in New Zealand ready for NPs? I would suggest rural communities cannot in effect answer this question. They are likely to have no prior exposure to NPs or knowledge of the capabilities or role of NPs (Lindeke, Bly & Wilcox, 2001; Wiseman & Hill, 1994). Lindeke et al., in examining perceived barriers to rural NP practice in Minnesota, USA, suggested lack of understanding by the general public of the NP role and scope of practice could prove detrimental to the success of NP practice. For nurses in rural New Zealand, there are no rural Primary Health Care NP roles in existence for these new roles to be modelled on. It should therefore be no surprise that communities have little insight into the roles, therefore the challenge is to raise awareness of the potential of the rural Primary Health Care NP role.

Having little or no knowledge of the NP role has the potential to cause consumer resistance, making implementation and establishment of these roles in some areas either very difficult or impossible. Conversely, lack of knowledge of the NP role may mean a community has undue expectations of the NP. I also believe the lack of knowledge of

NP roles creates a potential tension for nurses who have gained NP status, practising in this new role in a community that has previously known them in the capacity of their rural nurse role. This could create some confusion for patients.

Education of the NP role: Bidwell (2001), highlighted the importance of community consultation, and discussed the importance of health needs analysis in communities to establish the level of health service required. It appears education and information about the role and abilities of the NP to provide PHC will need to be thoughtfully and carefully assimilated and proffered to members of communities (Kelley & Mathews, 2001; Kinner, Cohen & Henderson, 2001; Lindeke et al., 2001). It may be that different information will need to be provided to different focus groups in communities (Bidwell). Bidwell discussed power balances within communities, and the ability of individuals to dominate or proffer views that are their own, and not necessarily a consensus. The difficulty in many community decisions is to gain consensus. Consequently if an individual or individuals choose, they may influence others either positively or negatively, and this phenomenon is a risk that an aspiring NP may take when proposing the establishment of NP roles. Bidwell suggested that these people are targeted either as a focus group or individually. In this way they can be educated, in this case regarding the role and capabilities of NPs, so the NP concept is 'sold' to this group. They in turn have the ability to influence others. Some communities will have people who need no convincing of the merits of NPs and these people are likely to assist intending NPs. They are likely to lobby with 'their' nurses to promote or even demand NP roles in their community. This offers a viable opportunity for communities, especially following loss of medical practitioners. In this way communities can identify and respond to their perceived needs, and community 'buy-in' can help secure some continuity of health service provision (Bidwell).

Conversely, other communities will have prominent citizens who may oppose the promotion of NP roles, and as in my own community, voice their concern that the establishment of a NP role may mean the community will lose funding for, or be prevented from supporting a GP role. The people in these communities deserve a rapid and honest response to these genuine, but often unfounded concerns. Importantly every opportunity to educate the public about NP roles must be taken (Kinner et al., 2001).

A search of the literature regarding community acceptance of rural NPs was disappointing in that despite a large volume of literature on this topic, it yielded little information other than community satisfaction with rural NP roles (Knudtson, 2000; Roberts, 1996). In discussing the lack of previous exposure of communities to NPs, Baldwin et al. (1998) suggested they would be accepted by communities under certain conditions. These conditions included issues of confidentiality, friendliness, willingness to integrate into the community, competence, cost, and availability. Brown et al. (2001) discussed similar issues for rural health professionals in the New Zealand context. Baldwin et al. also mentioned the issues around lack of knowledge of the NP role, and stressed the need for community education of the NP role to encourage acceptance.

Once established there will also be a need for research and audit of the roles, to explore the extent and nature of community acceptance, offering guidance for future nurses. It is important to remember that for the initial pioneering rural Primary Health Care NP roles in New Zealand, the new NPs will have had a minimum of four to five years' clinical practice within the context of rural Primary Health Care. They will have been practising either autonomously or semi- autonomously at an advanced level, and will be grounded in 'rural' health (Ministry of Health, 2003). These experienced advanced nurses will likely be well known to the 'team' where they will practise, they will have demonstrated collaborative practice, and their capabilities and philosophies of care will be known (Brown et al., 2001; Ross, 2001). They will have been 'prescribing' under standing orders for years, and will know their practice population well (Philips, 2003). They are likely to have lived in their community for many years (Brown et al.; London, 2001). The nurses will have fostered strong professional relationships with GPs during the course of their academic study. Selected GPs have performed the role of clinical associate while the nurse has undertaken their Master's level prescribing practicum, a process necessary to fulfil the requirement for NP endorsement (Nursing Council New Zealand, 2002). The role of the clinical associate in New Zealand is to assess the ability of the nurse to diagnose and prescribe appropriate therapeutic interventions and demonstrates collaboration between GPs and nurses. I would suggest that this collaborative relationship will continue to grow as the new NP enters practice. These GPs are well positioned to understand the potential of the NP role and to adjust their practice to align with NPs.

Other issues to consider: The question as to why some doctors are cautious about the introduction of NPs generally stems from the doctors' concerns over nurse prescribing, (Davis, 2005; MacDonald & Katz, 2002; MacKay, 2003). Others suggest doctors' concerns stem from prospective loss of income (Blayney, 2004), competition, loss of power and control, and discussion abounds surrounding nurses being accused of being doctor substitutes (Wood, 2000). Whatever the differences that may exist, nurses and doctors need to put aside their differences for the betterment of their patients and health service provision (MacKay).

MacKay (2003), in identifying the lack of knowledge GPs have surrounding the competence and abilities of NPs, once again highlights the need for education about the role, to promote acceptance of these new positions in New Zealand. However, given the barriers and challenges to practice experienced by the true NP pioneers in the USA (Brown & Draye, 2003; Kelley & Matthews, 2001) it would be unrealistic to assume that the endorsement of NPs in New Zealand would not meet with some similar forms of resistance and scepticism from doctors or nurse colleagues.

Nursing acceptance of the NP role: It is my view that nursing opinion of the rural Primary Health Care NP role will generally be one of acceptance, as more nurses undertake postgraduate studies and as the profession progresses into the next decade. I believe that the complex nature of existing rural nursing roles in New Zealand, and the

advanced knowledge required by rural nurses, is recognised by nursing colleagues. However, in the pioneering NP roles described by Brown and Draye (2003) and Kelley and Matthews (2001), the authors cited nursing resistance to the NP role as a barrier. They suggested negativity may stem from lack of knowledge of the role.

In New Zealand, some nurses have expressed concern that the NP role will be elitist, and will create a division or separatism (Grant, 2003). Nurses who have previously called themselves NPs are unhappy that now that the NP title is trademarked by the Nursing Council New Zealand (2001), they can no longer use the title. They believe this move devalues their role (Pantano, 2003/2004; Pepperell, 2003). O'Conner (2003b) explored what is described as 'angst' about NPs in New Zealand, and concluded that nurses were frustrated and disillusioned, and that they feared the NP role would create divisions within nursing. O'Conner (2003b) cited nurses' feelings of unease and anxiety about the role and that some nurses viewed the role as a threat. Should the role end up with an element of 'elitism' attached to it; is it wrong to view the role this way? It is after all the 'pinnacle' of the nursing scopes of practice in New Zealand. The new rural Primary Health Care NP will be aware of such comments, realising that until the role is 'proven' as suggested by Brown and Draye (2003), there will be unease surrounding the concept. They will be focused on establishing their role and commencing practice at a level previously not allowed in this country (Nursing Council New Zealand, 2001).

In this new role the rural Primary Health Care NP is likely to be a novice, and will have returned to the advanced-beginner level, or be in a transitional phase of learning and adapting to a different focus of nursing as described by nursing theorist Benner (2001). Several American studies have explored the transition of nurses from the Registered Nurse to the NP role and contain valuable insight into the pitfalls and triumphs of this process (Brown & Draye, 2003; Kelly & Matthews, 2001; Rich, Jordan & Taylor, 2001). The new NPs will need support and encouragement from nursing colleagues as they branch out into their fledgling practices (Kelly & Matthews). Formal professional support mechanisms will need to be established (Hewson, 2004).

As leaders, the NPs will need to encourage other nurses in educational pursuits, and assist them to achieve their own career goals. It has been suggested the resistance or unwillingness of nurses in the USA to accept the NP role, comes from their lack of knowledge of the role and the capabilities of the NP (Brown & Draye, 2003; Kelley & Matthews, 2001). Once again, this highlights the need for education and awareness of the NP role as mentioned in previous chapters. A positive attitude and a professional and collegial approach to the new role by NPs should promote the benefits of the role to other nurses who are sceptical or not accepting of the role. Efforts by the NP to understand and appreciate the opinion and beliefs of other nurses will hopefully break down any resistance to the role and promote acceptance. New Primary Health Care rural NPs will need to develop appropriate mentors and find supportive colleagues to help them cope with any resistance which may occur (Kelley & Matthews). In rural communities in New Zealand, most nurses seeking NP endorsement will be known to their nursing

colleagues. These colleagues are likely to have encouraged and supported these nurses in their quest for academic qualifications and NP endorsement. I believe that the rural Primary Health Care NPs will be accepted by nursing colleagues and that non-acceptance, if evident, will not hinder the development or achievement of the role.

Conclusion

Exploring the development and advancement of rural nursing in New Zealand in the past decade serves to remind aspiring rural Primary Health Care NPs of the influence of organisations, such as the CRH, on advanced nursing education that has in turn led to the evolution of this pioneering role, within the New Zealand health arena.

The first priority for rural nurses will be to gain NP endorsement. The challenge will then be for the development and creation of Primary Health Care NP roles in rural communities, as an employee of a District Health Board, Primary Health Organisation, or through self-employment.

Rural Primary Health Care NP role development will require NPs to demonstrate their ability to be effective in the role as well as show clarity and understanding of what the role entails. They will need community support for the role and the opportunity to collaborate with other health professionals. They will require skills to work with the media to raise awareness of the role as well as the ability to assess resistance, confusion, or concerns about the role, formulating appropriate responses to these challenges as required.

The resources the rural Primary Health Care NPs will require will be personal competence to perform the role and pioneering vision to lobby for the establishment of the role. They will require mentors to support them in the establishment of the role and District Health Boards or Primary Health Organisations to fund the roles. The final resource required will be for legislation and policy to enable role performance.

Finally, through audit of standards and health outcomes, and future research into the development of rural Primary Health Care NP roles, we will be able to gauge the true effectiveness of this role in rural communities in New Zealand.

It is time for nursing in New Zealand to come of age. I believe the NP concept is sound and feasible, and the timing is right to create Primary Health Care NP roles in rural New Zealand and to allow the challenges of establishing these roles to begin.

This step is captured in a quotation from nursing pioneer Florence Nightingale:

*'I think one's feelings waste themselves in words; they
ought all to be distilled into actions which bring results.'*

– Florence Nightingale 1820-1910

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Collaboration to Improve Health Provision: Advancing Nursing Practice and Interdisciplinary Relationships

ANNA HIGGINS

Introduction

This chapter introduces national policies and strategies that promote interdisciplinary collaboration as a means of providing better access to health care for all communities.

An increasing focus on collaboration as a concept within health practice during the last 10 years has become evident in policy documents from the Report of the Ministerial Taskforce on Nursing (Ministry of Health, 1998) to the Working Party for After Hours Primary Health Care (Ministry of Health, 2005). The emphasis would seem to be in response to political pressure to address health inequalities and an apparent assumption that interprofessional collaboration results in improved communication, fewer gaps in provision of care and more effective use of the limited health funds.

The following national health policies and strategies are discussed in relation to the focus on interdisciplinary collaboration.

National Policy Direction

Primary Health Care Policy

The Report of the Ministerial Taskforce on Nursing (1998) recommended that nursing contribute to a more 'responsive, innovative, effective, efficient, accessible and collaborative health care service for New Zealanders' (Ministry of Health, 1998 p.5). The Ministry of Health envisioned that nurses educationally prepared to advanced levels of nursing could provide direct access for clients seeking health care. Nurses in advanced practice could assess, diagnose and initiate treatments that fall within the range of knowledge and skills appropriate to that role (Ministry of Health). The report emphasised the importance of developing advanced nursing roles as part of health care teams. It could be argued that the development of advanced nursing practice roles in rural areas

is a direct result of doctor shortage and their reluctance to provide after hours care. This situation has encouraged nurses to collaborate with other health professionals to improve patient access to health care and to assist in the provision of a sustainable primary health care service.

Emergency Primary Health Care Policy

The Ministerial document 'Roadside to Bedside' highlighted the need for timely access to acute health care services especially in rural areas. This report stated collaboration, innovation, co-ordination and integration of care should form the basis for improved patient outcomes (Ministry of Health, 1999). Recommendations were made for co-ordination, collaboration and communication between traditional health care providers and other agencies such as the police, fire, civil defence, search and rescue and the military to provide timely access to emergency care.

The Primary Health Care Strategy

The collaborative approach to healthcare is a key feature of the Primary Health Care Strategy in New Zealand (Ministry of Health, 2001) and states that a new collaborative model of care should replace health professionals' fragmented way of working separately. This new collaborative approach includes a range of practitioners with the skills to communicate and collaborate to serve the patient's best interest (Ministry of Health).

The Primary Health Care Strategy focuses on the collaboration between the Ministry of Health, District Health Boards (DHB) and Primary Healthcare Organisations (PHO) to ensure useful information is collected and shared with doctors, nurses, and community primary health care workers (Ministry of Health, 2001). It is envisioned that this collaboration will help reduce health inequalities in the population and in turn address the causes of poor health status. This multi-disciplinary approach provides the opportunity to recognise the roles and importance of other health care professionals, their unique contribution to patient health and to working collaboratively with one another.

The Primary Health Care Strategy in Rural New Zealand

This Strategy focuses on improving and maintaining the health of the rural population and access to first line services with the potential to restore health, where the ultimate goal is to 'achieve accessible, appropriate primary health services for people living in rural New Zealand' (Ministry of Health, 2002, p. ix). PHOs are accountable for achieving collaboration among service providers, providing and sharing on call shifts, supporting expanded nursing roles, collaborating with Maori and non-Maori providers, reducing the duplication of service delivery and ensuring there is a sustainable infrastructure (Ministry of Health).

The Ministry of Health (2005) envisioned that registered nurses including Nurse Practitioners (NPs) as well as General Practitioners (GPs) should be involved in the provision of first level services. The Working Party for After Hours Primary Health

Care, which includes provision of first level services in New Zealand, recommended that for maximum effect, services need to fully utilise the competencies of the wider health care team and consider the potential for advanced nurses to provide strength to the workforce. Such collaboration has the potential to ensure accessible, effective and resilient primary health care service. As a collaborative service it is also likely to be sustainable as it provides career advancement opportunities for rural nurses and reduces the onerous on call requirements for the rural GP.

As can be demonstrated within these policies, collaboration is a key feature for improved health provision, advancing nursing practice and interdisciplinary working relationships. It is now appropriate to turn to defining collaboration and all that collaboration entails.

Collaboration

Definitions of Collaboration

Collaboration is defined as ‘working one with another’ (Macquarie, 2001, p. 383) and as working together, especially in a joint intellectual effort (Houghton, 2000). Bidwell and Ross (2001), in an extensive literature review of collaboration in rural nursing, noted that collaboration is synonymous with the words *teamwork*, *interdisciplinary*, *multidisciplinary*, *interprofessional*, and *co-operation*. Collaboration is further defined as a process whereby two or more people come together to discuss a common problem (Henneman, Lee & Cohen, 1995). It involves working together rather than alongside one another (Davies, 2000) and having effective team members with distinct roles who do not compete for the same tasks. In the context of health care, it is not about everyone trying to do the same job but working as a team for the benefit of the patient (Beecham, 2000).

Hence collaboration is not what people have in common - rather it is recognising what is different that makes collaboration more powerful than working individually (Davies, 2000). Collaboration can be viewed as an interaction between a doctor and nurse that enables the knowledge and skills of both professionals to synergistically influence patient care (Vazirani, Hays, Shapiro & Cowan, 2005). Armstrong (2005) and Castledine (2005) suggest positive changes can be made in primary health care if collaboration is evident and if there is no competition between health professionals.

Successful collaboration depends on a number of factors. A number of studies suggest successful collaboration within primary health care teams can be attributed to two key areas within an organisation; conditions and environment (Alford, 2005; Gardner, 2005; Henneman, 1995; Henneman et al., 1995; Martin-Rodriguez, Beaulieu, D’Armour & Ferrada-Videla, 2005). Martin-Rodriguez et al., identified that structure and philosophy form the conditions within the organisation whereas social, cultural, and educational factors influence the organisation’s environment.

Conditions within the organisations

Alford (2005) believes that an organisation has a responsibility to provide a suitable environment for a collaborative relationship to take place, for example by providing the framework in which the nurse-physician interactions take place. The management structure should be appropriate to support ideas put forward by all the employed health care professionals (Headrick, Wilcock & Batalden, 1998). The Ministerial Taskforce on Nursing suggested management structures of organisations should include nurses at all decision-making levels (Ministry of Health, 1998). This requires a clear direction, shared objectives, mutual support, clear decision-making procedures and support for innovation within the organisation (Headrick et al.). Hence, it is apparent that both management structure and role design are critical to help promote collaboration.

Structure of, and roles within, the organisation

Millar (1999), Henneman et al. (1995) and King (1990), suggest that structure holds organisations together, defines responsibilities for tasks and determines lines of communication. It has been argued that successful collaboration between health care professionals requires a shift from traditional hierarchical structures towards a flatter structure (Henneman et al., King). Evans (1994) suggests traditional hierarchy structures are less likely to facilitate the development of key elements in collaboration such as shared decision-making, and open and direct communication, whereas flat structures have fewer layers in the hierarchy and much wider spans of control (Millar). Collaboration is more likely when procedures, processes, and a flat structure facilitate team members to practise autonomously at times with an emphasis on co-operation in dealing with issues rather than competition. This can lead to praise for the team rather than an individual (Henneman et al.).

Flat structures are more likely to encourage the development of policies and procedures which allow individuals and teams to understand their role definitions within an organisation and help to equalise power dynamics (Alford, 2005). Defining roles through job descriptions assigns tasks, states delegated levels of authority for decisions and helps to equalise the power differences as each team member has a clear understanding of all the roles within the practice. It is argued that these elements of role design within an organisational structure have a strong influence on the development of collaborative practice (Walsh, Brabeck & Howard, 1999).

Organisational philosophy

Philosophy also influences the structural conditions within an organisation; each person brings a set of values and self developed perceptions to the clinical team, therefore their ideas with regards to collaboration will be different (Gardner, 2005). The specific worth assigned to a particular practice is defined as a value (Ervin, 2002). Gardner suggests a shared vision is necessary to attain collaboration. A philosophy or vision where importance is placed on collaboration within health care teams, also places value on

participation, fairness, freedom of expression and interdependence (Evans, 1994; Henneman, 1995). Consequently, an organisation's philosophy and its inherent values can affect the degree of collaboration within health care teams. Martin-Rodriguez et al. (2005) believe the organisational philosophy should explicitly support collaborative practice among health professionals. Gardner as well as Headrick et al. (1998) report that greater collaboration occurred in clinical practice when there was a clear objective directed to an area of practice where a change was likely to result in measurable improvement for the patient.

Social influences

Social factors, such as gender stereotyping where the traditional expectation is that men are dominant in the group, and perceived social status between team members, are often the source of power differences (Henneman, 1995; Lindeke & Block, 1998; Lockhart-Wood, 2000). Power differences between team members can influence the development of collaborative practice, as they are a potential source of inequality between team members (Evans, 1994; Gardner, 2005; Henneman et al., 1995; King, 1990; Martin-Rodriguez et al., 2005). Ignoring social factors leads to power imbalance that in turn impedes collaboration (Baggs & Schmitt, 1997; Gardner).

It has been suggested that collaboration occurs when the power is shared and when all participants in the relationship have shared discussion (Gardner, 2005), as collaboration is a complex process that requires sharing knowledge and joint responsibility for patient care (Lindeke & Sieckert, 2005). In the health care arena doctors tend to see themselves as the leaders of teams and may insist on their views having precedence (Begley, 2003). In a study regarding doctors' and nurses' perceptions of collaboration Baggs & Schmitt (1997) found that doctors described their legal authority for decision-making and prescribing as legitimising the power imbalance. Castledine (2005) believes collaboration between nurses and doctors is possible as long as they both work from a basis of equal power and mutual respect.

Cultural influences

Nurses and doctors differ in their approach to patient care so it is important that the two professions understand each other's perspective to foster collaboration. As nursing and medicine reflect two different cultures with differing approaches to practice, some authors suggest that professional conflict is expected between the two groups (Allen, 1997; Thomas, Sexton & Helmreich, 2003). Nurses often manage their role to minimise professional conflict with doctors and have difficulty expressing these views (Allen). Conflict resulting in unresolved disagreements with regard to patient care can become a barrier to collaboration (Gardner, 2005).

Gardner (2005) suggests collaboration involves knowing yourself, and learning to value and manage diversity. It is more likely to occur when there is no competition between the practitioners and there is equality, respect and appreciation of each

other's professional skills (Blue & Fitzgerald, 2002; Chaboyer & Patterson, 2001). Consequently, communication strategies such as making time to interact, providing the physical space to meet, sharing information, developing interpersonal relationships and addressing team issues are valuable in the development of collaboration (Gardner).

Educational influence

Education helps shape the organisational environment and has been emphasised as one of the main factors in promoting collaboration between health care professionals (Martin-Rodriguez et al., 2005). Students in health related professions have traditionally been socialised with a strong professional identification that fell within the boundaries of their respective professions. Limited knowledge of the practice, expertise, responsibilities, skills and theoretical perspectives of other disciplines has resulted. These factors are considered by some authors to be one of the main obstacles to collaboration in many health care teams (Alpert, Goldman, Kilroy & Pike, 1992; Mariano, 1989; Walsh et al., 1999).

Interprofessional education is considered important in promoting awareness of health professionals' disciplines and improving collaboration in health care teams (Alpert et al., 1992; Baggs & Schmitt, 1997; Lindeke & Sieckert, 2005; Mariano, 1989; Ross, 1999, 2001; Walsh et al., 1999). Headrick et al. (1998) identified barriers to inter-professional collaboration and education which included differences in history and culture, historical rivalry, difference in language and jargon, varying levels of preparation, qualifications and status, diluting professional identity and concerns regarding clinical responsibility.

Interpersonal relationships

Developing interpersonal relationships is an important element in successful collaboration. Key literature identifies three aspects of interpersonal relationships that provide the opportunity to develop successful collaboration:

Willingness to collaborate

Collaboration is voluntary unless it is a stated expectation in job descriptions. Even if this occurred, collaboration as a form of 'working together' is a way of practicing or being. As such, its success requires the team to become involved in the process, understand and accept the levels of expertise, and the role boundaries of different members (Gardner, 2005).

Mutual respect and trust

Health professionals working in collaborative relationships attribute a great deal of importance to mutual respect (Baggs & Schmitt, 1988; Prescott & Bowen, 1985; Ross, 2001). Mutual respect implies knowledge and recognition of the contributions of various professionals in the team (Evans, 1994; King, 1990; Mariano, 1989). In the rural context such trust, respect, and dependence are deemed critical to successful

collaboration between doctors and nurses (Blue & Fitzgerald, 2002). It has been suggested trust and respect from the doctor are established more quickly for nurses if positive and genuine feedback is received from the GP (Blue & Fitzgerald). Developing trust and respect takes time but it is apparent when both the nurse and GP understand each other's practice skills (Blue & Fitzgerald; Ross). Developing higher levels of respect between health professionals, and creating better understanding of each other's roles and collaborative skills are said to improve the working environment and provide effective collaboration (Davies, 2000).

Communication

Mutual respect and trust cannot be successful in a collaborative relationship if there is not clear communication between members of the team. A study of general practice teams in the United Kingdom noted there were improvements and increased collaboration when the health practitioners trusted each other and shared their different knowledge, experience, and agreed on improvements that should take place in the practice (Headrick et al., 1998).

Communication plays a significant role in the development of collaborative relationships among the team members and influences the degree of collaboration (Evans, 1994; Gardner, 2005; Henneman et al., 1995; Mariano, 1989). Although communication is a necessary component of successful collaboration, it is not sufficient on its own (Baggs & Schmitt, 1988; Ross, 2001). An organisation with a supportive management structure can facilitate effective communication (Alford, 2005).

Poor communication can become a barrier to the effectiveness of organisations and can keep them and their employees from fully achieving their collaborative goals (Bidwell & Ross, 2001). A lack of effective communication leads to extra work, duplication of effort and confusion for the patient (Mungall & Kenkre, 2004). Alford (2005) agrees that effective communication is a result of the structural environment established by the organisation and suggests that nurse-doctor communication is the foundation of safe, efficient, and effective patient care.

Communication is not always face-to-face and may require supporting technology. In rural practice, the telephone plays a major part in communication (Blue & Fitzgerald, 2002). The telephone is of particular significance when the nurse is working in isolation and is required to convey an accurate clinical picture to enable the doctor to provide advice on further treatment (Blue & Fitzgerald). Communication can be about a specific patient, or it may be sharing information between health professionals.

Conclusion

This chapter has identified the way forward for advancing nursing practice as part of a collaborative interdisciplinary approach to healthcare in rural areas. This is the vision of

the New Zealand Primary Health Care Strategy and is reiterated in a number of national health policies. Furthermore, recent literature reinforces this way of practicing and suggests that collaboration is possible when there is an effective organisational structure with a clear philosophy to guide all team members. It is anticipated that over time interdisciplinary collaboration will break down the barriers to traditional ways of practicing. Collaborative practice is achievable when health care professionals work together with the patients' best interests in mind. The concepts influencing effective collaboration are mutual trust, respect, effective communication and a willingness to collaborate. It is effective collaborative working relationships that will help improve patient health outcomes and subsequently support future sustainable rural health care services.

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Exploring the Nursing Reality of the Sole On-Call Primary Health Care Rural Nurse Interface with Secondary Care Doctors

SHARRON E. ARMSTRONG

Introduction

A qualitative framework was used to explore the nature and the quality of interactions between sole on-call primary health care rural nurses and secondary care doctors as a component of rural nursing practice and representative of the primary-secondary care interface. The primary-secondary care interface is crucial for the delivery of patient-centered care (Tanner & Myers, 2002). In today's health care environment with the emphasis for health care shifting from secondary care to preventative primary health care, there is an associated need for 'closer co-operation' (Ministry of Health, 2001, p.1) and teamwork, de-emphasising individual professions. The professional roles are being 're-positioned' (Thompson, 2006, p.299) with the New Zealand government seeing this as an opportunity to re-define and address the current constraints to nursing practice. This has resulted in concern by members of the medical profession who see nursing posing a threat to their medical dominance (Keyzer, 1997) and is potentially promoting inter-professional tensions. These tensions between nursing and medicine are not new, with the relationship sometimes marred by conflict which has been attributed to historical medical dominance and nursing deference (Godden & Forsyth, 2000; B. Kalisch & P. Kalisch, 1977). Together, changing roles and the traditional conflict may contribute to tensions at the nurse/doctor interface as endeavours are made to bridge the barrier of primary-secondary care and the nurse/doctor relationship, ultimately affecting delivery of primary health care to rural and remote population's dependent on such nursing services.

Literature

Overall, the research literature was scarce in the arena of rural nursing and devoid of any research-based literature on the rural nurse interface with secondary care doctors.

Background

The catalyst for the emergence of rural nursing in New Zealand was the number of medically underserved rural and remote areas. This situation has not changed, with rural hospital closures and an exodus of rural general practitioners leaving a current estimated shortfall of 80-100 rural general practitioners (P. Barnett & R. Barnett, 2001; Burton, 1997; London, 2002). The health needs of communities served by sole and isolated rural nurses demand that their role has expanded beyond that expected of a pure or singular nursing specialty scope of practice to incorporate tasks formerly held in other disciplines, (Ancott-Johnson, 1973; Hays, 1999; Hegney, McCarthy, Rogers-Clark & Gorman, 2002; McKegg, 1991; Ministry of Health, 1999, 2003a; Roberts, 1996; Ross, 1996; Thompson, 2006), the nurse often acting as a 'stop-gap' (Ancott-Johnson, 1973, p.15). This provision of health care by rural nurses was the norm in many remote rural areas in the first half of the 20th century (Hegney, 1996; Mahnken, 2001).

This wide reach of the rural nurse and lack of specialty poses a dilemma as the current health and legislative environment seeks to confine and limit practice to specialty areas (Nursing Council of New Zealand, 1995, 2001; Ministry of Health 2002a). This broad scope and the ambiguous definitions of rural nursing (Bushy, 2002; Couper, 2003) hinder a clear understanding of the role itself (Whitecross, 1999). The issues faced in daily practice include a sense of isolation, a lack of support and a lack of role recognition, leaving the nurses with a continuing sense of invisibility and professional exposure to risk. As 'hidden providers' (Sheehy & McCarthy, 1998, p.128) of health care, rural nurses feel largely ignored in the professional and political arena directing health practice. Additionally, the Medicines Act 1981 and Medicines Amendment Act 1999 (Ministry of Health, 2002b) fail to recognise the distinct difficulties of rural nurse provision of health care in rural or remote areas without access to the prescriptive authority of a general practitioner. Additionally, there is no legislative direction surrounding the use of verbal orders. This failure of legislative recognition or modification for the role of rural nurses can be interpreted as a lack of support (Bushy, 2002; Roberts, 1996; Werrett, Helm & Carnwell, 2001; Whitecross, 1999). Isolation is a recognised factor influencing recruitment and retention of the rural workforce (Bagg, 2004; MacLeod, Browne & Leipert, 1998; Mahnken, 2001; Richards, Farmer & Selvaraj, 2005; Ross, 1999).

Further, there is resistance amongst medical practitioners in the recognition of rural nurses, particularly in relation to diagnosing and prescribing (Roberts, 1996; Walker, 2000) which may stem in part from the historical conflict between nursing and medicine described as fraught with conflict (Alpert, Goldman, Kilry & Pike, 1992; Fagin, 1992; Makaram, 1995; Smoyak, 1977; Stein, 1967). This is chiefly attributed to historical medical dominance and nursing deference (Godden & Forsyth, 2000; B. Kalisch & P. Kalisch, 1977). Nursing is seen as threatening medicine by refusing to remain in its historical subordinate position (B. Kalisch & P. Kalisch), wanting instead to promote itself as an autonomous profession with its own epistemology (Henneman, 1995). It is

thought that these well-intentioned attempts by nurses to promote their uniqueness and to define nursing's professional boundaries have inadvertently planted seeds of distrust and disrespect (Henneman). The knowledge and activities of the two professions are, as Fagin (1992) suggests, 'occupying two partly intersecting spheres' (p.302) with Smoyak (1977) seeing jurisdictional conflict arising from this duality. Conflict also arises from a lack of understanding and insight into each others roles, exacerbated by a lack of interdisciplinary education (B. Kalisch & P. Kalisch).

This historical discourse is further fuelled by the recent political mandate for inter-professional intersectoral collaboration, seen as the tool for effective care (Freeth & Reeves, 2004; Werrett et al., 2001) with the opportunity for nursing to become a strong, visible, effective member of the primary health care team (Ministry of Health, 1999, 2001, 2002c; Walker, 2003). New Zealand health policy, with its emphasis on primary health care, is affecting traditional roles and professions, referring to 'practitioners' (Ministry of Health, 2001, p.viii) without differentiation.

Inter-professional and intersectoral collaboration is a dynamic process (Alpert et al., 1992; Makaram, 1995; Ministry of Health, 2001) with a number of antecedents necessary for its development. The organisational and institutional infrastructure needs to reflect a philosophy of collaboration with a shift from the traditional hierarchical and power inequities that inhibit true collaborative practice (Hibberd, 1998; Mackay, Soothill & Webb, as cited in Meerabeau & Page, 1999). Historical nurse/doctor relationships, attitudes and practices are seen as a significant constraint to collaborative practice with nurses more willing to collaborate than doctors (Alpert et al., Fagin, 1992; Stark, Warne & Street, 2002; Werrett, et al., 2001). Perhaps due to lack of understanding by doctors of the changing roles and attitudes by nurses over recent years (Alpert et al., B. Kalisch & P. Kalisch, 1977; Keddy, Gillis, Jacobs, Burton & Rogers, 1986; Makaram, Ministry of Health, 2003b; Stein et al., 1990; Whitecross, 1999). The lack of inter-professional education is noted by many authors (Fagin, 1992; Henneman, 1995; B. Kalisch & P. Kalisch, Keddy et al.) with Doering (as cited in Henneman, 1995, p.361) suggesting the 'development and maintenance of power relations between nursing and medicine is linked to the control of scientific knowledge by both disciplines impacting on their ability to collaborate'.

It is argued that improving the primary-secondary care interface requires addressing professional, organisational and educational issues. The interface is thought to improve if the professional participants are known to each other, if time is given for its development and if it is built on trust (Alpert et al., 1992; Prescott & Bowen, as cited in Fagin, 1992). Keddy et al. (1986) suggest that nurses are naïve to expect willing support from doctors and therefore processes to foster this interface need to be realistic. The development of mutual trust and respect (Kernick, 1999) takes time and is assisted through professional knowledge of complementary and contributing skills (Makaram, 1995; Smoyak, 1977; Werrett et al., 2001). These can be obtained through open discussion and face to face meetings (Alpert et al., Mungall, 2003; Robinson, 1999), clearly defined roles and

scopes of practice (Ministry of Health, 2003a; Ross, 1999), time, energy, and commitment to the process (Miccolo & Spanier, as cited in Makaram), and an awareness of, and sensitivity to, issues surrounding the interface.

The combination of the historical discourse between nursing and medicine and the current policy to increase the visibility and utilisation of nurses in providing primary health care, suggests further inter-professional antagonism. This antagonism is likely to be generated in an already fraught relationship creating problems in developing effective relationships across the primary-secondary interface. The premise for this study was that the primary-secondary interface would be variable and attributable to these influences.

Research Methodology

In order to examine the interface between sole on-call primary health care rural nurses with secondary care doctors, a qualitative research approach was adopted as an appropriate method to explore individual experiences and perceptions of a situation (LoBiondo-Wood & Haber, 2002; Morse & Field, 1995; Dawes et al., 1999).

Ethical approval was obtained from the Multi-Region Ethics Committee and the issues of confidentiality and anonymity were addressed within the approval process. Maori consultation was undertaken through the University of Otago, Christchurch School of Medicine and Health Sciences Research Office.

Twenty-seven potential participants were given the opportunity to self-select through letters of invitation. Initial contact included an information sheet and a consent form. A total of 17 consents enabled further selection, ensuring the broadest diversity of gender representation, employment and geographical settings. The final sample size was 11. Participants were sent a copy of the demographic, professional and clinical profile questionnaire plus the semi-structured interview format, both of which were pre-tested.

A semi-structured interview format guided the process of open-ended interviewing (Morse & Field, 1995; Streubert & Carpenter, 1999). Individual telephone interviews were audio-taped, hand written notes were taken for salient points and prompts and tapes were then transcribed. Early data analysis began concurrently with data collection to allow reshaping of questions as new information came to light (Streubert & Carpenter). Completed transcripts were returned to the participants for review and confirmation of the content, with amendments made as requested.

Demographic data collected during the initial phase of the telephone interview provided an overview of the participants, their contribution to the provision of health care to rural communities and the access of their area to medical care either as general practitioner services or secondary care. It also served to ensure that the participants fulfilled the study's definition of the sole on-call primary health care rural nurse.

As the small size of the sole on-call primary health care rural nurse population in New Zealand intensified issues of confidentiality and anonymity, data was depersonalised by avoiding identification other than the service setting (i.e. trust, private, district health board).

Analysis followed a general inductive approach for qualitative data analysis as described by Thomas (2003), involving close reading of texts, creation of categories, overlapping coding and uncoded text, and continuing revision and refinement of the category system.

Findings

The findings from analysis of the participants' experiences of the primary-secondary interface demonstrated some variability but were predominantly positive, participants indicating that this resulted largely from their professionalism, including their thorough introduction during any interactions, and that they and/or their role were known to the secondary care doctor:

RN1: *I think generally once they get to know where we are, what we're doing, what our qualifications are, its usually pretty positive.*

RN2: *I guess the nature of the interaction is usually pretty positive and straight forward. They're very helpful; they're real, as long ... Well, I've never had anyone that isn't helpful, but I always introduce and say that I'm the rural nurse at *** and I've got a patient and ... this is how they're ... presenting and go through and discuss things. So it's always very straight forward. I try to make it as professional as possible, using correct anatomical terminology and being very specific about, like the pain or the nature of the accident or whatever. And I feel that they, they're quite responsive in that way.*

Conversely, the typical qualification by participants of less than ideal interactions stemmed from the secondary care doctor being unaware of them and their role:

RN1: *You get some doctors who don't, they don't want to hear it as from a nurse, they want a doctor.*

Key features of the positive experience

Table 1 provides a summary of the determining factors of a positive interaction with secondary care and the resulting patient and professional outcomes.

Determinants	Patient Outcomes	Professional Outcomes
<ul style="list-style-type: none"> • Direct access to secondary care • Receptiveness • Discussion • Continuity of care 	<ul style="list-style-type: none"> • Prompt and appropriate intervention • Patient centred care 	<ul style="list-style-type: none"> • Acknowledgement • Support • Professional development

Table 1: Summary of determinants and outcomes of positive interactions between sole on-call primary health care rural nurses and secondary care doctors.

The key features of positive interactions with secondary care doctors revolved around direct access to the doctor who was then receptive to the nurse, and involved reciprocal non-problematic and apolitical discussion about clinical presentations.

RN5: *You end up being affirmed for what you have done, and perhaps, if there is more that you need to have done, you actually feel positive about it, you feel you've been involved in the decision making; you've not [been] talked down to ...*

Beyond this initial phase, a positive interaction includes the distinct contribution of feedback on the client status, diagnosis and management during their admission and on discharge to the community to ensure continuity of care.

RN1: *when you refer to them they will always write back ...*

Outcomes for the patient from positive interactions include prompt and appropriate intervention that may result in a referral to secondary care or continuing management within the community. It is important to note that occasions will inevitably arise when patients die despite the intervention being entirely appropriate.

RN5: *Had very positive interactions with *** who's a paediatrician over there in [larger hospital] when we had a baby that lived from 0-3 months but was likely to die at any of that time and the parents said that if the baby was going to die they wanted it to die at home amongst its own people and in its own home, so they brought it home here. Which was a lot of work for me, but [the paediatrician] was just so supportive. And I felt I could ring [the paediatrician]. When I rang [the paediatrician] and said I think this baby's going to die, what can I do for it? It's in distress and ... [the paediatrician] said, well it should come back here, and we then, the parents decided, of course, it wasn't and that they were going to keep it [at home], and [the paediatrician] said 'right, this is what I would do. You can give it sub cut morphine, you can do it this often, this is about the amount, do it,*

give as you feel it's necessary. It will make the baby calmer, and I'll leave it up to you how often you do it, this is palliative care.' And so [the paediatrician] was sort of saying well this is the drug you give, but you get out there and decide. You're looking at the baby. You're dealing with the parents. This is the situation and I trust you to do it. And that was really, although it was a horrible case, it was really positive. Yes, a really good interaction. Yes.

SB: *So the outcome of that was?*

RN5: *The baby died in the end.*

Patient-centred care suggests the central focus of the interaction between sole on-call primary health care rural nurses and secondary care doctors is the patient status, incorporating physical as well as psychosocial factors influencing well being. Such a focus encompasses physical comfort, reassurance and understanding, compassion, reducing anxiety and action that is in the patient's best interests with allowances for whanau/family, and distinctly rural difficulties such as geographical distance.

RN4: *It's not I am the doctor – you are the nurse, it is what's best for this patient and I sense that from the other end as well.*

For the sole on-call primary health care rural nurse, the outcomes of positive interactions result in a sense of professional acknowledgement, professional and personal support, and professional development.

The nurse participants found that engaging with secondary care doctors assisted in reducing their perceived sense of professional invisibility. There was expression of an enhanced professional feeling, development of mutual trust and respect, appreciation for their role and acknowledgement of them as part of the health care team. The interactions are in turn professional and are noted as collegial and reciprocal with receptive doctors. The nurses felt heard, respected and appreciated.

RN4: *It just cuts the isolation, you don't feel as isolated. It enhances your professional feeling. Professionalism. It makes you feel like you are part of the team*

Support for the rural nurse had three distinct tiers; emotional support, professional reassurance, and medico-legal indemnity.

Emotional support was noted as important both during and after significant events. Support of this nature allowed the rural nurse to learn from and leave behind traumatic events in a positive manner and minimised the level of stress during a critical event. In addition it seemed to reduce personal doubt and perpetual remonstration along with reducing the sense of professional isolation. After resuscitating a male in his 50s in the back of an ambulance with a cardiac arrest and continuing ectopics, RN3 describes the telephone support with a trauma surgeon in intensive care:

RN3: *Got this [trauma surgeon], and he just gave me some advice and then we hung up and then he rang back in a few minutes. No I rang him back 'cause I said, 'oh, he's having some ectopics, I'm just worried he's going to do something again on us.' And so he advised me what to do. And he was so nice. This is one of the top guys in *** hospital. He was just so lovely. 'You're doing well and the helicopter's on its way and good on you'. So then after I'd finished and went back to the medical centre. I rang him to thank him and I said 'I just wanted to thank you very much'. And he said 'how are your adrenals?' (Laughter). And I said 'they're really [stuffed].'*

Professional reassurance revolves around rural nurse's need for affirmation about the appropriateness of their decision making surrounding diagnosis and management. This is often post-event through the process of feedback either verbal or written.

RN4: *It's not for people saying 'good job' but its someone being able to say to you, yes you have done everything you could possibly do in that situation. That actually affirms your practice. You might know it yourself but it is really good to have it affirmed because what you might think you are doing [well] might be quite incorrect because you are only as good as your teacher.*

Medico-legal support involves indemnity relating to medical authorisation for clinical management outside a registered nurse's scope of practice. Written Standing Orders address many common and simple primary health care presentations with verbal support from a medical practitioner for other more complex or unusual presentations. The participants expressed a sense of feeling professionally safer when medical permission is obtained from the secondary care doctor for delivering care.

RN9: *... [the doctor] was actually very good, very supportive and what I felt was happening, describe or whatever, he would do the utmost to back me up etc ... So I think, implicit in the conversation, [is] that this is the correct action and I authorise you to follow these instructions.*

An important outcome from the interactions across the interface is the continuing professional education and maintenance of clinical standards through constructive feedback, identification of omissions and reciprocal sharing of knowledge and expertise.

RN8: *I always learn something. If you don't make that contact, you don't learn the outcome for your patient and you don't learn about whether you've made the right treatment decisions.*

Determinants	Patient Outcomes	Professional Outcomes
<ul style="list-style-type: none"> • Difficult access to secondary care • No accommodation of distinct rural difficulties 	<ul style="list-style-type: none"> • Increased potential for deleterious outcome • Increased patient suffering 	<ul style="list-style-type: none"> • Interprofessional discord • Professional invisibility • Professional risk • Professional dissatisfaction

Table 2: Summary of determinants and outcomes of less than ideal interactions between sole on-call primary health care rural nurses and secondary care doctors.

Key features of the less than ideal experience

Table 2 provides a summary of the determining factors of a less than ideal interaction with secondary care and the resulting patient and professional outcomes. The key features of less than ideal interactions between the participants and secondary based doctors featured difficulties surrounding access to secondary care facilities and doctors and little, if any, accommodation of distinctly rural difficulties.

Difficult access to secondary care encompassed problems surrounding means of communication, access to appropriate, informed and experienced medical advice and, at worst, complete denial of any access to any medical advice and refusal to accept a referral of a patient to secondary care.

Communication difficulties arose from inadequate telecommunications within certain areas of rural New Zealand, limiting access to secondary care when needed by sole on-call primary health care rural nurses. The participants reported communication ‘dead’ areas in certain difficult localities, inadequate cell phone coverage, or a mismatch between cell phone network provider and the equipment issued to the rural nurse to access the network. At other times, the acuteness of the situation limited the rural nurse’s ability to call for backup in a time of crisis.

RN10: *I had to go to a motorcycle accident and this person was obviously in distress, and it was early on in my days, and I thought this person obviously needs pain relief. So St Johns happened to be there, they had a bit of trouble with their radio and I kind of got a second hand message through to the ED for Morphine, and by the time I had given 5 [milligrams] the message hadn’t got through yet and then by the time I had given another 5 [milligrams], the message came back to give 5 [milligrams], so I had already exceeded my brief.*

Within the category of difficult access to secondary care is the inexperience of the medical staff available for after hours on-call advice. The concerns of the sole on-call

primary health care rural nurses related to the adequacy of the advice they received and the lack of awareness of the distinct rural difficulties with patient management in such situations.

RN5: *Have to say, when I'm admitting patients now I don't always ask for the doctor. I just simply ring A&E and tell them I'm sending them. That's a bit naughty, but I'm not prepared to argue with a junior doctor in A&E about whether my patient needs admission.*

The most resounding difficulty with access to secondary care doctors arises when there is a refusal of the doctor to provide advice or to accept a referral.

RN11: *There's a couple of doctors that I have found much harder to get through to. One simply said 'I don't like nurse practitioners. I don't believe in nurses practicing on their own like this. How do I know your clinical judgment?' And I've had to send people to *** to get service because she wouldn't actually accept my patient.*

Outcomes for the patient from less than ideal interactions included increased potential for deleterious outcomes:

RN5: *A guy that had fallen on his, he'd been skinning a deer with his knife and fell on the knife and stuck it in his leg, and he [was in] a lot of pain for what seemed to be a very small knife wound and when I got him to try and straight leg raise or straighten his knee; [the wound] was above his knee, he couldn't do it. I thought, 'oh my god, he's cut through his quadriceps tendon.' And, so I rang [the hospital] and said 'I'm not prepared to stitch him up. I want him to go'. [The reply from the doctor was] 'Oh no dear, don't be silly. What, is his leg just hanging loose?' [I replied] 'No it's not. He can't straight leg raise.' [The doctor responded] 'Oh that won't mean anything. It'll just be because it's sore.' [I replied] 'Well actually I don't care, he's coming up really. He's on his way.' Well he went to surgery. He went to theatre the next day to have; it was the main quadriceps tendon plus, I've forgotten the muscles on either side of it, the two on either side, and he'd made a really good job of it. He'd cut through all of that.*

and an increase in patient suffering:

RN5: *Pain relief is one that we find the junior doctors are very, will say 'no, no, no, you must not give them anything other than panadol' or something. And you think, 'this is ridiculous', these people can't travel that far on panadol.*

RN4: *Just [doctors] telling you no you can't do anything, you can't give them any pain relief you have just got to put them in an ambulance and send them down here and things like that. Trying to advocate for the patient and not being allowed to give them something.*

For the sole on-call primary health care rural nurse, the outcomes of negative interactions result in inter-professional discord, professional invisibility, professional risk and professional dissatisfaction. Interprofessional discord involving confrontation was rarely reported and usually arose in situations whereby there was a refusal of the doctor to accept a referral or to offer advice.

RN11: *I was furious. What I did was send the patient directly to another unit. I avoided them. I didn't send patients [to that hospital] ... I was quite scared about ringing again. It was a bit like, was she having a bad hair day.*

Discord involving conflicting opinions by the rural nurse and doctor on clinical management resulted in professional uncertainty and doubt, the rural nurse worrying about the client, an inability to provide care for the client, and reluctance to phone again. In the eyes of many of the participants, the historic nurse-doctor relationship persists, giving rise to the sense of 'invisibility', or professional exclusion as previously discussed.

RN1: *You get some doctors who don't want to hear it as from a nurse, they want a doctor. They don't understand our role*

Professional exclusion manifested itself in a refusal to acknowledge the rural nurse role or their position as a health care provider. Typically the rural nurses were left out of any feedback loop on the client's return to the community.

RN11: *So what faces me on call often is that its 5 o'clock at night, a patient's sent out of hospital, they arrive back in the district at 8 till 10 at night, and they've got a multitude of problems. Like a lady that had an aortic stent put in and she needed her blood pressure monitored regularly and then, lo and behold, she'd gone on a big car ride and she threw a clot off. So like what information you get from secondary care at 5 o'clock on a Friday night about your patient [on being discharged from secondary care] is really important.*

An awareness of the environment of risk in which rural nurses place themselves is strongly evident throughout the participants' transcripts. This is exacerbated by negative interactions leaving them with a sense of professional exposure. Particular concern surrounds the use of verbal orders, those times when they cannot access medical advice

or the medical advice seems inappropriate. This last point can result in a moral and ethical dilemma for the nurses, recognising that not treating will result in a potential detrimental outcome for the client but that treating ultra vires exposes them to increased professional risk. The example of the woman, breastfeeding twins, presenting with mastitis is a case in point whereby the nurse had phoned questioning the need for an immediate dose of intravenous antibiotics and was advised that mastitis was not a concern. The recommendation by the secondary care doctor was for the client to seek a general practitioner consult the following day requiring an hour's drive. This situation prompted the nurse to act ultra vires:

RN5: *and I went back and had to double check what I was thinking and thought 'No, I can't possibly leave this' ... I know you can't disregard mastitis. I know I need to start antibiotics now. Regardless whether this is legal or not, she's getting some antibiotics now. So I did ...*

Being belittled, having to validate and justify themselves as competent professionals, and/or having difficulty accessing the vital medical support they require, leads to professional dissatisfaction which in turn may lead to retention issues.

RN5: *So, you're really thinking, look, just because of something I'm saying as a nurse, doesn't mean I can't assess a patient, that I don't know what I'm talking about. I do know what I'm talking about. It makes you feel put down.*

Discussion

The discussion focuses on the findings from the data suggesting that the variability of the primary – secondary care interface stems from three inter-related factors affecting the interaction either positively or negatively.

Utilisation of secondary care doctors

The quality of nurse/doctor interaction was generally more positive when the need for secondary care was established beyond doubt. This consideration stems from the findings which suggest that there is sometimes a 'default' to secondary level care doctors or hospital level care for clinical presentations of a primary level health care nature, typically the emergency department, for advice and/or authorisation for therapeutic intervention. This default is driven by the non-availability of 24 hour access to a general practitioner and/or the non-provision of Standing Orders to implement therapeutic intervention. In some situations normal general practitioner backup may be temporarily unavailable and, in some extreme situations, a rural nurse may operate in an isolated area without full-time access to a general practitioner and without Standing Orders.

Further, utilisation of secondary care doctors within this 'default' arena was found to be influenced by three interlinking determining factors – clinical presentation, availability of resources, and the capacity of the nurse.

The nature of clinical presentations to the sole on-call primary health care rural nurse cross the continuum of a minor illness/injury to life threatening emergencies. Some situations clearly need secondary care or specialist involvement either in the form of specialist opinion or intervention; other situations may simply exceed the individual rural nurse's capacity (which may be defined as a combination of individual confidence, competence, experience, ability and legal confines). Legal confines refers to the level of treatment rural nurses can legally provide limited by their scope of practice under the Health Practitioners Competency Assurance Act (Ministry of Health, 2002a). Individual capacity across the participant rural nurses in this study appeared inconsistent for any one particular clinical presentation and as such, influences the degree of primary level health care available to different communities. This situation presents a dilemma regularly faced by rural nurses with conflict between the legal confines and the obvious patient need. When faced with any clinical presentation or situation requiring treatment outside of the legislative parameters, the rural nurse must defer to a higher authority, except in life threatening emergencies. This capacity factor is a consideration when the rural nurse is determining the need to contact a secondary care doctor.

Resources that may defer the need to contact a secondary care doctor include the availability of on-line information, text books and other guidelines, standing orders and 24 hour access to general practitioner medical advice. Some nurses operate without Standing Orders, so that for any pharmacological intervention, including paracetamol for children and infiltrating wounds with local anaesthetic, contact must be made with a medical practitioner. Where areas are without access to general practitioner advice, after hours contact with a secondary care doctor is seen as the only alternative. There were some criticisms of the Standing Orders amongst the participants, particularly the lack of comprehensive cover for common primary level health care clinical presentations such as mastitis, or the inclusion of individual preferences or protocols by doctors that are not evidence based. In addition, as Standing Orders are issued by an individual doctor, there is inconsistency between areas, raising the question of whether they reflect the latest evidence-based information. The degree to which rural nurses utilise Standing Orders or refer to a medical practitioner depends on the other factors outlined in rural nurse capacity.

When considering appropriateness of access to secondary care doctors, the secondary doctor's working environment must be considered. Typically based in an emergency department, a phone call is likely to be disruptive, when the issue could be easily dealt with by a general practitioner. Additionally, general practitioners are familiar with assessment and management of common primary care presentations which cannot be assumed to be the case with emergency physicians or junior and/or inexperienced medical doctors as identified by the participants.

Appropriate utilisation of secondary care doctors is seen as contact with a secondary care doctor only in those instances which clearly require secondary level expertise, opinion, or intervention. The use of a general practitioner in cases of uncertainty would seem appropriate to ascertain the need for secondary level care medical advice and/or referral.

Mutual familiarity with individuals, roles and rurality.

The second factor that emerged as affecting the variability of the interface between sole on-call primary health care rural nurses and secondary care doctors is familiarity. Familiarity incorporates individual familiarity, familiarity with respective roles and with the issues of rurality. Strasser (1999) suggests in rural contexts, 'it is impractical to provide health services in the same manner as occurs in cities' (p.1). Therefore, secondary care doctors need to be familiar with these differences and incorporate these variables into their decision making, advice and recommendations to rural health care practitioners.

The rural nurse participants indicated that their positive interactions with secondary care doctors were based on knowing the individual doctor, in addition to their professional approach. In the literature, the importance of this personal familiarity was noted during the building of a collaborative care unit, where a major barrier to interaction and collaboration was seen as limited knowledge of each other and the scope of each other's practice (Alpert et al., 1992). There was acknowledgement amongst the nurse participants in this study of the time taken to become familiar with the secondary care doctors and this is supported by Alpert et al., Makaram (1995), and the Ministry of Health (2001).

Conversely, less than ideal interactions were described by the participant nurses as those where the secondary care doctor was unfamiliar with the individual nurse or with the role of rural nursing. This suggests that both personal familiarity and familiarity of roles between and by participating rural nurse and secondary care doctor contribute to the quality of the interactions across the primary-secondary care interface.

Although the nurses placed importance upon recognition of their role there is in fact no national or international consensus of what that role might be (Hegney, 1996). For the purpose of this study a specific definition was used to recruit participants, but this does not confer upon a rural nurse a specific set of skills, competence and confidence in those skills, a defined educational pathway or scope of practice, nor a similar experience pathway. Rural nurses have their own distinct capacity and resources. Given the indistinct nature of rural nursing, its invisibility (Fagin, 1992) and lack of separate acknowledgement by the New Zealand Nursing Council, it is probably unreasonable to expect that secondary care doctors have a familiarity with the role or the levels of competence. Familiarity with the role has come instead from the nurses and secondary care doctors establishing personal familiarity through interactions and a shared history.

Awareness by the secondary care doctor of the distinct difficulties surrounding provision of health care in rural New Zealand was seen as influencing the variability of

the interactions between the nurse participants with secondary care doctors. Issues mentioned by the nurse participants included the scarcity of resources in rural New Zealand for delivering health care, geographical obstacles, distances to care, and the attitude of the rural population to seeking health care. Resources refer to the availability of general practitioners in rural New Zealand to assist with delivery of health care either by phone in the form of verbal advice or in person, other health professionals to assist with managing clients and situations, Standing Orders to provide a legal framework for delivering pharmacological intervention, and information sources to assist with client assessment and management. Without secondary care doctor awareness of these issues, the participants found the interactions often less than ideal. The extent to which rural nurses are responsible for health care in their communities surprised some doctors.

There were occasions when secondary care doctors encouraged the sole on-call primary health care rural nurse to retain and manage a client in the community despite the nurse's request to transfer the client to secondary care. This request was possibly driven by the clinical judgment of the nurse indicating that the client required secondary level care management, in addition to considering the need to maximise himself/herself as the only available on-call health resource for the community. If a referral was not accepted by secondary care, the participant nurse was left with a continuing responsibility to manage the client and a likely increase in anxiety.

The degree of familiarity with rural behavioural norms and understanding the epidemiology of rural health issues by secondary care doctors contributes to the variability of the interaction between the participating nurses and secondary care doctors. There is a suggestion internationally that rural populations generally have a lower health status than their urban counterparts (Bushy, 2002; Hays, 1999; Hegney et al., 2002; Mahnken, 2001; Strasser, 1999) although the Ministry of Health (1999) refutes this in saying that, for New Zealand, the health of rural populations is comparable to urban populations. In addition to the inference that rural living is not as healthy as supposed, there is a rural behavioural norm which values 'self-sufficiency, self-reliance and independence coupled with stoicism' (Strasser, p.2), and a need to get the job done equating with a low priority for accessing health care.

Acceptance of role and responsibility

The term acceptance refers to the acknowledgement of the role of the sole on-call primary health care rural nurse by the secondary care doctor and their implicit agreement to assist with the needs of the rural nurse. This acceptance is seen by the participants to extend to the secondary care doctor shouldering the responsibility for advising on patient management that exceeds the legal parameters of the rural nurse.

Non-acceptance of the rural nurse role is more likely to result in a less than ideal interaction. This represents a minority of doctors but indicates a continuance of the discordant historical nurse/doctor relationship. This has been attributed to issues of professional power and status with recent aggravation by overlapping professional

domains (Weiss, as cited in Fagin, 1992) and the reluctance of nurses to comply with medical dominance through the nurse/doctor game (Stein, Watts & Howell, 1990). There was little evidence of continued game playing through the examples provided by the rural nurses in this study indicating, as suggested by Porter (as cited in Manias & Street, 2001) that the rural nurse participants take an overt, but informal role in their interactions with secondary care doctors. As long ago as 1911 in New Zealand's history of nursing, the success of the district nursing scheme was thought to be assured should the nurses not 'usurp the functions of the medical practitioner' (AJHR 1911, H-31, p.8, as cited in Thompson, 2006, p.92). Rural nursing does however impose itself across many domains (Thompson) including medicine which, along with the historical poor nurse/doctor inter-professional relationship, may be the foundation for less than ideal interactions.

The largely positive interactions between sole on-call primary health care rural nurses and secondary care doctors depicted in this study suggest an acceptance of the rural nursing role by the majority of secondary care doctors with whom the participants interact. For the rural nurse participants, this extends to the secondary care doctor accepting the responsibility for any therapeutic or physiological intervention endorsed by them for implementation. This displays significant reciprocal, possibly unstated, trust by both professionals. For the secondary care doctor there is trust in accepting the clinical picture assessed and presented to them by the rural nurse. For the rural nurse, there is trust in the secondary care doctor to carry the legal indemnity on their behalf and to back them if anything goes awry. The basis of this trust is clearly and unarguably through the development of familiarity, presumably through a shared history of cases, built up over time, resulting in mutual confidence and recognition, and not on an established set of competencies or formal practice agreement.

Interestingly, as Thompson (2006) found during her study, the dialogues of the rural nurse participants were infiltrated by a sense of personal and professional vulnerability associated with exceeding registered nursing's scope of practice and available Standing Orders. Providing health care and meeting the needs of a rural population without having the legal authority to do so leave the rural nurse in an invidious position. There were times when the rural nurses, in their provision of health care, acted *ultra vires*. It is of concern that it is common practice amongst the rural nurses to manage pharmacological and physiological intervention on the basis of a verbal discussion, without any formal documentation from the authorising doctor. In the event of an adverse outcome, the verbal order could easily be disputed leaving the rural nurse exposed to litigation. Overall, the nurses had not considered the risk to the secondary care doctor in their provision of advice for pharmacological or physiological intervention.

Acceptance of rural nursing includes both national and regional perspectives. Rural nursing has been, and remains, relatively invisible (Fagin, 1992; Sheehy & McCarthy, 1998). This invisibility reflects the difficulties of defining rural nursing and rural nursing practice. Recent policy documents within New Zealand have begun to recognise the

rural nurse contribution but the national registration body, the Nursing Council of New Zealand, does not recognise rural nursing as a distinct specialty. District health boards are responsible for overseeing the provision of primary health care regionally and encouraging a seamless service for clients moving between health sectors. For one region, the policy guiding referral to secondary care services does not extend to referrals by sole on-call primary health care rural nurses. This may reflect the position of other district health boards and is considered as a possible oversight or a lack of awareness of the parameters of rural nursing practice.

Recommendations

A range of national, regional and individual initiatives are recommended to improve the quality of the primary-secondary care interface and interactions between sole on-call primary health care rural nurses with secondary care doctors. Most were drawn directly from the participants at the grass roots level (Robinson, 1999).

National initiatives

In consultation and conjunction with sole on-call primary health care rural nurses:

- Establish a national definition of primary health care rural nursing that incorporates the sole on-call responsibility in accordance with scopes and areas of practice according to the Health Practitioners Competency Assurance Act that enables recognition by the Nursing Council of New Zealand.
- Establish base-line competencies and credentialing mechanism for this role.
- Develop appropriate educational pathways to develop, and maintain competence of sole on-call primary health care rural nurses.
- Develop national evidence based Standing Orders for common primary health care clinical presentations and establish a committee to review and update these annually. Available in hardcopy and on a website for those rural nurses with internet access, this would avoid unnecessary duplication and/or personal idiosyncratic resource material.
- Develop referral guidelines to secondary care contained within the Standing Orders document.
- Address the need for 24 hour general practitioner telephone advice. Consider local and/or regional initiatives including a 0800 telephone line to with those situations that fall outside of common primary health care level presentations but do not require transfer or consultation with secondary level care.
- Explore ways to increase rural nurse visibility with the public, other health professionals and institutions.
- Involve rural nurses in national, regional and local working parties concerned with primary health care and rural health issues.

- Lobby for undergraduate and postgraduate inter-professional education to incorporate consultation skills and referral processes relating to the primary-secondary interface.
- Review current legislation that inhibits and restricts rural nursing practice with consideration of special dispensation for sole on-call primary health care rural nurses. Include the issue of verbal orders and current shortfalls of legislation restricting practice to specialty areas. Consider the impact of current Standing Order legislation on rural nursing whereby timeframes for reviewing and signing off Standing Orders may or may not be met.
- Develop a dedicated online chat room for rural nurses to encourage peer support and peer review.

Regional initiatives

- Develop practice based agreements between sole on-call primary health care rural nurses and secondary care facilities outlining requirements from secondary care facilities and doctors.
- Primary health organisations, or individual practices (if not affiliated with a primary health organisation), to write letters of introduction to secondary care facilities and doctors outlining the competence and role of rural nurses employed in the area. Consider sending posters including photographs and a location map for Emergency Departments to encourage personal familiarity.
- Primary health organisations or individual practices to arrange orientation of sole on-call primary health care rural nurses at secondary care facilities and/or inviting the secondary care doctor to conduct an onsite visit.
- Establish access to continuing medical education available at the secondary care facility enabling opportunities to meet each other and develop personal acquaintances.
- District health boards could invite sole on-call primary health care rural nurses to speak to new intakes of house surgeons and registrars and include relevant information in orientation of all emergency department staff (doctors, nurses and allied health professionals).
- Consult sole on-call primary health care rural nurses in development of relevant referral documents and associated policy.
- Establish a process to provide feedback on referrals from sole on-call primary health care rural nurses, including PRIME (Primary Response in Medical Emergencies) referrals.
- Develop local support structures for formal clinical supervision and mentorship of rural nurses.

Individual initiatives

- Maintain appropriate levels of clinical skill by attending continuing professional

education, clinical supervision and critical reflection through journalling and writing exemplars.

- Introduce self to local secondary care doctors through telephone exchanges and/or site visits.
- Ensure a professional introduction when dealing with an unknown secondary care doctor.
- Explore possible involvement in committees and training programmes to increase exposure of other health care professionals to rural nurses.

Conclusion

New Zealand has seen remote and rural populations in medically underserved regions receive health care by sole on-call primary health care rural nurses hidden beneath the guise of other position titles since the early years of the twentieth century. These health professionals have been invisible, sheltered behind the support of their communities, individual medical practitioners and secondary care doctors. They have always worked in an environment of risk, practising in an extended scope of practice dictated by client and community need, finding innovative solutions to managing prescriptive medicines and therapeutic interventions in the absence of other health care providers or in a political environment according them a legislative safe-guard.

The current political and professional environment of ‘audit and accountability’ (Thompson, 2006, p.297) is generating greater risk to these isolated professionals by legislating for a restrictive scope of practice exposing them to prosecution for a job they are expected to do. There is failure to acknowledge and support the breadth and scope of the tasks they fulfill by ignoring their need for both professional legal indemnity and professional endorsement. The reliance on medical support for authorisation is essential to providing accessible and timely health care, but this relationship is fragile. The policy push to expand the scope of nursing practice, introducing independent nurse prescribing and de-emphasising individual professional roles challenges the status quo. The policy of encouraging a collaborative relationship while at the same time generating conflict through the changing professional roles may discourage an ideal interface between sole on-call primary health care rural nurses and secondary care doctors.

This research suggests that the interface between sole on-call primary health care rural nurses and secondary care doctors is currently working well, despite of the above concerns, but against the odds. This is mainly due to the calibre of the individuals involved. Aware of the constraints to practice, they collaboratively explore viable options to ensure provision of prompt and appropriate patient care. However, this may not always hold true – hence the recommendations for improvement of the interface.

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ABOUT THE BOOK

Rural nursing in New Zealand is no longer a concealed speciality of nursing practice. During the past decade the nature of rural nursing has been revealed. **Rural Nursing: Aspects of Practice** is one such demonstration. This book is a first for New Zealand. Based on work of 17 New Zealand rural nurse contributors, this book provides a broad overview of topics relating to rural nursing. A diverse approach has been taken to present this work. Topics are varied, and include theory development, describing and adapting practice for the contemporary rural landscape, while research relating to clinical practice adds to this variety. This book concludes by raising a number of factors for consideration for the future success of rural nursing practice.

The book informs the reader about the wealth of experiences, knowledge and positions adopted by the contributors. It is hoped this will stimulate debate about the similarities and differences experienced by rural nurses in their practice. The book reveals more than distributing knowledge, it encourages alternative views, and new knowledge to be debated.

This book will be of interest to clinical nurses, including rural and urban nurses who provide services to rural populations, nursing undergraduates as well as postgraduate nursing students, nurse educators and researchers. All rural focused allied health – related disciplines and researches, policy developers and academic institutions as well as international rural colleagues.

Jean Ross is currently a principal lecturer in the School of Nursing at Otago Polytechnic, Dunedin. Culmination of her work in the development of rural nursing since 1994 has led to the publication of *Rural Nursing: Aspects of Practice*.

Artwork on the front cover by Morfydd Neilson, donated by Raeleen Thompson.