



# scope

*Contemporary Research Topics*

**health & wellbeing 4**

November 2019

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*Contemporary Research Topics*

health & wellbeing 4:  
Rural

November 2019

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The journal *Scope (Health & Wellbeing)* aims to engage in multidisciplinary discussion on contemporary research in the landscape of health. It is concerned with views and critical debates surrounding issues of practice, theory, education, history and their relationships as manifested through the written and visual activities, such as original research, commentary, and critical debates concerning contemporary researchers, industry, society and educators in their environments of national and international practice. *Scope's* focus is on building a sense of community amongst researchers in New Zealand and the international community.

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### **Scope: Contemporary Research Topics (Health & Wellbeing) 5, “Collaboration” (November 2020)**

The fifth issue will provide the opportunity for authors to consider, discuss and debate how collaboration is understood in relation to health and wellbeing. Papers presented will showcase work from the 2019 ANEC (Australasian Nurse Educators Conference) entitled “Navigating the future of nursing together”. This event held at the Dunedin Centre focused on themes relating to Practice, People, Place and Purpose will publish in conjunction with occupational therapy, midwifery and sport, with a focus on research and community projects which attempt to (re)build and (re)foster the dialogue about collaboration for health and wellbeing.

Submissions for *Scope (Health & Wellbeing) 5, “Collaboration”* are invited from researchers, educators, industry, writers, theorists and historians. Submissions should be sent in electronic format by 30 March 2020 for review and potential inclusion in the annual issue to Associate Professor Jean Ross (Editor-in-chief) at Otago Polytechnic/Te Kura Matatini Ki Otago, Private Bag 1910, Dunedin, New Zealand at [jean.ross@op.ac.nz](mailto:jean.ross@op.ac.nz). Please consult the information for contributors below or online versions for examples. Peer review forms will be sent to all submitters in due course, with details concerning the possible reworking of documents where relevant. All submitters will be allowed up to two subsequent resubmissions of documents for peer approval. All final decisions concerning publication of submissions will reside with the Editor. Opinions published are those of the authors and not necessarily subscribed to by the Editors or Otago Polytechnic.

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## RURAL IN RELATION TO HEALTH, HEALTH SERVICES AND HEALTH OUTCOMES

Fiona Doolan-Noble

This edition of *Scope*, Contemporary Research Topics, health & wellbeing focuses on the topic of rural and there is so much that could be written about rural in terms of health but what do we mean when we speak of rural in relation to health, health services and health outcomes? Rural is an inexact term and it conjures up different images for different people. A colleague once said to me, "I know I am in rural when I see a pair of redbands outside the doctor's practice". The term rural can also have diverse meaning for different organisations and different sectors of government. In New Zealand rurality is mostly defined using the Statistics New Zealand classification system (Statistics New Zealand, 2015). This definition has many issues especially when using it to compare health outcomes across populations but why is it necessary to have a definition that is fit for purpose?

Having a rural definition fit for purpose in terms of health and healthcare will more accurately inform policy making, enable more appropriate allocation of funding at a national and regional level and facilitate researchers to have confidence in the data they collect and compare. Furthermore, it will increase the accountability of Government, District Health Boards and Primary Health Organisations to their rural populations. Associate Professor Garry Nixon (University of Otago) and his team are now developing and validating a rurality classification that can be used to more appropriately analyse health data and assist in improving understanding of rural health outcomes. This topic is also briefly discussed in this issue of *Scope* by Ross titled Rural Communities.

Having data that can be relied upon will be a positive step, however, understanding and improving the health of the approximately 600,000 people who live in rural New Zealand requires disentangling the underlying causes of ill-health. This is not just a question of access to health services. The health and well-being of rural people and communities is a complex myriad of interconnected challenges including geographical, demographic, cultural, social, economic, transportation and environmental factors. In addition to these challenges, the accumulative trauma of being devalued and 'othered' by those living in the urban world is rarely acknowledged.

With most academics living in the urban world it is hardly surprising that research focused on rural often looks at rural via a deficit lens. In fairness, however, many rurally based health researchers also adopt this approach as a way of highlighting inequalities and inequities. Further these challenges are discussed in this Journal in the form of two original research projects by Helm and Butler and Smellie and Robinson. This focus of rural health research on inequitable health care provision in rural and remote areas has become intertwined with perceptions of rural and the people who live there, reinforcing negative views of rural, the people, and the professionals who live there.

Limited attention, however, has been paid to the strengths and assets present in rural communities and the possibilities to influence these protective factors to improve health and wellbeing. Asset-based community development builds on the strengths within communities, by mapping resources such as individuals; organisations; community; and cultural assets. Consequently, it is the polar opposite of much of the health and health service research that takes place in rural with its deficit base and focus on identifying and addressing needs. Asset-based community development moves us from what's wrong to what's strong and is further highlighted by two original poems which are included in this Journal. The first by Robson offers an excellent opening of the Journal's content while Crawley's reflective poem is presented at the close of the Journal.

So what are the strengths of our rural communities? Well our rural communities supply our food and our clean water; they are made up of people, young and old with strong social connections, irrespective of distances between neighbours; they are where much of the power used by urban and rural alike is generated; they are where most international (and domestic) tourists want to visit; and rural New Zealand is where most of our natural resources are to be found. There is therefore, much to celebrate about our rural places in New Zealand that said, it is impossible to ignore the significant challenges rural communities here and elsewhere face.

Climate change and its associated impacts – raising sea levels, flooding and drought, increasing regulation within the primary industry sector, ageing population profiles, poor internet and cell phone coverage are just a few requiring urgent attention. The challenge of attracting people to work in rural is front and centre for many sectors. Doolan-Noble et al touch on this in relation to health care but education and agriculture are also facing similar challenges. The sustainability of rural townships and areas will be dependent on their ability to respond to these and other challenges and the commitment of government to 'rural proofing' in all policies. An interview with Alun Roberts in which he so eloquently highlights the many challenges facing rural communities from an international perspective can be found in this edition.

Healthy rural individuals and communities are vital to the effective guardianship of the land on which our food grows and the land that has us in awe and these aspects are considered in the article by Page. It is therefore vital that as rural researchers we contribute in a cohesive manner across all disciplines by working with rural individuals, iwi, communities and sectors to provide high quality robust evidence, both quantitative and qualitative, that informs policy, nationally, regionally and locally. Further published papers in the Journal by Whiddon, Mullens and Mullens, Ross and Crawley elaborate on various rural topics, internationally and nationally. Equally Mahoney and Ross pave the way for three community development research projects (student nurses' contribution) and the outcomes that can have an impact on health care disparities in the rural. By working across disciplines within universities and collaboratively across universities we can hopefully improve the conditions and services provided to the significant number of New Zealanders living and working in the rural space. This is highlighted in the international book review of a recent publication by Ross and Crawley (2018) who have captured New Zealand rural nurses' stories which Professor Angeline Bushy then insightfully brought together the relationship between rural New Zealand and rurality internationally.

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## I'M FINDING YOU SLOWLY

Hope Robson

Feeling alone, like a chill to the bone  
wondered what I would do if I had to do it on my own  
my body teases me, makes me see my conscious community.  
Thinking of my mind-set, it's so full of positivity  
and deep-rooted subliminal thought patterns.  
Man I can speak for eternity, see it gets on people and it haunts and taunts  
and they want nothing to do with these thoughts.

I've learnt to be by myself, I feel isolated, freezing  
oh it can be seen as hell.

I love my mind and what I dwell on, I love being in my own space  
pop the kettle on, have a cuppa tea, relax and think deeply.  
In deep thought I think of my tribe  
wanting to gain a right to be together and be free  
come collective, come party with me.

See from time to time I meet people of the divine  
on my wave length, they see  
and we get lost for hours in speech  
talking of this and talking of that  
making my heart have an attack of upmost love and respect  
finally some minds that fully connect.

I'm finding you slowly. People who relate - people who resonate  
we are gathering, it's never too late, oh it's holy  
in its own way, come find me by the gate.  
Man it brightens my day, having this part to play  
find tribe and invite them to escape  
to a land of tranquillity.

Learn to tape and bandage the hostility  
these are what my prayers are made of.  
Finding people that shine and parade in their own paradise  
away from the hypnotised mess that we call civilised.

These people I meet make me want to keep my heart to its beat  
not to slip back into old habits of self-doubt and defeat  
don't disconnect from this higher 'gurl!', that's in me  
bringing me out, making me find these people  
and tell them all about my *true* feelings  
and how all this deep thought first came about.



Figure 1. Bishop's Castle Michaelmas Fair 2017.

Source: Author.

This poem is about human expression in connection to festivals of music and art and how these forms of gathering make up belonging - so the poet can tell her story to people she relates too. It reflects what is in her heart when she thinks of *her* rural community.

**Hope Robson** grew up in the small rural community of Bishop's Castle, Shropshire, UK. She works as an Independent Living Co-ordinator and a Complementary Therapist and has a passion for her community and how to keep it strong and vibrant.

## RURAL COMMUNITY PRACTICE: AN INTERVIEW WITH ALUN ROBERTS

Interviewed by Jean Ross

Thank you Alun very much for agreeing to discuss with me your current work in the Welsh community of Holyhead/Caergybi and Anglesey/Ynys Môn North Wales, United Kingdom.

Can you explain what your role is please?

I am the Business Support Manager for a local charity called Môn Communities Forward (CF) – Môn being the Welsh word for Anglesey – which is an island off the coast of North Wales (see Figure 2 below)

Môn CF has been going for about seven years now. We were actually set up to deliver a Welsh Government anti-poverty programme. So we wanted to identify what types of poverty we were dealing with which included all sorts of different issues like people's access to health services, family background and people's educational achievements.

We have access to information such as what school people went to and their achievements, family background where they came from, what sort of health issues in the family and access to medical services, access to jobs and employment. So just a whole range of information really, in terms of what was happening in communities. With this information we could see massive differentials between urban and rural areas. The difference was *stark*. So we decided right away on how we were going to tackle these areas of deprivation. Our thinking was to get the community to come up with the answers to the problems or the perceived problems. This was a bottom-up approach which in theory was empowering the community to come up with its own solutions.

A sum of money was allocated from the Welsh Assembly Government to kickstart activities where teams were established within the deprived areas with people from within the community being tasked to bring the community



Figure 1. Alun Roberts.  
Source: Jean Ross.



Figure 2. S4C. Source <http://www.s4c.cymru/en/entertainment/dal-ati/page/197/anglesey/>

together and set priorities for action. We have noticed over the years there seem to be some issues which are specific to rural areas. For example, the provision of services, either they're not there, or they're very minimal. You have to have access to transport to go out of your own area into towns where there is a good concentration of services. The problem we have here in the County of Anglesey is that the provision of services is not brilliant. In rural Anglesey there are no General Practice Services, no hospitals, no major shops while bus services are infrequent or non-existence. So you're really isolated in these rural areas and that includes not just isolation from services, but medical, educational and other things including access to employment. Many of the people living in a rural area are suffering from poverty in many cases or just living above the poverty line. So what they need is access to transport, which in most cases, requires a car, which is normally quite costly.

There are a number of key themes community members feel strongly about such as access to services, opportunities for young people, access to employment and access to training.

So what we do now is we go to these rural areas, talk to the local people meet them regularly and be the link for them, so that we provide information about opportunities for work and entry training while linking to jobs in the community and find a way to match individuals with employers. We're fortunate here, because we have had regular government funding. We also work with the bottom up approach rather than a top down approach, where the community takes control, comes up with solutions for some of the key issues in the community. They are then empowered to make change happen. So in Holyhead for example we have a priority to engage with young people. So we now have provided a Youth Pod (see Figure 3 below) for them, which is a safe haven after school (ages 11 to 16 years) for three and a half hours Monday through Friday, where the young people can go and chill out. They call it a safe space, or a safe haven. With the young people they set the rules for the safe space. They are supported by three members of staff. But generally, the young people run the hub for themselves. And they decide what to do. They decide on the activities they want to get involved in and what they want to do. What training they need for themselves? So it's quite a valuable asset for them and they do appreciate it.

Some young people come every night after school, so it's their social life in a way outside of school. If they need some quiet time to open up with issues that might be affecting them there is an opportunity to do so. We also are able to bring in specialist agencies to support them for example mental health or sexual health. So it's an ideal place really for them to feel safe, also to open up in a safe environment. The nearest similar youth set up is almost 200 miles away. So we are really lucky here - others would like to have a similar space, but we also understand that one model does not fit all. What we need is to listen to the community, and work with the assets that they have. And the people that they have and what they want and develop a model that meets their needs.

So Jean you've asked me a little bit about myself, I'm very driven to make a difference. If I can, I'll actually think strategically, but actually deliver on a micro level, helping individuals on a day to day basis. You can't really beat that. So the individuals that you see become a collective. So over



Figure 3. The Pod.  
Source: Jean Ross.



time you're actually supporting quite a few people. You need to get to the root of all communities. You can do this personally or you can find those community connectors, those people that connect with other people in their community. So you just talk to people and you find out who the key players in a particular community are. And so you try and find out what's going on in that community. So those connected people can connect with other people. And they all feel comfortable with you. You just collect all the information you can that is available, so you can get a good feeling about the community and most importantly you listen to people.

**Alun Roberts**, BA Business Administration was brought up in a small seaside village on the west coast of the Isle of Anglesey. He attended the local high school and progressed to higher education at the local university in Bangor. He did a B.A. degree through the medium of Welsh (which is his first language). His first proper job after university was as the Tourist Information Officer for the local authority in Anglesey. This gave him an excellent grounding and understanding of his home county. After a couple of years, he went into private business running an agency which offered self-catering accommodation within 800 properties on the Isle of Anglesey. Later he moved to work for a company in the construction industry as a commercial sales director before entering the world of supporting people who were struggling to find work. Over the previous 25 years he has been employed by a number of organisations such as Bangor University to utilise his local knowledge to support people into work or to establish new business ventures. He Chairs the only business forum in the county (Holyhead) and is a regular consultee in respect of community and business development in the county. He is currently looking at driving forward regeneration in one of the county's most deprived towns (Amlwch) which has been hit in 2019 with some major employers closing down operations or shedding hundreds of jobs.

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## RURAL COMMUNITIES

Jean Ross

### INTRODUCTION

The conceptual understanding of the term 'rural' is a key lens in this paper. However, rural is not a simple concept, as there is no one set of attributes that represent this complex space (Larson, 2002a; Woods, 2011). Woods (2011) cautions that "[t]he rural is a messy and slippery idea that eludes easy definition and demarcation. We could probably all instinctively say whether any given place was rural to us, rather than urban, but explaining why it was rural, not urban, and drawing a boundary line between urban and rural space on a map are altogether more difficult tasks" (p. 1).

Instead, there are multiple ways of characterising the rural in which individuals and institutions, both within and beyond rural geographical boundaries, construct their own understandings. These understandings fall into two categories – the rural is both real (internal subjectivity) and imagined (external subjectivity). Halfacree (2006) has studied the social constructions of the rural for many years; he has noted a change in how the concept is represented and imagined, while also being associated with diverse meanings. These diverse meanings reveal that the rural is a contested space, according to Woods (2011), who notes that a variety of different approaches are used to make sense of this space. He describes these approaches as marked by "imagination, representation, materialisation and contestation ... taking on different forms in different contexts and from different perspectives" (p. 30).

These diverse understandings associated with the rural imply that there are multiple ways of knowing, engaging and understanding this space. In this paper a deeper understanding of the rural is sought through both text and photography. According to Richardson and MacLeod (2010), photographs can convey a strong sense of meaning which can be significantly more dynamic than the written word. And when photographs are united with text, they "have the potential to be more powerful and expressive than the written word alone" (Burke & Evans, 2011, p. 174). It is for this reason that a number of photographs are included in this paper, providing a visual representation that speaks to the observer by illustrating an alternative medium (Richardson & MacLeod, 2010).

### DEFINING RURAL

Defining the rural in technical terms is attempted in what follows. Rural has been associated with population density and distance (Bidwell, 2001). Distance is measured by kilometres from urban centres (Bushy, 2000), which provide services such as tertiary health-care and employment for rural residents who commute from their rural locations (Statistics New Zealand, 2006). According to Halfacree (1993), typologies or continuums have been in use since the 1940s to measure the rural–urban divide. The aim of using a continuum is to measure differences in size, population and factors associated with a particular location, from the remote through to urban contexts. According to Hugo (2002), typologies or continuums are valuable measures for defining the rural. Measurements, whether in terms of distance, the population base or access to health-care, are widely used in defining the concept of the rural. Various indices are used to measure specific rural characteristics which, collectively, can be used to develop a rurality index. A rurality index assists with the planning of health-care and takes into consideration the nature of rural communities and their health-care needs (Kulig et al., 2008). Equally important is the context in which community members live and go about their everyday activities.

## A RURAL COMMUNITY

A community is not necessarily associated with a physical location, but can be a part of a global community (Ife, 2013; McMurray & Clendon, 2015). In general terms, the concept of community refers to people who align with similar values and beliefs which bond them together in a common cause. The purpose of this paper is to consider community in reference to people who relate to each other within the context of an identified space, in this case a rural location. According to Hughes (2009), the “very notion of ‘community’ sits rather more comfortably in a rural rather than urban framework. One does not often hear the term ‘urban community’” (p. 201). Communities are spaces of social networks where residents work, live, communicate (online) and play and are associated with each other through shared connections, obligations and responsibilities (Hughes, 2009; England, 2011). Communities are also places where people other than residents live; rural communities are places that non-rural people visit for holidays and recreation. Rural communities comprise rural people as a social collective. However, the existence of a social collective does not imply that all its members share the same values, as a variety of views exist amongst rural people, as elsewhere.

Rural communities have both negative and positive connotations. Both Woods (2011) and Murray (2012) reflect that the rural is sometimes considered as backward, in contrast to positive images associated with the ‘rural idyll,’ noting how the rural environment is often seen as an attractive and romanticised place to live in or visit. Liepins (2000) associates community cohesion, the social collective and action with rural locations, and notes that the sense of cohesion increases as rural communities become more remote from urban centres. Physical remoteness builds resilience among rural residents (Leipert & Reutter, 2005) and self-reliance (Bushy, 2000), and in addition promotes community sustainability (Panelli, 2006; Dillon, 2008).

Rural communities are constructed through their rural context, rural people, community values, community practice and community space (Panelli, 2006). This is linked to expectations of social participation among rural residents who practice a sense of community through various social practices (Panelli, 2006). Rather than being seen as a structural



Figure 1. Local landmark representing a sense of place and belonging.  
Source: Brian Scantlebury; printed with permission.



Figure 2. Local community members' hat representing relational knowing among community members.

Source: Brian Scantlebury; printed with permission.

concept, community can be considered as a symbolic construct where meaning is made through the social relations that occur within it. The meanings of community can be shared or contested. Liepins (2000) contends that rural people feel a sense of belonging and social cohesion in relation to their communities based on where they live. Community and place are constantly intertwined (England, 2011).

Figure 1 reflects local people's connection with local landmarks, producing a sense of belonging and emotional attachment leading in turn to the development of a sense of place.

Communities are based on social relations that occur continually in places and spaces as interactions develop and as links are developed between people (Hughes 2009). Social relations are formed through family, friends, functionality and loyalty to others, as well as being a consequence of community membership (England, 2011). In rural areas, social relationships are based on personal bonds of friendship and kinship, inter-generational stability and a close proximity to associated beneficial interactions (Liepins, 2000) that are considered in positive terms when associated with the rural.

Figure 2 represents the establishment and maintenance of local relationships – knowing the person who this particular hat belongs to.

## IMAGINING THE RURAL

In addition to the elements discussed above, 'rural' can conjure up a range of images including wilderness, outback, village, bush and open space (Halfacree, 2006). Rural places are understood as productive – for example, in terms of food, fuel and minerals. Rural places have also become recreational areas, holiday venues and a space to enjoy a slower pace of life (Woods, 2011; Central Otago, A World of Difference, n.d.). Rural areas are associated with



wide-open spaces where, generally, activities are associated with production or recreation, which are in turn both associated with the land. However, definitions and perceptions of the rural differ widely around the world. Difference is a particularly interesting phenomenon in relation to rural studies. It is useful to consider the different associations of images (such as those reproduced here) for different geographical location – for example, the concept of the village as it relates to perceptions in Britain and the concept of the Outback as it is conceived in Australia.

Equally, there are numerous representations of the rural. These include engaging with nature, farm life (including animals), farmed space, domesticated and wild space, clean air and the simple, healthy lifestyle associated with agriculture (all positive aspects of rurality) (Thurston & Meadows, 2003), as well as isolation (Bushy, 2012).

Family is also an important focus of the rural scene, with family members living and working close to each other (Panelli, 2006) and maintaining family values (Bushy, 2000). Positive aspects associated with community include small populations, having a strong sense of community (Liepins, 2000; Cloke, 2003) and the availability of local meeting places, such as community markets, as well as a slower pace of life (Bushy, 2000). Ideas of adventure, recreation and freedom are associated with the term 'rural' and have come to be represented as adventure tourism (Woods, 2011). Adventure tourism includes a range of recreational activities, including traditional activities such as rock climbing and mountain biking, while contemporary adventure tourism provides the individual with opportunities such as jet boating and four-wheel-drive activities. In New Zealand, adventure tourism in rural locations has become fashionable and is considered a leading part of the tourist industry (Woods, 2011). Often run by local people, it is not necessarily indulged in by the locals.

The Urban/Rural Profile prepared by Statistics New Zealand (Statistics New Zealand, 2006) illustrates the specific differences between the rural and the urban contexts as they relate to one country. Such descriptors reveal that the rural has its own culture, or 'rurality', a neutral term coined by academics to refer to the countryside (Woods, 2011). According to Cloke (2006), "it is [through] the social distinction of rurality that the significant differences between the rural and urban remain" (p. 19). Thus rurality relates to the countryside or an isolated geographical location and includes traditional ways of living and being. These representations of the rural are also associated with the open spaces found outside of cities (Bunce, 2003). They are also identified with the traditional term 'countryside' (Cloke, 2003) and, more recently, with the term 'rurality'.

According to Woods, rurality is a "social construct – that is as an imagined entity that is brought into being by particular discourses of rurality that are produced, reproduced and contested by academics, the media, policymakers, rural lobby groups and ordinary individuals" (Woods, 2011, p. 9). For some people the rural is imagined, for others it is a lived reality; alternatively, it is a place to visit. It is clear that the concept of rural is contested, depending on the individual's construction of rurality, which in turn shapes their representations of the rural.

One outstanding understanding of the rural is constructed by non-rural residents and is known as the "rural idyll."

## THE RURAL IDYLL

The rural idyll constructs rurality as a form of anti-urbanism or counter-urbanism, while maintaining a nostalgic and romanticised idea of the rural played out in social, economic and cultural structures, with the intention of keeping an idealised rural image alive. Some people value and dream of the rural countryside as a simpler way of life which has been lost in urban contexts; they "seek to construct rurality in a certain way rather than representing the rural that actually exists" (Woods, 2011, p. 22).

The concept of the rural idyll can influence policy development by non-rural people (Cloke, 2003). Likewise, Liepins (2000) states that those from outside a rural community may be influential in constructing or constraining understandings about it, including policymakers in core agencies who can shape resources, responsibilities and relations within and beyond the community.



Figure 3. A fence line in Central Otago representing rural geographical isolation.  
Source: Brian Scantlebury; printed with permission.

By contrast, the interpretation of the rural by rural residents represents situational knowledge related to their lived experiences and assists in understanding how these people are constructed (Woods, 2011). As rural residents come to know their rural context, a sense of self and identity associated with this space develops (Woods, 2011). Edensor (2006) emphasises that there is a way of performing within the rural, which he calls an “unreflexivity habitus” (p. 491). This refers to a situation where everyday tasks are performed routinely and confidently in place and among other rural residents, buildings and the countryside, including places where non-human activities occur.

According to Woods, the separation of rural and urban is one of the oldest ideas in geography (2011). Urban–rural differences are associated with the density of population in urban regions, which contrasts with the isolation experienced by rural residents. The differing social interactions which result from this play a significant part in the fabric of rural existence and communication (de Leeuw et al., 2011; Nagel, 2011). Figure 4 presents an excellent example of rural encounters that differ from urban living.

Rural residents are aware that they identify themselves as different from urban people (Strasser, 2003). Community connectedness is one such factor (Hughes, 2009) – in rural areas, everyone generally knows everyone (Hughes, 2009; England, 2011). According to Woods (2011), rural residents may feel a sense of belonging with each other; the shared identity that results has been referred to as the traditional notion of *Gemeinschaft*. However, this strong social connection does not mean that all rural residents think and act in the same manner; residents have differing values and views (England, 2011). Rural identity is therefore an important aspect of understanding how the self identifies with the rural.




Figure 4. The everyday non-human encounters with animals on a large scale.  
Source: Brian Scantlebury; printed with permission.

## CONCLUSION

In this paper I have provided an introduction to the nuances associated with rural attachment to place and the importance this has for rural people's sense of identity, safety and life satisfaction (McKinnon, 2011). A sense of identity is also associated with a sense of belonging or feeling connected to a rural location and the people residing in that location (Nagel, 2011). This encompasses both rural dwellers who are accepted as a part of the rural community as well as residents who either have not yet been accepted into the community or who remain physically outside of the community and its membership. The rural has historically been identified with the countryside (Cloke, 2003) and with notions of isolation, family connections and a small population, as well as the strong sense of community associated with rural locations.

This paper has included images that support the written material to provide a visual representation that speaks to the reader in an alternative way. Images trigger multiple meanings for viewers; what is significant to one viewer may not be the same for another, leading to unexpected revelations (Richardson & MacLeod, 2010) and the potential for meaningful dialogue through which our understanding of the rural can be deepened.

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## MAINTAINING THE HEALTH OF A RURAL COMMUNITY BY WORKING TOWARDS RESILIENCE AND SUSTAINABILITY

Keith Whiddon

### INTRODUCTION

Rural communities have particular issues and needs. They contribute significantly to the economy, yet too often service provision designed for urban areas is not appropriate or affordable for rural communities.

The United Kingdom (UK) is currently going through an unprecedented period of change, politically, economically and socially. The impact on small rural communities is far more significant than on urban areas, with their inherent economies of scale and superior connectivity. Never has there been a more important time for the UK to strive to make its communities resilient to such change and ultimately sustainable for the future for each one of its citizens.

The rural areas of England cover 90 percent of its land and house 17 percent of its people. There are 524,000 registered businesses in rural England, employing up to 3.7 million people and with an annual turnover of £404 billion. In these rural areas, 22 percent of the paid employment now works from home, while in urban areas the figure is only 13 percent (House of Lords Select Committee on the Rural Economy, 2019).

As an illustration, while rural Shropshire and the City of Nottingham have similar populations, one might expect urban Nottingham to have a far greater number of business enterprises. This is not the case: there are a total of 15,710 enterprises in Shropshire, while only 9,035 in Nottingham (Barrow, 2018). The romantic notion that rural areas are unchanging is false. In reality, England's rural economies have already changed markedly, and further change is inevitable. Once dominated by agriculture, they are now as economically diverse as urban economies, contributing a significant amount to the national economy with the potential to flourish and contribute even more to the nation's wellbeing and prosperity.

In terms of social justice (the distribution of wealth, opportunities and privileges within a society), inequality and sparsity, English rural areas face serious challenges and constraints in providing services and infrastructure. These include the unaffordability of housing by comparison with towns and cities; slower broadband and patchy mobile coverage; and recent declines in service provision – for example, in public transport and banking facilities, and businesses facing skills shortages and difficulty accessing finance. A lack of clarity over what will happen as the UK leaves the European Union means that these factors could get worse before they get better.

The result is that many rural communities now feel left behind. These communities deserve an equitable share of service provision and funding. Focusing on delivery in larger settlements is not a fair option. "No resident or business should be disadvantaged unreasonably by their rural location." (House of Lords Select Committee on the Rural Economy, 2019, p. 7).

## BACKGROUND

The terms ‘resilience’ and ‘sustainability’ are in common usage in contemporary writing to describe rural communities.

Resilience is the ability and capacity of a community to adapt to sudden change, to overcome unexpected problems. The concept of community resilience has mostly been applied to settlements responding to and recovering from an adverse physical event, such as a flood or earthquake. However, the term is equally applicable when political, economic or social events threaten the stability of the community, such as the proposed closure of a library or the removal of a subsidy for a bus service.

Sustainability is the long-term capacity for prosperity, growth and well-being. It is the ability or capacity of a community to take what it needs now, without compromising the potential for people in the future to meet their needs. Both resilience and sustainability function together as an integrated system (Figure 1).

While a community can often show the resilience to adapt to the loss of service provision by making alternative arrangements, there may come a point when such losses become too great and the sustainability of the whole community is left in jeopardy. As a result, many rural areas are locked into a “circle of decline” by a shortage of jobs, sustainable business activity and inadequate and declining services (Figure 2).

Writing in 2015, Alvarez (NESTA, 2015) drew an interesting parallel between Maslow’s “needs pyramid” (Maslow, 1943) and the “needs of a community,” arguing that just as individuals need to fulfil certain basic needs to be able to fulfil higher-order ones, then so do communities, as they are comprised of groups of individuals (Figure 3).

An insufficiency, unfair allocation or lack of access to resources can result in communities becoming unsustainable. In the UK, a number of serious political, economic and social issues threaten the sustainability of rural settlements, including:



Figure 1. Resilience and sustainability functioning as a system.  
Source: Author – based on Musker (2015).

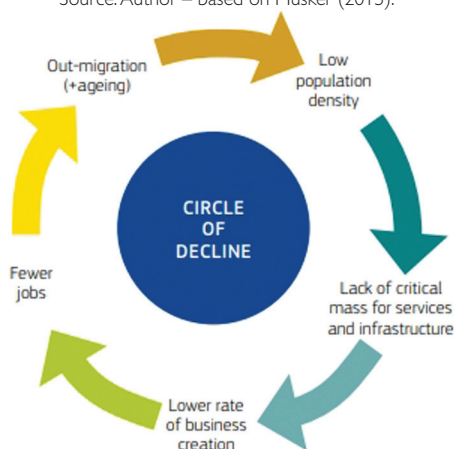


Figure 2. The circle of decline.  
Source: The European Network for Rural Development, 2018 (European Commission, 2018a).  
Reproduced with permission.



Figure 3. The “needs pyramid” for communities.  
Maslow pyramid (1943). Source: Alvarez (2015).

- **Fuel poverty** – ten million people spend more than 10 percent of their income just to keep warm;
- **Food poverty** – 5 percent of the population face malnutrition; 26 percent are obese due to food poverty;
- **Health inequalities** – people living in deprived areas have 7.5 years less life expectancy
- **Social isolation** – 1 in 8 lack a friend or family member with whom they are in daily contact;
- **Financial exclusion** – 8 million people lack a bank account, leaving them £1000 per year worse off.

(Alvarez, 2015)

These issues are important indicators of sustainability. When applied to the “needs pyramid for communities,” all five levels of “need” are required to be met and maintained for a community to be regarded as sustainable (Figure 4).

In his book *The Resilience Compass*, Wilding highlights four characteristics critical for a community to be sustainable (Figure 5). These include healthy and engaged people; creating a localised economy; cross-community links; and building a creative, inclusive culture.

The outer concentric ring of the compass represents the higher order characteristics found in sustainable communities, in much the same way as outlined by Alvarez in his “needs pyramid for communities.”

## COMMUNITY PROFILE

Bishop's Castle, which forms the case study for this paper, is a small English rural market town in the remote South Shropshire Hills, close to the Welsh border. It is a medieval settlement with a large number of historic buildings and an extensive Conservation Area covering the entire town centre.

With a population of just 1893 (UK Office for National Statistics 2011), it remains one of the smallest towns in England, yet is the service centre for an extensive hinterland and supports a significant tourist population throughout the year. The town has a well-earned reputation for the arts and music.

Despite its modest size, Bishop's Castle boasts a theatre-cum-leisure centre with swimming pool, a library, a community hospital, a doctor's surgery, three aged-care facilities, a business support and resources facility and a cattle market, as well as six public houses and two breweries. The local community values such services and there is a very strong will to preserve them through the current period of austerity.

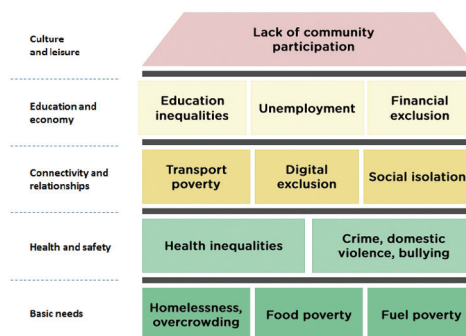


Figure 4. The needs hierarchy of a sustainable community. Source: Alvarez (2015).

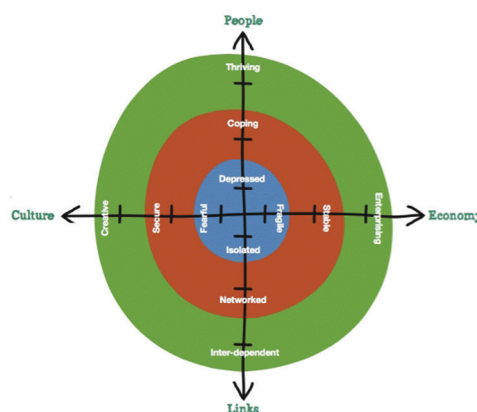


Figure 5. The resilience compass. Source: Wilding (2011). Reproduced with the permission of The Carnegie Trust.

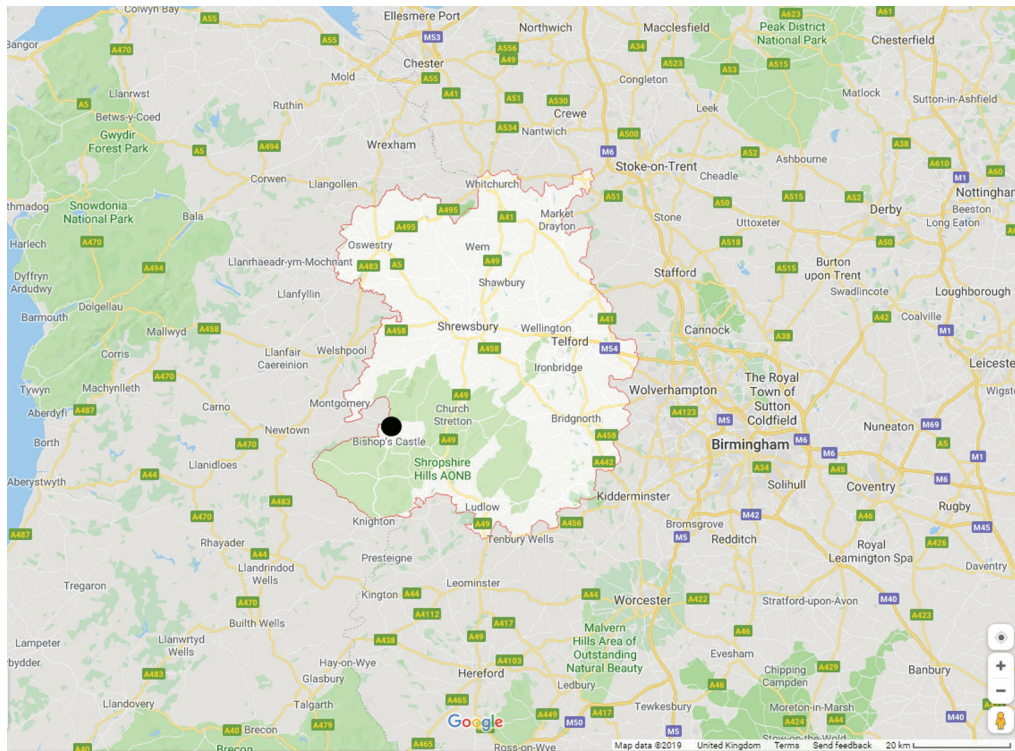


Figure 6. Map showing the location of Bishop's Castle and Shropshire within the West Midlands region.

Source: Map data ©2019 Google.

Being a small, remote rural town presents some significant economic and social challenges. Access to employment and the need for more affordable housing are seen as the key requirements to ensure the retention of young people and families, thereby avoiding becoming a retirement town. The demographic profile shows that children and young people make up a lower proportion of the town's population than in Shropshire as a whole. However, 63.5 percent of the population are of working age, a higher proportion than the average for Shropshire (60 percent), the West Midlands (62 percent) and the UK as a whole (63 percent) (Shropshire Council, 2017-18).

The three largest employment sectors are health (26.5 percent), manufacturing (22 percent) and retail (14.4 percent). Eighty-eight percent of the businesses in Bishop's Castle employ fewer than five people, with 5.8 percent employing between five and nine people. Fewer than 5 percent have a workforce of 20 or more (Shropshire Council, 2017-18).

There is nearly a two-fold difference in mental health spending across England. The biggest spending authority is South Yorkshire and Bassetlaw at £220.63 per person, per year, whereas Shropshire remains the second lowest spending authority in the country at just £134.77. Covering a large hinterland, Bishop's Castle Medical Practice has around 5200 registered patients. In common with many rural communities, the community has a disproportionately high percentage of the elderly. Figure 7 compares national and local figures for disease prevalence, showing that Bishop's Castle has a higher than average incidence of age-related illness and a higher than average demand on local health provision, despite inequitable funding.

## DISEASE PREVALENCE IN ENGLAND: LOCAL ESTIMATES

Jan-19

MSOA	LA	Atrial Fibrillation	Asthma	Cancer	Coronary Heart Disease	Chronic Kidney Disease	COPD	Cardiovascular Disease (Primary Prevention)	Dementia
	England average	1.9%	5.9%	2.7%	3.1%	4.1%	1.9%	1.1%	0.8%
Bishop's Castle	Shropshire	2.6%	6.6%	4.0%	3.9%	7.0%	2.0%	1.1%	1.0%

MSOA	LA	Depression	Diabetes	Epilepsy	Heart Failure	High Blood Pressure	Learning Disabilities	Serious Mental Illness	Obesity
	England average	9.8%	6.7%	0.8%	0.8%	13.8%	0.5%	0.9%	9.7%
Bishop's Castle	Shropshire	10.0%	7.0%	0.8%	0.9%	17.6%	0.9%	0.7%	10.7%

MSOA	LA	Peripheral Arterial Disease	Palliative Care	Rheumatoid Arthritis	Stroke & Transient Ischaemic Attack	Osteoporosis
	England average	0.6%	0.4%	0.7%	1.7%	0.6%
Bishop's Castle	Shropshire	0.9%	0.5%	1.0%	2.7%	1.1%

Figure 7. Disease prevalence in England and Bishop's Castle.

Source: Author-adapted data from House of Commons Library (2019).

Shrewsbury and Telford Hospital NHS Trust has approximately 628 inpatient beds and 43 day-case beds and 44 children's beds located in two sites: The Princess Royal Hospital in Telford and Royal Shrewsbury Hospital in Shrewsbury. Both hospitals provide a wide range of acute services including accident and emergency, outpatients, diagnostics, inpatient medical care and critical care and serve nearly half a million people in Shropshire and mid-Wales.

Recently, Shropshire's Future Fit programme has determined that "planned hospital care" will take place at Telford's Princess Royal Hospital, while the Royal Shrewsbury Hospital will become a specialist "emergency care" site only. Telford Hospital is 34 miles from Bishop's Castle, with no direct public transport service, making access impossible for those without their own transport.

Bishop's Castle has long been seen as a good place for people to retire to and the population is ageing, resulting in falling rolls at the schools. The cost of delivering education in rural areas is proportionately higher than in urban areas, yet current public funding formulas fail to take account of sparsity and rurality. As a result, Bishop's Castle's two schools suffer from problems of financial viability. They have insufficient resources to recruit and retain specialist staff, especially in the area of special educational needs. The town is no longer able to provide post-16 education, forcing students to travel up to 40 miles each way on a daily basis. This dependence on transport prevents many students from taking part in after-school and extra-curricular activities.

Between 2010 and 2017, £103 million was cut from bus support across England and Wales. This represents a 32 percent reduction in budget overall. Some rural authorities have seen very significant reductions, with Shropshire cutting more than 60 percent of its funding. Shropshire Council are currently proposing to cut this even further. For Bishop's Castle, this would result in just one or two buses per day to Shrewsbury, the nearest large town, instead of five. This threatens student courses, jobs and the health and social care of the community and is the subject of vigorous local protest.



## DISCUSSION

Bishop's Castle has a long history of responding creatively to external challenges. It demonstrates strong resilience, as shown by the following three examples illustrating issues of employment, housing and community services.

Employment and affordability of housing are the two main challenges for Bishop's Castle. In response, a Community Land Trust was established to provide affordable housing. It builds new homes or renovates existing properties to rent to local people. It also provides premises for business that deliver jobs for the benefit of the community. The trust is working to secure a business park through a Community Asset Transfer from Shropshire Council aimed at stimulating local employment opportunities, particularly for small and start-up businesses.

Maintaining the future of Bishop's Castle's SpArC Leisure Centre is a particular challenge, with local government funding cuts combined with a small population making it hard to achieve economies of scale. A well-organised "Save the SpArC" campaign began in 2016 in response to fears that the leisure centre might close after Shropshire Council announced it would withdraw funding. It persuaded the council to change their mind and designate SpArC as one of only two "rural hubs" in the whole county to escape the axe.

When Bishop's Castle's public library was threatened with closure in 2016, the town's own Enterprise Company took control from Shropshire Council through a Community Asset Transfer. It now runs the library, directly employing its staff. Enterprise SW Shropshire has been "trading for social benefit" since 1996, focusing on providing services that help the rural economy such as a drop-in IT centre, business support, equipment loan service and the local theatre.

In 2005 the EU developed a set of eight main characteristics by which the sustainability of a settlement could be assessed (Figure 8). Known as the Bristol Accord, this agreement has become a standardised way of comparing communities across Europe.

<b>01 - ACTIVE, INCLUSIVE AND SAFE</b>	<b><i>social and cultural</i></b>
<b>02 - WELL RUN</b>	<b><i>governance</i></b>
<b>03 - WELL CONNECTED</b>	<b><i>transport</i></b>
<b>04 - WELL SERVED</b>	<b><i>services</i></b>
<b>05 - ENVIRONMENTALLY SENSITIVE</b>	<b><i>environmental</i></b>
<b>06 - THRIVING</b>	<b><i>economy</i></b>
<b>07 - WELL DESIGNED AND BUILT</b>	<b><i>housing</i></b>
<b>08 - FAIR FOR EVERYONE</b>	<b><i>equality</i></b>

Figure 8. The eight characteristics of a sustainable community.

Source: Author-adapted version of

Office of the Deputy Prime Minister (2005, pp.12–14).

Positive Characteristics		%
02	People in Bishop's Castle feel proud of their Town	94%
01	Bishop's Castle people look out for one another and this helps to create a strong community	92%
01	People feel safe within our community	92%
01	There are shared activities in Bishop's Castle which help to create a strong sense of community	91%
05	Bishop's Castle is relatively free of litter and graffiti	91%
06	Local businesses contribute to / support the local community	84%
05	This is a community that is concerned about the effects of pollution, is careful about waste disposal and encourages recycling	82%
05	This is a community that respects the environment and uses resources carefully	77%
07	Bishop's Castle Town is in a good condition and is well looked after	76%
03	We have good facilities to encourage safe local walking and cycling	70%
05	This is a community that tries to minimise the effects of climate change through energy efficiency and the use of renewables	67%
01	Most people in Bishop's Castle feel part of the community and there are no excluded groups	65%
08	Our community respects the rights and aspirations of all local people	60%

Table 1. Survey results – positive characteristics of Bishop's Castle.

Source: Author.

	Negative Characteristics	%
07	The price of local housing does not create problems for local people	5%
07	The price of housing does not prevent people who work locally from living locally	10%
03	Local people are able to travel to work, to shop and to access education and other services using public transport and are not entirely reliant on the private car	11%
07	There is enough housing available to meet the needs of local people	12%
06	There is a range of jobs available for local people and they are not reliant upon one or two big employers	18%
06	The local economy provides employment opportunities for people in the community who wish to work here	25%
02	People feel well connected to services provided by Shropshire Council and other service providers	26%
03	Our community is well connected with other settlements and the 'outside world'	35%
03	The services that are available for our community are well used and are not under threat through lack of use	39%

Table 2. Survey results – negative characteristics of Bishop's Castle. Source: Author.

A recent survey of the Bishop's Castle community based on the characteristics noted in the Accord attracted more than 100 responses. The pride in and strength of the community is strikingly high. It is also a town very aware of environmental and 'green' issues (Table 1).

Conversely, issues of housing, jobs and transport are also of concern to the community, as is common in rural settlements in the UK. It is in these areas that the sustainability of the community is under most threat. Having identified the issues most likely to destabilise the long-term cohesion of a community, what steps might be taken to mitigate their effects? A sustainable community is one which is empowered and proactive in meeting new challenges head-on.

An empowered community is one that is confident, resilient, energetic and independent. It is well networked and has a high degree of social capital. "It is confident enough to imagine a better future for itself, and is in a position to take control of that future. It has the breadth of vision to be able to enlist others and other agencies in helping it to deliver its ambitions." (Elliott, Chair of Land Reform Review Group, 2014).

### A model for building a sustainable community

The research and empirical evidence collated by the author, in the form of community surveys and interviews, has led to the development of the model outlined below as a strategy for achieving the long-term sustainability of a rural settlement like Bishop's Castle. By focussing on the following five aspects of community development, the intention is to strengthen the town's resilience and sustainability.

#### 1. Creating a sense of place

Communities that are said to have a 'sense of place' are those with strong identity and civic pride that is deeply felt by inhabitants and visitors alike. As the aforementioned survey shows, Bishop's Castle has a very strong sense of community and pride. Events such as the annual Michaelmas Fair are critical in symbolising the community's cultural identity and manifesting what the community is about. The fair is about showcasing who and what the community is and fosters a huge sense of pride. It promotes a sense of belonging, or 'being part of the tribe.' It creates a shared understanding that 'this is a community that stands together,' strong and against the world if necessary.

## **2. Community capacity-building and empowerment**

To paraphrase Haile Sellasie, the ultimate resource of a community is its people. Perhaps the most important factor in achieving a resilient and sustainable community is to enable local people to develop, implement and sustain their own solutions to problems in a way that helps them shape and exercise control over their physical, social, economic and cultural environments. If a strong sense of place exists, then building the capacity of the community and investing in social capital will result in a united and proactive response.

The Bishop's Castle Community Partnership was established to address a range of issues identified by the community. Its slogan asks the question: "Are you worried about: too few jobs; shortage of affordable housing ...?" and puts the challenge: "Want to do something about it?" The aim is to empower the community to come together to recognise potential threats in the belief that community action is the best way to lead to change and improve outcomes for individuals. The partnership has instigated a number of projects where local people take responsibility for their own community – for example, Fight the Plastics, a campaign to tackle the problem of wasteful and unsustainable single-use plastics; and Food Waste, where surplus local supermarket food is redistributed to Meals on Wheels and the local college canteen.

## **3. Widening the horizons of the local community and challenging low aspirations, particularly relating to young people**

As the Resilience Compass shows, a sustainable community is one that is outward-looking, with a willingness to learn from other communities. Fostering links and networking spreads existing good practice and challenges esoteric and narrow ideologies by raising expectations.

The Bishop's Castle About Music Project has run for ten years with the aim of developing and supporting youth music groups. It has engaged many young people, providing them with a reason to stay in the town or to return there to live, following university studies.

The global issue of climate change and the resultant Extinction Rebellion has motivated younger people to start taking a greater responsibility for their own futures. In Bishop's Castle, young activists are designing a community café and drop-in centre. The Thrive Lounge (personal communication, H. Robson, May 2019) will be a space that promotes the mental health and well-being of the community. It is a place to help build an optimistic, vibrant community, full of opportunity and prosperity.

## **4. Promoting digital transformation**

Fast broadband connectivity empowers rural communities by enabling locational independence – the ability to work anywhere. The European Commission defines Smart Villages as rural areas where traditional and new networks and services are enhanced by means of digital telecommunication technologies, innovation and the better use of knowledge. They use digital technologies to improve economic activity and the quality of life, accessing knowledge and markets previously only available to urban areas (European Commission, 2018a).

## **5. Finding local solutions to public funding cuts and the centralisation of public services**

The 2015 Scottish Community Empowerment Act and the House of Lords Rural Strategy Select Committee both advocate a 'place-based' approach for future rural policies and services. An empowered rural community has the best understanding of what services it needs. Too often, service provision designed for urban areas is not appropriate or affordable for rural communities. Rural services may be improved and made more sustainable through the deployment of technology and through community-led actions and projects.

## CONCLUSION


Recent years of political and economic austerity now threaten the existence of many rural settlements in the UK. A lack of local jobs and affordable housing is resulting in a circle of decline. Too often service provision designed for urban areas is not appropriate or affordable for rural communities.

Bishop's Castle has a track-record of self-determination and identifying creative solutions to problems. For example, the Community Asset Transfer of the town's public library through establishing a company "trading for social benefit" is not dependent on a volunteer workforce and, as a result, has become a sustainable service for the community.

Both 'resilience' and 'sustainability' function together as an integrated system when one is considering the long-term prosperity of rural communities. Bishop's Castle is a community working towards resilience and sustainability and developing a model for how this might best be achieved.

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# CONFLICTING CONCEPTIONS OF PLACE BETWEEN CIVIL SOCIETY AND COUNCIL ACTORS INVOLVED IN LOCAL-LEVEL FOOD POLICY DEVELOPMENT: THE CASES OF DEVON AND BATH, UK

Daphne Page

## INTRODUCTION

In the United Kingdom, the number of local-level food policies is on the rise (Moragues-Faus & Morgan, 2015; Santo & Moragues-Faus, 2019). Unlike at the national level, where food policies are at risk of being watered down or scrapped as a result of Brexit, local authorities have scope to implement changes quickly, with an eye to resilience and sustainability (Lang et al., 2018). These local-level policies are being developed within a national context of devolution, with regional and municipal councils being required to take greater control over their local policies and finances (Morgan, 2014). This activity is coupled with significant cuts to the public sector. Increased awareness of global-level issues such as climate change, public health crises and non-communicable diseases (NCDs) related to lifestyle, and damage to the environment, has resulted in social mobilisation demanding change and a desire for associated policy actions (Goodman et al., 2012).

Integrating sustainable values and practices into the local food system is increasingly being viewed as a necessary way to confront the unsustainability of the global industrial food system (Mason & Lang, 2017). Marsden argues that global pressures (climate change, population growth, the “nutrition transition”) are pushing ‘down’ on the global food system, while those concerned with sustainability are pushing ‘up’ from the grassroots to incite a system shift (2013, p. 125). This paper contributes to this dialogue through an examination of two case studies of local areas in England (UK), Bath and Northeast Somerset (BNES) and Devon. Both of these regions have developed local-level food policies through partnerships with the local authority (LA) and with civil society (CS) groups. The two case studies examine the differing views of these two groups of actors on how local-level food production can contribute to sustainability, with addressing both urban and rural production systems being a particular challenge.

## BACKGROUND

The creation of “alternative food systems,” such as local short-food supply chains, has become more popular over the last decade (Goodman et al., 2012). Food production has been referred to as “the low hanging fruit of transition” (Hinrichs, 2014, p. 146), as food connects and overlaps with so many aspects of daily life and policy. This allows actions taken within the food system to have multiple and overlapping impacts for a municipality. For example, studies of urban agriculture (UA) have shown that community gardens can offer improved community cohesion through increased pride in place, reduced crime and improved mental health, as well as increased fruit and vegetable consumption (Mougeot, 2006; Pollans & Roberts, 2014). Likewise, improved access to local markets for producers and the promotion of agri-tourism can support the rural economy.



Figure 1. Small-scale market garden as an example of a sustainable vegetable production initiative in rural England.  
Source: Author.

It is within this context that civil society (CS) and local authority (LA, or 'council,' henceforth) actors are coming together in towns, cities and counties across the United Kingdom to create bespoke local food policies to respond to local sustainability objectives.

The meaning of the term 'local' has been contested in the context of food. Academics suggest caution in asserting or assuming that locally produced food is indeed more sustainable than the alternative, and have dubbed this phenomenon "the local trap" (Marsden & Franklin, 2013, p. 637). This issue has led some academics to suggest a cautionary approach when making sweeping assertions about the benefits of relocalisation of the food system. DuPuis and Goodman (2005) note the trend – that in research on relocalisation and alternative food networks (AFNs), "the global becomes the universal logic of capitalism and the local the point of resistance to this global logic" (p. 359). They argue that "unreflexive localism" could be a potential outcome of a "romantic anti-politics" of the local food system and could nurture the "ideological foundations for reactionary politics and nativist sentiment" (p. 360).

## **"PLACE AND PLACENESSES"**

Many scholars, as well as writers such as Henry David Thoreau in *Walden* and farmer-philosopher Wendell Berry, have argued that the global industrialised food system has caused a sense of disconnection or "placelessness" (DuPuis & Goodman, 2005, p. 360) that results from no longer knowing where our food comes from or how it is grown. There are both emotional and practical implications arising from this distancing of food from its production.

Previous issues of *Scope* have examined and defined the concept of a *sense of place* through both theoretical and practical lenses (see Aimers and Ross, respectively, in *Scope: Health and Wellbeing*, 2, November 2017). The development of UK food policy has been examined by scholars as a 'place-based' innovation, linking to food security, partnerships and governance (Coulson & Sonnino, 2019; Moragues-Faus & Sonnino, 2019). To date, research on UK food policy initiatives has had a predominantly urban focus, adding an unevenness to the examination of place in relation to these policy developments (Coulson & Sonnino, 2019).

While a sense of place is crucial to writing local-level policy that reflects the context of its municipality, the perspectives of those involved in policy development can diverge on fundamental aspects of how they understand 'place' in relation to the landscape(s) of local food production, and people's relationship to it. These differing views represent tensions in the policy-making process, but are often unresolved as a result of the power relationships within these partnership groups.

## METHODOLOGY

Research on the two case studies presented here was conducted between 2014 and 2019 as part of a doctoral dissertation on local-level food policy development in the UK's Sustainable Food Cities Network. This research received ethical approval from the Research Ethics Committee at City, University of London. The cases were selected based on the criteria of having local-level food policy initiatives developed through partnerships with civil society and council actors that were current at the time the research was begun (2014).

The cases of BNES and Devon illustrate two contrasting partnership group structures, along with the different narratives that emerged within their respective groups and policies relating to food production, sustainability and 'place'. Devon's partnership structure is characterised as a primarily CS-led effort, supported and overseen by the local council and structured according to council priorities. In contrast, the BNES food policy initiative was initiated and led by the LA, with the participation of some CS actors by invitation; as a result, the objectives and general approach were set early in the process by the council. In this research, 'local' – as the term applied to the food policies created by the Devon Food Group and the BNES council – was defined in its spatial sense and based on the political boundaries of each council. However, describing what constitutes local food production, and how it is or isn't sustainable, is less easily drawn out or defined.

This study took the form of qualitative interviews with both CS and LA actors involved in local-level food policy development: five actors from Bath and Northeast Somerset were interviewed (three LA actors and two CS actors), and six from Devon (one LA actor and five CS actors). The interviews focused on the beliefs of the actors relating to local-level food production and how it can foster sustainability objectives.

In addition to the interviews, relevant policy documents (as an output of the collaborative policy process) were analysed qualitatively, with attention to content relating to food production and sustainability. An examination of *Feeding Devon's Future* (Devon Food Strategy and Action Plan 2013-2016) and the *BNES Local Food Strategy (2014-2017)* (Bath and Northeast Somerset Council, 2014) showed how the views and priorities of actors were represented in these documents. This in turn offered insights into the partnership dynamics between CS and LA actors and how this affected the content of the respective food policies.

## THE CASES

The cases of BNES and Devon offered two models of policy collaboration between civil society and local council actors. These differed in the balance of civil society and council participation in the respective steering groups, as well as the extent to which the council set priorities to guide strategy content. These partnerships were based on a need to merge resources in a context of austerity – resources such as knowledge, networks, capacity, funding and authority (including the ability to make policy change at the municipal level).

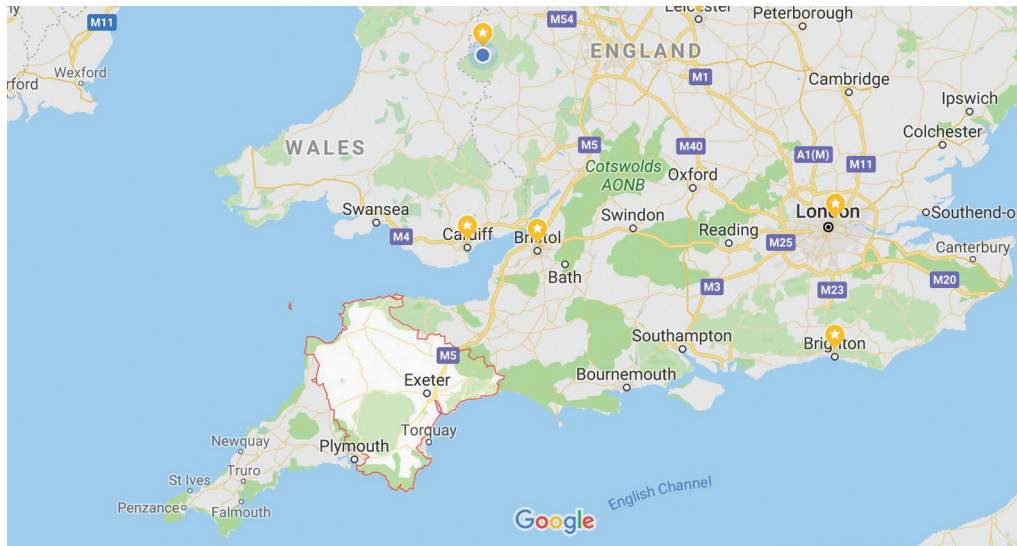


Figure 2. Map showing the County of Devon in the United Kingdom to illustrate the case study area.

Source: Google Maps, 2019.

### Case Study I: Devon

Devon is a county in England's South West. It is characterised by extensive rural agricultural land use that is dedicated primarily to livestock grazing and arable production of grains as livestock feed, with vegetable and fruit production as a small proportion of the sector (Devon Strategic Partnership, 2014).

The make-up of the coalition that created Devon's food 'strategy' could be defined as "[a] hybrid of civil society organizations and government with a conduit to decision makers through municipal council, and with municipal financing, political champions, and supportive staff" (MacRae & Donahue, 2013, p. 9). While proposed by a member of civil society and a mostly CS steering group, the main objectives and oversight of the food policy were provided by the local county council. One CS actor described the process as being "quite top-down," adding that "it ended up being quite high level, Devon-wide." Although CS actors agreed that there was a need for both urban and rural agriculture to balance a policy document, a focus on the rural economy was the council's main objective in the policy. The steering group was required to maintain this emphasis to ensure continued LA support.

Despite this constraint, CS actors used *Feeding Devon's Future* as a means of promoting their message, directing recommendations to the council and framing issues in urgent terms, with particular attention to the environment, food poverty and food security. Questions relating to the environment and the economy remained focused on the rural, and only through the social 'pillar' was any content relating to urban agriculture considered. UA was offered as a means of addressing issues of poor health, lack of skills, and access to food to address food poverty – all in areas of greater (urban) population density. The issue that cut across all three 'pillars' was a lack of knowledge of food associated with the global industrial food system. This included production in general and sustainable production methods in particular (thus connecting to farmers).

Devon's food strategy is based on binary narratives of past versus present and local versus imported, functioning as proxies for 'sustainable' and 'unsustainable.' The notion of an ideal period in the past which was more sustainable than the present is deeply embedded throughout the document. Within this emphasis are nested a number of related narratives, such as knowledge versus ignorance, connection versus disconnection and nature versus development. The strategy refers to "the ignorance of younger people" (p. 13), the fractured relationship with food

of “recent generations” (p. 13) and the present being “a time of public ignorance of the food-cycle” (p. 12). These sentiments were reflected in the interviews with civil society actors who drafted the document. In the strategy, Devon’s traditional ability to provide much of its staple food items has it referred to as a “land of milk and honey” (p. 8). It harkens back to a supposed time when Devon’s citizens lived lives connected to the land and contrasts this with the present: “Long gone are the days when most people in Devon grew, prepared, cooked and ate their own produce, with any leftovers being passed on to pigs or poultry” (p. 13). This highly romanticised view of the thriving, sustainable, healthy rural Devon of the past is held up as something to aspire to in the present.

With Devon County Council as the implied main audience for *Feeding Devon’s Future*, there is an assumption that it has the power to make changes to correct these modern-day ills that are besetting the county. Implicit in this is that by presenting such a stark portrait of the county’s rural circumstances, a compelling appeal might be made to the council based on its own stated priority areas. As a result of the council’s rural emphasis, once the document was finalised, the CS actors involved in the steering committee detached themselves from council oversight to launch the Exeter Food Strategy. This CS initiative was founded on the basis that it represented the needs of one of the most populated *urban* areas of Devon – issues such as food poverty, lack of knowledge, training and influencing procurement.

### Case Study 2: Bath and Northeast Somerset (BNES)

Bath and Northeast Somerset is a unitary authority in England’s South West. The area has a significant green belt, including historic agricultural land, and the main city, Bath, has a market tradition. The Bath and Northeast Somerset Local Food Strategy (2014–2017) was a council-led initiative. Davies identifies the BNES Sustainable Food Partnership as one of several “[f]ood partnerships housed within the public sector” across the UK (2017, p. 5). The effort was launched by the BNES Environmental Sustainability Partnership (ESP) as a joint effort by Bath Council’s sustainability team and the BNES Health and Wellbeing Board (HWBB). A steering group was convened by these council groups and CS actors were invited to participate. However, the council held ownership of the process and the output.

Within the policy document, references to food production identify a place for both urban and rural growing. Where farming is mentioned, it is typically referred to as “farming businesses,” reflecting the view that rural agriculture is largely seen in economic terms by the council. The rare mentions of farming methods include the suggestion that these need to change in order to be “more sustainable,” implying environmental concerns. However, the document’s attention to rural production is minor compared with its emphasis on “community growing,” implying an urban focus. In the BNES partnership, council and CS actors expressed concern over people being disconnected from food production as a result of imports, resulting in a skewed understanding of access and seasonality. Reduced knowledge of food growing and cooking skills in particular were linked to poorer health. These concerns drive the urban growing and training emphasis seen in the policy, and the provision of growing space through community gardens and allotments.

Throughout the interviews, council actors referred in passing to rural food production in only two contexts. The first was in relation to farmers and landowners taking part in the consultation process (and how few did so), and the second referred to the need to develop markets for local producers. CS participants expressed an awareness of this narrow approach to local food production by the council actors involved. One CS actor recalled that no clear distinction was made between urban and rural growing in the strategy development discussions. Another held more critical views about how food production had been used as a tool for the strategy: “[T]here’s been an emphasis and even a reliance on community gardening to act as the local food component ... I haven’t seen that the council is really engaging with agriculture.” The CS actors interviewed felt that rural agriculture wasn’t well understood by council actors and that this compromised the strength of the policy for BNES as a whole, as a rural, peri-urban and urban food producer. For them, this left the impression that urban agriculture and its associated social outcomes were the main priorities for the council.



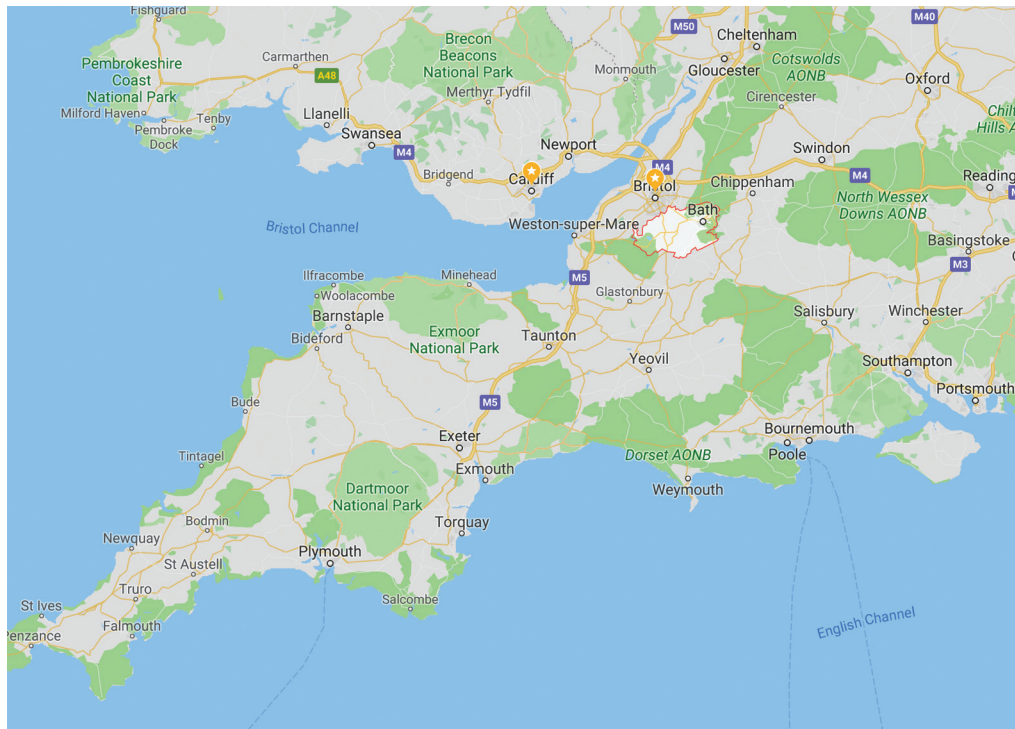


Figure 3. Map showing the County of Bath and Northeast Somerset in the United Kingdom to illustrate the case study area.  
Source: Google Maps, 2019.

## FINDINGS

Qualitative analysis of the interviews revealed some common themes across participant narratives. This research project found that, in these two cases, both civil society and council actors seek to use local-level food policy as a means of fighting back against a sense of 'placelessness' and disconnection from food production. In the interviews, participants spoke of what they understood 'local' food production to be, as well as how it was linked to sustainability in the standard three-pillar model of society/health, environment and economy. The territorially embedded nature of food production necessarily prompts reflections on the geographical origins and characteristics of food and the human connections to it. Likewise, in relation to local food production 'sustainability' prompts reflection on the links between global-level systems and how they impact on and are impacted by local-level actions. As one interview participant from Devon noted, "everywhere is local to someone – but it doesn't actually mean that it's in any way sustainable in an environmental or social sense of the word."

As food production is necessarily bound to a physical place through its origins in or on the land (or sea), this highlights the reality that our relationship to food is highly personal, especially as it relates to what we as individuals view as local. During the course of this project, I observed that despite their many shared aims, actors struggled to agree on a common understanding of 'place,' particularly in relation to food production in urban and rural contexts. Actors spoke of where production took place in their locality (typically expressed as 'rural' or 'urban'), what types of production were taking place, how it contributed to sustainability objectives, and who was intended to participate in projects to achieve their aims. When these interview themes were compared to the content of their respective food policy documents, the dominant voice(s) within the partnership groups (along with their objectives and concerns) became apparent, with others lacking representation.

## DISCUSSION


Despite joining together in partnership (for sharing resources, including but not limited to, funds, human resources, skills and networks), civil society and council actors presented an 'us versus them' mentality in interviews. The two cases varied in the structure of their partnership groups, as well as the priority food production areas identified in their policy documents, being urban for BNES and rural for Devon. In both cases, CS actors demonstrated frustration with the council's lack of practical knowledge about food production and agriculture in their municipalities, whether rural (BNES) or urban (Devon), suggesting a lack of knowledge beyond the council's priority areas. At the core of the CS–LA divide is a lack of common understanding of the food production 'landscape.' This results in disagreement on priority action areas for food production, despite shared beliefs in the reality of disconnection as a spatial, temporal and cognitive issue facing citizens.

In both cases, the council held a position of power over the policy process. This situation is typical of a local-level food policy environment, which Coulson and Sonnino (2019) identify as a "highly unequal, contested and multi-scalar governance and policy context" (p. 170). Despite claims to be working in 'partnership,' these partnerships were unequal. Although CS actors explained that they wanted to use the opportunity to influence important policies, they felt that the policy aims and core issues had already been determined, leaving little room for meaningful dialogue. Feeling that the council had an incomplete understanding of food production (ironically, noting the theme of 'disconnection' expressed by all), CS actors expressed frustration with what they felt were poorly constructed policies that would fail to meet the diverse circumstances in their areas. However, supporting Hinrich's statement that food is "the low hanging fruit" of local-level policy, this research suggests that council actors were acting strategically in their areas of focus in the face of budgetary constraints and otherwise reduced resources.

Ultimately, the power imbalance evident in these two cases stands at the core of conflicting understandings of space in relation to food production along the rural–urban spectrum. Pre-determined aims and a lack of equal and open dialogue about what comprises the local landscape of food production resulted in tensions within both policy partnerships, as well as a sense of weak policy foundations (largely expressed by CS participants).

## CONCLUSION

In the changing landscape of local-level governance in the UK, scholars Moragues-Faus and Sonnino (2019) have called for "trans-local" links to embed food policy more widely and to "create common imaginaries and a shared vision" (p. 1). While this is an essential step to moving local-level food policy (and the SFCN agenda) across the UK, actors at the local level will likely continue to be hindered by the effect of power imbalances on their ability to communicate effectively, even at the lowest levels – within their own local partnership groups. However, building dialogues about 'place' (in relation to the landscape of rural, peri-urban and urban food production) into the policy process could act as a tool to develop a shared vision and a more balanced view of agriculture in food policy at the local level.

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## **‘GOING THE EXTRA MILE’ FOR CLIENTS IN A RURAL COMMUNITY: REFLECTION ON AN ETHICAL ISSUE FACED ON FIELDWORK PLACEMENT**

**Jocelyn Helm and Mary Butler**

### **INTRODUCTION**

This article is a reflective piece that discusses an ethical issue faced in practice through the eyes of a student on fieldwork placement. The placement was in a rural community setting, which in itself provided barriers for a particular client who is referred to throughout this article. In order to protect client and therapist anonymity, I have not used any personal names throughout this piece. I have also changed small details about the context, so that these cannot be identified either:

This article reflects on how conflicts of interest operate and asks the ethical question whether or not it is within professional boundaries to ‘go the extra mile’ to meet a client’s needs. In this case, ‘going the extra mile’ refers to doing more than what is obviously and immediately necessary or expected in order to achieve something. I am not talking about going beyond the scope of professional practice. Instead, I want to challenge accepted notions of efficiency by suggesting that by doing that little bit more, a lot more trust and therapeutic engagement could be created. Another aspect of ‘going the extra mile’ involves taking responsibility for what is presented in terms of a particular client’s immediate needs and making a special effort to meet those needs. The final part of ‘going the extra mile’ is implicit in terms of what is required when working in a rural context – one always has to travel the extra mile when working rurally.

The ethical concern in question is discussed here in relation to occupational therapy practice and the use of the Quadripartite Ethical Tool (QET) for ethical analysis. The QET consists of four quadrants that aim to analyse ethical issues experienced in professional practice. These are utilitarian analysis, deontological analysis, virtue ethics and axiological ontology (Drolet & Hudon, 2015). Utilitarian analysis involves assessing the positive and negative consequences of projected actions on all parties involved, and looks specifically at choosing an action that will produce the greatest happiness for the largest number of people. Deontological analysis focuses on the rights and duties of the different parties to ensure that dignity, autonomy and freedom are respected. Virtue ethics focuses on promoting a narrative approach with patients to elicit their point of view so that decisions are meaningful and suited to them. Lastly, analysis based on axiological ontology underlines the importance of health professionals providing treatment that is in accordance with their professional values. In so doing, they can avoid ethical distress and minimise ethical tensions (Drolet & Hudon, 2015).

### **STATEMENT OF CONTEXT**

As an occupational therapy student on fieldwork placements, I have witnessed several behaviours and situations that were positive from an ethical standpoint. However, I have also witnessed situations and behaviours that were unethical. Given a fresh set of eyes in a placement setting and my status as a student, I felt that I was able to pick up

on ethical concerns that my supervising therapist might have overlooked. My most recent placement was in a rural community, seeing clients both on the ward and in their homes. Since a good deal of time was spent seeing clients in the community, there were often long periods of travel. Having this time with my supervisor when travelling, I was able to develop my ethical knowledge through discussions with her after visiting clients in their homes. One ethical issue that stood out for me arose when my supervisor stated that it would have involved a conflict of interest for her to go the extra mile to meet a client's needs. At the time, her statement made me feel uncomfortable and led me to ask the question: does it actually involve a conflict of interest for a therapist to go the extra mile to meet a clients' needs? In considering this question a number of issues and other questions arose.

## CRITICAL REFLECTION ON AN ETHICAL ISSUE

The ethical issue referred to on my placement arose when visiting a client in the community. He lived in a small rural town of around 200 people, lacking many facilities and about a half-hour drive from a larger town. This client had lost his home in a fire and had sustained severe burns to his hands and arms. He had no partner or family living nearby and was previously living alone with his dogs. He had no insurance, so after being discharged from hospital he moved into a caravan behind a shopfront that he owned. The caravan was run-down, and he had been sleeping on a thin mattress on the floor:

This client needed a shower stool, raised toilet seat and perching frame, explaining why a visit from an occupational therapist was required. When I visited him, he mentioned that he also needed a bed frame as he was cold from sleeping on the caravan floor. In New Zealand, the Salvation Army is often willing to donate beds. He stated that although the organisation had one available, he lacked the resources to pick up the frame himself. He also stated that the nearest branch of the Salvation Army did not deliver outside of their geographical area and that, unfortunately, he was now living outside of this area.

He expressed how angry he was that nobody was willing to help him and how distressed he was that he lacked the resources to pick up the frame himself. Although there were several other things he needed help with, this was one problem that was proving particularly distressing for him. At the time, I wondered why my supervisor had not suggested that we could deliver the bed frame. On the drive back, I asked her if there was a possibility that we could do this for him. However, she stated this would be considered a conflict of interest and would have breached professional boundaries. I wondered what exactly she meant by this action being a conflict of interest, and what professional boundaries would have been breached? My reflections in this article are intended to clarify these questions.

## CONFLICT OF INTEREST

A conflict of interest occurs in a situation in which professional judgment regarding a primary interest may be influenced by a secondary interest (Lemmens & Singer, 1998). More generally, conflicts of interest involve two contrasting motives that professionals often confront simultaneously – professional responsibilities vs personal or self-interests. In addition, when professional responsibilities clash with self-interest, the two motives tend to be processed differently. Self-interest involves the working of a more automatic influence than do professional responsibilities, which are more likely to be invoked through controlled processing. This differential processing often means that self-interest prevails, even when the person making the decision consciously attempts to comply with the ethical values of their profession (Moore & Loewenstein, 2004).

However, in this case I was puzzled – in what way would delivering the bed frame involve a conflict of interest? It would be in any caring person's best interest to want to help this man. Could it have been seen as self-interest to use time paid for by the health service to deliver the bed frame, when it is something that a family or other service would normally do? Or could it have been a case of automatic thinking – that delivering the bed would exceed the



hours of rostered work or interfere with finishing work on time? Looking at this through the utilitarian ethical lens provided by the QET, not taking action could be rationalised in terms of who else it may have affected, in terms of an action producing the best outcome for the largest number of people. If we were to spend more time with a patient beyond what was apparently allocated, other people might suffer; as many others were also in need of direct help from an occupational therapist.

## FALLING SILENT

When my supervisor stated that this case involved a conflict of interest, I hesitated to voice my own opinion as I felt it differed from hers. I felt uncomfortable about the situation, but also about speaking my mind, as I was a student in a subordinate position. I thought it was sad as I wanted to say something, or even deliver the bed frame myself outside of placement hours. However, I would overthink the issue and tell myself it was not my place. I also asked myself what the consequences would be if I was to take action independently as a student. Would I fail my placement? Would I have to repeat that year? These questions led me to remain silent about the issue.

Falling silent is a common experience for many students in practice. According to Bradbury-Jones, Sambrook, and Irvine (2007), students often diminish their role on clinical placements, typically stating they are “just a student” and thus creating the perception that it is not within their scope to question their supervisor's practice. In another study, when students accepted this identity of “just being a student,” it often led them to believe that they had no voice and they often felt compelled to remain silent (Levett-Jones & Lathlean, 2009).

## DOMAIN OF CONCERN

As health professionals, there are certain principles which occupational therapists must adhere to. These are set out in the Code of Ethics for Occupational Therapists (The Occupational Therapy Board of New Zealand, 2015). They include the statement that occupational therapists shall respect the autonomy of clients receiving their service, focusing on the needs of the client while working with them to determine goals and priorities. I feel that this principle is the one most relevant to my ethical concerns in this case, as the client's autonomy was not fully recognised in this situation because no action was taken. In addition to this, the client's expressed need to sleep on a bed frame, rather than on the floor, was not made a priority over the therapist's originally role, which was to provide equipment. I believe that this situation involved an ethical issue because the outcome hindered compliance with occupational therapy's core values.

Of the four ethical approaches described in the QET, the one most relevant to this ethical issue is axiological ontology. Occupational therapy is founded on core values that influence key aspects of therapists' daily practice including their attitudes, behaviours, reasoning and decisions (Drolet, 2014). One of the core values of occupational therapy is freedom, which is about enabling choice, independence and self-direction for clients (Peloquin, 2007). I felt that in this situation, my client's freedom of choice and independence were not enabled, as he did not have a choice about whether the bed frame was going to be delivered, and he lacked the resources and physical capability to pick up the frame independently.

In addition, one of the core assumptions of occupational therapy is that engagement in occupation enhances people's wellbeing (Hammell & Iwama, 2011). Part of the occupational therapist's role is to enable engagement in occupation. For this client, having a decent and safe place to sleep would have been the starting point for such enablement, as being safe is a fundamental principle of human life.

Maslow's hierarchy of needs is a five-stage model of human needs; Maslow suggests that lower-level needs should be satisfied at least to some extent before an individual can meet their higher-level needs (Maslow, 1943). At the lower end of the hierarchy are basic needs such as warmth, food, safety and security. As an individual progresses, they move on to satisfy their psychological needs such as the need for relationships, prestige and feelings of

accomplishment. At the highest level, a person will reach self-fulfilment by achieving their full potential. Maslow's hierarchy of needs suggests that my client needed to feel safe and secure before he could engage in everyday activities and interact with others in a meaningful way.

Virtue ethics, another quadrant of the QET, is also relevant to my ethical problem; this approach concentrates on the therapist as moral agent and the kind of person a therapist ought to be, rather than doing their duty or acting in order to bring about desirable consequences (Brody & Doukas, 2014). In the case at issue, I feel that this approach was also not fully acknowledged. Rather, I feel that our practice was focused on our role, defined in terms of doing no more than what we were tasked with – to deliver equipment. Let us assume that delivering the bed frame was not part of my supervisor's role, and that if she stepped out of her role there might have been consequences for her. But what would these consequences have been? Could going the extra mile for this client have brought my supervisor and me greater rewards and enhanced our relationship with our client? I feel that if a virtue ethics approach had been recognised in this case, it might have increased the level of trust and cooperation with the client while also leaving us feeling satisfied with our role.

The most important virtue for every health professional is caring (Drolet & Hudon, 2015). Sometimes the role of an occupational therapist is broad and hard to define, as roles differ from one another and constantly change. However, a holistic approach and a commitment to responding to clients' needs are a key part of every occupational therapists' professional role. A caring attitude can have a marked impact, as the therapist's role can potentially broaden and extend when she or he is willing to go the extra mile (Sachs & Labovitz, 1994).

In the case under scrutiny, I am not claiming that my supervisor did not care about the client and his quality of life; in this circumstance, it may have been more a question of the time available. However, if this was the case, then my personal view is that we should do everything to make ourselves available to and responsible for patients beyond our perceived professional role. In addition, if defining the boundaries of an occupational therapist's role is difficult because of the broad range of roles the profession includes, then why not do that little bit more? Stepping outside of one's perceived role and going that extra mile offers many advantages. These include satisfying the therapist's own understanding of what is professionally valid, as well as gaining the trust and cooperation of clients which, in turn, will enhance the client–therapist relationship (Sachs & Labovitz, 1994). Thus, reflecting on my ethical issue, if my supervising therapist and I had stepped out of our professional roles by doing that little bit more, we could have actually achieved a lot more, both for this client and for ourselves.

## RURAL PRACTICE

Having a placement in a rural community may have also been a contributing factor to my ethical dilemma. The unique contexts of rural communities can provide various ethical challenges (Nelson, Pomerantz, Howard, & Bushy, 2007). My placement revealed one of the common deficits of rural communities – the limited availability and accessibility of other healthcare services. In rural communities, utilisation of healthcare services often requires longer travel times over greater distances than in urban areas (Chan, Hart, & Goodman, 2007). This was relevant to my ethical issue, as service providers such as charitable organisations were geographically dispersed and required longer driving time and more resources to access them. This meant that more time had to be allocated to each client, as driving time needs to be considered when seeing clients in a rural community.

In this case, one charitable organisation that was not easily accessible was the Salvation Army. The organisation did not deliver outside of its geographical area, and the client's community lay outside of that area. Thus, if we were to deliver the bed frame, my supervisor would need to step outside of her role. In addition, picking up the frame would have required a minimum of an hour and a half's travel time. By contrast, in urban areas most services are readily available and do not usually require significant travel time. If the service provider had offered delivery to this particular location, the occupational therapist may not have been in the position she found herself in or involved in the delivery of the bed frame at all.


## CONCLUSION

One of the main points I make in this article is that stepping outside of the traditional occupational therapy role and 'going the extra mile' for a client offers a number of advantages – doing that little bit more can achieve a lot more, both for the therapist and the client. I also want to emphasise that on fieldwork placements, students often diminish their role to being "just a student" and hold back from speaking their mind. However, students do have a voice and it is fully within their scope to discuss their opinions with their supervisor.

From my experience and reflecting on this ethical issue, I have developed a more effective understanding of different ethical approaches. I felt very strongly about helping this particular client; my personal beliefs and values contributed to the situation I found myself in, as well as the values of occupational therapy as a profession – two sets of principles which I feel overlap. Overall, this situation has contributed to my understanding of ethical practice in occupational therapy – I now know what I would do if a similar situation was presented in practice.

One question that I still ask myself is: how far should a therapist be willing to go to enable occupation? Initially, I did not think that delivering a bed frame to a client would cause so much ethical discussion. I can confidently say that if I was placed in this situation again, knowing what I know now, I would voice my opinion with no hesitation. This client was seeking help and I walked away, feeling as if I had turned away from someone in need. One thing that has stuck with me is the client's question – "Why can't the people at the Salvation Army put down their hot cup of coffee to help me?" Well, why couldn't we put down our cup of coffee as well, and do everything it took to help this client? I now believe that – not only for this client, but for all clients – a therapist should do whatever it takes in the situation that presents itself, even if this requires them to step outside of their role as conventionally defined. A caring occupational therapist will always go above and beyond the call of duty for their clients.

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## RELOCATING OR AGEING IN PLACE? A STORY OF HOUSING MODIFICATIONS IN RURAL, NZ

Tania Smellie and Linda Robertson

### INTRODUCTION

As the New Zealand population grows older, there is a trend toward increasing proportions of older New Zealanders living in small towns or rurally (Statistics New Zealand, 2008). Older adults are moving to small towns or rural areas as they age to be closer to family (Burholt & Dobbs, 2012), or to enjoy the lifestyle (Provencher, Keating, Warburton, & Roos, 2014) or to reduce living costs. Others have lived in small town New Zealand or in rural areas for their entire life and are choosing to age at home (Fraser et al., 2005). Also there are a disproportionate number of Maori living in rural New Zealand with a high proportion of those over 60 years old living in rural and small-town areas (Rural Expert Advisory Group to the Ministry of Health, 2002).

It is a well-known fact that people are living longer than ever before. This has led to a growing population living with a long-term disability, who are increasingly choosing to remain at home (Davey, 2006; De Jonge, Jones, Phillips, & Chung, 2011). In New Zealand, 96 per cent of people with a disability live in their own home (Statistics New Zealand, 2014). For people with a disability, their physical environment can have a significant impact on their independence and participation in society (Iwarsson, Ståhl, & Löfqvist, 2013; Niva & Skär, 2006). The growing trend of this particular group of people to remain in their home has created an increasing need for housing modifications (Szanton et al., 2011; Tanner, Tilse, & De Jonge, 2008). This need will only continue to grow as disability and impaired mobility become more prevalent with an ageing population. For instance, in New Zealand, 59 per cent of people aged 65 or over are living with at least one impairment (Statistics New Zealand, 2014). Therefore, the New Zealand health system is currently developing policies that focus on supporting these people to remain in their home and to maintain their independence for longer (Ministry of Health, 2012, 2016). On a practical level, this means increasing the availability of health care and social support in the community.

One way in which people with disabilities can be stimulated to live in their own home and keep an active life is to modify their home to suit their needs. Such housing modifications are complicated processes that involve making structural or architectural changes to a person's home. Community occupational therapists play a significant role in this home modification process, specifically in the areas of assessment, intervention, follow-up and evaluation of the completed modification (Petersson, Lilja, Hammel, & Kottorp, 2008) and can thus improve the well-being of the recipients of this process.

Timeframes to access community occupational therapy services, and for housing modifications to be completed, are getting longer. Furthermore, available funding from the Ministry of Health is not matching the increasing demand (Enable New Zealand, 2018). There continues to be a shortfall each year, with regular prompts to limit spending from the organisations administering the housing contracts, as budgets are at capacity for the month (Enable New Zealand, 2018).

This article captures one couple's experience of receiving housing modifications in a small rural town in New Zealand and illustrates issues commonly found in rural communities.

### ***The importance of home and community***

The notion of home is culturally specific. In westernised societies, home is viewed as a place where it is possible to retreat from the eyes of the world to be “ourselves” providing a sense of control (Evans, Wells, & Moch, 2003). Mallett (2004) argues that a house is not simply a material building but is simultaneously a “home”, (frequently defined as “a haven”) or a “private place” providing psychological, social, and cultural security. Likewise, in Maori society the concept of *Turangawaewae*, commonly translated as a “place to stand” is central to one's relationship with the world – where one has rights of residence and belonging through kinship (Mason, 1998). Thus home has different meanings for people, depending on where they have lived, their personal and family history, their social connections and their environmental conditions. (Róin, 2015).

Older people often have strong emotional bonds not only to their homes but also to the wider community. They commonly spend time with friends and participate in family life outside of the home as well as devoting a significant amount of their time to voluntary organisations such as clubs, churches and local schools (Hocking, 2014). Community involvement and participation in civic duties are significant contributing factors to successful ageing (Cornwell, Laumann, & Schumm, 2008). For Maori, frequent visits to a *marae* is associated with higher quality of life (Puāwaitanga, Tapuwae, & Ora, 2016; Wiles et al., 2017). Thus place attachment involves emotional bonds resulting from a shared history of location (Manzo & Perkins, 2006). However this can vary between generations. For instance, older adults who have lived in rural areas for a long time have strong connections through generations of involvement in their community but the ‘new’ rural elderly may not have an equivalent support system (Keating, Eales, & Phillips, 2013).

### **The housing situation in New Zealand and the need for complex housing modifications**

Currently, in New Zealand the vast majority of older adults live in single dwellings on large sections, some distance from key services, either within an urban, semi-rural or rural setting (Amore, Viggers, Baker, & Howden-Chapman, 2013). Most of these houses were built approximately fifty to eighty years ago, when there was much less awareness of the need to make sure physical accessibility, independence and safety for older adults and persons with disabilities (McIntosh & Leah, 2017). Even today, few building requirements or incentives exist to promote/enforce the building of homes which incorporate attributes which make them more accessible and/or suitable for older adults (McIntosh & Leah, 2017).

Modifications to homes can have many benefits. They can help people live independently; enable them to remain in their home, prevent hospital admissions or allow for an early discharge from the hospital (Ministry of Health, 2016). Complex modifications such as the installation of a wet area level access shower or the installation of a ramp or platform lift can have a significant positive impact on a person's quality of life and well-being.

There are a number of issues unique to New Zealand that make complex housing modifications more challenging to facilitate locally. This includes the wide geographical area that needs to be covered, the variations between urban and rural New Zealand, isolation and remoteness, the limited experience among builders and other key team members to design and implement successful modifications at a region level, reliable access to tradesmen, and finally poor-quality housing, often in poor repair (Buckett, Marston, Saville-Smith, Jowett, & Jones, 2011; Page & Gordon, 2017). This is particularly notable in rental accommodation and in rural New Zealand where families own land and their home, however have not had a consistent income to enable the funding of maintenance.



This study focuses on housing modifications funded by the Ministry of Health (MOH) in New Zealand. The MOH supports housing modifications for disabled people of all ages to help them to remain in or return to their home so that they can continue to live as independently and safely as possible (NZ Ministry of Health, 2014). This funding is limited and there are specific criteria which govern who receives it and how it is used. A significant portion of the housing modification funding under the Ministry of Health umbrella is allocated to people over the age of 65.

## METHODOLOGY

This study used interpretive phenomenological analysis (Smith, Flowers, & Larkin, 2009) to capture the stories of people who received housing modifications funded by Ministry of Health. The aim was to examine the effects of housing modifications on the occupations and roles of the recipients, to understand the support they received, and to make recommendations for policy improvements. This article presents the story of James (pseudonym), who lives in a small rural town. It is his explanation of becoming disabled and then receiving housing modifications. It is also his wife's story (Anne - pseudonym) about this process. The interviews were conducted before, and after the housing modification was completed (18 months apart). The interviews were semi-structured, narrative interviews. Key questions that formed the basis of the interview were:

### **Pre modification:**

I was wondering what a good day is like for you.  
Tell me about how you feel about your days.  
Has your life changed, or  
Have the things that you do changed?

### **Post modification:**

How has the modifications affected what you do in your daily life?  
How did you feel after receiving your modifications?  
Please comment on the timing of the completion of the modification (e.g. was it about right or too late?)

## BACKGROUND INFORMATION

James and his wife Anne had semi-retired to the region when they were in their early fifties. Both had worked until they reached retirement age in local business. James was actively involved in his local community and lived with his wife in a one bedroom council flat.

James was referred for housing modifications after returning home when he became an amputee. He had his first leg amputated above knee after an acute episode of septicaemia. This occurred as an emergency surgery. During this case study James became a double amputee (above knee). His second leg was amputated above the knee 1 year later. This was a planned surgery. James was transferred to a large tertiary hospital for both surgeries', returning to his local regional hospital for stump management, inpatient rehabilitation, and community reintegration. Following the second amputation James received extensive modifications to his bathroom (wet area level access shower; new handbasin, toilet and door widening) and to the entrance to his home (aluminium ramping).

## FINDINGS

Stage	Themes
<b>Pre-modifications</b>	
Pre-modifications	Respite vs prison
<b>Post-Modifications</b>	
Post-modification – initial	A sense of relief, gratitude, hope and optimism
Post-modification	Making sense of unanticipated outcomes
Post-modification – later	Reflection

Table 1. Themes.

### Pre-modification interview

The pre-modification interview has been organised into one major theme that demonstrates the quandary of not knowing how a housing modification will contribute to his life. The three themes in the post modification summary illustrate both the value of the modifications as well as the questions that it raised for James and Ann. Table 1. Captures the themes.

#### Respite vs Prison

James and Ann did not associate potential difficulties with James's returning home until his discharge from the hospital came closer. James spoke about being in the hospital, preparing to go home, and talking with the ward's social worker about what his needs were going to be upon discharge.

*James: There is no way I am going to get into my unit as we have steps, and my bathroom..., well, my wheelchair won't even fit through the door.*

James spoke about how he wanted to be at home. He saw this as his right. He saw his home as the place where he felt safe, where he could "be" and "do", and where he could get well, if sick. It was where he belonged. He felt that there was no valid alternative. Continuing to live at home, in their home, was his normality.

James and Ann also talked about choosing their current home based on their long-term needs.

*Ann: Our previous home was a lot larger, with a fireplace. A standard weatherboard three-bedroom home, with a section. James [was] unwell for a few years before his amputation. We were struggling to keep the section, and collect the firewood so we could heat the place. We used to go along to the beach and collect driftwood. So, we downsized to our small flat in a block of pensioner flats.*

A significant period of time passed (at least 12 months for James) as him and Anne continued to make do within their house. Living in the unmodified house, with a significant disability, meant that the environment had the potential to become quite negative, and potentially toxic.

*James: Well, I'm retired, and that's it. I'm basically home-bound, and I look out the window all day. There is nothing out there for me.*

For James, their home environment was far from being right for his level of need. At times, the way they were doing things was unsafe and quite inappropriate. Their issues included inadequate equipment, poor temporary solutions and insufficient support while waiting for their housing modifications.

Ann and James found that the temporary solutions in place were not sustainable solutions. For example, they were not happy about the carer who came to their home for support.

*James: We tried having a carer come in to help me with my morning cares, so Ann could have a break. But the agency was useless. They never sent the same person. Half the time the person they sent didn't know what they were doing. Often nobody would turn up. We would wait around for them, and then Ann would need to do it anyway.*

The equipment solutions (commode chair for use in lounge, and temporary ramp) would have been suitable for 2-3 months, but they were in place for close to 2 years. James had to complete most of his personal care in the lounge of the couple's small one-bedroom flat because he could not get into the bathroom.

*Ann: So, when he wants to pee-pee, he's got the bottle there, and, as he said, if visitors come I've got to take him out of the room. And for the commode – it's always done in the lounge here 'cause we've got no [other] option for him to go. So that's frustrating.*

*James: I haven't had a shower for [9] months. Because I can't get into the bathroom. Thus, I have bed baths. Anna washes me using a sponge while I lie on our bed. It isn't pleasant.*

Going out was hard for James and Ann because of poor equipment and poor environment. Over time, this became very tiring for both James and Ann.

*James: Well, the main thing is getting in and out of the car. We've had a little ramp built by a friend for the front door, so we can get to the car. I don't have much of [a] problem getting out of the wheelchair into the car, but it's still a hassle [as the ramp is very steep].*

*Ann: Yeah, but it's also maybe 'cause that thing's heavy, it is difficult to get you down the ramp in it because it doesn't move very well. The wheelchair gets stuck in the gravel, and I find it hard to push you in it, and then I have to try and lift it in the boot to go out.*

*James: And if it's raining it's a no-no 'cause you just get drenched.*

*Ann: 'Cause it takes so long to get him in the car.*

From the way James and Anne talked about being unable to get out and about regularly, it becomes apparent that their home started to feel like a prison.

*James: I just sit looking out at the world. There is nothing here for me.*

Although James engaged in daily conversation with his wife and used media (internet, newspaper, phone) to maintain a relationship with the outside world, he experienced the psychological consequences of not being able to get out of their home and do activities. Both James and Anne reported feeling excluded from life, feeling isolated. They had lost their connections to others in the outside world and found being physically isolated from others extremely taxing. The psychological consequences were severe for James especially. Both of them felt alone, became depressed and lost the motivation to go out.

The time spent waiting was clearly difficult for James and Anne as each of them spoke about how they wanted to know that the modifications were a possibility much sooner in the process.

*Ann: Our main thing is that we have both been angry about the time it has taken, because of how we've got to handle things here with James.*

*James: Yeah.*

*Ann: But it's the time lapse that's just about pushing us both over the edge trying to deal with this time.*

Not knowing exactly when the modifications were going to be done meant that there was no end in sight.

*Ann: Until we know when it's going to be done. It's not good trying to prepare to do something now when it could be another couple of months off. It could be next week, so until we know we're not doing anything.*

*James: Mm, could be next year.*

*Ann: Oh, don't even think that! They'll be locking me up in a white jacket if it's that long.*

What was obvious from the interview with James and Anne was that they felt stuck and started to have negative feelings about their home. After a significant wait James and Ann were contacted and the housing modifications were eventually done.

### **Post-modification**

The completed modification included:

- Bathroom— the installation of a level access wet area shower; wheelchair accessible toilet and handbasin, and door widening into the bathroom.
- Door widening – between the lounge and bedroom.
- An aluminum ramping solution at the front entrance

### **A sense of relief, gratitude, hope and optimism**

For James, just being able to go and do simple everyday tasks by himself, in the right room, was truly an amazing experience, after what he and Ann had coped with for so long. The modified bathroom meant that Ann no longer needed to be James's carer at every level and manage all aspects of his personal activities of daily living. It meant that James could do at least some of his bathroom-related tasks himself. For James and Ann, the changes to their bathroom automatically brought some degree of normality back into James's life, and into their relationship.

*Ann: Well, now, you know, he wheels himself in now and will clean his teeth and wash his face, and do his hair in there now,*

*James: Yeah.*

*James: So, it's so much different.*

*Ann: And just to go and clean your teeth, eh babe? [...] [Before] he'd have to spit in a bowl, and I had to clean it up.*

The modifications seemed to bring about some peace. Ann and James described a greater sense of calm at home since having their bathroom modifications completed.

*James: Having the bathroom done has changed things for the better, although there are still big gaps in our lives. Things are now easier at home for both of us, as we don't need to be planning all of the time just to do simple everyday tasks like clean my teeth. Therefore, we find that we are both more relaxed.*

### **Making sense of unanticipated outcomes**

At a superficial level, James seemed to be managing well within the home. However, a deeper conversation with Ann and James revealed that his day-to-day reality was very different. James had not been out of the house for many months except to get his second leg amputated and to have respite care at a local aged care facility for a week when his modifications were being completed.

*James: I didn't like to go out because I lost my confidence and people stare at you, and it is just physically too hard on Ann, for us to go out together. We have tried.*

He had suffered several knock-backs throughout his journey. He had not gained much control since he had left his home in an ambulance 3 years ago, and had developed a profound sense of hopelessness. Except for the intervention leading up to the housing modification and a period of hospital-based rehabilitation during which he had excelled in an environment that was both accessible and very usable, James had had no community-based input from the community rehabilitation team.

*Ann: He did really well in hospital, earned himself a gold star, but that environment was accessible. After rehabbing, it was more a self-confidence thing because he would transfer confidently and go in the bathroom with confidence in hospital, but it was outside that little comfort zone that he lost all his confidence.*

*James: If I had been supported once I got home to get back out into the community, it might have been different ... [I] may not have got so depressed...*

James talked about how he felt that people did not see community occupational engagement as an essential part of a person's day-to-day life.

*James: Doing things like getting outside for some fresh air or sitting watching the children play rugby on the backfield is seen as not an essential part of living. Everything is focused on meeting my basic needs with support. Nobody talks about what I may like to do myself. Or what I would like to do outside of this unit.*

James and Ann did not have the skills or the appropriate resources to manage the day-to-day life with James living as a double amputee in a wheelchair outside of his immediate environment. When asked if going out was more important than having a modified environment, James responded:

*James: Yeah, things you normally do. Just because you've lost your bloody legs. I haven't lost my hands or anything, or brain. That is just so frustrating.*

James found it difficult to get about both inside and outside of his home. This significantly affected his ability to participate actively.

It was physically not possible for Ann to push James around the village in his wheelchair, as had been suggested by the hospital as a way of getting out together. And since James could no longer get into or out of their own car, they had to use a mobility taxi to travel distances.

*James: I still cannot get in that car, will never be able to.*

*Ann: So, we've paid for a taxi, a mobility taxi, if we've got to go out anywhere.*

*James: So, if we decided to go out anywhere, you've got to add another 50-odd dollar on there, going out.*

To be able to live the life they had hoped for prior to the modifications, James needed further changes to be made to their home environment and additional equipment to be supplied.

In addition to further equipment and modifications, James and Anne were also asking for more "people" resources. They wanted support from someone with the appropriate knowledge instead of "battling away" on their own. In other words, they were asking for access to counselling and psychological support, and this 'not instead' of but 'alongside' the community-based services that helped them develop the skills they needed to manage their day-to-day lives.

James got so isolated that his caregiver was concerned and initiated a referral for a Mental Health Assessment. After 3 years of being isolated at home, he was now severely depressed. As a result of the assessment, he began to receive mental health services, including a weekly companionship service. As Anne explained:

*James now has a support worker coming in regularly. The idea is that the support worker will take James out to do different activities in the immediate community.*

James interjects by explaining:

*Well, we've been to McDonald's for ice cream. We've been to look at all the shops and that up north. We went to the hotel and had a beer, and that's it.*

Ann explained the importance of this:

*... it was at least 4 years since he'd been into a bar. So, he enjoyed that, so the guy took him for a walk up here to one of the bars, and they sat there, and they had a drink and a yak together.*

The focus of this service was to get him back into the community. But the additional support would not be of use until the modifications were made.

*Ann: Yeah, that's why I say there are two sides to this. If we had him from day one, it would've been marvellous, but to me, it was still more important to get that .... to get the bathroom modifications for hygiene reasons done first.*

Ann was aware that James's recovery was going to take time, and that an important part of this involved being able to get him out of their flat regularly, and actively 'doing' again. Having George coming in every week was effective but Anne added:

*All we've got to get done now is organise and try and get this van. [...]Mm. Just even to say right, come on, we're off to Napier, we'll go and have lunch at the beach or something. Even just to do that and zoom down the path and off we go.*

*James: Yeah.*

*Ann: 'Cause he gets really down at times, that if I go out it's always just on your own and that was it. So just for both of us, get in the car and just go.*

## **Reflection**

In the end James loss of occupation remained significant with many significant consequences in the long term. Anne could see a time in the not too distance future that moving into a care facility was going to be James's reality.



*Ann: Off the record, if James loses his transfer because our flat is not big enough for the equipment he needs to assist [him], we will either need to shift, or he will need to move into care.*

*Ann: We are now in a far worst situation than at the being of this process. We believe that we needed to be better informed at the beginning of the process about James long term needs and the limitations of this property. At the beginning if we had known how long the process was going to take we would never had chosen to modify this house. Three years is just too long when you are our age. We lost too much through this process – our identity, our dignity, and the opportunity to be part of our families' lives. James became a shell of himself. I became his full-time carer.*

## DISCUSSION

Home had become a negative environment because it restricted the amount of control the participants had in their lives and because there was uncertainty around when the changes might occur (Aplin, de Jonge, & Gustafsson, 2015; Sixsmith & Sixsmith, 2008). Home was becoming a place that was “toxic” or poisonous - maybe not physically, but mentally. Initially the situation might remove a part of one's dignity and eventually might affect both physical and mental health. It may lead to sleepless nights, high level of stress that can cause headaches, low mood, upset stomachs, and reduced tolerance for others. This study showed that James and Anne did get to the point where both their physical and mental wellbeing was affected. The place that had been ‘home’ had become mentally and physically challenging, if not debilitating. For James and Anne the experience of being at home while waiting for modifications was more akin to that of a prison and a place of terror’ rather than the idealised concept of home as a ‘haven or place of love’ (Golant, 2015)

The housing modifications enabled the efficient performance of self-care activities and, whether assisted or not, appeared to provide a foundation from which to expand the occupational lives of the participants (Thordardottir, Fänge, Chiatti, & Ekstam, 2018).

However, this initial positive response was then superseded by the reality of incomplete solutions and partial enablement. This concurs with the literature which describes the challenges often faced after housing modifications (Aplin et al., 2015; Fänge, Oswald, Gitlin, Iwarsson, & Wahl, 2009). Most problems arise from having a wrong solution for the level of need, such as modifications not meeting the long-term need, recipients not having the level of skill to enable independence inside and outside of the home, recipients being limited by a lack of transport, and the ‘right’ mobility solution not being in place. A recent qualitative analysis of the decision-making processes surrounding housing modifications concluded that clients expect the intervention to not only facilitate independent activity, but also to achieve more subjective outcomes, such as freedom and the ability to self-initiate (Thordardottir, Ekstam, Chiatti, & Fänge, 2016). For James, the level of expectation for the positive effects of the modifications were not always realised over the longer term. This may be the result of insufficient and/or untimely housing modifications, for example by neglecting to modify other parts of the home despite the participant having expressly requested such need in the initial stages of the intervention, as highlighted in other recent studies (Granbom, Taei, & Ekstam, 2017).

For James and Anne the housing modifications did not deliver the expected gains they had anticipated, the battle to engage in daily activities continued. This had a marked impact on James wellbeing. Over time, unmet housing modification needs are inescapable as a consequence of a progressive decline in health and wellbeing. Nevertheless, the reality that unmet needs arose early in the process for James is of significant concern and indicates that the needs assessment was not complete/robust. Similar results have been found in an earlier Swedish study (Ekstam, Fänge, & Carlsson, 2016). It is a challenging task to facilitate a housing modification that is both viable and flexible when the recipient's need shifts over time. However, this study indicates that recognising the broader (and sometimes transient) influences on a particular situation is likely to have a positive influence on both performance and participation for the recipient. It is therefore important to understand dynamic interplay between these influences if a sustainable solution is to be found.

## Home vs control

This study has shown that remaining in one's home and community is not likely to be the optimal situation for everyone. While remaining in the same neighbourhood and dwelling may have beneficial effects for some, there is little rigorous research regarding the costs and benefits of doing so. Furthermore, some scholars (Golant, 2015; Wilkinson-Meyers et al., 2014) have raised concerns about the different experience of being 'in place', noting that not everyone is able to live safely, independently and comfortably as proposed by the World Health Organisation. This is exemplified by a growing recognition that 'ageing in place' is not always desirable and that being "stuck" in place (Golant, 2015) may lead to negative outcomes in health and wellbeing.

James's experience of being in place post modification was negative, and eventually lead to him and Ann to considering the option of relocation. There appears to be a number of parallels between what Ann and James identified as they considered a move to a different home and Golant's (2011) work on voluntary relocation. Golant suggests that voluntary residential relocation is only considered after the person has tried to adapt his or her situation through assimilative and accommodation changes. In addition, moving will not occur unless it is perceived as a feasible option based on physical, psychological, social factors and in particular, financial resources. Furthermore, the person or couple must believe that relocation will result in improved outcomes such as increased feelings of mastery and comfort. This involves expectations that the act of moving will not exceed their threshold for stress or negative emotional experiences (Golant, 2011). James and Anne described that they would have chosen relocation over staying in place initially if they had realised that relocation would have resulted in feeling more in control. Simply stated, place does matter as much as feeling in control. Further research is required to address this gap in our understanding of how to support people when they are choosing to modify or relocate.

Most people in the older age group recognise that they need to think about how to make home life easier when moving into older age (Golant, 2011). In Golant's study there was a planned transition when the participants began the process of organising their affairs to move into retirement. During the planned transition the participants reported that they considered when they were going to retire, where they were going to live, and how they were going to meet their living costs. Consideration was also given to the location of their home relevant to key services (e.g. doctor, supermarket, and hospital), the level of maintenance the property would require, and how age-friendly the property was – i.e. single storey, located on a level section, and the number of steps into the home (Golant, 2015). James commented on the difficulties they had finding a suitable property to retire to, however they thought they had chosen the right property for their needs. This transition is a critical time for older people and a key opportunity to positively influence the timing of housing modifications.

The interviews also revealed the necessity of having adequate space. James and Anne talked about their need for a space in which to socialise and entertain, but also for quiet areas where they could rest and recharge. In addition, having enough room to store and tidy items is important for people's mental health, as clutter and mess can result in anxiety making it difficult to physically and mentally relax (Davy, Adams, & Bridge, 2014). The value ascribed to space within the home is integral to how it is utilised and also whether a family member with a disability is included or excluded from that space or area (Buffel, 2017).

## Empowerment


There has been a change in society's expectations as to of what a person living with a disability can expect with regards to quality of life. The disability community has worked very hard to have equal opportunities to participate in meaningful occupations that ensure a good quality of life (Durocher, Rappolt, & Gibson, 2014; Imrie & Luck, 2014). Furthermore, there is an emphasis on empowering the individual to maintain engagement in meaningful occupations and in their wider community. However, as this study has shown, at the service level there is uncertainty as to how this empowerment can be effectively and continuously delivered. There is a need to do further research on home environments and how these may be modified more effectively and sustainably in order to increase a person's level of participation.

This is a particular issue for those living in rural areas as New Zealand is aging at a faster rate in smaller towns and rural regions than it is in larger cities. Between 1996 and 2006 alone, the proportion of New Zealanders living rurally that were older than 65 years rose from 8.2% to 10.1% (Statistics New Zealand, 2008). The number of older adults in rural areas looks set to increase further in the future as the number of adults in New Zealand over 65 years of age is expected to double in the next 25 years (Statistics New Zealand, 2008). There is the potential for even greater disparities as the population continues to age. Such geographical differences in the number and proportion of older people may also bring challenges for local authorities, DHBs and the private sector to provide more strategic resource that focuses on older adults needs, healthcare, transportation and suitable housing. This will require a national approach with a focus on housing in rural New Zealand. The primary purpose will be to ensure that small town New Zealand and rural New Zealand have housing solutions that will ensure that people have the opportunity to age in place.

## CONCLUSION

Reasoning about whether to relocate or age in place with housing modifications is a complex and ambivalent matter. It is important that the client's voice is heard throughout the process, at all levels, and their individual values are respected. Finally, it is essential to understand the high value that a housing modification holds for individuals who choose to remain in place and experience everyday life as a struggle. Yet as this research found, delays in the referral and delivery systems for modifications and peoples tendency to be reluctant to seek help until they are forced to do so by a crisis, means that help may come too late for many.

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## RURAL NURSING IN AOTEAROA NEW ZEALAND AND AUSTRALIA: EMBRACING STRATEGIC FORESIGHT TO SUSTAIN TOMORROW'S WORKFORCE

Fiona Doolan-Noble, Jean Ross, Rhonda Johnson,  
Melanie Birks, Karen Francis and Jane Mills

### INTRODUCTION

The problems facing rural nursing in Aotearoa New Zealand and Australia in the contemporary healthcare environment are very similar. Rural nurses manage a myriad of presentations in their work setting, frequently without medical support. Commonly, healthcare services are provided in either small rural hospitals, in the community, in general practice or in nurse-only rural clinics. Operating with limited infrastructure is a distinctive aspect of rural practice (Francis, Chapman, Hoare, & Birks, 2013). Consequently, rural nurses require a greater diversity of skills and knowledge than their urban counterparts, as they frequently face a broad range of challenges (O'Connor, 2014). These challenges are present in part due to the high numbers of visitors, many of whom take part in adventure tourism, and the transient and seasonal workers employed either in hospitality or in vineyards and orchards (Fitzwater, 2008), all of whom require access to healthcare 24 hours a day. In Australia, older people are touring long distances over protracted time frames while living in caravans, campervans, motorhomes or tents. These individuals are accessing health services largely for management of chronic illnesses and, to a lesser extent, medical emergencies, and this further increases the burden (Raven, 2015). In order to manage these unique challenges, rural nurses work within a purview that is frequently termed "generalist specialist" (Jones & Ross, 2008; Bingham, 2016; CRANA Plus, 2018)

### WORKFORCE CONCERNS IN NEW ZEALAND AND AUSTRALIA

In both New Zealand and Australia, rural nurses have advanced their practice into domains normally considered within the traditional boundaries of other health professionals (Ross, 2016). Interventions usually provided by other members of the healthcare team in urban settings are often undertaken by rural nurses in these contexts (Meyer-Brat, Baernholdt, & Pruszyński, 2014). Rural nurses' scope of practice results from adapting to local needs: developing levels of competence in new and emerging areas of practice to ensure that individuals, whānau/families, Aboriginal and Torres Strait Islander peoples, refugees, other vulnerable groups and communities as a whole achieve positive health outcomes. This commitment means that the scope of practice of rural nurses encompasses prevention, intervention and rehabilitation and is inclusive of the provision of cradle-to-grave services. Consequently, rural nurses are considered an asset in their local community (Rural Health Information Hub, n.d.).

Over the last few decades, Western countries have seen advances in nursing practice, such as the establishment of the nurse practitioner role. The Australian government recognised the contribution of nurses and Nurse Practitioners to primary healthcare in the Rural Health Strategy (2018), and has committed to strengthening this workforce to ensure improved health outcomes for rural Australians. As is the case in New Zealand, these roles



have been largely dependent on employer support, access to mentorship and a guarantee of employment when the learning process is complete (Carrier, Boddy, & Budge, 2013).

Numerous patient and professional factors impact on the sustainability of the rural nursing workforce in both Australia and New Zealand. These include the greater number of older adults of higher acuity driven by multimorbidity and polypharmacy living in rural areas, appropriate staffing levels in rural hospitals and timely access to appropriate resources and support services in the current climate. Retention and recruitment issues are more challenging in the rural and remote space due to a number of factors: professional isolation; limited access to professional development opportunities and professional supervision; and inadequate professional recognition, including provision of a career pathway (Chipp, Dewane, Brems, Johnson, Warner, & Roberts, 2011; Litchfield & Ross, 2000).

Of immediate concern is the age of the rural nursing workforce (Beltran & Frezza, 2018). Further analysis of Australian data shows that, overall, approximately two in five nurses and midwives are aged 50 and above (39.9 percent), with an average age of 44.4 years (Australian Institute of Health and Welfare, 2016). Of this number, 46.1 percent of the nurses employed in inner and outer regional Australia were aged 50 years and above (Bingham, 2016). This is paralleled by New Zealand data showing that in 2017 44.2 percent of the overall New Zealand nursing workforce was aged 50 or above and the median age was 47, although Nurse Practitioners and Enrolled Nurses were notably older than Registered Nurses, with median ages of 53, 58 and 46, respectively (Nursing Council of New Zealand, 2017).

Table 1 compiles the demographic data from both countries. However, these figures are not directly comparable due to the method of defining rurality and the inclusion of midwives in the Australian data set. The New Zealand data comes from a recently published Nursing Council report (Nursing Council of New Zealand, 2017) where Registered Nurses, Nurse Practitioners and Enrolled Nurses were asked to self-identify being employed as a rural nurse. The Australian data comes from the Australian Institute of Health and Welfare's Nursing and Midwifery Workforce report (Australian Institute of Health and Welfare, 2016) that uses Australian Standard Geographical Classification data. Nevertheless, it is of interest to consider the general similarities and differences between the two countries. For the purpose of this exercise we combined three Australian Standard Geographical Classification – Remoteness Area (ASGC-RA) categories – outer regional, remote and very remote – to calculate Australian rural nurse numbers.

	<i><b>New Zealand, 2016-17</b></i>		<i><b>Australia, 2015</b></i>	
<i><b>Number of Rural Nurses</b></i>	599		31,767	
<i><b>% of Total Number of Nurses</b></i>	1.1%		10.3%	
<i><b>RNs Average Age</b></i>	54.2yrs		45.9yrs	
<i><b>RNs over 50</b></i>	59.6%		44.9%	

Table 1. Demographic data of rural nursing workforce.  
Source: Adapted by the authors from Nursing Council of New Zealand, 2017 Report and Australian Institute of Health and Welfare 2016 Report.

Findings from both of these studies indicate that there is, and will continue to be, a significant issue around the ageing nursing workforce in both New Zealand and Australia. However, in New Zealand this challenge is particularly acute, with 60 percent of the rural Registered Nurse workforce aged over 50. Of this group, 24 percent are aged over 60. Given the reliance on nurses to meet the needs of these unique communities through the provision of innovative, quality care across the lifespan, nursing leaders will be required to rise to the challenge and utilise strategic foresight in order to shape the rural nursing workforce of the future. Such leadership will ensure that citizens who live in rural or remote Australia and New Zealand have equal access to healthcare services as near to home as possible.

To accommodate the healthcare needs of rural populations and to address the ageing nursing workforce in both countries, two key questions that nurse leaders need to consider are who the prospective rural nurses will be and where they will come from. Recent literature highlights the precarious strategy of recruiting rural high-school students and expecting them to return to their rural roots after several years of education and clinical practice, frequently in an urban centre (Reimers-Hild, 2018). Reimers-Hild suggests that a better place to look is in "your own backyard," pointing to "a need to teach and train more non-traditional students, such as women and men in midlife, who already live in rural communities" (2018, p. 47).

The mature student of the future will require nursing institutions to provide customised, online and on-demand education and training, enabling them to complete their study in their own locality. Similarly, the rural 'patient of the future' will use personalised technology to support their healthcare needs, thereby allowing them to remain in their rural location. Acknowledgement of the significant geographical distances that characterise Australia has seen rapid growth in flexible educational opportunities in recent decades, and increasing enrolments in off-campus nursing programs reflects their popularity. Similarly, telemedicine is becoming commonplace in non-metropolitan areas as a way of meeting the needs of these communities.

In 2019, the healthcare system is lagging several decades behind other sectors in New Zealand in terms of digitalising its customer interface, as are the country's health professional training institutions.

## CONCLUSION

If we are to recruit and retain a strong rural nursing workforce that is fit for purpose, perceptions of rural nurses will need to change, as their contributions are fundamental to rural healthcare. Given the depth and breadth of skills that rural nurses need to possess, rural nursing needs to be seen and valued as one of the pinnacles of nursing practice.

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## NARRATIVE INQUIRY INSIGHTS: RURAL NURSE RESPONSES TO DECADES OF CHANGE

Jean Ross and Josie Crawley

### INTRODUCTION

In this paper we shine light on rural nurses' innovative practice. Narrative interviews with rural nurses who practiced throughout the previous three decades provide a rich source of evidence to illustrate responsive practice against a changing political health-care landscape.

The New Zealand health-care system has been subject to major reform over the past three decades. These reforms have influenced the provision of health-care, especially in the rural regions. In response to these reforms, the funding structure for the provision of health-care services changed significantly, from a national emphasis to local rural governance. As local governance developed, so did local responses. Rural nurses were in a unique position to instigate equitable health services; during the last 30 years, many of these practices have become national norms, celebrated as New Zealand's health story.

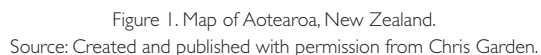
It is timely to recognise these rural nurse pioneers. From their innovative practice emerged the contemporary identity of the nurse practising in the rural context, combining multiple traditional occupational identities as the rural nurse or rural nurse specialist.

### BACKGROUND

Rural nurse stories illuminate both the minutiae and the context of rural nursing in New Zealand. Capturing their stories has helped us learn how communities and nurses have adapted to the changing socio-political, economic and health-care environment. In this paper we share our narrative inquiry insights, capturing and illustrating the creative responses of rural New Zealand nurses to shifting resources and realities.

Rural nurses service the rural population within their geographical home. Thus their community stories of practice are embedded in *whenua* [the sustaining land], and the use of photographic images strengthens the importance of the land to each nurse's story while recognising and honouring the connectedness of people and place. In 2018, *Stories of Nursing in Rural Aotearoa: A Landscape of Care* was published (Ross & Crawley). The book forms a treasure trove of rural nurse experiences as a testament to their dedicated practice, creativity and gritty determination. The stories draw on contributions by rural nurses throughout the whole of rural New Zealand (Aotearoa) – the North (Te Ika ā Māui) and South Islands (Te Waipounamu) including the West and East coasts, as well as her offshore islands, Great Barrier Island (Aotea), Chatham and Pitt Islands (Rēkohu/Wharekauri) and Stewart Island (Rakiura) (Figure 1) – while showcasing the historical development of rural nursing practice during a time of major change, transitioning from a loosely to a highly regulated professional environment.

This narrative research project took place over a three-year period (2015–2018) and was divided into three phases. Funding was in the form of a research grant from Otago Polytechnic, Dunedin New Zealand, to conduct all three phases of the project. Phase one and two addressed a gap in the literature by seeking to identify and strengthen awareness of rural nurses' changing professional practice, as well as increasing rural nurses' own understanding and articulation of it. In these initial phases, relationships with potential contributors were established at the national workshop for rural nurses, aligned with the Rural General Practice Network conference in 2016. During 2017 (phase two), fieldwork was undertaken to capture rural nurses' stories, which included images the nurses chose to include to further represent their practice. Phase three was undertaken in 2017–2018 and was divided into two parts: the first was concerned with developing the unique stories contributed by the nurses, and the second with the edited book.



We were aware that our research was likely to involve Māori (the indigenous population of New Zealand) as there are a higher number of Registered Nurses who identify as Māori in the rural practice setting (N=59; 11.6%), compared to 6.5 percent in the overall workforce (Nursing Council of New Zealand, 2015). Statistics show that 14 percent of the New Zealand population is Māori; over three quarters of the Māori population live outside the Auckland urban area, making up a significant part of the nation's rural communities (Statistics New Zealand, 2013). Rural nursing is a valued setting for Māori Registered Nurses' employment, and nurses' practice stories potentially include reference to *tikanga* Māori (customs, values and practices) within the context of describing their work.



## PARTICIPANTS

Invitations to rural nurses from New Zealand to participate in the project were canvassed through email contacts, newsletters, national nursing journals, regional directories and websites and through professional networks. The criteria included being in rural practice for more than 15 years, as this ensured that those participating had practised in the country's changing socio-political and economic health-care context (discussed further below). These criteria reduced participants from an initial 58 expressions of interest to 40 potential participants who met the research criteria, of whom 25 were in a position to commit to the project's requirements and time frames.

Of the 25 stories originally gathered, 16 were subsequently edited and reworked by both the participant and the researcher for sharing in the book. Each nurse storyteller featured in the book is identifiable; there is no anonymity. We ensured that we did not hurry or coerce participants, so that they could consult with their own community and whanau (family). The open, semi-structured interviews used respect each story as it is told. Each is framed by a structure (shared pre-interview) – a “three-dimensional narrative enquiry space” which includes the past, present and future, and situation and place, as well as personal and social elements experienced by both the researcher and the participant (Clandinin & Connelly, 1998). This framework was sufficiently flexible to encompass the influence of time, *whenua* and *tikanga* within each story told. Future details of the model are given below.

## NARRATIVE INQUIRY

Ever since humans have been able to communicate in gestures and ink, stories and pictures have been a way of making sense of the world. The world we live in and the institutions we work in form an interconnected web of narratives, with stories of the past shaping our present (Clandinin, 2013; Crawley, 2009). Research has recognised the power the story has to explore meaning, make connections, to entertain, build empathy and to teach, with benefits for both receiver and teller (Haven, 2007). Based on the solid foundation of the study of narrative, since the 1990s a methodology that characterises narrative as both a phenomenon and a research methodology has been known as narrative inquiry – “a way of understanding and inquiring into experience” (Clandinin, 2013, p. 13).

Research based on narrative inquiry was used to collect the 16 stories published in the book. This is a qualitative methodology – story is the medium used to explore the structured phenomenon of rural nursing in New Zealand, as lived and told by experienced nurses. The personal and human dimensions triumph over statistics, as the in-depth meaning of their experience was described by each individual storyteller. Each rural nurse involved was an active participant in the research, deconstructing dominant ‘truths’ against stories of personal experience, checking and rechecking that their story reflected what they wanted to tell. Each participant was invited to send photographs to supplement their story in the published book. In health humanities, images can distil meaning (act as symbols), both for the person taking the image and for the person viewing it (Crawford, Brown, Baker, Tischler, & Abrams, 2015). The photographs add visual depth to the text, and offer an alternative interpretation for viewer and storyteller alike.

The participants' stories used a personal and social lens to explore the past, the present and the future of the rural nurse journey, capturing the essence of place, distance, historical change and both the joys and challenges of working embedded in a variety of rural communities. Their personal perceptions, life experiences, their community, their values and the physical geography of the places where they work together shape each unfolding story. To capture and share the stories of New Zealand rural nurses, we wanted to ensure that the voices heard are theirs (although it is also important to acknowledge the contribution of the researcher).

Clandinin (2013) describes narrative inquiry as a relational methodology. The researcher intentionally relates to participants and, as inquirers, we consider our own experiences as well as those of the participants. As inquirers, we influence the phenomena being studied, as we temporarily become part of the participants' landscapes. Given the narrative paradigm, the authors were in the privileged position of collecting and editing the stories. Each of the 16 stories published involved contacting the storyteller, arranging a time and venue and a vector for sharing and

recording their story. Each story was guided by Clandinin and Connelly's (1998) "three-dimensional narrative inquiry space" – a model that examines personal and social interactions across the continuity of time and context. The use of this framework by all interviewers (as a way of reducing researcher bias), and a preview of the framework by interviewees, provided a thematic but open structure of past, present and future responses to the challenges faced – whether political, financial, geographical or demographic. As interviewers and narrative researchers, we were listening, clarifying, reading transcripts, editing, discussing, rereading and editing again at least three more times. These rural nurse stories were what Clandinin (2013) describes as "co-composed in the spaces between us as inquirers and participants" (p. 24).

Clandinin (2013) describes how for narrative inquirers, participants' experiences become visible as we walk alongside their stories and their contexts. As narrative researchers, our familiarity with the 16 stories, ongoing communication with the participants, our fieldwork meetings and shared process to ensure consistency in collecting and editing the stories produced a resounding shared insight: the last 30 years of rural nurse practice in New Zealand have been full of pioneering responses to a changing environment, responses that have shaped New Zealand's current health context.

## DISCUSSION

The effects of the economic downturn of the global market during the 1980s and 1990s had a dramatic effect on the health-care system in New Zealand as well as health-care practitioners, including nurses, particularly rural nurses. With limited funds at its disposal, the government enacted major health reforms, resulting in changes to the provision of health-care (Hounsell, 1992; Prince, et al., 2006) and changes in the delivery, funding, governance structures (National Health Committee, 2010; Dalziel & Saunders, 2014) and models of health-care (Carryer et al., 2015). The government's aim was to increase efficiency and address the needs resulting from increasing health disparities while providing health-care in the most fiscally prudent way (Barnett & Barnett, 2009).

This restructuring was influenced by neo-liberal political philosophy (Barnett & Barnett, 2009). The neo-liberal reforms emerged towards the end of the twentieth century and reduced the responsibility of the state and the welfare sector to the individual and, in so doing, increased competition among health-care practitioners and service providers (Prince et al., 2006).

Rural communities across New Zealand/Aotearoa responded to the changing health environment and fluctuating funding levels with a variety of models designed to meet the health needs of their local communities. The changing needs of these communities have continued to be apparent, in parallel with a changing health-care context. Rural nurses put a stake in the ground with the aim of responding to these changes and enabling equity – exploring new practice models to ensure that the best levels of health-care were available (as we share in this paper).

The rural nurses we interviewed revealed the practice models they adopted in response to these changes. Firstly, nurses had the opportunity to purchase and govern general practices, which were traditionally owned and operated solely by general practitioners (GPs) – those with a medical background. Nurse Kim Carter became a practice owner in rural Canterbury. She explains that while influencing the outcome of the provision of health-care in her district, "I have the added element that this organisation is very much reflecting my practice and the way we [nurses] construct our care, and how we do that in partnership with our community" (Ross & Crawley, 2018, p. 55).

The establishment of Rural Community Trusts (RCTs) was one outcome of the country's major health-care reforms (Gauld, 2000; Eyre & Gauld, 2003). Their engagement with local community members meant that RCTs designed and managed their own individual local health services; this model was regarded by the government as innovative and came with associated cost savings. The stimulus for this restructuring was the government's acknowledgment of continuing inequalities in health, in particular, in the indigenous Māori and Pacific population (Matheson & Neuwelt, 2013).

As well as encouraging community involvement in health-care decision-making (Gauld, 2001; Eyre & Gauld, 2003), the RCTs assisted in the development of “by Māori, for Māori” iwi providers (Gauld, 2003). Leonie Howie, a rural nurse storyteller from Great Barrier Island (Figure 1), discusses how Māoritanga (the Māori cultural way of life and understanding) is infused into the rhythm of island life, weaving symbiotically into the holistic approach of the rural nurse. She describes her own affiliation with Ngāti Wairere as helping her understand at a deeper level that “belonging remains at the heart” (Ross & Crawley, 2018, p. 33). Furthermore, as the Great Barrier Island Community Health Trust became established, Leonie Howie describes how a local kuia (female elder) spearheaded the island’s initiative to have a “centrally located, properly equipped health centre” (Ross & Crawley, 2018, p. 32), along with local health-care workers. After community fundraising, the community health centre was opened in 1990, and remains an active trust on Great Barrier Island to this day. The health trust is unique in that it owns all its buildings and resources, but does not contract health services.

In 1994, Aotea Health Ltd was established, providing holistic primary care to Great Barrier Island residents from antenatal to palliative care – co-directed by two nurses, Leonie Howie and Adele Robertson (Ross & Crawley, 2018). Adele Robertson describes how being able to control both funding and decision-making provided nurses with a satisfying sense of autonomy to meet the needs of their island community: “[T]o bring that money onto the island and then have a say about how it got spent, was very empowering. It has been an exciting journey and that is basically what has kept me here” (Ross & Crawley, 2018, p. 37).

Although RCTs were very diverse in size, their organisational arrangements and the services that they provided, they all represented a unique community strategy designed to secure health services for their individual rural areas. In the long run, all these trusts ensured the feasibility of community health services, having been redesigned to perform this function (Barnett & Barnett, 2001; Eyre & Gauld, 2003). The RCTs, including nursing services, were driven by the health needs of their communities which, over time, granted rural nurses a strong community involvement while enhancing communities’ social capital.

In the 1990s, with some government support, these trusts were further developed into an alternative mechanism for the ownership and continuance of health services in rural areas (Barnett & Barnett, 2005). The trusts generally employed all local health-care staff including the GP. These new employment arrangements gave the RCTs a significant advantage over the traditional model of self-employed GPs associated with the fee-for-service payment model and the direct employment of nurses (Barnett & Barnett, 2001). GPs’ employment of practice nurses was recognised as one barrier associated with the deployment of nurses – in particular, the “practice nurse,” as noted in the 1998 Ministerial Taskforce Report (Ministry of Health, 1998). Rosters shared between GPs and rural nurses covered 24 hours of health-care at the weekends and during week nights.

One noticeable difference between rural and urban nursing practice was the expectation that rural nurses would provide an emergency health-care service in the form of Primary Response in Medical Emergencies (PRIME). It is important to acknowledge this in the context of changing models of health-care and funding and the provision of sustainable health-care by rural nurses. The PRIME “service is funded by the Ministry of Health and the Accident Compensation Corporation (ACC) and is administered by St. John. It utilises the skills of speciality trained rural GPs and/or rural nurses in areas to support the ambulance service where the response time for assistance would otherwise be significant or where additional medical skills would assist with the patients’ condition” (Ross & Crawley, 2018, p. 39).

Rural geographical locations offer different levels of isolation and support. Tania Kemp compares PRIME on the Chatham Islands and in rural South Canterbury, having practised in both locations. PRIME calls were often about rural accidents involving acute care and a high death rate – often involving cars, fishing and farming – with hospital-level care a flight, or two to three hours’ drive away. “On the Chathams and on Pitt Island you were on your own; there wasn’t anybody else. ... One big difference doing PRIME in Waimate, you worked with the ambulance ... I had wheels to get us to Timaru hospital ... I had support, I had comrades ...” (Ross & Crawley, 2018, p. 47).

Changing governance structures meant that nurses were able to shape the direction and delivery of health-care. For the first time, chemotherapy was administered by rural nurses in selected regions. This innovative practice was later recognised by the establishment of Nurse Specialists. Like all new practices, changes were scaffolded to make innovation possible. In this case, nurses becoming intravenous-certificated was an important first step to providing local access to chemotherapy. The alternative model required local residents to travel 3–5 hours, in each direction, to an urban health-care facility. Janet Wright, a rural nurse from South Canterbury, explained that “[w]e needed to adapt, which as rural nurses we do very well. So we changed it [the delivery of chemotherapy] to more of a medical day unit and took on doing other transfusions” (Ross & Crawley, 2018, p. 53).

This approach to the delivery of health-care was designed to meet the localised health needs of the community, such as in rural Northland, where one nurse described “going around delivering services in all schools to children with runny ears, glue ears, ear problems ... [and] hearing problems” (Ross & Crawley, 2018, p. 22).

Throughout the book, such pioneering stories are told one after another, displaying models of practice in response to change and to ensure that access to health-care was maintained and ultimately improved. As Tania Kemp put it:

To make it work in rural [areas], I needed to be able to do more than what the RN scope allowed me, in order to really be available for rural people. ... slowly as I moved out into more rural [areas] and away from that physical support of a GP or another health colleague, the more I needed the tools to be able to be available to those patients (Ross & Crawley, 2018, p. 50).

From such innovative practice emerged the contemporary identity of the rural nurse, combining multiple traditional occupational identities. As local governance developed, so did local responses. Rural nurses were in a unique position to pioneer equitable health services – such as providing localised treatment and palliative care, PRIME (as discussed above), Standing Orders, Telehealth, the transfer of acute patients to tertiary bases and community mental health, as well as developing the Nurse Practitioner role and establishing community trusts (Ross & Crawley, 2018).

Shona Blair, a rural nurse from Queenstown, explained how transfer nursing worked: “I used to do a lot of ambulance work or helicopter work ... flying patients to Dunedin ... and some of that stuff was quite scary because we are in the mountains here. ... So everybody who had to get out of here by helicopter were usually very sick and they needed to be treated in a larger hospital” (Ross & Crawley, 2018, p. 90).

For rural nurses, being a generalist means developing expertise in many roles and juggling several contracts at once. Liz Burns, a rural nurse from the West Coast of the South Island – with a huge geographic area to cover – describes the roles she shares with a colleague:

It's really a one-stop shop. ... we cover Prime, ACC, District Nursing, Public Health Nursing ... plus we do palliative care ... When the GP is here – we generally have a doctor here one morning a week – we're the Practice Nurse when they're here. ... I think it's a privileged position, rural nursing. ... It really sort of stops and starts with us. In saying that, we have an amazing team behind us [respiratory nurse specialists, diabetic nurse specialists, cardiac nurses, palliative care teams and oncology nurses, GPs, physios and Occupational Therapists]. Nobody stands alone (Ross & Crawley, 2018, p. 76).

Nurses working in rural hospitals also had to have generalist specialist skills to meet the needs of the community, given limited resources. Dianne Pollard, another West Coast nurse, explains how the small four-bed critical care unit she works in, as a sole nurse on eight-hour shifts, also functions as the medical and surgical high-dependency unit, the coronary care unit and the intensive care unit – providing expertise to paediatric (children) and adult patients, both in the critical care unit and, if necessary on the wards. She is also on the voluntary roster for ventilator call (assistance with breathing), averaging around three shifts a week after hours.

Helen Sawyer, also from the West Coast of the South Island, describes how the rural nurse role expanded as services closed during the 1990s and 2000s:

[O]ur theatre closed, meaning all surgery cases were attended to in Greymouth (two hours' drive). We lost our generalist surgeon and anaesthetist. A lot of our services were cut down and they started doing visiting clinics for follow ups to save people going down after their appointments. We learned to do what we were able, and that involved a lot of travelling in ambulances, bringing patients to the ward to stabilise, then we'd transfer them ... you have to be a generalised specialist in all fields. You are triaging patients as they present (this can be from a non-event to life-threatening trauma ...), delegating tasks, liaising with the doctor, arranging transport, communicating with other areas' transport [prioritising], hand-over of patients and notifying or liaising with the family (Ross & Crawley, 2018, p. 63).

With this expansion of practice came the rural nurses' need for ongoing and advanced education. Postgraduate education for rural nurses was established in 1998 (Ross, 2016; Maw, 2008) and funded by the Clinical Training Agency (CTA). It became a priority following a study commissioned by the Southern Regional Health Authority in 1995 which sought to understand the evolving role of the rural practice nurse in the South Island (Ross, 1996; Thompson, 2006; Maw, 2008).

In their stories, the rural nurses talked about completing postgraduate studies, gently dipping their toe into the water to experience this form of advanced education. According to Gaylene Hastie, a rural nurse practitioner from Queenstown in Central Otago, many rural nurses got hooked. She said that postgraduate education "sparked my interest in postgraduate study where I was becoming aware of the theory behind practice, how to sustain nursing practice, [the] context of communities and how this guides our nursing practice. I got a taste of what postgraduate education could offer and the journey had begun" (Ross & Crawley, 2018, p. 94).

Nurse leaders from New Zealand ensured that a statement relating to the practice of nursing was included in the development of the philosophy behind the government's Primary Health-care Strategy (Ministry of Health, 2001), which promotes Primary Health-care (PHC) nurses as central to the delivery of care in the community. For nurses to practise in the context of PHC philosophy, a shift in thinking by nurses and educators alike was necessary to ensure that nurses could acquire the skills necessary for autonomous practice and guarantee that they would be in a strong position to practise in the community. Practising in the community required nurses to focus on wellness and health promotion and to provide education to individuals and groups within the framework of PHC nursing.

The PHC philosophy understands health in social terms – health is associated with social inequalities, community engagement and the participation and empowerment of individuals and communities (Duncan et al., 2014). Communities in rural areas often pull together to provide what they think is necessary – the level of community engagement and participation is strong, even in some of the country's most economically deprived rural areas. This might involve fundraising for new clinics, hospitals and resources; providing options for clients without transport; providing food parcels for families when nurses are away doing further training; volunteering to assist in emergency response situations; being the driver for an exhausted on-call nurse; or being creative in ensuring that services are delivered where they are needed (Ross & Crawley, 2018). According to Liz Burns,

I know health-care's got to be paid for, but when I first started, nobody paid for anything. Now basically everybody pays for everything, except for District and Public Health Nursing. Some people just can't pay – but they need to be seen ... And they can't afford to go to the GP, they can't afford to pay for their antibiotics ... I don't think we should be creating dependents – but with just very little you can really make a change with people and help them move forward and on (Ross & Crawley, 2018, p. 77).

Sometimes the assistance given is very practical. Adele Robertson recollects one client who would not leave Great Barrier for rehabilitation until he had a return ticket in his hand. While he was gone, his neighbours held a working bee to adapt his multi-level home, creating railed access so that the client had every chance of ending his life at home, as he wished (Ross & Crawley, 2018) – a fine illustration of an empowered individual within an engaged community. Tania Kemp knows that her practice has the absolute support of the community: "Lions Club are buying

us a defibrillator ... A local school say 'Hey, do you want to use us?' [for an evacuation plan in emergencies] There's no such thing as having to go begging and saying 'can we do this and this?' People are so supportive of you in a small community" (Ross & Crawley 2018, p. 48).

It is clear that rural nurses are part of their community, above and beyond their nursing role. The rural nurses' stories collected in this project have revealed the extent of nurses' work with allied health organisations such as St Johns – becoming members of the local St Johns committee and training to be an ambulance officer to further support the community and their health needs (Ross & Crawley, 2018). Teamwork is essential.

The rural nurses acknowledged that working in teams creates an environment in which specialist skills and knowledge can be shared, enhancing collaborative work to provide a wide range of services in an efficient manner – an experience that is supportive and also fun (Ross & Crawley, 2018). Supportive teamwork and dedication to the community can mean some very long hours, where both the team and the local community work to support each other; whether in the rural hospital or in the community.

West Coast nurse Julie Lucas describes receiving a phone call saying a STAT 1 (life-threatening, requiring resuscitation) patient was coming in. The ambulance driver knew the patient was Julie's father; so rang Julie's off-base manager, who promptly returned to relieve and support her (Ross & Crawley, 2018). Later in her story, Julie notices an emergency on her way home, and returns to work to support an inexperienced colleague. On the West Coast, rural hospitals (and allied resources) and rural nurses work together as much as possible – they are part of the same team. Julie Lucas says that, in her community, they "rely on a lot of nurses stepping up into different specialities (like Rural Nurse Specialists, Nurse Practitioners, Clinical Nurse Specialists), because it is very difficult to retain doctors in a lot of those areas [the remote West Coast] ... They have to work in that community alone, although they do get support by ringing our emergency department ... (Ross & Crawley, 2018, p. 72).

The community is also part of this team. Liz Burns chooses to cross over with her colleague, doing a half-day handover – necessary after a self-chosen schedule of seven and half days on duty and six days off. "When you are looking at what you can do, you actually have to consider the fact that you only have one pair of hands, no one else is there" (Ross & Crawley, 2018, p. 75). Her rural West Coast district is one of the few mainland areas with no ambulance back-up, and often no cell reception. The local fire brigade is being upskilled by St Johns, eventually becoming part of the first response team. Because the fire brigade is at least an hour closer to the community than an ambulance, the rural nurse educates them twice a year to ensure the brigade knows everything that is packed into the nurses' car, and is able to fetch things as needed. Here, the community expects to be part of the team, and responds to the nurses' needs – Liz Burns reports that the local community had just fundraised to build a new health clinic.

Involving community members in setting their own health needs was a significant shift in philosophy, going beyond anything that had been attempted previously. The aim was to reduce health disparities while being true to the principles of PHC, which encouraged working from the bottom up (at the grassroots) and minimised a top-down (government-directed) approach in the implementation of health-care (Neuwelt & Crampton, 2005; Matheson & Neuwelt, 2013). At this time, the health-care system was transformed by situating PHC at the centre of health-care, while also considering nursing as crucial to its success (Ministry of Health, 2001). This philosophy is encapsulated in the words of Martinus Pepers, a rural nurse on Stewart Island (the southernmost inhabited area of New Zealand; see Figure 1), who expresses his practice as

becoming an expert in all facets of clinical presentations of all times of the day and night. This has required me to be practical, adaptable and flexible and engage in the community. As I have engaged in the community I have developed as an individual, taking responsibility for community issues, health issues and environmental concerns. I would say I am fulfilled and I hope I fulfil this community's needs as well (Ross & Crawley, 2018, p. 107).



This account of the varied and interesting work carried out by rural nurses is a synopsis to be shared and is a component of our ongoing work. The raw data from interviews with 25 rural nurses is currently undergoing thematic analysis in order to generate further knowledge of rural nursing practice and curriculum development, as well as professional development intended to equip rural nurses for the varied demands of their practice. Our research will also inform workforce planning, with the aim of improving the recruitment and retention of rural nurses. We envisage that this will further open up ideas for the contributions that rural nursing will be able to make in the future, thereby adding to the growing national and international research in this area.

## CONCLUSION

Narrative inquiry has been used to celebrate and share the lived experiences of New Zealand rural nurses, while showcasing how they have adapted their practice over the last few decades. Their stories illustrate creative responses to a changing health environment, with innovative responses to a variety of challenges strongly evident. During the last 30 years, many of the practices described in their stories have become national norms, celebrated as part of New Zealand's health story; it is timely to recognise these rural nurse pioneers. Capturing these stories has helped us learn how nurses have adapted to the changing socio-political and economic environment, while identifying rural nursing as a specialty area of nursing practice.

In 2019, rural nursing is still not officially identified as a separate specialty of nursing practice in New Zealand, and this lack of identity has often left this occupational group misunderstood and challenged by the wider nursing profession and the policies governing nursing practice. In this paper, we have outlined the research project we have undertaken and the book we have published to demonstrate why and how rural nursing should be recognised as a speciality area of nursing practice which is comparable internationally. Rural nurses service the rural population within their geographical home; thus their stories of practice are embedded in *whenua*, underlining the importance of the land to each rural nurse's story while recognising and honouring the connectedness of people. As we celebrate these stories, our chief remaining aim is to strengthen the position of rural nursing, both nationally and internationally.

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## LEARNER ENGAGEMENT IN COMMUNITY HEALTH AND DEVELOPMENT: ISLANDS, ISOLATION AND IMPACT

Cynthia Mullens and Michael Mullens

### INTRODUCTION

This report sets out the ways in which personal connections and volunteer work guided our research focus on community health and development and our engagement in work-based learning through the Doctorate of Professional Practice Framework.

Having both worked extensively in relief and development, the authors took the opportunity to join a group of dedicated individuals to travel to the island of Paama, Vanuatu, at the beginning of 2018. A long-term connection dating back to 2001 between community elders from the village of Liro and volunteers from Dunedin, New Zealand, meant that much of the hard work of developing trust and establishing relationships had already been done. (Figure 1 shows the situation of the remote island of Paama within the archipelago of Vanuatu.)

The Paama community extended an invitation to the authors to establish outreach opportunities for Otago Polytechnic learners from Dunedin. Working within the School of Engineering and the School of Nursing at Otago Polytechnic, Dunedin, the authors set out to develop and provide problem-based, real-world learning in regards to water, sanitation and health. This report details the initial work undertaken on a ten-day field trip in September 2018.

Historically, access to clean drinking water has determined health outcomes in many parts of the world. With changing climate and accessibility to water, as well as contamination of water sources, the World Health Organisation (WHO) estimates that by 2025 half of the world's population will be living in water-stressed areas (WHO, 2019). It has been estimated that close to 785 million people lack basic drinking water services, and over 144 million people are dependent on surface water for drinking (WHO, 2019). Globally, two billion people are utilising a water source contaminated with faeces, contributing to the transmission of diseases including diarrhoea, cholera, dysentery, typhoid and polio (WHO, 2019).

Effective and safe water systems are imperative for the promotion of health, the prevention of disease and the understanding of disease management within communities.

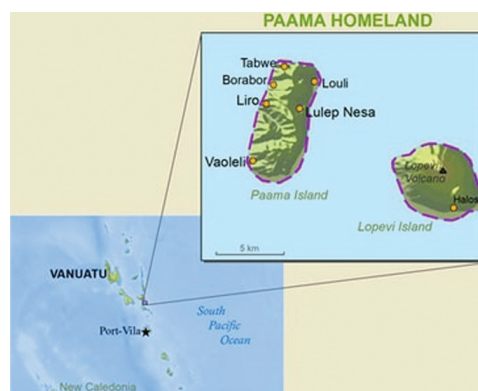


Figure 1. Map of Paama, Vanuatu.  
Source: <http://pacificpathways.org.nz>.

## CONTEXT

Historically known as the New Hebrides, the archipelago of Vanuatu gained independence from French and British colonisers on 30 July 1980. In general terms, the separate focus of competing British and French administrations has contributed significantly to the post-independence unrest experienced by Vanuatu since joining the Commonwealth in 1980. Political controversy and foreign investment continue to undermine the capability of communities to establish operational systems that effectively manage health and wellbeing. The majority of services are developed and managed from urban areas, leaving smaller islands at the mercy of climate change, migration problems and economic disadvantage on a much larger scale than their urban counterparts are experiencing.

The definitions of “rural” and “remote” as they apply to the areas of health and wellbeing often equate to isolation in regard to place and the culture of “self-sufficiency” (Howie, 2008). Complicating the definition of rurality are the lenses through which various disciplines and professions view this concept. Dillon (2008) linked the concept of rurality with that of “islandness” in her exploration of what constitutes a rural context. Similarities between the two include:

1. The impact of climate and the seasons as they relate to sustainable economic viability
2. The migration of populations seeking resources outside a particular locality

Economic factors known as “diseconomies of scale:” a financial drawback or cost arising from a particular process – for example, the cost of transport or access to services – which can disadvantage individuals. Services are generally designed, implemented and regulated with larger geographical areas such as urban regions in mind, and local focus and autonomy is often disregarded in favour of systematic process.

Delivery of and access to care is determined by the structural design of the appropriate systems, as well as considerations of how rural isolation can affect health. These conditions and challenges affect island populations in a particular way, meaning that the island of Paama faces many of the same challenges as rural communities in New Zealand. However, the island’s unique socio-political history and geographical location require further discussion when considering issues of work and community development.

The island of Paama is approximately 8km long and 5km across, and is distant from the capital of Port Vila. Paama can be visited by taking a 45-minute charter flight from the capital, landing on one of the shortest grass runways in the region, or by means of a 24-hour boat journey. (Figure 2 shows a charter flight departing Paama from the grass airstrip.) While the population of the island stood at approximately 2000 in 2019, the movement of individuals seeking work on larger islands means that this figure is not constant, but changes with the availability of work and financial or educational demands. The traditional language spoken in Paama is known as Voum. However, the majority of residents speak Bislama, an English-based Creole language that combines English, French and local vocabulary.

Most of the island’s income is from agriculture. Crops include yams, manioc, taro, banana, kumala (sweet potato) and “island cabbage” (bok choy), produce which is exported to the



Figure 2. Charter flight leaving Paama. Source: Authors.

larger islands. Employment on the island includes nursing, teaching and banking. Individuals make an income through activities such as selling crops in the market, dressmaking and basket and mat weaving. There are a few independent store owners as well. Many people on Paama participate in seasonal work programs in Australia and New Zealand, primarily apple- or grape-picking for six to nine months of the year. Most of these earnings are sent home to support workers' families on the island. The agricultural economy and self-supporting communities have historically been the way of life in Liro village. However, technology and increasing communication with the outside world are changing the traditional focus of many who live here, especially the youth.

In a time of global awareness and connectivity, citizens and governments in the developed world have a responsibility to assist island nations in securing access to water and sanitation. The United Nations Sustainable Development Goals speak to the fundamental need for public health and sustainable development objectives to be met by 2030 (United Nations, 2015). Water, Sanitation and Hygiene (WASH) are often grouped together, as the impact and deficiencies of each are substantially overlapping.

Globally, many agencies are involved in developing water and sanitation infrastructure projects in island nations. However, advancing projects is never as simple as implementing a solution and then walking away. As with most projects, in this area there are multiple factors at play, which can affect the long-term outcome in regards to community development. The assumption that *any* water and sanitation project will have a positive impact on the health and prosperity of a community can result in suboptimal outcomes. Poorly planned or executed development projects will be ineffective, and even have a detrimental effect on the community in the long term. Such projects can be environmentally unsustainable, culturally inappropriate and create dependence on donor organisations and non-governmental organisations (NGOs). As a result, agencies must carefully consider project design and delivery in order to maximise the small window of opportunity available and minimise the risk of failure. Many well-designed projects fail due to poor maintenance of the accompanying infrastructure in the years after completion. Engagement of community and donor organisations is vital to successful outcomes.

With these factors in mind, the School of Engineering, Construction and Living Science at Otago Polytechnic, Dunedin, developed a program that would offer second-year learners an opportunity to become involved in WASH projects focused on the South Pacific region. Following the implementation of a water system, the School of Nursing at Otago Polytechnic agreed to support the health needs of the community through annual field trips over a two-year period. This arrangement would allow a five-year research focus for this community. School of Nursing research by Ross, Crawley and Mahoney (2017) into the teaching and learning involved in sustainable community development, and how nursing students can make a difference to health outcomes, laid the foundation for the development of the Community Health Assessment Sustainable Education model (CHASE). Future work on this rural educational health model will investigate its transferability from rural to island populations.

## PURPOSE

The objectives and aims of the overall project were to provide learners with WASH projects and opportunities to develop them in the Liro community, using their academic knowledge and skills to provide real-world solutions under challenging conditions. The testing of projects in real-world conditions, coupled with the unique challenges consistently faced by island communities, provided learners with the opportunity to apply their academic knowledge, thus linking their theory with their practice.

The purpose of this initiative was to develop water and sanitation projects that will meet the water, sanitation and health needs of communities in the South Pacific region. The development objectives were to build sustainable water and sanitation projects, increase health and educational capacity in local communities, and encourage local people to develop ongoing relationships with Otago Polytechnic. Our focus was on long-term sustainable development and on transferring knowledge and skills.

The project offered students who had completed civil engineering courses in Water and Waste Systems (DE6205) and Water and Waste Management (DE6206) at Otago Polytechnic an opportunity to participate in the field trip. The School of Nursing provided health support for the team, as well as capacity building through the development of relationships with the Liro community. Lecturers, community elders and health-care workers collaborated and identified future outreach opportunities for nursing learners. Projects identified include a community health needs analysis and health resource development as a follow-up to the water implementation project.

## LOGISTICS AND FUNDING

A ten-day field trip was scheduled in 2018 for the second semester mid-term break. A total of 14 engineering students and two lecturers, one from the School of Engineering and one from the School of Nursing, were allocated to the team. The cost of student travel was determined at \$3000 per person. This included the cost of airfares, accommodation, food and travel insurance. Otago Polytechnic supported learners by contributing \$1000 per student towards their overall costs, with the expectation that they would meet any additional costs themselves.

The team worked together over a nine-month period to cover the additional \$2000 per student required through a variety of fundraising events. Otago Polytechnic lecturers self-funded their participation, with any surplus funds donated to participating learners and supplies for the projects undertaken.

## PROCEDURE

With projects on this scale, there are always challenges relating to engagement by the local community. Community involvement is essential to ensure that local people are the chief stakeholders in the project. Exploring communities' needs at the grassroots level promotes a bottom-up approach, as opposed to a top-down administration of policy and projects. Logistically, this approach is imperative for community development, empowering individuals and discouraging long-term dependence on aid.

In July 2018, an advance team consisting of the authors and the original group of volunteers from Dunedin travelled to Vanuatu for an initial assessment of the community's needs. Collaboration with the aim of identifying viable projects involved a wide range of community members. This included the local community Peace Corps volunteer, the Liro Water Committee, a group of community elders (both men and women) and the village chief. Discussions of technologically appropriate solutions to the needs identified by the community directed the field trip made by the School of Engineering two months later, in September 2018.

## THE PROJECTS

In what follows, we describe the three projects which the Liro community identified as high priority and achievable in the short time frame available.

### Project 1 – Toilet and Shower Block for Health Centre

The village health centre provides local and regional health facilities for the population of Paama and the smaller island communities nearby. The existing building was no longer fit for purpose and has suffered a significant amount of wear and tear. Often families need to stay there to receive care or await transport via ship to Port Vila for extended periods. No shower or toilet facilities in working order were available for use by patients and families. On this basis, this was considered a viable project to initiate.

An initial assessment revealed an existing structure that would readily convert to a toilet and shower block, and serve the health centre's needs. (Figure 3 shows the existing structure which was chosen for conversion.)



After the scope of the project had been explained, the learners developed a number of designs for the toilet and shower block, using the knowledge gained from their Water and Waste Systems course at Otago Polytechnic. The chosen design determined the materials and supplies required. Supplies were purchased in Port Vila and transported by boat in advance of the learners' arrival.

Each team involved in the project consisted of six members and included a team leader, engineering learners and a member of the local community appointed by the water committee. As the project transitioned through its various phases, other teams were mobilised to assist with the more complex issues that arose. The project was successfully completed within the ten-day time frame, and local engagement meant that knowledge of the working system would ensure ongoing maintenance of the project. (Figure 4 shows the almost completely converted structure, now comprising two shower stalls, two flush toilets and a changing area.)

## Project 2 – Sanitation Field

In order to manage the effluent and wastewater from the toilet and shower block, a sanitation field was required to be designed and constructed. Learners used knowledge derived from course content to design a sanitation field to deal with the discharge. A previous assessment had located an ideal area for the sanitation field, and geo-testing had indicated the ideal soil conditions and slope required for breakdown of the effluent.



Figure 3. Existing structure chosen for conversion to a toilet and shower block.  
Source: Authors.



Figure 4. Shower and toilet block nearing the final stages.  
Source: Authors.



Figure 5. Construction of sanitation field for renovated toilet and shower block.  
Source: Authors.



Existing polyvinyl chloride (PVC) pipes were used in the design of the manifold to ensure even distribution of the effluent over a 12m<sup>2</sup> area. The plan included the provision of backfill involving wire netting, sand, and compact soil and turf. This was the first time that this community had helped create and develop a working knowledge of a sanitation field, as most toilets in the village are pit latrines. (Figure 5 shows the construction of the sanitation field, with community participation.)

### Project 3 – Water Security

One of the major issues facing Liro is water security, a problem exacerbated by natural disasters such as cyclones, volcanic eruptions and climate change. Water security is the most serious threat to the livelihood of this island community. Previous assessment visits had enabled the advance team to evaluate a number of possible solutions, in consultation with the Department of Water Resources–Vanuatu and the Paama Water Committee.

Possible project areas included constructing water catchment tanks, rehabilitating existing underground water tanks, developing access to local springs, increasing water storage capacity, desalinisation and the development of water management techniques at the local level.

Following community consultation, it was determined that the focus would be on establishing new water tanks, in addition to rehabilitating existing underground structures. Funding raised by the engineering learners enabled the purchase of four 10,000-litre tanks in Port Vila and their delivery via ship prior to the learners' arrival. These tanks were strategically located around the community. Collaboration between the learners and community volunteers resulted in cement bases being designed and built to support the new structures.



Figure 6. Cement base construction for a new community water tank.  
Source: Authors.



Figure 7. Rehabilitation of existing ground water tanks.  
Source: Authors.

Rainwater collected from roofs using bamboo guttering and PVC piping provided greater volumes of water to supply the storage tanks. (Figure 6 shows the construction of one of the cement bases for the tanks.)

Rehabilitation of existing underground tanks meant that valuable collection facilities could be used once again to provide sources of potable water. This involved assessing the tanks for leaks, cleaning them and designing covers to keep environmental contaminants out of the water supply. (Figure 7 shows the cleaning and inspection of an existing water collection system to determine its suitability as a collection and containment tank.)



Figure 8. Bamboo covers and guttering were provided for existing underground tanks.

Source: Authors.

Figure 8 shows a bamboo cover constructed by learners to protect the underground water collection point. Locally sourced bamboo was used as a way of ensuring that appropriate, sustainable technology, design and construction was utilised.

## FINDINGS

Surveys and interviews conducted after the trip allowed us to measure the impact this opportunity had on learners, as well as the local community. The feedback received indicated that the work and learning opportunities experienced were highly valued. Many participants spoke of being able to address challenging situations within a safe and constructive space through trial and error. Community participants reported a strong level of trust and appreciation for the work completed, and extended invitations for future collaboration. A farewell ceremony and dinner celebrated the success of the three projects, as well as the relationships that had been built. (Figure 9 shows learners and children from the community at the farewell celebration.)

The impact of the field trip on learners included the development of a comprehensive understanding of the challenges involved in developing and designing viable water and sanitation projects in resource-poor environments. As the foundation for community development and health, water security became a reality for these learners, rather than simply one of the United Nations Sustainable Development Goals.



Figure 9. Farewell celebration for project members in Liro village.

Source: Authors.



For many of our learners, their future focus has now shifted to include water and sanitation work, as well as community development – a career path of which they had previously been unaware. A follow-up field trip involving Otago Polytechnic's Civil Engineering Department is planned for September 2019; this will continue the WASH projects in Liro and measure the effectiveness of the work done on the previous field trip.

In addition, a field trip involving third-year learners from the School of Nursing is being planned for 2020. Future opportunities to extend our activities to other Pacific Islands have been offered through collaboration with the Pacific community in Dunedin, and plans to evaluate an invitation to work in Fiji are also underway.



Figure 10. Local Paama fisherman.

Source: Authors.

## CONCLUSION

As rural and isolated populations, Pacific islands face extreme challenges to health in relation to such factors as geographical location, climate change, natural disasters and access to services. In accordance with UN Sustainable Development Goal 6, "Clean Water and Sanitation," providing systems that achieve this outcome can have a major impact on Goal 3, "Good Health and Wellbeing." In a global community, there are opportunities for individuals to work towards equitable outcomes for all populations.

As an organisation, Otago Polytechnic strives to equip learners with the skills to practice in sustainable ways. This opportunity has allowed educators and learners alike to align practice with beliefs and seek out ways to effect change through inter-professional collaboration.

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## GLOBAL RURAL NURSING STUDENT EXCHANGE: ENGAGING WITH THE CHASE MODEL AND FOSTERING WORLDVIEW INTELLIGENCE TOWARDS SOLUTION-FOCUSED COMMUNITY WELLBEING

Jean Ross, Diana VanderWoude, Audrey Snyder,  
Elizabeth Merwin, Corey Hamilton Kilgore and Lisa M. Feller

### INTRODUCTION

This paper shares a pilot project designed to provide student nurses, from diverse countries, with the opportunity to gain a global rural healthcare perspective while creating solution-focused community health interventions. Nurses play a critical role in reducing disparities in rural healthcare around the globe (Ross, 2016). The main objective of this pilot project is to raise student nurse awareness of community development in the rural healthcare context and the significant opportunity for nursing to impact health outcomes. The pilot is a unique partnership, initially developed between an international and a local New Zealand provider; a community foundation, the International Rural Nurse Organisation and participating schools of nursing.

Guided by the Community Health Assessment Sustainable Education (CHASE) model (Ross, Crawley & Mahoney, 2017), the student nurse learners participating in this pilot will be working collaboratively with local students to identify the health needs of an aligned rural community over a three-week period. The CHASE model will be adapted to accommodate both the learners and international needs. Also, students will be exposed to the Worldview Intelligence Model (Nagel & Jourdain, 2019) to equip them to lead inclusive conversations and build strength from cultural and geographical differences. The pilot will use videography and photo image as a medium to document the students' learning journey (Garner, 2014; Leipert & Anderson, 2012) and share that journey with a larger audience, while also co-creating a model for international academic practice and community foundation partnerships.

### BACKGROUND

The rural population accounts for almost half of the total global population, and people in rural areas often suffer more than their suburban and metropolitan counterparts due to lack of access to healthcare, which is in turn related to the lack of providers including specialists, travel issues and/or cost (Jones, Parker, Ahearn, Mishra, & Veriyam, 2009). Those living in rural areas are more likely to develop and succumb to heart disease, cancer, chronic lower respiratory disease and stroke, or die from unintentional injury (Moy, Garcia, Bastian, Rossen, Ingram, & Faul, 2017). The infant mortality rate is higher among rural children and life expectancies for men and women in isolated regions are less than those in urban areas (Ely et al., 2017).

According to analysts at the Kaiser Family Foundation in the United States, isolated rural populations often develop collective customs and habits that directly affect their health (Orgera & Artiga, 2018). For instance, Alaskan Natives, American Indians, African Americans and Hispanic individuals living in rural regions are more likely to avoid seeking routine and emergency medical care than white residents, due to both historical obstacles to healthcare access and other variables such as language. Others living in rural communities indulge in long-standing negative personal habits that adversely affect their health. According to research from the US Department of Health and Human Services (HHS), rural adults are more likely to abuse alcohol and drugs, smoke cigarettes and lead sedentary lifestyles (Gamm, Hutchison, Dabney, & Dorsey, 2010). These practices may lead to the development of chronic health conditions.

Health disparities are also found in the New Zealand population and are associated with socioeconomic deprivation and poor health outcomes including the incidence of mortality, hospitalisations, health risk factors, chronic disease and many acute conditions (Hogarth & Rapata-Hanning, 2015). Life expectancy is similar for both rural and urban populations in New Zealand. However, there is a difference in life expectancy between Māori and non-Māori populations (Hogarth & Rapata-Hanning, 2015). Rural Māori (the indigenous population of New Zealand) have a shorter life expectancy than urban Māori, with 1.2 years difference for women and 1.5 years difference for men (National Health Committee, 2010). Mori experience a higher rate of cancer; a higher incidence of obesity and higher rates of chronic illnesses stemming from obesity (Hogarth & Rapata-Hanning, 2015). Chronic illnesses such as diabetes mellitus, coronary heart disease, stroke and high blood pressure are also more common among Māori (Hogarth & Rapata-Hanning, 2015).

According to Rural WONCA (an active network of rural family doctors and rural academics from each of the world's regions), despite the huge differences between developing and developed countries, access is the major issue in rural health around the world (Couper, Strasser, Rourke, & Wynn-Jones, 2015). Even in countries where the majority of the population lives in rural areas, resources are concentrated in the cities. All countries have difficulties with transport and communication, and all face the challenge of shortages of doctors and other health professionals in rural and remote areas.

Nurses make up the largest segment of the global healthcare profession (WHO, 2013) and are in a position to play a critical role in reducing rural health disparities (Ross, 2016). Rural nurses need broad-based knowledge, a cradle-to-grave perspective on health and to be committed to learning to work and collaborate in new models of healthcare (Ross, 2016). They must also be capable of working with the rural community to gather and analyse population-level data; promote wellness and disease prevention; assist in adopting and disseminating best practices for population health; and identify patients who are at greater risk of disparities, necessitating greater outreach efforts (Ross & Crawley, 2018).

## THE PILOT PROJECT

The pilot project is designed to provide student nurses (the learners), from diverse countries, with the opportunity to gain a global rural healthcare perspective while creating solution-focused community health interventions. These interventions are in alignment with the United Nations Sustainable Development Goals (United Nations, 2019). In order to provide learners with the skills and confidence to undertake community development as it relates to health, learners will engage with the CHASE model that provides nurses with a method to undertake a valid research process while gathering data related to health outcomes. For nurse educators, the CHASE model gives student nurse learners the opportunity to impact positively on health outcomes and reduce disparities.

The brief of this pilot project is to work initially in partnership with two rural communities (regional and international) to generate data with which to inform and adapt the original CHASE model, which was designed by Ross et al. (2017) from the School of Nursing at Otago Polytechnic, Dunedin, New Zealand. The CHASE model is recognised internationally as a valid tool that can be adapted to individual countries' needs in order to reduce rural health

disparities and as a teaching and learning tool in the area of community development for undergraduate nurse learners. It is therefore envisaged that this model will be adapted to meet the needs of global learners and the identified community/s, and will enhance the viability, utilisation and implementation of healthcare delivery in rural regions across the globe. The adapted CHASE model will also augment the collaborative relationships of student nurse learners in the global landscape and will inform nursing curricula and teaching and learning internationally.

In addition, to complement the CHASE model, students will be exposed to the Worldview Intelligence Model (Nagel & Jourdain, 2019) to equip them to lead inclusive conversations and build strength from differences. Worldview Intelligence concepts offer an approach to exploring assumptions, beliefs and value systems in reflective and curious rather than adversarial or defensive ways, providing the potential for more comprehensive approaches and solutions. In addition, the pilot will begin with a cultural and contextual orientation phase and will close with a reflective debrief process.

## PROJECT OBJECTIVES

A primary objective of the rural nursing student exchange programme will be to evaluate whether the CHASE model can be adapted for use in rural communities throughout the world. While in America, students from New Zealand will utilise the CHASE model to guide community assessment and intervention in the mountainous region of rural Appalachia, home to high numbers of poverty-stricken and medically underserved individuals and families. This region will provide rich opportunities to develop impactful community-based interventions. With a grounding in the CHASE model, students will gain experience working collaboratively with local practitioners and members of the interprofessional team as they care for this rural population.

Similarly, students from America will work alongside faculty and students in New Zealand to implement the CHASE model while designing community-based interventions. Learners in the rural nursing student exchange program will earn academic credit for population-health nursing requirements. As part of their experience, students will engage in debriefing and reflection about the unique aspects of rural nursing practice and the need to develop proficient nurse generalist skills in order to meet the complex needs of rural populations. Students will be exposed to the Worldview Intelligence Model so that they are equipped to lead inclusive conversations and build strength from differences.

In addition to encouraging intellectual exploration the Worldview Intelligence concept offers the potential for more comprehensive approaches and solutions to emerge on a spectrum of issues ranging from mildly oppositional to completely divisive to seemingly unsolvable (Nagel & Jourdain, 2019). The five principles of Worldview Intelligence are:

1. Each of us has a unique worldview (as does each organisation, community, system and culture)
2. Worldview Intelligence is a relational approach, recognising that individual and collective experiences are locally and socially constructed
3. The ability to hold and invite multiple perspectives (or worldviews) allows us to build strength from differences, to make better decisions and to make progress on issues that matter
4. It is in the intersections between worldviews where the greatest opportunities and innovations lie
5. Worldviews shift and change, and we can be intentional about how this process is invited.



## PRESENTATION OF PILOT


For the purposes of this project, students will receive instructions on the concepts behind the photovoice method including ethical considerations and the participant's use of camera or video to minimise risk to patients/clients (Garner, 2014; Leipert & Anderson, 2012). The specific goals of the photovoice project are to

- enable students to record and reflect on the rural culture experience and identify strengths and challenges in the rural environment,
- promote critical dialogue and knowledge about rural culture and health through large and small group discussion of photographs and videos.

## FUTURE COLLABORATION

Future work will adapt the CHASE model to accommodate the specific requirements of each organisation and/or country's individual needs and requirements. This work will ensure that the model will demonstrate strategic foresight, guide student learning and make a difference to the health of rural people, globally. These efforts will capture the changes achieved through the media, in written form, videography and photo image, and will be shared nationally and internationally. Further opportunities for publication will be available while engaging with the global contemporary worldview in alignment with the WHO and United Nations 17 Sustainable Development Goals, with collegial international multidisciplinary engagement including the International Rural Nurse Organisation and dissemination of findings.

In 2022 additional funding will be sought to establish an International Community Development Symposium hosted by Otago Polytechnic in Dunedin, New Zealand, and to bring together the international fellows aligned with this project. The aim will be to establish a Global Centre for Community Sustainable Resilience. One intention of this group will be to compile a book based on our community development work, data collection and analysis, as well as the impact of this work on community healthcare outcomes and reduction of health disparities.

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## NURSE LEARNERS' EDUCATIONAL INTERACTION WITH COMMUNITIES AS 'LIVING LABS' HAS PROVEN TO IMPACT POSITIVELY ON THE SUSTAINABILITY OF RURAL COMMUNITY HEALTH-CARE OUTCOMES

Laurie Mahoney and Jean Ross

### INTRODUCTION

Nurses are responsible for sustaining and improving a community's health. For this to occur it is vital that nurses' practice according to the principles of partnership with the community. As nurse educators, it is our responsibility to ensure that nurse learners have the opportunity to practice in the community. A solution-focused approach by the authors evolved during 2015–2017 through the development of the Community Health Assessment Sustainable Education (CHASE) (Ross, Crawley, & Mahoney, 2017) model – designed to provide clinical access and prepare learners to work with a “community as their client,” rather than the traditional model, where the individual is their client. The CHASE model comprises six phases and is based on the concept of the “living lab.” This model encourages nurse learners to develop a partnership with communities to identify their health needs with the aim of improving the health status of the relevant population group(s).

In this paper, we provide examples of interventions and resources developed by nurse learners and their impact on health outcomes with respect to identified population groups. The authors are lecturers in the Otago Polytechnic School of Nursing who supervise, guide and support their learners with these community projects. This paper reviews the impact of the community projects on both the students and the communities involved.

### BACKGROUND

The School of Nursing at Otago Polytechnic, Dunedin, New Zealand, is the institution where the authors facilitate nurse learners to partner with a rural community as their client. Community health assessments were introduced into the curriculum for the Bachelor of Nursing (BN) degree in 2009. In the first year of the BN, one aspect of the primary health-care experience is visiting older people and families in their homes. The purpose of this is to gain an understanding of “well health,” whereby learners gain an appreciation of how people maintain personal wellness. The learners interview these ‘clients’ about their health experiences and how they engage with their community and primary care agencies (both health and social agencies) to stay well, thereby gaining an understanding of how unmet health needs might be prevented as well as unnecessary admissions to secondary health services – for example, the hospital.

Alongside this experience, the learners gain an initial understanding of the concept of community-as-partner (Anderson & McFarlane, 2008). At this level, the students learn community assessment skills and processes by undertaking a ‘windshield and foot survey’ of the neighbourhood where their ‘client’ lives. This exposes learners to different communities, both geographical communities and communities of aggregate populations – for example, the

elderly, people with disabilities and families with pre-schoolers. Using these methods (windshield and foot surveys), learners work in teams (groups) to undertake a profile of a defined geographical location. They discover more about the community by collecting secondary data – for example, using the internet and identifying population statistics from sources such as Statistics New Zealand.

In the second year of the BN degree, learners experience clinical placements in the primary health-care setting with Registered Nurses. Since 2016, the BN Year 3 learners have been completing community projects for their primary health-care clinical placements. This group uses the skills they have already learnt about community profiling to assess community needs in their previous years of study. At this level, learners are using both primary and secondary data collection to describe the community and to identify health needs in the community. They extend their learning even further by incorporating health promotion models – for example, the Ottawa Charter – to develop strategies to reduce the health needs of the community (Ross et al., 2017). The process of developing the community profile, health needs assessment and health promotion resources has been described by the authors as the CHASE model (Ross et al., 2017). Because they are commonly referred to as “the Community Projects” by learners, they are referred to as community projects below.

## COMMUNITY PROJECTS

The academic year for Otago Polytechnic Bachelor of Nursing third-year learners extends from February to August. Approximately 110 learners are enrolled at third-year level each year and experience three clinical placements of 120 hours each (over a four-week period). One of these placements includes completing a team community project.

The 110 learners are split into four groups of around 30. Because the community projects are considered as clinical, learner nurses are supervised by a Registered Nurse (RN), with lecturers taking this role. Each group of 30 learners is divided into smaller groups and allocated to a lecturer.

Nurse learners advocate for the expressed health needs of their clients (community) by engaging with community resources (or the lack of resources) while being prepared to apply the principles of the Primary Health Care Strategy (Ministry of Health, 2001). For nurses to be effective in sustaining and improving the health of the identified aggregates (population groups) in their project, they need to practice according to the principles of partnership with the community and identify its health needs with the aim of improving the health status of the community.

When an entire community is the client, nurse learners require a model and tools with which to achieve change to improve health in ways that are meaningful and sustainable. The tools and models utilised must be flexible enough to enable them to explore individual community contexts, and sufficiently structured so that learners have a clear framework to follow and remain embedded within the Primary Health Care Strategy (Ministry of Health, 2001). Meaningful Primary Health Care practice designed to assess a rural community as a client, and to identify and respond to its health needs, requires a platform that prepares learners to integrate practical, ethical and research requirements, performed within an isolated professional landscape. Experiential learning provides learners with the opportunity to participate (to become immersed in the community, in the manner of a “living lab”) while transforming this experience into knowledge (Kolb, 1984).

Once on site, learners appreciate the reality of the rural context and experience the physicality of the community and its location, mapping resources with the aim of uncovering inequalities and listening to stories of resilience that are unique to each rural community. They are active in their own learning, intentionally strengthening their professional competence through reflection on their practice, applying theory and scaffolding frameworks that shape and extend their clinical experience. They are exposed to examples of solution-focused interventions, highlighting their positive impact on community health. In implementing such solutions, nurses work within a landscape of collaboration and partnership while conducting their own practice aimed at enhancing change and reducing health disparities. In this sense, collaboration fits well with the concept of the “living lab.”

## LIVING LABS

Living labs are spaces where educational institutions and health-care organisations collaborate at the macro level to enable innovation. Researchers participate at the meso level with communities where living lab activities take place in order to foster innovation. It is at the micro level that activities are undertaken to highlight the communities' assets, deficits and capabilities, with a view to harnessing innovation. According to Bergvall-Kåreborn et al., "[a] Living Lab is a user-centric innovation milieu built on every-day practice and research, with an approach that facilitates user influence in open and distributed innovation processes engaging all relevant partners in real-life contexts, aiming to create sustainable values" (Bergvall-Kåreborn, Eriksson, Ståhlbröst, & Svensson, n.d.).

Living labs combine and individualise different user-centred, co-created methodologies to best fit their purpose. The authors' work engages with this concept of living labs, together with the Community Health Assessment Sustainable Educational (CHASE) model (Ross, et al., 2017) to conduct community-facilitated research projects.

Living lab projects include assessment, planning and implementation and evaluate impacts on a community's health in ways that fit well with the CHASE model.

## THE CHASE MODEL

The CHASE model was introduced as a way to incorporate the living lab concept in planning each project and setting realistic goals; it consists of a pre-orientation session, an orientation session and six phases (Ross, et al., 2017). The authors emphasise the importance of access to clinical practice opportunities where nurse learners build trust, respect, integrity and partnership with rural community members, with the intention of creating opportunities for improved health. Nurse learners come to appreciate the reality of rural isolation and experience by physically visiting rural locations, mapping resources, uncovering inequities and listening to stories of resilience that are unique to each community.

Learners meet the requirements of the School of Nursing Ethics Committee (Category B) and work must gain research approval relating to ethical issues, safety of students and supervision by research lecturers. In addition, Kaitohutohu consultation is undertaken between local iwi and the supervising lecturers and is progressed throughout the duration of the project. Processes put in place to manage these ethical considerations need to take account the short time frame involved (four weeks) and the underlying nature of the partnership process, with all its unknown factors. Community needs are identified by the learners together with the community itself, and sustainable responses evolve through ongoing consultation.

## DISCUSSION

For the last three years (2017–2019), third-year primary care nursing students in the Bachelor of Nursing programme at Otago Polytechnic have been creating community profiles and needs assessments and delivering relevant health messages to (mainly) rural communities in the Otago, Southland and South Canterbury regions. (The first two regions fall within the Southern District Health Board, while the latter comes under the South Canterbury District Health Board.)

In undertaking these community projects, learners have applied the CHASE model (Ross, et al., 2017) which incorporates the Community-as-Partner model (Anderson & McFarlane, 2008). Both models guide learners in collecting primary and secondary data. From this data, they identify vulnerable population aggregates in the community and complete the associated needs analysis. The needs analysis then further guides the learners to identify more specific health needs. A literature review is completed about the specific health need identified by the learners in consultation with members of the community and Kaitohutohu. The learners then apply health promotion frameworks to develop a health message(s) designed for the specific needs of that community. In

preparing this paper; the authors have identified common themes relating to vulnerable groups and their health needs from the learners' clinical practice over the course of these three years, and highlight the approaches taken by some of the learners to the health promotion messages and resources developed.

In 2018, 18 teams completed projects; these were all rurally based, with the exception of one team which covered an urban area close to Dunedin. In 2019, 19 teams completed projects, with 12 being in rural areas of Southland and Otago and five in urban areas of Dunedin and Timaru.

Learners were placed into teams of between 3 and 12. The size of each team was dependent on the time allocated to the supervising lecturer and the geographical area that the learners were exploring. The larger teams completed profiles of areas with a larger population base. For teams larger than five learners, each team was split into smaller groups once the community profile and needs analysis were completed.

Health need	Population group(s)	Number of projects identifying health need
Physical health; Chronic Obstructive Pulmonary Disease, Diabetes	Rural population, Maori	2 1
Mental health	Men	2
Mental health	Children	5
Mental health	Farming/rural communities	3
Mental health	Youth	4
Mental health	General	1
Social isolation	Rural well elderly	4
Difficulty in accessing emergency treatment	Rural population	1
Family violence	Rural population	1
Tourism	Tourists	2
Access to oral health services	General rural population	2
Access to oral health services	Rural youth	1
Lack of access to mental health services	Rural communities	1
Access to health-care for older people	Rural elderly	1
Access to or knowledge of health-care – general	Rural population/men	6
Lack of sexual health services	Rural youth	1
Environmental health	Rural communities	1
Dementia care	Rural elderly	1
High alcohol intake	Rural youth	1
Sexual assaults	Women	1
Access to health-care	Rural children and mothers	1
Lack of access to midwifery care	Rural pregnant women	1
Access to after-hours care	Rural population	1
Road safety	Cyclists	1

Table 1. Health needs and vulnerable groups identified by nurse learners. Source: Authors.



Table 1 lists the health needs identified and the population groups considered as vulnerable. The vulnerable groups most commonly identified were men, youth, children and the elderly. Whole populations were also identified as being vulnerable, generally in regard to access to health services or a lack of knowledge of services available in their communities.

One of the major themes that came through the projects was mental health (in Table 1). More specifically, the learners identified rural men, youth, children and the elderly as being at risk of mental health issues. Mental health resources developed by learners included a variety of pamphlets and posters targeted at the general population and also to the identified at-risk groups. A range of other responses were produced including submissions to the Minister of Health and the Gore District Council, as well as 'novelty' resources including key rings, cold drink holders and others as identified in Table 2. A specific health promotion message and resource directed at improving the mental health of young male farmers is discussed below.

Mental health resource – format	Identified target audience or issue	Number of mental health resources developed
Pamphlet/brochure	General population	3
Pamphlet	Youth – HEADDS for professionals youth parents	1 1 1
Pamphlet	Men	1
Pamphlet on mindfulness	Teachers of children	1
Pamphlet	Social isolation	
Poster	Social isolation	2
Poster	Youth	3 (1 with 4 different designs/ messages)
Poster	Teachers of children	1
Book	Children 6-8 years of age	1
Submission	Social isolation – Minister of Health	1
Submission	Gore District Council re youth	
Letters to media (local newspapers)	Community members aged 15–64 years/advertisement	1 1
Stress ball + handout on mindfulness	Children – primary school	1
Magnet	Men	1
Parents		1
Bookmark	Children/youth	1 1
Drink cooler	Men	1

Table 2. Types of resources created by nurse learners and target audience(s) identified. Source: Authors.

## Improving the mental health of young male farmers

Table 2 highlights the variety of mental health resources developed by the nurse learners to improve the mental health of the target population(s). All of the resources developed, except for the two written submissions, were intended to be self-help or (non-pharmaceutical) information resources appropriate to the identified population group(s). The following excerpt – from the article by Ferris et al., published in full in the following paper in this issue of *Scope*, Rural – highlights the successful contribution that nurse learners can make to the health of rural communities and identified populations within them.

### Health promotion resource: The drink cooler

The literature suggests the need for male farmers to open up and engage in healthy conversations about how they feel and what is happening in their lives. Creating a health promotion resource which encourages rural Kiwi men, such as those in Gore, to be more open to conversation may begin to relieve stress, build camaraderie and reduce the impact of the talking stigma on farmers' mental health (World Health Organization, 1986).

A drink cooler with health promotion messages targeted at male farmers was therefore developed as part of this community health project (Figures 1 and 2). The phrase "crack open a cold one and crack on with the conversation" is printed on the side of the cooler to suggest that sharing a drink with mates is an opportunity to have a healthy conversation, thus challenging the stigma around opening up. The aim is to make having a drink a social lubricant for male farmers in order to reduce stigmatisation and improve their mental health. This small keepsake is not only practical, but can also be the icebreaker they need to "crack on" with their conversation. Phone numbers of existing help lines are printed on the drink cooler to refer users to available support services.



Figure 1. Drink cooler (front).

Source: Danielle Martin



Figure 2. Drink cooler (back).

Source: Danielle Martin

### Impact assessment

After producing 12 prototypes, which were placed in stores in the Gore community, contact was made by the founder of 'Will to Live', a mental health campaign for young farmers, who requested 200 additional coolers for the Balclutha section of the nationwide mental health forum. Three members of the project group travelled to this forum, where the project was acknowledged, and the drink coolers were very well received by attendees. A further order of 1000 was made to be distributed in future events across the nation.

The social impact of this resource is ongoing and is reaching more and more communities. This is evidence of its potential to raise awareness and encourage healthy conversations with the aim of improving the health and wellbeing of individuals and communities.

## FEEDBACK FROM LEARNERS

Routine course evaluation is sought from all learners at Otago Polytechnic, and although the response rate is low across the board for third year learners (approximately 40 percent of learners' complete course evaluations), the feedback related to this clinical placement has been improving over the last 2-3 years. Some learners struggle to relate the content of this clinical placement as direct nursing practice, reporting that they would prefer traditional hands on clinical experience. However, this response has lessened in 2019 with many learners responding that they appreciate the different set of skills gained. Below are some of the comments from learners:

Outcomes for learners:

- Developing a greater understanding of rural community health and health needs
- Developing a better understanding of the disparities between rural and urban health needs and access to health services
- Developing an understanding of the available services in small communities and learning to think broadly about who provides services and what services look like
- Learning to understand the use and benefits of health promotion and to consider how to meet the specific needs of specific population groups – e.g., learning to apply knowledge about how people learn and the appropriate media for learning including written, visual and electronic forms
- Learning where to access resources that are already available – e.g., through the internet
- Enabling learners to work in teams and be responsible for their own and their team-mates' learning
- Giving learners opportunities to develop and show their leadership, IT skills and creative abilities in a supportive environment, and to work collaboratively
- Allowing learners to develop confidence with interviewing skills
- Helping learners to develop research skills
- Giving learners an opportunity to gain confidence with their skills in presenting to large groups
- Broadening learners' thinking about primary health-care.

## FEEDBACK FROM COMMUNITIES

Impact analyses from community members/partners is ongoing, at the time of publication we can report on the following outcomes.

Outcomes for communities:

- Introducing Polytechnic nursing students to rural communities, who appreciate the interest the learners show in their community
- Providing communities with an opportunity to talk about the issues faced by the community
- Providing communities with resources that are specifically designed to meet the community's needs.
- Impact analyses will now take place as a component of the learners' clinical practice, and completed within a 2-3-month timeframe, as opposed to the original completion by the lecturers' 6-12 months post clinical placement.

## CONCLUSION

Through engaging with the 'living lab' concept and the use of the CHASE model, Otago Polytechnic's third-year nursing students have shown that they are proficient at identifying the health needs of groups in the population and creating appropriate resources that contain a health promotion message. The CHASE model has allowed nurse learners to partner with rural communities, 'the living lab,' in a meaningful way, addressing their health needs and incorporating different strategies and ways of thinking to achieve better outcomes for vulnerable population groups.

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## EVIDENCE-BASED HEALTH PROMOTION FOR YOUTH, FARMERS AND FAMILIES OF THE GORE COMMUNITY: A FOCUS ON MENTAL HEALTH AND FAMILY VIOLENCE

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Danielle Martin, Danni Ma and Jean Ross

### INTRODUCTION

Community health nursing takes a population-based view of health and well-being, viewing the entire community as a client (Francis, Chapman, Hoare, & Birks, 2013). To promote the health of a community is to empower the community both as a group and as individuals so that they have more control over, and improve, their health status (Patterson, 2007). This community health project involved a nursing assessment of the Gore community in Southland, New Zealand. Youth mental health, family violence and mental health in farmers were identified as specific health issues in the community. Following a review of evidence from the literature, health promotion resources were developed to target these health needs. An impact assessment of the project was carried out three months later, and evidence was found showing positive health and social impacts on Gore and the wider rural community.

### ETHICS APPROVAL

Category B ethical approval was granted through the Otago Polytechnic School of Nursing Ethics Committee for this project, and Māori representatives of the Otago Polytechnic Kaitohutohu Office were consulted throughout the process.

### GORE

Gore district is situated on the plains of the Southland region between Dunedin and Invercargill. It covers an area of 1251 km<sup>2</sup> and is divided into four electoral wards: Gore, Mataura, Waikaka and Waimumu/Kaiwera (Gore District Council, 2013a). The community health assessment focused on the Gore ward, comprising a town situated in the centre of Gore district surrounded by agricultural land.

### Community profile

The population of the Gore district is 12,033; 91 percent identify as European and 11 percent as Māori (Statistics New Zealand, 2013). Historically, the area was an important transit route for Māori, with the Mataura River being a significant food source (Beattie, 1962). European settlement from 1855, followed by the goldrush boom of the



Figure 1. Gore's "brown trout fishing capital of the world" statue.

Source: Gore District Council.

1860s, saw significant growth in the town of Gore, which continued to prosper until a downturn in agricultural production in the 1970s (Grant, 2008). In recent years, as Gore's working population moves towards retirement and the population is declining due to urban drift, concerns have been raised over the need to encourage growth in the district (Kelly, 2016; Newman, 2018).

Gore is a tight-knit, supportive rural community with evident pride in the town's heritage and a proactive approach to future planning. Farming is a major influence on the community's character; bringing with it a self-reliant attitude and a strong work ethic. The Gore District Council (2013b) describes the town's lifestyle as "rural city living," having the cultural and sporting advantages of a city and the values and benefits of rural living. These values are described by the council as an energetic and positive attitude, politeness, helpfulness, friendliness, transparency and consistency.

## Health needs

The Gore community is well-resourced in terms of health and social services. Despite this, our contact with representatives of these services identified a lack of youth mental health services within the community and a high prevalence of youth depression, anxiety and suicidality. Representatives of the education sector suggested that a lack of resilience in young people contributes to these mental health issues (Local professional, personal communication, April 3, 2019). The mental health of dairy farm labourers in the rural community was also raised as a concern as a result of their social isolation, lack of support and the "tough southern man" culture, which acts as a barrier to seeking help (Local professional, personal communication, April 3, 2019). Social and justice service representatives identified family violence as a significant threat to community well-being, with approximately 80 percent of all police callouts being family violence-related. The local women's refuge had received 350 presentations by people seeking help with family violence issues over the previous year (Local professional, personal communication, April 3, 2019).

Health promotion resources were developed to target these various health needs using the Ottawa Charter (World Health Organization, 1986) as a framework to enable people to have control over and improve their health. The following report provides an overview of the literature findings and the development of health promotion resources for youth mental health, family violence and farmer's mental health in Gore.

## HEALTH NEED: YOUTH MENTAL HEALTH

*Resilience in early adolescence and its impact on youth mental health and behaviour: Development of a health promotion resource for the youth of Gore*

### Introduction

The period from early childhood to adulthood is full of physical, social and emotional changes as well as unforeseen challenges and stressors. Without the ability to deal with these developments, such adjustments and confrontations can lead to negative youth mental health outcomes and anti-social behaviours such as substance abuse and gang involvement (Harris et al., 2015).

In Southland, 16.6 percent of youth identify as being depressed, and 19.2 percent experience mood or anxiety disorders (New Zealand Health Survey, 2018). According to a representative from Oranga Tamariki Gore, there has been an increase in presentations of youth experiencing mental health issues and associating with drugs, alcohol and gangs as a coping mechanism. According to Oranga Tamariki, this rise in youth mental health issues can be related to individuals' past traumatic experiences and their inability to cope with them in a healthy manner (Local professional, personal communication, April 3, 2019). Teachers spoken to within the Gore community reported that a significant proportion of children lacked resilience and experienced mental distress (Local professional, personal communication, April 3, 2019).

The Adolescent Health Research Group (2013) has identified an inability and resistance by youth to seek help when faced with distressing situations. While seeking help is a crucial skill and resource associated with resilience, only 22.2 percent of southern adolescents seek help with their emotional difficulties (Southern District Health Board, 2016). This suggests that many youth lack the ability and knowledge to overcome obstacles in a positive way. Furthermore, the Southern District, including Gore, lacks sufficient youth mental health services, making access to such services difficult (Southern District Health Board, 2016).

Adverse mental health outcomes in youth can thus potentially be credited to a lack of resilience developed in adolescence. Gluckman (2017) supports this analysis by acknowledging that the progression of youth mental health distresses and disorders is often linked to an underlying lack of resilience in the face of stressors or traumatic events. A person's youth mental health status often progresses into adulthood, which presents its own problems in the community. Mental illness during youth may result in individuals who lack the competencies necessary for typical social and educational attainment, which may in turn negatively influence their adult life, resulting in continuing mental health and social issues (Wickrama, Conger, & Abraham, 2005).

In Gore, there are limited mental health and addiction services available to cope with youth who are experiencing these illnesses and social disadvantages. The ward's limited services are not equipped to help these young people once they reach adulthood and continue to suffer with mental illness and anti-social behaviours. Health promotion resources addressing resilience which are targeted at adolescents may help to break the cycle of psychological distress extending from youth into adulthood.

### Literature review

There is a wealth of evidence-based literature that supports and recognises the potential for resilience-building activities in early adolescence with a view to decreasing negative mental health outcomes and anti-social behaviours in youth. Resilience is defined as the capacity to adapt to, overcome and manage stress and adversity (Lown, Lewith, Simon, & Peters, 2015). In relation to mental health, adolescents who develop resilience are able to cope with stress in a positive manner and are less likely to develop unhealthy social behaviours in their youth as a coping mechanism (Murphey, Barry, & Vaughn, 2013). Furthermore, Lee, Cheung and Kwong (2012) report that building resilience



at a young age is a major contributing factor to positive youth development, accompanied by enhanced skills in conflict resolution and problem solving and greater optimism. Such characteristics provide youth with the ability to overcome stressors in a positive manner; and not conform to anti-social behaviours. Conversely, a lack of resilience in youth has been associated with outcomes such as crime, poor educational performance and involvement in risky behaviours, which all contribute to poor mental health (Khanlou & Wray, 2014). These findings underline the importance of building early resilience strategies for youth in schools. It is also important to consider which age group should be targeted for the best outcomes and what activities are the most beneficial for the development of resilience.

When implementing resilience-building strategies, it is important to recognise the appropriate age to intervene in order to maximise the positive outcomes and benefits to youth mental health. Youth and early adulthood have been identified as the prime age group for the onset for mental health issues which, if left untreated, will carry on into adulthood (Zarobe & Bungay, 2017). Kessler et al. (2007) reviewed the literature on the most at-risk age group for the onset for mental disorders, concluding that almost half of all lifetime mental illnesses start in the mid-teens. Since the majority of mental health and substance abuse disorders begin during youth and early adulthood, investing in developing resilience early in the life course is a powerful health-promoting step with lifelong benefits (Khanlou & Wray, 2014). This evidence provided the rationale for directing the group's health promotion resources focusing on resilience towards children in early adolescence (10-14 years), with a view to preventing and minimising the negative health and social outcomes associated with youth (15-24 years) in the Gore community.

In order to develop resilience in early adolescence, an understanding of the most effective strategies and activities is important. Research reviewed by Condly (2006) has shown that extracurricular activities such as sport and art can have a positive effect on building resilience in schoolchildren. Involvement in extracurricular activities has been shown to increase student motivation and positive connections with the school, which in turn lessen anti-social behaviour and delinquency (Condly, 2006). Extracurricular activities are an excellent way to develop social and conflict resolution skills, which are not always available in the classroom (Downey, 2008).

According to Steiner, McQuivey, Pavelski, Pitts and Kraemer (2000), adolescents who played sport reported fewer mental health problems, indicating that participation in extracurricular sporting activities can contribute positively to mental, as well as physical, health. Participation in sport in early adolescence introduces young people to moral norms and values such as fairness and justice, which in turn encourages pro-social behaviours and reduces risky behaviours later in life (Johnson, 2015). Hall (2011) conducted a study into the connection between sport participation and overall perceived resilience in youth. He reported that participation in sport increased self-confidence and the ability to overcome setbacks. He concluded that these skills and learned resilience were transferable to individuals' everyday lives and protected against negative youth mental health outcomes and involvement in antisocial behaviours.

Art as a form of extracurricular activity includes dancing, singing, drama and visual arts, and has also been linked to the development of resilience in adolescence. Zarobe and Bungay (2017) found that participating in arts activities had a positive effect on self-confidence, self-esteem and relationship-building and encouraged a sense of belonging. These features are associated with the development of resilience, positive mental health and positive social behaviours. Art encourages critical and creative thinking and gives opportunities to freely express one's inner self, transforming internal struggles into an art form. Group art programmes in schools could potentially offer early adolescents a valuable form of support and enhance their ability to develop into well-rounded individuals, effectively functioning as a preventative service (Cohlic, Eys, & Lougheed, 2011).

### **Health promotion resources: Written submission and poster**

The literature reveals that extracurricular activities such as sport and the arts can teach resilience during early adolescence by focusing on students' strengths and building self-esteem. Schools can potentially play an important role in this process by encouraging student participation in these activities.

The local research undertaken by the group revealed that sporting and art facilities are largely accessible to adolescents in Gore. As a result, a written submission was prepared as part of this community health project and sent to the Gore District Council; it recommended the implementation of annual sport and art days in the community as a way of introducing these activities to local children and promoting their engagement in them.

In addition, a poster was developed as a health promotion resource for schools with the aim of encouraging children to recognise and acknowledge their feelings and experiences (Figures 2 and 3). It promotes the 'bounce back' strategy developed by Noble and McGrath (2005), which gives tips on how to overcome difficult experiences. The poster also included a list of IT applications and phonelines as a way of introducing external support services to the children. The poster is interactive and allows children to write their own list of who they can talk to, as well as list their personal strengths, with the aim of building positive self-esteem, a key element of resilience.

## Impact assessment

A follow-up discussion with the Gore District Council regarding our written submission was positive, with a representative suggesting that the health promotion resources may be a valuable component of future strategies in the community. The principal of a local school where the posters were distributed described them as having an immediate and ongoing positive impact for both students and teaching staff. Children were engaging in the flow chart and teachers were using the resource to provide additional support to students, as well as refer any identified issues to the principal. The principal anticipated that the health promotion resource would be particularly useful in assisting children through transitional phases of their life such as changing schools or year levels. These responses provide evidence of the project's positive impact in building resilience and improving mental health outcomes for the youth of Gore.

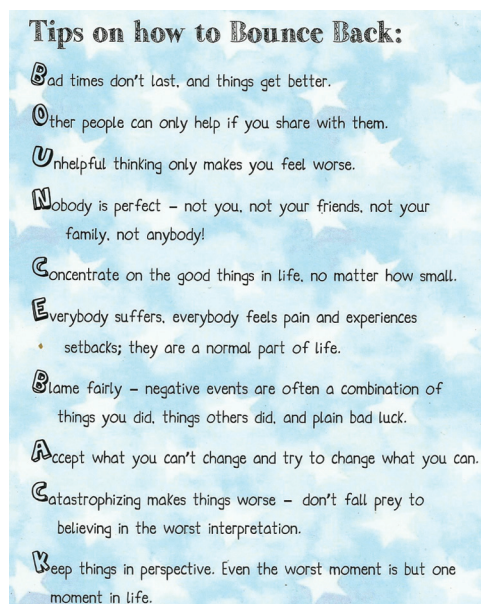


Figure 2. "Bounce back" acronym poster.  
Source: Noble and McGrath (2005).

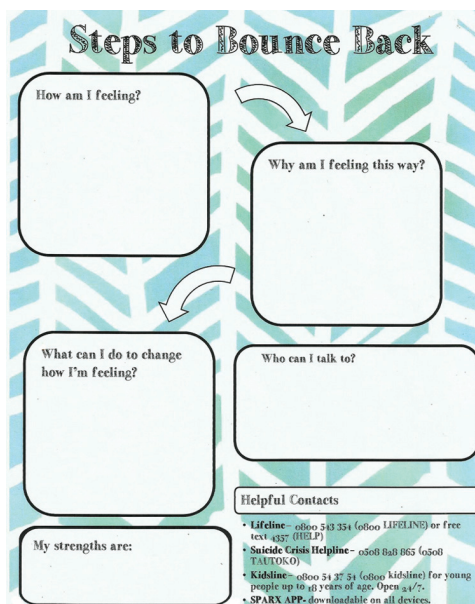


Figure 3. Steps to "Bounce back" interactive poster.  
Source: The authors.

## HEALTH NEED: FARMERS' MENTAL HEALTH

*Promoting farmer's mental health in Gore  
through support of healthy social interaction*

### Introduction

A high incidence of mental illness and suicide are significant health issues for male farmers worldwide (Roy, Tremblay, Oliffe, Jbilou, & Robertson, 2013). Gore is no exception to this trend, as highlighted by suicide rates among young farmers in the community (Local professional, personal communication, April 11, 2019). Farmers are exposed to risk factors such as environmental impacts, isolation and high levels of stress, as well as stigmas related to traditional understandings of masculinity. A review of the literature revealed the dominant contributing factors to mental illness in young farmers, which established an evidence base for development of a health promotion resource to address mental health issues among farmers in Gore.

### Factors contributing to mental illness in farmers

#### *Adverse environmental conditions*

Southland experiences less average sunshine hours and colder temperatures than the rest of New Zealand (Macara, 2013). A lack of sun exposure can contribute to depression due to reduced vitamin D synthesis (Farrington & Moller, 2013). Therefore, farmers in Gore are at a greater risk of vitamin D deficiency, which may impact on their mental health. Lack of sun exposure can also result in reduced production of the mood-boosting hormone serotonin, which is associated with a type of winter depression known as seasonal affective disorder (Nicol-Williams, 2018).

#### *Isolation*

Isolation is another factor which may contribute to mental illness among farm workers (Fraser et al., 2005). Agriculture is at the forefront of Gore's economy, and farmers make up a large proportion of the community (Gore District Council, 2019). The physical isolation of these farmers affects their mental health in numerous ways including limited access to healthcare services due to distance, inadequate transport and long working hours. As a result of these factors, it is suggested that farmers' mental health can deteriorate slowly and thus avoid being detected (Fraser et al., 2005).

Social isolation also affects farmers' mental health, as there are limited opportunities to express concerns and make connections with others. According to Kawachi and Berkman (2001), being socially connected is psychologically beneficial, while a lack of social networks and a minimal number of close relationships are associated with depressive symptoms. Personal isolation can occur when farm workers live alone. Gregoire (2002) found that a protective factor for men's mental health is being married or having a person they trust living at home. Having someone readily accessible to talk to can reduce the risk of developing a mental health problem. However, the research suggests that rural men can be unwilling to express their emotions due to cultural barriers (Macdonald, 2017).

#### *Attitudes and the masculinity stigma*

Getting support in rural communities can be difficult, particularly as support providers may be under-resourced and not easily accessible to isolated farm workers. This can escalate potential problems as, without an outlet, problems can escalate and become highly stressful (Health Promotion Agency, 2018). Because of this situation, it is all the more important to understand the positive consequences of sharing and expressing personal concerns. In New Zealand, and particularly in Southland, among many men there is a stigma associated with sharing thoughts and feelings, which is considered to be a weakness (Macdonald, 2017). As a result of this attitude, many rural men contain their thoughts and troubles, leading to an increase in anxiety and depression. Mackenzie, Gekoski and Knox (2007) found

that men were less open than women in acknowledging mental health problems and seeking professional help. Such findings are concerning and raise the question of how males can be encouraged to discuss and prioritise their own mental health.

Fear of stigmatisation is a significant barrier to people seeking help or speaking out (Corrigan, 2004). It diminishes self-esteem and reduces opportunities for social interaction (Hammer & Vogel, 2010). In a small community such as Gore, stigma can be heightened due to the concern that personal information can easily be shared and become known to everyone. For rural males living in the Southern region of New Zealand, there has traditionally been an expectation to portray the 'Southern Man' persona – an individual who is strong-minded, tough and capable (Jackson, Gee, & Scherer, 2009). The Southern Man portrays an older ideal of masculinity in which men must play sport, never drink cocktails, keep animals solely for work purposes and never share their thoughts and emotions (Jackson et al., 2009).

Our research therefore suggested that health promotion should be focused on challenging these attitudes, but also integrating them with alternative ideas which are relevant and acceptable to men. The aim was not to change rural men's attitudes to life, but to create an alternative pathway that would enhance their mental health.

### **Social interaction and talking therapy**

The literature suggests that, historically, beer has been an essential aspect of manhood in the Western world (Strate, 1992). Together with sport, beer-drinking has traditionally been the Southern Man's means of social interaction (Jackson et al., 2009). Engaging in social activity and maintaining social connections are important factors in maintaining psychological well-being (Kawachi & Berkman, 2001). We became aware that health promotion initiatives could incorporate these beneficial elements to help lower the incidence of mental illness and its associated stigma within the rural community of Gore, and to promote awareness and participation in self-care practices (Corrigan, 2004).

A current non-pharmacological intervention for mental illness is a process known as cognitive behavioural therapy (CBT). CBT is a talking therapy which engages the client's cognition in order to help change their attitudes and behaviours (Blenkiron, 2015). This therapy utilises the idea that cognition influences how people think, feel and behave. If people are able to change their cognitive processes through talk therapy, it can change how they see the world (Dozois, Dobson, & Rnic, 2019). Therapies such as CBT utilise the power of communication and the productiveness that accrues from engaging with others, strategies which may be useful for the male farmers of Gore.

### **Health promotion resource: The drink cooler**

The literature suggests the need for male farmers to open up and engage in healthy conversations about how they feel and what is happening in their lives. Creating a health promotion resource which encourages rural Kiwi men, such as those in Gore, to be more open to conversation may begin to relieve stress, build camaraderie and reduce the impact of the talking stigma on farmers' mental health (World Health Organization, 1986).

A drink cooler with health promotion messages targeted at male farmers was therefore developed as part of our community health project (Figures 4 and 5). The phrase "crack open a cold one and crack on with the conversation" is printed on the side of the cooler to suggest that sharing a drink with mates is an opportunity to have a healthy conversation, thus challenging the stigma around opening up. The aim is to make having a drink a social lubricant for male farmers in order to reduce stigmatisation and improve their mental health. This small keepsake is not only practical but can also be the icebreaker they need to "crack on" with their conversation. Phone numbers of existing help lines are printed on the drink cooler to refer users to available support services.



Figure 4. Drink cooler (front).

Source: The authors.



Figure 5. Drink cooler (back).

Source: The authors.

### Impact assessment

After producing 12 prototypes, which were placed in stores in the Gore community, contact was made by the founder of Will to Live, a mental health campaign for young men, who requested 200 additional coolers for the Balclutha section of the nationwide mental health forum. Three members of the project group travelled to this forum, where the project was acknowledged, and the drink coolers were very well received by attendees. A further order of 1000 was made to be distributed in future events across the nation. The social impact of this resource is ongoing and is reaching more and more communities. This is evidence of its potential to raise awareness and encourage healthy conversations with the aim of improving the health and wellbeing of individuals and communities.

### HEALTH NEED: FAMILY VIOLENCE

*Family violence prevention from a male perspective:  
development of health promotion resources for the community of Gore*

#### Introduction

The New Zealand Ministry of Justice (2019) defines family violence as "physical, sexual or psychological abuse against any person by someone with whom they have a close personal relationship. Psychological abuse includes economic and financial abuse, threats of violence, property damage and causing children to witness violence. Family violence includes intimate partner violence, elder abuse and neglect, abuse of a family member with disabilities and child abuse and neglect" (p. 1).

Family violence has been recognised as a health issue due to both the immediate and long-lasting harm it causes to individuals, families and communities (Ministry of Health, 2016). Among the health consequences to individuals described by the World Health Organization are acute physical injuries, chronic conditions, sexual and reproductive disorders, behavioural disorders, mental illness and death (Krug, Dahlberg, Mercy, Zwi, & Lozano, 2002). Family

functioning is impacted by violence as it disrupts the normal parent and child roles necessary for security, nurturing, learning and development (Garzon, 2017). The healthy functioning of families is important in order to produce effective members of society, illustrating how the detrimental effects of violence on family health also have far-reaching effects on society (Tsitsis, 2015). In a small rural town such as Gore, these effects are even more significant as they have the potential to impact a greater proportion of the community.

According to World Health Organization (2017) statistics, 35 percent of women worldwide have experienced family violence in their lifetime, most of which is intimate partner violence. In New Zealand, 55 percent of women report having experienced physical and/or sexual violence and psychological or emotional abuse (Ministry of Women's Affairs, 2013). Figures compiled by the New Zealand Family Violence Clearinghouse (2017) show that half of all homicides and more than half of all crime in New Zealand is related to family violence.

### **Rural context**

Rural areas are not exempt from these trends and in fact are more at risk of family violence – 39 percent of women in rural areas experience family violence compared to 33 percent of women in urban areas (Rural Women New Zealand, 2018).

The isolation characteristic of rural areas contributes to family violence, as the large distances between homes and the infrequent accessing of health services by rural dwellers makes detection difficult (Rural Women New Zealand, 2018). The self-described characteristics of rural culture in New Zealand are strength, hardiness and self-reliance (Bales, Winters, & Lee, 2006). As discussed earlier, and particularly for men in Southland, this often means that males must live up to the Southern Man persona, which portrays a strong masculinity and a disdain for appearing vulnerable (Jackson et al., 2009). This concept also normalises the dominance of men over women and stigmatises seeking help as weakness, thus acting as a barrier to addressing family violence.

The family violence statistics for the town of Gore reflect this situation. Between July 2018 and April 2019, Gore Women's Refuge received 350 presentations seeking help with family violence. Māori are over-represented in these figures, with 54 percent of all presentations coming from this ethnic group (Local professional, personal communication, April 3, 2019). Physical abuse remains the most common form of violence in Gore, although psychological abuse and financial abuse are also prevalent, as is the emotional/psychological abuse of children who witness family violence (Local professional, personal communication, April 11, 2019).

### **Nationwide strategy**

National government-funded campaigns addressing family violence have been implemented in New Zealand. "It's not OK" was launched in 2007 as a community-driven behaviour-change campaign aimed at reducing family violence. Since the campaign's launch, more New Zealanders have been seeking help and more people believe that they can help others to change (Family Violence: It's not OK, 2019).

### **Men as perpetrators**

The literature was reviewed to establish an evidence base for effective family violence prevention strategies aimed at men at risk of perpetration. Although not all family violence is gender-based, statistically men are more likely to be perpetrators, particularly in the case of intimate partner and sexual violence (New Zealand Family Violence Clearinghouse, 2017). Men's violence against women tends to be more severe and have more serious consequences (New Zealand Family Violence Clearinghouse, 2017). Therefore, the aim of the health promotion resources developed for this community health project was family violence prevention, with a focus on men.



## Barriers to accessing help in Gore

Although more people are beginning to discuss the issues that the Gore community faces around family violence, there are still likely to be many unreported cases and barriers preventing both victims and perpetrators from accessing help (Local professional, personal communication, April 11, 2019). The principle barriers to men asking for help are stigma, masculine ideology, social normalisation of violence (Local professional, personal communication, April 11, 2019) and a focus on men by the criminal justice system (Donovan & Griffiths, 2015). Communication with the Gore Women's Refuge representative revealed that additional barriers in the Gore community are isolation, infrequent contact with health services and minimal opportunities for healthy conversations due to long working hours (Local professional, personal communication, April 11, 2019). A lack of appropriate male role models may be another barrier to men accessing family violence services. In the town, male role-models have been recruited for a "champions" campaign aimed at family violence prevention, with both non-Māori and Māori men selected. However, a rise in the number of youth gangs in Gore has seen young males looking to older gang members or leaders as their role models; these are men who often perpetuate the macho masculine ideology discussed above (Local professional, personal communication, April 12, 2019).

## Literature review

A review of the literature on family violence prevention strategies (focused on men) revealed a diversity of family violence prevention programmes around the world. Viewing violence as a behaviour that could be prevented or deterred was a cornerstone of many of these strategies (Decker, Wilcox, Holliday, & Webster, 2018). Some programmes were primarily prevention-focused and aimed at high schools or colleges (Jaime et al., 2018), while others were aimed at individuals who were at risk of, or had engaged in, violent behaviours. The interventions reported by these studies include working with couples to improve relationship skills (Kalokhe et al., 2019); teaching self-regulation techniques (Wistow, Kelly, & Westmarland, 2017); stopping violence group education (Hayward, Steiner, & Sproule, 2007); and peer support groups (Casey, Leek, Tolman, Allen, & Carlson, 2017).

The following strategies were identified in the literature as effective and were taken into consideration during the development of a health promotion resource for family violence prevention in Gore:

- Positive role-modelling of non-violent behaviour (Jaime et al., 2018)
- Peer support groups (Roguski, 2015)
- Challenging masculine ideology (Gage & Lease, 2018)
- Focus on support and recovery rather than criminalisation and judgement of men (Donovan & Griffiths, 2015)
- Partnership with men and emphasis on values relevant to men (Casey et al., 2017)
- Promoting resilience through teaching problem-solving, stress management and emotional regulation (Kalokhe et al., 2019; Wistow et al., 2017)
- Teaching self-regulation and self-soothing techniques (Tollefson, Webb, Shumway, Block, & Nakamura, 2009)
- Improving communication and conflict management for couples (Kalokhe et al., 2019)

To achieve effective engagement with such prevention strategies, the barriers of masculine ideology, stigmatisation and isolation must also be addressed, particularly in a rural New Zealand community (Jackson et al., 2009; Rural Women New Zealand, 2018). A health promotion resource has the potential to challenge social norms and stigmas through education, language and imagery, while also raising awareness and encouraging healthy conversations (World Health Organization, 1986).



## Health promotion resources: Poster and keychain

Taking into consideration effective prevention strategies which have been utilised worldwide and those in use in New Zealand, as well as cultural and ethical considerations specific to the Gore community, a poster and keychain were developed as health promotion resources (Figures 6 and 7).

According to Boyko, Wathen and Kothari (2017), in order to effectively engage stakeholders and the wider public, violence prevention messages must be clear and consistent, derive from an evidence base and utilise evidence-informed strategies for communication aimed at specific groups. The poster was designed to contain minimal but hard-hitting information that is consistent and taken from recent and relevant literature. The language and imagery used incorporate male and Māori values, as well as values important to the community of Gore, making it relevant to its specific target groups.

The title on the poster is designed to attract the attention of men and encourage conversation while raising awareness of family violence and its effect on the community of Gore. The body of the text challenges masculine ideology and the stigma around it. The barrier caused by isolation is targeted by emphasising the importance of seeking support and a reference to “talking it out.” Use of the phrase “you are not alone” places the focus on support, making connections and challenging stigmas. The values of whānau and community are emphasised and Māori imagery is used in the form of a pair of koru, which represent origins, growth, strength and new life (Te Ahukaramū Charles Royal, 2005). The colours chosen for the poster create a simple, clear and powerful message without triggering stress in the reader (Przybyla, 2019).

A more interactive health promotion resource was designed to accompany the poster and act as a tool to promote ‘time out’ and self-regulating strategies. References in the literature to men “taking time out” to go for a drive (Hayward et al., 2007) led us to create a keychain with a traffic light image designed to communicate a ‘stop, think, share’ strategy to help de-escalate tense situations and promote support-seeking. Contact details for support services were listed on the back of the keychain.

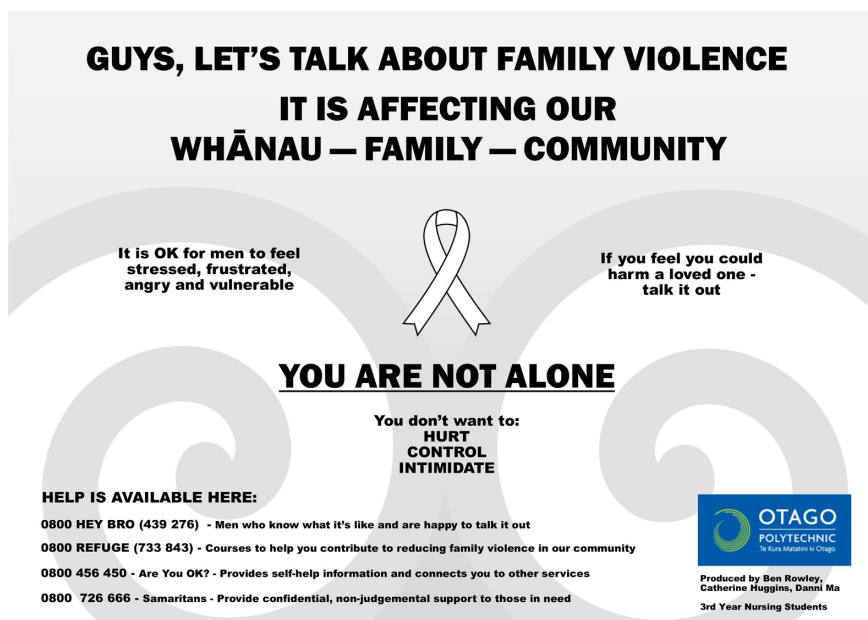


Figure 6. Family violence prevention poster.  
Source: The authors.

The support services listed on the poster and keychain are four confidential helplines which can be called by men in need of help related to family violence. 0800 HEY BRO is a 24/7 helpline staffed by men with lived experience of these issues who are available to talk with other men who are feeling at risk of harming a loved one (He Waka Tapu, 2018). 0800 REFUGE is the national crisis number for Women's Refuge, who provide advice and support as well as educational services which promote healthy, equal relationships (National Collective of Women's Refuges Inc., 2019). The "are you OK?" phonenumber is part of the "It's not OK" campaign and provides advice, support, risk assessment and safety planning to prevent offending and referral to local services (Family violence, it's not OK, personal communication, April 17, 2019). Samaritans are a charitable organisation offering 24/7 help through listening, encouraging and facilitating problem-solving for anyone requiring emotional support (Samaritans of Wellington Inc., 2018). Consent was obtained from these organisations for the use of their details on the health promotion resources.



Figure 7. Family violence prevention keychain.  
Source: The authors.

### Impact assessment

The poster and keychain were sent to Gore Women's Refuge and Oranga Tamariki, as they are both organisations with an interest in the project insofar as it is relevant to the health and social aspects of family violence. A follow-up discussion with these organisations revealed that the resources were well received by the community. Keychains were made available to community members visiting these two organisations and great interest was shown in them by healthcare and social service professionals, as well as by service users such as parents and whānau members. Feedback was positive regarding the messages conveyed by the resources. Importantly, representatives of Oranga Tamariki reported that they felt they provoked positive conversations about family violence.

### CONCLUSION

The community assessment revealed that Gore has the capacity and resources available to address the health issues identified in this community health assessment. Values integral to the community, such as positivity, transparency and consistency, will assist in developing effective solutions. The community health project was well received by representatives of the Gore community, including the Gore District Council, which has taken into consideration the health needs identified and proposed a follow-up discussion of the Council's planned strategies to address them. It is hoped that the health promotion resources created as a result of this community project will continue to benefit the people of Gore, encouraging constructive conversations and acting as a catalyst for effective, large-scale change which would see the health and well-being of the Gore community flourish.

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## ANALYSIS OF YOUTH MENTAL HEALTH AND SUSTAINABLE TOURISM IN OWAKA, RURAL OTAGO

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### INTRODUCTION

The primary healthcare setting is an essential area of nursing for the prevention of illness and promotion of health and well-being (World Health Organization, 2019). As part of our third-year studies towards a Bachelor of Nursing degree at the Otago Polytechnic, we participated in a group project which focused on health and well-being in the rural setting of Owaka in South Otago. We developed a community profile of Owaka through collecting primary and secondary information, and next identified vulnerable population groups in the community and relevant health needs. We then carried out a literature review of these identified areas of need and developed relevant health resources. Both these procedures are discussed below.

In part A we discuss the youth of Owaka as a vulnerable population group, and the impact that rural life can have on mental health. We identified that access to, and knowledge of, mental health services within the township is limited and was a health need that we could respond to. In part B we discuss the impact of tourism on the Owaka community and local Department of Conservation (DOC) workers as a vulnerable population group. More specifically, the community assessment allowed us to identify that the current toilet facilities in Owaka are unable to cope with the influx of tourists and the appropriate disposal of human waste. DOC employees are responsible for these facilities within the region and respond directly to any challenges as they occur. In each section, we will discuss the health-promoting interventions we have developed, which aim to reduce the negative impact of the health needs identified.

Ethical approval for this project was granted by the Otago Polytechnic Ethics Committee, including Maori consultation with the Kaitohutohu office.

### OWAKA

Owaka is located in the Catlins region, in the Clutha District of South Otago, New Zealand (see Figure 1). This area has a unique expanse of rugged coastline interspersed with diverse native bush, and is home to many different species of rare and endangered wildlife. The Catlins is considered to be of national importance due to the careful preservation of its distinctive natural environment, both in the past and the present (Department of Conservation [DOC], 2003a). The close connections between people and environment are interwoven throughout the history of both Māori and colonial peoples, who have lived and travelled through Owaka and the wider Catlins region. Today, this connection remains – for instance, through farming, which remains a leading industry in the region, and tourism, which has undergone significant development and growth over the past few decades (Catlins Coast Incorporated, 2019a).





## PART A: IDENTIFIED HEALTH NEED: YOUTH MENTAL HEALTH IN OWAKA

### Introduction

In the 2010 global burden of disease analysis, mental health disorders were established as the leading cause of disease burden for youth between the ages of ten and 24 (Gore et al., 2011). In the New Zealand context, youth are also significantly impacted by mental health issues, and have some of the highest rates of suicide found in developed countries (Mental Health Foundation, 2014). Furthermore, for New Zealand youth aged between 15 and 19, the numbers reporting episodes of psychological distress, [correct?] increased from 58,000 to 79,000 between 2016 and 2017 (Gatley, 2017). In the rural township of Owaka, adolescent mental health is recognised as an area of concern to the community. We undertook a detailed literature review of adolescent mental health and the influence of the rural environment. This enhanced our understanding of the issue and aided us in developing health-promoting resources in partnership with the Owaka community.

### Effects of adolescent mental health into adulthood

In contrast to chronic physical health issues, it is common for mental illnesses that begin, develop and are identified early in life to result in ongoing effects persisting across a person's lifespan (Copeland, Wolke, Shanahan, & Costello, 2015). Mental health issues experienced during adolescence can profoundly affect an individual's transition to adulthood and can negatively impact their social skills and interpersonal relationships, as well as their socioeconomic position, physical health, self-esteem and engagement in risk-taking behaviours (California Adolescent Health Collaborative, 2008; Maldonado, Huang, Chen, Kasen, Cohen, & Chen, 2013).

According to Johnson, Dupuis, Piche, Clayborne and Colman (2018), people who experience depression during their adolescent years are two and a half times more likely to experience depressive disorders during adulthood. They also identified a link between adolescent depression and anxiety in adulthood, and recognised that a comorbidity of mental health issues further compounded negative outcomes for individuals and increased the complexity of their condition. In relation to suicidality, Johnson et al. (2018) recognised that previous suicide ideation and attempts are a predictive factor for a recurrence later in life. Their findings agree with those of Goldman-Mellor, Caspi, Harrington, Hogan, Nada-Raja, Poulton and Moffitt (2014), who determined that suicide attempts at a young age lead to persistent mental health problems such as depression, substance dependence and persistent suicidality in midlife.

### Mental health in rural settings and barriers to accessing health services

Rural life involves distinctive occupational and lifestyle challenges, as well as unique barriers to accessing health services. Rural residents often have a strong sense of stoicism and staunchness and value independence and self-efficacy. When it comes to mental health, these attributes can contribute to an individual's resistance to engage with mental health services (Bayer New Zealand, 2018; Berry, Hogan, Owen, Rickwood, & Fragar, 2011; Clements, 2010; Gibb & Cunningham, 2018; Roy, Tremblay, Oliffe, Jbilou, & Robertson, as cited in Accident Compensation Corporation [ACC], 2014).

It has been shown that there is a level of mistrust towards mental health providers within rural settings which can prevent people from accessing these facilities (Aisbett, Boyd, Francis, Newnham, & Newnham, 2007; Brenes, Danhauer, Lyles, Hogan, & Miller, 2015). For example, Aisbett et al. (2007) identified that individuals were less inclined to engage with health services due to the concern that health professionals may not respect their confidentiality. Furthermore, mental health services within rural settings are often situated in visible public spaces, and this lack of anonymity can affect the willingness of individuals to seek help or engage in services, as some people may believe that they will be perceived negatively within their community for doing so. This perception can be heightened by the close-knit nature of rural communities, where residents often share others' personal information without their knowledge (Aisbett et al., 2007; Walker, 2012).

On a wider level, these issues are associated with the stigma often associated with mental health, on both the societal and personal levels (Aisbett et al., 2007). At the societal level, Aisbett et al. (2007) identified that within rural communities, individuals with mental illness may be perceived as a danger to the community and are best treated in mental health institutions. This stigma can impact on an individual's perception of their mental illness. Aisbett et al. (2007) also found that personal stigma can be another factor leading to reluctance to engage with mental health services.

Recent research by Whitehead, Shaver and Stephenson (2016) has identified similar links between the mental health stigma and help-seeking behaviours shown by individuals with mental illness. They identified that sufferers were less inclined to seek help due to fear of discrimination – a direct result of the stigma associated with mental health. Additionally, the prevalence of the stigma creates a further barrier for people needing to access mental health facilities, as negative attitudes to mental illness can result in additional stress. This stress can exacerbate a person's mental health status and lead to feelings of isolation which can create further reluctance to seek attention for their condition in the rural setting (Dinos, Stevens, Serfaty, Weich, & King, 2004).

In rural communities, isolation – geographical, physical and psychological – has been linked to high levels of negative mental health and barriers to accessing help. For example, isolation has been associated with increased rates of depression, anxiety, suicidal behaviour, psychosis and personality disorders (Wang, Lloyd-Evans, Giacco, Forsyth, Nebo, Mann, & Johnson, 2017). According to Walker (2012), psychological isolation is a self-imposed phenomenon, associated with a personal culture that values being strong and self-reliant and equates asking for help with weakness. Geographical isolation presents a significant barrier for individuals seeking to access mental health services (The Royal Australian and New Zealand College of Psychiatrists, n.d.). Aisbett et al. (2007) identified geographical isolation as the most prominent factor relating to service accessibility in rural settings, reflecting the lack of qualified mental health professionals and services available to rural residents. In Owaka, the closest mental health services are located 30.6 km distant in Balclutha, with more specialised mental health services located between 110 and 132 km away in Dunedin and Invercargill, respectively (see Figures 1 and 2). If transport is difficult to access, the possibility of accessing professional help in distant centres is limited.

Occupational and lifestyle challenges can contribute to mental health problems in rural communities. A recent New Zealand survey found that stress and anxiety are increasing in rural communities, linked to the significant and often unpredictable financial and environmental factors involving work and livelihood in country districts (Bayer New Zealand, 2018). These factors can lead to severe and long-lasting economic stress and in turn impact on the mental health of farmers and their families (The Royal Australian and New Zealand College of Psychiatrists, n.d.).

The behavioural and situational factors found in rural settings can have an especially adverse impact on the mental health of rural youth. Many young people in both rural and urban settings are beginning to experiment with substances such as recreational drugs and alcohol for the first time. However, rural youth have an increased likelihood of risk-taking behaviour with these substances (Health Promotion Agency, 2017). Moreover, there is a higher rate of youth suicide in rural settings, and rural youth are particularly susceptible to being negatively affected by friends and family members committing suicide or having poor mental health (New Zealand Herald, 2017).

### **Strategies for reducing mental health disparities in rural communities**

High rates of suicide and barriers such as service accessibility contribute to the complexities involved in targeting mental health strategies in rural settings. To this end, joint initiatives between the Ministry of Primary Industries and the Ministry of Health have been established. The Rural Health Alliance Aotearoa New Zealand [RHANZ] (2017) has devised a framework that aims to reduce disparities and provide equitable health and social services to people living in rural communities. Among the goals of the framework are:

- Developing community resilience and a community's capacity to respond to mental health issues and mental health services
- Providing culturally purposeful peer support programmes which reflect Māori frameworks of practice
- Providing psychiatric clinical leadership
- Expanding telehealth and online-based resources to supplement face-to-face service provision (RHANZ, 2017).

Community resilience is linked to increased levels of psychological well-being for individuals; within this context, resilience is measured by how the community adapts and utilises available resources (RAND Corporation, n.d). According to Mardsen, Ambrens and Ohl (2019), community participation – for instance, collaboration and collective action – can enhance mental well-being.

From a survey of the literature, it is clear that mental health interventions which are targeted at the adolescent population can be an effective strategy for minimising the impact of mental health issues in both the short and long term (Johnson et al., 2018; Maldonado et al., 2013; Patton et al., 2014). RHANZ (2017) recognised that online and telehealth resources can provide access to mental health services when barriers such as geographical location are present, and can empower individuals to engage with them through self-management (RHANZ, 2017).

## **Bringing it together**

Through our literature review, we have identified the issues involved in adolescent mental health, examined how the rural context impacts on this subject, and explored some frameworks appropriate to delivering health promotion messages in the rural context.

On this basis, we recognised the need for a resource to be developed that would improve mental health in adolescents in the rural setting. Such a resource would be aimed at eliminating the barriers associated with accessing mental health services. Existing frameworks and strategies were critically assessed with a view to generating ideas about what is available and where gaps exist.

## **Recommendations**

From the literature review and through the primary and secondary research conducted on the Owaka District, we formulated the following recommendations:

### ***1 — Improving youth mental health services in Owaka***

Young people in Owaka have reduced access to mental health services, as many are not of legal age to hold a New Zealand driver's licence, and there is no public transport to take people from Owaka to Balclutha-based health services. Unlike many urban schools, Owaka's one school has no onsite counsellor. In 2019, the school has no programme targeted to mental health – which we recognise as a specific area for improvement. Thus, considering the present gaps, we recommend that mental health services specific to youth need to be improved in Owaka.

### ***2 — Reducing barriers to mental health services***

The literature identified that gossip, social stigma and isolation are key barriers for rural communities in the management of mental health problems. Owaka is not immune to these barriers; the community profile analysis indicated that this is a close-knit population where "everyone knows everything," including residents' mental health issues. Currently, Owaka lacks even basic mental health promotion, almost making it a 'taboo' subject and further decreasing the likelihood that sufferers will reach out for help.

A resource promoting the importance of accessing help would work to de-stigmatise mental health problems, improving residents' engagement in health-seeking behaviours and challenging current beliefs about mental health, thus minimising these issues for youth. The resource will also provide information where help can be found that would counter the effects of isolation in this rural location, such as phone help lines and internet sites. Such resources would eliminate the need to visit a help service in person, where people may feel stigmatised and be subject to gossip. Instead, rural clients can access services anonymously, increasing their engagement with mental health services.

### 3 — Promoting awareness and access to available resources

Owaka has limited mental health resources, especially information about where to access help. This has the effect of limiting residents' autonomy and opportunities to improve their mental health. The resource will provide residents with information about how to access a variety of services, taking Owaka's isolated location into consideration.

#### The resource

After evaluating our primary and secondary research, literature review and recommendations, we developed a collection of mental health resources. These resources foster a youth-friendly and holistic approach and aim to raise awareness of and promote engagement with mental health services for young people in the township of Owaka. In developing our resources, we initiated further contact with the Catlins Area School to ensure that our material would reach our target population. Our resources included several components: a pamphlet, caregiver leaflet, fridge magnet, and a piece in the school newsletter. Taken together, we anticipated that these materials would combine to deliver essential information and improve access to mental health services in the rural context.

Figures 3 and 4–6 illustrate some of the resources we developed.



Figure 3. Youth mental health pamphlet (front).  
Source: April-Lily Sule, Claudia Unkovich-McNab,  
Gemma Heseltine, and Danielle Booth.

## PART B: IDENTIFIED HEALTH NEED: INCREASED TOURISM IN THE OWAKA TOWNSHIP AND THE OCCUPATIONAL HEALTH RISKS FOR DEPARTMENT OF CONSERVATION (DOC) EMPLOYEES

### Introduction

While conducting our research in Owaka, we identified insufficient infrastructure for tourists and the consequent health risks that this poses for the DOC employees. We noted that Owaka has limited facilities to manage the expanding tourist industry. Through our discussions with DOC employees in the region, we identified that tourists were using facilities incorrectly by defecating next to toilet facilities and smearing faecal matter along walls. This behaviour could pose a risk to the health and safety of DOC employees, who carry out the disposal of human waste. DOC employees explained that as a result of this problem, there was a need for them to receive vaccinations. Thus, we wanted to explore further the impact of increasing tourist numbers on Owaka township, and the occupational health risks that this poses for DOC employees. We conducted a literature review of the health issues faced by DOC employees in this situation. Specifically, we focused on the impact of tourism in New Zealand, the health impacts of managing waste generated by tourism, and current government strategies and plans which seek to respond to the expanding tourism industry.

### The impacts of tourists on New Zealand

Tourism in New Zealand is a growing industry, with over 3.8 million visitors entering the country each year (Weir, 2018). The tourism industry has significant impacts on the environment and health of the country. A study carried out in New Zealand of local attitudes to tourists by Lawson and Williams (2001) established that there were insufficient facilities for the numbers of visitors in some small townships, resulting in negative impacts on the environment. According to Bradley (2019), many New Zealanders believe that the expanding number of



Figure 4. Youth mental health pamphlet (back and centre).

Source: April-Lily Sule, Claudia Unkovich-McNab, Gemma Heseltine, and Danielle Booth.

tourists visiting the country is placing pressure on infrastructure, the environment and road safety (Bradley, 2019). Popular tourist destinations have reported increasing problems with human faeces and waste being deposited in inappropriate areas (New Zealand Herald, 2017).

### **The health impacts of exposure to faecal waste**

Increasing numbers of tourists pose a challenge to DOC employees in managing the environment (New Zealand Herald, 2017). Tourists defecating around toilets is becoming a pressing issue, which may partly be the result of different cultural customs. In Owaka, DOC staff have identified a particular issue with smearing of faecal matter along walls (New Zealand Herald, 2017; personal communication, April 4, 2019).

Raw sewage and faeces contains pathogenic organisms including bacteria, viruses and fungi, to which workers are exposed through skin contact, drinking or eating contaminated products, mucous membrane contamination and, more commonly, inhalation of aerosols (Arulmozhi, Leena Hebsi Bai, Pandia Rajan, & Dheenadayalan, 2018). A study conducted in India showed that hepatitis B was frequently contracted through the transmission of body fluid such as faeces, urine and blood. It recommended that all workers who risk exposure to sewage and faecal matter be vaccinated against hepatitis B (Tiwari, 2008). The same study identified abnormal respiratory function as a result of exposure to endotoxins and airborne bacteria (bioaerosols), with ventilatory capacity being significantly decreased compared to individuals who were not exposed to sewage and faecal matter. Following such exposure, there was also a higher chance of acute symptoms such as eye irritation, dyspnea and coughing developing, and the study found that long-term exposure to occupational toxins may lead to chronic changes in lung function. Many workers also contracted dermatitis resulting from contact with substances which they are handling or exposed to (Tiwari, 2008).

### **Tourism management in New Zealand**

A discussion by Tourism New Zealand of the 2015 tourism management plan for New Zealand highlights four approaches to managing the country's expanding tourist industry (Bowler, 2015). Two of these are applicable to Owaka – channelling channeling tourists into areas of the country where visitor numbers have traditionally been low, such as the Catlins; and minimising the impact of tourism on the environment and communities which are especially affected (Bowler, 2015). Although such strategies are already in place, the management of tourist waste has largely been overlooked and is still a work in progress. Clutha District Council is responsible for the management of waste disposal in Owaka. At the moment, they have nominated one day a week [correct?] for roadside collection (Clutha District Council, n.d.) Although this is efficient for the present, with increasing tourist numbers visiting these areas it is likely that waste management plans will have to be developed to ensure safe and healthy environments for locals, tourists and DOC workers alike.

### **Recommendations**

#### ***1. Increased government funding***

One solution we identified that would decrease the health risks to DOC employees is to increase government funding for infrastructure in Owaka that is suitable and sustainable. This would allow for improved facilities, with a view to reducing the amount of human waste on conservation walking tracks.

#### ***2. Improving waste management resources for tourists***

This option would help provide cleaner, safer environments for those using toilet facilities as well as for DOC employees who maintain them. Incorrect waste disposal can lead to an unhealthy and unsustainable environment, which in turn becomes an occupational health risk for DOC employees, tourists and the Owaka community.

### **3. Continued funding for vaccines**

We commend DOC-funded vaccinations for its employees, a measure that has already been implemented. Owaka DOC employees are vulnerable to occupational health risks due to their exposure to bodily substances. Protecting against infections and disease, vaccinations are therefore a cost-effective health investment. From an employer perspective, it lessens the risk of short staffing, which can further increase the risks to health and safety.

#### **Resource**

A submission has been sent to Hon. Eugenie Sage, Minister of Conservation, with the aim of raising awareness about increased numbers of tourists in the Owaka township and the occupational health risks of dealing with human waste for DOC employees.

### **CONCLUSION**

Throughout this community project, we have gathered both primary and secondary information relating to the Owaka community, enabling us to identify two key health needs of the district. The first was the lack of support for youth with respect to mental health issues. Combining this information with the findings from the literature review on youth mental health in rural areas, we developed three main recommendations for improving youth mental health services in Owaka. Next, we developed a health promotion resource which takes into consideration our target population, their whanau and the diverse ways in which people may want to seek help. Our resources – the magnet, pamphlet and caregiver information card – reflect our main health promotion message – that even in a small rural community, there are options for youth to access help if they are experiencing mental health issues. The resources we generated have been distributed to the Catlins Area School; this will ensure that our target population is reached.

Our group also identified a second health need, relating to the increase in tourism in the Owaka region and, in particular, the health risks which tourism poses to local Department of Conservation (DOC) employees. Our second literature review involved investigating the impacts of tourism, especially the health impact on DOC employees dealing with large volumes of human waste. In addition, we reviewed current tourism management strategies in New Zealand. The literature review allowed us to formulate recommendations that aim at improving DOC facilities, including providing educational resources about the correct disposal of waste and a continuing vaccination programme, goals to be achieved through additional funding. To express these concerns and to progress our aim of improving the health of DOC workers through better management of tourists, we wrote a submission that was forwarded to Hon. Eugenie Sage, Minister of Conservation.

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## MATAURA IN SOUTHLAND, NEW ZEALAND: A SUSTAINABLE PROJECT

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### INTRODUCTION

This report outlines the community assessment, health interventions and recommendations, along with an evaluation of the Mataura district, proposed by a group of Year 3 students from the School of Nursing at Otago Polytechnic over a four-week period in April 2019.

Mataura is a small settlement situated on the Mataura River on the eastern edge of the Southland Plain. According to the 2013 New Zealand census, the population of Mataura is 1509 (Statistics New Zealand, 2013). In Mataura, the most common ethnic group is European; the second most common group is Māori, with 29.6 percent of residents identifying as Māori (Statistics New Zealand, 2013). Historically, sheep, cattle and dairy farming have been practiced on the surrounding plains. Logging and timber mills once operated in the forested hills to the east. The Mataura River is internationally renowned for brown trout fly fishing (Grant, 2015).

Through visiting Mataura, conducting a foot survey and interviewing members of the community, some key health needs became apparent to the group. We discovered that the most at-risk population groups within the community are Māori, children and adolescents, shearers, immigrants and the elderly. The main health needs identified by community members were dental caries in children and psychosocial issues in adolescents. In order to address these issues, we developed a health promotion resource for each. To address dental caries in children, we created a health promotion poster, fridge magnets and a tooth-brushing chart. The key health message in our resource is the need to brush teeth twice a day, look after your smile and that baby teeth matter.

To address psychosocial issues in adolescents, we decided to focus on depression. We chose this issue as, in this age group, the signs and symptoms of depression are often not recognised (Thapar, Collishaw, Pine, & Thapar, 2012). We decided to make a health promotion poster and a bookmark that included signs, symptoms and resources



Figure 1. "Our people, our community."  
Image retrieved from <https://mataura.com>. Source: Authors.

focused on depression. The key message in this resource is the need to look after yourself; we wanted to give adolescents the information and tools to recognise if they were feeling low, what to do and where to seek help.

Category B ethical approval was granted through the Otago Polytechnic Ethics Committee, including Maori consultation with the Kaitohutohu office at Otago Polytechnic.

## Needs Analysis

Through research, consultation and a community assessment, we identified six groups within the community which are vulnerable to poor health: Māori, children, adolescents, shearers, immigrants and the elderly.

- According to the 2013 census, Māori make up 30 percent of Mātaura's population. Health inequalities experienced by Māori in New Zealand are greater than those for non- Māori. Māori have lower immunisation rates, a lower incidence of screening for health conditions, and less engagement in health services (Personal communication, April 3, 2019).
- Children are identified as a vulnerable group due to their age and reliance on adults (WHO, 2019c).
- Adolescents are a vulnerable group within this community, with psychosocial issues the main cause for concern. Problems include anxiety, depression, truancy and gang affiliation.

The most common reasons that the vulnerable groups identified failed to access appropriate healthcare in Mātaura were low socioeconomic status, mental health conditions, low health literacy, and a lack of services that are acceptable, accessible, affordable, appropriate and available.

## Identified health needs chosen to pursue

We chose two health issues to investigate that we heard spoken about most frequently:

- Dental caries among children
- Psychosocial issues among children aged 11–14.

Our project was based on the Ottawa Charter, enabling us to create resources to build healthy public policy, create supportive environments, strengthen community action, develop personal skills and promote health in order to prevent illness. Our aim was to ensure that local people could have access to education and resources that would facilitate, control and improve the oral health of children and manage depression among adolescents in the community (WHO, 2019a).

## HEALTH NEED 1 – ORAL HEALTH IN NEW ZEALAND

While on primary health placement doing a community assessment of Mātaura, we established through talking with health professionals that dental health was a major concern in the area, especially in relation to children. While dental care is free to all eligible children until they reach 18, there is still a high prevalence of poor oral health in New Zealand children (Everything New Zealand, 2019). Māori have higher rates of health inequalities in general, and oral health is no exception. In this literature review, we discuss the factors that contribute to poor oral health,



Figure 2. Mātaura, Southland.  
Image credit for figure 2. Mātaura, Southland. Image retrieved from <https://www.google.co.nz/maps/place/Mataura/@-44.1248942,168.4586918,6z/data=!4m5!3m4!1s0xa82cd15273a36cb5:0x500ef8684798c30!8m2!3d-46.1934288!4d168.8660155>.

the importance of a fluoridated drinking water supply, barriers to parents taking their children to the dentist for caries prevention and treatment, and why Māori have higher rates of poor oral health.

In 2018, there were more than 96,000 New Zealand children with overdue dental checks (New Zealand Herald, 2018). Dr Bill O'Connor, president of the New Zealand Dental Association (NZDA), spoke at the association's 2018 annual conference about the need to improve dental services in schools: "Children don't get to choose what they eat or drink, they don't choose to have rotten teeth and the pain and suffering that comes with that. "They don't choose to live in areas that are woefully unable to meet the treatment needs of their population ... ." (Martin, 2018, para. 8).

Dental caries is one of the most common preventable childhood diseases and is the major cause of poor oral health in children (Hunt et al., 2018). Caries is caused when bacteria in the mouth, present for prolonged periods, begins to 'eat away' at the teeth, leading to tooth decay (Colgate, n.d.). If there is no treatment, the cavities can progress beneath the tooth enamel and into the core layers of the tooth (Martin, 2018).

Early childhood caries disrupts the day-to-day lives of children, causing chronic pain, disrupted sleep, changes in eating patterns and altered growth (Hunt et al., 2018). Insufficient oral care, including not brushing teeth twice a day, can cause them to decay. Another main contributor to tooth decay are unhealthy eating habits, especially foods, drinks and sweets that are high in sugar. This creates the ideal breeding ground for bacteria to grow (Colgate, n.d.). According to Dentist Dr Rob Beaglehole, a spokesman for the NZDA, sugar is the leading factor in the development of tooth decay (NZDA, 2017).

The Ministry of Health has provided simple guidelines to prevent dental caries in children:

1. Ensure that teeth are brushed twice a day
2. Have regular dental check-ups
3. Limit sugary drinks and promote healthy snacks

It is well documented that Māori have higher rates of poor oral health in New Zealand (Stuart, Gilmour, Broadbent, & Robson, 2011). Factors identified as barriers to good oral health in the Māori population are smoking, alcohol use, sugary diets and frequent snacking and poor nutrition (Harris, Nicoll, Adair, & Pine, 2004). For this group, dental caries is a result of poor oral health habits such as not brushing teeth adequately or frequent use of a recommended fluoridated toothpaste, and failure to visit a dentist to maintain dental hygiene (Harris et al., 2004). Other social factors that influence dental health are lower socioeconomic status, lack of education and living in areas that lack a fluoridated water supply (Harris et al., 2004). Together, these factors contribute to the difficulties in developing effective preventative strategies to address inequalities in dental care.

In New Zealand, early childhood caries is the leading cause of chronic disease and hospital admissions for children (Bach & Manton, 2014). The consequences of chronic dental conditions in children are localised infections leading to facial cellulitis, pain leading to disrupted sleep patterns, behavioural problems and missing school (Broughton et al., 2013). Severe dental caries can also affect the growth and development of children under five (Bach et al., 2014). One tooth with decay that affects the nerve has been shown to reduce weight by 1 kilogram in preschool children (Schluter et al., 2016).

### **The importance of a fluoridated drinking water supply**

Fluoride is a mineral that occurs naturally in many places (Colgate, 2019). Fluoride is frequently added to drinking water supplies around the world to prevent tooth decay and dental caries in the local population (Colgate, 2019).

Fluoride prevents and reduces tooth decay and dental caries in a number of ways: it inhibits the demineralisation of tooth structure, promotes the remineralisation of tooth structure, inhibits bacterial plaque action and fortifies the

enamel of developing teeth – all of which strengthens teeth, making them much more resistant to caries (Hassan, 2018; Messina, 2016). For continued protection, children and adults need both systematic and topical fluoride application (Messina, 2016). Topical fluoride refers to fluoride toothpaste, while systematic fluoride is obtained through drinking water with added fluoride (Messina, 2016).

In some places, fluoridation of drinking water supplies has reduced the incidence of dental caries in children's developing teeth by as much as 60 percent (Messina, 2016). When fluoride is ingested with water, it is absorbed and then secreted in the saliva where it inhibits enamel demineralisation and prevents dental caries and tooth decay. A constant low level of fluoride in the mouth has been proven to benefit oral health and prevent the effects of plaque bacteria on the teeth (Royal Society of New Zealand, 2014).

Because New Zealand water supplies have low natural fluoride levels (Royal Society of New Zealand, 2014), fluoride is added to the water supply for oral health reasons. These levels of added fluoride are set on the basis of research and data derived from animal and human toxicology studies; the levels of fluoride in drinking water provide maximum benefits for oral health, with no adverse effects (Royal Society of New Zealand, 2014).

It appears that misinformation and fear of the effects of fluoride at high levels have made places like Southland wary of adding fluoride to the water supply. Even though the Ministry of Health has urged Southland towns to fluoridate their water, they have consistently refused to do so (McLeod, 2016). Unfortunately, this has created a health issue for preschoolers and young children in the province, whose oral health has been negatively influenced (Personal communication, April 3, 2019). Unfluoridated towns in Southland have a much greater incidence of tooth decay and dental caries than places with fluoridated water.

## **Barriers**

Oral health remains a neglected area in Mātaura. The situation is not helped by the various barriers to the delivery of oral health services to children living in rural locations (Personal communication, April 3, 2019).

## **Accessibility**

There is a lack of available services for certain groups in this rural area (Personal communication, April 3, 2019). A mobile dental clinic visits Mātaura for only six weeks each year to provide annual check-ups and dental treatment for children (Southern District Health Board, 2019). Apart from the mobile clinic, there is no dental service in Mātaura; parents and their children must arrange transport to Gore for dental appointments (Personal communication, April 3, 2019). There are geographical barriers – Gore is 12.3 km from Mātaura (Google, n.d.). Transport and time factors were reported as barriers for some whānau; they had difficulties in making appointments for their children, as the dental clinic was closed at weekends, which are usually their 'free' days to take their children to the clinic (Personal communication, April 3, 2019).

## **Acceptability**

Lack of culturally competent care and culturally safe service are likely to delay or prevent whānau seeking healthcare (Personal communication, April 3, 2019). Late diagnosis and too few interventions lead to oral health disparities in Māori (Stuart et al., 2011). Most oral health professionals are non-Māori and there is no Māori oral health initiative or Oranga Niho services in Southland (Personal communication, April 3, 2019). Language barriers and a lack of cultural awareness by healthcare professionals could hinder the development of Māori participation and partnership with whānau. In general, differing beliefs and cultural norms relating to dental care can contribute to poor access to dental care in small rural communities (National Health committee, 2003).

## Affordability

In New Zealand, a dental consultation fee is likely to be more expensive than a visit to a GP (Stuart et al., 2011). As most Mātaura residents have an income of \$30,000 or less, there is a financial barrier for dental services for some whānau and immigrant families (Statistics New Zealand, 2013). Although the dental service is publicly funded for children who meet the eligibility criteria (0 to 18 years), the cost of consultation fees and certain treatments – for example, orthodontic work (MOH, 2017) – and travel costs (due Mātaura's poor public transport system) can be a significant burden on families.

## Additional barriers

We noted a lack of awareness of the local services available. Since the immigrant population has increased in Mātaura, there are many parents with little knowledge of the New Zealand healthcare system and the services offered, leading to a low uptake of dental care among preschoolers in Mātaura, with many children missing or delaying dental care (Personal communication, April 3, 2019). Many parents who hold a work visa and have lived in New Zealand for more than two years are unaware that their children are eligible for the publicly funded dental health service (MOH, 2017).

Parents play an important role in their children's oral health, and their perceptions could delay or prevent them accessing dental care for their children. Parents who avoid visiting the dentist because of past negative experiences of pain, fear or dissatisfaction represent a further barrier to achieving dental care for their children (Gordon, Dionne, & Snyder, 1998). In addition, inadequate preparation for the first appointment could lead to fear and anxiety in children, which can delay them receiving appropriate care or lead to refusal of future dental appointments (Gordon, Dionne, & Snyder, 1998).

In conclusion, there are many factors that influence good oral hygiene and oral health. With the delivery of more inclusive oral health programs and resources through the primary and public health sectors, New Zealand will start to see better oral health outcomes for all citizens. Investigators have made strong recommendations to develop new models of oral health and how it is delivered in order to meet the needs of low-income Māori and non-Māori clients, and to make dental care much more accessible (Broughton et al., 2013). Another intervention involves encouraging, educating and supporting small communities to fluoridate their drinking water supply to ensure that all possible steps are taken to reduce the incidence of dental caries.

## Resources created for Health Need I

### Dental Caries

The team working on dental caries decided to create a poster, fridge magnet and teeth-brushing chart, to be displayed in schools, preschools and community hubs, to encourage children and parents to keep the issue relevant and part of community conversations. The poster includes both images and text. The fridge magnet was designed as a daily reminder of good oral health. The brushing chart is an incentive for children to brush their teeth twice daily and to have a visual aid that would help them to remember to do so.

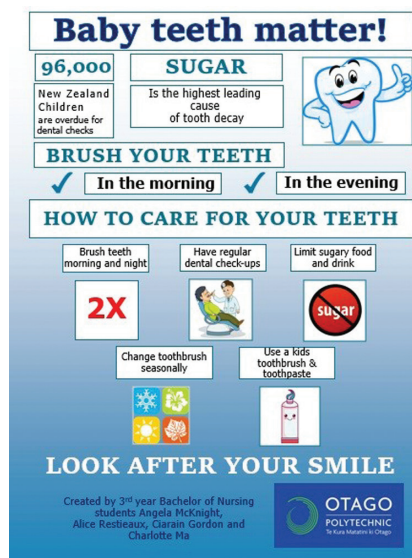


Figure 3. Children's oral health resource: Tick chart.  
Source: Authors.



**HEALTH NEED 2 – ADOLESCENT PSYCHOSOCIAL ISSUES: DEPRESSION**

A survey of youth mental health conducted in 2012 questioned 3 percent of students in secondary school education in New Zealand (Best Practice Journal, 2015); 38 percent of female students and 23 percent of male students said they felt depressed on occasion, with 16 percent of females and 9 percent of males experiencing symptoms that had an impact on their lives (Mental Health Foundation, 2014). Unfortunately, 20 percent of young people are likely to experience a mental health issue (Mental Health Foundation, 2014). Depression is not always due to reactions to circumstances; if sufferers experience depression or any symptom of depression for more than two weeks, this could suggest mental illness (MacGill, 2018).

The literature suggests that adolescence is a pivotal developmental period for establishing positive health practices and resiliency for adulthood. Health practices and patterns of behaviour begun in adolescence can significantly impact the health and well-being of a person over the course of their lifetime and, conversely, unaddressed health concerns or unhealthy behaviours can contribute to the trajectory of long-term conditions in adulthood (Weber, Puskar, & Ren, 2010; Curtis, Waters, & Brindis, 2010).

**Causes**

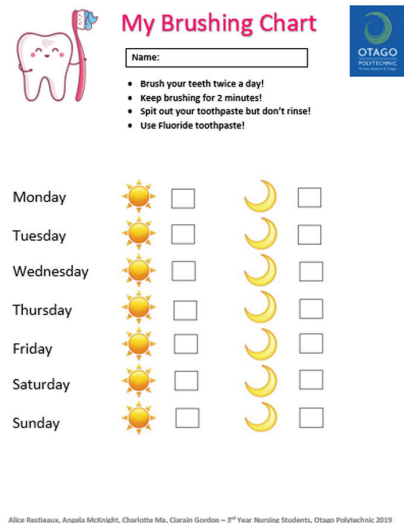
The triggers for depression include genetics and family history, trauma, isolation, stress and the side effects of some medication. If a sibling or parent has depression, then a person has a 20–30 percent higher risk of depression, rather than the 10 percent incidence in the rest of the population (Levinson, n.d.; Psych Guides, n.d.). A traumatising event that has caused emotional turmoil can lead to a person shutting off, causing isolation which can make their depression worse (Psych Guides, n.d.), in addition to stress, which can cause emotional and mental exhaustion (Psych Guides, n.d.). Some medications have side effects that include depression; these can be reversed if the medication is stopped (Psych Guides, n.d.).

**Contributing factors to depression in rural adolescents**

A person's mental health is shaped by the social, economic and physical environments present at different stages of life. Social inequalities are heavily associated with many



Figure 4. Children's oral health resource: Poster.  
Source: Authors.



Alice Reddix, Angela McKnight, Charlotte Ma, Clarain Gordon – 3<sup>rd</sup> Year Nursing Students, Otago Polytechnic 2019

Figure 5. Children's oral health resource: Fridge magnet.  
Source: Authors.

common mental health disorders – the greater the inequality, the higher the risk. The social determinants of mental health include the conditions in which people are born, work and live, as well as age and access to healthcare. These factors are in turn shaped by a set of broad external forces: state social and environmental policies, politics and economics (Allen, Balfour, Bell, & Marmot, 2014).

The World Health Organisation has identified some important factors that influence a person's risk of suffering mental disorders, factors that also present opportunities for intervening to reduce risk. For adolescents, these factors are:

- Life course
- Parents, families and households
- Community
- Local services
- National-level factors (World Health Organisation, 2014)

### Short-term effects

- Lethargy
- Fatigue
- Hypersomnia
- Insomnia
- Weight loss and loss of appetite (Psych Guides, n.d.)
- Sleeping issues (Best Practice Journal, 2015)

### Long-term effects

- Malnutrition
- Obesity
- Decrease in short-term memory (due to the struggle to focus)
- Possibility of suicide (over 66 percent of suicides are linked to depression; Psych Guides, n.d.).
- Social isolation

The rural environment presents a unique and potentially challenging context for adolescent health. Statistically, rural people experience greater poverty and achieve lower levels of education than urban populations (Weber et al., 2010). Rural settings may also present barriers to healthcare for adolescents including isolation, insufficient financial resources and concerns over confidentiality within a small community setting (Curtis et al., 2010).

Rural communities are often close-knit; while this provides a support system for residents, it may also function as a barrier to reaching out for help. These communities can also be highly integrated, meaning that people who are different or new arrivals may be isolated (Byrne, 2017). Isolation, which often correlates with loneliness, has a significant impact on mental health; there is evidence that loneliness is a predictor of depressive symptoms (Bohny, 2018).

Isolation is a significant problem in rural communities, as a consequence of their physical location and the limited services available within the community. Opportunities for treatment, recreation, health education and social inclusion can be difficult to find, circumstances which significantly impact the well-being of the community (Byrne, 2017). In rural areas, the structure and location of the community and the relationships between its members can have a significant impact on the mental health of residents and work as barriers to seeking help.

## Mental health services and initiatives

In rural New Zealand, there are often very few support services for youth with depression. In Matarua, counselling and peer support groups are provided by the pastor of the local church; there is nothing else (Personal communication, April 3, 2019). Mental health support and access to services is lacking in many areas of New Zealand, particularly in rural areas (The Royal Australian and New Zealand College of Psychiatrists, n.d).

The recommendations of the Inquiry into Mental Health and Addiction, set up by the New Zealand government, were made in a document called *Te Ara Oranga*. Expanding access to and choice of services is the main recommendation of the report (Mental Health and Addiction Inquiry, 2019). Expanding access includes:

- agreeing to significantly increase access to publicly funded mental health and addiction services for people with mild to moderate and moderate to severe mental health and addiction needs
- setting a new target for access to mental health and addiction services that covers the full spectrum of need
- agreeing that access to mental health and addiction services should be based on need, so that access to all services is broad-based and prioritised according to those needs
- ensuring that people with the highest needs continue to be the priority (Mental Health and Addiction Inquiry, 2019).

The Youth Mental Health Project initiated by the Ministry of Health (2018) includes several funded initiatives aimed at improving the mental health of youth in New Zealand. These initiatives include maintaining and expanding funding for school-based health services to decile 3 secondary schools, as well as expanding HEADSSS (Home, education/employment, activities, drugs/alcohol, sexuality, suicide/depression, safety) wellness checks in schools and primary care settings (Ministry of Health, 2018e). The Ministry is also focused on increasing funding to extend the current primary mental health service to all youth in the 12-19 age group and their families. The Ministry also runs a funded youth mentor service and funded mental health workshop days, which train participants to recognise and respond effectively to youth experiencing mental ill health (Ministry of Health, 2018e). A review of the literature and services available to address youth mental health in New Zealand has also produced some nursing recommendations.

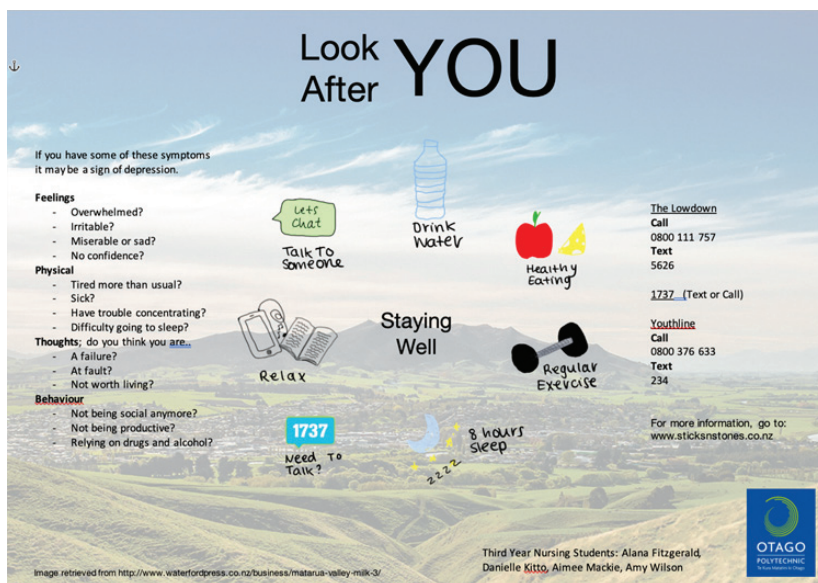


Figure 6. Youth mental health resource: Poster.  
Source: Authors.

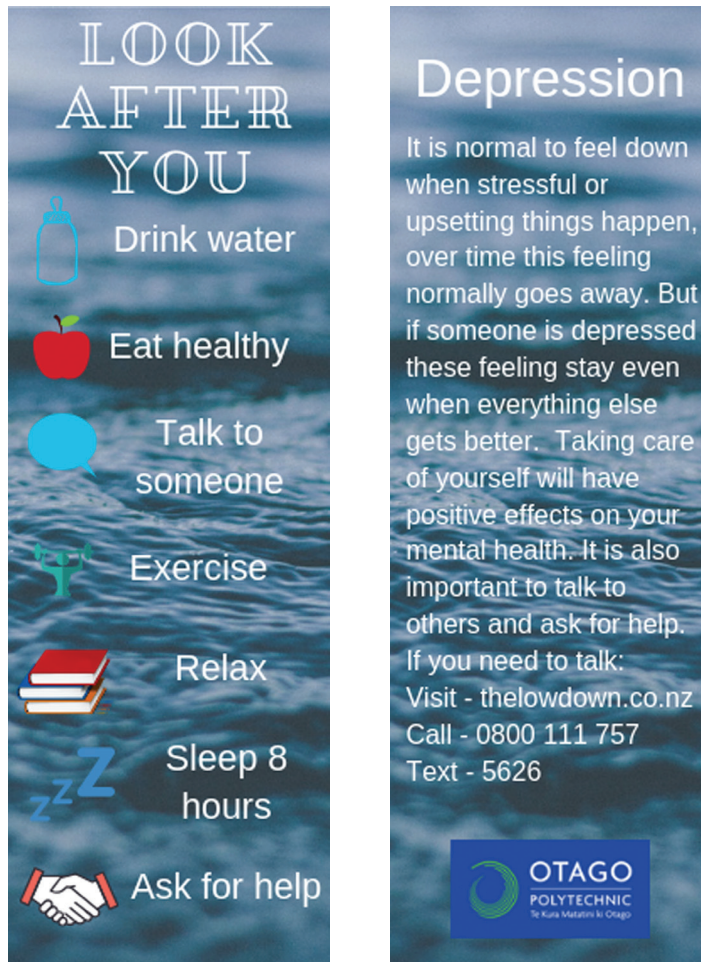


Figure 7. Youth mental health resource: Bookmark.  
Source: Authors.

## Resources created for Health Need 2

### *Adolescent Depression*

The team working on adolescent depression created a bookmark and a poster. We originally wanted to create a website or a Facebook page, but found this was inappropriate due to the limited access to technology enjoyed by some members of the community. The poster contains information about the signs and symptoms of mental illness and how young people can look after themselves, presented in seven simple steps. It also includes a list of 24/7 support, with numbers to call or text when professional intervention is sought. The second resource we created was a bookmark for young people to take home, a condensed version of the poster.

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## STORIES OF NURSING IN RURAL AOTEAROA: A LANDSCAPE OF CARE

Angeline Bushy

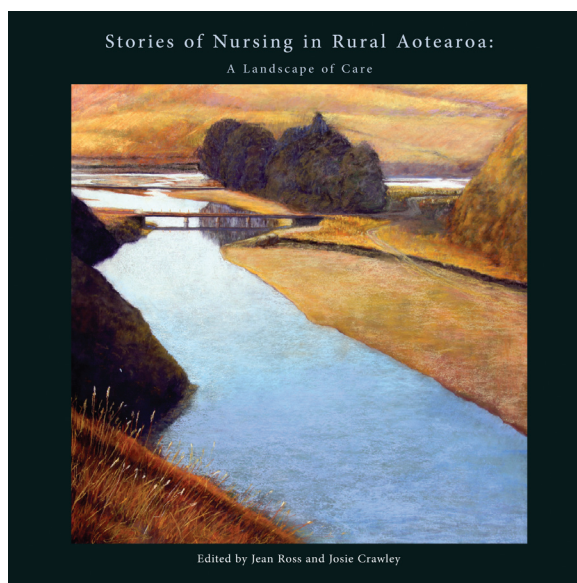


Figure 1. J. Ross and J. Crawley (Eds.). (2018). *Stories of nursing in rural Aotearoa: A landscape of care*. Dunedin, New Zealand: Rural Health Opportunities.

*Stories of nursing in rural Aotearoa: A landscape of care*, edited by Jean Ross and Josie Crawley, makes an exceptional contribution to the international rural nursing literature. The textbook is cogently organised, with a preface that presents an overview of the content. The colourful graphics, coupled with personal stories from nurses who live and work in rural and remote New Zealand, offer an exceptional sense of their love for their communities. For one who is not a New Zealand native, the book is much like a travelogue, enticing me to visit this down-under nation. Several unique features are included in this textbook. Especially appealing for each of the chapters is the inclusion of a regional map with scenic photos that feature a particular region of New Zealand. The historical overview at the beginning of a chapter, along with indigenous terminology, folklore and poetry, provides a rich cultural perspective relative to various rural and remote New Zealand regions. The featured rural nurses' stories, including their photos and personal stories, expand the scholarly and professional dimensions of this textbook. The nurses' stories are engaging, interesting to read and expand on the concept of 'place.' The inclusion of numerous footnotes is another useful feature, especially for someone who is not familiar with New Zealand's health-care system. Rather than interrupting a chapter narrative with extensive details, the footnotes expand on relevant historical background and cultural nuances. The authors of *Stories of nursing in rural Aotearoa: A landscape of care* have made an important contribution to the New Zealand nursing literature and the international rural nursing scholarly community.



**Dr. Angeline Bushy** has published and presented widely and is nationally and internationally recognized for her expertise related to rural health and nursing issues. She holds the position of Professor and Bert Fish Eminent Chair at the University of Central Florida College of Nursing.

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## SOLACE IN 'PLACE'

Josie Crawley

Ancient spirits, time  
and clear water shape craggy peaks,  
tumble rock to carve smooth shores,  
soothing sharp edges of loss  
to peaceful curves, glinting silver:  
Perspective lost, then found  
in the blue depths of the mountain's shadow.  
Air so honest it burns. Yet here I can breathe  
under a bruised and purple sky.



Figure 1. Wanaka Reflection.  
Source: Author.

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