

Journal Pre-proof

The delivery of Primary Health Care in remote communities: A Grounded Theory study of the perspective of nurses

Dr Kylie McCullough , Professor Lisa Whitehead ,
Associate Professor Sara Bayes , Professor Anne Williams ,
Associate Professor Vicki Cope

PII: S0020-7489(19)30281-0
DOI: <https://doi.org/10.1016/j.ijnurstu.2019.103474>
Reference: NS 103474



To appear in: *International Journal of Nursing Studies*

Received date: 10 May 2019
Revised date: 3 September 2019
Accepted date: 4 November 2019

Please cite this article as: Dr Kylie McCullough , Professor Lisa Whitehead , Associate Professor Sara Bayes , Professor Anne Williams , Associate Professor Vicki Cope , The delivery of Primary Health Care in remote communities: A Grounded Theory study of the perspective of nurses, *International Journal of Nursing Studies* (2019), doi: <https://doi.org/10.1016/j.ijnurstu.2019.103474>

This is a PDF file of an article that has undergone enhancements after acceptance, such as the addition of a cover page and metadata, and formatting for readability, but it is not yet the definitive version of record. This version will undergo additional copyediting, typesetting and review before it is published in its final form, but we are providing this version to give early visibility of the article. Please note that, during the production process, errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

© 2019 Published by Elsevier Ltd.

Title: The delivery of Primary Health Care in remote communities: A Grounded Theory study of the perspective of nurses

Corresponding Author: **Dr Kylie McCullough**, ¹

School of Nursing and Midwifery ¹,

Edith Cowan University,

270 Joondalup Drive

Joondalup WA6027

Australia

k.mccullough@ecu.edu.au

Professor Lisa Whitehead ^{1,2}

l.whitehead@ecu.edu.au

University of Otago ²

Centre for Postgraduate Nursing Studies

Associate Professor Sara Bayes ¹

s.bayes@ecu.edu.au

Professor Anne Williams ^{1,3,4}

Discipline of Nursing ³

College of Science, Health, Engineering and Education

Murdoch University

90 South Street,

Murdoch, WA 6150

anne.williams@murdoch.edu.au

Centre for Nursing Research ⁴

Sir Charles Gairdner Hospital

Hospital Avenue,

Nedlands, Perth WA6009

Associate Professor Vicki Cope ³

V.Cope@murdoch.edu.au

Abstract

Background

Australia has vast areas of desert, wilderness and tropical islands where nurses provide the majority of health care services. The residents of Australia's remote communities generally have poorer health status than their metropolitan counterparts. Despite recognition of Primary Health Care as a comprehensive model of acute and preventative care well suited to areas of high health and social need, there is little known about how nurses employ the Primary Health Care model in practice.

Objectives

This study described and explained from the perspective of nurses, the actions and interactions involved in the delivery of Primary Health Care in remote communities.

Design

This study was conducted from a Constructivist Grounded Theory perspective.

Settings

The setting was community health centres or Aboriginal Medical Services located in 'remote' or 'very remote' areas. Communities with inpatient health services were excluded.

Participants

Twenty four Nurse Practitioners, Registered Nurses and nursing academics participated. Participants had worked or were working, in a variety of remote communities across Australia. Length of service ranged from three months to over 15 years nursing in remote areas.

Methods

Data were collected through 23 telephone interviews and an expert reference group. Theoretical sampling and constant comparative analysis were used to reach theoretical saturation.

Results

The core issue participants faced was the *inability to provide Primary Health Care*. Four conditions impacted on the core issue: *understanding the social world of the remote community, availability of resources, clinical knowledge and skill and, shared understanding and support*. The process of *doing the best you can with what you have*, emerged as the way participants dealt with the inability to provide Primary Health Care. The process involved four primary activities: facilitating access to health care, continually learning, seeking understanding, and home-making in a work environment. The outcome of this process was considered to be *making compromises to provide Primary Health Care*.

Conclusions

This study describes the substantive theory: making compromises to provide Primary Health care services in the remote Australian setting. Understanding the process of making compromises could direct employers and educators in their efforts to improve the provision of Primary Health Care in a variety of settings. Increased attention to the education, resources and support of nurses is likely to increase access to safe, quality care for remote communities.

Keywords

Advanced Practice Nursing, Community Nursing, Constructivist Grounded Theory, Health Promotion, Indigenous Health, Nurse Practitioners, Primary Health Care, Primary Care, Remote Area Nurse,

What is already known about the topic?

- Implementation of Primary Health Care models is a priority for many governments because of the potential to arrest increasing health care costs through health promotion and the principles of social justice.
- Residents of Australian remote communities experience significant health disparities when compared to other Australians. Remote Area Nurses have a broad scope of practice with a high degree of General Practitioner substitution.
- The remote area nursing workforce experiences high levels of stress which contributes to difficulty in recruiting and retaining nurses in these advanced practice roles. The high turnover of nurses has implications for quality and safety of patient care.

What this paper adds

- There are currently no published models of Remote Area nursing practice. The model presented in this paper: *Making compromises to provide Primary Health Care* provides a theoretical basis for understanding the complex nature of nursing care within the remote and isolated community setting.
- This study is the first to link the experiences of Remote Area Nurses in providing Primary Health Care services to job satisfaction and quality of patient care.
- The advanced nursing practice of Remote Areas Nurses may be considered an example of Primary Health Care in practice and as such provide guidance on education, resource needs and support required in implementing the Primary Health Care model.

Introduction

Primary Health Care is an essential component of health systems and the social and economic development of communities (World Health Organisation, 1978). Globally, Primary Health Care is particularly important in rural and remote areas where access to health services is limited and populations are more susceptible to health and social disadvantage (World Health Organisation & United Nations Children's Fund, 2018).

Approximately 85% of Australia is considered to be 'remote' (Commonwealth of Australia, 2012). Remote communities are characterised by limited resources and distance from goods and services. However, every remote community is unique in both its social capital and its health needs (Smith, 2016). Some communities serve tourist populations, some are hubs for farming communities, others provide services for mining operations, and many function as focal points for Aboriginal and Torres Strait Islander peoples living on traditional lands (Coyle et al., 2010). The populations in each of the 1212 remote communities in Australia range from 150 to approximately 5000 residents (Smith, 2016).

The type and availability of health services varies depending on the size of the population and their health needs. Typically, medical and allied health specialists visit intermittently with on-site care provided by small teams of Registered Nurses and sometimes resident General Practitioners and Aboriginal Health Practitioners.

Health services also include an on-call service outside of normal business hours. These services are usually provided by a Registered Nurse through an initial triage assessment by telephone, with follow-up at the clinic if necessary. The absence of ambulance services means that nurses also provide emergency response and patient transport over a vast geographical area. Patients requiring on-going observation, hospital-level treatment or care that is outside of the scope of practice of the nurse are transferred via road, boat or air to the nearest hospital. Nurses often have to manage complex clinical and social situations on their own for several hours until additional help arrives.

Registered Nurses working in remote areas, are often referred to as Remote Area Nurses. They require a generalist scope of practice to manage emergency and acute presentations, maternity and child health, palliative care, health promotion, screening and chronic disease management skills (Mills et al., 2010). There is a high degree of medical practitioner substitution, cross-cultural communication and personal and professional isolation all within a resource-poor environment (Cramer, 2006, Dowd and Johnson, 1995, Smith, 2007). Registered Nurses working in remote areas often have experience working in emergency departments and complete short courses and post-graduate qualifications that support the autonomous scope of practice required. However, there are no formal requirements for training beyond the status of Registered Nurse. Nurses may undertake

professional credentialing as a Remote Area Nurse through the Council of Remote Area Nurses but this process is voluntary and is not formally recognised by Australia's nursing regulatory body.

Existing studies concerning Remote Area Nurses have focused on workforce issues such as recruitment, retention, stress and violence (Lenthall et al., 2018, Lenthall et al., 2011, McCullough et al., 2012, McCullough et al., 2012, Opie et al., 2011). Canadian studies of outpost nurses have identified similar issues to those affecting Remote Area Nurses in Australia (DiCenso et al., 2007, Donald et al., 2010, MacLeod et al., 1998, MacLeod et al., 2004, MacLeod et al., 2017, Penz et al., 2008). The absence of an evidence-based framework for understanding how nurses incorporate Primary Health Care principles into their work within a community setting, along with a lack of knowledge about the complex, generalist nature of remote area nursing, inspired this study.

Therefore the aim of this study was to develop a substantive theory on the nature and process used by nurses to deliver Primary Health Care in remote Australian contexts. A model that describes nursing practice in this context is necessary as a basis for further research and understanding of the advanced-practice nature of nursing in remote areas. Remote Area Nurses in Australia live and work with communities who experience significant health and social disparity and the autonomous nature of working alone, or in very small teams, a great distance from tertiary health services, makes their practice unique and contributions to health outcomes particularly valuable. This study's results may guide improvements in education and resource support for nurses working in resource-poor settings which in turn may improve health outcomes for residents of remote communities. Furthermore, this study sheds light on how nurses apply the principles of Primary Health Care to their work which has global relevance given the increased emphasis on Primary Health Care as a strategy to improve health.

Methods

Study design

A constructivist Grounded Theory approach was used (Charmaz, 2014) and additional guidance was provided by other prominent authors in the field (Birks and Mills, 2015, Corbin and Strauss, 2015).

Grounded Theory is based on the principles of Symbolic Interactionism with the purpose of explaining phenomena (Charmaz, 2014). Grounded Theory methods enabled the development of the following substantive theory of nursing practice which explains the practice of nurses in this previously undescribed setting. The perspective of nurses was considered pertinent as they were best positioned to explain their actions and interactions within their work setting. A detailed description of the methods is available elsewhere (Author name withheld, 2018).

Research team

This study was conducted as partial fulfilment of the first author's (level of study withheld) studies. The first author had previously worked as a Remote Area Nurse and had a total of 23 years nursing experience in a variety of nursing settings. The remaining authors contributed to the academic supervision of the study. A constructivist approach to Grounded Theory was appropriate due to the previous knowledge and experience of the chief investigator. Reflexivity was achieved through the use of a methodological journal (Charmaz, 2014).

Sample and setting

The setting for this study was Australian community health centres or Aboriginal Medical Services, colloquially referred to as 'nursing posts' or 'community health clinics', located in the areas classified as 'remote' or 'very remote' as defined by the Australian Bureau of Statistics (Australian Bureau of Statistics, 2003).

Participants were initially recruited from a remote Nurse Practitioner interest group as they were considered to be experts in the remote nursing practice setting. Further participants were recruited according to the principles of theoretical sampling (McCrae and Pursell, 2016) using a snowball approach to find participants with the necessary expertise to facilitate theoretical sampling principles.

The total number of participants in this study was 24. This total comprised of 13 Nurse Practitioners , seven Remote Area Nurses and four nursing academics with experience in Remote Area Nursing who attended an expert reference group. Twenty participants were female and four were male. The ages of participants ranged from 25-67 years with an average age of 49 years. One participant identified as Aboriginal.

All interview participants were employed in roles relating to the remote context at the time of interview. Participants' primary location of remote experience was: Northern Territory ($n=14$), Western Australia ($n=6$), Queensland ($n=2$), and Indian Ocean Territories ($n=2$). Participants had worked or were working, in a variety of communities, both Indigenous and non-Indigenous and reflected on their experiences in remote area nursing as a whole, rather than in relation to one particular community.

Participants had varying degrees of experience working as a nurse in remote areas (3 months -15 years). The total number of years of nursing experience in any setting ranged from 2–50 years (average 25 years). Years of experience of being a Nurse Practitioner ranged from 1–10, with half of the Nurse Practitioner participants having worked as Nurse Practitioners for less than three years. Eleven of the 24 nurses held midwifery qualifications.

Participants also had a wide range of post-graduate qualifications and areas of expertise. Many had Masters degrees ($n=16$) as their highest level qualification, two of the expert reference group held PhD qualifications and several had specifically studied Remote Health Practice ($n=10$). Theoretical sampling prompted the recruitment of nurses who currently held 'specialist' remote area positions in areas such as Chronic disease, Mental health, and Women's and Children's health this meant the perspective of preventative health care and education was included. Other participants were employed in 'generalist' positions wherein they were required to attend to acute, chronic and preventative health care. These nurses were also required to participate in regular on-call duties after business hours and over the weekend. A summary of participant demographic information is presented in Table 1.

| Item | Response | n |
|---|--|----|
| Gender | Female | 20 |
| | Male | 4 |
| Age | 20-29 | 2 |
| | 30-39 | 2 |
| | 40-49 | 8 |
| | 50-59 | 6 |
| | 60+ | 6 |
| Current state of residence | Northern Territory | 14 |
| | Western Australia | 6 |
| | Queensland | 2 |
| | Indian Ocean Territories | 2 |
| Highest Nursing Qualifications | Registered Nurse | 7 |
| | Nurse Practitioner | 13 |
| | Other Master's degree (excl. NP qualification) | 3 |
| | PhD | 2 |
| Midwifery qualifications | Registered Midwife | 11 |
| Years working as a nurse in Australian remote areas | Less than 5 | 8 |
| | 5-10 | 4 |
| | More than 10 | 12 |

Table 1: participant demographic profile

Data collection

Telephone interviews of 45 minutes to 2 hours duration, conducted by the first author occurred between April 2014 and July 2015.

An interview guide with broad open-ended questions explored the participants' experiences of nursing in a remote setting. Interviews were audiotaped and transcribed verbatim. Field notes were created during and at the conclusion of the interviews.

An expert reference group, consisting of remote area nurses and nurse academics, was convened in October 2014. Five participants evaluated the emergent categories for evidence of fit with the participant's experience, applicability of the findings, the properties, dimensions and contextualisation of concepts, the logical flow of ideas, the depth and variation of the findings, and the creativity and sensitivity of the researcher's interpretations (Corbin & Strauss, 2008). Final data collection, in the form of field notes, occurred in October 2017, with presentation of the emergent theory at a national remote area nursing conference.

Data analysis

Data were analysed using memos and diagrams as well as open, focused and theoretical coding methods applied (Charmaz, 2014). Coding was conducted by the first author with input from all authors of this paper. Constant comparison between interviews directed the collection of the new data, (Charmaz, 2006; Corbin & Strauss, 2008). Theoretical saturation was reached when new data did not provide any new theoretical insights, properties or dimensions of categories (Charmaz, 2006). Raw data are used to illustrate the findings below and pseudonyms are ascribed to participants to protect their identity.

Trustworthiness

Trustworthiness was achieved according to criteria described by Charmaz, (2014). Of particular value was the opportunity to present the emergent theory at a conference for Remote Area Nurses in order to assess resonance and theoretical saturation. A large poster displaying the overall theory and description of categories facilitated discussion between delegates and the first author, who then considered feedback and suggestions for gaps that required further investigation.

Ethical considerations

Approval to conduct the study was provided by the Edith Cowan University Human Research Ethics Committee, protocol number: 10810. All participants signed 'informed consent' forms and participant anonymity was maintained.

Results

The substantive theory that emerged from this study, was named *making compromises to provide Primary Health Care in a remote setting*. Figure 1 displays the context, core issue, process and outcome of the theory. Each of these elements, along with the categories that constitute each element are described sequentially below.

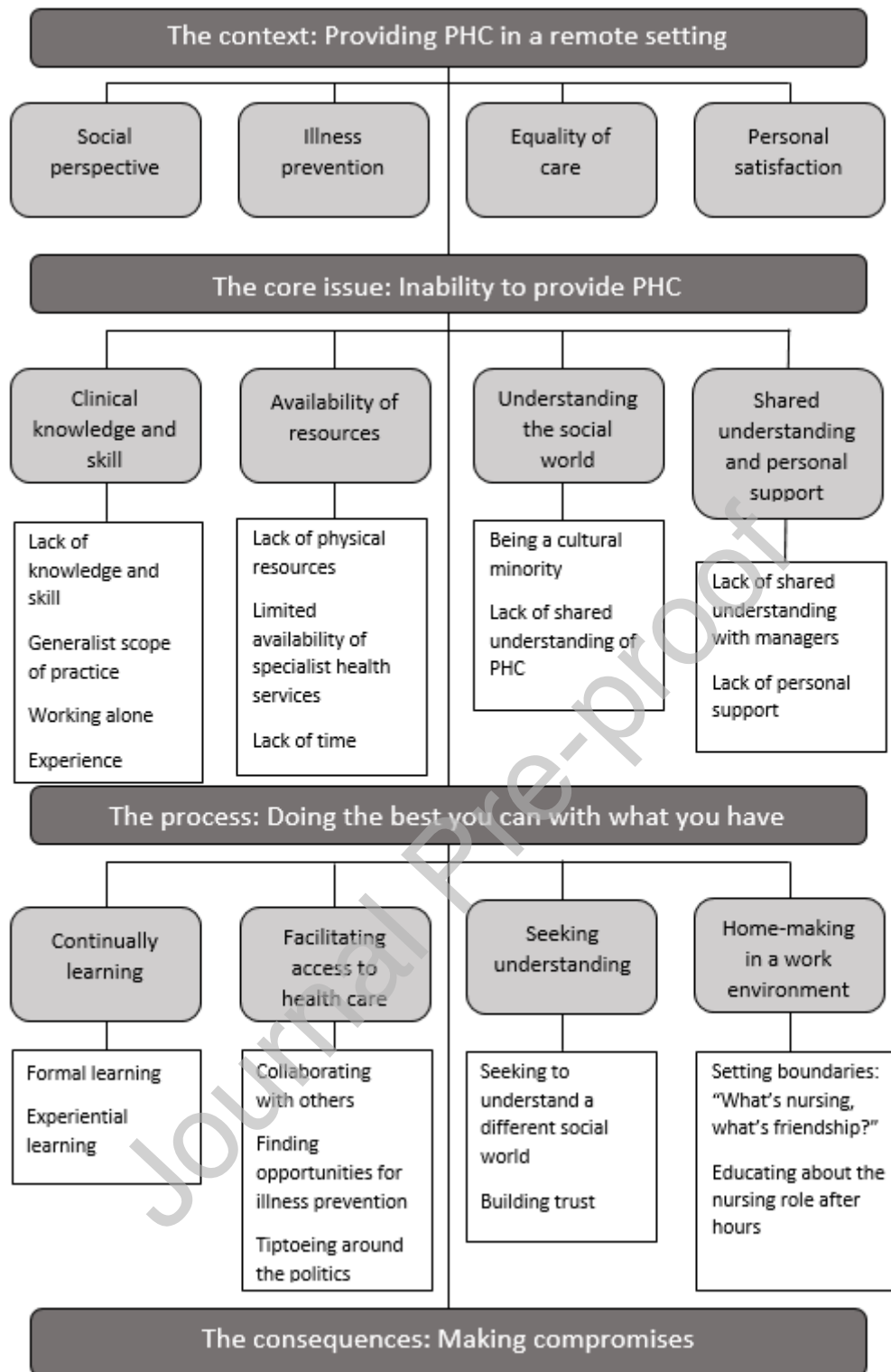


Figure 1: The substantive theory: making compromises to provide PHC

The context: providing PHC

Providing PHC was described by nurses as caring for the community as well as individuals, with a focus on preventing ill health and aiming for equality in access to health services despite the resource-poor remote setting. As described by one nurse, "... I very much look at the patient and

how they fit within the social determinants of health and what ... their complete health needs are, not just what their medical health needs are”(NP3). Similarly, another participant emphasised the importance of understanding a person’s social environment and support network:

“... I think you need to know what’s happening for them outside the clinic in their lives, you know, are they working? Are they caring for anybody? ... What level of support ... have they got out there? ... Where they see themselves and where they fit in the community and sense of pride and all that sort of stuff ... I think that’s important” (RAN4).

Nurses were motivated by a desire to make a difference in the lives of community members and providing Primary Health Care was described as ‘satisfying’; “I loved being able to give holistic care ... that you got to know the patient well and the disease from their view” (NP3). Nurses in this study described providing Primary Health Care as ‘quality’ care.

The core issue: inability to provide PHC

However, the core issue for these nurses was the *inability to provide Primary Health Care*, as evidenced by their feelings of distress and frustration. These feelings were expressed in terms of compromised care, “... I think it’s foundational; it’s all a compromise! ... you can’t do what you would like to do” (NP14). Similarly, being unable to provide PHC resulted in compromises to the quality of care, “... and that’s where I do think the care falls down the cracks” (NP14).

The inability to provide PHC was dependent on four conditions: the level of *clinical knowledge and skill*, the *availability of resources*; their *understanding of the social world*, and *shared understanding and personal support*. These variables applied to different degrees in different patient interactions and between different nurses in different communities. Therefore, they were considered variables that impact on the core issue that is; the greater the clinical knowledge and skill, the greater the availability of resources, the deeper the understanding of the social world and the more shared understanding and support; the greater the likelihood of being able to provide quality Primary Health Care and achieve job satisfaction.

Clinical knowledge and skill

The degree of clinical knowledge and skill of the individual nurse affected the ability to provide quality care in the remote setting. Even experienced nurses from an urban hospital setting felt uncomfortable with their scope of practice when they arrived in a remote community because Primary Health Care required different clinical skills such as immunisations, emergency roadside management of trauma, management of chronic disease and common illness and injury across the lifespan. In addition, they needed skills in cross-cultural communication, community development and health promotion. Further, working alone and the responsibility of working autonomously

increased the need for greater clinical knowledge and skill than is necessary in most other nursing settings.

The need to extend practice beyond the 'normal' scope of nurses was evident in the comparison with general medical practitioner practice, "It is really like being a General Practitioner, a Remote Area Nurse really has to have a fairly solid grounding in a lot of the things that General Practitioners do" (NP12). Despite an apparent lack of knowledge and skill in all of the necessary clinical areas, nurses had to provide care because there were simply no alternative practitioners available. For example, one Remote Area Nurse recalled attending a woman in labour without feeling adept to do so thus, "... I was the only one there [at the birth] ... I didn't have any knowledge at all except for what is in the CARPA [clinical procedures] manual" (RAN7). Individual nursing practice was described as changing over time: "I had to change the way I did everything ... a whole pile of things gradually changed my practice completely" (NP8) and the uniqueness of the context was evident in statements such as: "... you take away all your usual parameters and start again" (NP12). The lack of individual clinical knowledge and skill was exacerbated due to the resource-poor setting.

Availability of resources

Providing Primary Health Care with limited physical resources (often in terms of money or equipment) was evident. By way of example, the following participant described arriving at the clinic where she:

"... had to cobble together four blood pressure cuffs to get one that would actually work,... there was no ECG [electrocardiograph] machine there was no, nothing really, there was no way of monitoring a patient. I didn't have the most simple things like dressings ... I had come from state of the art ... and I thought, '*expletive*', are we still in Australia? What happened here?!" (NP8).

Furthermore, the paucity of human resources available in remote communities had a significant impact on the nurse's ability to provide Primary Health Care, "... [there's a] lack of time to do it [Primary Health Care] effectively" (RAN4) and this resulted on the prioritisation of acute and emergency care, "We often feel like we're not delivering Primary Health Care at the clinic because you don't have time to ... through the busyness and the amount of illness" (RAN1).

In addition to the lack of clinical knowledge and skill in a resource-poor setting, a lack of understanding of the unique social world of remote communities also contributed to the inability to provide Primary Health Care.

Understanding the social world

It was apparent that on arrival, nurses felt unprepared for what they would experience when working in a remote community. For example, RAN1 said, "... there's this world that I've been

exposed to that I wasn't prepared for". Furthermore, nurses perceived that there would always be a lack of shared understanding because the context was culturally a different world:

"I don't know that a white fella like me could ever understand the worldview of [an Aboriginal person] ... if you think you know it then maybe you're in the wrong job because you never know it ... it goes back to that listening and hearing I guess, what people will tell you" (NP3).

The ability to provide Primary Health Care was particularly compromised for nurses who worked in communities where English was not the dominant language. As NP14 said, "You compromise in so many areas ... if you are working ... with a population that is not literate in English". Finally, the level of personal support and shared understanding of the unique challenges of the remote setting was a condition which influenced the nurses' ability to provide Primary Health Care.

Shared understanding and personal support

Nurses described feeling misunderstood by their managers who were often in a regional hub many kilometres away. These feelings of frustration were described as a lack of shared understanding of the conditions that impact on the ability to provide Primary Health Care: "They'll come and do a site visit and I think they have unrealistic expectations of what we can actually achieve" (NP5).

Furthermore, nurses worked in very small teams and when they did not get on well with their colleagues they were limited in their opportunities for personal support: "... [I come across staff] who just end up crying and they are beside themselves and they don't know where to go, they feel unsupported and they don't feel as though they get on well with other colleagues" (RAN4).

The remote setting also compounded the lack of personal support as nurses rarely had extended family or established social networks due to the short time spent living in the remote community. Simply not having access to social activities in a remote community was described as living with a, "... lack of support, lack of normal things *laughs* ... you can't go out for a coffee, you can't go out to a movie ..." (RAN2). There was variation between communities in regards to the opportunities for recreational activities and social interaction.

The process: Doing the best you can with what you have

This substantive theory proposes an explanation for how nurses manage the issue of an inability to provide PHC. The basic psychological process: *doing the best you can with what you have* is characterised by the activities of: *Continually learning, facilitating access to health care, seeking understanding and home-making in a work environment* as strategies which nurses used in seeking to alleviate their feelings of distress and frustration and increase their ability to provide Primary Health Care.

Continually learning

Application of learning to the clinical environment was revealed as a strong motivator in engaging with a continual learning process: "... the work actually fascinated me ... and I would read stuff and I would think, 'oh gee that's why that happens'... which kept me engaged in it" (NP8). As nurses increased their own knowledge and skill they increased the availability of health resources to the community, this in turn expanded their individual scope of practice and enabled them to safely and autonomously manage a wider range of clinical situations. The developmental nature of this learning was a combination of practical experience within the remote setting and engaging in formal learning opportunities such as post-graduate university courses and employer provided workshops and programs. Expertise in the remote setting also included knowledge of the broader health system and community in order to facilitate access to health services.

Facilitating access to health care

Nurses described their role as a co-ordinator of care that facilitated access to health services in the remote setting. Where the patient's condition required a service that was not available in situ, the nurse coordinated appointments or transfers to other services. When outreach services such as medical specialists or allied health teams visited the communities, it was the nurse's role to coordinate those visits with the community member who would benefit from an appointment. In this way, the health service was described as a one-stop-shop for health care:

"... [Primary Health Care it's] that we can be the entry point into any health care ... that we are ... accessible for everybody, ... we can be a one-stop-shop for pretty much everything and that's particularly from a Nurse Practitioner point-of-view ... so if you come in with a sore toe, I can also look at your cholesterol, I can look at this, I can look at that, and let people know that we can be the facilitator or the coordinator of their health care" (NP11).

The facilitation role was central to connecting people with the health services they need but actions and interactions that lead to understanding those health needs was described as seeking understanding.

Seeking understanding

Seeking to understand the culture and organisation of the community described a range of activities that ultimately improved the ability to provide Primary Health Care because nurses could communicate better and plan care that met the needs and expectations of the community. This deeper level of understanding evolved over time, "... *you think you know something and you scratch below the surface and find you don't know anything*" (NP7). Furthermore, interacting with the community over time provided opportunities to develop understanding through personal relationships. These relationships also increased the likelihood that people would access the health services provided. For example:

“... since I’ve been working remote you get to know people; you work with people and their whole family and it’s that interactions with people ... that you get this consistent approach where you see them time and again and ... you build those relationships” (RAN6).

Whilst nurses described relationships and mutual understanding as important factors to facilitate providing Primary Health Care, the fact that nurses lived in the communities and had a social role of ‘the nurse’ meant that nurses had to negotiate boundaries between their personal and professional lives.

Home-making in a work environment

Nurses described strategies that enabled them to feel comfortable and as though they belonged to the community as home-making. Feeling a sense of connection and stability contributed to their personal resources and capacity to manage the demands of the remote setting; however, they were aware that their social role meant that they were living in a work environment. Managing these competing needs was described as establishing boundaries, and the extent of these boundaries differed between nurses and settings.

“[A colleague had] been there for a long time ... and she didn’t approve of nurses doing anything with the community outside of the clinic ... she was quite concerned for me and being able to draw ... those boundary lines you know, living, breathing, eating, sleeping in a community I guess and getting burnt out; ... she really had huge borders, ... like she went from the clinic to her house and didn’t go fishing or hunting or anything with people in the community (RAN1).

In essence, the theory *doing the best you can with what you have to provide Primary Health Care* proposes that nurses adapt the context of providing Primary Health Care by *making compromises* to their expectations of providing Primary Health Care and accepting compromises to patient care. Changing expectations and accepting compromises are suggested to be coping mechanisms and positive outcomes that support nurses to conserve their personal resources, and acceptance of the limitations of the remote setting is a protective mechanism in protecting nurses from distress and frustration.

The outcome: Making compromises to provide Primary Health Care

Despite their desire to provide Primary Health Care according to their holistic, community-centred ideology, the resource limitations reduced their ability to meet these expectations. In order to cope with the resulting feelings of frustration and distress, nurses compromised on their expectations of providing Primary Health Care.

“... as a Remote Area Nurse you are physically living there every day ... I think two things happen, either it’s like a lobster in cold water and if you stay there long enough you actually get used to it ... I don’t know whether you become complacent and you just accept, I think

the other flip side is that people get so frustrated then burnt out and then have to leave” (NP4).

The compromises to expectations of providing Primary Health Care was described by RAN4 as: “We are a medical model-based care. Selective Primary Health Care at best. . .” NP14 however looked at it in the following way:

“... if you are looking at care from life to death across the lifespan in all aspects you can generally provide some care ... you may provide better care in an aspect of the lifespan and what you do in other aspects is you provide some care”.

Providing ‘some’ care was an outcome of nurses’ actions to conserve and prioritise resources. Conservation of personal resources was seen in reference to coping with the workload, “... sometimes when it gets too overwhelming, it’s a coping mechanism to just deal with ‘I’m just going to do an ECG [electrocardiograph] and that’s all I’m going to worry about’ ... It can just be too big and people become overwhelmed by it” (RAN4). Furthermore, Primary Health Care activities required more time and resources than attending to acute care only. Therefore, nurses compromised on the extent to which they provided Primary Health Care based on their capacity. NP2 described it thus:

“But you also have to be sensible about your capacity ... if you took Primary Health Care, you could get involved in housing if you like, but you can’t write hundreds of letters to the housing department unless you’ve got capacity to do that sort of stuff. So you have to be mindful of your capacity”.

Nurses in this study also talked about equality of care in comparison to the availability of health services (in particular tertiary and specialist care) with urban settings. In the following statement, the nurse acknowledged that a limitation of the setting was the inability to transfer patients to a tertiary setting after dark:

“... there were no night flying choppers so if something went belly up at 11 o’clock at night ... it didn’t come. So whatever you had, was whatever you had; and you did the best you could” (NP8).

Another element was the increased risk to other community members when the nurse had to leave the community. In these situations, doing their best in the situation included an evaluation of risk:

“... we take into account if it is needing a patient transfer by road ... the risk of having such a full community and something else popping up, well we just try our best to you know, a lot of risk management and kind of those decisions”(NP5).

In addition, doing your ‘best’ in a particular situation, may not be the same as ‘best’ practice. The following example relates to one such situation; it revealed a nurse’s explanation for not following the recommended guidelines for antibiotic administration:

“... in terms of delivering evidenced-based care as you would in the city; it’s all well and good to say ...’don’t give antibiotics here and hold off as long as you can’... [but] General Practitioner services, they are all Mon-Fri there is nothing that operates on a Saturday so it is only going to be the hospital [30 minutes’ drive away] so you do things [that are not ‘best practice’]...” (NP13).

Similarly, nurses justified their actions as doing their best despite a perception that patient care was compromised because of a lack of alternative options, “Sometimes you don’t have any option; you just have to give it your best go” (RAN 6).

Making compromises to expectations of providing Primary Health Care was described as a consequence of being unable to provide Primary Health Care. Nurses who did not adapt their aim of providing Primary Health Care to the realities of the remote setting were likely to experience frustration and may leave the remote setting. Providing ‘some’ care was clearly a compromise to the aim of providing holistic care across the lifespan but also a reflection of the reality of attempting to provide PHC within a setting of limited resources.

Doing the best they can, represents a compromise in participants perception of providing Primary Health Care in the remote setting and *with what they have*; acknowledges the resource-poor nature of the remote setting and the apparent compromises to care that occur due to distance from tertiary services and lack of resources.

Discussion

The substantive theory presented describes a process by which remote area nurses seek to resolve feelings of frustration and distress because of the inability to provide Primary Health Care in a way that is meaningful for them. The participants were mostly experienced nurses so their collective perspective demonstrates one of persistence within the setting despite the challenges associated with the context and the core issue. They described making compromises to their aspiration of providing Primary Health Care in order to provide *some* care even if it is not as comprehensive or complete as they would like. In these situations, they simply did the best they could with what resources they had.

This concept was also identified in an ethnography of Remote Area Nursing practice which was based on field work conducted in 1995 in a remote Western Australian Indigenous community (Cramer, 2006, Cramer, 2005). Cramer also stated that: “Nurses do their best. Their ‘best’ varies widely according to each nurse’s abilities, attitudes and motivations, and the resources available” (Cramer, 2006p.193). Cramer depicted Remote Area Nursing practice as ‘amorphous’ which she explained was the constantly changing practice of the nurse between situations, nurses and teams. The concept of amorphism strongly reflects what emerged from the current study as the process of

doing the best you can with what you have and the outcome of making compromises were highly reliant on the conditions and circumstances of each situation.

The concept of making compromises alludes to the potential for compromises that impact patient safety and the quality of care. When nurses in the current study discussed quality care, they referred to the disparity in access to care as part of the inequality experienced by residents in remote communities. If the metropolitan level of service is considered to be the 'gold standard' of patient care, then the care in remote areas will inevitably fall short of this standard due to a lack of resources and distance to tertiary-level emergency care. In contrast, the participants also described positive feelings associated with rising to the challenges of the remote context such as cultural differences and resource limitations. Therefore, making compromises describes a continuum with 'satisfactory compromise' at one end and 'unsatisfactory compromise' at the other. Satisfactory compromises describe outcomes that may be novel, fit-for-purpose, or even the best care dependant on the perspective of various actors. Alternatively, unsatisfactory compromise lead to feelings of frustration and distress as nurses feel that they are unable to provide the care required.

Scott (1997) also describes compromise as an attempt "... to reach a win-win solution ... [which] is based on a willingness to reach a position that is better than the current one for everyone concerned" (p.149) and goes on to state that "The concept of compromise includes basic trust and respect (among) conflicting parties, recognition of the moral legitimacy of the conflicting claims, and a process of rational argument and decision-making..." (Scott, 1997p.149). Scott (1997) also proposes that if the basic attributes outlined above are present then the compromise may be considered to be just and reasonable. However, if the basic attributes are not present, then a compromise has not been met and the outcome of negotiation is morally questionable.

Some nurses in this study seemed to experience a change of attitude and adoption of a 'pragmatic' sense where they justified their actions and outcomes in terms of doing the best they can with what they have. Wiggins (1997) framed this change as 'rationalisation' and suggested that it was a strategy used by nurses to alleviate the feelings of distress associated with conflict in values and beliefs. According to Wiggins, rationalisation occurs in two ways: nurses do their best for those they felt were most in need, and nurses' justify why they are not providing the care they want to through rationalisation that they give an equal level of care to all patients and see this as equality of care. Both forms of rationalisation described by Wiggins were evident in the current study. Specifically, the first form occurred when nurses rationalised the prioritisation of emergency care over preventative care in term of those people needing them at that moment. The second form was evident in participants' comments about the reality of not having enough resources to provide care akin with

what was available in the city and their rationalisation about the level of care that could be provided.. Making compromises as a coping strategy employed by Remote Area Nurses is further supported by Cramer (2006) who found that, “ ‘Doing your best’ in this context is their pragmatic principle of last resort” (p.199) because ‘doing their best’; was an attempt, “ ... to cope as individuals with an impossible array of demands in a context where the systems essential to support a safe and effective health service are not provided” (Cramer, 2006p.201).

Nurses described compromises to their feelings of satisfaction or professional principles rather than necessarily the quality or safety of the care provided to the patient. Freshwater and Cahill (2010) developed a conceptual framework for work-related stress based on the understanding that healthcare workers experience stress when they do not have “... the capacity to deliver the optimum level of care” (p. 173) that helps explain this aspect of the experience of the participants in the current study. Compromise was argued by Freshwater and Cahill (2010) to be a defence mechanism and psychological process of adaptation in response to stress that was rooted in organisational factors and inadequate preparations, skill and support as required by the context. These authors considered the role of compromise in alleviating stress and suggested that, “... compromise can occur both externally, through relationships with others. And internally, through intra-personal processes characterised by inner conflict, where the psychological impact of cognitive dissonance can be significant” (Freshwater and Cahill, 2010p.177).

This study describes making compromises as an outcome of doing the best you can with what you have because these actions and interactions work towards creating consonance within the context of providing Primary Health Care and the issue of the inability to provide Primary Health Care. Despite contextual differences, a Grounded Theory study by Irurita and Williams (2001) described *balancing and compromising to preserve integrity* as a basic psychological process used by nurses and patients in a general hospital setting, as an attempt to resolve the problem of the inability to provide high-quality care to all patients. Preserving integrity was a process that patients used to manage the problem of patient vulnerability and nurses used the process of preserving integrity in relation to their professional role and the ability to consistently provide quality patient care. In the current study, preserving integrity describes the link between the nurses desire to provide Primary Health Care, to their perception of quality care and explain the feelings of frustration and distress when they encountered situations where they were unable to provide Primary Health Care.

In the acute care context described by Irurita and Williams (2001) nursing actions and interactions directed towards balancing and compromising were described as ‘selective focussing’, which describes a phenomenon wherein nurses balanced work satisfaction with quality patient care. In the

current study, the outcome of making compromises describes the outcome of nurse's actions and interactions to balance providing Primary Health Care with the resources available. Selective focussing is thus also evident in their comments about providing 'some' care as a resource-driven compromise where acute care needs were given precedence over health promotion or social justice activities.

Irurita and Williams (2001) proposed four phases in the process of balancing and compromising: contributing to care - cooperating; prioritising and rational sacrificing; justifying compromised care and lowering expectations, and protecting self by attracting or repelling. Contributing to care - cooperating is clearly evident in the current study, specifically the findings relating to structure and agency where nurses described conflict and negotiation concerning the degree of patient involvement and responsibility in care and the level of care co-ordination and proactive engagement activity undertaken by the nurses.

Prioritising and rational sacrificing was evident in this study around a lack of resources impacting on nurses' ability to provide Primary Health Care. Both the current study and Irurita and Williams' (2001) concur that a lack of time represents a lack of human resources, and this situation leads to chronic stress; this in turn impacts on the nurse's personal integrity as patient care is compromised. Furthermore, accepting the resource limitations of the setting changed nurses' perspective so they were more readily able to accept or rationalise making compromises to provide Primary Health Care. Therefore, making compromises may be a coping strategy rooted in the theory of Cognitive Dissonance. Festinger (1957) in his seminal work, *Theory of Cognitive Dissonance*; proposed that we "... seek harmony in our attitudes, beliefs and behaviours and try to reduce tension from inconsistency among these elements" (Vaughan and Hogg, 2014p.598). Dissonance describes the state of psychological unease that occurs when there is a mis-match between someone's knowledge and actions (Vaughan and Hogg, 2014). Festinger (1957) explained that situations of dissonance occur frequently in people's lives and people deal with dissonance by either changing their actions or their knowledge's to create a situation of consonance. This psychological construct is evident in Irurita and Williams (2001) study where dissonance is described as justifying compromised care and lowering expectations. Similarly, justifying compromised care and lowering expectations was also evident in the current study by the process of doing the best you can with what you have. The 'best' care describes providing Primary Health Care and the reality of a lack of resources meant that providing Primary Health Care was at times considered an unrealistic and unachievable goal.

Protecting self by 'attracting' or 'repelling', was identified when nurses described the impact of social roles and the need to form professional and personal boundaries to preserve and maintain

their own sense of integrity. Furthermore, in Irurita and Williams (2001) study, patients implemented strategies to attract and sustain the presence of nurses. This notion resonated with the current study as nurses described creating a health care environment that attracted patients and as such increased access to health services. Similarly, acts of repelling patients were described when nurses discussed attempts to reduce after-hours call outs.

This study is unique in that presents the concept of compromise within a Primary Health Care setting. However, it seems likely that nurses in other resource-poor settings may experience stress and frustration as a result of the need to compromise. Further exploration and understanding of the actions and interactions, within a range of settings, that leads to both positive and negative compromises is needed.

Study limitations

Although the participants in this study represent diversity in geographical setting and population demographics, as well as variation in levels of nursing experience, readers are reminded that this is a relatively small sample and as such not reflective of the entire diversity within the Australian remote setting.

Conclusion

This study has described the phenomena of providing Primary Health Care within the Australian remote setting from the perspective of nurses. This phenomena has not been studied before, therefore, the substantive theory presented in this paper proposes a framework for understanding nursing practice in a Primary Health Care setting.

Whilst the findings describe the experience of nursing in the Australian remote setting, it is likely that these results would resonate with nurses working in remote areas around the world with common experiences of providing Primary Health Care in a resource poor environment. In addition, any setting where nurses are required to have a social role within the community that extends beyond normal business hours, or any role where nurses are working on their own attending to out-of-hours emergency and urgent care may recognise elements of this theory that relate to their practice. Similarly, nurses in many settings will identify with the frustrations of a lack of time and resources needed to provide the level of quality care. Understanding the impact of these compromises on nursing recruitment, retention and patient outcomes would be valuable.

This study provides insight into how the Primary Health Care principles of equity, social justice and empowerment are incorporated into nursing practice within the remote context. This is important because the health of people living in remote communities across the globe is reliant on Primary Health Care services, where nurses are often the primary care providers.

Conflicts of interest: none

Signed: Dr Kylie McCullough

Acknowledgements

Financial support for this study was provided through an Australian Postgraduate Award and an Advancing the Nursing Profession fellowship from the Western Australian Department of Health.

Journal Pre-proof

References

- Australian Bureau of Statistics, 2003. ASGC Remoteness Classification: Purpose and Use (Census Paper No. 03/01). Commonwealth of Australia.
- Besner, J., 2004. Nurses' role in advancing Primary Health Care: a call to action. *Primary health care research and development* 5 (04), 351-358.
- Birks, M., Mills, J., 2015. *Grounded Theory: A practical guide*. SAGE Publications Ltd., London.
- Charmaz, K., 2014. *Constructing Grounded Theory*. Sage Publications Ltd, London.
- Commonwealth of Australia, 2012. *National Strategic Framework for Rural and Remote Health*. Standing Council on Health,, Canberra.
- Corbin, J., Strauss, A., 2015. *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. Sage Publications Inc., Thousand Oaks.
- Coyle, M., Al-Motlaq, M.A., Mills, J., Francis, K., Birks, M., 2010. An integrative review of the role of Registered Nurses in remote and isolated practice. *Australian Health Review* 34 (2), 239-245.
- Cramer, J., 2006. Amorphous practice: Nursing in a remote Indigenous community of Australia. *Contemporary Nurse* 22 (2), 191-202.
- Cramer, J., 2005. *Sounding the alarm: Remote Area Nurses and Aboriginals at risk*. University of Western Australia Press, Crawley, W.A.
- DiCenso, A., Auffrey, L., Bryant-Lukosius, D., Donald, F., Martin-Misener, R., Matthews, S., Opsteen, J., 2007. Primary Health Care Nurse Practitioners in Canada. *Contemporary Nurse* 26 (1), 104-115.
- Donald, F., Martin-Misener, R., Bryant-Lukosius, D., Kilpatrick, K., Kaasalainen, S., Carter, N., Harbman, P., Bourgeault, I., DiCenso, A., 2010. The primary healthcare Nurse Practitioner role in Canada. *Nursing Leadership* 23 (Special Issue), 88-113.
- Dowd, T., Johnson, S., 1995. Remote area nurses - on the cutting edge. *Collegian* 2 (1), 36-40.
- Festinger, L., 1957. *A theory of cognitive dissonance*. Stanford University Press, Stanford, California.
- Freshwater, D., Cahill, J., 2010. Care and compromise: Developing a conceptual framework for work-related stress. *Journal of Research in Nursing* 15 (2), 173-183.
- Irurita, V.F., Williams, A.M., 2001. Balancing and compromising: nurses and patients preserving integrity of self and each other. *International Journal of Nursing Studies* 38 (5), 579-589.
- Lenthall, S., Wakerman, J., Dollard, M.F., Dunn, S., Knight, S., Opie, T., Rickard, G., MacLeod, M., 2018. Reducing occupational stress among Registered Nurses in very remote Australia: A participatory action research approach. *Collegian* 25 (2), 181-191.
- Lenthall, S., Wakerman, J., Opie, T., Dollard, M., Dunn, S., Knight, S., Rickard, G., MacLeod, M., 2011. Back from the edge: reducing and preventing occupational stress in the remote area nursing workforce. In: 11th National Rural Health Conference. National Rural Health Alliance, Perth.
- MacLeod, M., Browne, A.J., Leipert, B., 1998. International Perspective: Issues for Nurses in Rural and Remote Canada. *Australian Journal of Rural Health* 6 (2), 72-78.
- MacLeod, M., Kulig, J., Stewart, N., Pitblado, J., Banks, K., D'Arcy, C., Forbes, D., Lazure, G., Martin-Misener, R., Medves, J., Morgan, D., Morton, M., Remus, G., Smith, B., Thomlinson, E., Vogt, C., Zimmer, L., Bentham, D., 2004. *The Nature of Nursing Practice in Rural and Remote Canada*. Canadian Health Services Research Foundation, Ottawa.
- MacLeod, M.L.P., Stewart, N.J., Kulig, J.C., Anguish, P., Andrews, M.E., Banner, D., Garraway, L., Hanlon, N., Karunanayake, C., Kilpatrick, K., Koren, I., Kosteniuk, J., Martin-Misener, R., Mix, N., Moffitt, P., Olynick, J., Penz, K., Sluggett, L., Van Pelt, L., Wilson, E., Zimmer, L., 2017. Nurses who work in rural and remote communities in Canada: a national survey. *Human Resources for Health* 15 (1), 34.
- McCrae, N., Pursell, E., 2016. Is it really theoretical? A review of sampling in grounded theory studies in nursing journals. *Journal of advanced nursing* 72 (10), 2284-2293.
- McCullough, K., Lenthall, S., Williams, A.M., Andrew, L., 2012. Reducing the risk of violence towards Remote Area Nurses: A violence management toolbox. *Australian Journal of Rural Health* 20, 329-333.

- McCullough, K., Williams, A.M., Lenthall, S., 2012. Voices from the bush: Remote Area Nurses prioritise hazards that contribute to violence in their workplace. *Rural & Remote Health* 12 (1972).
- Mills, J., Birks, M., Hegney, D., 2010. The status of rural nursing in Australia: 12 years on. *Collegian* 17 (1), 30-37.
- Opie, T., Lenthall, S., Dollard, M., 2011. Occupational stress in the remote area nursing profession. . In: Langan-Fox, J., Cooper, C. (Eds.), *Handbook of Stress in the Occupations*. Edward Elgar Publishing Ltd, U.K.
- Penz, K., Stewart, N.J., D'Arcy, C., Morgan, D., 2008. Predictors of Job Satisfaction for Rural Acute Care Registered Nurses in Canada. *Western Journal of Nursing Research* 30 (7), 785-800.
- Scott, P., 1997. Compromise and its limits. *Nursing ethics* 4 (2), 147-157.
- Smith, J.D., 2007. *Australia's rural and remote health : A social justice perspective* Tertiary Press, Croydon, Vic.
- Smith, J.D., 2016. *Australia's rural, remote and Indigenous health*. Elsevier, Chatswood.
- Vaughan, G., Hogg, M., 2014. *Social Psychology*. Pearson Australia, Frenchs Forest.
- Wigens, L., 1997. The conflict between 'new nursing' and 'scientific management' as perceived by surgical nurses. *Journal of Advanced Nursing* 25 (6), 1116-1122.
- World Health Organisation, 1978. Declaration of Alma-Ata. In: *International conference on Primary Health Care*. Alma-Ata USSR.
- World Health Organisation & United Nations Children's Fund, 2018. *A vision for Primary Health Care in the 21st Century: towards universal health coverage and the Sustainable Development Goals*. World Health Organisation, Geneva.