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# **Neonatal nursing in Fiji: Exploring workforce strategies to help Fiji achieve Sustainable Development Goal 3, Target 3.2**

A thesis presented in partial fulfilment of the requirements for the Degree of  
Master in International Development

at  
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**Ireen Manuel**

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This thesis is dedicated to:

**The Neonatal Intensive Care Unit nurses in Fiji**

## Abstracts

In Fiji 124 neonates lost their lives in 2017. While rates have improved in the Pacific, Fiji's neonatal mortality rate has remained stagnant. The neonatal workforce struggles to meet the demands of this vulnerable population. Neonatal mortality is a global health challenge which is reflected in Sustainable Development Goal 3, target 3.2. This target aims to end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births by 2030.

My research set out to explore and provide some understanding of the development needs of neonatal care globally and review the workforce challenges for nurses in this speciality area in Fiji. Improving the continuum of care for neonates will be critical if Fiji is to achieve Sustainable Development Goal 3, target 3.2.

To answer these research questions, I adopted a qualitative methodology. I conducted four semi-structured interviews in Fiji and interpreted qualitative primary and secondary data. In doing so, I came across challenges that were present within programmes, service designs and national policies. Some of these challenges were easily fixed and did not need policy interventions, but rather individual willingness to change. Others required state interventions and long-term commitment and willingness.

When applying the rights-based approach to health framework, my findings showed that the hardworking workforce in Fiji is still trying to change an organisational culture to a point where the workforce can feel fully inclusive and able to make evidence-based decisions as a team. The profound effects of not being able to do this is detrimental to the positive outcome for the neonates in their care. It was evident that health has many determinants and the problem relating to neonatal mortality is complex.

My research showed that the neonatal nursing workforce were committed to reform and an effective health care service with adequate capacity and consumables is needed to run a well-functioning neonatal service. The key conclusions of my research are that there needs to be better collaboration between all sectors, evidence-based research practice and empowerment of the neonatal nursing workforce in Fiji. This is necessary if the government of Fiji is to achieve a neonatal workforce that can support it to achieve the critical Sustainable Development Goals target of reducing neonatal mortality.



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To the NICU nurses in Fiji, thank you for making me understand about the delicate care of neonates and sharing your experiences with me as mothers, health professionals and educators. You have empowered so many fragile souls in your care and I was one of them in 1997. I would like to thank you as a mother and a researcher.

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## Abbreviations

|        |  |
|--------|--|
| CWM    | Colonial War Memorial (Hospital)                   |
| FNU    | Fiji National University                           |
| MDG    | Millennium Development Goals                       |
| MHMS   | The Ministry of Health and Medical Services (Fiji) |
| NGO    | Non-Government Organisation                        |
| NICU   | Neonatal Intensive Care Unit                       |
| RMNCH  | Reproductive Maternal Newborn and Child Health     |
| SDG    | Sustainable Developments Goals                     |
| WHO    | World Health Organisation                          |
| UNICEF | United Nations Children’s Emergency Fund           |
| UNCF   | United Nations Children’s Fund                     |
| WPRO   | Western Pacific Regional Office                    |

# Chapter 1

## Introduction to the research

Fiji is an island nation in the South-West of the Pacific. It has 322 islands. Fiji gained independence from Great Britain in 1970. Its education and health system has been inherited from the British colonial systems that has undergone many modifications over the years. The Ministry of Health and Medical Services (MHMS) in Fiji manages a comprehensive health system. Fiji acts as the hub of the Pacific and has pioneered the nursing and medical schools in the region over many years. The country has the sub-regional offices for many United Nations agencies. For the past four decades Fiji has had three coup d'états. As a result of these series of coups Fiji has experienced a slow economic growth with a high rate of migration that has hindered the development of the country, including the capacity of the health system to manage the complex care of neonates (a new born child in its first 28 days) and their families.

### 1.1 Background and rationale to this research

I have always been intrigued with the work that is done globally in the field of reproductive, maternal, newborn and child health. My interest grew from the fact that I have worked in many programmes over the last ten years that support the capacity and capability development of the child and maternal health workforce in the Pacific. I am a Fijian and New Zealander by nationality. Both my sons were born in Fiji; one at the Colonial War Memorial Hospital in Suva, the capital city of Fiji, and one in Savusavu on the island of Vanua Levu. My first born was in the neonatal care unit for over three weeks. I have therefore experienced the child and maternal health system in Fiji both as a user and a service developer. I have had first hand opportunity to recognise the extreme hardships our health workforce faces in Fiji with an added burden of short clinical consumables, which are products and devices needed for an efficient and effective clinical workflow and care. This situation, however, does little to dampen the spirit of the Fijian workforce who have made many gains for the children in their care.

Over the years, there has been a decline in the neonatal mortality rate in the Pacific. What was concerning was the stagnant or slow decline in the neonatal death rate for neonates in Fiji. So, I embarked on the journey over the last year to understand and explore the reasons for this slow decline. I had many questions, but my enthusiasm arose from the fact that I wanted to investigate and discern if we had a confident and capable workforce and to what extent we include our parents in the

wider care of the neonates while at the hospital and post-discharge period. These are both factors that are critical to neonatal survival.

Over the decades I have been immersed in the global trends that have influenced health systems. These trends have created several pathways at international, regional and national levels to achieve the Millennium Development Goals (MDGs) and now the Sustainable Developments Goals (SDGs). The United Nations in setting its agenda for the SDGs in 2015, strongly recognised its commitment towards human rights, gender equality and empowerment for all women and girls, under the overarching commitment made at the Beijing *Platform for Action* in 1994. Alongside 16 other related goals the SDG 3 – Achieve health for all, has created a vision of a collective journey of leaving no one behind in the areas of reproductive, maternal, newborn and child health initiatives. The SDGs built up a platform on which the World Health Organisation (WHO) launched the Partnership for Maternal, Newborn and Child Health, a global initiative of 170-member bodies dedicated to ensuring that all women, neonates and children remain healthy and thrive worldwide.

To achieve this, the Partnership called for investment in proven and cost-effective interventions that can save at least 7 million of the 10 million children that die before the age of five, and over 500,000 women who die during pregnancy (WHO, 2007, p.577). In addition, this Partnership emphasised the need for leadership and urged countries and donors to work together, avoid duplication of interventions and single-disease approaches. It called for integration of reproductive, maternal, newborn and child health initiatives into nationwide health plans. This emphasis of nationwide planning adds to a determined need to revitalise or strengthen RMNCH programmes that currently exist. The health of the mother, new born and child are intricately linked, and this must be reflected in the continuum of care approach (WHO, 2011).

A newborn infant dies every two minutes in the Western Pacific Region (WHO, 2014), which means 50,000 newborns die annually. This is a stark number of deaths given the interventions, advanced technology and commitment that governments have made globally and regionally. In order to meet Sustainable Development Goal 3 (SDG3), target 3.2, which calls for minimising neonatal deaths, equitable and high-quality coverage of essential care for mothers and newborns is critical. It is evident that the lives of newborns can be saved. This can be done through low cost interventions and effective healthcare focussed on birth and the first three days of life, with particular emphasis on the intrapartum period and first 24 hours after birth (WHO, 2014). The strategic focus has remained to improve quality care for newborns within the right-based approach to health and these are explored and described in Chapters 2 and 7.

As part of my research, I ventured to explore global trends that have influenced Fiji in achieving the goals intended for the MDGs and the SDGs towards child health outcomes, in particular, for neonates, and how they have shaped the workforce today. It is my aim that within this research I am able to articulate what systems are in place and how to best leverage off built systems to strengthen and increase workforce capability and capacity so the neonates in Fiji have better health outcomes. As we have entered into an exciting new era of all-inclusive SDGs since 2017, we cannot forget that there were many Pacific Island nations that struggled to meet the targets set within the MDGs. It is apparent that children born today have their vulnerabilities and rights integrated into the SDGs and local voices raised to strengthen the services and workforce in a country like Fiji will be further realised through the use of technology and advanced patient information system.

## **1.2 Conceptual framework to the research**

My research is largely based through the lens of the human rights-based approach to health, and this is the conceptual framework that I am going to use. My participants and ethics approval team in Fiji found this an interesting concept as it is not fully clinical-based. I am trying to establish trends between sectors of health, social sector, environment and in particular climate change, and education in relation to neonatal health outcomes in a diverse country. Under the human rights-based approach to health all development efforts must be considerate of the needs of the people and it must be “anchored into a system of rights and corresponding State obligations established by international law” (WHO, 2008, Factsheet 31). I will discuss this framework more in Chapters 2 and 7.

Healthcare is a complex system and there are many underlying determinants that one needs to consider when undertaking a study or service evaluation or reform. For the purpose of this research, I have focused on the nurses and then aligned my findings on what will enable the nurses to better do their work in the child health development platform in order to meet SDG 3, target 3.2. My research and findings align with the human rights-based capacity development approach (UN, 2009) and that of the SDGs. I followed the human rights-based approach situational analysis approach to some extent for this research in trying to understand what is happening, why the problem and challenges keep occurring, who has the obligation to do something about this and what capacities are needed for those affected within their duty of care.

## **1.3 Research aim and objectives**

The aim of my research is to explore and understand the development needs of neonatal care in the Pacific. In particular, this research will review the workforce challenges for nurses in this speciality area in Fiji in order to contribute to policy on the achievement of SDG 3, target 3.2. This target aims

to end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births by 2030.

Two overarching questions were identified:

Question 1 - What are the existing nursing workforce challenges in Fiji regarding neonatal care?

Question 2 - What developments have been made in neonatal nursing care in Fiji, and how effective have they been in terms of achieving SDG 3, target 3.2.?

Under this aim and questions, four objectives were identified:

- To understand the issues surrounding neonatal mortality in Fiji
- To gain an understanding on the state and challenges of neonatal nursing in Fiji
- To explore the strategies that Fiji is employing to help neonatal nurses upskill
- To understand the role and potential that upskilling neonatal nurses has in terms of Fiji achieving SDG 3, target 3.2.

It is important to note that given the lack of availability of hospital reports I am relying on the limited published literature for child health service development needs and the information provided by the participants in this research. This study provides a platform for a more comprehensive intersectoral review of how child health and its workforce could be supported in order to meet Fiji's SDG goals and targets.

## **1.4 Structure of the report**

This thesis is made up of eight chapters:

### Chapter 1 – Introduction to the research

This chapter introduces the background and rationale for the research that I have undertaken and outlines the research aims and the objectives.

### Chapter 2 – Taking actions to address child health from MDGs to SDGs

Chapter 2 will outline the gains made through the Millennium Development Goals and describes the development of the Sustainable Development Goals. This is the analysis of the literature review that was undertaken to explore national, regional and international trends in child health mortality. It explores the challenges presented within the sustainable development themes of social, economic

and environmental factors and how these matter for mothers and children within a cross-cutting perspective. I will be broadly discussing the aspects and needs of a rights-based approach to health within health and development context. This will include the growing acceptance of the Four Ps of predictive, preventative, personalised and participatory means to wellness under the Alma-Ata Declaration for primary health care in 1978.

### Chapter 3 – The nursing workforce and the neonatal speciality – a global perspective

Chapter 3 explores what a child health workforce that is fit for purpose and fit to practice would potentially look like in the Pacific. It discusses on the global strategies that agents have to adopt to create people-centred care approaches and the concerns of an unregulated workforce regionally. I also discuss the lack of workforce availability in the Pacific that can translate the needs of the health services into national plans. I will explore the capability of nurses carrying out research and the benefits this could have for health and other sector planning work. There is discussion on why research is important beyond the needs of the clinical workforce.

### Chapter 4 – Approaches to this research and methodology

This chapter describes the actions and the methods that I took in order to investigate and answer my research questions. It discusses the cultural and institutional considerations that I had to make during my research, including how I rationalised the techniques, processes, and provided analysis and critical justifications for my research.

### Chapter 5 – Neonatal health care and workforce in Fiji – a country context

Chapter 5 explores Fiji's context and examines the trends that are presented through the many national reports by Ministry of Health and Medical Services Fiji. The current situational analysis of why neonatal mortality has remained significant has been discussed. Chapter 5 also discusses the current health workforce, the training that is available, the new roles that enhance health care and how a more effective workforce distribution is needed to meet the needs of neonatal care in Fiji. It also discusses the added benefits of nurse practitioner roles in Fiji.

### Chapter 6 – Provision of neonatal care in Fiji and its challenges

Chapter 6 identifies common themes arising from my research as findings and groups them under thematic areas, so it remains within my focus area of identifying challenges for the neonatal workforce.

### Chapter 7 – The identified needs – an analysis.

This chapter provides an analysis of my research findings using a rights-based approach to health development and considers what challenges the neonatal nursing workforce faces in a low middle-income country like Fiji to be appropriately trained. Achieving SDG 3, target 3.2 creates opportunities for other platforms and initiatives that the duty bearers in health care systems could harness to deliver a better-quality care through a patient-centred care approach and the AAAQ framework for improving health gains.

### Chapter 8 – Future considerations and recommendations

Chapter 8 concludes my research and outlines the limitations that I faced and discusses recommendations for further research and future planning of health services and health workforce.



## Chapter 2

# Taking actions to address child health from MDGs to SDGs

### 2.1 Introduction

In this chapter I will explore the developments and challenges that took place during the MDG era and how these contributed to the design of the SDGs. I will also review the global and regional trends in the Pacific in meeting the targets set within MDG 4 and look at the variations within regions that were presented for the Oceania or the Pacific region. I will broadly be discussing the aspects and needs of a rights-based approach to health within a health and development context. This will include the growing acceptance of the four Ps under the Alma-Ata Declaration in 1978 for primary health care.

Finally, I will be discussing the inter-relations between the sustainable development themes of social, economic and environmental factors and how these matter for mothers and children.

### 2.2 The Millennium Development Goals and its era of change

The MDG's that started in 2000 helped to drive a lot of support for reproductive, maternal, newborn and child health initiatives globally. The MDG's certainly proved that achievement in health is possible with global efforts and common goals. It also proved that unnecessary deaths for children had happened for far too long, as we were not ambitious or strategic enough at global or regional level in avoiding and minimising the neonatal and maternal mortality (UNICEF, 2015). A child's chance to survive post the MDG era is far greater today than it was fifteen years ago, but the unequal opportunity and the underlying disadvantages of inequity remain in many countries, as many vulnerable children are left behind within the country at national, and sub-national levels (UNICEF, 2015).

Humans are entitled to a healthy and productive life and achieving health gains requires challenging the issues facing women and children and the elimination of poverty. A Lancet Report (2015) by Liu et al., concluded that 6.3 million children who died before the age of 5 prior to 2013, died of infectious disease causes and within the neonatal period. The three leading causes of death during this period are preterm birth complications, pneumonia and intra-partum related complications. The neonatal period is from birth to first 28 days of life. The first five days is the most crucial part of a child's life and

the neonatal death remained as the largest number of deaths for children under five globally (UNICEF, 2015; WHO 2011).

In 2015, UNICEF released its major report, Levels & Trends in Child Mortality Report 2015. This report brought together successes and challenges and the stark reality of child mortality in the Pacific region too. The under-five deaths dropped by 53%, which meant that about 48 million lives of children were saved globally (UNICEF, 2015). There have been considerable regional variations when comparing the Oceania or the Pacific region to the rest of the world. While the under-five mortality for this region hasn't been the highest in the world, the decline was the smallest of all the regions sitting at 51 deaths per 1000 live births on average, which is still double the MDG target that was set to be achieved in the region (UNICEF, 2015).

At the end of 2015, countries in the Pacific region, like Papua New Guinea, had 57 deaths per 1000 live births for neonates. The number of neonatal deaths were 5127 out of 11,963 births, which means nearly half of the babies born in a year, died within the first 28 days. In Kiribati, there were 56 deaths per 1000 live births annually. Papua New Guinea and Kiribati had their targets set for 30 and 32 deaths per 1000 live births for their neonates. Fiji had 22 deaths per 1000 live births for children under 5 years of age. Fiji's target was set at achieving 10 deaths only at the end of 2015. 164 deaths were of neonatal age out of the 388 deaths that occurred in the under-five age group in 2015 (UNICEF, 2015). A 2017 country report for Fiji showed 124 deaths were of neonatal age out of 343 deaths that occurred for children under-five age group (MHMS, 2016, p.9). Fiji's overall neonatal mortality rate remained stagnant.

Figure 1 on page 18 shows that the mortality rates for children under the age of five was significant, however, Figure 2 (see page 18) confirms that the lowest achievement was with the neonates. Many of the countries in the Pacific region, apart from Australia and New Zealand, are categorised as low-income or middle-income countries and the lowest reduction in mortality rate by age group was for the neonates in these countries. Figure 3 (see page 19) shows the trend that was present over a 27-year period before and during the MDG era. All these figures show that while achievements were made in the overall under 5 child mortality rates, neonatal mortality rate has been the hardest nut to crack and improvements have been stagnant.

The above country, regional and global statistics are concerning, and the MDG targets remains an unfinished business. The challenge of how to sustain and accelerate and achieve the indicators set with SDG 3, target 3.2 has remained.

Figure 1: Child mortality decline for children under 5 between 1990-2017

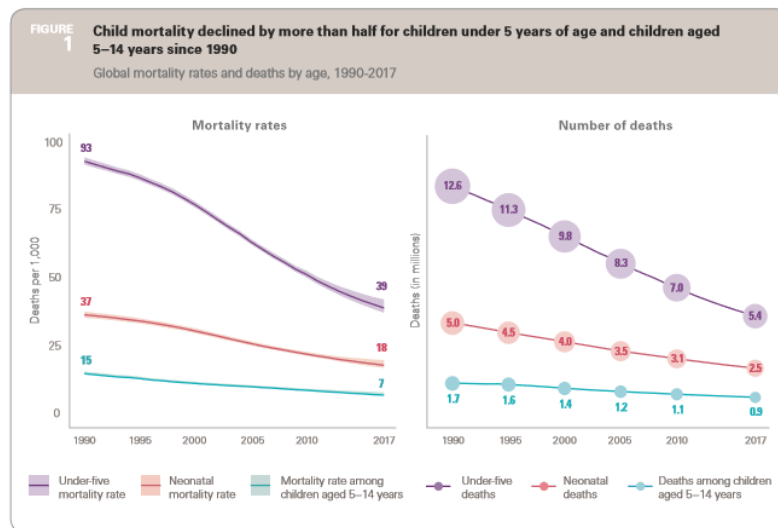


Figure 2: Risk of dying for neonates globally

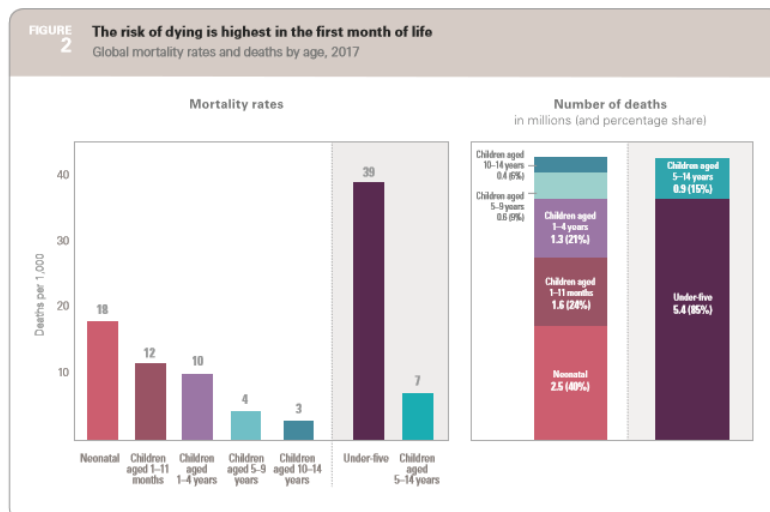
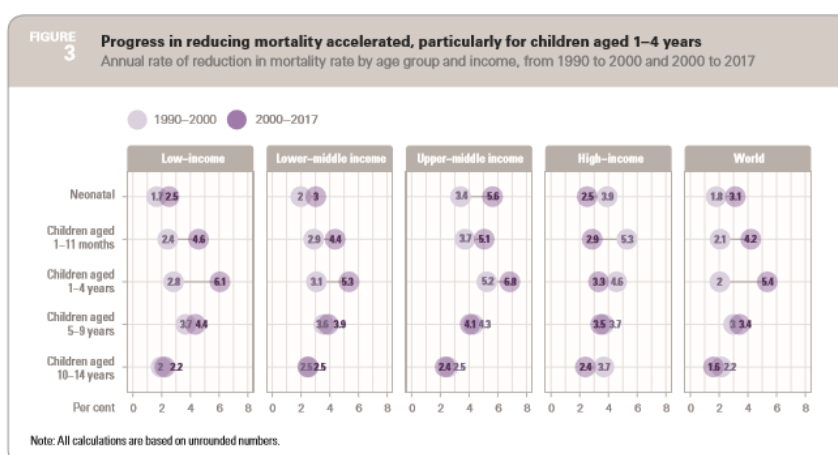


Figure 3: Trends in child mortality by country type over 27-year period (in percentage)



## 2.3 The Sustainable Development Goals and the way forward

The maternal, newborn and child health clusters used the integration of services in many countries during the MDG era to achieve targets set within MDG 4 in order to reduce the number of deaths in under five-year-old age group. The integration of services in many countries sustained the continued momentum for women and children to access healthcare effectively. These benefits featured prominently during the MDG era, where child health gains were achieved, with the East Asia and the Pacific region as one of the only two regions globally achieving its MDG 4 target by 69%. This is a remarkable declined percentage rate of under-five mortality rate by region from 1990 to 2015 (UNICEF, 2015). These country clusters shared their learnings and challenges with each other. Ironically, and as explained earlier, the achievements are less inspiring when we look at country data individually, like for Fiji and Papua New Guinea in the Pacific region, and compare these to the regional or global data and the achievements that were made elsewhere.

The SDGs are ambitious goals that focus on the improvement of the health workforce, especially those related to child health initiatives (WHO, 2009) and the unfinished business of the MDGs. The ultimate goal within the 13 targets of the SDG 3 is to reduce maternal mortality (target 3.1) and reduce child mortality (3.2). The remaining targets within this goal focus on how to reach this ultimate outcome (Silver and Singer, 2014). SDG3, target 3.2 is focussed on ending preventable deaths for newborns and under-fives by 2030. This is an aspiring goal. The SDG goals and targets are built on from the successes and gaps identified within the MDGs with more of a country-focussed approach (WHO, 2016).

In 2015 and on the eve of the SDGs, the Pacific Ministers of Health announced a commitment to the revised Yanuca Island Declaration in response to the rapidly changing social and economic condition that affected the quality of life and health of the people in the Pacific. This was a revised vision that was set at Yanuca, Fiji in 1995. The first out of the five unifying themes of the declaration is that children are nurtured in body and mind, and it goes on to point out that family and community values are the foundation of the Pacific culture and should be nurtured. The declaration informs that while there have been considerable improvements in child survival across the region, there are still further gains to be made. The burden of high non-communicable diseases, the continuing communicable diseases and the impact of climate change with slow economic growth mean sustainable health financing in the Pacific is not assured (WHO, 2015). The proposed future directions focus on strengthening service provision in prenatal and maternal care, strengthening Integrated Management of Childhood Illness, monitoring early childhood development and ensuring a holistic life-course approach to protecting and nurturing children (MHMS, 2011).

#### **2.4 The human rights-based approach to health in relation to the MDGs and the SDGs**

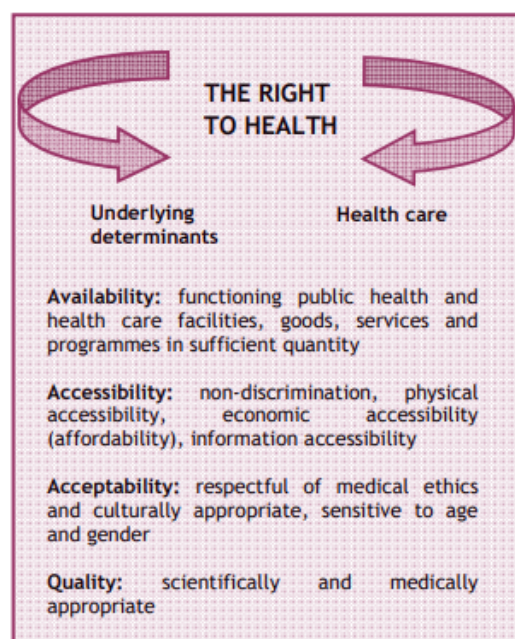
The MDGs have provided political direction and set the norm for the SDG platform in each country globally. While the MDGs were fewer in number, they had placed importance for human development in terms of health, gender equality, education, and the empowerment of women, and others which has translated the relevant overarching goal of the SDGs to end poverty for all by 2030 (Solberg, 2015). Within the development context, and as shown in Figure 4 below, the right to health is having the right to availability, accessibility, acceptability, and quality of health-related goods and services (Gruskin, Mills, and Tarantola, 2007; London, 2008, WHO, 2017). These rights highlight the underlying determinants to health and become part of the global agenda for the universal health coverage for all.

The core principals of the human rights include accountability, equality and non-discrimination, and participation. These rights are universal, indivisible and interdependent (WHO, 2017). The core elements of a right to health calls for progressive realisation using maximum available resources and non-retrogression. This means that states cannot allow for its services, that present within any rights, to deteriorate unless there is a strong reason for this to occur (WHO, 2017). Universal health coverage is a critical component of the SDGs. Within the broad SDG for health – ensure healthy lives and promote wellbeing for all, a specific target has been set for advocating the principles of universal health coverage. There are arguments that the targets set for universal health coverage are international targets or mandates and sometimes do not promote all the efforts that are required at

country level, and as set within the Alma Ata declaration of 1978, but broadly many positive gains have been made within the right to achieving good health (WHO, 2017).

Internationally, the right to health makes a compelling case to view health systems and the people they serve within a wider social context and generally as an integrated approach. It is the duty of a state to support the obligations set within the rights to health, so the highest attainable standard of health is gained. The right to health through empowerment and participation is elaborated on by De Vos et al. (2013) as multitude of approaches used by individuals, communities and duty bearers. It is usually the disadvantaged and marginalised populations that are excluded from achieving good health and these are more prevalent amongst the lower income countries (WHO, 2017). I will be discussing this more in Chapters 7 and 8.

Figure 4: WHO mandated right to health



In 1978, the Alma-Ata International Conference on Primary Care promoted the principle that people must play a crucial role in developing policies and programmes that affect their health, and that good health was a universal right. This crucial principle became a clear call for participation (De Vos et al., 2013). The definition of the primary health care concept over the years has gone beyond the health sector and is inclusive of practical, scientifically sound, socially acceptable methods and the use of advanced technology in accessing timely health care and is therefore a fundamental human right (MacNaughton & Frey, 2018).

There is a recognised need to synergise siloed conventional medical care and public health into people-centred, community-based systems, where people and community can own their health and that of their community through the 4 Ps of predictive, preventative, personalised and participatory means, so that wellness remains a focus (Hood & Auffray, 2013; De Vos et al., 2013; MacNaughton & Frey, 2018; WHO, 2008). For many countries globally, selective primary health care at the community level is becoming a norm as being cost effective rather than a costly and unrealistic approach, given the broad donor agency goals and certain thematic areas of development focus (De Vos et al., 2013). This is a diversion from Alma-Ata's vision of primary care, through broader societal change and community engagement which leads to empowerment that recognises that power and power relations within individuals, states and duty bearers plays a significant role in addressing health inequalities at all levels (De Vos et al., 2013, WHO, 2017).

The SDGs have rightfully combined the economic, social and environmental aspects for development. The human rights-based approach gives importance not only to the outcomes, but also to the processes. For example, investing financial resources in the health sector alone is not enough, as the social determinants of health inequalities and inequities spread beyond the health sector, or participation and inclusion means that people actively participate in decision making about their well-being, as this will increase ownership and make people responsive to programmes that benefit them. Having the right to correct information allows one to make informed decisions. For example, in sexual and reproductive health there is a right for women to access and use contraceptives in order to minimise pregnancies or create a gap in child bearing years (Angeles & Gurstein, 2000; United Nations [UN], 2009). This is a critical component of participatory and empowerment process in development. All information should be available in a culturally appropriate manner and should be accessible to all. It also means that the health workforce has the cultural knowledge to assist and provide clinical care in diverse population settings.

The social determinants of health led through environmental, climate, water, sanitation and hygiene, increase the severity of neonates to be exposed to non-ideal conditions, such as diarrhoea, which is a leading cause of death in children under 5 years of age (Lim et al., 2012; Walker et al., 2013). The breeding of mosquitoes and its transmitted diseases poses a high risk to pregnant mothers and neonates (Heymann, 2008). Not having clean water can result in reduced water consumption (Howard et al., 2003), can affect personal hygiene and increase risk of urinary and reproductive tract infections associated with pre-eclampsia and anaemia (Schieve et al., 1994; Minassian et al., 2013), as well as the risk of infection during delivery and post-partum. A mother who is not able to access health care

in a timely manner may also have issues of poverty and be faced with the burdens of climate change. These examples show that health is inter-twined with cross-cutting issues and it has to be reviewed from an all of sector approach.

As within the sustainable development themes, social, economic and environmental factors matter when placing child health in survival context (Requejo & Bhutta, 2015; WHO, 2014), and the role of the governments and their partners in providing basic packages of care must continue (Bhutta & Black, 2013). The Global Investment Framework for Women and Children's Health has estimated that with an investment of \$5 per person annually, the deaths of 60 million newborns and five million pregnancy-related deaths could be averted in the next twenty years (Stenberg et al., 2014), with one of its key enablers being that of health systems aimed at improving management of health workers, commodities, financing and data and decision making. The other enablers are policy enablers, community engagement and innovations that build and strengthen the current available systems.

## **2.5 Chapter summary**

We have moved from the MDGs to the ambitious SDGs that calls for more integration of services, policy reform and clear directives that all stakeholders for child health must work towards achieving better health outcomes. The declarations and calls made at every level are reflective and accommodating of building on leveraging off the work of the MDGs. Global efforts in strengthening reproductive, maternal, newborn and child health initiatives give us the opportunity to integrate health programmes across sectors, as poor health is an outcome of other unmet social and economic needs. Therefore, while putting together national and district level implementation plans the managers of the health systems need to have a sustainable outlook in place that benefits all.

The right to health, and, as accepted globally under the Alma-Ata Declaration, means that everyone has a part to play at all level to achieve good health. Neonatal deaths are preventable and it goes to show that with proper planning and commitment, gains are made. It is, however, important to remain vigilant as improvements within health and other sectors do not happen in the short term. Therefore, donor and government obligations must remain intact for over a decade to monitor progress and change. Having a well informing and functioning health and patient information system is crucial as the future investments in health can only be made when we have accurate data available.

In the next chapter, I will continue to discuss about maternal and child health initiatives by looking at workforce trends in the Pacific. This will include exploring the regional commitments, understanding



the complexities of the capacity of the workforce that is in place and exploring the need for research for evidence-based decision making within the health sector.

## Chapter 3

# The neonatal nursing workforce and the neonatal speciality – a Pacific perspective

### 3.1 Introduction

There has always been a robust regional commitment to better the health workforce in the Pacific, and Fiji has played a major part in this. In this chapter, I will explore what a workforce that is fit for purpose and fit to practice should potentially look like. I will discuss the global strategies that agents have to adopt to create people-centred care approaches, the concerns of an unregulated workforce regionally, the added benefits of the nurse practitioner roles in addressing infant and neonatal mortality, the need for nurses to carry out clinical research and the understanding of research from a user perspective.

### 3.2 Regional commitment for health workforce

At the Sixty-Seventh World Health Assembly in 2014, seven years after WHO identified a global shortage of 2.4 million doctors, nurses and midwives, a global strategy was adopted called the Recife Political Declaration on Human Resources for Health. This strategy represented a renewed commitment towards universal health coverage for the SDG agenda by 2030 (WHO, 2016). This strategy and commitment are primarily for health planners and policy makers, as well as other stakeholders, to recognise the concept of having a sufficient and well-resourced workforce, an improved distribution of workforce by taking account of labour market dynamics, education policies that inform employment creation and economic growth, and to build capacity for institutions. All these align with the WHO Framework on integrated people-centred health services that are easily accessible without financial burden (WHO, 2009; WHO, 2015; WHO, 2016; Campbell et al., 2013).

At the 10<sup>th</sup> Pacific Health Ministers Meeting held in 2013 at Apia, Samoa, health workforce development and the commitment for fit-for-purpose and fit to practice workforce was discussed as a priority issue in the Pacific. Multiple reports from regional meetings state that the health workforce needs to create and meet continued professional development as a requirement and the focus should be on the recruitment and retention of the workforce. Other challenges that were identified include that there is a limited translation into quality human resources for health planning and management capacity at country level, that there are variations in regulatory capacities, and the inconsistent quality assurance in the 250 plus workforce training programmes and course selections that are available for

workforce training in the Pacific. (Western Pacific Regional Office [WPRO], 2016; Wiseman et.al., 2017). The 250 plus overall course selections for doctors, nurses and midwifery, as well as other health professionals provide opportunities to explore and understand the types of clinical presentations commonly found in the Pacific, which strengthen the sharing of what clinical interventions are made with the limited workforce. However, all these courses add to the difficulty in having a regulated workforce throughout the Pacific and now pose thoughtful interventions for countries like Fiji and Papua New Guinea that train the majority of the health workforce in the Pacific to produce a regulated body of knowledge for health professionals. Additionally, in having so many courses available, there is a need to fill these academic areas with the correct skillset to teach the curriculum and the required practical expertise. The Pacific already has a limited workforce, so to find people to teach and deliver health services at the same time is a challenge.

### **3.3 Neonatal workforce in the Pacific**

The health of mothers, newborn babies and children consists of sequential stages and in order to tackle the issues of preterm births, the programmes or initiatives in health must be strengthened before, during and after pregnancy for a mother and the child (United Nations Children's Fund [UNCF], 2015). Many documents have strongly outlined the need for growing good technical and professional health resources in the neonatal care space, whether in the Pacific or elsewhere (Duke et al., 2015; Bhutta & Black, 2013; Sternberg et al., 2014; WHO, 2002). According to Duke et al. (2015) doctors and nurses in the Pacific have huge roles and responsibilities due to the decentralisation of health systems in the region. Due to lack of practicing paediatricians or physicians overall, nurses need to be well trained in neonatal health cases.

The case of having a richer skill mix of staff might appeal in settings where nurses are trained to increase their capacity and capability (Fulton, B. et al., 2011). On the contrary, Dubois and Singh (2009) elaborate that while the conceptualisation of a richer skill mix of a multi-disciplinary team could be the best approach, there is no reported positive impacts from enriching staff-mix as it does not offer clear guidance about ideal thresholds in terms of personnel and patient ratio. The same sentiments are echoed by Usher and Lindsay in their 2004 report on the nurse practitioners in Fiji. Here then lies the danger in over worked staff who have low morale, have less of or no peer support, move around a lot on their feet due to no transport, display skill imbalances, and are exposed to hazardous conditions (Narasimhan et al., 2004).

### **3.4 The need for a regulated workforce and evidence-based research to improve workforce and clinical capacity**

The neonatal nursing speciality area is a global challenge, but it presents us with opportunities as more countries lean towards nurse specialisation thinking. In order for progress to continue from the MDGs to the SDGs, there is a need for a better quality and quantity of nurses within the child health sector (Lawn et al., 2006). There has to be a balance between the child health demand and the workforce that is now in supply. In many neonatal speciality areas at a global level, there is not available literature that states what constitutes a neonatal nurse specialisation and whether the licensing of neonatal nursing has a clear scope of practice (Kenner, 2015). This itself can be challenging to regulate in the Pacific perhaps as many countries are yet to develop competency for nursing practice and criteria of recognition and the qualifications associated with nursing specialisation. At many times continued formal education and upskilling is a focus. For example, at its 4<sup>th</sup> Annual National Nursing Scientific Symposium in Fiji in April 2018, nursing specialisation was addressed as the key strategy for the nurses in Fiji. The symposium relayed that nursing was an evolving profession and specialisation is needed from broader-perspective thinking. It was not clear what the broader perspective thinking should involve. Samoa, in its 10<sup>th</sup> National Health Symposium in 2017 and the Pacific Nurses Forum in October 2018, echoed the same sentiments (Nursing Review, 2018). These sentiments have been relayed in many Pacific nursing dialogues and meetings over the years.

### **3.5 Nurses as researchers in neonatal child health**

In order for us to expand the role of nurses within neonatal and other child health settings, there should be more emphasis on nurses carrying out research within their setting to measure their knowledge, confidence, competence, attitudes and intention that will advance their workforce capacity and capability. There is little published research at country level in the Pacific that outlines the success and workforce clinical capability and capacity development for nurses in the child and maternal health platform. There is little research carried out by nurses overall that could help to address gaps relevant to policy making decisions for best clinical practice (Ekeroma et al., 2014). This same research by Ekeroma et al. in 2014 confirmed that nurses could benefit by using a team approach with other health professionals to perform research. Nurses can perform research and it was confirmed that the research workshops that were delivered to multiple Pacific island clinicians showed that the knowledge gained by midwives and nurses were far more significant than that gained by physicians (Ekeroma et al., 2014). This shows, in part, the willingness and readiness of nurses in the Pacific in general to build their research capacity. In my opinion, for driving the sustainable development efforts within a multisectoral approach, there is a need to pull research together to

understand the correlation between the social determinants and the lack of access to health care and well-being in the Pacific. So far there is not enough published literature to understand the difficulties presented by neonatal nurses in the Pacific and how important this speciality area of nursing is overall. It is also difficult to then understand how far the scope of practice for neonatal nurses and infant nurses expand to. I hope to achieve this as I progress through the semi-structured interviews, especially from academic leaders and planners who are aware of regional development plans. Research findings are not made freely available and this acts as a barrier for further learning for the workforce and the public. In addition, when findings are available, they are written in advanced clinical language that is difficult for everyone to understand.

The Pacific has a strong public health system and the quality of health services varies among the countries and within individual countries (WPRO, 2015). With a limited workforce in the child health care space, the emphasis is on a continuum of care approach for mothers and their neonate (0-28 days old), infants (28 days to 1-year), preschool (2-4-year-old), school-age children (5 onwards), and young persons (12 years and onwards). The workforce relating to child and maternal health should not be a neglected component of the health system development (Galea et al., 2002; Chapstick et al., 2009; Kickbush & Nutbeam, 1998; Kate et al., 2007) and the capacity building elements should be carefully considered (Angeles & Gurstein, 2000; Potter & Brough, 2004; Schacter, 2000; Narasimhan et al., 2004) in relation to reducing disparities and enhancing engagement between health and human rights workforces.

Given the many health sector reforms, decades of political instability in some countries, geographical isolation to deliver efficient services, and the difficulty in assessing and agreeing on standards or guidelines for best practices, it will be interesting to examine how broad ranges of non-government organisations (NGOs) and civil society have continued to work together in coherence and with international parties to advocate for human rights-based approaches in these countries relating to child and maternal welfare. Another factor to consider is how policy makers and programmers or planners have been guided by human rights standards and principles and whether our duty bearers continue to empower women and work towards eliminating discriminatory practices that disallow every woman and child the right to good health in line with the SDG 3, target 3.2.

### **3.6 Chapter summary**

Good health will continue to remain a challenge for the Pacific. The Pacific continues to face the hardships of regulating its workforce against incompetency's. Within the neonatal speciality, there is a global challenge to understand what the exact competencies of a neonatal nurse must include. An

equitable distribution of workforce will ease the burden on nurse practitioner roles and the general child health workforce. The use of a richer mixed skillset concept is draining on the nurses in child health care settings at all levels. Therefore, specialisation of the neonatal nursing is welcoming for the Pacific. The continuum of care approach for mothers and children should be well considered within all health systems' planning and not be designed in isolation.

The Pacific health planning and management teams display a lack of quality workforce planning capacity at the country level as there remains continued variations in regulatory capacities and inconsistencies in quality assurance checks. There is a lack of advanced and long-term planning in capacity and capability development for the workforce, more so in nursing where only skills-based learning is promoted or available after formal qualifications.

Nurses have the capability to carry out research on their own or within a team. Having the opportunity to perform investigations within a multidisciplinary team outside of the health sector will benefit the countries as it will produce research findings that encompass more than health issues.

The next chapter discusses the methodology I used for this research, the thought and design elements that had to be completed within an ethical framework, and other considerations that took place.

## Chapter 4

# Approaches to this research and methodology

### 4.1 Introduction

This chapter will describe the actions and the methods that I will take in order to investigate the research questions.

I will begin this chapter by exploring the mixed method approach that I adopted; the cultural considerations that I had to be mindful of and practice vigilantly; the other consideration I had to be aware of as a mother, researcher, health planner and from a user perspective; and the ethical issues and boundaries that I had to manage while carrying out my research. I travelled to Fiji and stayed in the country over two weeks to collect information and carry out the semi-structured interviews. This process demanded a lot of attention to detail and relationship management and I have carefully outlined this in this chapter.

### 4.2 Theory and mixed method approaches

I used the mixed method approach for this research. This approach allowed me to collect data and information using both quantitative and qualitative methods. A mixed method approach was considered favourable given that I wanted to allow the voice of the nurses and the other participants in my research to be heard. It gave me an understanding of the real environment, the context and the broader picture of the successes and challenges in the child health platform.

I personally felt that if I took a quantitative study only, my role was non-existent, as anyone can sit and analyse data, and the same can be done by other people at any given time, and if placed under the same conditions and variables, it might yield the same results. The quantitative data had provided me with an understanding of child and infant mortality rates (IMR), maternal mortality rates (MMR), population trends, what were some of the causes related to IMR and MMR, Human Development Index rankings and what it meant for the Pacific and Fiji, immunisation coverage rates, birth weights, ethnic differences in child survival rates, distribution of government welfare and poverty reduction schemes, workforce enrolment rates and success rates (under and postgraduate training) for health professionals, workforce to patient ratio, workforce professional development, and others. Like O'Leary (2014), suggested interpreting quantitative data with careful analysis and keeping an eye on the big picture of my research was important to me.

However, quantitative data did not fully benefit my research, as I needed an approach that suited social inquiry. I therefore intended to rely and use more of the interpretative approach, which included analysing and understanding information from a variety of material, such as personal experiences, interviews and historical processes, as these allowed me to broadly research the human experiences and the social context associated with neonatal care and the nursing workforce. The investigations were carried out in their natural work place in Fiji and these provided rich, in-depth information about the complexities of the world people lived in that would have been otherwise missed in a quantitative analysis. My research was about creating a theory and not testing one with a holistic view in mind.

While keeping both approaches in mind, I decided to use the mixed method approach of qualitative data collection method in a naturalistic manner which means I had to be present, listen, probe questions for deeper understanding and understand using the human element as an instrument rather than the spreadsheets and tables that are generated from surveys (Denzin and Lincoln (2003); O'Leary, 2014). This approach also allowed me to have a full understanding of the neonatal workforce in Fiji, social context and the local people's reality.

#### **4.3 Cultural considerations**

From the onset I was considerate of the *i-Taukei* (indigenous Fijian) culture and protocols, and that of institutional requirements of Massey University. I took heed of the Guidelines for ethical practice in Pacific research (Massey University, 2017) and acknowledged the importance of the Pacific values of respect, reciprocity, relationships, humility, service and that of community. These values were always translated into mindful and respectful practices that upheld the integrity of the participant, Massey University and that of myself as the researcher. My strong sense of identity as a Fijian held the notion of doing good and putting people's integrity over anything else. This included ensuring that the wellbeing of my participants was looked after. I carried the goal of a balanced relationship with tactful diplomacy to be present always and at all levels of interactions, so the participants were acknowledged for their knowledge, information was carefully sieved and disseminated for feedback and relationships were not harmed (Nabobo-Baba, 2006).

There is a culture of hierarchy in the health sector in Fiji and careful consideration was given about where I undertook my conversations and how I applied flexibility when required (Robson, 2011). Given that I am from Fiji and speak the three key languages of English, Fijian and Hindi, I was able to converse using the three languages to gain more meaning and clarity in my research. I am aware of the Fijian traditional protocols when talking to people in hierarchical settings and these include the formalities within the education and health sectors. As a gesture towards the time and knowledge that the



interviewees shared with me, I gave them a small koha to show my acknowledgement and appreciation.

#### **4.4 Semi structured Interviews**

Even though my research was mostly desk based, I still carried out four semi-structured in-depth interviews while I was in Fiji over two weeks or through other methods such as video conferencing and emailing that I conducted once I returned to New Zealand. This was with health care workers, technical advisors and other experts. In total, I interviewed four people. While this research was about the health outcomes of neonates, I did not interview mothers but the workforce that provided for their health outcomes. I interviewed one donor and implementation partner to understand how the Pacific (and Fiji) has benefitted from their initiatives and programmes. I know that while I was not perceived as a 'Western World' person in Fiji, I was still doing this research as a student from New Zealand and I had to give important consideration in practicing my shared cultural competency and knowledge in a respectful way, trustworthiness and integrity at a day-to-day level (Smith, 2012).

Being of a Pacific country decent, I had to ensure that the politics of everyday matter towards gender inequality faced by the vulnerable and marginalised workforce that I am aware of through my work in the Pacific did not hinder my positionality (Wolf, 1996) when interviewing. The people of the Pacific like to follow a style of talanoa (conversation) and they will only share their voices and stories if they feel a mutual understanding and connectedness of the wider subject matter. I wanted to seek to understand what my interviewees were saying at a factual level and as health service workers in Fiji given the complexities and long-term disruptions to the health sector progress due to many unsettling events in the country (Kvale & Brinkmann, 2009). These semi-structured interviews added value as they were the experiences of everyday clinicians and policy makers. I used the list of guided questions that I prepared in advance to probe for more in-depth thinking, authentic answers and to further investigate responses (Oplatka, 2018). This kept me on track with the research aim and objectives too. I carried out my semi-structured interview based on this thinking. Being a qualitative researcher in this case is about "producing a theory, rather than testing it." (Stewart-Withers et al., 2014). The above approaches allowed me to carefully position myself as a researcher and describe relevant aspects, assumptions and experiences as a researcher in development field (Greenbank, 2003).

#### **4.5 Other considerations**

As my research was carried out with both academics and clinicians who teach at the Fiji National University (FNU) and work at the hospitals in Fiji, I took care in how I approached academics when carrying out a qualitative research. According to Ingham, Vanwesenbeeck, and Kirkland, (2009)

qualitative research is focused on the identification of the possible range of behavioural patterns, opinions, justifications, and explanations. Maternal and child health deaths, as well as other health related deaths is a sensitive topic to discuss (Alty & Rodham, 1998) and many academics exercise careful planning and implementation on how to answer the questions within a research setting (Oplatka, 2018). The FNU ethics team were very helpful in the ethics process and approval with MHMS, which was a requirement for my research in Fiji.

Neonatal death and workforce competency are a sensitive topic and it has not been researched outside of clinical based research in Fiji. The topic did affect my emotional well-being and I had to seek support post interview to debrief and discuss my emotional health, a situation which sometimes occurs with this kind of research (Lee & Lee, 2012). We are, after all, only human and I could not detach myself from these sensitive issues completely.

Elmir et al., (2011) suggests that it is important to build the trust and rapport between the participants and gain credibility in what this knowledge means and how crucial it is to be shared and reflected upon with honesty, supportive behaviour and respect. I used open-ended questions, which allowed the participants to feel at ease, and they answered the questions through a plan of enquiry in a flexible mode (Babbie, 2016). The questions were asked in any order so that it resonated with what was discussed. These flexible questioning sequences provided opportunities to discover my misunderstandings or learn new things (Schostack, 2006).

#### **4.6 Ethical issues**

As a researcher, it was my ethical responsibility to carry out the ethics approval for this research. This gave me credentials for my research, helped maximise benefits and minimised harm for the participants (O'Leary, 2009). I used the conceptual framework based on a human rights-based approach to health for this research and this was about finding the responsibilities of different roles in the health and other sectors that contributed to the strengthening of the child health workforce and the wellbeing of neonates in particular. I found that the following thematic attributes of positionality, recruitment and access to participants, potential harm, conflict of roles and handling information were addressed in an ethical manner so that non-bias, non-judgemental and workforce-sensitive research was obtained.

I had the opportunity to provide a low-level briefing on my research to a group of child health academics in Fiji and they all had advised me on the steps that needed to be taken in order for a formal participation to be made on their behalf. This was to let the head of child health at FNU and the child health clinicians (doctors, nurses and midwives) know of the research idea and why it was carried out,

the name of my academic university and supervisor and to inform the Fiji Health Research Council in advance for their information and note taking. I also submitted a copy of the ethics application from Massey University to the participants and respected bodies once it was available and before I carried out any formal semi-structured interviews.

I interviewed professional and experts in child health in Fiji who I knew or were referred as qualified individuals to provide meaningful conversation for this research. I emailed these participants, carried out skype or zoom video sessions and for the semi-structured interviews I travelled to Fiji to complete this in person.

Informed consent is critical to ethical research (Banks & Scheyvens, 2014). An information sheet outlining the research was given to all participants and I respected decisions from professionals who did not want to participate at any given point during the research. I had given careful consideration about who I would interview through consultations with my university supervisor and other academics that I liaised with in Fiji for this research. I was considerate of the role these agents played in Fiji's nursing and child health development towards policy making and those that worked in the wards alongside neonates. I would like to highlight that while I led this research, this is country-level information that rightfully belongs to Fiji's health sector workforce and every effort has been made to counter check information to be as accurate as possible. A copy of this research report, once completed, will be shared with Ministry of Health and Medical Services, Fiji.

All information regarding the interviewees has been fully safeguarded and protected and will not be mentioned in this research at individual level (Rossman & Rallis, 2012). I checked with institutions if they would like their institutions named in the research as providing recommendations on what can be improved. This gave individuals the control over what they would like disclosed or not (Olsen, 2003). All informed consents and information that was provided were checked on an on-going basis, so participation was harnessed, and participants informed all the time (Halloway & Wheeler, 1996).

#### **4.7 Positionality**

I tried to bring together understanding on how best to grow the neonatal workforce in Fiji and how some of the innovative approaches and current programmes and systems could be integrated or used in other parts of the Pacific. Having valid and factual information was critical to this research (Golafshani, 2003). I was careful that while I was also a health worker who managed health programmes, mostly relating to maternal and child health in the Pacific, I was solely focused on researching and not evaluating the programmes that I had managed in the past or continue to be

involved in now. This also meant that I informed all that I interviewed and consulted with, including development funders, and that I was not using any information relayed to me during this research for programme evaluation or reporting purposes and vice versa.

It was my aim to present a coherent development studies thesis and not a health studies thesis. As a scholar it is my aim to not let the politics and the programme issues and constraints that I am aware of influence my thesis report in anyway, but have it solely based on the information that was presented to me relating to this research and that was collected during this research.

#### **4.8 Conflicting roles**

It was highly likely that I was going to interview clinicians who were filling multiple roles within their administrative and clinical capacities and this workforce added value to my research as they brought a wealth of knowledge as policy contributors, too. It was also important for my participants and supervisor to know that I have classed myself as an emic and etic position holder many times within this research as a development consultant and programme writer for health plans, as my specialist knowledge in this field is known by many stakeholders. I was very content that I was able to practice my positionality, as my research was built on allowing me to be an etic person and observe and collate information objectively from the outside (Punch, 1998), leaving me to be non-biased in my judgements. Through the support of my supervisor I was also able to have a clear balance of approaching this research as a development studies student rather than a health programme developer.

To allow for internal validity, credibility, transferability and to test the fitness of the information that was gathered and analysed from information shared, I shared my findings with the interviewees to gain freedom from unacknowledged researcher bias, which provided true value to the people studied (in this case the neonates and the nurses) and see that the conclusions of my report fits with what we already knew and how the study added utilization and reliability to current and future context (Miles and Huberman, 1994).

I wanted to use the information in my research to empower my participants and make this experience a worthwhile one (Banks & Scheyven, 2014). In the Pacific there is limited research on the reproductive, maternal and child health workforce front and this research could provide a valuable platform for health professionals and policy makers in the future in order to reflect and investigate on the innovations that are already in place for Fiji nurses.

Utmost care was taken not to share sensitive information in this research. All information gathered has been used for research and is for academic use only.

#### **4.9 Chapter summary**

As covered in this chapter, I relied heavily on the qualitative and naturalistic approach to obtaining information in the settings of Fiji. I gained enough quantitative information through desk-based studies and am hopeful that more published literature at country level will continue to add value to this research. The use of semi-structured interview was favourable and allowed for gaining a deeper meaning using the talanoa approach.

The ethics approval process was compulsory for my research and so was the safeguarding of all participants and the information that they will share with me. This chapter has highlighted the limitations that were presented and the strengths of this research. The validity of the findings was confirmed by the participants and these have been transferred and analysed in Chapters 7 and 8.

While remaining adamant that I was not going to be affected by the sensitive nature of this topic, I proved myself wrong. This research deeply affected my emotional well-being. While it shows that we are only human, it concerned me that I was talking to a workforce that dealt with these overwhelming and sensitive issues and risks every day. These issues and risks are discussed in chapter 6.

The findings from this research has been captured in Chapter 6. The next chapter provides a deeper analysis of Fiji's health systems and defines the country's context in terms of workforce and neonatal mortality.

# Chapter 5

## Neonatal health and workforce in Fiji – a country context

### 5.1 Introduction

The first four chapters of this research allowed me to dig deep and explore the international, regional and some of the national health programmes that add value to the neonatal child health outcomes and that of the workforce providing it.

In this chapter, I will explore Fiji's child health context, paying attention to neonatal health and examining the trends that are presented through the many national reports by MHMS. The current situational analysis of why neonatal mortality has remained significant will be discussed. I will also touch on the current health workforce, the training that is available, the new roles that enhances health care and why an effective workforce distribution is needed.

### 5.2 Fiji's health status – the national situation

According to a national report on Fiji by Chung and Howick-Smith (2007), Fiji has, since the late 1990s, experienced stalled progress on the basic development indicators of reduction in poverty and the satisfaction of basic human needs. This report states that while child mortality rates have dropped in other Pacific Island nations Fiji's has remained static at around 20 deaths per 1000 live-births for under-fives. The maternal mortality rate is significantly high, increasing from 19.07 in 2013 to 44.4 in 2014, and teenage pregnancy within a two-and-a-half-year period between 2015 and 2017 for girls under 15 was 117, and 7220 for girls between the ages of 15 and 19 (MHMS, 2017). The teenage pregnancy data presented for 2015 sat at only 25% of the total teenage pregnancies in the annual reports due to inconsistency in reporting compliance (MHMS, 2016). A high maternal mortality, infant mortality and teenage pregnancy rate could be a determinant of many health and socio-economic factors.

Fiji forecasted an increase in life expectancy for males at 66 years and females at 71 years (MHMS, 2016). There is an increase in child poverty and hardship that has been driven by decades of political instability, loss of employment and large flows of migration and emigration (Chung & Howick-Smith, 2007). Fiji's health system faces many challenges as its population grows rapidly in the urban areas and the health status of the population has slowed since 1990 (WHO, 2011). All the above shows the

challenges that lie within Fiji for unmet needs of family planning and a high death rate for maternal and child cases.

### 5.3 Child mortality and health - why is infant mortality improving in Fiji, yet the neonatal mortality is still a major concern?

Globally, the neonatal mortality rate fell from 36 deaths per 1,000 live births in 1990 to 19 in 2015 (UNICEF, 2015). For Fiji this decline has been slower, despite the gains made in the Oceania region (UNICEF, 2015). This slow progress is shown in Table 1 below. The table shows the progress towards achievement of MDG 4 (Reduce Child Mortality), and MDG 5 (Improve Maternal Health by 2015) for Fiji over a period of 17 years and as reported by WHO in 2011. At the time of reporting and coming close to the end of the MDG era of 2015, this report showed that there was no marked improvement, and together with other information concluded that the overall population indicators showed no significant improvement in the health status of the people of Fiji generally between 2003-2007 (WHO, 2011).

**Table 1: Fiji's progress towards achievement of MDG 4 and 5 (1990-2007)**

| Year              | MDG 4  |  | MDG 5   |
|-------------------|--|--|---|
|                   | Child (< 5 ) Mortality Rate (per 1000 live births) | Infant Mortality Rate (per 1000 live births) | Maternal Mortality Rate (per 100 000 live births) |
| 1990              | N/A  | 16.8   | 26.8  |
| 1995              | 19.3   | 14.7   | 60.4  |
| 2000              | 21.8   | 16.2   | 57.5  |
| 2005              | 25.8   | 20.7   | 67.3  |
| 2007              | 22.4   | 18.4   | 31.1  |
| <b>MDG Target</b> | <b>9.3</b>   | <b>5.6</b>                                   | <b>10.3</b>                                       |

Source: Ministry of Health (1990), Ministry of Health (1995), Ministry of Health (2007b).

Fiji has made some advances in the child health field, more so in the broad goal of reducing child mortality for under five-year olds (WHO, 2011) even though the MDGs did not focus strictly on the newborn death and still births (Cumberland, 2015). A review of the infant mortality rate by Russell (2010) reveals that the bulk of all under-five mortality rates in Fiji occurs during the neonatal period (Bythell, 2016; WHO, 2011; MHMS, 2016). Fiji, like, other countries still lacks adequate death registration capacity, together with issues relating to classifications of deaths, but there has been significant improvement made in 2016 to capture correct data that lists the infant mortality rate at 13.9, perinatal mortality at 13.2, neonatal mortality at 6.5 and post neonatal mortality rate at 7.4, all per 1000 live births (MHMS, 2016). There has been a decrease in mortality rates since 2000 but fluctuations have been noted in the last three years. Adding to the complexity, the perinatal mortality

rate has variations due to definitions on “fetal losses, fetal death and reporting of these cases” (MHMS, 2016). These show the challenges in obtaining accurate data for the neonatal death rate in Fiji.

In 2010, Fiji undertook a comprehensive review for infant mortality in Fiji. This was due to concerns about the lack of improvement in infant and child health mortality rates for Fiji during the MDGs. This review was taken under the guidance of the Ministry of Health and Medical Services, Fiji. The findings concluded that there had been little change in the infant mortality rate in the ten years preceding the study (Bythell et al., 2016). The review called for more concerted effort to improve the quality of antenatal and perinatal services. In 2012, it was reported that a total of 169 stillbirths and 334 infant deaths were reported. 172 of the infant deaths occurred in the neonatal period, with 128 of these deaths occurring in the first seven days (Bythell et al., 2016). The vast majority of stillbirths and neonatal deaths occurred in divisional hospitals, around half of the late deaths occurred in divisional hospitals, with a large number of these infants dying at home. Following this comprehensive review in 2012, the recommendations and suggestion were included in the national child health strategy planning in Fiji from 2014 onwards.

In meeting the goals set within SDG 3, Fiji has shown signals of how this will be achieved. The Fiji MHMS Corporate Plan (2017-2018) clearly articulates its key pillars, target outcomes against the goals and policy objectives that relate to the SDGs, outcome performance indicators in relation to the SDGs, and the Ministry of Health and Medical Services outputs in eight priority areas of health. The Priority Area 2 is listed as maternal, infant, child and adolescent health. There is no mention of neonatal health within this priority area and whether the statistics relating to neonatal mortality is inclusive of infant related data, is not emphasised. The outcome performance indicators, however, include a neonatal mortality rate as low as 12 per 1,000 live births. The Corporate Plan does not outline how the indicators will be achieved and what outputs will be in place to achieve the targets and these may be present in the service delivery plans at country level. However, these documents at service delivery level are not readily available. The level of health funding overall in Fiji is still weak and Fiji needs to have a National Health Accounts audit conducted to understand its health spending fully, as the last one was completed in 2015 (WPRO, 2016) and the last national census was completed in 2017. The understanding provided through a thorough health funding audit will enable the government to commit its resources more to child health investments, as investing in children and the workforce related to providing better health care for children is crucial and has positive long-term benefits (Alipui & O’Shea, 2015).



The challenges remain. I have outlined in the chapters that follow how Fiji has or is able to scale up effective interventions, create new approaches (in health and other sectors), strengthen its overburdened health system, overcome inadequate post-natal care, reduce inequality and make every child count to meet its strategic priorities and targets within the SDGS.

A human rights approach to health is critical in addressing the inequalities faced by the population of Fiji. These inequalities created over the decades of political instability and lack of investment into healthcare has remained a challenge for improving health literacy, developing health policies and practicing guidelines, ensuring state willingness and ability to meet constitutional obligations, understanding and having an ownership over donor funded programmes and empowering duty bearers and patients to understand their own health and use the services that is available for them (WHO, 2011).

Fiji has made advances for child health and with careful systems strengthening can accommodate for useful data to make future decisions on child health investments. In later part of this chapter, I am exploring the overall workforce to understand the directives Fiji is working on to end preventable deaths for neonates, infants and mothers. It is clear that Fiji has a continuum of care approach within its government funded public health system. What needs to be reviewed is how robust these approaches are.

#### **5.4 Fiji's health workforce – training, new roles and workforce distribution**

In chapter 3, as I analysed the workforce in the Pacific, it has been apparent that the workforce in the Pacific is scarcely distributed. In Fiji, the Health Systems in Transition report by WHO was the last country-based report for Fiji that provides a detailed description of Fiji's health systems and the reform and policy initiatives in progress at the time in 2011. This report outlines that public health care is free or at a very low set fee and the government is responsible for all health care development and management in the country. The report states that due to the high number of health professionals leaving or migrating overseas, there has been a pressure to work within means. On the contrary, and because of financial dilemmas, the report also states that there have been actions to cut down on the workforce, while at the same time, the population keeps growing and so does the demand for the health service. Additionally, the report elaborates on the health workforce, and that per capita, the number of doctors and nurses has remained static since 1996. The ratio of Fiji's health workforce in 2016 was doctors at 6.2 per 10,000 population, nurses at 31.7 per 10,000 population and midwives at 2.5 per 10,000 population (MHMS, 2016).

The critical threshold as mandated by WHO for low income countries is 23 doctors, nurses and midwives per 10,000 population (WHO, 2009). Fiji has a total nursing workforce at 3,360 nurses (MHMS, 2018). Therefore, the understanding is that Fiji sits comfortably as having a justified health workforce and having 36-38 nurses per 10,000 population (MHMS, 2018). Nurses in Fiji have remained at the forefront of health care, represent almost two-thirds of the workforce and provide care from secondary to primary and community-based facilities (MHMS, 2016). It is equally important to note that the health worker density does not consider all the health system's objectives, and this can become an issue for lower or middle- income countries where the data and population measure is not accurately captured at times (WHO, 2011). I will discuss this further in this chapter under health workforce relating to the benchmark of health workforce set by WHO.

According to the most recent report by Wiseman et al., 2017, Fiji fortunately meets the 2.3 health workers per 1000 population as set by WHO but there are causes for concern as to whether this workforce is sufficient and distributed in an equitable population needs basis. This report adopted methods in economics literature using the Lorenz Curve/Gini Coefficient and the Theil Index to measure the extent of health workforce distribution inequality based on the use of population size and crude death rates as proxies for health care. In Fiji's case, during this 2017 study, the infant mortality rate sat at 20/1000 live births since 2000, thus remaining stable, the maternal mortality rate was 29.3/100,000 (still above the MDG target of 10.3 / 100,000 live births) and the under-five mortality rate was 16.6/1000 live births (barely unchanged for the MDG target of 5.5/1000 live birth). The report goes on to say that there is an inequality shown in the way workforce is distributed within Fiji, and for the 15 provinces in Fiji, nine were below the minimum ratio for nurses and all were below the ratio for doctors. This shows that having a country baseline and WHO recommended ratio of 2.3 health workers does not necessarily mean having workforce spread out appropriately to balance the needs of the population. These findings then led me to further explore whether the neonatal or other child health nurses are adequately spread out between the four divisions and the three main divisional hospitals and other health centres throughout Fiji. I have captured these in my findings in Chapter 6.

For my thesis and as focussed on Fiji, it is not difficult to point out that Fiji, in terms of health care delivery and planning, has major challenges, too, for child health and these are stated in many of the country annual health reports. In 2003 there were about 1,750 nurses and 300 doctors for whole the of Fiji (Usher and Lindsay, 2003). There was a significant marked improvement in 2014, with the health workforce having 2,421 nurses and 597 doctors (MHMS, 2014), and a steady increase since then. A

large proportion of nurses resign or retire every year though (MHMS, 2014), which creates a workforce gap in the already stretched healthcare system, as nurses are the forefront of many disease prevention and health promotion services in Fiji. Most of the health stations in remote areas of Fiji are managed by the nurse practitioner role (Usher 2001).

The nurse practitioner role was implemented by the government of Fiji in 1999. This role has remained a successful component of the health workforce. Experienced nurses, who already have a midwifery and public health qualification and have been in a nursing position for over 15 years, complete a 13-month programme which allows them to assess and manage direct referrals, make out prescriptions and order diagnostics (Fiji National University, 2018). In an impact study report by Usher and Lindsay (2004), the findings stated that the nurse practitioner role has significantly expanded the role of clinical capacity for nurses in the community and adds to the continuum of health provision for neonates after discharge from divisional or sub-divisional setting. It is a sustainable way of creating a health workforce that has filled in the gaps that the decentralised system is struggling to fill, while at the same time unsafely leaving the nurse practitioners to carry out procedures that are outside their scope of practice (Usher and Lindsay, 2004; Haddad and Williams, 2001).

It is difficult to ascertain what happens at the country level and how in particular the nurse workforce for child health is trained after their undergraduate studies. There are very little opportunities for on-going formal professional development for nurses. The FNU offers a general three-year undergraduate degree in nursing qualification. During years two and three of the three-year programme the learners are trained in many of the child health related areas at primary and acute level of clinical management (FNU, 2018). These include obstetrics nursing, child health nursing, public health nursing and epidemiology, and others. Up until the end of 2017, there was postgraduate level Diploma for Midwifery available for nurses to undertake over a year (FNU, 2018). As of 2018, there is a Bachelor in Midwifery qualification that is offered post registration, which is an 18-month programme (over three semesters) in line with the International Standard for Midwifery Courses by the International Confederation for Midwives (FNU, 2018). The doctors on the other hand are provided with a five-year undergraduate general level Bachelor of Medicine and Bachelor of Surgery, a postgraduate in diploma in child health as well as obstetrics and gynaecology, and a master's level of study in paediatrics as well as obstetrics and gynaecology (FNU, 2018). Some midwives in Fiji work as neonatal nurses, but it is crucial to note that the nurse practitioner roles have an added clinical capacity to provide treatment for children in their care too.

Fiji does not have a neonatal nursing specialisation yet but has neonatal intensive care units (NICU). The nurses who work in this unit and provide critical care for neonates, are trained by senior nurses within the clinical settings. There is a need for a role analysis to be completed for this speciality in nursing, so that preventable neonatal deaths are minimised or eradicated in Fiji. Fiji invested \$27million (MHMS, 2017) for child health initiatives and nursing costs are generally the largest costs in a healthcare system (Kenner, 2015). In 2017, the Minister for Health stated that \$3.51 million was allocated in the 2016-17 National Budget to fund the recruitment and hiring of nurses in Fiji, which saw 300 new graduate nurses recruited in 2017 from FNU and the Sangam Institute of Nursing and having a current workforce of now 38 nurses per 10,000 people, a significant increase from 22 nurses per 10,000 population till April 2017 (The Fiji Sun, 2017). The press release also mentioned that Fiji's 2018 goal was to have 40 nurses per 10,000 people (The Fiji Sun, 2017). The challenges continue to lie in where these nurses will be stationed in an equitable resource and population needs-based setting within Fiji's fifteen provinces (Wiseman et. al., 2017) and how many of them will be training further in maternal and child health needs. With the positive achievements made so far by the government of Fiji, the investments in the nursing profession should be regarded as contributing to better outcomes of the greater population's health and should remain, in large part, as an investment rather than regarded as an expenditure.

## **5.5 Chapter summary**

Fiji has made many gains on the child health front. There is a strong emphasis on its public health care model and the continuum of care approach. The country has been the main training hub for medical graduates in the Pacific. Overall the country has worked very hard to keep producing clinicians for the whole of the Pacific and at the same time train their own workforce too. There have been significant investments made in the nursing front at community level through the training of nurse practitioners. There are few courses available at post graduate level and these could accommodate for more child health related qualifications at nursing level. The FNU and other academic providers will need to work harder and invest more resources towards upskilling the child health workforce and train nurses to be specialists in their area of practice.

Fiji has a strong health sector Corporate Plan and clearly identifies the outcomes and targets it wants to focus on and improve. This is a welcoming strategic plan as it aligns its focus to SDG goals and targets. It will be useful to have the service implementation plans that correspond to the National Corporate Plan or other governance level plans readily available for the workforce. This will enable the workforce to be aware and included at all levels of the country's strategic directions, goals and

planning around how to achieve the targets. Fiji's National Development Plan 2017-2036 is exemplary as it accommodates all of sector planning in a gratifying cross-cutting approach. It promotes the integration of services and policy reforms to enhance social and economic development. This allows inclusive socio-economic development to take place.

The national health workforce in Fiji is adequate given the recommended threshold by World Health Organisation. It is however evident that the dissemination of the workforce remains fragile within the districts and this is seen as a limiting factor to meeting outcomes for neonates within community settings. Fiji has had decades of political instability and a stagnant achievement for child and maternal mortality targets during the MDG era. To return the health sector and its workforce to an acceptable level within child health care provisions, Fiji will require a strong commitment from the government and all partners in health.

The next chapter outlines the findings for this research following a visit to Fiji and after completing semi-structured interviews.

## Chapter 6

# Provision of neonatal care in Fiji and its challenges

### 6.1 Introduction

In this chapter I have identified common themes arising from my research and have grouped them under thematic areas, so it remains within my focus area of identifying challenges for the neonatal workforce, establishing what developments has been made in neonatal care in Fiji and examining how effective these are in terms of achieving SDG 3, target 3.2.

I will start by outlining the programmes that are in place to support neonatal and neonatal nursing workforce and disclose the opportunities that were identified to strengthen provision of services within a continuum of care approach. I will further discuss issues of an over-burdened and undertrained workforce and what sentiments are held on this delicate issue. This then leads to the realisation on why an organisational culture change is necessary within a holistic perspective which builds onto the subject of role delineations and how this plays a major consideration for current and future neonatal workforce. Finally, I will discuss the findings in relation to the government of the day and what their duty is.

### 6.2 Programmes in place that enhance neonatal care and support the neonatal nursing workforce

As part of this study, I carried out a desk-based literature review and semi-structured interviews. Semi-structured interviews proved to be well accepted within the context, as a talanoa approach was more suitable for all technical advisors that I liaised with. The professionals in Fiji were forth coming in their understanding and sharing of what was happening in the country and they were able to identify many successes, challenges and solutions.

There were many programmes that were identified as positive supporting initiatives that the government and donor partners had put in place to support the role of neonatal nursing, directly and indirectly. These were the Mother Safe Hospital Initiative, Nurse Practitioner Programmes, Integrated Management of Childhood Illness, Baby Friendly Hospital Initiatives, Neonatal Resuscitation Programme, Paediatrics Life Support, Patient Information System, Neonatal INFANTS Training, and several other ongoing learning support programmes. Fiji has a high number of women attending antenatal clinics and the package of care at nurse led primary and acute clinics included the antenatal, child birth and post-partum care. There seemed to be a provision for mothers accessing these clinics

in a timely manner and the clinics were mostly staffed with highly skilled attendants who were senior nurses or midwives.

Many of the above programmes were recognised as a scaled-up intervention that were strengthened during the MDG era. There was a political will at the time to have these in place so the hard to reach and marginalised women and children could be reached earlier. The health workforce identified that their concerns were mostly in the areas of post-partum as part of the continuum of care approach. Women who delivered in many of the facilities were discharged within hours and this sometimes posed a risk to mothers and neonates as the presentation back to the hospitals were often delayed. Concerns were raised for teenage mothers who were at a higher risk and often presented late for antenatal support provided by midwives. This meant that the unborn child and the mother were not monitored over a period of up to eight or nine months at times. Participants felt that this was due to the unacceptance of teenage pregnancy by society which is still in place in Fiji and also the costs related to accessing the services in a timely manner. The added burden of lack of health literacy was also seen as a barrier.

There was an increased identification that there is a need to understand the presentations, carry out clinical audits and analyse data in a timely manner. This means understanding the clinical needs of the patients and that of the mother and providing care in a timely and effective manner. Nurses felt that they should be part of the clinical audit team, policy decision making and programme planning teams. Participants relayed that they want to be better informed about practices such as early identification of illnesses, sepsis, deteriorating and improving conditions, and others. Nurses felt that if this was happening, they would be better able to take ownership of their capacity and capability growth as neonatal nurses.

For the many programmes that were at the public health level, nurses relayed that there was little contact between neonatal nurses and the trained Integrated Management of Childhood Illness clinicians, who were mostly doctors, based in the public health system. These doctors wrote discharge summaries and opportunities were identified that these discharge summaries could be discussed in a fuller state with the nurses in the neonatal and other child health wards. Opportunities were also identified that there could be a better follow up process that could take place between nurses for the neonate and the mother. It was also recognised that an improvement could be made in using the patient health information system more effectively to provide timely communication between levels of care, as most of the time manual clinical notes were presented between community and other settings. The nurses felt that at many times the focus was on the neonate rather than the mother and that this should change to provide effective and quality healthcare to both in care.

### **6.3 Under-trained and over worked workforce**

At the time of these semi-structured interviews that took place in late August 2018, over 300 neonates were admitted at the NICU at Colonial War Memorial (CWM) Hospital in Suva already within a seven to eight-month period. Being Fiji's main NICU hospital, CWM Hospital has 30 beds, 32 nurses, and three shifts with nine nurses present per shift. There were six midwives who worked in the NICU as charge leaders and managers. It was evident that the team were overworked and tired and that there were no qualified neonatal nurses. The NICU team struggled to keep their staffing safe, as on any given shift 27 out of 32 nurses were on rostered duty each day. This left the team with five nurses who they could rely upon to fill in. It was difficult when staff took leave. The nurse to patient ratio was not acceptable given the acuity for the patients in care. It was evident that adequate nursing staff is a prerequisite to providing the basic fundamentals of care. The NICU nurses at CWM Hospital were providing one to one care for ventilated neonates. The ratio of nurse to non-ventilated patients was one to four. At times, when there was more demand for ventilated patient support, the nurses worked longer hours to provide this support if staff was in short supply.

Many staff felt that they were in a state of fatigue and emotionally challenging themselves to do more as they felt for the families in their care. There was a concern that staff chose to leave or migrate as they were overworked, underpaid, not given or having lack of moral support and were under trained in what was a highly skilled area. There were also concerns raised that competency in such a critical area should be assessed for all nurses against international guidelines.

It did appear that there was no recognised formal career pathway that is primarily focused on child health, except for midwifery. There were continued efforts by FNU and other stakeholders to do this over the last three years but each time the programme got shelved and no reasons were given as to why this happened. There was a recommendation made that within the nurse practitioner model there could be provisions made to design curriculum for post-graduate nurse practitioner level qualifying in child health management. This would allow future nurses to train in their areas of interest. It was well accepted that nurse practitioners were brought into places where doctors didn't want to go so it was timely that future role delineations were understood better to meet industry need. To further their training after undergraduate level, nurses relayed that they needed the tertiary education sector to deliver to the needs of the healthcare workforce driven by the needs of the population. The same sentiments were echoed by the other people that were interviewed. The sector is heavily reliant on FNU to design and deliver programmes of learning that meets the current workforce need or industry need in terms of specialist scope of practice.



Nurses who had gone overseas on work attachments felt that they were as well trained practically in the wards as their New Zealand counterparts, but they were in danger of losing their service staff at anytime due to Fiji's challenging health system which included lack of time to supervise new nurses in the neonatal wards:

*"Many of the tasks carried out in New Zealand is what we do at CWM, so we are able to do these. We need more confidence and supervision for our younger nurses."*

The nurses felt that neonatal nursing had to be a recognised nursing specialist area and a competency-based guideline should be in place for nurses at induction, basic and advanced levels of nursing for this specific area of nursing. Fathers' were often not fully present or allowed in the wards at all the time. There was a continued recognition that a family centred care approach was needed and should always be in practice:

*"First of all, we need to be specialised in the special care...and teach how to enhance care through family-centred care, we need to involve the families."*

Many nurses reported that they suffered from emotional fatigue. The workforce within NICU could confide in each other and the nurses were able to discuss their concerns with their senior nurses. But there was no proper support available for nurses who felt that they were burned out and their soft skills in nursing of simple communication, empathy and teamwork were at risk and often compromised. It was relayed that raising such concerns meant that some nurses felt that they were not strong enough and there was often a stigma that was associated with seeking for help:

*"We don't only look after the neonates. We look after the mothers and try and make provisions for fathers to be present too. It is difficult when a neonatal death occurs. It hits us all. And we don't know where to get the right moral support and what questions to ask. It becomes a confused nature and we eventually sometimes beat ourselves for it. Every mother wants a healthy child and it is their right to have a healthy child. Having a baby is everything."*

Nurses were not aware of the number of neonatal deaths that had occurred during the 2016 or 2017 year. They relayed that it was an information managed by others in hierarchy and will only know the total number of deaths when reports are collated at the end of the financial year. Participants

agreed that the information relayed by different parties regarding neonatal, infant and other child mortality numbers were at times confusing as each relayed data that was not the same or inconclusive.

#### **6.4 Continuum of Care**

Within the community nursing practices, there was little understanding of what provisions were made or are available for babies at neonatal age in a community care setting. There was no recognised formal programme or project post NICU discharge that did long term follow up.

As part of the discussions that continued within the continuum of care approach, it was noted that many consumables were in continuous short supply. NICU nurses were using worn out consumables on neonates. At many times the procurement ordering was a challenge and while things were slowly improving it was far from having an adequate supply that was readily available in the NICU ward. Participants relayed that many parents were aware of the shortage of consumables for neonates at the hospital and they often vented their frustrations on the social media.

Concerns were raised that the perinatal mortality was high, and the clinical team needed to understand, carry out audits and be able to explain why this was happening. The perinatal period commences at 22 completed weeks (154 days) of gestation and ends seven completed days after birth. It was stated that the perinatal period is an important indicator for maternal and child health and driven through the health, social and other sectors and the associated underlying determinants influenced the outcome of the birth of a healthy child, the obstetric care that was available for mothers and the post discharge care.

#### **6.5 Organisational culture change**

Fiji was a colonised nation. Our education system is still very British, and our hierarchical system, adopted and heavily influenced by the colonial era is still prevalent. The staff in NICU felt that this hierarchical nature acted as a barrier to advocating for neonates and their mothers in care. This included advocating for changes at government level that they know affects their profession and the patients in their care:

*“We don’t do it in fear of being victimised. We will not be appreciated and will be told that we are acting in sub-ordination to others in hierarchy. In overseas, there is a team environment. Everyone feels involved in the decision making and there is a mutual respect between a doctor and a nurse.*

*Our titles should not dictate who we are.”*

There was a common recognition that nurses and others in the team should be empowered into correctly advocating for the neonates in their care. Nurses should be considered as equal as other health professionals and should be included in the decision-making processes regularly. Nurses felt that policy decisions and programme planning were therefore often carried out without much thought on what is happening in the wards. There was a recognised urgency to improve decisions made and to adopt evidence-based practices where information was fully analysed. Nurses relayed that they did have the capability to do this, but it often came down to capacity of workforce available within the wider NICU team. Workforce numbers were limited and the demand for the service was high being the only advanced NICU care in the country. Nurses were determined to establish a NICU neonatal society so safe practices could be discussed for patients in care and for the workforce.

Linking to this topic, and over many times during the talanoa sessions, came the echoing sentiments that an organisational culture must be nurtured that brings together positive change in a patient-centred environment. Leaders felt that they would benefit from further training that required showing emotional understanding and empathy for others:

*“We have to create leadership approaches and models where people feel they are able to discuss their concerns. This is not about counselling. This is about change management that brings improvement to who we are as individuals and clinicians.”*

Leaders identified that the NICU ward is one of the most critical wards in the healthcare system as it attends to the care of the most vulnerable babies. Often at times it was evident that mothers who came from lower socio-economic status were caught up in a complex multi-sector system, including that of healthcare, and these systems were not proving to be efficient and not fully integrating the principals of a patient-centred care approach. This was more of an organisational and institutional culture dilemma and needed a coordinated effort in providing a cohesive rather than fragmented service.

Participants interviewed showed strong emphasis and approach to understanding what care meant for them in a nursing sense and they kept referring to prescriptive, ethical and human care. It was evident that the nurses were motivated morally and felt that they had the obligation to consider everyone within their circle of care. Nurses felt that more emphasis must be given on not only learning the scientific and clinical components of neonatal nursing but to the philosophical practice. Nurses talked about humanity and the Fijian caring attitude of asking and indirectly having a conversation about a patient’s wider family, food availability, proper environment for the neonate to return home

to, providing personal support and being present when the people in their care needed solace and other support. Being able to hear the silent voices and understanding the deeper meaning from a silent mother was an important skill to the nurses. Nurses felt that nursing is not based on prescriptive medicine model only and that its value and place in society and future planning has to be given more thought:

*“We want to conceptualise nursing as more than medical care. It is about talking about other activities too. We create conversations or talanoa about other things like family planning, being prepared to be a healthy mother and how to care for a fragile child. We want our parents to be able to make the decisions for themselves with our support. Our role is to make an impact where parents feel knowledgeable. It is not only about the clinical aspect but genuinely being able to care for another human being is important to us. That is nursing.”*

## **6.6 Role Delineation**

It was recognised that midwifery is a speciality area in Fiji. Given there was no other paediatrics programme in place then and now, the scope of midwifery practice was originally developed within the understanding that midwives can work in the pre-natal area, labour ward and post-natal area until the six weeks post-partum period. This understanding should still be valid, and a wider consultation was needed on this given that the midwives practicing as NICU nurses will gradually be taken out of the NICU setting.

Adding to the above, the nurses felt that there were too many rotations for interns in wards. This created a burden with forever teaching new nurses who were to eventually move out of the NICU ward. There was lack of coordination and understanding on the number of nurses required in the NICU ward by senior authorities. Nurses felt that they could benefit from putting forward an expression of interest for the ward they want to serve in and become a specialist in that area:

*“A nurse with more than a decade of neonatal experience but with a midwifery qualification will benefit from staying in NICU...give us a choice and understand that our interest is in neonatal nursing. We will have to start from the bottom again if we moved to labour ward and we have to upskill for years. How can this make sense? Taking out the charge nurses who are midwives to now go to midwifery or labour units will leave a huge gap in our service and pose a risk to our neonates.”*

The team recognised that they could have opportunities created where nurses, midwives and doctors could train together. As there is no specific neonatologist in Fiji, role delineation needs to be fully

considered when making or putting together a children's service. The NICU and the special care admissions can sometimes last for three months. There were concerns raised on how this was measured in terms of reporting as neonatal period lasts from 0-28days. The paediatricians usually decided on the recording methods and the nurses were not sure how this was captured.

## **6.7 Government responsibility and required support**

There is an absolute recognition by the authorities of child health care that there is a NICU nursing and doctor shortage in Fiji. The same goes for midwifery. FNU did not train midwives for over two years recently and this affected the workforce supply nationally and regionally. No one was qualified at FNU level to teach a post-graduate level qualification for child health nursing.

FNU is a government-based academic provider and a paediatric curriculum is necessary for the country. There are many short courses and training material that has been worked on by donor and other agencies that could be combined and put into a curriculum and implemented.

It was recognised that the nurses needed to take a vested interest in their own formal learning and not rely on government scholarships all the time. This culture needed to change. It was also suggested that the government could put in place some financial support. There was a recognised need to have a higher education payment scheme depending on the qualification gained. All those who were interviewed felt that the government could create a payback scheme over the years so advancing oneself in further education is much more affordable. There was availability of the Fiji National Provident Fund scheme to withdraw funds for further education, but nurses did not want to touch their retirement funds.

Participants believed that the health system needed an overhaul in child health services and future programmes have to be well considered within a continuum of care approach to thinking and growing the workforce equally to be competent and readily available. It was stated:

*"You cannot run the health system with-in the current model of workforce growth."*

At many times, there were courses that were delivered over 3-4 years by donor led agencies that did not provide any accreditation though there was an agreement to have this in place. This created a sense of being burdened with extra learning and network creation when the support within the country and programme planning lacked cohesive thinking on workforce accreditation and training. There was no budget allocation for national programmes by the government that were donor led; for example, the INFANTS Programme. There was little understanding on who made the decisions and who signed off programmes and whether a full consultation was in place to identify the needs within

the wards. Many approved programmes and projects simply did not get reviewed by nurses but were approved. Some donor programmes changed their content after they were approved by the government and a new programme was delivered without prior approval or consent from the nurses. As recipients, participants felt that they were in no position to question the hierarchy but had to manage the workflow and learn what was provided at the same time.

It was relayed that the government targets set within the healthcare system were ambitious and nurses worked hard to meet these targets, but the reality was often missed on the ground as basic consumables and skilled workforce was in short supply. The sector felt that the MHMS team could hold teaching and consultation meetings at clinical and ward level to understand why targets were not met or what could be improved in order to meet the set targets. Intersectoral meetings would benefit other ministries that provide for the wellbeing of mothers and children, like the Ministry of Children, Women and Social Development.

It was agreed that the government needed to coordinate efforts of donor agencies better and have a national health coordination team doing this with the child health implementing team, and not just with the planning team. As relayed, some felt that sometimes one donor agency did not know what the other was doing, and programmes were often duplicated. At one point over two years, two programmes ran parallel to each other and both were teaching the same concepts in neonatal care. This created a burden on the tired workforce and reporting on the outputs was seen to be taking precedence over long-term outcomes. There were also confusions at country level whether the focus was on project outputs or programme outcomes. Since the government of the day did not provide any project outputs but depended on the donor agency or implementing partner to do all the work, there was little on-going monitoring and evaluation of programmes within country level. Change of leadership at the ministry or programme management level also meant that usually there was poor handover and the local nurses had to work hard to fill in the information gaps on top of their everyday roles.

Emphasis was placed on the organisational culture that needed changing overall. This central theme was on the organisation valuing the health workforce more, understanding worker fatigue and having provisions made for incremental changes within a comprehensive transformational strategy over time. It was important for all to have a sense of belonging and that leadership could be distributed. Ultimately, the participants felt that promoting staff engagement was critical in order to create any change.

The nurses felt that being a predominantly women led workforce in the NICU care, they had a bigger role to play in providing health literacy to parents and other family members. A baby who was admitted over two months with their mother should give nurses the opportunity to talk about much more than neonatal care. These timely opportunities could be used by nurses, other healthcare practitioners, social workers, and others to provide a well-rounded holistic service to families in need. In addition, participants relayed that being in an environment led by women can also provide opportunities for nurses to advance their leadership skills and be a positive role model for other women who otherwise do not feel equal, are in abusive relationships and do not see themselves as important as others. Many lacked self-esteem as mothers. The government therefore could support mothers within the NICU care to explore ways in which they can make a sustainable living when they get discharged and upskill nurses in recognising the other social needs of the patients in their care. It was understood that while there needed to be an in-depth study on the number of readmissions made at CWM NICU ward, the nurses felt that this was due to mothers facing poverty and lack of social care support.

## **6.8 Chapter summary**

It was evident that we have a country with a determined neonatal nursing workforce and the relevant authorities working religiously to improve the care for mothers and neonates. There were many enhancing programmes in place that are working well after considering scaled-up interventions. Concerns remained that the overall health workforce in the neonatal unit is overworked and under-trained given the fragile nature of neonates that nurses have in their care. There is lack of consumables and procurement practices needed more attention.

The continuum of care approach is working well but opportunities were identified where through better collaboration and team work a more holistic care could be provided. This include the use of available technology and an improved health care patient information system. Standardisation of neonatal nursing through a specialist nursing approach was vital and the need to understand and consider changes within role delineation was seen as paramount. Nurses felt that being able to discuss and advocate for patient care and wellbeing should be done without any guilt and fear of hierarchy, as better health is a right for every individual.

It was apparent that improving the overall health system is about considering many aspects and these include the current and future workforce competency and skill set, advancing neonatal care practices in community-based nursing, reviewing the nursing curriculum and including paediatrics as part of the post graduate specialisation offer, and being able to provide more to mothers as well as the neonates in care.

The nurses had a strong sense and pride of the evolution of neonatal nursing in Fiji and they considered this speciality with such enthusiasm. The nurses knew that the care they provided to the neonates was complex. The nurses relayed that there have been significant advances in being able to understand and work with advanced technology. There was an increased understanding in clinical and ethical care and an active willingness to be part of clinical research and continued learning. There was an overall willingness to go back to family-centred care approach and having a collaborative partnership with parents. The participants concluded that the government was doing lot more for children than ever before and this was a positive sign.

In my next chapter, which analyses my findings, I will provide some recommendations on how to further support the needs of the neonatal nursing workforce in Fiji using the AAAQ Framework.



# Chapter 7

## The identified needs – an analysis

### 7.1 Introduction

This analysis has been completed using a rights-based approach to health development under the AAAQ Framework of availability, accessibility, affordability and quality of health care. I used this framework to consider what challenges and barriers the neonatal nursing workforce faces in a middle-income country, like Fiji, in order to effectively deliver services as aligned within the principles of universal health coverage. Achieving SDG 3, target 3.2 creates opportunities for other platforms and initiatives that the duty bearers in health care systems could harness to deliver a better-quality care through a patient-centred care approach.

This chapter begins with understanding the workforce, and in particular the specialisation of neonatal nursing. It considers the role of the duty bearer and what this means, explores the social determinants to health and how this important aspect must be considered holistically to improve the scope of care provided by the neonatal nurses.

### 7.2 The need for a regulated workforce to improve clinical capability and capacity

It is clear that the post-2015 development agenda calls for fit-for-purpose and fit-to-practice workforce (Homer et al., 2018). The neonatal nursing speciality area is a global challenge, but it presents Fiji with opportunities as the country leans towards more nurse specialisation thinking and ensuring that the neonatal nursing workforce has the capability and capacity to do more. The participants relayed that the shortage of neonatal nurses throughout Fiji was a concern for them as the NICUs are accommodating for more acute care neonates with complex needs and these neonates are admitted over a longer period of time. The insufficient size of the neonatal nursing workforce and the inequity in its distribution between three divisional hospitals meant that the availability of workforce in proportion to the population need was a concern. Fiji has to create an improved balance between the child health demand and the workforce that is now in supply.

Having quality nurses who understand their scope of practice within acute care setting is important and safeguards the workforce. Participants in my research understood confidently that managing patient risk was part of quality of care approach. Participants bravely called for standards,

accreditation and regulated practices. In order for progress to continue from the MDGs to the SDGs there is a need for better quality and quantity of nurses within the child health sector (Lawn et al., 2006). Nurses in Fiji felt that they were lacking confidence in their practice as they didn't have a clearly guided competency to practice at different levels when caring for neonates. Unfortunately, in many neonatal speciality areas throughout the world, literature is not available that states what constitutes a neonatal nurse specialisation and whether the licensing of neonatal nursing has a clear scope of practice either (Kenner, 2015). Therefore, at a global level, the International Council of Nurses and other recognised nursing fraternities need to become more proactive and have some standards and regulations in place on what constitutes the practices of a neonatal nurse. To have a neonatal nursing competency and to regulate this is a challenge for Fiji as the country is yet to develop competency for nursing practice and criteria of recognition and the qualifications associated with nursing specialisation (MHMS, 2018). Nevertheless, this is an urgent need that the government has to look into promptly.

At many times, and in Fiji's case, the continued formal education and upskilling is a focus (MHMS, 2018). At its 4<sup>th</sup> Annual National Nursing Scientific Symposium in Fiji in April 2018, nursing specialisation was addressed as the key strategy for the nurses in Fiji (MHMS, 2018). The symposium relayed that nursing was an evolving profession and the specialisation is needed to be considered from a broader perspective such as what is the need of the population, the hardships faced by nurses in a mixed-skill situation, understanding the plight of the mothers in care and the improved care that patients will receive from specialised nurses. This thinking could well be of the SDGs and how many different parties and sectors play an important role in workforce growth, leadership and a responsive healthcare system.

The sentiments raised in chapter 6 by participants and through literature reviews, shows a lack of ownership (Marris, 1986), organisational complexity and external influences driving non-sustained changes (such as donors and education providers) (Davies, Nutley & Mannion, 2000). There was a call for stronger partnerships and enhanced appreciation of the workforce. It was noted that there was also lack of appropriate leadership to understand workforce need against service demand, a cultural diversity that competes for dominance or creating an almost integration of other sub-cultures in one to avoid conflicts that have been generated over the years (Child & Faulkner, 1998). Neonatal nursing is not midwifery. Neonatal nursing is a sub- speciality of nursing in its own merit and in order for it to be functioning well, it has to have future workforce planning to be properly considered, so that the many sub-specialities of child health nursing are not clumped together. The nursing care of neonates

and mothers need to be well learnt within a neonatal ward. Additionally, for the current NICU nurses in Fiji there needs to be a study completed on nurse to patient ratios based on “patient acuity, skill mix, nurse competence, technological support, architecture and geography of the environment” (Kaur et al., 2010) in order to ascertain the workforce that is needed in a regulated form. These sentiments were strongly voiced by all the participants which shows their concerns on the effectiveness, appropriateness and availability of correct resources and infrastructure to do their work well. The participants were clearly advocating for the patients in their care and their own needs.

It was clear that the nurses wanted to be part of an improved change by being able to carry out clinical audits, system audits and research within a collaborative team environment where learning and continued culture of team environment could be embraced and enhanced. Generally, in the Pacific, there is little research or clinical audits carried out by nurses overall that could help to address gaps relevant to policy making decisions for best clinical practice (Ekeroma et al., 2014). This research by Ekeroma et al. in 2014 confirmed that nurses could benefit by using a team approach with other health professionals to perform research. Nurses can perform research and it was confirmed by Ekeroma et al. in 2014 that the research workshops that were delivered to multiple Pacific island clinicians showed that the knowledge gained by midwives and nurses was far more significant than that gained by physicians. This shows the willingness and readiness of nurses in the Pacific in general to build their research capacity. As shown in chapter 6, nurses wanted to contribute to social and humanities-based research topics too and not only the ones that were clinical-based. The nurses believed that nursing was bigger than the four walls of the hospital settings and by linking with other sectors in research they would be able to contribute to understanding the wider social, economic and environmental factors affecting families.

### **7.3 The responsibility of the main duty bearer – the Government of Fiji**

Given Fiji’s decades of political instability, it was interesting to examine how broad ranges of non-government organisations (NGOs), private sector and civil society have continued to work together in coherence and with international parties to advocate for human rights-based approaches in Fiji relating to child and maternal welfare. There were many reasonable communications on factors that were considered by policy makers and programmers or planners who were guided by the human rights standards and principles. The NGOs and international organisations together with the government continue to empower women and work towards eliminating discriminatory practices that allow every woman and child the right to good health in line with the SDG 3, target 3.2 target.

Fiji generally has high number of deaths due to delayed presentation and as recognised by many this is linked to poverty and low level of education (MHMS, 2016). Concerns remained given the high number of teenage pregnancies and cases of increased violence against women in Fiji. The annual number of births in Fiji was approximately 18,000 to 20,000 per year, with approximately 6% of births to adolescents aged less than 18 years of age, which means about 1,200 women were of teenage years (MHMS, 2016, p.8). Participants relayed that there were many cases of teenage mothers presenting very late to the health service providers or centres to acquire appropriate and timely care for themselves and the unborn child. This was related to the social stigma by the community and the inadequate health literacy. It therefore calls for understanding and acceptability and for health professionals to provide care without judging and in a respectful way so further harm is minimised or eliminated. Health practitioners at all level need to show sensitivity, cultural awareness and provide equal care for women and babies. It was evident that the government was focusing on equal care for all, but the inadequate practices remained. The lack of health literacy calls for improving the content of sexual and reproductive health curriculum delivered in schools for younger adults and in community settings that could benefit women of child bearing age.

Accessibility of health care remains one the biggest challenges for mothers and neonates in many countries. Accessibility is broken into two categories and these are geographical access and financial access or affordability (Homer et al., 2018). Geographical accessibility presents Fiji with challenges in terms of problems with roads and transports, poor communication networks between service providers and facilities as well as patients, lack of integration between the divisional and primary care facilities, and the higher impact of natural disasters. Fiji is now rated as the 19<sup>th</sup> most vulnerable country to natural disasters and has continued to have many devastating floods, droughts and cyclones in the recent years. There has been outbreaks such a dengue and typhoid which in turn causes an influx of admissions for babies and mothers. These high exposure to natural disasters and geographically isolated towns creates a further burden on the population and the workforce to reach people in need in a timely manner (AusAID Country Strategy 2011-14).

In order to minimise the above accessibility barriers, the government can look into improving safer transport for women and neonates from isolated settings to access services in a timely manner. The workforce also needs safe and reliant transport in place. The Ministry of Health and Medical Services could invest into improving referral pathways and use of electronic patient information system so real time health information data and records are made available for clinicians and health planners. Poor communication networks, or lack of, hindered advice-seeking between community and acute care

child health professionals and the government could rectify these, so adequate care is delivered through highly knowledgeable clinicians. Families struggle financially to access healthcare for neonates as the NICU care is only based in the three urban cities of Fiji. More still births and neonatal deaths in 2012 occurred with i-Taukei babies and while not in hospital care (Bythell et al., 2014), which calls for better continuum of care approach and access to health care in a timely manner for isolated communities. The government could upskill more health professionals in acute neonatal care provision in other centres of Fiji and with sub-divisional and community care level, so the main units are not overcrowded with overworked neonatal nurses. In order for continuity of care approach to be successful, these solutions and recommendations could be looked into.

The upkeep of health facilities has been disregarded over many years and participants identified that there is an absolute need for clean birthing and neonatal units. A clean facility made women feel healthy and this improved the acceptability of better and respectful care for everyone. The government has acknowledged this need and a new birthing facility was built in Mokoi, near the capital city of Suva in 2018. Investments in quality NICU facilities hopefully remains a priority for the government too.

The National Strategic Plan 2016-2020 delivers on two strategic pillars. The first pillar is focused on the provision of the health services to the community and the second pillar is on health systems strengthening. Fiji has made tremendous advances in antenatal care visits with a regulated workforce to provide this, a strengthened Safe Motherhood Initiative and a parent-owned Maternal Child Health Card. There continues to be strong investments in better health facilities and the training of all cadres of health professionals (MHMH, 2016), but not in speciality areas in nursing. Since 2010's Child Health Review, a concerted effort has achieved systems-strengthening in services delivered under Integrated Management of Childhood Illness, training in neonatal care and improved referral and specialist services are in place. (MHMS, 2016, p. 9). This is a welcome approach and delivery by the government as it improves accessibility and the quality of care delivered.

The dimension of effective coverage relating to quality calls for a check on quality of consumables or essential supplies in the hospitals and community-based health facilities. Fiji needs to equip its health systems and services with appropriate and adequate equipment and consumables to provide improved care for the neonates and mothers. Careful budget considerations need to be in place to finance supplies.

In regulating quality and availability of the workforce, there was an increased call by all participants that the government needs to put clear mandates in for continued professional development for all of child health practitioners. Nurses and auxiliary care staff were mostly disadvantaged in terms of acquiring further formal studies. FNU, a government education provider, could deliver more accredited and pre-service and in-service upskilling opportunities, employ and retain qualified and experienced teachers, attract quality students from different ethnicities, and provide support for professional associations and research. The government overall needs to ensure that the workforce, both clinical and non-clinical, are adequately experienced and employed, responsive to the needs of the population and its workforce understood the clinical and the socio-cultural needs of the patients in their care. As an ultimate duty bearer, the government has to provide oversight and hold itself accountable in delivering improved healthcare for neonates and an have acceptable workforce and conducive work environment. A conducive work environment includes psychological and physical safety for the neonatal nursing workforce and a healthy workplace environment produces positive environment for all.

My research did not include carrying out any studies with mothers and their families. My participants relayed that the government could make efforts in understanding the systemic need and wider population need of mothers and their families by carrying out a formal analysis of what they thought neonatal care and neonatal nursing service should accommodate. Some participants felt that not having fathers included in the care of a neonate is a demoralising issue for many families. According to the participants, father's felt that they were often excluded from understanding and appreciating the wholeness of what it means to take care of a fragile infant and mothers were often left to attend to all the needs once they were discharged from divisional health care settings. Therefore, the acceptability of fathers, or any other nominated male, should be fully considered in caring for a neonate. This approach should be comprehensive and become a norm. A neonatal unit should become a mother and father friendly place and the government could drive this approach by making the neonatal units more user friendly and having private spaces for families to be together in this time of need and supporting each other.

Through the semi-structured interviews and other means of gaining information, it was apparent that the government needs to step up, own and drive its agenda as a country with bilateral, multilateral and regional partners in development. There was a highly chance that the aid through many countries for maternal and child health will remain significant in Fiji's health care and services development and growth but overtime the amount of donor funds will decrease. Donor agencies and partners remain a

bigger part of the systems strengthening work when it came to strategic and corporate health sector development. Strategic intelligence could be built on designing appropriate targets and on how to achieve and sustain targets and improvements. The availability of the donor agency support has to be harnessed, owned and strategically overseen to meet the needs of the country. Long-term strategies can be created within the programmes of development to formally upskill workforce in a recognised and accredited manner. The neonatal nursing workforce could benefit immensely from this upskilling. The AAAQ Framework could be used in all programmes and services development needs and careful considerations could be given to the many barriers and solutions that could be implemented overtime to improve neonatal health in a holistic way and through using other government agencies and stakeholders.

#### **7.4 Social determinants of health and how these impacts neonatal well-being from a rights-based health perspective**

Everyone has the right to good health. Health equity and equality forms a foundation through which a rights-based approach to health is considered. This perspective broadly categorises the way we work through and understand the complexities present in the health care system and the underlying determinants of health. The AAAQ framework drives the authorities to consider the power that they hold as duty bearers and to develop services and programmes that provide for healthcare beyond the four walls of the hospital. The framework also explores the past and present focus on the allocation of resources appropriately to meet the needs of the population. This includes the human resources for health. The framework provides an overarching or interwoven strategy or guideline to health sector planning and delivery in terms of availability, accessibility, affordability and the quality of health services and how this expands into other social sector initiatives. All functions of any system should always be ready to adapt and adopt changes that brings forward improvement. I have discussed many of the barriers within this framework in Fiji and suggested ways on how Fiji could make some changes to improve its neonatal nursing workforce and the care of the neonates. As I stated before, many of these changes requires state interventions and new policies. Others require an effective leadership and a simple willingness to change and support the choices made by the advanced implementation teams.

There are numerous treaties and policies at all levels in many countries that emphasise closing the gaps within accessing appropriate and quality healthcare by acknowledging and having a political will to rights-based approach to health (Chapman, 2010). Broad governance principals cannot remain muted, but work hand in hand to prevent neonatal deaths occurring. Social and economic policies will

have to invest more into the social determinants of health than investing into health itself, as previously thought (Yamin, 2008; London, 2007). Therefore, consistent attention is needed to understand the power dynamics in equity and equality, be this driven through local or donor parties and harnessing these positive dynamics to create improved health care systems with an efficient health care workforce. Providing equitable access to vulnerable groups of populations, especially mothers and neonates who present with high-risk associated care, needs to take priority. Being able to manage the risks to patients in an effective way and within an acceptable setting is important.

The World Health Organisation's mandated rights to health, focusses firstly on the availability of healthcare and the appropriate workforce to provide best care. A health care system should have functioning public health care at primary, secondary and tertiary levels. Programmes and services must be provided in appropriate facilities and in sufficient quantity. Fiji has been able to design and implement many programmes relating to maternal and child health and these are well spread out in terms of delivery. The concerns remain about the number of people in the workforce that are available to meet the population needs, therefore the quality of care is challenged. There must be a sufficient supply of regulated and competent health workers with the correct skillset and skill-mix to meet the health needs of mothers and children and this remains a priority for Fiji (London, 2007; WHO, 2008; UN, 2009; Liu et al., 2015; Raquejo & Bhutta, 2015; Bhutta & Black, 2013).

Accessibility of health can be achieved when an individual can access healthcare and the appropriate health literacy or information in a non-discriminative manner (London, 2007; WHO, 2008; UN, 2009; Liu et al., 2015; Raquejo & Bhutta, 2015; Bhutta & Black, 2013). This also applies to training and producing a workforce that is ethnically diverse, as Fiji has a diverse population. There are many women and children suffering from health and disability issues, sexually transmitted diseases and family violence and these women, many of whom are of teenage years, need to access health services that are free (MHMS, 2016 & 2017). An equal distribution of the health workforce, taking into account the demographic compositions in Fiji, still needs to be well considered. The health workforce needs to feel safe when practicing in under-served areas and Fiji has combatted this challenge is by having more nurse practitioner roles to help in under-resourced settings (Usher & Lindsay, 2004). While the health services in Fiji are mostly free of charge or have minimum costs attached, the overall affordability for patients to travel to major centres to receive healthcare can be a concern. With only three NICU set up in Fiji, many parents have to travel into the main centres of Suva, Labasa and Lautoka to receive timely health and social care. This is an expensive exercise considering transport, accommodation and other related costs.



The acceptability of the neonatal services in Fiji is growing and more recognition is given to the service by the NGO's and other civil societies. The celebration of World Premature Day has brought the community, service users and the workforce together over the years. There is still a national sensitivity and concern towards the number of teenagers getting pregnant and this will need careful dialogue between agencies and community groups, so a more robust sexual and reproductive education is in place. Providing care with dignity remains paramount for the neonatal workforce.

Overall, the quality of care provided is vastly dependent on the availability, accessibility and acceptability of services to meet population needs. Careful long-term child health service and implementation plans need to be designed and utmost consideration must be given to current and future workforce development initiatives. An effective and efficient care that is driven from a needs-based perspective must remain at the forefront of service development (London, 2007; WHO, 2008; UN, 2009; Liu et al., 2015; Raquejo & Bhutta, 2015; Bhutta & Black, 2013).

## **7.5 Chapter summary**

The analysis within this chapter highlights some of the key recommendations that Fiji can work towards and some that is already in the pipeline for discussion. NICU nursing is a delicate and acute practice and neonates are better cared for if highly trained personnel can provide the neonate and the mother with best evidence-based practice and interventions of care.

There is a need for a regulated workforce in neonatal nursing overall. The workforce needs to be able to articulate and critically analyse clinical findings through research and evidence-based practices. The rights-based approach to health is a determinant of many factors that have to be given priority. The severe shortage within the neonatal nursing health workforce can be overcome by critically understanding, reviewing and analysing the needs through all policy, planning and implementation strategies. Salaries and benefits, further education opportunities, inclusion in programme planning, increased supervision and management duties will improve the conditions for a competent and already motivated neonatal nursing workforce. These appropriate workforce strategies, without urban bias, will help address the disparities in health worker distribution, access and health outcomes for neonates throughout Fiji.

My next and final chapter discusses the limitations that I experienced from the research and from the sample selection. It also outlines some recommendations for further considerations that the health sector in Fiji could employ and the regard and need for further research from a development-based perspective.

## Chapter 8

# Future considerations and recommendations

### 8.1 Introduction

Throughout this research I have focussed on understanding the many qualities and attributes that the Fijian neonatal nursing workforce needs to serve a growing population in Fiji. Certainly, the health workers with a higher level of acquired knowledge were based in the urban centres in Fiji and the NICU's were only in the three urban centres of Suva, Labasa and Lautoka. Chapter 6 discussed the poor distribution of doctors per region and outside of the capital cities of Suva and Lautoka.

The neonatal workforce has their scope of duties clinically and socially interlinked and the care that they provide is not within the acute setting of a hospital only. In this final chapter I will discuss the evidence that I have found through research, discuss the factors affecting and motivating a health care workforce and provide recommendations for further study.

Overall, this thesis proposes that the neonatal workforce in Fiji has been around for many years and there is a recognised need for specialisation in this area. The government of Fiji has to consider making further investments in its workforce within this speciality area as this is a crucial workforce that needs to be considered and phased out approach to workforce growth.

### 8.2 Organisational change through a rights-based approach to development

My research has shown that to drive the sustainable development efforts within a multisectoral approach, there is a need to pull researchers' together to understand the correlation between the social determinants and the lack of access to health care and well-being in Fiji. So far, there is not enough published literature to understand the difficulties presented by neonatal nurses in Fiji and how important this speciality area of nursing is overall. It is also difficult to then understand how far the scope of practice for neonatal nurses and infant nurses should expand to, so that quality and better continuum of care is provided. As Anderson states:

*"The negative consequences of childbirth can go beyond the burden of mortality and morbidity experienced by the mother and newborn, affecting also the health of infants, children and other members of the family (Anderson et al., 2007)."*

NICU nurses have a greater emphasis placed on them to acquire the knowledge derived from evidence-based practices that goes beyond the neonatal environment. This calls for measures in evidence-based practice that are reliable, current and comes out of valid research that is both clinical and non-clinical. It is acknowledged that these practices are often challenging to implement, as nurses must be cognisant of the organisational-based practices that they have to weave through to gather support for a new change (Smith, J., & Donze, A., 2010), and their understanding of the outside non-clinical environment should not be used in isolation. Considering the three levels in health care systems which are the organisational level, interdisciplinary team level and within the nursing level, requires considerable effort and team cohesiveness. This also means having the time to teach, implement, assess and review what is working well and what is not.

Careful consideration and priority could be given to the over-stretched NICU wards in the country and how expanding the services further from divisional-based hospital care could enhance the care provided to neonates. The healthcare landscape is always changing, and nurses have always led and adapted to changes in healthcare delivery. Therefore, it is vital that nurses are seen as an important part of the healthcare system and their input is gained from the outset, as change is not only about certain leadership and cutting costs (Martin, 2014). Given the high climate change and non-communicable disease burden faced by the Fijians it is timely to ask, *“are the neonatal nurses in Fiji adequately knowledgeable and equipped in their practices, and how late will be too late to attend to a neonate or a mother in need?”* To close this gap, Fiji, a country that probably has less than 80 NICU trained nurses all up, will need to think of innovative and sharper systems to work closely with other public and community-based nursing teams and recruit and train more nurses in intensive care child nursing. The scale, size and scope of this speciality will change, and the focal point will not be just nurse leaders, but all nurses (Martin, 2014). Fiji could likely benefit from more formalised education to prepare child health workforce relating to neonatal health.

The Government needs to respond better to revising not only the pay scales but review minimum qualifications to practice in acute care settings, treat and grow nurses from diverse ethnicities equally and implement a fairer rostering system that is not reliant on short workforce supply (Henderson and Tulloch, 2008).

### **8.3 Implications**

Considering the lack of literature available on neonatal speciality and nursing in this area in Fiji I hope that this research encourages duty bearers and planners to consider the development needs of a fragile workforce that is taking care of fragile babies. Maternal, newborn and child health cannot be vertically managed, and the focus should lie equally in acute and primary care settings (Ekman, Pathmanathan & Liljestrand, 2008). While there have been packages of continuum of care sighted, these do not necessarily mean the implementation between acute and community-based care is synthesised well. Current services can encompass further services within the Integrated Management to Childhood Illness, such as family planning and social services. For large policies, such as that of neonatal health, the enablers at district and national level need to enact policies and strategic guidelines and set up financial mechanisms to support implementation. Success of such initiatives sometimes cannot be seen in a short timeframe. Therefore, the framework of any national or local programme should be wisely considered. Results have to be disseminated widely within the workforce and other parties to validate findings and to improve clinical and socio-economic interventions where possible (Germain, 2004).

### **8.4 Recommendations for further studies**

Understanding the contextual environment within a healthcare ward is important for healthcare professionals. Nurse burnout and stress does have a detrimental effect on neonatal care and because of the level of care involved NICU nurses often experience emotional and physical burnout (Braithwaite, 2008; Shattell & Johnson, 2016). To improve an organisation, individuals want to be part of a participatory process, whether this is in management or to develop clinical based skills. Use of evidence-based practices will eventually minimise the empathy and worker fatigue that many nurses experience in their roles. These barriers relate to the settings, administrative norms, infrastructure, utilisation, critique, continuum of care approaches and research findings (Williams et al., 2015; Nguyen & Wilson, 2016). Simply asking nurses what affects them the most emotionally and putting supportive measures in place can be a good start in showing empathy to the tired neonatal nursing workforce.

One of the key gaps identified within this study is the lack of availability of country reports for health at national and within the hospital level that are readily available to all stakeholders. Nurses did not have access to unit reports to read so they were not sure of recommendations. Through the use of the intranet at work, there can be provisions made for these reports to be made available for the neonatal nursing workforce, so that there is a sense of inclusiveness, reflection and informed decision

making that can occur. Information technology plays a bigger role in health systems strengthening, and a trial could be put in place for interventions that will add to the quality improvement process and assess the effectiveness of new and ongoing processes.

There is patient demand for appropriate care, and these are evident in the social media every day in Fiji. The determinants of performances such as health worker factors, patient and client factors, work factors, health facility environment and administrative environment would be enormously helpful and this requires a competent human resource setting and management (Rowe, et.al, 2005). Again, transparency and accountability can be highlighted to discuss effectiveness and review practices in place. With decentralisation in place, it is evident that the only communication between the district and the acute care setting is through the heads of the service or charge nurses. In addition to this, the supervision sometimes available at both levels for nurses looking after neonates could be enhanced. More time has to be spent with new and undertrained neonatal staff.

More attention needs to be given to trials, projects and programmes of development. There have been usual cases noticed that the in-country workforce and planners had difficulty in understanding the short- and long-term funding allocations for any activity that ran for more than a set trial or project period. Donor agencies could support local planners and health clinicians with understanding long term outcomes, budget implications for programme ownership and the long-term commitment inclusive of all resources.

The lack of investment gaps must be reviewed given the current government has placed many commitments to improving child health in Fiji. There is an insufficient resourced health system, still a focus on centralisation of services for Suva, Labasa and Lautoka due to lack of health workers, and a poor health information and management system. These systems in turn contribute to preventable neonatal and maternal deaths and lead to significant social and economic losses (Stenberg, et. al., 2014). In hindsight, Fiji has strong mechanisms when it comes to accreditation and licensing for overall medical practitioners in general as in doctors, nurses, allied health professionals, and others.

It takes years to train a neonatal nurse. It takes meaningful and deeper cultural understanding and appreciation of wider context in how children and mothers are cared for holistically in Fiji. The Fijian concept of *yalomatua* or broadened wisdom and *veigaravi* or being of service, emerges from years of experiences that is nurtured within nurses. Nursing, after all, is about caring for people. Taking care of these delicate maternal and family bonds, ties and understanding makes the neonatal nursing workforce in Fiji special. Having the spiritual understanding of how to hear the voices of a silent mother is powerful and these special nursing compassionate qualities should continue to be nurtured.

In order to achieve SDG 3, target 3.2, the strong commitment must continue by the government of the day. There are many visible aspects of strong programme planning and development that shows improved access to services. Equitable and high-quality coverage essential for mothers and neonates should remain as whole of country focus. The first five days remain as the most crucial part of a child's life and more care has to be instilled during this period. The government needs to keep considering the sustainable development themes and be vigilant in putting priorities and careful thoughts when planning against barriers and challenges in the social, economic and environmental factors that strengthen the neonatal workforce and improve the lives of neonates and families. The investments made to overcome these challenges will improve the lives of many children. There is a recognised need for sufficient trained neonatal nurses and improved distribution of trained neonatal nurses in all child health facilities. The scale, size and scope of this speciality of nursing needs to change for the wellbeing of neonates who are dying unnecessarily. Good policy enablers and change has to be celebrated. The neonatal nursing workforce needs to be kept safe and their contributions to saving many vulnerable lives should be equally celebrated too.

## **8.5 Chapter summary**

Understanding the challenges of a health workforce is crucial, especially when they are providing care to the most vulnerable of human beings. Wider societal gains are made when we have healthy mothers and children. Cross cutting issues such as social determinants of health that include education, roads, transport, living environment, sex, equity and human rights have to be taken into consideration when providing for a neonate, and therefore, the care provided by a neonatal nurse crosses the traditional clinical boundaries and ventures into the social settings. This means that our workforce has to be well engrained with the quality-of-life concept and a rights-based approach to good health at all levels and have the *yalomatua* or wisdom and broadened knowledge to be effective health practitioners.

The achievement of key performances of any health system depends on the knowledge, skills, motivation and responsibilities of the people delivering the service. We can use the human resources data available today to better plan for the next decade and thereafter, so the neonatal nursing sub-speciality in Fiji is strengthened, competent, responsive and productive.

The neonatal nursing workforce are committed to reform and an effective health care service with adequate capacity and consumables is needed to run a well-functioning neonatal service. The key conclusions of my research are that there needs to be better collaboration between all sectors, evidence-based research practice and empowerment of the neonatal nursing workforce in Fiji. This is

necessary if the government of Fiji is to achieve a neonatal workforce that can support it to achieve the critical Sustainable Development Goals target of reducing neonatal mortality.

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