

VITAL ROLES

OF NURSES AND MIDWIVES IN THE WESTERN PACIFIC REGION



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IN THE WESTERN PACIFIC REGION**



**World Health
Organization**
Western Pacific Region

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FOREWORD

Nurses and midwives are key to health systems and essential to society. They are crucial for delivering on the promise of “leaving no one behind” and the global effort to achieve universal health coverage and the Sustainable Development Goals. They make central contributions in addressing noncommunicable diseases and ageing, unfinished agendas in reproductive health and infectious disease control, the negative impacts of climate change and environmental changes on health, and emergency preparedness and response – all of which are encompassed by the thematic priorities of *For the Future: Towards the Healthiest and Safest Region*, which lays out the vision for the work of the World Health Organization in the Western Pacific Region over the next years.

Comprising more than two thirds of the health workforce in the Region, nurses and midwives are at the forefront of delivering the full spectrum of care, including health promotion, disease prevention, and the delivery of primary and long-term care. By responding to health needs in all settings and throughout the lifespan, they contribute significantly to improving the health of individuals, families and communities.

However, across countries in the Region, the nursing and midwifery workforce faces a number of challenges, such as inequities in distribution, outdated education models, limited career pathways, unsatisfactory working conditions and structural barriers that prevent them from using the full potential of their skills.

As health systems in the Region are at a turning point, the reforms that governments undertake over the next decade will be critical in creating and sustaining a healthy and safe region. Nurses and midwives are well placed to help achieve health-care transformations and build a “future-proof” health system for all.

This document, *Vital Roles of Nurses and Midwives in the Western Pacific Region*, outlines why and how nurses and midwives are important, not only for individual health optimization but also to achieve the thematic priorities of *For the Future*. More specifically, it provides case studies to showcase the amazing work that nurses and midwives across the Region are doing to improve health. The document also provides future policy directions to strengthen the scope and leadership of the nursing and midwifery workforce, alongside actions to accelerate investment in their education, skills and employment.

By supporting nurses and midwives, investing in their training, and ensuring adequate remuneration and decent working conditions, countries can achieve the triple impact of improving health, promoting gender equality and supporting economic growth.



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ABBREVIATIONS

AMR	antimicrobial resistance
APSED III	Asia Pacific Strategy for Emerging Diseases and Public Health Emergencies
CHW	community health worker
DOTS	directly observed treatment, short course
IHR (2005)	International Health Regulations (2005)
INSPIRED	Integrating Specialist Palliative Care into Residential Care for Older People
IPC	infection prevention and control
MCH	maternal and child health
NCD	noncommunicable disease
PICs	Pacific island countries and areas
PIORNA	Pacific Islands Operating Room Nurses Association
PPE	personal protective equipment
TB	tuberculosis
UHC	universal health coverage
WHO	World Health Organization
WHO CC	World Health Organization Collaborating Centre

EXECUTIVE SUMMARY

The World Health Organization (WHO) Western Pacific Region is home to one quarter of the world's population. Countries in the Region reflect a range of cultural, social, religious and political diversity. Despite this diversity, the Region is experiencing some common epidemiological, socioeconomic and demographic trends. These include population ageing and mobility, rapid urbanization, persistent inequities despite rapid economic growth, unfinished agendas in reproductive health and infectious disease control, the rise of noncommunicable diseases and increased environmental threats. The evolving nature of the challenges requires new ways of working.

At the seventieth session of the WHO Regional Committee for the Western Pacific, Member States adopted *For the Future: Towards the Healthiest and Safest Region*, a vision paper that sets out thematic priorities for WHO's work in the Region for the coming five years. It also describes transformative changes needed to respond collectively to current and future health challenges.

Nurses and midwives make up more than two thirds of the regional health workforce. Due not only to their sheer numbers but also to their transformative role at the front lines, nurses and midwives will play a vital role in optimizing individual and community health, and in achieving the thematic priorities outlined in *For the Future*.

This document, *Vital Roles of Nurses and Midwives in the Western Pacific Region*, showcases some of the contributions of nurses and midwives towards improving the health of people in the Region. The case studies presented demonstrate the diverse roles that they play in addressing evolving challenges and providing quality care.

While nurses and midwives are critical to attaining the goal of making the Western Pacific Region “the healthiest and safest region”, optimizing their contribution will require concerted and sustained efforts to maximize their role within multidisciplinary health-care teams. This will require policy interventions to augment their scope and leadership, as well as accelerated investment in their education, skills and employment. These efforts and interventions are expected to result in the following:

REFORM NURSING AND MIDWIFERY EDUCATION AND PRACTICE

- Enhance accreditation and regulation of educational systems for nurses and midwives.
- Update and upgrade curricula, and ensure a smooth transition from an academic environment to a range of practice environments, with a focus on primary health care.
- Provide training on work in multidisciplinary teams, the use of technology and innovations in health.
- Provide opportunities for continuing professional development and upskilling.

INCREASE INVESTMENT IN NURSES AND MIDWIVES

- Ensure that remuneration reflects the contribution of nurses and midwives to the health sector.
- Take steps to reduce work-related stress and to increase job satisfaction.
- Recognize the innovative and collaborative achievements of individuals and groups in nursing and midwifery.

USE PRACTICE TO FULL POTENTIAL

- Develop and enhance scope of practice so that nurses and midwives may maximize their potential.
- Address historical, regulatory and policy barriers that hinder their development and fuller participation in decision-making.

FOSTER LEADERSHIP AND EQUAL PARTNERSHIP IN DECISION-MAKING

- Provide leadership skills training in educational institutions and at different stages of careers in nursing and midwifery.
- Encourage the nursing and midwifery workforce to engage in multidisciplinary and multisectoral partnerships and networking in their countries and in the Region.
- Include nurses and midwives in policy and decision-making in the health sector.

These actions will enable nurses and midwives to work to their full potential and maximize their role in building a “future-proof” and multifaceted health system in the Region.



1. INTRODUCTION

1.1 HEALTH CARE IS CHANGING

In the World Health Organization (WHO) Western Pacific Region, the demand for health care and the context in which it is provided are constantly changing. Robust economic growth, migration and urbanization have created opportunities for better lives for many people. However, progress has also created new health challenges: the imminent risk of health emergencies and health security threats, including the spread of antimicrobial resistance (AMR); increases in the prevalence of noncommunicable diseases (NCDs); climate change and its impact on health and the environment; and the persistent burden of the unrealized Millennium Development Goals agenda. Also, because of earlier public health successes leading to increases in life expectancy, the Region is home to some of the world's most "silver" – or older – societies. While such rapid development has created new opportunities, in some instances it has also widened health and gender inequities.

Population ageing, growing demand for chronic care and rising health-care costs have made it urgent for health systems to innovate and embrace new financing, service delivery and risk models to shape affordable, high-quality health-care solutions. The emergence of ground-breaking disruptive technologies, big data, expanded delivery sites and high-performance financing models are creating opportunities for health sector stakeholders in planning moves – as pathfinders, fast followers or niche players – in order to remain relevant and financially viable.

Many countries are challenging the status quo by adopting critical transformations to improve the efficiency and effectiveness of health organizations and services, and to reduce health-care costs. While each country must focus its developmental ambitions based on its unique context and set of circumstances, achieving universal health coverage (UHC) and the Sustainable Development Goals underpins the transformation agenda.

While significant improvements have already been made, much remains to be done as countries strive to build efficient, accountable and resilient systems providing equitable access to quality health care.

Nurses and midwives make up two thirds of the regional health workforce and are essential to health service delivery. By virtue of their numbers and adaptive capacity, these workers have the potential to bring about

wide-reaching changes in the health-care system. Moreover, the disciplines of nursing and midwifery embody holistic and people-centred approaches that go beyond traditional paternalistic approaches to health care. As such, and because of their education, the roles they play and the respect they have earned, nurses and midwives are well-positioned to contribute to and lead the transformative changes occurring in health care.

This document, *Vital Roles of Nurses and Midwives in the Western Pacific Region*, and the case studies it presents, demonstrate why and how nurses and midwives are important not only for individual health optimization, but also to achieve the priorities outlined in *For the Future (1)*.

1.2 WHAT DOES THIS MEAN FOR THE WAY NURSES AND MIDWIVES WORK?

Health-care transformations are intended to prioritize the needs and preferences of individuals, their families and their community. Increasingly there is a focus on integrated care, which takes into account local health economies and social care aspects. A strong emphasis is also being placed on prevention, health promotion and support for self-care, taking into consideration the needs of people with long-term conditions. There is a growing commitment to move care outside of acute hospitals into the community and into people's homes, and to provide incentives for working in new ways.

Nurses and midwives are at the front lines of this transformation, and these professions are changing almost as rapidly as the contexts in which they are practised.

Increasingly, nursing practice covers a broad continuum, from health promotion to disease prevention, to coordination of care, to cure – when possible – and to palliative care when cure is not possible. Nurses and midwives are crucial in uncovering and understanding the links between wider conditions and individual and population health. While they may focus on helping people achieve optimal health, their work frequently includes addressing the social, environmental and commercial determinants of health.

Nurses and midwives are well poised to assume expanded roles in a redesigned health-care system. In some cases, the system limits their ability to fully utilize their knowledge and practice in accordance with their professional training and education. By granting them access to educational opportunities and leadership positions at all levels, nurses and midwives will be able to maximize their potential as partners in the health-care team.

1.3 NURSES AND MIDWIVES IN THE WESTERN PACIFIC REGION

Across the Region, nurses and midwives represent over two thirds of the qualified health-care workforce (2). They work in a range of settings, from acute hospitals to remote communities, to deliver core services across the continuum of care to promote health and improve patient care, service delivery and health outcomes.

In the Region, nursing and midwifery is well-positioned to contribute to and lead the transformative changes taking place in health care. Countries have acted to reorient nursing practice and education and enable nurses and midwives to assume a partnership role in attaining UHC.

Despite successes, the nursing and midwifery professions face challenges in fulfilling the promise of a reformed health-care system. These include:

- The shortages of nurses and midwives across the Region's health system, among them primary care providers, faculty and researchers, continue to be a barrier to advancing the profession and

improving the delivery of care. Globally, the shortage of nurses was estimated at 5.9 million in 2018, with the shortage estimated to be 350 000 in the Western Pacific Region. Some 89% of that shortage was concentrated in low- and lower-middle-income countries (2).

- While there are concerns regarding the number of nurses and midwives available to meet demand, in many countries relatively large pools of qualified nurses and midwives end up working in other sectors for a range of reasons, such as inflexible work situations in the health-care field.
- Outdated education and training systems can make it difficult for nurses and midwives to transition from education to practice, and to adapt to changing roles.
- Scope-of-practice limitations, as well as professional hurdles, undermine the ability of nurses and midwives to practise to the level of their education or to take on expanded roles.
- Although nurses and midwives constitute the largest proportion of the health workforce, they are often not represented in the health policy decision space (2).

In the Western Pacific Region, nurses and midwives will continue to play an important role in the transformation of health-care systems to meet the needs of an increasingly diverse population. Yet their visibility is often not commensurate to their expertise, numbers and position. This document aims to highlight the contributions of nurses and midwives in achieving the vision of making the Western Pacific the “safest and healthiest region”.

1.4 VITAL ROLE OF NURSES AND MIDWIVES IN ACHIEVING REGIONAL PRIORITIES

To provide responsive and effective support to countries, the WHO Regional Office for the Western Pacific has outlined priorities for its work in the Region over the next five years. These priorities were identified based on extensive consultations with Member States, partners and WHO staff.

In 2019, at its seventieth session, the WHO Regional Committee for the Western Pacific unanimously endorsed the vision paper entitled *For the Future: Towards the Healthiest and Safest Region (1)*. It identifies four main priorities: health security, including AMR; NCDs and ageing; climate change, the environment and health; and reaching the unreached, meaning people and communities still affected by infectious disease and with high rates of maternal and infant mortality.

The following sections provide case studies of individual nurses and midwives helping to make that vision a reality. The cases highlight their influence on their surroundings and communities in creating a healthier and safer region.

1.5 CASE STUDY APPROACH

To document the experiences of nurses and midwives and raise awareness of their vital contributions, the authors reviewed existing resources and relevant documents and reports. A wide range of nursing and midwifery professionals and experts were interviewed to understand their perspectives and the key role they play in improving health outcomes in the Region. Over 40 semi-structured interviews were conducted with participants from 22 countries, with a selection of these written into specific case studies. These interviews informed different aspects of this document, in particular the recommendations.

The following case studies are discussed under the four thematic priority areas of *For the Future*.



2. THEMATIC PRIORITY AREAS

2.1 HEALTH SECURITY, INCLUDING ANTIMICROBIAL RESISTANCE

In the Western Pacific Region, health security is constantly threatened by emerging diseases and public health emergencies (3). The Region has been an epicentre for many emerging diseases in recent years, resulting in substantial negative impacts on health, as well as social and economic development. The existence of newer threats such as novel coronavirus disease (COVID-19), as well as uncommon patterns of AMR, add to the vulnerability of the Region.

Many countries have invested in enhancing their fundamental public health surveillance and response systems. These efforts have been guided by the *Asia Pacific Strategy for Emerging Diseases and Public Health Emergencies* (APSED III), which is the common framework developed by WHO to address shared threats as required by the International Health Regulations, known as IHR (2005) (4). With the aim of strengthening health systems and capacities beyond IHR (2005), APSED III has supported ongoing efforts to improve the overall preparedness for emerging diseases in the Region and globally.

Nurses and midwives have long been at the forefront of emergency risk reduction, preparedness and response. They deal with clinical care, management and communications, and are well recognized and trusted in their community. Furthermore, they work closely with the disadvantaged and vulnerable groups most frequently affected by emergencies and disasters.

Nurses and midwives often end up filling care gaps when no other health professionals are available. This has broadened the perception of nursing and midwifery roles and responsibilities, resulting in changes to scopes of practice. It also positions nurses and midwives as first-hand witnesses to the causes of ill health (5). Moreover, the voice of nursing and midwifery is commanding because these workers see the health needs of the people beyond the medical diagnosis.

2.1.1 AT THE FRONT LINES OF THE COVID-19 RESPONSE – CHINA

A coronavirus that previously had not been identified in humans emerged in Wuhan, China, in December 2019. Signs and symptoms of COVID-19 developing from the coronavirus included fever, cough and shortness of breath. In more severe cases, infection caused pneumonia, severe acute respiratory syndrome and, sometimes, death.

Liu Yilan, Director of the Hubei Nursing Association, has been a nurse at the Wuhan Union Hospital for over 30 years. She witnessed the sudden appearance of the novel coronavirus and its rapidly progressing spread, as well as the many challenges faced by health workers.

She observed that the response to COVID-19 in medical institutions required a substantial workforce of nurses because of the sudden large influx of patients, increased need for nursing care, and necessary infection prevention and control (IPC) measures to prevent the spread of the virus.

Nurse Liu also points out that responding to severe cases of COVID-19 required highly skilled nursing staff with specialized knowledge and skills in critical and respiratory care. “Some nurses from general departments couldn’t perform specialized tasks such as operating ventilators,” Nurse Liu said. “Fortunately, nurses learned relevant new skills with some training, and head nurses arranged shifts to ensure that at least some nurses with critical skills were on duty during every shift in the ward.”

Nurse Liu recalled patients in severe or critical condition experiencing uncertainty, anxiety and fear. “These patients were isolated from their family and friends,” she said. “It was our nurses who stayed with them 24 hours a day. Nursing is important for patients’ survival and also for their psychological recovery.”

The assignment and scheduling of nursing staff had to be aligned with the number of patients, their condition and the requirements for personal protective equipment (PPE). If there were many patients in serious condition, more nurses were needed at the hospital. As the number of patients decreased, the number of nurses deployed was reduced to avoid unnecessary exposure.

Nurse Liu believes that to prepare for future epidemics, all nurses must be trained in how to identify, assess and deal with outbreaks, as well as trained in critical and emergency care. Nurses and nursing students must also be trained in IPC including the proper use of PPE.

In addition to preparing the health workforce, medical institutions should be able to ensure physical safety and security and be equipped with adequate stocks of supplies and PPE. “Although the COVID-19 virus proved to be highly contagious, medical staff were relatively safe once proper IPC measures were adopted,” Nurse Liu said.

Nurse Liu said that tens of thousands of nursing experts and colleagues from across the country volunteered to support Hubei, which boosted morale in the health workforce. “While some nurses worked on the front line, hospital leaders, nursing department leaders and head nurses also gave care and support in so many ways,” she said.

2.1.2 PERIOPERATIVE CARE – SAMOA

Surgical site infections remain a significant contributor to postoperative morbidity and mortality, including the threat of AMR. IPC in perioperative settings or around the time of surgery is critically important to decrease the risk of perioperative infections (6).

Natasha Mamea is a critical care senior nurse specialist who has been involved in raising nursing and midwifery standards in Samoa and across the Pacific. She currently leads the operating theatre at the

Moto'otua Hospital in Apia, the capital of Samoa. The hospital serves a population of 200 000, or 60% of the Samoan population.

Nurse Mamea has spent the past four years engaged in implementing perioperative care standards, particularly in relation to infection prevention and patient safety. Her interest in this area developed from her involvement in the implementation of the Pacific Perioperative Practice Bundle and audit tools in 2015. As a part of the project, nurses and midwives from 14 Pacific island countries and areas (PICs) were provided with several training sessions. "We all met and were all trained on the standards," said Nurse Mamea. "Each island leader was supported to do their own implementation plan and train their own nurses."

Recognizing the threat of perioperative infections and the risk of AMR, Nurse Mamea was eager to ensure that the perioperative practice standards were adopted in her hospital. This was not easy due to staff shortages, limited hospital resources, infrastructure-related issues and other challenges. However, through initiatives such as the use of checklists, area demarcation, posters and audits, they were able to make improvements early on. "We've managed to identify our weaknesses," said Nurse Mamea. "Initially there were not enough scrubs for the nurses and doctors, and they didn't have appropriate theatre shoes or goggles. We have managed to get some resources that were not provided previously."

To ensure greater cooperation among PICs, the Pacific Islands Operating Room Nurses Association (PIORNA) was founded in 2019. "The idea was to have the Pacific islands consistently implement perioperative nursing practice," said Nurse Mamea, who is the current PIORNA president.

2.2 NONCOMMUNICABLE DISEASES AND AGEING

NCDs are the biggest killers in the Western Pacific Region (9). The incidence of NCDs has been compounded by the ageing of the populations in most countries in the Region, which is one of the most rapidly greying regions of the world.

Many of the NCDs affecting the Region and particularly PICs are preventable, and addressing risk factors can have a huge impact on the burden of these diseases. As a result, there have been efforts to reduce precursors that facilitate these diseases, such as the consumption of tobacco and alcohol. There are initiatives to improve access to, and adoption of, healthy diets, and to encourage people to lead a physically active lifestyle. Countries are also embarking on efforts to create age-friendly societies that provide equitable access to health-care services (10).

Nurses and midwives are uniquely placed to address the burden of NCDs and ageing, and to build on the strengths of individuals and communities in improving health outcomes. Their expertise is vital in addressing and managing the complex risks associated with NCDs and aged care.

With the right knowledge, skills, opportunities and financial support, nurses and midwives can act as effective practitioners, health coaches, spokespersons and knowledge providers for patients and families throughout the life course (11,12). As core members of multidisciplinary health teams, nurses and midwives can play a central role in service delivery – whether health promotion, disease prevention, treatment or rehabilitation. In some areas within the Region, they may be the only front-line providers of these services.

Nurses and midwives have been developing and introducing innovative approaches to delivering care closer to people's homes, thereby reducing the load on hospitals and other health facilities. These initiatives deserve further research and development, with best practices being expanded and implemented.

2.2.1 COMMUNITY HEALTH WORKER PROGRAMME – FIJI

Fiji is the largest of the PICs, with a population of 900 000 residing in 14 provinces and 1171 villages. Like many other countries around the world, Fiji is experiencing a growing NCD burden (13,14). Aligned with the *National Strategic Plan 2016–2020* of the Fijian Ministry of Health and Medical Services, the Community Health Worker Programme aims to provide care closer to peoples' homes through their participation and community engagement (15).

Under the programme, community health workers (CHWs) collaborate closely with nurses, midwives and other health workers. Margaret Leong is the chief nursing and midwifery officer of the Fijian Ministry of Health and Medical Services and is currently leading the CHW programme.

Ms Leong identified the programme as “one of the strategies of the Fijian Government and the Ministry of Health and Medical Services to provide universal access to services”. She added: “We've equipped CHWs with the skills to be the first responders. They're able to identify a sick child and talk to a nurse or doctor about it or manage emergencies in the communities.”

In the programme, nurses and midwives work closely with CHWs to take on roles traditionally filled by practitioners or consultants. To date over 1400 CHWs have been trained, with at least one in each village, including those in remote locations. This serves to ensure that the health needs of the population are addressed while improving the quality of care. The Fijian Government recently increased funding for the programme, which provides a US\$ 200 monthly allowance for the CHWs. A formal reporting system has been implemented that allows the nurses and midwives, among others, to better supervise and mentor CHWs.

“We must ensure better reporting from CHWs as well as better supervision of their work, because [they] are the eyes and the ears on the ground for the nurses and midwives,” Ms Leong said.

In addition to the existing community clinics and NCD clinics, the CHW programme has introduced Fiji Wellness Achievement Programme clinics to ensure general well-being and early prevention and intervention strategies for the patients at risk of NCDs. Ms Leong hopes that this will boost people's participation and commitment towards their own health.

“We want to put nurse practitioners in the clinics as well as nurses and CHWs... because we don't need doctors looking after well people,” she said.

2.2.2 INTEGRATING PALLIATIVE AND RESIDENTIAL CARE – AUSTRALIA

A trial of a programme called Integrating Specialist Palliative Care into Residential Care for Older People (INSPIRED) in Canberra, Australia, adopted a new proactive approach to providing specialist palliative care within residential aged-care facilities (16). Under this initiative, three nurse specialists conducted regular palliative-care needs rounds at the aged-care facilities. They supported staff to recognize deterioration and dying, and to make individual end-of-life plans for these residents.

Nikki Johnston, a palliative care nurse practitioner, was the clinical lead for the INSPIRED trial. She said the “proactive approach contrasts with current practice of reacting in the last hours of life [when] referrals tend to be made late, if at all”. She adds that residential aged-care staff can now learn about palliative care during the palliative-care needs rounds. She emphasizes that “the approach is not about going in, training staff and then leaving and expecting them to do it all on their own. It is a permanent state of integration.”

In addition to the rounds, nurses and aged-care staff also learn how to facilitate end-of-life case conferencing, which includes the resident, their family and general practitioners, and to work to ensure goals of care are documented, along with anticipatory planning through advance care planning and anticipatory prescribing.

The INSPIRED trial achieved international interest because it was able to demonstrate benefits for residents, families and staff, and saved the health system at least 2.5 million Australian dollars over the 17 months of the trial, largely by reducing unnecessary hospital admissions (17).

Nurse Johnston adds: “The population is ageing, and people are dying when they are older with lots of co-morbidities and complex health issues. That is why we are going to need more access to palliative care and specialist palliative care to support people who are dying. The elderly deserve support in their last six months of life.”

Nurse Johnston aspires to see palliative-care needs rounds rolled out across Australia and along with her research team is in the process of developing implementation resources that will be launched soon. The model is designed to be easily adapted across a range of geographical locations.

2.2.3 LALO MANGO GROW YOUR WELLNESS PROGRAMME – TONGA

The food and physical activity choices made by people influence their risk for heart disease, high blood pressure, obesity and diabetes. These conditions not only impact quality of life but are also associated with increasing health-care costs (18). In Tonga, high rates of obesity among men and women are a major factor in the rise of NCDs (19).

Healthy eating, healthy foods and regular physical activity can help establish a solid foundation for the promotion of a healthier and more productive society.

Amelia Latu was running a nursing clinic in a Tongan village when a community leader commented that he could not take her health advice seriously because she herself was overweight. This drove her to make healthy changes in her life, and to change as well the lives of other Tongans. Her journey to wellness inspired the development of the Lalo Mango Grow Your Wellness programme. She said: “As a leader I have to hold myself accountable in order to spread the message of healthy living.”

The programme has five key aspects. “The first is inclusivity,” said Dr Latu. “We invite all people to be a part of the programme with a spirit of acceptance.

“Secondly, we support people to cook local Tongan food. We encourage them to consume food that they plant in their own homes so that it is accessible, blended with modern methods of cooking,” Dr Latu said. “Thirdly, in the Tongan culture family is very important. Within the programme, we try to create a sense of belonging, to ensure that everyone feels that they are a part of a bigger family. Within this family, we want everyone to be self-committed, self-disciplined and self-driven.

“Fourthly, we want to be good role models for our children. We want our children to avoid high-calorie, low-nutrition foods and to be physically active. Finally, we provide advice on dieting, exercise and maintaining a healthy weight based on current scientific research and using an evidence-informed approach. We also self-assess and analyse our approaches and how we can improve.”

The programme works with multiple sectors to address the problem of obesity while taking into consideration the Tongan sociocultural context, and “leading by example”.

Through the Lalo Mango Grow Your Wellness programme and other activities, Dr Latu continues to empower Tongans to take control of their health. Her involvement in communities has led to systematic improvements in diet quality and increased physical activity uptake, with a positive impact on the entire country. The programme also has youth and young leadership teams that showcase the dual importance of creating wellness and protecting the environment.

2.2.4 NURSE PRESCRIBERS FOR PALLIATIVE CARE – NEW ZEALAND

The importance of nurses and midwives who can prescribe medicine in community health-care settings is an important innovation. In New Zealand, highly qualified clinical nurse practitioners have been able to prescribe medicine since 2001 (20). These nurse practitioners, who work autonomously in continuity-of-care models, are often better positioned to respond to patient needs than many general practitioners, who only see patients infrequently. It also means that terminally ill patients do not have to leave their homes to visit a general practitioner (21).

Michelle Rodda has been a nurse prescriber for more than two years. “It’s really new,” she says of the role. She is able to prescribe medications, including morphine and methadone, which are important for some mortally ill patients. She is now a nurse practitioner and can prescribe any medications, similar to a medical practitioner. There are only 238 nurse practitioners in New Zealand, of which only 20 work in palliative care and she is the only one in palliative care in the Hawke’s Bay area (20).

Nurse Rodda recently saw a young patient with a terminal disease who had had issues with nausea for months. As a nurse practitioner, she was able to change his medications and improve his quality of life.

“It was really lovely,” Nurse Rodda said. “Now he’s realized that hospice care is not about my helping him to die tomorrow – it’s that I’m there to make his life better while he’s living. And we will support him and his family when he is dying.

“I never thought I’d be a hospice nurse, I always thought I’d work in acute care because I loved it. But this is the best place,” Nurse Rodda said. “I get to use all my nursing all the time so it’s amazing.”

As a nurse practitioner, Nurse Rodda covers two large rural areas, Central Hawke’s Bay and Wairoa. Her work goes beyond the parameters of hospice to cover ageing, mental health and NCDs like diabetes. She visits people in their homes because it can be difficult for them to go out and about. “I’m one of the health professionals that has the luxury to spend more time with them,” Nurse Rodda said. “Sometimes I have an hour or two to spend with a person.”

Maori make up about 45% of the Wairoa population, many of whom have chronic health conditions (22). Recently, she has started working with the renal services at local regional hospitals to provide renal supportive care clinics. “Our Maori and Pacific island population are predisposed to diabetes,” she said, “so a lot of our renal patients in palliative care are there due to diabetes complications.”

Nurse Rodda finds her work rewarding, particularly when she can help patients with a life-limiting illness to improve their quality of life. “It’s about quality of life and having someone in front of them that they can talk to and realize that this isn’t so scary, and they are not alone,” she said.

2.3 CLIMATE CHANGE AND THE ENVIRONMENT

Climate change is estimated to directly and indirectly contribute towards an additional 250 000 deaths globally each year between 2030 and 2050 (23). To help prevent this and mitigate the impact of climate change, climate-resilient health systems are urgently required.

The Western Pacific Region is particularly vulnerable to the impacts of climate and environmental change (1). PICs are at immediate risk due to rising sea levels (24). This has been compounded by an increase in serious health risks associated with the displacement of populations due to extreme weather events, food insecurity, changes in rainfall patterns and drought. While the health sector must contend with many of the problems

caused by climate change, it often has little control over the causes. However, the health sector can raise public awareness of the impact of climate change on health and augment advocacy efforts for national action.

The immediate effects of climate change on health, such as the increase in incidents of diarrhoeal disease and vector-borne diseases like dengue fever are becoming apparent (25). Health systems must be strengthened to increase resilience and adapt to a changing climate. This must include the ability to adapt services to changes in climate and in other determinants of health. For instance, the technical and clinical capacity of health workers must be enhanced to meet the changing health needs of the population and to help build the social capacity and resilience of communities (23).

Being at the front line of services, nurses and midwives can work with individuals, families and the community in the adoption of adaptation and mitigation strategies. As the largest group of health personnel, nurses and midwives have key roles in both reducing and responding to the health consequences of climate change. In addition to their involvement in every facet of health promotion and patient care, nurses and midwives are also trusted messengers of health information and serve as essential personnel during all phases of disaster response (26).

Nurses and midwives are also knowledgeable stewards of health-related resources and leaders in reducing the health-care waste stream (for example, biohazards and pharmaceutical waste) and the carbon footprint (26). In addition to providing clinical care to patients and populations, they are able to conduct research related to climate change and serve on local, national and international boards that address pollution and climate policy. They can also advocate for actions to mitigate climate change.

2.3.1 CLIMATE-RESILIENT WORKFORCE - TUVALU

As a low-lying island country in the South Pacific, Tuvalu faces an immediate climate change threat in the form of rising sea levels (27). Climate change is also increasing the burden of disease and demands for health-care services. At the same time, the growing frequency and intensity of floods and cyclones is affecting local food production on plantations and is causing damage to health-care facilities (28).

Until recently, Alaita Taulima was one of three nurses working in the maternal child health clinic based at Princess Margaret Hospital, the only hospital in the country, on the main island of Funafuti. Currently, she has assumed the chief nursing officer's role in Tuvalu. She sees this as an amazing opportunity but also a challenge.

"In Funafuti we can see water coming up in the streets during high tide," said Nurse Taulima. "These high tides have been destroying the land, leaving fewer places in which to grow food, which means having to depend on imported food. Following natural disasters, we have to deal with nutrition issues, skin diseases in children, and diarrhoeal diseases. And, of course, there are always pregnant women giving birth during bad weather. There's a lot of things that we have to endure during disasters. As first responders, we are vital players."

Tuvalu has less than 30 nurses for its population of a little over 11 000 people. As a result, nurses end up taking on multiple roles.

"One person does absolutely everything," Nurse Taulima said. "The nurses in the outer islands do the doctors' jobs as well as their own, as they are [often] the only health worker on the scene. If there's a dengue fever outbreak we give health tips to mothers and we also go out into the community. We do workshops on family planning at night time, when we've already worked a full day."

Nurse Taulima likes to work at the grassroots level because she feels that's where the need is greatest. As the chief nursing officer, she is focused on training Tuvalu's nurses, in order to upskill their knowledge and competencies to combat the inevitable threat of climate change.

2.3.2 COLLABORATIVE APPROACHES TO DISASTER EDUCATION – JAPAN

Japan is often described as the most earthquake-and-tsunami-ready nation in the world (29). The nation learned from the devastation of the Great Hanshin–Awaji Earthquake in 1995, and now promotes disaster awareness among schoolchildren. The country has developed innovations such as earthquake-ready *shinkansen* or bullet trains that sense the earth shuddering and automatically stop, emergency updates on smartphones and earthquake-resistant buildings (30).

Misako Miyazaki has worked as a nurse in the wake of several devastating earthquakes in Japan, including the Hyogo Earthquake of 1995, which killed over 6400 people (31). In 2011, she helped public health nurses following the Great Eastern Earthquake, which triggered a tsunami, causing the Fukushima Daichi nuclear accident and resulting in more than 15 000 deaths (29). Nurse Miyazaki later interviewed a number of nurses about their difficult experiences during this disaster. This was integrated into training materials she developed on community resilience.

As the recently appointed Professor of Disaster Nursing at Chiba University, Nurse Miyazaki has developed an innovative course for public health nurses on collaborative approaches for building community resilience, health literacy and leadership.

Nurse Miyazaki's work reflects the growing trend of tackling disasters before they happen. She is a keen collaborator, doing research with scientists, geologists, weather experts, horticulturalists and government officials.

Nurse Miyazaki has identified a number of challenges faced by nurses. First, there are gaps in training, particularly with regard to taking on leadership roles. Second, nurses play an important role in dealing with disasters but are greatly impacted by them as well. She also pointed out that “public health nurses need to be able to better facilitate and influence policy at regional and higher levels”.

2.4 REACHING THE UNREACHED

Communicable diseases and reproductive health issues continue to add to the burden of disease, disability and disadvantage in many countries of the Western Pacific Region (1). While major progress has been made in tackling the burden of some diseases, more work remains. Addressing the unfinished agenda of the Millennium Development Goals, such as reducing the morbidity and mortality due to HIV/AIDS, tuberculosis (TB) and malaria, as well as concerns regarding high infant and maternal mortalities, remains a priority.

In many countries of the Region, maternal mortality rates have remained stubbornly high. Recent data show that rates have either plateaued or decreased slowly (32). Similarly, while there has been some success in containing communicable diseases, such as hepatitis, HIV and TB, the incidence still remains high (1). The resurgence of measles, vaccine-derived poliovirus, diphtheria and dengue in some countries emphasizes the urgent need for effective surveillance and control. Further, data also suggest that, within countries, these conditions invariably affect populations that are most disadvantaged and marginalized.

The persistence of these long-standing and resurging conditions indicate that business-as-usual approaches will not be sufficient. Countries will have to adopt newer approaches and emerging technologies to implement robust, integrated surveillance, monitoring and response systems to inform evidence-based, timely, cost-effective and contextual mitigation strategies, as well as innovative interventions.

Nurses and midwives are on the front lines of prevention efforts aimed at reducing maternal and child mortality and promoting healthier pregnancies and birth outcomes. They can detect early warning signs of

health problems during pregnancy, postpartum, infancy and early childhood, and support mothers in their interactions with the health-care system.

Nurses and midwives also contribute significantly towards containing outbreaks. They are an important source of surveillance data and can help identify epidemics of emerging and re-emerging infectious diseases. In addition, they are frequently tasked with fronting the response to outbreaks. By engaging and partnering with local leaders, communities and schools, and communicating, collaborating and coordinating with other health workers, they play a crucial part in responding to outbreaks.

As the primary care providers in various settings, such as health centres, hospitals and schools, nurses and midwives are often the face of the health system. By building trusting relationships with individuals and their families, nurses can reinforce the need for prevention and control measures, alleviate concerns, and provide evidence-based recommendations and reassurance on health topics such as vaccine safety.

2.4.1 IMPROVING CHILDHOOD IMMUNIZATION – KIRIBATI

Kiribati consists of 32 atolls and one raised coral island spread over vast areas of the central-western Pacific Ocean. Health care is provided free of cost, but access can be a challenge, especially on the sparsely populated islets that do not have their own clinic. Immunization services and other primary health-care services are delivered by health centres and dispensaries.

Baaua Teibira is based in South Tarawa, where she works as the Deputy Director of Nursing. One of her key responsibilities has been the implementation, management and evaluation of the routine immunization programme. “The coordination of the vaccination campaign in the remote islands, isles and atolls was challenging,” Nurse Baaua said. “While there was a delay in carrying out the campaign, due to flights and weather inconveniences on some of the outer islands, most managed to carry it out successfully.”

Nurse Baaua underlined the pivotal role nurses and midwives played in supervising teams that carried out the immunization campaign. It was important to involve the mayor and community members of each of the outer islands from the very beginning. She would have a briefing with each island mayor, in which she would lay out the purpose of the visit and the relevant age group, and request their assistance in making the campaign run efficiently. “It’s a real collaborative effort between health workers and local island councils, teachers, village leaders,” she said.

2.4.2 TACKLING THE TB BURDEN – PHILIPPINES

In the Philippines, more than 60 people die every day due to tuberculosis (TB) (33). Despite the availability of free treatment for TB cases, the number of Filipinos developing active TB every year has not changed in more than a decade. The Government has taken strong steps to provide greater access to TB screening and testing. Nurses from facilities across the country have been engaged as part of a nationwide effort to intensify TB case finding, diagnosis and treatment.

One such facility is the Jose R. Reyes Memorial Medical Center, a private hospital in Metro Manila. The hospital has a team of providers trained in the national TB programme protocol. Melinda Ramos, a nurse at the TB clinic, said: “At the hospital we receive patients suspected of having TB from different hospital departments such as the outpatient department and wards, that are referred using an intra-hospital referral form. The TB clinic, in turn, refers the TB patients to the DOTS [directly observed treatment, short course] facility, such as the health centre, using an external referral form. These are facilities that are equipped to provide quality TB services.”

As the TB clinic nurse, Nurse Ramos closely follows up the outcome of referrals. She does this through the reply slip, telephone call or SMS (text) to the patient or the health centre. As a result of the hospital TB team's hard work, 96% of the cases referred went to the health centre that registered and provided the patients with treatment under the National Tuberculosis Control Program protocol.

Nurse Ramos said that nurses play an important role in the management of TB, including monitoring and administering treatment, identifying and addressing adverse effects of medicines and conducting contact tracing. Their understanding of best practices and correct clinical management is essential to reducing TB.

2.4.3 MIND CARE CLINIC - VANUATU

The WHO *Mental Health Action Plan 2013–2020* calls for changes in the attitudes that perpetuate discrimination and the isolation of people who live with mental health conditions (34). The Action Plan calls for their empowerment so that they may participate as fully as possible in society. Most nations in the Pacific have growing suicide rates and increasing mental health problems, but few have the resources to address the issue (35).

In March 2007, health ministers launched the Pacific Islands Mental Health Network (PIMHnet), which aims to help people of the Pacific islands to enjoy “the highest standards of mental health and well-being through access to effective, appropriate and quality mental health services and care” (35).

Vanuatu is one country that is making significant strides in addressing mental health problems (35). Vanuatu's population of 300 000 consists primarily of subsistence farmers and gardeners, 75% of whom live in isolated rural areas. There are over 110 dialects spoken, and the common language, Bislama, contains only a few words which describe moods, or what would be classified in the West as mental health disorders. Traditionally, “mental illnesses” were perceived as spiritual problems for which people sought treatments from traditional healers and soothsayers. Recently, the Ministry of Health has taken steps to improve mental health services, including the training of health personnel and community awareness about mental health problems (36).

Lawrence Hinge, a trained nurse, is the mental health officer in Port Vila, the capital city. He was asked to manage the mental health unit soon after graduation. Subsequently, he received a scholarship from WHO to pursue postgraduate training in mental health.

Nurse Hinge believes that in Vanuatu there is now much more awareness of mental health issues. In earlier years, he said, the stigma associated with mental illness led affected individuals to not seek care or even to deny that they might have a mental health problem. To address this taboo, the name of the mental health unit was changed to the Mind Care Clinic. “As soon as we changed the name, many people approached the clinic, including hospital staff and those who wanted to have regular counselling,” said Nurse Hinge.

Clients come to the clinic from various provinces of Vanuatu, he said, but “if a client is actively unwell, then one of the team will fly out to the islands [where the client is based] and actively monitor and treat them there. If the client is stable, they travel to the clinic by boat or by plane.” He added: “We try to ensure that mental health services are available as and when people need them.” The clinic also holds family conferences to better educate the clients' families.

The clinic occasionally charters a van to provide services to remote villages throughout the main island. Nurse Hinge uses these visits to follow up on current clients and to train community members to recognize the signs and triggers of mental illness. He emphasized that “one of the most effective tools for mental health officers is having community leaders trained so that they can assist and refer clients to the clinic”.

Nurse Hinge hopes to one day run a group home for people with mental illnesses who have been abandoned by their families and community.

2.4.4 ADDRESSING CHILD AND MATERNAL HEALTH – PAPUA NEW GUINEA

Having highly qualified midwives is the most significant, least expensive and simplest way to address the infant and maternal mortality ratios (37). Midwives who are well trained and educated to international standards are able to deliver almost all of the care needed for newborn children and their mothers. Under even a modest scale-up, midwifery services, including family planning, reduce maternal, fetal and neonatal deaths by 34% (38).

Papua New Guinea has one of the highest rates of infant and maternal deaths in the Western Pacific Region (39). In response to this, in 2012, the Government launched the national Maternal and Child Health (MCH) Initiative to systematically improve maternal and child health outcomes and expand the midwifery workforce (39). To improve the competency of the midwives, a *National Framework for Midwifery Education* was adopted that focused on curriculum reforms, accreditation and professional regulation.

The number of midwifery schools was increased from four to five, and 11 international clinical midwifery facilitators were embedded in schools to provide mentoring and develop teaching resources for Papua New Guinea educators. A key change was upgrading training to an 18-month programme to ensure that midwives developed adequate skills (40).

As registrar of the Nursing Council, Nina Joseph has been working on ways to improve midwifery services, including the development of an audit and accreditation system. “Prior to this, no audit of the nursing and midwifery capacity had been carried out for more than 30 years,” Dr Joseph said.

“The population is increasing rapidly,” she said. “With more births and more pregnancies, the likelihood of complications also increases, so we need more highly skilled midwives to save lives. In a nutshell, education is vital to improving maternal and child health outcomes.”

As a result of the MCH Initiative, between 2012 and 2016, more than 400 midwives were educated and registered, doubling the existing workforce. Many of the graduates are stationed in rural and remote areas.

Early results from the MCH Initiative suggest a highly positive impact on maternal and infant health across the country. Most health centres are now staffed by a qualified midwife. An evaluation led by the University of Technology Sydney found substantial improvements in the quality of clinical education with a stronger focus on clinical skills.

“This is still not enough,” Dr Joseph said. “We still have 1500 to 2000 women dying every year. Something needs to be done to address this. Compared to other countries, we are still short of the average number of midwives needed to provide quality midwifery services.”



3. IN THE FUTURE

Health systems in the Western Pacific Region are at a turning point. The reforms that governments undertake over the next decade will be critical in creating and sustaining a healthy and safe region. Countries must reassess their health-care systems to ensure that they will remain viable over the next decade. The health challenges that lie ahead are unprecedented in scale and complexity. To address them effectively, greater creativity, more innovation and stronger partnerships outside the health sector are needed.

Nurses and midwives are well placed to help achieve these health-care reforms and build a “future-proof” health system. As illustrated by the various case studies, nurses and midwives continue to make significant contributions in the many aspects and levels of the health system. Some key areas for action are discussed below.

3.1 KEY ACTIONS AREAS

3.1.1 REFORM NURSING AND MIDWIFERY EDUCATION

Current and anticipated changes in the health-care system and practice environments (such as the shift to primary health care and the growth of NCDs, with a view to UHC) will require commensurate changes in nursing and midwifery education systems. Developing leadership, accreditation and regulation will strengthen education systems to ensure that the current and future generations of nurses and midwives are prepared to meet diverse patient needs and incorporate advances in scientific knowledge and technology.

At the same time, nursing and midwifery education should prepare graduates to work in multidisciplinary teams in a variety of settings, within a complex and evolving health-care system. Nurses and midwives are called upon to use a growing variety of technological tools and complex data systems, and to analyse and design improvements in the quality and effectiveness of care.

Governments need to orient education systems towards innovations in health care, with a focus on updating curricula. Strengthening the education system will also include the smooth transition of new nurses and midwives from their academic preparation into a range of practice environments, with an increased emphasis on community and public health settings.

Nurses and midwives should have opportunities throughout their careers for continuing professional development linked to regulation and association. Those who benefit from these opportunities will be in a stronger position to drive high-quality care delivery in their teams and communities.

Finally, investments must be made in faculty development and education infrastructure. This should, where possible, cover regulation and accreditation processes to ensure the quality and relevance of the curriculum. There should be a focus on collaborative learning, use of innovative teaching and learning approaches, e-learning and new technologies, and the development of leadership and management.

3.1.2 INCREASE INVESTMENT IN NURSING AND MIDWIFERY

Investing more and investing better in the health workforce, including nursing and midwifery, bring obvious benefits. As outlined by the United Nations Commission on Health Employment and Economic Growth, stimulating investments in nursing and midwifery will create decent health sector jobs, particularly for women; maximize women's economic participation and foster their empowerment; and create a demand for high-quality nursing and midwifery education and lifelong learning (41).

Supporting nursing and midwifery through high-quality and appropriate preparation, ongoing education, career development opportunities, improved working conditions and better remuneration will be critical in attracting future generations to enter these professions (5). This will help to address current shortages of nurses and midwives in primary care, research, education and training.

Strategic planning approaches to prepare a sustainable and resilient health workforce are crucial. In addition, investments in the workforce should be accompanied by more effective approaches to provider payments in order to enhance the quality, efficiency and equity of care. The use of disruptive technologies can help to further efficiency.

3.1.3 USE PRACTICE TO FULL POTENTIAL

Nurses and midwives need to be utilized to their full scope of practice in order to lead innovation in health-care systems. However, a variety of historical, regulatory and policy barriers have limited the ability of nurses and midwives to generate widespread transformation.

A wider perspective and more clearly defined roles will be important in ensuring equitable access to health services. Many studies highlight the scope for effective deployment of clinical nurse specialists and nurse practitioners in advanced roles (42,43) in leading, delivering and evaluating health-care interventions for individuals and populations. There is great potential across the Western Pacific Region for enhancing the scope of practice for nurses and midwives and for utilizing more specialist and advanced practice nurses and midwives to work with communities, level inequities and provide interventions to manage ill health and promote health and well-being.

Scope of practice for nurses and midwives needs to be developed and enhanced by each country to ensure access to UHC among populations. Nurses and midwives should be enabled to practise to their full potential in line with their education or training, and not because of political decisions within the jurisdiction in which they work. Restrictive and outmoded regulatory barriers should be reduced and career structures aligned with remuneration standards that encourage and reflect the contribution of nursing and midwifery.

3.1.4 FOSTER LEADERSHIP AND EQUAL PARTNERSHIP IN DECISION-MAKING

While the nursing and midwifery workforce is seen as an essential component of health-care systems, it receives less recognition at the level of governance and regulatory functions in health systems.

Leaders from the nursing and midwifery professions need to play a stronger role within the health system. These leaders must be able to act as full partners with all stakeholders involved in health. Strengthening regulation, accreditation and scope of practice will enable nurses and midwives to deliver work collaboratively with leaders from other health professions and stakeholder groups.

Nurses and midwives should have a voice in health policy decision-making and be engaged in health-care reform. As they represent the largest sector of the health workforce, nurses and midwives should also serve actively on advisory committees, commissions and boards where policy decisions are made to advance health systems. For example, in ministries associated with health, chief nurses and chief nursing and midwifery officers are required to provide governments with data and advice on the implementation of public and private health care. It is important to note that these chief officers, due to their broad sector engagement, can make significant contributions to health policy and decision-making. Their expertise and input are crucial in making national health priority, planning and funding decisions.

To prepare nurses and midwives to assume leadership roles, training in related competencies needs to be embedded throughout their education. Leadership development and mentoring programmes must be made available for them at all levels, and a culture that promotes and values their leadership needs to be fostered. Equally important, leadership opportunities must be made available at all levels of nursing and midwifery – among graduates, clinicians, policy-makers and academics, as well as among chief nursing and midwifery officers.



4. CONCLUSION

Nurses and midwives are well-positioned to contribute to and lead the transformative changes occurring in health-care systems in the Western Pacific Region.

Developing a future-proof health-care system that can address evolving health needs, and that is people-centred, accessible, evidence-informed and sustainable, will require improving work environments, enhancing the scope of practice, supporting education reforms, and increasing leadership opportunities for nurses and midwives.

Investment in the workforce is important for ensuring sufficient numbers of nurses and midwives with relevant level skills to meet complex and evolving health-care demands.

Nurses and midwives need to be recognized and valued as one of the few health professional cadres that work across all sectors of health. Leadership, therefore, is particularly important to ensure that they are well represented in the policy arena and are able to bring their perspective into decision-making. Stronger partnerships need to be developed within and between the nursing and midwifery professions, as well as with client communities, research and educational institutions, government agencies, and policy-making bodies.

These actions will ensure that nurses and midwives are utilized to their full potential to bring about the desired health outcomes and achieve the Western Pacific Region vision of becoming the healthiest and safest region.

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