

NURSES

A VOICE TO LEAD
ACHIEVING THE SDGS



NURSES' ROLE IN ACHIEVING THE SUSTAINABLE DEVELOPMENT GOALS

INTERNATIONAL NURSES DAY
RESOURCES AND EVIDENCE

INTERNATIONAL COUNCIL OF NURSES



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DEAR COLLEAGUES,



On behalf of the International Council of Nurses, we would like to wish nurses around the globe a very happy International Nurses Day!

This year, ICN has chosen the theme, Nurses: A Voice to Lead, Achieving the Sustainable Development Goals. It is our aim, through this publication, and the accompanying website, video and social media campaign, to raise awareness: firstly amongst the nursing profession of what the SDGs are and why they matter; and, secondly, amongst the population, governments and other decision-makers, of the contributions nurses are already making to achieve the SDGs. This publication provides an overview of the SDGs and their links to the nursing profession. More specifically, it provides a host of case studies showing the amazing work that nurses around the world are doing to improve access to health care, to educate populations, to address poverty, nutrition, clean energy, inequality, sustainability, innovation, justice and every other goal in the SDGs. Nurses, as the primary providers of healthcare to all communities in all settings, are key to the achievement of the SDGs. In fact, if investment in the nursing profession is not made by governments and world leaders, we cannot succeed.

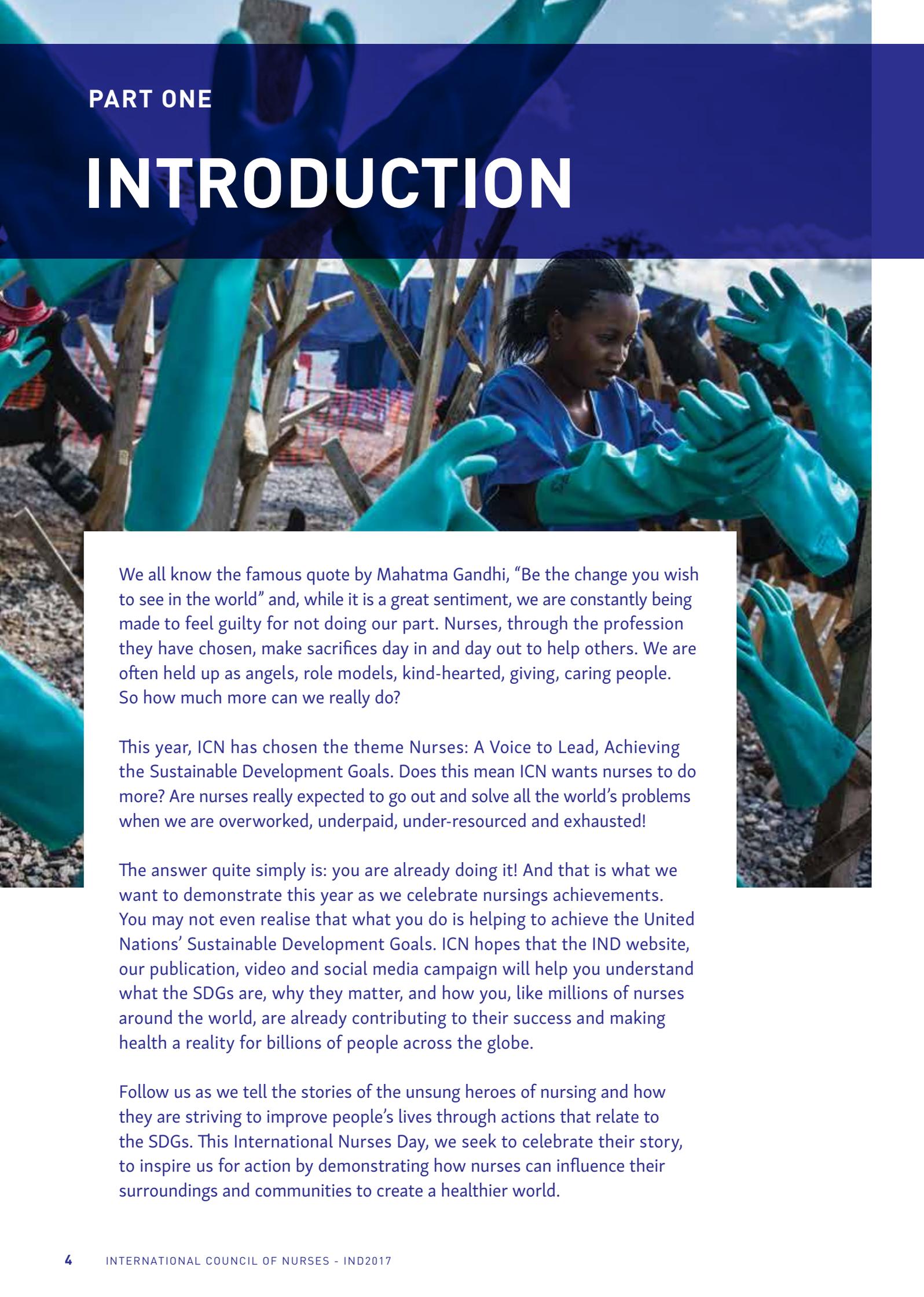
The SDGs are relevant to all of us – in our professional lives and our personal lives. Each one of you can and are making an impact. Celebrate your achievements, share your stories, and use your voice to lead.



Judith Shamian
President



Frances Hughes
Chief Executive Officer

A woman in a blue uniform is shown in the process of putting on a bright green rubber glove. She is in a makeshift outdoor structure made of wooden poles and blue fabric. Other people and more gloves are visible in the background, suggesting a busy, possibly humanitarian or disaster relief, environment. The scene is set against a clear blue sky.

PART ONE

INTRODUCTION

We all know the famous quote by Mahatma Gandhi, “Be the change you wish to see in the world” and, while it is a great sentiment, we are constantly being made to feel guilty for not doing our part. Nurses, through the profession they have chosen, make sacrifices day in and day out to help others. We are often held up as angels, role models, kind-hearted, giving, caring people. So how much more can we really do?

This year, ICN has chosen the theme Nurses: A Voice to Lead, Achieving the Sustainable Development Goals. Does this mean ICN wants nurses to do more? Are nurses really expected to go out and solve all the world’s problems when we are overworked, underpaid, under-resourced and exhausted!

The answer quite simply is: you are already doing it! And that is what we want to demonstrate this year as we celebrate nursing achievements. You may not even realise that what you do is helping to achieve the United Nations’ Sustainable Development Goals. ICN hopes that the IND website, our publication, video and social media campaign will help you understand what the SDGs are, why they matter, and how you, like millions of nurses around the world, are already contributing to their success and making health a reality for billions of people across the globe.

Follow us as we tell the stories of the unsung heroes of nursing and how they are striving to improve people’s lives through actions that relate to the SDGs. This International Nurses Day, we seek to celebrate their story, to inspire us for action by demonstrating how nurses can influence their surroundings and communities to create a healthier world.

“There is a world of apathy out there. Every single day there are many things that aren’t right. While you have to pick your battle, it is very important that when you encounter things that aren’t right, you weigh in on them. Leadership is learning how to do that effectively. You won’t be a reasonable leader if you don’t have the instinct to say: ‘This is something I have to put right.’”

– Marla Salmon, Former Chief Nursing Officer, US Department of Health and Human Services

1.1 THE SUSTAINABLE DEVELOPMENT GOALS AND NURSING

The Sustainable Development Goals (SDGs) were adopted by the United Nations in 2015 to replace the Millennium Development Goals (MDGs). They contain 17 goals covering a broad range of sustainable development issues for the world, such as ending poverty, hunger, improving health and education, combating climate change, etc. The 191 UN Member States have agreed to achieve these new goals by 2030. Health has a central place in SDG 3: Ensure healthy lives and promote well-being for all ages, and clearly nursing has a major role to play in relation to SDG 3. But the work of nurses also has a major impact on the delivery of other SDGs such as education and poverty – these are often referred to as the social determinants of health (SDH). The SDH are the conditions in which people are born, grow, work, live and impact on the conditions of health and daily lives. While nurses seek to help people achieve their optimal health, our work frequently includes addressing the SDH and nurses understand the links between wider conditions and individual and population health. This resource and the case studies we use demonstrate those relationships and make it clear why nurses are so important not just to individual health optimisation but also to achieving the SDGs.



1.2 A WORLD OF UNEQUALS

The Millennium Development Goals did much towards improving the lives of millions of people around the world, but the gap between the rich and the poor, the health and unhealthy, the educated and uneducated continues to grow. This, the Sustainable Development Goals aim to address inequalities between nations, but also within nations. It is now well-recognised that social factors, such as education, employment status, income level, gender and ethnicity have a direct influence on how healthy a person is.

Let us take life expectancy as an example. According to data from 2010 there is a 35 year difference in life expectancy between the highest and lowest countries (**Figure 1**). When GDP per capita is below \$4,000, life expectancy is generally below 70 years of age. Conversely when GDP per capita is above \$8,000, life expectancy is generally over 70 years of age. This difference in life expectancy is clearly linked to income levels. But not only is there a difference between the rich and poor countries, there is also a difference within countries between the rich and the poor. Within England for example, there is a significant difference in life expectancy and quality of life between the rich and the poor (**Figure 2**).

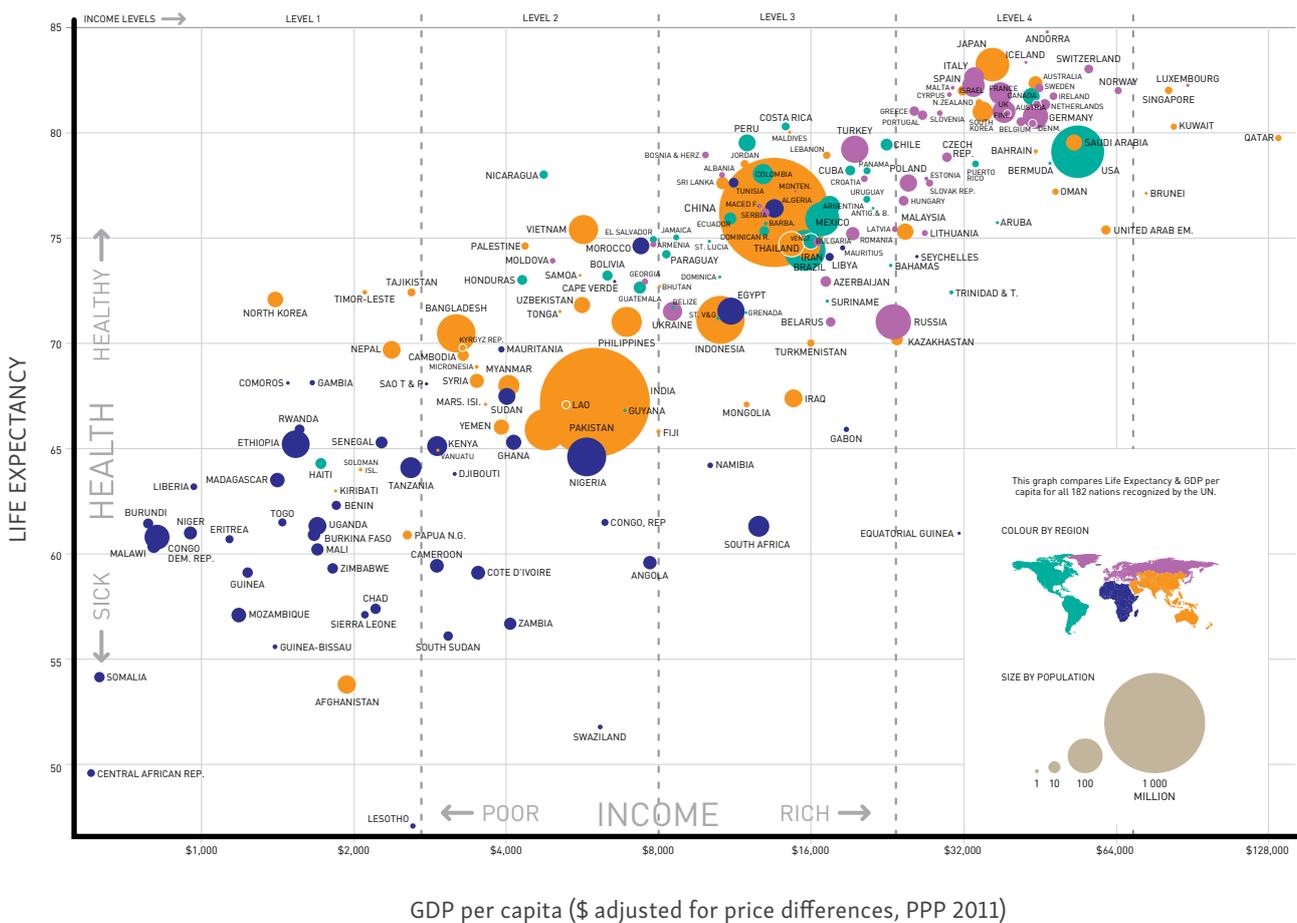


Figure 1. Life expectancy by country and annual income level

Based on a free chart from www.gapminder.org^[51]

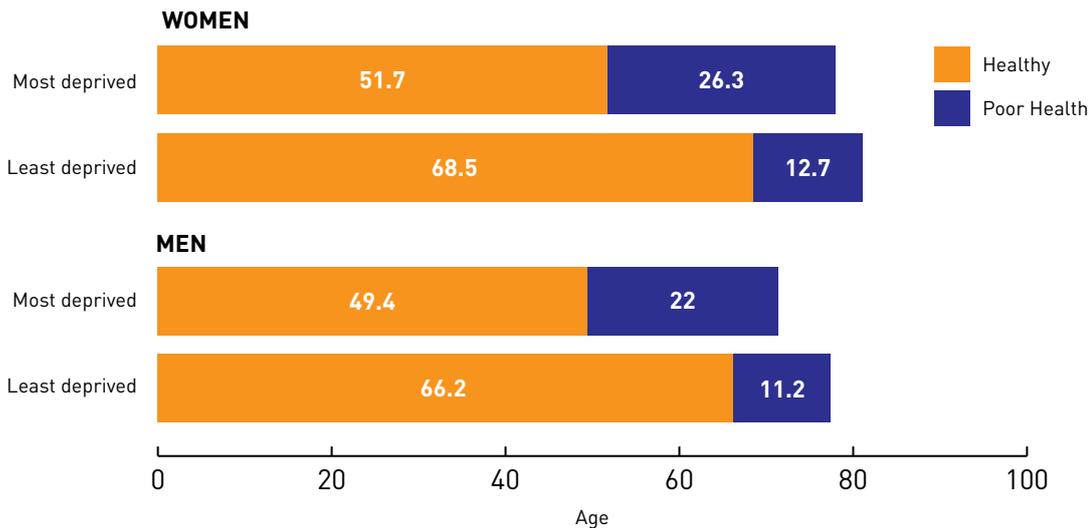


Figure 2. Years of healthy life expectancy and poor health by deprivation level in England^[5]

But life expectancy is not just about rich and poor, it is also about quality of life and the differences observed between social groups, low, middle and high income. The same phenomenon is seen throughout the entire world, the lower the socio-economic position, the higher the risk of poor health and increased likelihood of premature death.

The issue is not simply one of limited access to health services. Poor health can be attributed to inequity in the conditions in which people are born, grow, live, work and age. It is the inequities in power, money, education and resources that give rise to inequity in daily life. These elements are better known as social determinants of health.^[17]

Health equity and the social determinants of health

The social determinants of health (SDH) are the conditions in which people are born, grow, live, work and age.^[17] These circumstances are shaped by the distribution of money, power and resources at global, national and local levels. The SDH are mostly responsible for health inequities - the unfair and avoidable differences in health status seen within and between countries.

Health equity and social determinants are acknowledged as a critical component of the post-2015 sustainable development global agenda and of the push towards progressive achievement of universal health coverage (UHC). If health inequities are to be reduced, both SDH and UHC need to be addressed in an integrated and systematic manner.^[8]

Furthermore, the goals inextricably link the social determinants of health to the full spectrum of government sectors (e.g. agriculture, water, housing, education, energy, transport, infrastructure, social development, environmental protection, governance) and not just the health sector.

Of course, the third sustainable development goal (SDG 3) is specific to health (Healthy Lives and Wellbeing for All), but the social determinants of health (sometimes called the causes of the causes) are clearly evident throughout. Our role as nurses is to take the language of the SDGs and translate it to the language of each country's national priorities as set by the government and make explicit links to their published policies. Of the 17 goals, we can have a powerful influence on the achievement of most.

In relation to health, within the SDGs there is recognition of the social determinants impact on health and wellbeing. WHO recognises that the socioeconomic circumstances of individuals and groups have at least as much – and often more – influence on health status as medical care and personal health behaviours. Some of the most important social determinants of health include poverty, economic inequality, social status, stress, education and care in early life, social exclusion, employment and job security, social support and food security.

The Global Burden of Disease study^[10] shows that development indicators such as income, education, and birth rates are critical to healthy living but are not the only factors that determine health. Several countries, despite their resource level, have improved the health of their populations through improvements in sanitation, immunization, indoor air quality, and nutrition.

The broadening that can be seen in the SDG agenda reflects the need to consider a holistic view of the roots of economic, social, and environmental development. The health of populations is not only the responsibility of the health sector, but that of transport, environment, housing, trade, and agriculture.

1.3 WHAT ARE THE SUSTAINABLE DEVELOPMENT GOALS?

The Sustainable Development Goals (SDGs) build on the success of the Millennium Development Goals (MDGs). But they go much further and tackle issues that affect people, the planet, prosperity, peace and partnership. In September 2015, world leaders agreed on 17 goals and 169 targets.

Whilst these are not legally binding, governments are expected to take ownership and establish national frameworks for their achievement. Over the next 15 years, countries will mobilise efforts to end all forms of poverty, fight inequalities and tackle climate change, whilst ensuring that **'no one is left behind'**.^[11]



“Think how rare is ‘completeness’ or ‘wholeness’ of mind and body. If each man [or women] finds good health a challenging goal, think how difficult it is for the nurse to help him [or her] reach it. She/He must, in a sense get ‘inside the skin’ of each of her patients in order to know not only what he [or she] wants but also what he [or she] needs to maintain life and regain health. She/He is temporarily the consciousness of the unconscious, the love of life for the suicidal, the leg of the amputee, the eyes of the newly blind, a means of locomotion for the infant, knowledge and confidence for the young mother, a voice for those too weak or withdrawn to speak, and so on.”^[14]

– Virginia Henderson

1.4 WHY SHOULD NURSES CARE ABOUT THE SDGs?

You may still be asking yourself how your contribution to the SDGs can make a difference? But there are several critical reasons why you – and all nurses – should care about the SDGs.

1. NURSES CARE FOR OTHERS

Nurses go in to the profession to improve the health of individuals and populations. This is fundamental to the core of nursing. As the ICN definition of nursing states,^[171] **“Nursing encompasses the promotion of health, prevention of illness, and care of physically ill, mentally ill, and disabled people of all ages, in all health care and other community settings. Within this broad spectrum of health care, the phenomena of particular concern to nurses are individual, family and group responses to actual or potential health problems.”** As nurses, we are therefore rightly concerned about where children are born, where people grow, where they live, work and age.

2. IT IS THE RIGHT THING TO DO

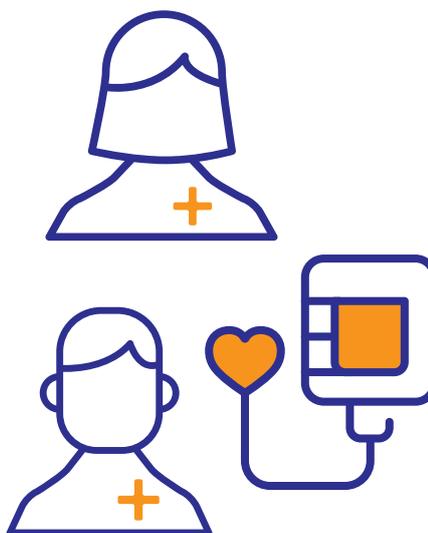
The underlying dynamic in all of this is one of social justice. We should learn about and contribute to the SDGs because it is the right thing to do. We can prevent child and maternal deaths; we can end extreme poverty; we can improve quality of life; we can ensure children attend school; we can end violence and oppression; we can have justice. The SDGs present us with an opportunity to apply the knowledge we have as nurses to create a healthier and a better world.

3. CHANGE IS POSSIBLE

Under the Millennium Development Goals (MDGs), the world saw incredible improvements in increased life expectancy, reduced child mortality, getting more children into schools, reducing extreme poverty and improving access to safe water and sanitation. Whilst there might be scepticism about the ambitious targets set in the SDGs, the MDGs demonstrate to us that progress is possible and countless people’s lives will benefit from it.^[11]

4. IT IS OUR HEALTH

The SDGs don’t just relate to people in low income countries. They affect all of us. The realisation of these targets will improve the lives of people in our communities, our families, and even our own health. They are important because you are important.



“Nurses respond to the health needs of people in all settings and throughout the lifespan. Their roles are critical in achieving global mandates such as universal health coverage and the Sustainable Development Goals.”

– Dr Margaret Chan, Director General, World Health Organization^[172]



“We can tell a great deal about how well a country meets the needs of its citizens — provides the conditions for them to lead flourishing lives — by the health status of its citizens.”

– Michael Marmot, President, World Medical Association, 2015-2016^[17]

PART TWO

THE SUSTAINABLE DEVELOPMENT GOALS

Social inequalities exist across a wide range of domains, for example, age, gender, race, ethnicity, religion, language, and physical and mental health. In addition, some groups within society are particularly disadvantaged and this includes those who are homeless, migrants, refugees and asylum seekers. Many people also live in absolute poverty and who receive no financial support. These inequalities interact in complex ways and shape the way people are born, grow, live and age. It affects their health and well-being and their chance to reach their potential.^[16]

ICN has collected case studies from around the world to show how nurses' daily work is helping to achieve the SDGs. The following section outlines examples that have a profound impact on the health of individuals, communities and countries.

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GOAL 1: NO POVERTY

In March 2016, Amelie killed herself. She was just 10 years old. In the small community of Looma, in West Kimberly Australia, she became the 19th person to commit suicide over a three-month period.^[173] This is a shocking tragedy that impacts the lives of many people and communities.

Whilst there will be investigations into this particular case, it will be equally important to look at the broader context. For indigenous people within Australia, the youth suicide rate for girls is six times higher than non-indigenous girls. The suicide rate of indigenous boys is four times higher than non-indigenous boys.^[178]

Why is it that so many indigenous young people seek to end their life in this way?

Sir Michael Marmot^[17] defines suicide “**as a response to disempowerment - the last desperate attempt to control an uncontrollable situation.**” He believes that ‘empowerment can be viewed in different ways including material (lack of money to buy basic things like food); psychosocial (the means of having control over your life); and political (having a voice). Australia’s indigenous population, along with disadvantaged people more generally, are disempowered in all three areas. Disempowerment is not confined to one part of the world. It occurs universally and has effects not only on suicide, but on all health and well-being.

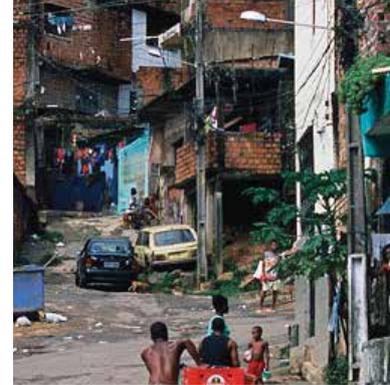
Poverty is often the central factor of this disempowerment. It affects social hierarchy, and limits children’s intellectual and social development. From an early age, conditions are set in place that hinder people from reaching their potential. The mixture of what happens in early life profoundly impacts life in later years. More adverse conditions in early childhood lead to fewer educational opportunities, fewer opportunities for good and meaningful work, low income, worse environments, high rates of smoking, poor diet, increased alcohol and drugs.^[17]

Limits are placed on people from an early age and these limitations reduce capacities to enjoy basic freedoms to give life meaning and maximise health. Poverty sets in place a cycle that is difficult for anyone to break. It disrupts the social conditions in which people are to grow, live and age.^[17]

Poverty also has immediate impacts on health. There is an obvious correlation to access to food, clothing and shelter. But it also affects a person’s abilities to access healthcare services and receive the required treatment for them to return to health.

Throughout nursing’s history, it could be argued that nurses have been at the forefront of caring and working with those who are most vulnerable and disempowered. We have all seen and witnessed nurses working in incredible and sacrificial ways for the betterment of others health. There are nurses caring for prisoners irrespective of what the crimes they may have committed; there are nurses working on the streets caring for the homeless; for anyone who walks through hospital doors; on the back of trucks providing mobile clinics; in completely under-resourced, remote locations in the world.

Whilst this care has sought to improve health, it has also advanced the nursing profession itself. Nursing has often had to fill the gap where no other profession is willing or potentially able to work. This has challenged both our and the public’s perception of nursing roles and responsibilities, resulting in changes to scopes of practice. It also positions nursing as a first-hand witness to the causes of ill-health. The voice of nursing is a commanding one because it sees the health needs of the patient beyond the medical diagnosis.



CASE STUDY 1.1: NURSE FAMILY PARTNERSHIP IN URBAN NEIGHBOURHOODS, USA

“Nurses must break down walls between professions to create cost-effective interventions to improve the lives of patients with complex health and social needs.” - Dr Katherine Kinsey

Dr Katherine K. Kinsey, PhD, RN, FAAN, is the Nurse Administrator and Principal Investigator for the maternal child home visiting programmes of the National Nurse Led Care Consortium (NNCC).

NNCC advances nurse-led models of care through policy, consultation, and innovative programming. Two of NNCC’s most successful programs are The Philadelphia Nurse Family Partnership (NFP) and the Mabel Morris Family Home Visit Program (MM-PAT), evidence-based early childhood initiatives serving low-income women and children in some of the most distressed urban neighbourhoods in the United States.

Led by public health nurses, these programmes, provide home visiting, family support and education to low-income mothers of young children throughout the city of Philadelphia, Pennsylvania. Each year, the service provides support and care for over 700 mothers and their children. Most clients are teen mothers and are African-American (73%) or Hispanic (21%). The average annual household income for clients is under US\$6,000.

Typically, women enrol when they are pregnant with their first child. Over the course of the programme, each client receives between 30-50 visits from their nurse, designed around three goals: a healthy pregnancy and delivery; the baby’s good health and development; and the mother’s vision and goals for the future.

Over the years, nurses saw an increase in pregnant women reporting situations of crisis, with concerns about their physical safety, food security, housing status, and other basic needs related to conditions of poverty. Over 90% of the mothers have experienced three or more Adverse Childhood Experiences (ACEs), such as physical, sexual and/or verbal abuse, living with a mentally ill relative, having an incarcerated family member, or witnessing domestic violence. Approximately 45% of the mothers exhibit symptoms of perinatal depression when they enter the programme.

This led to the development of a new partnership, allying legal assistance to nursing care.

“We sought a new connection with the Health, Education, and Legal Assistance Project: A Medical-Legal Partnership, a NGO with unique experience providing free legal services to low-income mothers. Together, we launched the Nursing-Legal Partnership,” says Dr Kinsey.

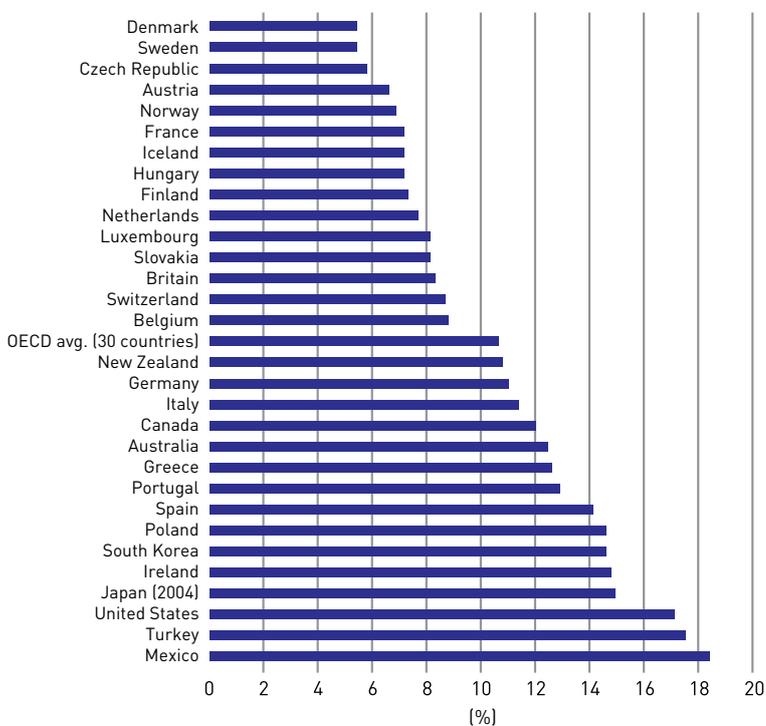
In this approach, lawyers work hand-in-hand with nurses to ensure that new mothers have the opportunity to raise their children in safe, healthy homes, with uninterrupted access to public benefits. They can develop new skills to support their children’s socioemotional, physical and developmental needs, while also providing legal resources to ensure that each family’s basic needs are met. Working with their nurse, many women set goals for themselves for the first time.

To date, the nurse home visiting programmes have served over 3,500 mothers and their children. The expertise that Registered Nurses bring to this intervention is pivotal in gaining the confidence of a new mother. The nurse helps guide first-time mothers through the emotional, social and physical challenges they face as they prepare for a healthy birth. Prenatal support is the starting point, but the nurse continues to serve her client after she delivers her child, teaching parenting and life skills that foster positive growth for both the mother and child.

Lawyers with expertise in public benefits, health law, housing law, consumer law, and other areas represent clients and work with nurses to address health-harming legal needs identified during screening.

“It takes an interdisciplinary team of professionals to break the cycle of poverty. We have envisioned a nurse-driven way to link and coordinate health, social and support services to meet families’ needs. Because of nursing’s emphasis on holistic care, nurses naturally operate at the intersection of health and social services” says Dr Kinsey.





Relative poverty rate

Poverty is not just a low and middle income country issue. It is a worldwide phenomenon. Whilst people may have access to more money in one country, they still may not have the resources required to maintain a healthy standard of living.

Relative poverty is defined relative to the members of a society and, therefore, differs across countries. People are said to be impoverished if they cannot keep up with standard of living as determined by society.^[18]

When expressed in this way, throughout the world there is a large proportion of the population living in poverty. Figure 3 shows the relative poverty rates for OECD countries.

Figure 3. Relative Poverty Rates for OECD Countries (mid-2000s)^[19]



EVERY DAY IN 2014, 42,000 PEOPLE had to abandon their homes to seek protections due to conflict.^[20]



INDIGENOUS PEOPLE make up about **5%** of the world's population but for some **15%** of the world's poor.^[21]



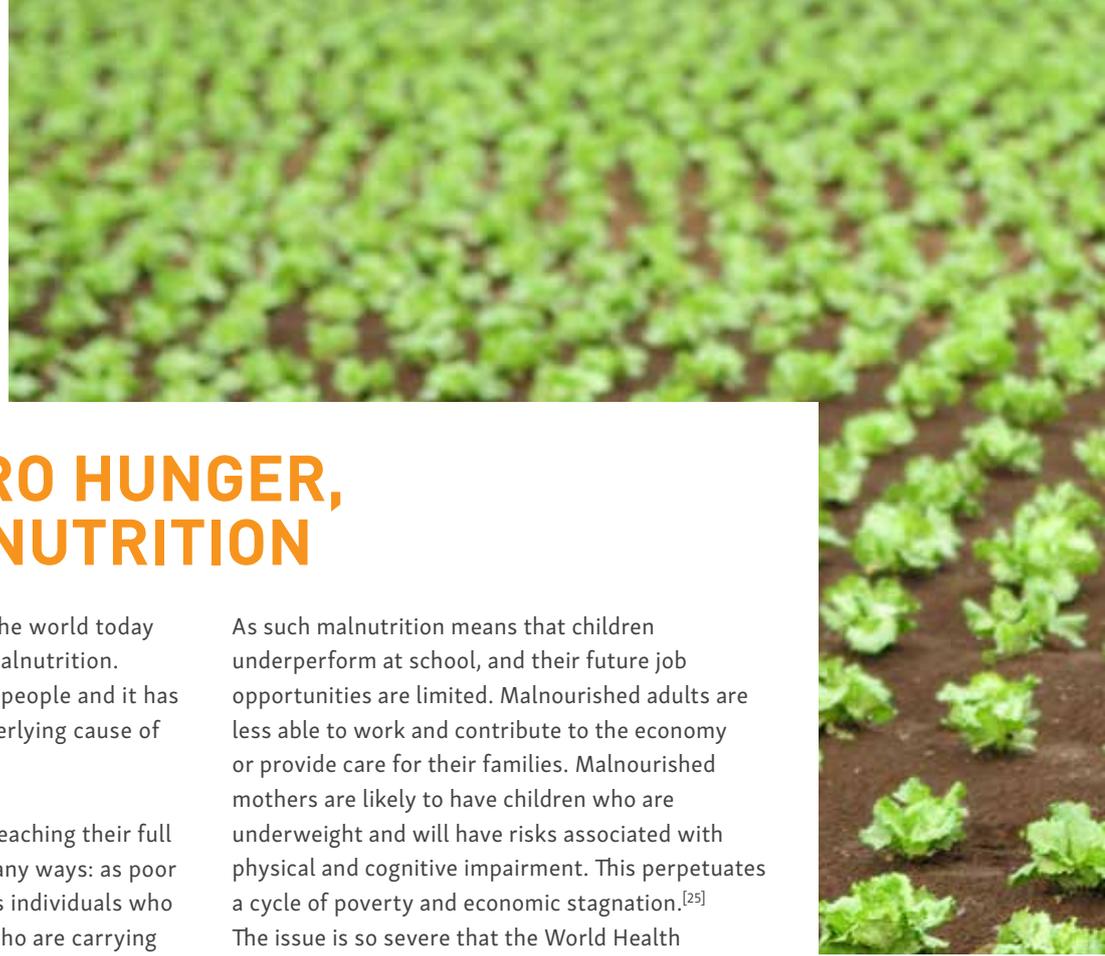
GLOBALLY, 1.2 BILLION PEOPLE (22 percent) live on less than \$1.25 a day. Increasing the income poverty line to \$2.50 a day raises the global income poverty rate to about **50%, or 2.7 BILLION PEOPLE.**^[22]



In developing countries (where 92% of children live) **7 IN 100 WILL NOT SURVIVE BEYOND AGE FIVE.**^[21]



A THIRD OF ALL POOR in the developing world are children 0–12 years.^[21]



GOAL 2: ZERO HUNGER, IMPROVED NUTRITION

There are few challenges facing the world today that can compare with scale of malnutrition. Malnutrition affects one in three people and it has been estimated that it is the underlying cause of 45% of child deaths.^[24]

Malnutrition keeps people from reaching their full potential. It manifests itself in many ways: as poor child growth and development; as individuals who are prone to infection; as those who are carrying too much weight or who at risk of chronic diseases because of increased intake of salt, fat, sugar or those who are deficient in important vitamins and minerals.

As such malnutrition means that children underperform at school, and their future job opportunities are limited. Malnourished adults are less able to work and contribute to the economy or provide care for their families. Malnourished mothers are likely to have children who are underweight and will have risks associated with physical and cognitive impairment. This perpetuates a cycle of poverty and economic stagnation.^[25] The issue is so severe that the World Health Organization (WHO) considers that poor nutrition is the single most important threat to the world's health.^[24]

Although the numbers of people affected by different types of malnutrition cannot simply be summed (because a person can suffer from more than one type), the scale of malnutrition is staggering^[26]

OUT OF A WORLD POPULATION OF 7 BILLION



About 2 billion people suffer from micronutrient malnutrition



Nearly 800 million people suffer from calorie deficiency

OUT OF 5 BILLION ADULTS WORLDWIDE

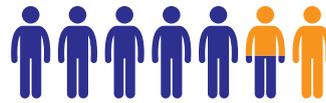


Nearly 2 billion are overweight or obese



One in 12 has type 2 diabetes

OUT OF 667 MILLION CHILDREN UNDER AGE 5 WORLDWIDE



159 million under age 5 are too short for their age (stunted)



50 million do not weigh enough for their height (wasted)



41 million are overweight

OUT OF 129 COUNTRIES WITH DATA, 57 COUNTRIES

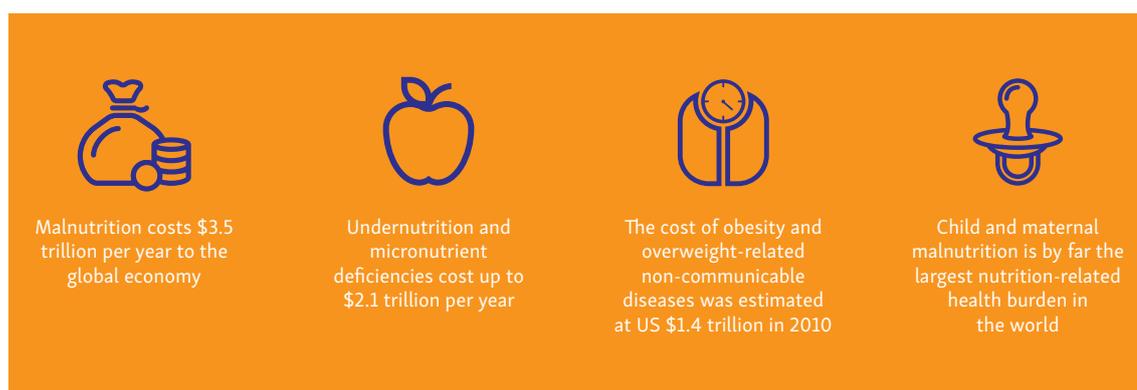
have serious levels of both undernutrition and adult overweight (including obesity)^[26]



©Maria Fleischmann / World Bank

The economic consequences of malnutrition are severe. The United Nations (UN) estimates that malnutrition costs US\$3.5 trillion to the global economy. In Africa and Asia it is estimated that malnutrition represents an 11% loss to gross domestic product (GDP) every year. Preventing malnutrition in these areas delivers a US\$16 in returns on investment for every US\$1 spent.^[26]

The cost of malnutrition^[25]



Governments around the world are looking at ways to tackle this complex issue. Nurses have a vital contribution to make improvements in this area. Nurses are working in areas that are identifying and treating people at risk of malnutrition, developing new models of care to tackle the problem, modifying treatment programmes to work for people's

environmental circumstances, developing policies and supporting changes to legislation. In some circumstances, nurses are using the media to inform the public thereby influencing political decision making. Nurses are at the forefront of enabling this goal to be achieved.

CASE STUDY 2.1: ACCESSING FOOD AID, SYRIA

Khaled Naanaa was a nurse in the town of Madaya, Syria. In July 2015, the Syrian regime and their allies completely surrounded the town with checkpoints and landmines, trapping the population and blocking the entrance to any food supplies. Access to food became very difficult and a number of patients in the hospital where she worked began to die of starvation. Khaled had contacted the United Nations for urgent food aid.

However, despite repeated requests, the Syrian regime denied the UN access into the city. Khaled sent videos and photos to a news outlet; the images quickly went viral and made headline news in Europe. It also made its way on to the agenda of the UN in New York. Faced with mounting pressure, the Syrian Government permitted a UN aid convoy to enter the city. Unfortunately, 28 residents, including six babies, had starved to death whilst waiting for assistance.^[30]

CASE STUDY 2.2: BARIATRIC PRACTICE, AUSTRALIA

“Nurse-led programme of individualized patient care lead to a tighter control on clinical assessment and enhanced clinical outcomes.” - Shirley Lockie

Sixty-six per cent of the Australian population is overweight or obese. The current waiting time for bariatric surgery in the public system is more than three years. Without health insurance, there is no alternative but to wait while your health deteriorates.

Shirley Lockie, a Perioperative Nurse Surgical Assistant in a bariatric and general surgical practice in Australia has developed a comprehensive bariatric programme to respond to patients' needs and guide them through the procedure. The core team consists of surgeon, dietitian, psychologist and perioperative coordinator. Continuity of care, continual assessment, and communication and planning, ensures the best for each individual having a bariatric procedure.

As a typical example of the patients cared for in this programme, one woman who came to the clinic was in the super obese category and had Type II diabetes, hyperlipidaemia, hyperparathyroidism and hypothyroidism.

She was bipolar, had gastro-oesophageal reflux disease and obstructive sleep apnoea. She was attending a tertiary centre for medical management of obesity and had no private health fund.

Shirley worked with the woman's GP, endocrinologist, anaesthetist, surgeon, dietitian and psychologist, liaising to establish a clear pathway, identifying risks such as lithium and post-operative nausea, and diabetes management. Protocols were established of when she should see the endocrinologist and GP to monitor diabetic control and hypertension.

One year after surgery, the patient's weight has dropped 72 kilos; her diabetes and hypertension have resolved; an macronutrient management is ongoing. She has sold her wheelchair and is undertaking a course in medical reception/healthcare.

Submitted by Shirley Lockie. Managing Director, Perioperative Services



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GOAL 3: GOOD HEALTH AND WELLBEING

The world has seen dramatic changes over the last few years. There is anger at political establishments, fluctuating currencies, unstable economies, prolonged conflicts, ethnic tensions and inexplicable acts of violence. Organised acts of terrorism are a global and unpredictable threat. Not only is society rapidly changing, but so is the environment in which we live: global temperatures are rising, antibiotics are failing, inequalities in income levels are increasing and healthcare costs are rapidly escalating. Whilst progress is being made in health, there are still marked differences in life expectancy and the quality in life between countries and within countries.^[34]

“To pretend that health is somehow separate from people’s social conditions is madness. No patient should be denied access to care, regardless of health status or insurance. That is the passionate message I believe and fight for every day of my professional career.”

– Ruth Lubic, Nurse Midwife who co-founded the National Association of Childbearing Centres^[32]

The Millennium Development Goals showed that gains can be made in development and health and health outcomes. However, we are starting to see new challenges. For the first time, the global population over the age of 60 will be more than the population of children under five.^[47] We are also seeing a shift from rural areas to where more than half the world is now living in urban areas. These new demographic features are changing health profiles and challenges.

Today, for the first time in history, non-communicable diseases have overtaken infectious diseases as the leading causes of mortality across the world. Economic growth, modernisation and urbanisation have opened wide the entry point for the spread of unhealthy lifestyles.^[10] Whilst many health systems have been designed to meet the needs of acute infections, the changing profile of disease means that many systems are not prepared to manage conditions requiring long term and sometimes lifelong care.

It is important that we look at how we can improve the quality of physical and mental health throughout life. Evidence shows that those with mental health disorders have a higher prevalence and incidence of infectious diseases and NCDs. At the same time, they are less likely to receive the health care they need to manage these conditions. Mental health is an issue that has been missing from the global agenda for too long.^[34]

In 1946, it was agreed that health is a human right. Despite this recognition in the WHO Constitution^[2] and various international human rights treaties, hundreds of millions of people worldwide are still waiting for access to lifesaving health services or fall into poverty paying for needed healthcare. As part of addressing this issue, more than 100 countries have begun working toward universal healthcare coverage (UHC).

UHC means that



Dr Margaret Chan has stated that,

“Universal health coverage is one of the most powerful social equalizers among all policy options. It is the ultimate expression of fairness. If public health has something that can help our troubled, out-of-balance world, it is this: growing evidence that well-functioning and inclusive health systems contribute to social cohesion, equity, and stability. They hold societies together and help reduce social tensions.”^[34]

UHC delivers many benefits. It means that workers are more productive, children are less absent from school, poverty and inequality decreases, societies are more harmonious and growth is more robust and sustained. Economically, UHC is a good investment. The WHO estimates that in developing countries, for every US\$1 invested in health, between US\$ 9-20 of growth is returned.^[35]

The nursing profession has for a long time been a strong supporter of UHC. The ICN Code of Ethics for Nurses^[36] calls for nurses to advocate “for equity and social justice in resource allocation, access to healthcare and other social and economic services.” Nurses are committed to UHC and we are aware of the trends in healthcare, the costs and the added demands on the daily practice of nursing work. Despite what nurses have to offer, constraints have been placed on the profession. There have been regulatory and institutional obstacles, including limits placed on nurses’ scope of practice. These need to be removed so that health systems can reap the full benefits of nurses’ education, skills, experience and knowledge.

In addition, there are attitudinal constraints which are often entrenched in the views and policies of national medical associations. Some medical professionals believe that enabling nurses to work to their full scope of practice will adversely affect the quality of care. Overwhelmingly, this is being disproved by evidence which demonstrates that nurses provide cost-effective, accessible quality care with greater or equal clinical outcomes and patient satisfaction to that achieved by medicine.^[37]

Maximising the potential of nursing will not solve the problem alone. As a WHO^[38] publication stated, there is “No health without a workforce.” If UHC is to be achieved, there must be further investment in the development of the nursing workforce so that there are sufficient numbers that are ‘fit for purpose’ and ‘fit to practice.’ Without sustained investment in the workforce, UHC will not be achievable or maintainable either in terms of accessibility or in the quality of care that is being provided

UHC can only be realised with the leadership and offerings of the nursing workforce. This means involving nurses in more than just clinical practice. It includes involving nursing leadership in policy, in economics and in reform at local, national and global levels.

CASE STUDY 3.1: SUPPORTING NURSING WORK, CUBA

“The best way nurses support the development of the profession, is by creating a climate of cooperation, worthy and challenging workplaces, with interdisciplinary and ethical thinking.” - Dr Idalmis G. Infante

The Cuban health system is recognised worldwide for its excellence and its efficiency. Despite the limited resources resulting from trade sanctions placed on the country since the 1960s, Cuba has managed to guarantee access to care for all segments of the population and obtain results related to health and well-being that are amongst the best in the world.^[39] It has also sent more clinicians to low and middle income countries to support their health systems than any other country. For example, it was one of the earliest responders to the Ebola crisis in West Africa.^[40]

The success of the health system has been attributed to its preventative approach to care. Dr Idalmis G. Infante Ochoa, Cuba’s National Chief Nursing Officer, believes that nurses are responsible for much of the success of Cuba’s healthcare system. The nurses’ focus on personalised, comprehensive, quality care, with a rational use of human and technological resources, through an enabling organisational climate, according to standards defined for a competent and responsible professional practice.

The Cuban Government has been very supportive of the nursing profession and recognises their importance in decision making. Nurses are actively involved in policy development and decision making within the Ministry of Health. Nurse leaders are represented at national, provincial, municipal and institutional levels and their contribution has been decisive in the results of the health care system. The entire population of Cuba has 100% access to a nurse within their community both in rural and urban areas.^[41]

Nurses are responsible for:

- **Education and regulation standards related to the profession**
- **Workforce planning**
- **Conducting and maintaining high quality research**
- **Design and development of models of care**
- **Developing multi-sectorial approach to the provision of care.**

Under the guidance of the Chief Nursing Officer, Cuba has implemented policies that support nurses in their professional development. They have developed clear pathways and incentives that support post graduate education at a Master’s and Doctoral levels in nursing and health. These nurses work within a multi-sectorial approach to care in close collaboration with other clinicians, secondary care providers, education institutions, researchers, welfare systems and other government agencies to provide a comprehensive approach to care of the individual and the community.



CASE STUDY 3.2: BREAKING LEGISLATIVE BARRIERS TO NURSE PRACTITIONERS, CANADA

“Despite progress, numerous pieces of federal legislation still require updating. Without these changes, barriers in access to care persist for many Canadians” - Carolyn Pullen

Over 20 years ago, nurse practitioners (NPs) became a regulated class of healthcare providers in Canada with the aim of improving access to primary care for many citizens, especially indigenous peoples living in rural and remote communities. Today, there are almost five thousand NPs in Canada, many of whom are members of multidisciplinary care teams, and the primary care providers for over three million Canadians.

Since the introduction of NPs, many pieces of provincial, territorial and federal legislation have gradually been modernised to recognise and list NPs as professionals eligible to provide a range of health services, but many legal amendments still need to be implemented to increase the scope of practice of RNs and to extend access to care to all.

Updates have allowed NPs to officially sign off on a range of legal and administrative documents that verify they have examined or treated a patient and assessed a patient’s eligibility for a federal programme.

British Columbia has been the leader in removing provincial barriers where legislation required modernisation to include NPs. In 2014, the British Columbia College of Physicians and Surgeons and the College of Registered Nurses of British Columbia collaborated to successfully address this issue with the province passing Bill 17 to make 11 changes in nine Acts.

As progress is made at the provincial level, the Canadian Nurses Association (CNA) and their partners, including the Canada Association of Advanced Practice Nurses and the Canadian Indigenous Nurses Association, continue to work with the federal government to make similar legislative changes at the federal level. While the required legislative changes are minor, collectively they will greatly enhance access to care.

The CNA continues to advocate strongly at the federal level for changes to 34 pieces of federal legislation. They are presently working toward an omnibus solution that may be implementable in 2017 to comprehensively address the issue. The most current outcome is a high level of awareness of the issue among federal politicians and policy makers and strong support for change.



UHC IS CRITICAL BECAUSE 1 BILLION PEOPLE lack access to basic healthcare.^[35]



AT LEAST 400 MILLION PEOPLE GLOBALLY lack access to one or more essential health services.^[35]



On average, about **32%** of each country’s health expenditure comes from **OUT-OF-POCKET PAYMENTS.**^[35]



HEALTH IMPROVEMENTS drove a quarter of full income growth in developing countries between 2000 and 2011.^[35]



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CASE STUDY 3.3: EBOLA VIRUS IN SIERRA LEONE

“Advocating and providing advice on how to engage and support improved health programmes in some of the most remote and hard to reach locations in the world ensures that global health initiatives reach those in need and contribute to the Sustainable Development Goals at a global and local level.”

- Amanda McClellan

In 2014, Sierra Leone captured worldwide attention due to the outbreak of the Ebola Virus. It has been estimated that 28,616 people contracted the virus and more than 11,310 people died. The disease had a devastating impact on the country with families torn apart, children losing their parents, civil unrest and food shortages.^[84]

The entire health system was on the verge of collapse. Large numbers of health professionals died from the disease. Clinics were full of patients who had contracted Ebola. This caused issues with access to health services for women giving birth and those affected by diseases such as malaria, pneumonia and diarrhoea.

Amanda McClellan is a Registered Nurse from Australia and a Global Public Health Emergency Advisor for the International Federation of the Red Cross and Red Crescent (IFRC). From June 2014 to January 2015, she was deployed to West Africa, working across Sierra Leone, Liberia and Guinea. Amanda was responsible for leading Ebola-related health operations for the Federation, assuming the role of Technical Advisor for the operation.

As part of this role, she supported the training and supervision of 200 clinical staff and 6000 volunteers.

Tragically, dead bodies are highly contagious. Improper burials and burial rituals were the catalyst of many infections. One of Amanda’s key responsibilities was the oversight of burying the dead in a way that was culturally sensitive and safe. Coaching and mentoring health staff is another major component of her role. Supporting local health workers and Red Cross and Red Crescent volunteers to be better prepared to respond to disasters and health emergencies is critical to support the increased resilience of communities to shocks. Engaging communities and working with them to build stronger health systems that can reduce hunger and improve health outcomes is a critical function of the health programmes of the IFRC. In addition to this field work, a large part of Amanda’s role is representing the IFRC in coordination and technical forums ensuring the role of communities, volunteers and local health workers is being considered at the highest levels.

Submitted by Amanda McClellan, International Federation of the Red Cross and Red Crescent



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GOAL 4: QUALITY EDUCATION

Pemiscot County in rural, southeast Missouri, USA, has a population of almost 20,000 residents. Approximately a quarter of this population is African American, 30% live below poverty, 18% have less than a high school education and the unemployment rate is over 10%. The risk factors for increased burden of disease in this area are shocking and, as a result, the county has the highest rate of cardiovascular disease in the state. A study^[52] conducted in this region demonstrated that levels of education played a significant part in the cause of this health burden.

The level of educational attainment has been recognised as an important social determinant of health. Education plays a significant role in shaping future employment opportunities: it influences our decision making and our choices; and it enables social and personal resources that are vital for physical and mental health. In fact, the level of education attainment is a strong predictor of long-term health and quality of life.

Education has the potential to bring many benefits to the individual, families, communities and countries, including employment and income benefits, but also many social benefits.

However, not all children have access to or connection with the healthcare sector for comprehensive care. Multiple barriers accessing healthcare exist including geographic, financial, transportation, sociocultural and availability of services. Nurses are working in partnership with education providers as a means of health promotion and disease prevention, early screening and detection of illnesses. By working with the education providers these barriers can be diminished.



A CHILD WHO IS BORN TO A MOTHER WHO CAN READ IS 50% more likely to survive past age five.^[54]



171 MILLION PEOPLE COULD BE LIFTED OUT OF POVERTY if all students left school with basic reading skills.^[54]



Enrolment in primary education in developing countries has reached **91%** BUT **57 MILLION CHILDREN REMAIN OUT OF SCHOOL.**^[54]



103 million youth worldwide lack basic literacy skills, and **MORE THAN 60% OF THEM ARE FEMALE.**^[54]



ACROSS THE OECD COUNTRIES, A 30 YEAR OLD MALE TERTIARY GRADUATE is expected to live eight years longer than a male who has not completed secondary education.^[53]



80% OF TERTIARY GRADUATES VOTE WHILST ONLY 54% of young adults who have not completed secondary education vote.^[53]



THE PREVALENCE OF SMOKING IS MUCH HIGHER IN LOWER EDUCATED PEOPLE.^[54]



INCREASING GIRLS' EDUCATION HELPS WOMEN CONTROL HOW MANY CHILDREN THEY HAVE. In Mali, women with secondary education or higher have an average of three children whilst those with no education have an average of seven children.^[54]



CASE STUDY 4.1: EDUCATION PLUS HEALTH, USA

“Education Plus Health elevates the school nurse’s role to offer more comprehensive health care, ensuring accessibility to holistic primary care and preventive services for every student.” - Julie Cousler Emig

In the United States, as in many countries, people face a myriad of potential barriers to access of high-quality health care, most especially children living in poverty. In the high poverty areas of Philadelphia, asthma and diabetes are the two greatest concerns facing children, exacerbated by high rates of obesity (22% of students served were considered obese last year).

Julie Cousler Emig is the Executive Director of Education Plus Health, a non-profit organisation that improves education and health outcomes by providing access to high-quality health care and health education to students directly in their schools. The vast majority (75% nationally) also provide mental health services.

Education Plus Health is designed to cater specifically to undeserved areas with high poverty student populations, identified as the group facing the most barriers to consistent utilization of healthcare. The organisation has developed an innovative and evidence-based approach to better address the health needs of students through preventive and acute primary care.

The scheme reaches over 7,000 individuals annually through 15 school-based, nurse-managed health centres in Philadelphia. Education Plus Health is a cost-effective, nurse-driven staffing model, led by Advanced Practice Nurses (APNs), working collaboratively with a Licensed Practical Nurse to provide school nursing care and primary care. Nurse Practitioners work to secure collaboration with the student’s medical home and specialists to wrap vulnerable children with holistic health care.

The students enrolled are all eligible for the federally-funded free school lunch programme generally made available to students whose household incomes is under the poverty threshold. Many students also live in public housing projects and a number are homeless or formerly homeless students. The aim is to tackle inequalities on the principle that health is directly correlated to academic outcomes and addressing both is key to improving students’ chances. This model creates an optimal venue for APNs to monitor children who have special health needs, to work collaboratively with primary care providers and specialists whose time with children is limited to office visits or hospital stays, and to intervene promptly with all children when facing an acute health issue.

The success of Education Plus Health is backed by nearly 40 years of research, which documents the positive impact school-based health centres have on student achievement and well-being, as well as cost savings to society.

Among the benefits, the scheme has succeeded in reducing absenteeism, especially among asthmatic students. Students achieve better academic outcomes and attendance rates and also have lower rates of tardiness, discipline problems, and course failures.

The programme also reduces inappropriate emergency room use and publicly-funded insurance costs overall, and hospitalisation rates among asthmatic children. Additionally, 56% of asthmatics have shown improved attendance over the last three years.

The model is effective in engaging youth in mental health services and urban students were 21 times more likely to make mental health related visits to school-based health centres than to traditional community-based safety net health centres.



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GOAL 5: GENDER EQUALITY

In some parts of Africa today, adolescent girls are seven times more likely to acquire HIV than their male counterparts, and AIDS is the leading cause of death amongst girls and women of reproductive age.^[55] Whilst it is a terrible tragedy that anyone should acquire HIV, this is a clear symptom of a great injustice: gender inequality. Gender equality is a fundamental human right. Yet despite this, young women and girls in many communities are not treated as equal. Many cannot reduce their vulnerability to diseases such as HIV because they are not permitted to make decisions regarding their own healthcare or their own bodies. They cannot choose at what age to marry, whom to marry, when to have sex, how to protect themselves or how many children they have. They are also subject to physical and sexual violence at devastating rates.

The impacts of gender inequality are far reaching and are pervasive in all societies. Gender equality matters intrinsically because it affects people's abilities to make choices regarding their basic human rights. Gender inequality damages the health of millions of women and girls. This occurs as a result of discriminatory feeding patterns, violence against women, lack of access to resources and opportunities, and lack of decision-making power over one's own health. There are gender biases in power, resources, entitlements, norms and values and in the organisation of services.

As a female dominated profession and one that witnesses the disparities in health between the genders, nurses can make a key contribution to reducing these inequalities. The International Council of Nurses played a key role in the establishment of the United Nations specialised agency for women, UN Women. Nurses from many nations wrote to the UN Coherence Panel to support the creation of a single organisation to fulfil the UN mandate of achieving gender equality and advancement for women. According to Paula Donovan, Senior Advisor, Women's and Children's Issues, Office of the UN Special Envoy for AIDS in Africa, nurses played a greater role than any other single lobbying force.

She believes that the outpouring of concern from nurses was extraordinarily influential, helping persuade panel members to take this issue seriously.^[57]

Nursing as a profession is being used to promote gender equality. Whilst nursing has not and should be seen as an exclusively female profession, women currently make up the vast majority of the nursing workforce. By becoming a nurse, many girls and women around the world are accessing formal education and training programs, obtaining an income and gaining respect within their communities. This sets them free from the poverty cycle. In addition, a competent and qualified and empowered nursing workforce is helping other women to improve their health and wellbeing.^[58]

– All-Party Parliamentary Group on Global Health, Triple Impact Report: How Nursing will improve health, promote gender equality and support economic growth.



495 MILLION WOMEN are illiterate (64% of all illiterate adults).^[56]



PROPORTION OF WOMEN IN NATIONAL PARLIAMENTS: 27%.^[56]



WOMEN ARE PAID 20-30% lower than men for equivalent work.^[56]



1 in 9 GIRLS ARE MARRIED before the age of 15.^[56]

Within the European Union^[56]

- 1 in 3 girls have experienced physical or sexual violence
- 5% have been raped by the age of 15
- 500,000 women are at risk of female genital mutilation
- Greatest risk of human trafficking

CASE STUDY 5.1: REDUCING HIV STIGMA, ZAMBIA

In Zambia, nurses are partnering with other organisations to ensure women's rights when it comes to the management and treatment of people with HIV/AIDS. An AIDS Integrated Program has been established by the Catholic Diocese of Ndola, Zambia. Within this programme, there is collaboration between nursing and medical care, socioeconomic support, human rights and legal support and psychological care. There are close partnerships with government and non-government organisations to provide care to the community. Within the nursing clinics and community settings, nurses are providing families with information about the transmission of HIV and TB and correcting misconceptions. They help raise awareness about the need for people living with HIV to receive love and support from their families and friends and as such seek to reduce stigmatisation.

As part of their work, they collaborate with legal institutions, human rights volunteers and other legal areas to provide legal protection against child abuse, violence against women and helping widows to protect their property from being seized by their deceased husband's families. As a result of this work, women have come forward in greater numbers to receive the care and treatment they need.^[60]

Programmes where HIV care is integrated into nurse-led primary healthcare services have commenced in South Africa. Nurses in primary healthcare are providing first line antiretroviral therapy (ART), sexual health and other holistic care in their clinics.^[61] This has increased the number of women accessing treatment particularly after suffering sexual abuse. It is hoped that by improving access to ART in areas with limited access to medical care, that the transmission of HIV will be reduced.

CASE STUDY 5.2: GENDER INEQUALITY IN NURSING, USA

“Better understanding that nurses are autonomous, educated science professionals will strengthen nursing care, education and research, allowing nurses to save more lives.” - Sandy Summer

The nursing profession has not been immune from gender inequality. Because the profession remains predominantly female, the way nurses are treated in a particular society often reflects how women are treated. Sadly, in the media, nurses are often portrayed as embodying feminine stereotypes: low-skilled handmaidens, sex objects, angels, or battle-axes. The news media still tends to focus on physicians' work and to discount nurses' clinical and research achievements. In many television dramas, physicians, who are often male characters, receive the credit for meaningful healthcare, whilst the mostly female nurse characters meekly assist, displaying no autonomy and little skill. Such characters may reflect creators' attempts to provide comic relief or meet ethnic diversity goals with minimal effort. And of course, the male physician leads look more heroic when seen next to deferential female nurses. Even “progressive” programming that features female physician characters and may even include male nurses tends to reflect the same assumptions, with the added gender stereotype that men in nursing are gay or weak.

Advertising still exploits the “naughty nurse” image, suggesting that nurses exist mainly to provide sex to patients or physicians. The media has often reinforced these misconceptions of nursing in global society.

Nursing should challenge these misconceptions. Nurse Sandy Summers is a leading advocate for nurses and is the founder and executive director of the international nonprofit organisation ‘The Truth About Nursing,’ which challenges stereotypes and educates the world about the value of nursing. Sandy has worked tirelessly since 2001 to encourage accurate presentations of the profession and to confront the media regarding misportrayals of nurses on many occasions. The Truth About Nursing also maintains a vast website with analyses of nursing in the media and it has engaged in many global advocacy campaigns. As a result of its work, numerous programmes and advertising campaigns have changed.

Submitted by Sandy Summer, Founder and Executive Director, 'The Truth About Nursing'



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GOAL 6: CLEAN WATER AND SANITATION

Scovia, 16, lives in the Opolin Village Uganda. She hopes to one day become educated and trained as a nurse because she wants to “save people’s lives.”

Regular bouts of diarrhoea, along with her menstrual cycle mean that Scovia regularly misses school. The school she attends does not have water for washing and has very few toilets. After going to the toilet or having periods, Scovia is scared to touch anything and is fearful to eat because her hands are dirty. Like many of her school friends, she regularly gets sick and is unable to attend school. As a result, she finds it difficult to prepare for exams and regularly fails. For Scovia, this is distressing because her hopes of becoming a nurse and breaking the poverty cycle are diminishing.^[62]

Safe and readily available water is important for public health, whether it is used for drinking, domestic use, food production or recreational purposes. Improved water supply and sanitary conditions is critical to improving the lives of millions of people, boost countries’ economic growth and reduce poverty.

One of the great tragedies is that, even in the healthcare setting, there is a lack of clean water. In 2015, a study was conducted into 66,000 healthcare facilities in 54 different low and middle income (LMI) countries. The report found that more than a third of these facilities lacked sufficient water and soap for staff and patients to wash their hands and maintain basic hygiene.^[67]

Dirty water and the lack of safe toilets are among the top five killers of women worldwide. Without these basic facilities, health centres cannot adequately prevent and control infections, placing mothers and their children at risk during delivery. Where latrines are not provided, mothers in labour may have to go outside to relieve themselves, and tend to leave health facilities within hours of giving birth, leaving little time for them to receive advice and support.^[68]

Access to clean water, sanitation and hygiene in healthcare facilities is critical to delivering quality services and advancing health. Hand hygiene is one of the most cost-effective interventions to protect health and nurses are pivotal to ensuring this is possible in every healthcare setting.



Globally, at least **1.8 BILLION PEOPLE** USE A DRINKING-WATER SOURCE contaminated with faeces.^[63]



Contaminated drinking water is estimated to cause **502 000 DIARRHOEAL DEATHS EACH YEAR.**^[63]



663 MILLION PEOPLE WORLDWIDE rely on unimproved water sources, including **159 MILLION DEPENDENT ON SURFACE WATER.**^[63]



At least **10% OF THE WORLD’S POPULATION** is thought to consume food irrigated by waste water.^[64]

CASE STUDY 6.1: IMPROVING SANITATION, UGANDA

Philomena Okello is a senior nursing officer at Lira referral hospital in Uganda. The hospital has capacity for 22 women a day but routinely receives more than 100. She has seen first hand the devastating effects of the lack of safe water and sanitation across numerous health facilities in Uganda. However, Philomena believes that “if they are empowered, people can demand that clean water be put in place.”

Philomena has stressed that people should know about WASH and should be encouraged to demand that right. She urges her staff and patients to be involved in a movement to demand this right. “It is not just our right to be heard, but our right that they listen to us, involve us. It is the only way to have sustainable change,” she said.^[69]

She has led a movement amongst health professionals and the community seeking improvements in the hospitals towards better access to clean water, sanitation and hygiene (WASH). As a result, over the past two years dramatic improvements have been made.

Hunger

Access to water leads to food security. With less crop loss, hunger is reduced. Schools can feed students with gardens, reducing costs.

Education

When students are freed from gathering water, they return to class. With proper and safe latrines, girls in school through their teenage years.



Poverty

Access to water can break the cycle of poverty.

Health

Safe water, clean hands, healthy bodies. Time lost to sickness is reduced and people can get back to the work of lifting themselves out of poverty.

A study of 66,000 healthcare facilities in low and middle income countries found:^[67]



Presence of a water source or water supply in or near the facility (within 500m) for drinking, personal hygiene, medical activities, cleaning, laundry and cooking –
38% WITHOUT ACCESS.



Presence of latrines or toilets in the facility (does not consider functionality or accessibility) –
19% WITHOUT ACCESS.



Availability of hand washing stations with soap or alcohol-based hand rubs within the facility –
35% WITHOUT ACCESS.

Figure 4. Impact of clean water on health^[70]



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TAIMANI FILMS /
World Bank

GOAL 7: AFFORDABLE AND CLEAN ENERGY

In Totorabamba, Peru, Espirita crouches by an open fire toasting barley grains. On the thatched roof is thick black soot, a frequent reminder of the particles she inhales whenever she cooks. For the millions of people who cook like this on a daily basis, it is the equivalent of smoking nearly 400 cigarettes a day.^[74]

Indoor air pollution affects mostly people in LMI countries which represent 82% of the world's population.^[75] It is ranked in the top ten risks to health^[10] even ahead of unsafe water as a cause of death in these countries.

The WHO attributes 22% of chronic obstructive pulmonary disease (COPD) deaths to indoor air pollution from solid fuels. COPD results in the deaths of low birth weight babies, causes pneumonia in children, and heart and lung problems in adults. The UN estimates that nearly three billion people cook with open fires and traditional stoves.^[75]

Insufficient access to clean energy has a profound and wide reaching effect on health. It affects the ability to communicate health promotion and prevention messaging; the conditions which directly affect health (e.g. access to clean water, indoor air pollution, malnutrition); it limits the services that can be safely delivered within health facilities (e.g. from medication storage to radiotherapy provision); and it prevents health workers from wanting to work in these areas (e.g. isolation and being unable to practice without the appropriate tools).

It is important that we recognise the importance of clean energy and its effects on health and health service delivery (See Figure 5).

Nurses care for people like Espirita on a daily basis. As part of that care, we must ask ourselves how we can help people when we send them back to the place that made them sick in the first place?



...the annual death toll from indoor air pollution will still be over 1.5 million people - a higher rate than that from both malaria and tuberculosis...^[73]

– United Nations



58% HAVE ACCESS TO CLEAN FUELS and technologies.^[76]



2.8 billion people RELY ON WOOD, CHARCOAL, animal or crop waste to cook their foods or heat their homes.^[76]



+50% OF PREMATURE DEATHS DUE TO PNEUMONIA AMONG CHILDREN under five are caused by the particulate matter (soot) inhaled from household air pollution.^[76]



+4 million people DIE PREMATURELY FROM ILLNESSES ATTRIBUTED TO THE HOUSEHOLD air pollution from cooking with solid fuels.^[77]



1.1 billion people without access to electricity.^[76]



4.3 million PREMATURE DEATHS ANNUALLY FROM NONCOMMUNICABLE DISEASES including stroke, ischaemic heart disease, chronic obstructive pulmonary disease (COPD) and lung cancer are attributed to exposure to household air pollution.^[77]

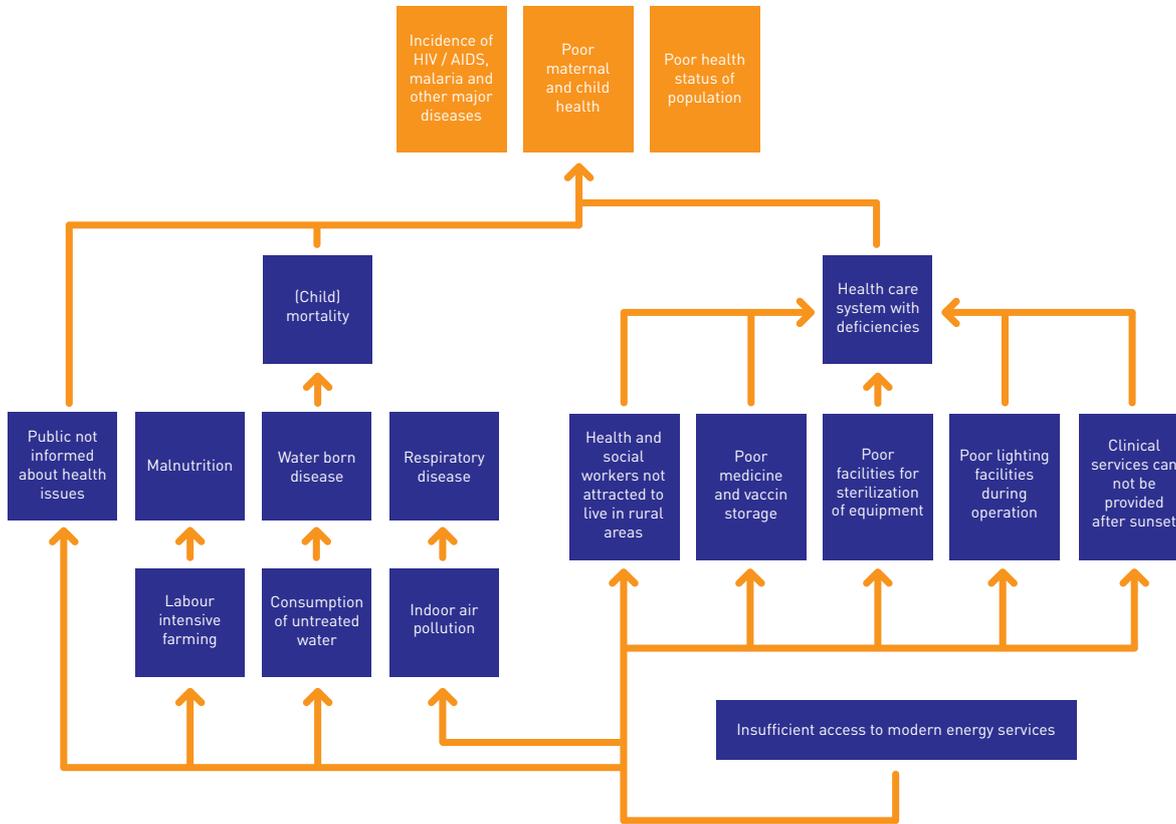


Figure 5. The impact of insufficient access to energy on health^[78]

CASE STUDY 7.1: ADDRESSING COPD, CHINA

Chronic Obstructive Pulmonary Disease (COPD) is a leading cause of morbidity and mortality in China. There are a number of causes of this including tobacco smoking, genetic susceptibility and indoor air pollution from the use of solid fuels.^[79]

COPD is a disease characterised by persistent airflow limitations that is usually progressive and not fully reversible. The burden of disease is high as it leads to disability and impairs quality of life. It also has a large economic burden on patients costing nearly 40% of an average annual income for people living in urban and rural areas of China.

In Guangzhou, China, a nurse-led respiratory service for COPD has improved the lives of many patients. The clinic has focused on patients with COPD who are at high risk of representation to the hospital. The programme includes risk stratification of patients, a holistic needs assessment of the patient, home visitation as required, patient empowerment and a 24 hour contact service. The programme has reduced acute exacerbations, improved health-related quality of life and reduced medical expenses to patients.^[80]



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GOAL 8: DECENT WORK AND ECONOMIC GROWTH

The Ebola outbreak in 2014 had a devastating effect on a number of countries in Africa. It caused the deaths of thousands of people and had a major effect on socioeconomic conditions. It demonstrated a weakness of country public health systems and global emergency aid due to issues with workforce availability and the resources required to manage the epidemic.^[133]

On the 17 March 2016, the WHO marked the end of the flare-up of the Ebola Virus in Sierra Leone.^[84] Today, the country still remains on alert to ensure that the epidemic does not occur again.

Of critical concern, however, is that the nurses in Sierra Leone have not been paid in months. The work is often being done on a voluntary basis. As a result, nurses are leaving the profession in order to pursue job opportunities where they can receive a guaranteed income. Whilst this is damaging to the provision of health services in the country, it also places Sierra Leone at risk of being capable of managing another epidemic.^[85]

Access to a highly skilled and educated health workforce is critical to improving local, national and global health outcomes. In 2013, WHO launched a report called 'A Universal Truth: No Health without a Workforce'.^[38] The report's findings highlight that the advances made in health can be attributed to the increased availability of health professionals.

Whilst it may be thought that investing in health professionals and infrastructure places a drain on the economy, it actually has the opposite effect. The health sector is a key economic sector and a job creator. Demand for health services continues to increase, creating millions of new jobs. By investing in the creation of new health workforce positions, the returns on investments are estimated to be nine to one. Research in this area also suggests that for every extra year of life expectancy, the GDP is increased by four per cent.^[88]

The High-level Commission on Health Employment and Economic Growth^[88] has stated that investments in health employment can improve economies, move countries closer to universal health coverage and act as a bulwark against outbreaks such as Ebola. With increasing populations and incidence of non-communicable diseases, approximately 40 million health workers will be required worldwide by 2030.

To achieve this required workforce, a number of strategies will need to be implemented to attract people into the nursing profession and retain them once there. The strategies for nursing recruitment and retention in workforce require issues of concern to be addresses. They generally fall within the following major problem areas: education – including attrition from undergraduate courses, access to post graduate education and career pathway progression and continuing education opportunity; adequate remuneration; conditions of employment – including staffing and skill mix, working hours and making nursing a more family friendly profession; and providing a safe, healthy and rewarding working environment.

“I hear nurses say, ‘I am just a nurse.’ Can you imagine that? The most important person in a hospital and we discount our value. Nurses are the cornerstone of healthcare, and yet they don’t respect what they do.”

– Margaret McClure (Former chief nursing officer at NYU Medical Centre and pioneer researcher of Magnet Hospitals.)

United Kingdom

In the United Kingdom, since 2010, nursing pay has fallen by 14% in real terms. This has increased financial pressure for many individuals and as a result many nurses are leaving the profession. The gap in meeting workforce shortages continues to widen.^[89]

CASE STUDY 8.1: GOOD PRACTICE, EDUCATION AND TEAMWORK, MALDIVES

“Explore the manager and leader within yourself because that’s what nurses are.”

In many clinical settings, nurses are overworked and undervalued, caring for patients who are highly dependent on their care, but lacking the time for adequate patient care or interaction.

Fathimath Rasheeda, Ward manager at the Indhira Gandhi Memorial Hospital in Male, Maldives observed this in her medical ward. There was a high uncertainty of daily events, since many tasks are highly interdependent or dependent on the condition of the patient in question. With 5-6 nurses working a 8-9 hour shift, caring for 35 patients, most of the nurses were not able to take their one hour break. Approximately 75 to 80% of the patients were bedridden and highly dependent on nursing care.

Low morale amongst staff led to conflicts, and many nurses felt they were running around like “headless chickens”. They had ineffective communication and poor teamwork among themselves and other units in the hospital. Some critical care patients on mechanical ventilators were placed in cubicles where they were not properly observed and where their safety was compromised.

After a close analysis of the situation with the deputy ward managers and other nurses in the ward, Fathimath suggested to the nursing director to merge the medical ward with a small general ward unit of more than 10 nurses caring for patients who were fit for discharge.

This resulted in an increase in the number of nurses in both of the units and enabled some nurses to be posted for a week or two in the intensive critical care unit to learn how to care for critical care patients.

Two other nurses joined the critical care nursing advanced diploma course and established an education session for all nurses during the monthly staff meeting of medical ward. The sessions included critical care topics such as interpretation of ABG results, Interpretation and recognition of abnormal ECGs, and physical assessment (system wise assessment; cardiovascular, pulmonary, gastro intestinal, neurological exams, etc.). In addition, body system examinations and care planning were taught to nursing students posted to the ward for clinical practice.

Fathimath established a new “priority cubicle” especially for critical care patients and informed all the doctors about the criteria for admission or transfer to this cubicle.

As a result, a new environment was created where nurses showed competence in clinical practice and a better understanding in managing critical care patients. Complaints in the unit decreased and better teamwork and respect was observed amongst the multidisciplinary team. The medical ward became a place to learn and to grow; a place where nurses love to work and new graduates and nursing students look forward to join and work.

“

I work in a busy hospital in South Africa and every day I feel an overwhelming feeling of hopelessness because of the strenuous working conditions and under-staffing. Often we are forced to do work outside of our job description without appropriate training or pay. Not only are we understaffed, our hospitals are dangerous – we have had incidents where patients physically and verbally attacked nursing staff and security did not arrive for 10 minutes. So many colleagues have left because of burnout and compassion fatigue.^[90]

”

Submitted by: Fathimath Rasheeda, Ward manager (RNM, BSN, CCN), Indhira Gandhi Memorial Hospital (IGMH), Kanbaa Aisaarani Hingun, K. Male', Maldives
Other nurses involved are: Mariyam Shaikath, Deputy Ward Manager, Zileena Mohamed Didi, Deputy Ward Manager, Aminath Rishfa, Deputy Ward Manager



Global unemployment is increasing with **NEARLY 202 MILLION PEOPLE OUT OF WORK IN 2012.**^[86]



7.2 MILLION SHORTFALL OF HEALTH-CARE WORKERS.^[38]



An increased investment in health spending of US\$932 million annually over 20 years on top of current spending will prevent **54,000 DEATHS AND HAVE AN ECONOMIC RETURN OF US\$14 for every US\$1 spent.**^[87]



2.2 BILLION PEOPLE LIVE BELOW THE US\$2 POVERTY LINE.^[86]

VIOLENCE IN THE WORKPLACE^[92]

In the USA, around one in four nurses has been physically attacked at work in the last year. There are more violence injuries in the healthcare industry than in all other industries combined.

It is estimated that:

- **Only 29% of nurses who are physically attacked report it.**
- **18% of nurses fear retaliation if they report violence.**
- **20% of nurses say they would not report physical violence because they say it is a normal part of the job.**

“I see the worst of it on a weekly basis, having about a dozen family members in nursing and other various hands on medical fields. Floor, ER, OR and post op nurses and other related caregivers receive injuries or deal with combative patients and sexual harassment on a daily basis, not to mention the injuries and general wear on one’s body manoeuvring the ever increasing percentage of 300+ lb patients. I can’t really think of an industry other than labour intensive ones like mining, drilling, lumber, etc. with anywhere close to the same odds of being seriously injured. If you go into a nursing field, I can pretty much guarantee you’ll be injured and given enough time, you will likely be injured severely or end up with a permanent disability.”

– Openuris comment to The Atlantic article, cited 5 December 2016^[92]



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GOAL 9: INDUSTRY INNOVATION AND INFRASTRUCTURE

Jane lived in a rural area in Australia when she was diagnosed with stage one ovarian cancer. Both her mother and sister had died of cancer and this came as a shock to her. Living in such a remote location, the nearest major hospital to provide chemotherapy was a four hour drive away. In many small towns, the local hospitals are unable to provide chemotherapy because of the low number of cancer patients which means that few staff have the required competencies in the administration of chemotherapy. If patients are to receive care, they are often required to travel long distances for extended periods of time. Often patients find it too difficult and too expensive (US\$380 per visit) in addition to being away from their family for this duration so they do not access treatment.^[93]

The Townsville Hospital has established an innovative model for the provision of chemotherapy in rural areas. It is a tele-health chemotherapy service from the hospital to the smaller rural hospital. This means a generalist rural nurse in the rural hospital can be overseen by a specialist nurse via a video link from the tertiary hospital. Utilizing this model, patients can receive the same intensity of treatment and receive the same safety profiles as if they were being treated locally. This model of care has improved patient satisfaction and access to care, reduced patient and hospital expenses, and generally improved patient welfare.^[94]

For many people around the world, access to healthcare requires hours of travel, often across difficult terrain. People living in rural areas have limited choices in regards to transportation. This can be a significant burden in terms of time and money. Ageing populations and increased incidence of chronic conditions often require frequent visits to healthcare facilities.

Ideally, people should be able to conveniently and confidently access services such as primary care, dental, behavioural health, emergency and public health services. Access to healthcare is important for:

- **Overall physical, social and mental health well-being**
- **Prevention of disease**
- **Diagnosis and treatment of disease**
- **Improved morbidity and mortality.**



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To meet the challenging demands of health and healthcare provision, many governments and hospital executives are championing innovation. They have recognised that the old ways of doing things cannot be sustained and are therefore looking for other solutions. The former National Health Service (NHS) Institute for Innovation and Improvement stated that “innovation is about doing things differently or doing different things to achieve gains in performance. It is a myth that most innovations come from laboratories, policy makers or senior leaders. Most innovations come from staff working within those organisations.”^[97]

Throughout the world, nurses are firsthand witnesses to the needs of patients and the challenges of healthcare systems in meeting those needs. There is hardly an intervention, treatment or healthcare programme in which nurses do not play a part. As such, nurses play a pivotal role in determining the quality, efficiency and accessibility of care.

Nurses at all levels need to continue to explore and unlock the potential of innovation in enhancing the quality, efficiency and accessibility of care. We must demonstrate the impact and the outcomes of these interventions as the future of people’s health and well-being is dependent on our ideas, creativity and willingness to engage with change.

“I never wanted to become anything. I wanted to do the things that mattered – things that fundamentally haunt you – like the faces of migrant children or the shoes on the beach (in Sri Lanka after the tsunami), things that have social meaning and importance.”

– Marla Salmon, Former Chief Nursing Officer, US Department of Health and Human Services



Distance matters

There is a clear correlation between distance to the most clinically appropriate health setting and health outcomes. Examples include:

A study in Sweden found that patients who experience an increase in the distance from their home hospital of 50-60 kilometres had a 15% lower chance of surviving a heart attack than patients who lived within 10 kilometres of their home hospital.^[100]

A study in the United Kingdom found that every 10 kilometres increase in straight line distance to an emergency department is associated with around 1% absolute increase in mortality.^[101]

A study in Australia found a strong correlation between distance from radiotherapy centres and

survival outcomes of people diagnosed with cancer. On average, there was a 6% increase in mortality risk for each 100 kilometre increment in distance from the nearest radiotherapy facility.^[102]

In Niger in 2012, approximately 90% of the roads were non-paved. In six districts there are no health facilities and it is estimated that the ratio of health facilities to population size is 7,000. During the dry season, 39% of the population was within a one hour walking distance to a health centre. This percentage decreased to 24% during the wet season. A study found that there was a strong correlation between vaccination rates and distance. It found that if a child was within one-hour walking distance from the hospital, they were almost twice as likely to complete vaccination programmes as those living further away.^[95]

CASE STUDY 9.1: NEIGHBOURHOOD CARE IN THE NETHERLANDS

“Developing a good relationship with our patients helps us better appreciate and understand their environment. The treatment we can then implement empowers them through giving them autonomy over their condition.”

In 2006, district nurses in the Netherlands were becoming increasingly dissatisfied with the model of care being provided to people with complex health needs in the community.

Traditional models utilized low cost, lesser trained personnel to provide care. In response, the Buurtzorg (Dutch for ‘Neighbourhood Care’) care model was established. The model consists of the recruitment of highly skilled nursing professionals working in independent teams of up to 12 nurses) taking responsibility within a defined area of all aspects of care of 50-60 patients.^[177]

The model relies on IT systems for online scheduling, documentation of nursing assessments and billing. The Neighbourhood Care model aims to:

- **Create self-governing teams of nurses to provide both medical and supportive home care services**
- **Become a sustainable, holistic model of community care**
- **Maintain or regain patients’ independence**
- **Train patients and families in self-care**
- **Create networks of neighbourhood resources**
- **Rely on the professionalism of nurses.**^[177]

In 2015, Buurtzorg employed 8,000 nurses in 700 teams, providing a full range of medical and support services to over 65,000 patients. At the heart of the nurse-led model is client empowerment; by making the most of the clients’ existing capabilities, resources and environment and emphasizing self-management the teams garnered highly successful results.^[176]

The scheme reduced clients’ costs by 40%, saving a potential of 2 billion Euros per year and reducing the hours of care per patient by 50%. Quality of care was also improved as the patients regained autonomy more quickly, fewer hospital admissions were recorded as well as shorter lengths of stays.^[177]

Ornella Zanin and Gerda Mast, District Nurses specialized in triage of chronic wounds, shared this story to illustrate the strength of the programme.

Lars, a 70 year old man resident in one of the neighbourhoods served by Buurtzorg was in need of a serious intervention. Wheelchair-bound after being infected by polio as a child and suffering from Guillain-Barre syndrome, he contracted an ulcer on his lower right leg, subsequently complicated by mycosis which spread to the leg and toes. The pain prevented compression therapy leading to significant leg edema. Lars was largely confined by his condition, unable to appropriately care for his legs and feet, and was also resistant to varying forms of treatment.

Ornella and Gerda visited Lars in his house and worked together with him to develop a treatment plan for his wound. Within six weeks, the wound was healed. Through developing a good relationship with Lars and appreciating a better understanding of his environment, Ornella and Gerda were able to implement a treatment plan that was not only successful in the short term, but has also led to the empowerment of Lars so that he is more attentive in the care of his legs.

Submitted by: Buurtzorg Nederland, Ornella Zanin, district nurse, specialized triage chronic wounds.
Gerda Mast, district nurse, specialized triage chronic wounds.



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GOAL 10: REDUCED INEQUALITIES

Morley was a young indigenous girl who cared deeply for those around her, especially her younger brother. Tragically, Morley's mother had been abused when she was a child and suffered from serious bouts of depression and numerous addictions. Unfortunately, these struggles would cause her to neglect her children. Morley began cutting herself and had attempted suicide. While she wanted to live at home with her mother and brother, for her protection it was decided she should be placed into care. During this time in care, the foster parents began reporting that Morley was hearing voices telling her to cut herself. A psychiatrist diagnosed her with post-traumatic stress disorder. Her mental health and her behaviour would further deteriorate and she was taken to the hospital after another attempted suicide. Such was her condition that she was placed in a residential facility.^[103]

The circumstances into which we are born dramatically affect how we develop and grow. But it is not just how you start but also how the advantages and disadvantages accumulate as to how you will end up. Studies show that people who have had four or more different types of adverse childhood experiences had nearly five times more risk of having spent weeks in a depressive mood, and 12 times the risk of suicide.^[104] In this story the cycle of disadvantage was perpetuated leading to severe ill-health for Morley.

The differences in health and wellbeing between advantaged and disadvantaged groups can be dramatically seen in indigenous populations. Social disadvantage is linked to higher rates of suicide, alcohol and drug abuse, mental health problems, heart disease, lung disease, obesity, diabetes and many other types of diseases and risk factors. Typically, those who are the least disadvantaged and benefit from a better social status have much better health. This inequality exists between countries and within countries.

No country is immune from it. As Sir Michael Marmot puts it so eloquently, it exists because there is a disparity in where people are born, where they grow and develop, where they work and live, and where they age. It affects not only life expectancy, but also the quality of life.^[104]

Those who are most disadvantaged are more likely to need healthcare but are less likely to receive it. It has also been recognised that the poor and socially disadvantaged often receive differing options for treatment than those who are the least disadvantaged. This may be a result of health systems not being set up or organised to deliver health services to people at the bottom of the class structure. Nursing is critical in challenging these issues and advocating for the rights of patients. Nurses collaborating with other health professionals can create a climate where socio-economic differentials are unacceptable. Standing up for the health needs of all people is being true to the rich heritage of the profession.

“The test of our progress is not whether we add more to the abundance of those who have much; it is whether we provide enough for those who have too little.”

– Franklin D. Roosevelt, Former President of the United States of America



THE RICHEST 1% OF THE WORLD POPULATION CONTROLS UP TO 40% of global assets.^[105]



50% OF THE POOREST POPULATION OWNS JUST 0.5% of global assets.^[105]

CASE STUDY 10.1: HEPATITIS C NURSE LED CLINIC NEW ZEALAND

“Nurses in whatever area they work have the opportunity to challenge discrimination and increase diagnosis of HCV in this often hidden population” - Jenny Bourke

Internationally, 200 million people suffer from Hepatitis C. This is a staggering number considering that there are 40 million people with HIV. The vast majority of sufferers are either past or current intravenous drug users, for whom access to treatment is difficult due to social stigma and marginalization which prevent them from seeking assistance and make them a high risk group. This is often at the heart as to why intravenous drug users do not consider treatment for Hepatitis C.

In New Zealand, the number of people with Hepatitis C is estimated at 50'000 and is predicted to increase by 50 percent over the next 10 years. What makes these figures of greater concern is that, because Hepatitis C can be symptomless for many years, only about a quarter of those infected are aware they are carrying the virus, with only 5 percent accessing treatment. The estimated cost to New Zealand by 2020 will be \$400 million annually if those infected do not receive treatment.^[174]

Jenny Bourke is a Clinical Nurse Specialist and Nurse Manager at the Hepatitis Community Clinic in Christchurch, a city of approximately 375,000 people.^[175] Together with two other nurses, a social worker and a general practitioner (GP), they form a multidisciplinary team that works to reduce the barriers to accessing care and increase the accessibility for testing, diagnosing and treating the condition.

Jenny says that one of the greatest accomplishments of the clinic is the trust and respect gained, not only with clients, but from other agencies (Alcohol and Drug Services, Needle Exchange Programmes, GPs and secondary care physicians). Through building collaborative partnerships with other health professionals and services they have developed an integrative approach and improved healthcare access to Hepatitis C treatment for people who inject drugs.

Thanks to nurses' key role in the ongoing care of those with Hepatitis C, from raising awareness to testing for new infections, liaising with others, providing education and supporting IV drug users, the clinic is able to offer clients a non-judgemental environment with flexible appointment times, expert phlebotomy skills, nurse-led outreach clinics and continuity of care.

Over the last three years the clinic has grown exponentially. The service currently manages 465 clients, and enrolls approximately 15-25 new clients a month. The clinic has been successful and has a 98% attendance rate.



Submitted by: Jenny Bourke, Clinical Nurse Specialist and Nurse Manager, Hepatitis Community Clinic, Christchurch, New Zealand



INCOME INEQUALITY INCREASED BY 11% in developing countries between 1990 and 2010.^[105]



In parts of Ecuador, indigenous peoples have **30 TIMES GREATER RISK OF THROAT CANCER THAN THE NATIONAL AVERAGE.**^[106]



INDIGENOUS PEOPLES' LIFE EXPECTANCY IS UP TO 20 YEARS lower than their non-indigenous counterparts.^[106]



In the USA, a Native American is **600 TIMES MORE LIKELY TO CONTRACT TUBERCULOSIS AND 62% MORE LIKELY TO COMMIT SUICIDE.**^[106]



Globally, more than **50% OF INDIGENOUS ADULTS SUFFER TYPE 2 DIABETES.**^[106]



In Canada, indigenous incarceration rates are **10 TIMES HIGHER; AND IN AUSTRALIA IT IS 14 TIMES HIGHER.**^[106]



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GOAL 11: SUSTAINABLE CITIES AND COMMUNITIES

By 2050, it is estimated that 70% of the world's population will live in urban areas. As such, global health will be determined increasingly by cities. Cities will provide the context in which people will grow, live, work and play.^[110]

Living in urban areas has been associated with improvements in income levels and health outcomes. At the same time, the pressures on urban growth have contributed to the emergence of stark social and health inequalities in cities around the world.

Sao Paulo, in Brazil, is a rapidly growing metropolis: 100 years ago, the population of Sao Paulo was just 100,000; since then, the population has rapidly expanded to over 10 million people (including surrounding areas, the population increases to 18 million). The city has many contrasts: in some sections, it has cultural vitality and economic growth; in other areas there are high crime rates and intense poverty. As Wolfgang Nowak stated, **“the big cities are everything, the first world, the second world and the third world come together in one city”**.^[108]

The rapid growth of population in the city has been a major factor in this disparity. Planning has not been able to keep pace with the rapid expansion, meaning that services such as sanitation and wastewater management, mobility, building standards, indoor air quality and communication are inadequate. Access to schools, health services and work has been hindered. All of these elements have led to disparity in how people perceive their health and their well-being. The poor are often the most excluded from social equity when located in the city fringes. Inclusive cities need to accommodate the less well-off within the core urban fabric and minimise the degree of isolating poverty and allowing creating truly public infrastructure, shared by a wide range of different income groups. There is a need to limit the sprawl, and increasing the overall compactness of cities should be a crucial element of social policy. There are many features that can be used to transform a city into a healthy city. However, at its core, for the benefits of transformations to be realised, they must address the issue of equity.^[109]

CASE STUDY 11.1: INCLUSIVE HEALTH, MICAH PROJECTS, AUSTRALIA

“It is possible to improve the health outcomes of people living on the streets, end their homelessness and save money on the hospital system.” - Kim Rayner

Kim Rayner is the manager and clinical nurse leader of Inclusive Health, Micah Projects in Brisbane, Australia, which was established as a direct response to the high rates of multiple morbidities and identified mortality risks among disadvantaged individuals and families experiencing homelessness, poverty, social exclusion, mental illness, disability and domestic violence.

Brisbane, with a population of 1.15 million people, has over 4,300 people living on the streets.^[111]

Micah Projects, a non-governmental organisation, was set up to actively address this issue, and Kim has been pivotal in establishing the partnerships between Micah Projects and some of Brisbane's largest private hospitals in order to provide services to Brisbane's homeless and vulnerably housed population.

In order to understand the health and social needs of the community, nurses within the team adapted a Vulnerability Index Survey tool developed in the United States.

The survey found that:

- 59% were tri-morbid – with a chronic disease, substance abuse and mental illness
- 36% had a history of brain injury or trauma
- 30% had a history of liver disease, cirrhosis or end stage liver disease
- 28% had a history of heart disease or arrhythmia
- 9% were diagnosed with cancer.^[112]

Analysis of this data enabled the team to develop a targeted approach to prevent and intervene early to stop people becoming homeless; break the cycle of homelessness; and improve service systems in response to homelessness.

As a result, tailored health services were developed to meet the needs of this vulnerable population group, through the rapid re-housing of homeless people and the provision of cost-effective healthcare services at all stages of the housing process (before, during and after rehousing) in order to reduce the personal and social costs and impact of homelessness on individuals and the community.^[113]

The Homeless to Home Healthcare After-Hours Service consists of two teams: one which works in the Street to Home outreach van visiting public spaces, parks and squats; and the other which makes home visits and visits to public spaces across the Brisbane metropolitan area.

The service includes:

- Collaborative planning and engagement with housing focused community workers
- Provision of a single access point to after-hours services including housing and healthcare
- Establishment of trust and rapport with individuals and families who are homeless as well as vulnerable individuals in housing
- Provision of an immediate response to people who present to the Brisbane Homelessness Service Centre as well as outreach in the streets, parks, and homes of people housed through Housing First initiatives
- Provision of health assessments and referrals to primary healthcare, including allied health services
- Follow-up of care via supported referral to other practitioners and provision of assistance to navigate the healthcare system

- Engagement in proactive early intervention and preventative healthcare
- Health education and the coordination of healthcare for individuals via liaison and advocacy with local GP clinics and specialist services such as dental, drug, alcohol, renal, diabetes treatments, and vaccination
- Liaison with hospitals and hospital workers about discharge planning and clinical follow-up.^[114]

This service is led by a dedicated nursing team and demonstrates that it is possible to improve the health outcomes of people living on the streets, end their homelessness and save money on the hospital system.

In every aspect, the service is a success: it has improved health-related quality of life; substantially reduced hospital usage among persons utilizing the service; reduced inpatient hospital admissions by 37% and visits to the emergency department by 24%. There has also been a significant reduction in hospitals costs with a net saving of approximately AUD\$6.45 million per year; an annual net social benefit of over AUD \$12.6 million; and an improvement of at least 82 quality adjusted life-years per annum.^[114]



Submitted by: Kim Rayner, Manager and clinical nurse leader, Inclusive Health, Micah Projects, Brisbane, Australia

CASE STUDY 11.2: SOCIAL PRESCRIBING, UK

In one of the most deprived areas of England, an innovative community organisation has transformed the area. The Bromley by Bow Centre has worked in partnership with primary health-care providers and community groups to support people to improve their skills, find employment and lead healthy happy lives.

The general practitioners and registered nurses connect their patients with the services provided in the centre and the wider community. The staff utilise what has been termed as 'social prescribing', the process by which individuals are referred to external non-clinical services such as healthy lifestyle programmes, welfare and housing advice, employment support, debt and financial advisors. It recognises that health problems may not just have physical causes.

Alison Bell, a nurse within the practice, encourages COPD patients to join a choir to help them control their breathing patterns. Patients with joint problems are referred to ceramics classes because the act of moulding the clay helps improve hand strength and range of movement. Community groups are also referred to for weight loss management. The philosophy of social prescribing is to empower patients and connect them to their community and environment.^[115]



In 2015, **50% OF PEOPLE** (3.5 BILLION) LIVED IN CITIES.^[110]



828 MILLION PEOPLE LIVE IN SLUMS.^[110]



By 2030, **60% WILL LIVE** IN URBAN AREAS.^[110]



1.6 BILLION PEOPLE LACK ADEQUATE HOUSING.^[110]



95% OF URBAN EXPANSION will take place in the developing world.^[110]



The last time a global survey was attempted by the UN, an estimated **100 MILLION PEOPLE WERE** HOMELESS.^[110]



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GOAL 12: RESPONSIBLE CONSUMPTION AND PRODUCTION

Hospitals and health services are large consumers of resources and produce significant amounts of waste. It has been estimated that the healthcare industry generates 7,000 tons of waste per day, including solid waste and medical waste. It has also been estimated that health facilities consume about 2.5 times the amount of energy used in a commercial building of the same size.^[116]

Healthcare facilities have a significant contribution on the sustainability of resources. They also have a direct impact on individuals' health. WHO believes that only 58% of healthcare waste is disposed of in the correct way.^[67] This is putting communities at risk from cross contamination of waste from infectious and pathological waste, sharps-infected injuries and poisoning from pollution from chemicals, pharmaceuticals, genotoxic and radioactive wastes.



CASE STUDY 12.1: HEALTHCARE WITHOUT HARM, USA

'Healthcare without harm' is an organisation co-founded by Charlotte Brody, a registered nurse. The organisation began as a reaction to a U.S. Environmental Protection Agency report that named medical waste incineration as the leading source of dioxin, a potent carcinogen. The organisation has been instrumental in achieving a number of goals such as virtually eliminating the use of mercury-based medical equipment in the USA; and advocating for hospitals to buy from local sources that support sustainable agricultural practices.^[119]



85% OF THE WASTE GENERATED BY HEALTH FACILITIES is general, non-hazardous waste.^[120]



Each year, there are **16 BILLION INJECTIONS**, but not all of the syringes are disposed of correctly.^[120]



Unsafe injections are responsible for as many as **33,800 NEW HIV INFECTIONS, 1.7 MILLION HEPATITIS B INFECTIONS AND 315,000 HEPATITIS C INFECTIONS.**^[120]



15% OF WASTE IS CONSIDERED HAZARDOUS MATERIAL that may be infectious, toxic or radioactive.^[120]



1/3 OF ALL FOOD PRODUCED ends up being disposed of (1.3 billion tonnes of food).^[120]



3 MILLION TONS OF RUBBISH is generated every day.^[120]



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GOAL 13: CLIMATE ACTION

Angela is a nurse who works in a large city in the United States. She reports an increase in the number of people coming to her clinic on days when there is an elevated pollution level.

Angela's interventions to help her patients include adjusting medications and educating them to remain inside on bad air days. However most of her patients work and due to the social circumstances they do not have cars or air-conditioning. Staying out of the bad air is not a reasonable option.^[121]

Nurses and other healthcare providers are seeing first hand the effects of changing climate conditions. Dr Margaret Chan, Director General of the WHO has stated that "climate change is one of the greatest challenges of our time."^[122] Although there are some localised benefits to climate change, such as reduced winter deaths and increased crop yield in certain areas, overwhelmingly, it will have adverse effects, particularly on our most fundamental determinants of health: sufficient food, clean air, safe drinking water and secure shelter.

The impacts of climate change are not limited to a few. It affects all of us. However, some people are more vulnerable to it than others.

Nurses and nursing organisations are often early adopters of strategies that affect the health of populations and are therefore at the forefront of issues such as climate change.

For example, in 2008 the Canadian Nurses Association (CNA) published a report entitled 'The role of Nurses in Addressing Climate Change.' The CNA recognised the threat that climate change posed on the health of populations and provided guidance to nurses on the roles they can play in both adaptation and mitigation strategies. They have been active players in advocating for governments to act on climate change.^[123]

Climate change is not just an environmental issue, as too many people still believe. It is an all-encompassing threat.

– Kofi Annan, Secretary General, United Nations, 2006



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CASE STUDY 13.1: ALLIANCE OF NURSES FOR HEALTHY ENVIRONMENTS, USA

Weather and vector-borne disease, like those spread by mosquito, occur in tempered climates along the southern coastal states of the United States. For populations at or below the federal poverty level, education and advice on how to avoid vector-borne diseases and assistance with mosquito control and abatement are particularly important.

In 2016, Lisa Campbell, DNP, RN, APHN-BC, a board member of the Alliance of Nurses for Healthy Environments (AHNE) and part of Texas Team, the state's Action Coalition, met with senior members of the Obama administration and federal agencies to address nursing's contribution to mitigating the effects of climate changes, outlining actions for nurses in education, research, practice and policy.

Lisa has many years of experience as a public health director. For her addressing climate change has meant:

- Maintaining effective mitigation programmes such as mosquito control
- Issuing health alerts and public education during extreme heat waves
- Working with emergency management to assess the community and develop plans to address flooding, hurricanes and other disasters, and
- Advocating for research on climate change and health.

As the former director of a local public health department, Dr Campbell used the three core functions of public health: assessment, assurance, and policy development to guide her work on climate change. Weather and vector-borne disease, like those spread by mosquitoes, surveillance are particularly important in tempered climates along the southern coastal states, where Campbell and her staff monitored for cases of West Nile virus, dengue, and other emerging infectious disease such as Zika virus.

Dr. Campbell assured a competent mosquito control programme with a staff that conducted health-related pest control to prevent the possible and/or probable transmission of vector-borne disease to or between humans. Through careful budgeting she ensured regular training, maintenance of equipment, and purchasing of appropriate pesticides. She and her staff worked with local and state agencies to develop Zika action plans, which included mosquito control on private property of a confirmed Zika case. Public health alerts during the hot rainy season was a key strategy to reduce vector-borne diseases. The public was advised through local media and the health department's website of measures to avoid vector-borne diseases, such as staying indoors during dusk and dawn, dressing in long sleeves and long pants, applying insect repellent and draining standing water.

Health alerts paired with public education were also used during weather emergencies such as extreme heat waves. Alerts are important to prevent heat-related illnesses most especially in vulnerable populations, such as children, the elderly and those who are economically disadvantaged. Most vulnerable populations have limited or no air conditioning which increases their risk of health-related illness. The team worked with local media to disseminate information and with local agencies to provide fans and cooling shelters for the economically disadvantaged. All programmes to address weather-related public health issues were anchored in the public health department and partner organisations.

Dr Campbell worked with the Office of Emergency Management to assess functional capabilities, determine community assets, and develop plans to address flooding, hurricanes and other disasters. Inhabitants of low lying areas were mapped for evacuation. Partnering with local and state organisations mass care was established through memorandums of understanding.



THE NUMBER OF WEATHER RELATED NATURAL DISASTERS HAS TRIPLED SINCE THE 1960S. These disasters claim 60,000 deaths each year.^[128]



+1/2 OF THE WORLD'S POPULATION LIVE WITHIN 60KM OF THE SEA. People may be forced to leave increasing risks of health effects, from mental disorders to communicable diseases.^[128]



In 2012, **12.6 million DEATHS WERE ATTRIBUTED TO THE ENVIRONMENT.** This represents 23% of all deaths.^[127]



If conditions are to continue, between 2030 and 2050 **CLIMATE CHANGE IS EXPECTED TO CAUSE 250,000 ADDITIONAL DEATHS** per year due to malaria, malnutrition, diarrhoea and heat stress.^[128]

Submitted by: Lisa Campbell, DNP, RN, APHN-BC, Board Member of the Alliance of Nurses for Healthy Environments (AHNE) and associate professor at Texas Tech University Health Sciences Center School of Nursing.^[125]



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GOAL 14: LIFE BELOW WATER

Tolne Sap, Cambodia is the largest lake in Southeast Asia and is one of the most productive fresh water fisheries in the world. The lake supports families and communities in Cambodia and is the main source of protein and other micronutrients critical to health. Harnessing the value of the lake is vitally important in preventing childhood malnutrition which has been so prevalent in the country. However, the health of the lake was at risk from illegal fishing practices, clearing of forests, pollution and competing interests. There was a real threat to the future of food security from the lake for the region until appropriate interventions were made by the government to support sustainability.^[129]

Care for our oceans and waterways is crucial. They provide natural resources including food, medicines, biofuels and other products. They support the breakdown and removal of waste and support climate change mitigation and adaptation efforts. They are also valuable resources for tourism and recreation. As the Food and Agriculture Organization stated, "The health of our planet as well as our own health and future food security all hinge on how we treat the blue world."^[130]



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GOAL 15: LIFE ON THE LAND

In 2015, the Ebola outbreak was declared to be over. However, it has left a terrible trail of destruction as it killed more than 11,000 people (500 health workers) and infected more than 30,000. The aftershocks continue for the survivors who struggle with impaired personal health and a damaged health system. The effects of Ebola will be felt for many years as industries and food producers seek to reestablish the resources necessary to recover.^[133]

A WHO report^[127] believes that changing landscape patterns and biodiversity may have been a key contributor to the outbreak of the disease. The report states that human-induced land use changes are primary drivers of a range of infections. It is believed that land use changes, food production and agricultural changes account for almost half of all global zoonotic infectious disease emergencies.

With an increase in logging, bush meat hunting, development of villages and agriculture changes, people are brought closer to reservoir hosts of diseases such as Ebola.^[134]

Stable ecosystems are vital to sustaining human life. All aspects of human well-being depend on ecosystem goods and services, which in turn depend on biodiversity. With the loss of biodiversity and changes to ecosystems, the results can be devastating. There can be outbreaks of infectious diseases, undermining of the development progress, it can risk food and nutrition security as well as protection from natural disasters.^[134]





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GOAL 16: PEACE, JUSTICE AND STRONG INSTITUTIONS

Kabra, a 14 year-old girl and her two younger brothers, Merhawi and Filmon, were at the risk of execution because of their religious upbringing. As they fled their homes in Sudan they were temporarily enslaved by gangs who forced them to work for them. Whilst they escaped this terrifying ordeal, they still had a long journey ahead of them. They joined 700 refugees on a dangerously overcrowded boat and travelled on a two-day journey from Libya to Sicily; a journey which has killed hundreds of people. These children have received refuge now, however, they are still too traumatised to speak and do not know whether their parents are dead or alive. There are many others who have not reached a safe place.^[138]

Criminal gangs and traffickers are taking advantage of the migration crisis. Many people, particularly women and children are forced into sex work or other types of slavery.^[139]

In 2015, almost 96,000 unaccompanied children claimed asylum in Europe. Approximately 10% of these children have lost contact with government agencies. It is understood that organised crime groups have targeted children because **“they are easy to recruit and quick to replace, they can also keep under their control child victims relatively cheaply and discreetly.”** Trafficked children are bought and sold for sums ranging from US\$4,000 to US\$8,000. The children are trafficked into sex work, forced labour (agricultural workers and domestic servitude) and forced begging.^[140]

This is brutal to our emotions. It does and it should break our hearts. The world is experiencing a humanitarian crisis on a horrendous scale. This is a most severe symptom of injustice, inequality and war. How we will be judged as a society by future generations will be determined on our response to a crisis such as this.

Our humanity depends on everyone’s humanity. We will not be judged on our scientific and technological advances, nor on how we treat the rich and the powerful, but rather how we treat the poor, the condemned, the displaced and the incarcerated.

To break this crisis, we must address poverty, inequality and chaos and replace it with peace and justice. The nursing profession is pivotal in leading this change. We have the public trust, we have seen the damage, we have the mind fuelled by convictions; we can provide solutions to aid individuals, communities and nations.

“The opposite of poverty is justice.”
– Bryan Stevenson, Lawyer



Corruption, bribery, theft and tax evasion cost approximately **US\$1.26 TRILLION PER YEAR.**^[141]



Only **50% OF CHILDREN IN CONFLICT AREAS** have finished primary school education.^[141]



There are **21.3 MILLION REFUGEES WORLDWIDE.**^[143]



21 MILLION PEOPLE ARE VICTIMS OF FORCED LABOUR.^[142]



34,000 PEOPLE ARE FORCIBLY DISPLACED EVERY DAY.^[143]



4.5 MILLION ARE VICTIMS OF FORCED SEXUAL EXPLOITATION.^[142]

Protecting healthcare workers, Syria and other conflict zones

One of the targets of SDG 16 is to “significantly reduce all forms of violence and related death rates everywhere. ICN is very active in protecting the rights of nurses and other healthcare workers to safely provide care to populations without threat to their physical or mental well-being.

In May 2016, ICN signed a joint statement by member of the Health Care in Danger initiative, calling on the United Nations Security Council to adopt a resolution to protect healthcare workers. The statement urged Security Council member states to reaffirm international humanitarian law and adopt specific measures for the protection of healthcare. It also called for governments to review and, where necessary, introduce domestic legislation to prevent violence against patients, healthcare personnel, facilities, and medical vehicles.

In August 2016, ICN joined with the World Medical Association to condemn the continuing violence against health personnel in Syria and other nations, stating that the persistent and targeted attacks on doctors, nurses, emergency medical personnel and other health workers in Syria have reached unprecedented levels that should alarm the world.^[145]

In December 2016, ICN renewed a joint call for access to healthcare of wounded and sick during an armed conflict to be respected and protected, and for attacks on health personnel and facilities to stop.^[146]

The Health Care in Danger initiative, with the support of experts and professionals from different backgrounds, including those working on the frontline, governments, the armed forces, humanitarian agencies, international professional associations and health-care services, as well as the International Red Cross and Red Crescent Movement, has formulated a substantive body of recommendations and identified practical measures that, if implemented by all those concerned, would increase the protection of health-care services in armed conflict or other emergencies.

In addition to supporting the Health Care in Danger initiative, ICN is a founding member of the Safeguarding Health in Conflict Coalition, which promotes respect for international humanitarian and human rights laws that relate to the safety and security of health facilities, health workers, ambulances and patients ensuring they are safe and secure during periods of armed conflict or civil violence.

ICN is also a member of the steering committee and scientific committee of the International Conference on Violence in the Health Sector.

“Respect for health services is one of the core values of international humanitarian law and the human right to health. The attacks on nurses, doctors and healthcare facilities in Syria and other nations in conflict must urgently stop, so they can continue to provide the care needed by their populations.”

– Dr Frances Hughes, ICN CEO



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GOAL 17: PARTNERSHIP FOR THE GOALS

Rose had been smoking since she was 13 years old. As a result she developed lung cancer and had to endure over 2 years of intense treatment. She has had radiotherapy, surgery, radiation and long inpatient hospitalisations. Part of her lung had to be removed by surgery and due to complications required her to be in hospital for over a month. Rose wished that she had more days that she could spend with her friends and family, especially her three grandchildren. She died in 2015 from a cancer caused by smoking.^[149]

Tragically this story is not a unique one. Each year over 1.6 million people die of lung cancer.^[150]

The rise of non-communicable diseases is costly to countries. Not only do countries lose their citizens prematurely, the costs to treat are exceedingly expensive. For example, the costs of cancer care are becoming unaffordable even for countries considered wealthy. In 2012, the US Food and Drug Administration approved 12 new drugs for the treatment of various cancers. Out of the 12 drugs approved, 11 were priced above \$100,000 per patient per year.^[34]

Prevention is by far the better option. It reduces costs placed on the health system and it improves people's quality of life. However prevention for non-communicable diseases is more problematic than for infectious diseases. Many infectious diseases can be prevented by vaccines or cured by medicines, all delivered by the health sector.

However the root causes of non-communicable diseases reside mainly in non-health sectors. They often escape the direct influence of health policies. When health policies do cross purposes with the economic interests of sectors like trade or finance, economic interests have generally prevailed.

The health sector cannot work in isolation if it is to truly enable prevention strategies to take effect. We need to work in tandem with industry and other government departments. When the health sector works in tandem with others, it can generate huge benefits. It can even tackle a powerful, devious, and dangerous industry on multiple fronts, including through fiscal and regulatory measures.

“Health is one of the most precious commodities in life. But it is highly influenced by politics and it requires investment. As such, you need political leadership; You need commitment; And you need a conversation with the public.”

– Dr Margaret Chan, Director General, WHO

“When dealing with tough situations, there are three things you must remember: vision, partnering, and courage. Always take the high road, even though this is often the tough road, and you will find more solid ground.”

– Marla Salmon, Former Chief Nursing Officer, US Department of Health and Human Services^[32]

CASE STUDY 17.1: MANAGING TOBACCO DEPENDENCY, HONG KONG

Dr Sophia Chan, Under Secretary for Food and Health in Hong Kong, has shown true commitment and passion to defeating NCDs. Before joining the Government, Dr Chan was a Professor in Nursing and Director of Research in Hong Kong University School of Nursing.^[151] She specialised in health promotion with a particular focus on the management of tobacco dependency. Dr Chan was pivotal in the development of a programme of research to test nurses' interventions to change smokers' behaviours and to protect children from second hand smoke.

This led to the country's first smoking cessation counselling programme which assists all health professionals in managing tobacco treatment interventions in China. She started the 'Women against tobacco taskforce' to help Chinese women quit smoking. Part of her success can be attributed to the relations that she has established with WHO, government agencies and various health promotion coalitions.^[152]

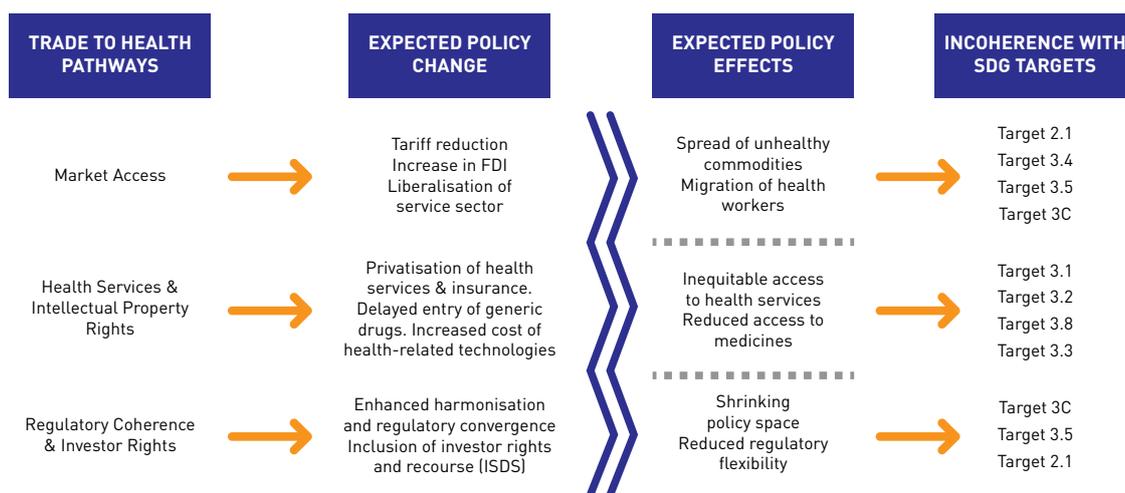


Figure 6. Potential trade impacts on health outcomes^[153]

Non-health related policies can have enormous impacts on health and health determinants. For example, following Vietnam's removal of restrictions on foreign direct investment, the sales of sugar-sweetened carbonated beverages increased from 6.7% to 23% per year. Vietnam is projected to be one of the largest growth markets for Coca Cola and PepsiCo.^[154]

As such, whilst increased trade and investment may have positive effects on health by stimulating the economic growth and reducing poverty, there are also potential health risks that need to be considered.

CASE STUDY 17.2: NURSING LEADERSHIP TO ACHIEVE THE SDGS, CHINA

The health of the Chinese people is a priority to the Chinese government and healthcare workers, and especially nurses, are seen as the main force driving health promotion.

In the last year, nurses have made great contributions to the average life expectancy in China, which increased to 76.34 years old in 2015. Nurses also played a key role in decreasing the maternal mortality ratio and the infant mortality rate from 20.1 per 100,000 births and 8.1 per 1,000 births respectively.

Dr Li Xiuhua, President of the Chinese Nursing Association, credits this success to four levels of leadership strategies.

First, there is the importance of healthcare positions and representation at the national level. The Chinese government has been a strong supporter of the development of nursing care and selects members of The Chinese People's Political Consultative Conference (CPPCC) National Committee and deputies of the National People's Congress, to represent nurses, to offer advice and suggestions, to participate in political affairs and consultation, and to actively influence health policies. Dr Li has served as a member of the CPPCC National Committee for two terms, submitting nursing-related proposals to the government, communicating with people from all walks of life and seeking governmental and social support.

Second, innovation must be regarded as the force leading to development.

Third, healthcare systems must have a strong capacity of implementation. We must move forward as long as the goal is established, don't be afraid regardless of any difficulties encountered, do not forget the original intention and bravely undertake responsibilities.

Fourth, we must have inclusiveness, promoting cooperation and multidisciplinary collaboration.

In order to achieve the Sustainable Development Goals and tackle a series of challenges including the global shortage of nursing workforce, Dr Li believes that national nursing leaders around the world should work together to formulate a long-term sustainable development strategy, promoting the progress of nursing science, nursing career development, nursing industrial development and improving the level of people's health. She stresses that priority should be given to scale up the knowledge, information and promotion of global emergency response and first aid; elderly care and chronic disease management; emerging infectious diseases; prevention and healthy lifestyles, as well as maternal and child health. In addition, health guidance to the vulnerable and marginalized group is a priority, ensuring everyone's right to access healthcare.

Submitted by: Dr Li Xiuhua, President of the Chinese Nursing Association



“Nursing leaders around the world should actively strive to make a voice on behalf of nurses and participate in the actions that may change health policy to advance the influence of nurses.”



PART THREE

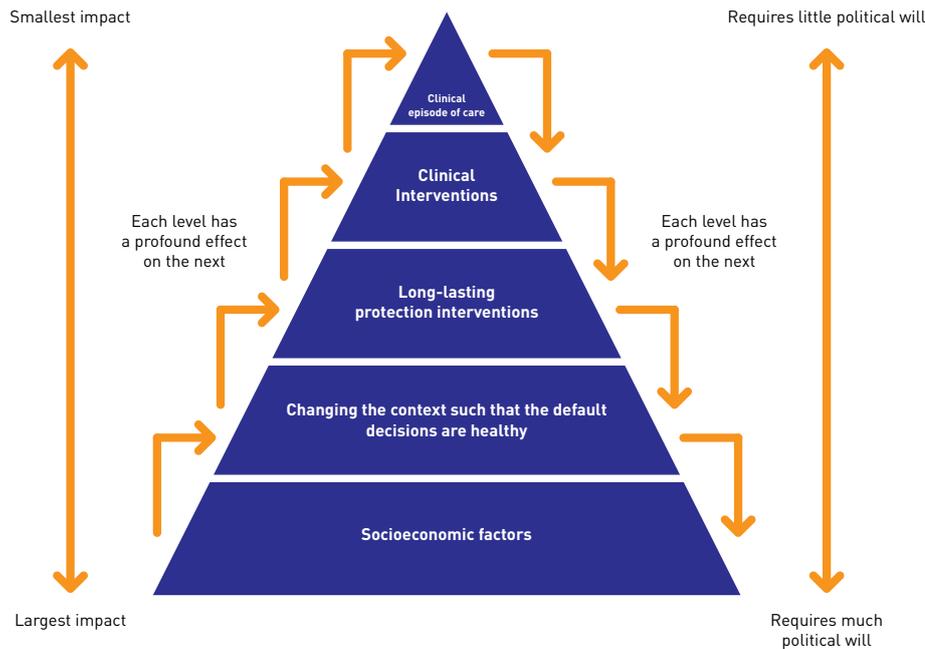
HOW CAN YOU BE A VOICE TO LEAD?

There are many ways in which the health and well-being of people and populations can be enhanced and improved. Whether it be in clinical practice, working with individuals and their families, through community support and development programmes, national health initiatives and policy, or international commitments and agreements to improve access to and the quality of healthcare. At every level, nurses have a significant role to play whether delivering care, accurately assessing needs, designing the clinical or policy response or evaluating outcomes and effectiveness.

As **Figure 7** shows these actions are connected and interrelated and it is for this reason that nurses must be involved and have a voice at every level of decision making.

There are three ways you can be a Voice to Lead:

- **As an individual**
- **As a profession**
- **As part of a multidisciplinary team**



Action	Example
Improve episodic outcomes of health interventions	Endoscopy performed by nurses: In Queensland, nurses have been educated and trained to perform endoscopy procedures. Regular monitoring and reporting of data demonstrates the high-quality performance of the nurses. An evaluation of the model has also shown high levels of patient satisfaction.
MOC that improve access, quality and efficiency of care, improve episodic outcomes of health interventions	Self-managed teams: The Buurtzorg model in the Netherlands has been an innovative model of care that has improved the health of communities and saved the health system millions of Euros each year. An independent team of specialised nurses take responsibility of care for patients within a defined area. The teams seek to empower clients and improve self-management.
MOC that take into consideration a holistic approach to the needs of individuals, families and communities	Collaborative partnerships: Inclusive Health Partnerships provide an integrated, person centred and trauma-sensitive response to the health needs of vulnerable people, including people experiencing homelessness. The model of care recognises the broad range of social factors that impact on people’s health. They work with legal, housing and social support services to achieve the desired outcomes.
Health is considered in all policies	Trade: Following the removal of foreign direct investment in Vietnam, the sales of sugar sweetened carbonated beverages has increased from 6.7% to 23% per year. The WHO states that increased consumption of sugary drinks is associated with increased weight gain leading to overweight and obesity (WHO,2016).
Reduced inequitable distribution of power, money and resources	Universal Health Coverage: In 2002, Thailand had achieved universal health-care coverage, incorporating a comprehensive package of curative services in outpatients, inpatients, accident and emergency, high-cost care, drugs provision reflecting the WHO Essential Drug Lists, and personal preventive and promotion services, with minimal exclusion (WHO 2008).

Figure 7. Framework of actions in promoting health.

Adapted from Frieden (2010)^[155]

1. A VOICE TO LEAD – AS AN INDIVIDUAL

Change and impact starts with you! The IND theme - Nurses: A Voice to Lead – does not refer only to the privileged few. Each and every nurse on this planet has a voice and can use that voice to make a difference, as you have seen in the many case studies in this publication. Leadership and political activism are key to making your voice heard.

“What each of these nursing leaders had in common was political activism that grew out of the personal knowledge they gained in providing care for poor, immigrant, and otherwise vulnerable populations and understanding that their efforts toward achieving social justice were as important to health as the more immediate ‘downstream’ direct nursing care they provided”^[157]

– Adeline Falk-Rafael

BECOME A LEADER

Nurses may not be used to viewing themselves as leaders, but it isn't necessary to have a traditional, titled or elected position to take a lead and bring about change that benefits others in our local or global communities.^[156]

Nurses' ability to effect change is just as important as the technical ability to deliver safe and effective care and they are influential at all levels.

Leadership is a process not a position. Contemporary views on leadership have moved towards collaborative processes that take place in groups and communities. Leadership is tied to social responsibility and good citizenship, which connects to nurses' professional and ethical responsibilities to champion the human right to health.

At the front-line, nurses collaborate with patients and use their influence to empower them to make positive changes themselves.

Not only do nurses influence others in their day to day work, but they have expert skills in the art of persuasion, a process that involves relationships and negotiation. Persuading an older person who has dementia to have a shower, or a child to cooperate while they are vaccinated, or their parents to allow the vaccination, are examples of how persuasive powers in action help negotiate a mutually desirable outcome.

Nurses' sphere of influence as healthcare professionals goes beyond the individuals, families, groups and communities they work with. It extends throughout the health sector to nursing and midwifery colleagues, medical colleagues, allied health colleagues, and those with policy, management and fiscal responsibilities.



Mr. Mohammad Sharifi Moghadam has been highly influential in the professional growth of nursing in Iran. He has been a strong advocate for increasing the nursing profession role in health management, politics and policy decisions. In addition, through his role in numerous nursing and political organisations, and collaboratively working with other clinicians, Mr Mohammad Sharifi Moghadam has actively improved the profile and respect for the nursing profession amongst other health professionals and the ministry of health.

RAISE YOUR VOICE AT THE POLICY TABLE

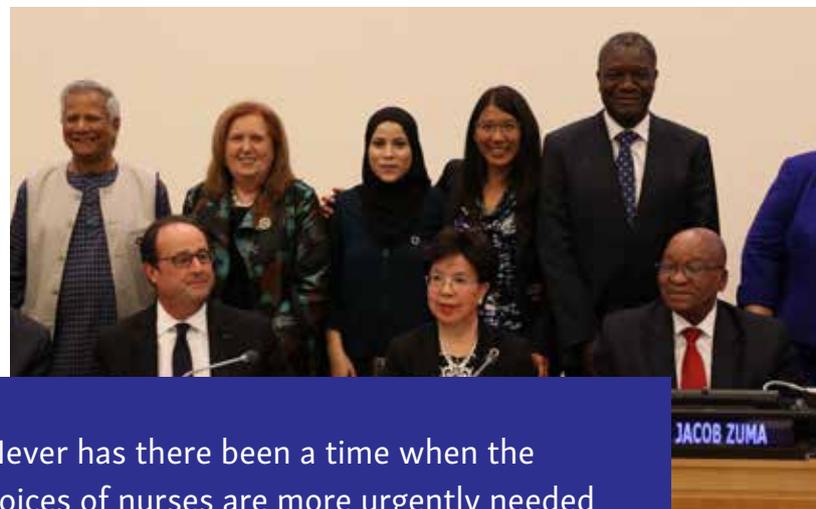
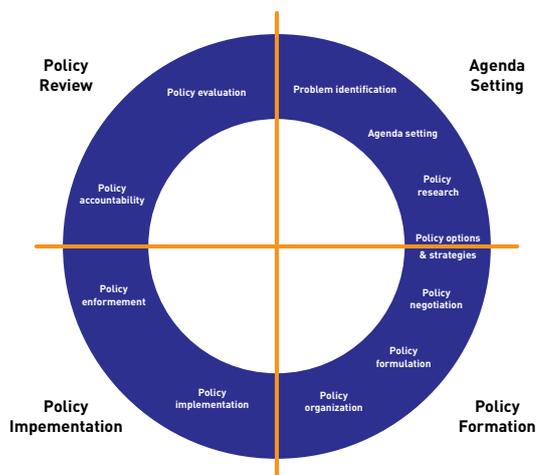
The Sustainable Development Goals are an opportunity for nurses to influence decision making processes and health care policies. Policy development is a practical tool for change^[159] and when nurses are involved, health care is safe, of a high quality, accessible and affordable.

There is no doubt that nurses should engage in policy-making and that it is a logical extension and expression of the profession's care and compassion^[157] particularly where it addresses issues of resource allocation and access to health care for vulnerable populations.^[160]

Nurses are needed and they are wanted around the policy table.^[161] and as the Institute of Medicine emphasises, "a shift must take place in how nurses view their responsibility to those they care for; they must see themselves as full partners with other health professionals" to be effectively involved.^[162] Activism is a continuum.^[163] On the first level, reaction to the context triggers political awareness.

The second level requires **setting the agenda** for change. This is done through collaboration with others who are working towards a common purpose. For example: Nurses who work with consumer groups and national nursing associations typically develop considerable political sophistication working at this level. They form coalitions with other like-minded (nursing) groups, contribute to policy development and are active in promoting the appointment of nurses to health-related policy positions.

On the third level, nurses must **lead** that agenda to include issues beyond those that impact nursing, to those that address broad health and social policy concerns to do with political or economic conditions that produce and sustain poor health.^[164]



“Never has there been a time when the voices of nurses are more urgently needed at high levels of policy formation and decision-making than they are now.”

– Judith Shamian, ICN President^[158]

Figure 8. Policy cycle

This political activism continuum illustrates that it is rare for an individual to solve a major societal problem by acting alone. Success comes when nurses work together across the levels to engage effectively in the political process. There are four main stages to the policy cycle comprising agenda setting, policy formation, implementation and review (see **Figure 8**).^[165] Nurses in any and various roles can be involved at each of these stages.

Policy champions play a central role in policy making by connecting solutions to problems and watching and waiting for the right political climate.^[166] Without a policy champion to recognise that a problem, proposal and political climate are ready to converge, good ideas do not come to fruition.^[167] Anyone can be involved as a policy champion and nurses are particularly well positioned and equipped to play that role. Any nurse who is working as a policy champion needs the support of other nurses and in this respect, all nurses can contribute to the policy-making process.

2. A VOICE TO LEAD – AS A PROFESSION

ICN has long believed that in nursing associations as the vehicle of influence to achieve nursing goals. By working through your national nursing association, and bringing the profession together, we achieve solidarity in our goals and, together, can be one Voice to Lead.

As members of the ICN, NNAs benefit from the global respect which ICN has held for over 100 years as a key player in health policy decision-making at an international level. In addition, ICN provides its members with the platform and the means to achieve common goals through collaborative action, working together for the benefit of society, the advancement of the profession and the development of its members. The strength of our numbers, our strategic and economic contributions, our collaboration with the public, health professionals, other partners and individuals, families and communities for whom we provide care all add power to our vision.

Through ICN, nurses have played a key role in the development and implementation of many key pieces of policy, including the WHO Global Strategy on Human Resources for Health: Workforce 2030 and the recent recommendations of the UN High-Level Commission on Health Employment and Economic Growth. Many NNAs have had similar input into their national policies.

3. A VOICE TO LEAD – AS A MEMBER OF A MULTIDISCIPLINARY TEAM

It is equally important that nurses' voices are heard as part of a multidisciplinary team of health professionals. ICN's partnership with the international federations representing physicians, pharmacists, dentists and physical therapists, is one such example. ICN also work closely with the International Confederation of Midwives. When caring for patients, teamwork and communication between the professions is essential in order to provide true patient-centred care.

Given the importance of the social determinants of health, it is clear that health professionals must also work with other disciplines – with educators, lawyers, politicians, social services, etc. We must understand the patient's family and social needs, and their economic situation.

What do NNAs do? National Nursing Associations represent the interests of their members and advance the nursing profession by fostering high standards of nursing practice, promoting a safe and ethical work environment, bolstering the health and wellness of nurses, and advocating on health care issues that affect nurses and the public (adapted from ANA).

What do CNOs do? The Chief Nursing Officer role is one which influences health policies and government health officials, and can create opportunities for nursing to influence health policy agendas. The CNO is expected to provide high level expert advice, leadership, and guidance on nursing and health policy.^[166]

What does ICN do? The International Council of Nurses is a federation of over 130 national nursing associations and represents the over 16 million nurses worldwide. As the global voice of nursing, it enhances and promotes the nursing profession and utilizes the voice of nurses to improve the health of individuals, communities and countries around the world. ICN represents nurses at the World Health Assembly.

We need to work with nutritionists, physical therapists and social workers to integrate care into the community and patients' daily lives. Above all, we must work with patients and form a relationship based on mutual respect.

A familiar feature of collaboration is that it often brings together individuals or organisations with different but complementary knowledge, skills and/or resources. It also features a commitment by all parties to make their joint initiative a success. Together, health professionals, patients, government, working collaboratively, can have a significant impact on our nations' health policies and the lives of the people we serve.

LEAD AND BE HEARD

Every action, no matter how small, counts.

One way you can use your voice to lead is via social media networks such as Facebook and Twitter. Used in a responsible way, these platforms can be used by nurses to disseminate evidence-based information to colleagues and the general public, and to raise the professional profile of nursing.^[168, 169]

When nurses share their concerns in these public spaces they are acting not only as good citizens, but as the legitimate voice of the nursing profession.

Although these are small and individual acts of political activism they collectively have the power to influence public opinion and ultimately bring about shifts in public policy. ICN and national nurses' associations and ICN run regular social media campaigns that require minimal effort to follow and share with individuals' own networks, and have the added benefit of keeping nurses current with regional, national and global issues and events.

ACTIONS BY GOVERNMENTS

While nurses have a responsibility to work towards the SDGs, and especially the health-related targets, Governments have a reciprocal responsibility to provide the means that will enable nurses to contribute usefully to the targets.

Governments clearly have responsibilities for both national and global policy initiatives whether that be achieving and sustaining universal access to healthcare, recruiting, supporting and retaining the healthcare workforce or ensuring sustainable development and facilitating and co-ordinating partnership and collaboration across many different sectors and organisations. However, arguably the most important role Governments have is political leadership that recognises spending on health is an investment and not an economic drain. This diagram very simply demonstrates how healthy populations create economic growth yet still in too many parts of the world health spending is being cut and health services are underinvested.

You can make a start now by following us on Twitter **@ICNurses**, and using the hashtags **#IND2017** and **#VoiceToLead**. You can also join us on Facebook, **www.facebook.com/icn.ch**, and share your knowledge and expertise, and promote issues of concern to nursing.

Subscribing to email alerts and joining webinars are also valuable tools to help us develop knowledge and expertise in a specific area of interest. Joining established and reputable nursing campaigns adds strength to the message with a collective and therefore more powerful voice. Imagine what our nursing predecessors could have achieved had they access to these publicity tools!

And finally, you can share your successes, your innovations and your stories with ICN and your colleagues all over the world, by sending your stories to **indstories@icn.ch**

We need a change in political mind-sets and nurses wherever you work and whatever your role have a voice that can lead this change. It is up to us - each and every one of us - to be a voice to lead others, our patients, our colleagues, our communities and our governments to better health. Let your voice be heard!

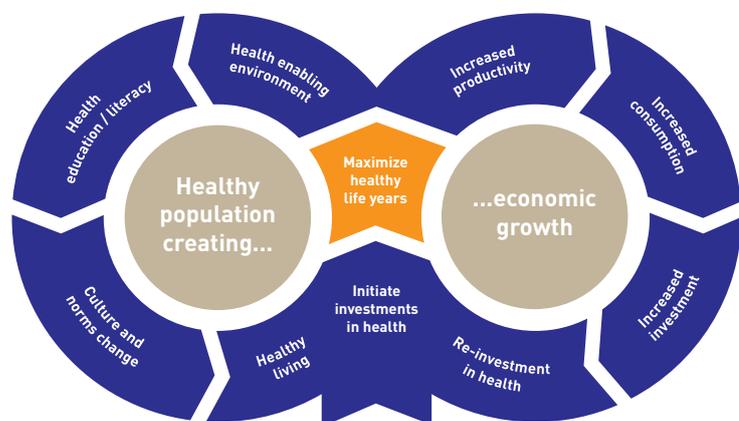


Figure 9. Investing in health creates healthy populations and economic growth^[170]

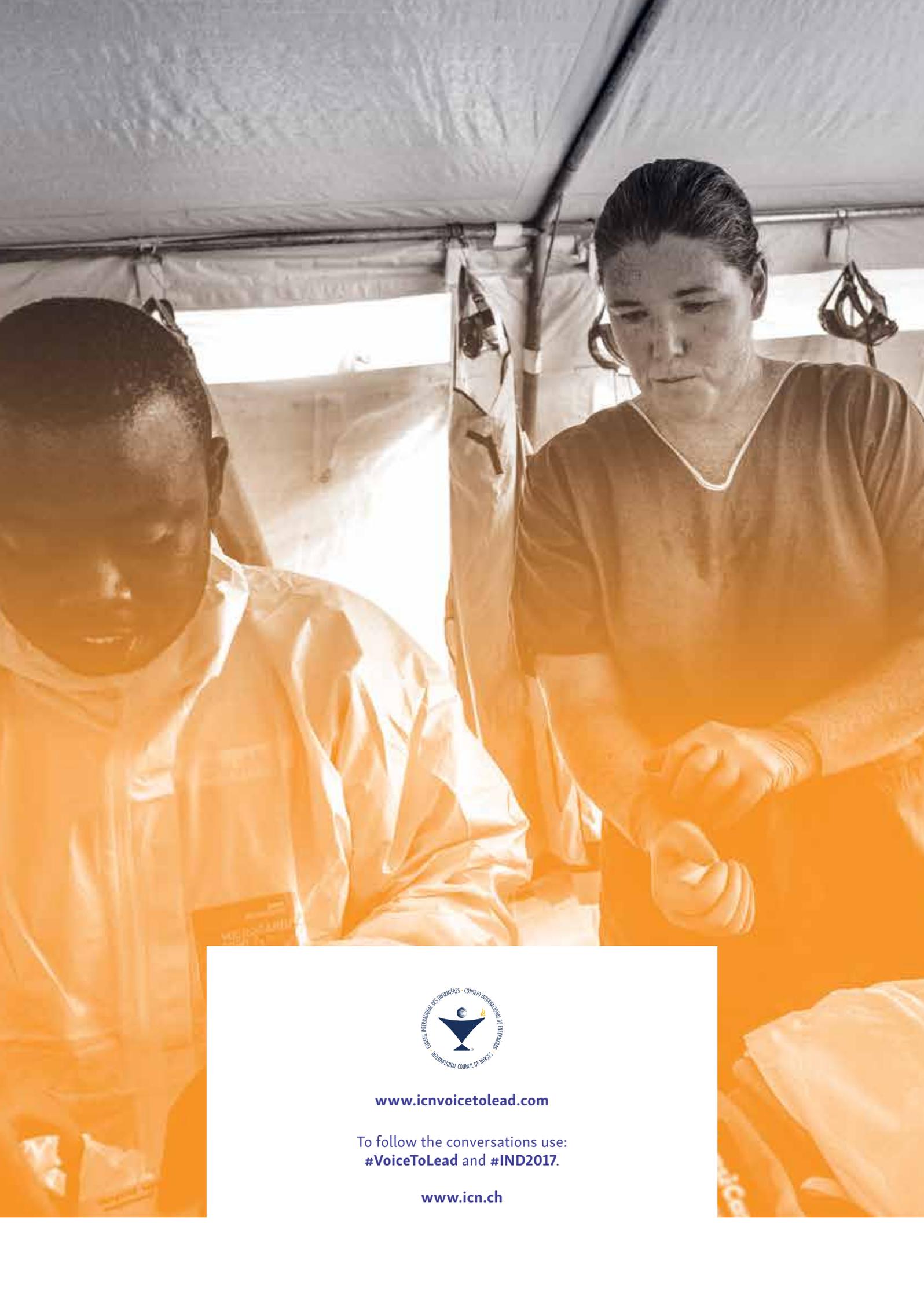
BIBLIOGRAPHY

1. Kounang, N. Aleppo's angel: A nurse's devotion to Syria's children. 2016 [cited 2016 21 December]; Available from: <http://edition.cnn.com/2016/08/13/health/nurse-childrens-hospital-syria/>
2. World Health Organization. Constitution of the world health organization. 2006 [cited 2016 22 December]; Available from: http://www.who.int/governance/eb/who_constitution_en.pdf.
3. Davidson, P.M. Not Angels but Shining Examples. 2016 [cited 2016 7 November 2016]; Available from: http://www.huffingtonpost.com/patricia-m-davidson/not-angels-but-shining-ex_b_11567674.html.
4. World Health Organization. Global Health Observatory (GHO) Data: Life Expectancy. 2016 [cited 2016 7 November]; Available from: http://www.who.int/gho/mortality_burden_disease/life_tables/situation_trends/en/.
5. U.K. Parliament. Health inequalities - extent, causes, and policies to tackle them 2009 [cited 2016 22 December]; Available from: <http://www.publications.parliament.uk/pa/cm200809/cmselect/cmhealth/286/28605.htm>.
6. Cook, L. U.S. Education: Still Separate and Unequal 2015 [cited 2016 22 December]; Available from: <http://www.usnews.com/news/blogs/data-mine/2015/01/28/us-education-still-separate-and-unequal>.
7. Breierova, L. and Duflo, E. The Impact of Education on Fertility and Child Mortality: Do Father's Really Matter Less Than Mothers? 2004.
8. World Health Organization. What are the social determinants of health? 2016 [cited 2016 22 December 2016]; Available from: http://www.who.int/social_determinants/sdh_definition/en/.
9. Canadian Nurses Association. Social Determinants of health and Nursing: A Summary of the Issues. CNA Background 2005 [cited 2016 22 December]; Available from: https://www.cna-aic.ca/~media/cna/page-content/pdf-en/social-determinants-of-health-and-nursing_a-summary-of-the-issues.pdf?la=en.
10. Forouzanfar, M.H., et al., Global, regional, and national comparative risk assessment of 79 behavioural, environmental and occupational, and metabolic risks or clusters of risks, 1990–2015: a systematic analysis for the Global Burden of Disease Study 2015. *The Lancet*, 2016. 388(10053):p. 1659-1724.
11. United Nations. Sustainable Development Goals: 17 Goals to transform our world. 2016 [cited 2016 7 November]; Available from: <http://www.un.org/sustainabledevelopment/development-agenda/>.
12. Nightingale, F. Notes on Nursing: What it is, and What it is not. 1860; Available from: <http://digital.library.upenn.edu/women/nightingale/nursing/nursing.html>.
13. Bridges, D.C., A history of the International Council of Nurses, 1899-1964: The first sixty-five years. 1967: Lippincott.
14. Henderson, V., Harmer and Henderson's Textbook of the Principles and Practice of Nursing. 1955, Macmillan: New York.
15. Kagan, P.N., Smith, M.C. and Chinn, P.L, eds. Philosophies and practices of emancipatory nursing: Social justice as praxis. Routledge studies in health and social welfare. 2014, Routledge: New York.
16. Marmot, M. and Bell, R. Fair society, healthy lives. *Public health*, 2012. 126: p. S4-S10.
17. Marmot, M. Boyer Lectures: Sir Michael Marmot highlights health inequalities and 'causes of the causes'. 2016 [cited 2016 21 December]; Available from: <http://www.abc.net.au/news/2016-09-03/boyer-lecture-sir-michael-marmot-highlights-health-inequalities/7810382>.
18. Williams, Y. What is Relative Poverty? 2015 [cited 2016 9 December]; Available from: <http://study.com/academy/lesson/what-is-relative-poverty-definition-causes-examples.html#transcriptHeader>.
19. Nippon.com. Japan's Worsening Poverty Rate. 2014 [cited 2016 19 December]; Available from: <http://www.nippon.com/en/features/h00072/>.
20. United Nations. Goal 1: End poverty in all its forms everywhere. 2016 [cited 2016 8 December]; Available from: <http://www.un.org/sustainabledevelopment/poverty/>.
21. World Bank Group, Global Monitoring Report 2015/2016: Development Goals in an Era of Demographic Change. Overview booklet. 2016, World Bank: Washington DC.
22. UNDP. Human Development Report: Sustaining Human Progress: Reducing Vulnerabilities and Building Resilience. 2014 [cited 2016 9 December]; Available from: <http://www.compassion.com/multimedia/human-development-report-2014-undp.pdf>.
23. World Bank Group. Global Monitoring Report 2014/2015: Ending Poverty and Sharing Prosperity. 2015 [cited 2016 9 December]; Available from: <http://www.compassion.com/multimedia/ending-poverty-sharing-prosperity-world-bank.pdf>.
24. European Parliament. Background Document: The social and economic consequences of malnutrition in ACP Countries. 2016 [cited 2016 11 November]; Available from: http://www.europarl.europa.eu/meetdocs/2009_2014/documents/acp/dv/background_/background_en.pdf.
25. Food and Agriculture Organisation of the United Nations. (2014). Understanding the true cost of malnutrition. Retrieved from <http://www.fao.org/zhc/detail-events/en/c/238389/>
26. International Food Policy Research Institute, Global Nutrition Report 2016: From Promise to Impact: Ending Malnutrition by 2030. 2016: Washington, DC.
27. OECD. Obesity Update. 2014 [cited 2016 11 November]; Available from: <http://www.oecd.org/health/Obesity-Update-2014.pdf>.
28. World Bank. Prevalance of undernourishment 2016 [cited 2016 11 November]; Available from: <http://data.worldbank.org/indicator/SN.ITK.DEFC.ZS?locations=MX>.
29. Jordan, M. Malnutrition Blights Mexico's Young. 2003 [cited 2016 11 November]; Available from: <https://www.washingtonpost.com/archive/politics/2003/06/09/malnutrition-blights-mexicos-young/c8170157-7ed3-4c03-a003-b9609ad090b9/>.
30. McNeil, S., Khaled Naanaa and his family fled to Perth after deaths threats in Syria, in Perth Now. 2016, Perth Now: Western Australia. <http://www.perthnow.com.au/news/western-australia/khaled-naanaa-and-his-family-fled-to-perth-after-deaths-threats-in-syria/news-story/b18d35a7c9832979daec6a068c2e816e>
31. Food and Agriculture Organization of the United Nations, I. WFP (2015) The state of food insecurity in the world 2015—Meeting the 2015 international hunger targets: taking stock of uneven progress. 2015 [cited 2016 9 December]; <http://www.fao.org/3/a-i4646e/index.html>
32. Houser, B. and Player, K. Words of Wisdom from Pivotal Nurse Leaders. 2008, Indianapolis: Sigma Theta Tau International.
33. World Health Organization. Universal health coverage (UHC): Fact sheet. 2016 [cited 2016 8 December]; Available from: <http://www.who.int/mediacentre/factsheets/fs395/en/>.
34. Chan, M. (2015). WHO Director-General addresses ministerial meeting on universal health coverage. Retrieved from <http://www.who.int/dg/speeches/2015/singapore-uhc/en/>
35. World Health Organization. The Global Push for Universal Health Coverage. 2015 [cited 2016 9 December]; Available from: http://www.who.int/health_financing/GlobalPushforUHC_final_11Jul14-1.pdf.
36. International Council of Nurses, ICN Code of Ethics for Nurses. 2015, Geneva: ICN.
37. Currie, J., Chiarella, M. and Buckley, T, An investigation of the international literature on nurse practitioner private practice models. *International nursing review*, 2013. 60(4): p. 435-447.
38. World Health Organization. A Universal Truth: No Health Without a Workforce. ISBN 2013 [cited 2016 30 November]; Available from: http://www.who.int/workforcealliance/knowledge/resources/GHWA-a_universal_truth_report.pdf?ua=1.
39. Latina, P. World Health Organisation describes Cuba's health system as exemplary. 2015 [cited 2016 7 November]; Available from: <http://en.granma.cu/mundo/2015-10-21/world-health-organization-describes-cubas-health-system-as-exemplary>.
40. Lamrani, S. Cuba's Health Care System: a Model for the World. 2014 [cited 2016 7 November]; Available from: http://www.huffingtonpost.com/salim-lamrani/cubas-health-care-system_b_5649968.html.
41. Columbia University School of Nursing. A Lesson in Cuban Health Care. 2016 [cited 2016 7 November]; Available from: <http://nursing.columbia.edu/lesson-cuban-health-care>.

42. United Nations. Goal 3: Ensure healthy lives and promote well-being for all at all ages. 2016 [cited 2016 8 December]; Available from: <http://www.un.org/sustainabledevelopment/health/>.
43. World Health Organization, WHO Media Centre Fact Sheet N94: Malaria. 2015, WHO: Geneva.
44. World Health Organization, WHO Media Centre Fact Sheet N104: Tuberculosis. 2015, WHO: Geneva.
45. World Health Organization, WHO Media Centre Fact Sheet N378: Immunisation Coverage. 2015.
46. World Health Organization. Noncommunicable diseases. 2015 [cited 2016 8 December]; Available from: <http://www.who.int/mediacentre/factsheets/fs355/en/>.
47. World Health Organization. 10 facts on Mental Health. [cited 2016 23 December]; Available from: http://www.who.int/features/factfiles/mental_health/mental_health_facts/en/.
48. International Medical Corps. Mental Health: The Invisible Burden The Facts. 2014 [cited 2016 23 December]; Available from: <https://internationalmedicalcorps.org/document.doc?id=312>.
49. World Health Organization. 10 facts on ageing and health. 2015 [cited 2016 23 December]; Available from: <http://www.who.int/features/factfiles/ageing/en/#>.
50. Age International. Facing the facts: The truth about ageing and development. 2015 [cited 2016 23 December]; Available from: <https://www.ageinternational.org.uk/Documents/Age%20International%20Facing%20the%20facts%20report.pdf>.
51. Gapminder. Gap Minder World Poster. 2016 [cited 2016 23 December]; Available from: https://s3-eu-west-1.amazonaws.com/static.gapminder.org/GapminderMedia/wp-uploads/20161010170934/countries_health_wealth_2016_v84.pdf.
52. Barnidge, E.K., et al., The effect of education plus access on perceived fruit and vegetable consumption in a rural African American community intervention. *Health Educ Res*, 2015. 30(5): p. 773-85.
53. OECD. Education Indicators in Focus. 2013 [cited 2016 11 November]; Available from: [https://www.oecd.org/education/skills-beyond-school/EDIF%202013--N%C2%B010%20\(eng\)--v9%20FINAL%20bis.pdf](https://www.oecd.org/education/skills-beyond-school/EDIF%202013--N%C2%B010%20(eng)--v9%20FINAL%20bis.pdf).
54. UNESCO. Education Counts: Towards the Millennium Development Goals. 2010 [cited 2016 11 November]; Available from: <http://unesdoc.unesco.org/images/0019/001902/190214e.pdf>.
55. UNAIDS & The African Union. Empower Young Women and Adolescent Girls: Fast-Tracking the end of the AIDS Epidemic in Africa. 2015 [cited 2016 11 November]; Available from: http://www.unaids.org/sites/default/files/media_asset/JC2746_en.pdf.
56. European Commission. Strategic Engagement for Gender Equality: 2106-2019. 2016 [cited 2016 11 November]; Available from: http://ec.europa.eu/justice/gender-equality/document/files/strategic_engagement_en.pdf.
57. Oulton, J.A., Nurses as advocates for women worldwide. *Int Nurs Rev*, 2007. 54(1): p. 11.
58. All Party Parliamentary Group on Global Health, Triple Impact: how developing nursing will improve health, promote gender equality and support economic growth. 2016, APPG: London.
59. Abwao, P. Kenya's Nurses Can Empower Women through Family Planning. 2015 [cited 2016 22 December]; Available from: <https://www.intrahealth.org/vital/kenya%E2%80%99s-nurses-can-empower-women-through-family-planning>.
60. UNAIDS, HIV - Related Stigma, Discrimination and Human Rights Violations: Case studies of successful programs, UNAIDS, Editor. 2005: New York.
61. Uebel, K., et al., Integrating HIV care into nurse-led primary health care services in South Africa: a synthesis of three linked qualitative studies. *BMC health services research*, 2013. 13(1): p. 1.
62. WaterAid, Her right to education: How water, sanitation and hygiene in schools determines access to education for girls. 2013, WaterAid: London.
63. World Health Organization, Media Centre Fact Sheet N. 391: Drinking Water. 2015, WHO: Geneva.
64. World Health Organization, Progress on Drinking Water and Sanitation 2014 Update. 2014, WHO: Geneva.
65. World Health Organization, Media Centre Fact sheet N°392. Sanitation, 2015, WHO: Geneva.
66. UNDP, Human Development Report 2014. Sustaining Human Progress: Reducing Vulnerabilities and Building Resilience. 2014, UNDP: Geneva.
67. World Health Organization and UNICEF. Water, sanitation and hygiene in health-care facilities: Status in low- and middle-income countries and way forward – WASH in Health Care Facilities for better health care services. 2015 [cited 2016 20 November]; Available from: http://apps.who.int/iris/bitstream/10665/154588/1/9789241508476_eng.pdf?ua=1.
68. Lambie, L. Lack of safe water, sanitation and soap 'an embarrassment', says WHO 2015 [cited 2016 20 November]; Available from: <https://www.theguardian.com/global-development/2015/mar/17/lack-safe-water-sanitation-soap-embarrassment-who-priority>.
69. WaterAid. Breaking down barriers: why quality health care is reliant on water, sanitation and hygiene (WASH) and how to make integration happen. 2015 [cited 2016 20 November]; Available from: <http://www.wateraid.org/-/media/Publications/Breaking-down-barriers-event-report.pdf?la=en>.
70. The Water Project. Poverty and Water. 2016 [cited 2016 20 November]; Available from: <https://thewaterproject.org/why-water/poverty>.
71. Chamney, M. and James, R. Dialysis water quality for renal nurses. *Renal Society of Australasia Journal*, 2008. 4(1).
72. Gill, C.J. and Gill G.C. Nightingale in Scutari: her legacy reexamined. *Clin Infect Dis*, 2005. 40(12): p. 1799-805.
73. United Nations. Goal 7—Ensure Access to Affordable, Reliable, Sustainable and Modern Energy for All 2015 [cited 2016 20 November]; Available from: <https://unchronicle.un.org/article/goal-7-ensure-access-affordable-reliable-sustainable-and-modern-energy-all>.
74. Fraser, B. Killer cookstoves: Indoor smoke deadly in poor countries; cleaner stoves elusive 2012 [cited 2016 20 November]; Available from: <http://www.environmentalhealthnews.org/ehs/news/2012/not-so-improved-cookstoves>.
75. World Health Organization. Burden of disease from Household Air Pollution for 2012. 2014 [cited 2016 20 November]; Available from: http://www.who.int/phe/health_topics/outdoorair/databases/FINAL_HAP_AAP_BoD_24March2014.pdf.
76. United Nations. Leaving no one behind: Energy for humanitarian response and sustainable development. 2016 [cited 2016 20 November]; Available from: <https://sustainabledevelopment.un.org/?page=view&nr=2016&type=13&menu=1634>.
77. World Health Organization. Household air pollution and health. 2016 [cited 2016 20 November]; Available from: <http://www.who.int/mediacentre/factsheets/fs292/en/>.
78. European Commission, The role of energy services in the health, education and water sectors and cross-sectoral linkages 2006: London.
79. Should read Gao, J. and Prasad, N, Chronic obstructive pulmonary disease in China: the potential role of indacaterol. *Journal of thoracic disease*, 2013. 5(4): p. 549.
80. Li, P., et al., A new mode of community continuing care service for COPD patients in China: participation of respiratory nurse specialists. *International journal of clinical and experimental medicine*, 2015. 8(9): p. 15878.
81. International Atomic Energy Agency. The Advisory Group on increasing access to Radiotherapy Technology in low and middle income countries. 2013 [cited 2016 7 November]; Available from: <https://cancer.iaea.org/documents/AGaRTBrochure.pdf>.
82. World Health Organization. Breast Cancer Awareness Month: increased awareness, equitable access to early diagnosis and timely, effective, and affordable treatment needed globally. 2016 [cited 2016 20 November]; Available from: http://www.who.int/cancer/breast_cancer_awareness/en/.
83. International Atomic Energy Agency. Pover's Cancer. 2011 [cited 2016 20 November]; Available from: cancer.iaea.org/newsstory.asp?id=87.
84. World Health Organization. WHO statement on end of Ebola flare-up in Sierra Leone. 2016 [cited 2016 20 November]; Available from: <http://www.who.int/mediacentre/news/statements/2016/end-flare-ebola-sierra-leone/en/>.
85. Shyrock, R. Some Sierra Leone nurses have not been paid in months. 2016 [cited 2016 20 November]; Available from: <http://www.voanews.com/a/3609710.html>.
86. United Nations. Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all. 2016 [cited 2016 20 November]; Available from: <http://www.un.org/sustainabledevelopment/economic-growth/>.
87. The Lancet Commission on Investing in Health. Graduation of Ghana and Kenya to lower-middle income status: fiscal implications for health financing 2016 [cited 2016 20 November]; Available from: <http://globalhealth2035.org/sites/default/files/afnea-fiscal-analysis-ghana-and-kenya.pdf>.
88. High-level Commission on Health Employment and Economic Growth, Working for Health and Growth: Investing in the Health Workforce. 2016, WHO: Geneva.

89. Royal College of Nursing. RCN responds to 1% pay award for NHS nursing staff. 0216 [cited 2016 20 November]; Available from: <https://www.rcn.org.uk/news-and-events/news/rcn-responds-to-1-per-cent-pay-award-for-nhs-nursing-staff>.
90. Oosthuizen, M.J. The portrayal of nursing in south african newspapers: A qualitative content analysis. 2011 [cited 2016 29 November]; Available from: http://uir.unisa.ac.za/bitstream/handle/10500/8897/ajnm_v14_n1_a6.pdf?sequence=.
91. UCL Institute of Health Equity, Health inequalities in Taiwan. 2016, Health Promotion Administration, Ministry of Health and Welfare: Taiwan.
92. Campbell, A.F. Why Violence Against Nurses Has Spiked in the Last Decade. *The Atlantic* 2016 [cited 2016 2 December]; Available from: <http://www.theatlantic.com/business/archive/2016/12/violence-against-nurses/509309/>.
93. Fernbach, N. Townsville Hospital's tele-health delivers cancer treatments to outback patients. 2016 [cited 2016 3 December]; Available from: <http://www.abc.net.au/news/2016-04-20/tele-health-chemotherapy-saving-lives-and-money/7341724>.
94. Males, T. Remote Chemotherapy Supervision via Telehealth. 2014 [cited 2016 3 December]; Available from: <https://www.healthroundtable.org/Portals/0/PublicLibrary/2014/HRT1420/1c/1.1c-10-TimMales-TownsvilleQld.pdf>.
95. Blanford, J.I., et al., It's a long, long walk: accessibility to hospitals, maternity and integrated health centers in Niger. *International journal of health geographics*, 2012. 11(1): p. 1.
96. United Nations. Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation. 2016 [cited 2016 3 December]; Available from: <http://www.un.org/sustainabledevelopment/infrastructure-industrialization/>.
97. National Health Service. Institute for Innovation and Improvement; Innovation Making it Happen. 2011 [cited 2016 9 December]; Available from: <http://www.institute.nhs.uk/innovation/innovation/introduction.html>.
98. Burkett, E. and Scott, I. CARE-PACT: a new paradigm of care for acutely unwell residents in aged care facilities. *Australian family physician*, 2015. 44(4): p. 204.
99. World Health Organization. mHealth New horizons for health through mobile technologies. 2011 [cited 2016 3 December]; Available from: http://www.who.int/goe/publications/goe_mhealth_web.pdf.
100. Avdic, D., A matter of life and death? Hospital distance and quality of care: Evidence from emergency room closures and myocardial infarctions. *University of York HEDG Working Paper*, 2014. 14: p. 18.
101. Nicholl, J., et al., The relationship between distance to hospital and patient mortality in emergencies: an observational study. *Emergency Medicine Journal*, 2007. 24(9): p. 665-668.
102. Baade, P.D., et al., Distance to the closest radiotherapy facility and survival after a diagnosis of rectal cancer in Queensland. *Med J Aust*, 2011. 195(6): p. 350-354.
103. Rusnell, C. and Russell, J. Alberta report details 'heartbreaking' life stories of 7 Indigenous youths who committed suicide 2016 [cited 2016 8 December]; Available from: <http://www.cbc.ca/news/canada/edmonton/alberta-report-details-heartbreaking-life-stories-of-7-indigenous-youths-who-committed-suicide-1.3551181>.
104. Marmot, M., *The Health Gap*. 2015, London: Bloomsbury.
105. United Nations. Goal 10: Reduce inequality within and among countries. 2016 [cited 2016 8 December]; Available from: <http://www.un.org/sustainabledevelopment/inequality/>.
106. United Nations. State of the World's Indigenous Peoples. 2010 [cited 2016 6 December]; Available from: <http://www.un.org/esa/socdev/unpfi/documents/SOWIP/press%20package/sowip-press-package-en.pdf>.
107. Health Canada. Awards of Excellence in Nursing. 2016 [cited 2016 22 December]; Available from: <http://www.hc-sc.gc.ca/fniah-spnia/services/nurs-infirm/profil/index-eng.php>.
108. London School of Economics. Cities and Social Equity: Detailed Report. 2009 [cited 2016 3 December]; Available from: <https://lsecities.net/publications/reports/cities-and-social-equity/>.
109. London School of Economics. Cities and Social Equity: Implications for policy and practice. 2009 [cited 2016 3 December]; Available from: <https://lsecities.net/media/objects/articles/cities-and-social-equity-implications-for-policy-and-practice/en-gb/>.
110. United Nations. Goal 11: Make cities inclusive, safe, resilient and sustainable. 2016 [cited 2016 3 December]; Available from: <http://www.un.org/sustainabledevelopment/cities/>.
111. Brisbane City Council. Brisbane City Council: Housing and homelessness. 2016 [cited 2016 1 November]; Available from: <https://www.brisbane.qld.gov.au/community-safety/community-support/housing-homelessness>.
112. Walsh, K., Stevens, B. and Rayner, K. Homeless to Home Healthcare - More Healthcare Please 2013 [cited 2016 7 November]; Available from: <http://chp.org.au/wp-content/uploads/2013/05/Karyn.pdf>.
113. Connelly, L., Walsh, K. and Rayner, K. Micah Projects. 2015 [cited 2016 4 November]; Available from: http://www.wapha.org.au/wp-content/uploads/2016/02/160218_Presentation_PerthMicahHealthEvaluation_KarynWalsh.pdf.
114. Connelly, L. An economic evaluation of the homeless to home healthcare after-hours service. 2013 [cited 2016 4 November]; Available from: http://micahprojects.org.au/assets/docs/Publications/IR_130_An-Economic-Evaluation-of-the-Homeless-to-Home-Healthcare-After-Hours-Service.pdf.
115. Bhardwa, S. Social prescribing pioneers. 2015 [cited 2016 3 December]; Available from: <http://www.independentnurse.co.uk/professional-article/social-prescribing-pioneers/89126/>.
116. iSustainableEarth. Sustainability and Healthcare: The Green Connection. 2012 [cited 2016 3 December]; Available from: <http://www.isustainableearth.com/sustainable-living/sustainability-and-healthcare-the-green-connection>.
117. United Nations. Goal 12: Ensure sustainable consumption and production patterns. 2016 [cited 2016 3 December]; Available from: <http://www.un.org/sustainabledevelopment/sustainable-consumption-production/>.
118. ONE. Ensure sustainable consumption and production patterns. 2016 [cited 2016 3 December]; Available from: <https://www.one.org/international/globalgoals/responsible-consumption/>.
119. iSustainableEarth. Nurses Taking the Lead in Green Initiatives. 2012 [cited 2016 3 December]; Available from: <http://www.isustainableearth.com/green-jobs/nurses-taking-the-lead-in-green-initiatives>.
120. World Health Organization. Health-care waste. 2015 [cited 2016 3 December]; Available from: <http://www.who.int/mediacentre/factsheets/fs253/en/>.
121. Domrose, C. The climate connection: Nurses examine effects of climate change on public health. 2015 [cited 2016 3 December]; Available from: <https://www.nurse.com/blog/2015/10/12/44479/>.
122. World Health Organization. Message from WHO Director-General. 2016 [cited 2016 3 December]; Available from: http://www.who.int/world-health-day/dg_message/en/.
123. Canadian Nurses Association. The Role of Nurses in Addressing Climate Change. 2008 [cited 2016 6 December]; Available from: https://www.cna-aici.ca/~media/cna/page-content/pdf-en/climate_change_2008_e.pdf?la=en.
124. World Health Organization. Global environmental change. 2016 [cited 2016 3 December]; Available from: <http://www.who.int/globalchange/climate/en/>.
125. Crimmins, A., et al., The impacts of climate change on human health in the United States: a scientific assessment. *Global Change Research Program*: Washington, DC, USA, 2016.
126. United Nations. Goal 13: Take urgent action to combat climate change and its impacts. 2016 [cited 2016 3 December]; Available from: <http://www.un.org/sustainabledevelopment/climate-change-2/>.
127. World Health Organization. Preventing disease through healthy environments: A global assessment of the burden of disease from environmental risks. 2016 [cited 2016 3 December]; Available from: http://apps.who.int/iris/bitstream/10665/204585/1/9789241565196_eng.pdf?ua=1.
128. World Health Organization. Climate change and health: Fact Sheet. 2016 [cited 2016 3 December]; Available from: <http://www.who.int/mediacentre/factsheets/fs266/en/>.
129. WorldFish. Building resilient community fisheries in Cambodia. 2013 [cited 2016 6 December]; Available from: https://www.ard-europe.org/fileadmin/SITE_MASTER/content/eiard/Documents/Impact_case_studies_2013/WorldFish_-_Building_resilient_community_fisheries_in_Cambodia.pdf.
130. Food and Agriculture Organisation of the United Nations. The State of World Fisheries and Aquaculture. 2014 [cited 2016 3 December]; Available from: <http://www.fao.org/3/a-i3720e.pdf>.

131. Brunner, E.J., et al., Fish, human health and marine ecosystem health: policies in collision. *International journal of epidemiology*, 2009. 38(1): p. 93-100.
132. United Nations. Goal 14: Conserve and sustainably use the oceans, seas and marine resources. 2016 [cited 2016 6 December]; Available from: <http://www.un.org/sustainabledevelopment/oceans/>.
133. Morrison, S. After the Ebola Catastrophe. 2015 [cited 2016 6 December]; Available from: <https://www.csis.org/analysis/after-ebola-catastrophe>.
134. Romanelli, C., et al. Connecting global priorities: biodiversity and human health: a state of knowledge review. 2015. World Health Organization/Secretariat of the UN Convention on Biological Diversity.
135. United Nations. Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss. 2016 [cited 2016 6 December]; Available from: <http://www.un.org/sustainabledevelopment/biodiversity/>.
136. Centers of Disease Control and Prevention, Drought and Health. 2012.
137. Colfer, C., et al. Forests and human health in the tropics: some important connections. [cited 2016 22 December]; Available from: <http://www.fao.org/docrep/009/a0789e/a0789e02.html>.
138. Hill, P. Freedom for the child refugees sold into slavery during 2,000-mile journey through hell. 2016 [cited 2016 7 December]; Available from: <http://www.mirror.co.uk/news/world-news/freedom-child-refugees-sold-slavery-8334676>.
139. European Commission. Report on the progress made in the fight against trafficking in human beings (2016). 2016 [cited 2016 7 December]; Available from: http://ec.europa.eu/dgs/home-affairs/what-we-do/policies/organized-crime-and-human-trafficking/trafficking-in-human-beings/docs/commission_report_on_the_progress_made_in_the_fight_against_trafficking_in_human_beings_2016_en.pdf.
140. Rankin, J. Human traffickers 'using migration crisis' to force more people into slavery 2016 [cited 2016 7 December]; Available from: <https://www.theguardian.com/world/2016/may/19/human-traffickers-using-migration-crisis-to-force-more-people-into-slavery>.
141. United Nations. Goal 16: Promote just, peaceful and inclusive societies. 2016; Available from: <http://www.un.org/sustainabledevelopment/peace-justice/>.
142. International Labour Organisation. Forced labour, human trafficking and slavery. 2016 [cited 2016 6 December]; Available from: <http://www.ilo.org/global/topics/forced-labour/lang-en/index.htm>.
143. UNHCR. Figures at a Glance. 2015 [cited 2016 7 December]; Available from: <http://www.unhcr.org/en-au/figures-at-a-glance.html>.
144. Hawtin, J. Burns, M. Médecins Sans Frontières and The Royal Children's Hospital. 2016 [cited 2016 22 December]; Available from: <http://blogs.rch.org.au/global/2016/10/01/profile-monica-burns/>.
145. International Council of Nurses and World Medical Association Physician and Nursing Leaders condemn Syrian Attacks on Health Personnel. 2016: Geneva.
146. International Council of Nurses and Health Care in Danger Initiative, Everyone, wounded or sick during an armed conflict, has the right to health care. 2016.
147. World Health Organization. Tobacco: Fact Sheet. 2016 [cited 2016 13 December]; Available from: <http://www.who.int/mediacentre/factsheets/fs339/en/>.
148. Reuters. Ukraine drops lawsuit against Australia over plain-packaging tobacco laws, WTO says. 2015 [cited 2016 9 December]; Available from: <http://www.abc.net.au/news/2015-06-04/plain-packaging-tobacco-ukraine-drops-lawsuit-against-australia/6520160>.
149. Centre for Disease Control. Rose's Story. 2016 [cited 2016 8 December]; Available from: <http://www.cdc.gov/tobacco/campaign/tips/stories/rose.html>.
150. World Health Organization. Cancer: Fact Sheet N297. 2015 [cited 2016 8 December]; Available from: <http://www.who.int/mediacentre/factsheets/fs297/en/>.
151. Chan, S. 2016 [cited 2016 10 December]; Available from: <https://higherlogicdownload.s3.amazonaws.com/AANNET/c8a8da9e-918c-4dae-b0c6-6d630c46007f/UploadedImages/docs/Featured%20Nurse%20Leader/2016/2016-01-11%20Sophia%20Chan.pdf>.
152. Chan, S.S.-C. Professor in Nursing and Director of Research School of Nursing, The University of Hong Kong. [cited 2016 13 December]; Available from: http://www.nurse.cmu.ac.th/inter2012/Document/SophiaChan_bio.pdf.
153. Ruckert, A., et al., Policy coherence, health and the sustainable development goals: a health impact assessment of the Trans-Pacific Partnership. *Critical Public Health*, 2016: p. 1-11.
154. Schram, A., et al., The role of trade and investment liberalization in the sugar-sweetened carbonated beverages market: a natural experiment contrasting Vietnam and the Philippines. *Globalization and health*, 2015. 11(1): p. 1.
155. Frieden, T.R., A framework for public health action: the health impact pyramid. *American journal of public health*, 2010. 100(4): p. 590-595.
156. Wagner, W., Ostick, D.T., Komives, S.R. Leadership for a better world: Understanding the social change model of leadership development. 2010, National Clearinghouse for Leadership Programs. San Francisco, CA: Jossey-Bass.
157. Falk-Rafael, A., Speaking Truth to Power: Nursing's Legacy and Moral Imperative. *Advances in Nursing Science*, 2005. 28(3): p. 212-223.
158. Shamian, J., Global perspectives on nursing and its contribution to healthcare and health policy: Thoughts on an emerging policy model. *Nursing Leadership*, 2014. 27(4): p. 44-51.
159. Hughes, F., Policy - a practical tool for nurses and nursing [Editorial]. *Journal of Advanced Nursing*, 2005. 49(4): p. 331-331.
160. International Council of Nurses. The ICN code of ethics for nurses. 2012; Available from: <http://www.icn.ch/who-we-are/code-of-ethics-for-nurses/>.
161. Khoury, C.M., et al., Nursing leadership from bedside to boardroom: a Gallup national survey of opinion leaders. *Journal of Nursing Administration*, 2011. 41(7-8): p. 299-305.
162. Institute of Medicine. The future of nursing: Focus on scope of practice. 2010; Available from: <http://www.nationalacademies.org/hmd/-/media/Files/Report%20Files/2010/The-Future-of-Nursing/Nursing%20Scope%20of%20Practice%202010%20Brief.pdf>
163. Cohen, S.S., et al., Stages of nursing's political development: where we've been and where we ought to go. *Nursing Outlook*, 1996. 44(6): p. 259-266.
164. Tomm-Bonde, L., The Naive nurse: revisiting vulnerability for nursing. *BMC Nursing*, 2012. 11: p. 5-5.
165. World Health Organization, Health in all policies: Training manual. 2015, Geneva: WHO.
166. Hughes, F.A., et al., Enhancing nursing leadership: Through policy, politics, and strategic alliances. *Nurse Leader*, 2006. 4(2): p. 24-27.
167. Kingdon, J.W., *Agendas, Alternatives, and Public Policies*. 1995, New York: Longman.
168. Risling, T., Social media and nursing leadership: Unifying professional voice and presence. *Nursing Leadership (1910-622X)*, 2016. 28(4): p. 48-57.
169. Jackson, J. and Mitchell, R. Day in the Life: Live tweets as a professional tool. *American Nurse Today*, 2015. 10(6): p. 14-22.
170. World Economic Forum, Maximizing Healthy Life Years: Investments that Pay Off. 2015, WEF.
171. ICN 1987. Definition of Nursing, located <http://www.icn.ch/who-we-are/icn-definition-of-nursing/>
172. Global Directions for strengthening nursing and midwifery 2016-2020 Strengthening
173. Taylor, P. (2016). WA community in shock after suicide of Aboriginal child. Retrieved from <http://www.theaustralian.com.au/news/wa-community-in-shock-after-suicide-of-aboriginal-child/news-story/c28fb9e534657e3fc1a00609d8b3799>
174. Andrews, K. (2011). "The little community clinic that could." Retrieved 11 November, 2016, from <https://www.drugfoundation.org.nz/book/export/html/2318>
175. Christchurch City Council (2016). "Christchurch City Council: Population." Retrieved 11 November, 2016, from <https://www.ccc.govt.nz/culture-and-community/statistics-and-facts/facts-stats-and-figures/population>
176. Belardi, L. (2014). "Dutch model offers new approach to home care." Retrieved 7 November, 2016, from <http://www.australiansagenda.com.au/2014/07/30/dutch-model-offers-alternative-approach-home-care/>.
177. The Commonwealth Fund (2015). "Home Care by Self-Governing Nursing Teams: The Netherlands' Buurtzorg Model." Retrieved 7 November, 2016, from <http://www.commonwealthfund.org/publications/case-studies/2015/may/home-care-nursing-teams-netherlands>.
178. Australian Bureau of Statistics. (2015). Cause of Death, Australia, 2013. Retrieved from <http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/3303.0~2013~Main%20Features~Suicide%20by%20Age~10010>



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