



Cover photo: Alberto Giuliani

Lead author: David Stewart, ICN Associate Director (consultant), Nursing and Health Policy.

Contributing authors: Howard Catton, ICN Chief Executive Officer; Dr Michelle Acorn, ICN Chief Nurse; Erica Burton, ICN Senior Policy Advisor (consultant); Hoi Shan Fokeladeh, ICN Policy Advisor; Colin Parish, ICN Staff Writer; and Lindsey Williamson, ICN Senior Communications Advisor.

Design: Artifex Creative Webnet Ltd.

All rights, including translation into other languages, reserved. No part of this publication may be reproduced in print, by photostatic means or in any other manner, or stored in a retrieval system, or transmitted in any form, or sold without the express written permission of the International Council of Nurses. Short excerpts (under 300 words) may be reproduced without authorisation, on condition that the source is indicated.

Copyright © 2022 by ICN-International Council of Nurses, 3, place Jean-Marteau,

1201 Geneva, Switzerland.

ISBN: 978-92-95124-01-1



Every day, nurses across the world overcome incredible challenges to care for their patients and communities. These challenges have been heightened during the past two years by the COVID-19 pandemic.

Several recent critically important reports address the issues facing the nursing profession, such as the global nursing shortage, the ageing nursing workforce, the mass traumatisation of nurses, the lack of protection, the increasing workloads and low salaries, all of which have led to many calls for investment in the nursing workforce in order to meet healthcare needs now and in the future.

In 2020, the World Health Organization (WHO) published the first State of the World's Nursing (SOWN) report, an in-depth look at the nursing workforce, which identified important gaps in the nursing workforce and priority areas for investment in nursing education, jobs, and leadership to strengthen nursing around the world and improve health for all.

In 2021, WHO issued its Global strategic directions for nursing and midwifery (SDNM) 2021-2025 which presents

evidence-based practices and an interrelated set of policy priorities that can help countries to ensure that midwives and nurses optimally contribute to achieving universal health coverage and other population health goals.

IND 2022 has taken these two important reports, along with recent reports published by the International Council of Nurses, such as Sustain and Retain in 2022 and Beyond: The global nursing workforce and the COVID-19 pandemic, and identified clear actions needed to implement the directions and policy priorities of the SDNM and the recommendations of the SOWN.

Nurses are catalysts for positive transformation to repel the forces that threaten global health and to build strong healthcare systems. We have seen the evidence and understand the need for investment and protection. Now is the time for action.

Dr Pamela F. Cipriano

President
International Council of Nurses

Table of Contents

Executive Summary	6
Introduction	10
Time for transformation Not a moment to lose A defining moment Drivers for change How to use this IND toolkit	
Part 1: Invest in Nursing and Respect Rights	14
SDNM Strategic & Policy Focus 1: Invest in nursing education Benefits of investing in nursing education Evidence of underinvestment in nursing education Expected outcomes from investing in nursing education Actions required for successful delivery	14
SDNM Strategic & Policy Focus 2: Invest in nursing jobs Benefits of investing in nursing jobs Evidence of underinvestment in nursing jobs Expected outcomes from investing in meaningful nursing jobs Actions required for successful delivery	20
SDNM Strategic & Policy Focus 3: Invest in nursing leadership Benefits when nurses are included in leadership positions Evidence of underinvestment in nursing leadership Expected outcomes of investing in nursing leadership Actions required for successful delivery	26
SDNM Strategic & Policy Focus 4: Invest in nurses for service delivery Benefits of investing in nursing service delivery Evidence of underinvestment in service delivery Expected outcomes of investing in service delivery Actions required for successful delivery	32
Additional Policy Focus 5: Invest in and prioritise the safety of nurse and healthcare workers Benefits of protecting the safety of nurses Expected outcomes of protecting the safety of nurses Actions required for successful delivery	38
Additional Policy Focus 6: Invest in and care for the health and wellbeing of nurses Benefits of caring for the carers Evidence of underinvestment in caring for nurses' psychological health Expected outcomes of investing in the health and wellbeing of nurses Actions required for successful delivery	44
Part 2: Investing in and Securing Global Health	50
Good health, good care, good nurses—a prescription for a prosperous world United Nations Sustainable Development Goals (SDGs) and Universal Health Coverage (UHC) The prioritising of health as an investment Mental health and wellbeing New and persistent humanitarian crises Gender equity contributions and challenges for women Global solidarity for health equity	
Conclusion	57
References	58



International Nurses Day (IND) is celebrated around the world every 12 May, the anniversary of Florence Nightingale's birth. ICN commemorates this important day each year with the production and distribution of IND resources and evidence. The theme for International Nurses Day 2022 is Nurses: A Voice to Lead - Invest in nursing and respect rights to secure global health.

The 2022 IND report acts as a strategic toolkit that aligns with key documents such as the <u>WHO Global Strategic Directions for Nursing and Midwifery: 2021-2025</u> (SDNM); the <u>WHO State of the World's Nursing</u> (SOWN) and the International Centre for Nurse Migration's <u>Sustain and Retain in 2022 and Beyond</u>. In particular, this work supports the implementation of the SDNM by providing practical guidance required by multiple stakeholders for effective realisation of their aims. It also showcases case studies as real-life examples in action. As such it is a toolkit that provides multisectoral guidance to various stakeholders.

The report examines the extra burden that the pandemic has put on health systems, in general, and the nursing workforce, in particular. It explores whether the pandemic as been the brutal wake-up call the world has needed in order to address the faults in the system.

The report looks at the four policy focus areas of the SDNM: education, jobs, leadership and service delivery and discusses the benefits of investing in each of these areas, the evidence of underinvestment; the expected outcomes of meaningful investment; as well as the actions required for successful delivery and monitoring of these priorities.

In addition, the IND report focuses on two vitally important strategic priorities that have come to the forefront over the last two years: investing in and prioritising the safety of health care workers and caring for the health and wellbeing of nurses. Whilst the safety, health and wellbeing of nurses and midwives is implicit in the SDNM, which address the need to attract, recruit and retain nurses, ICN believes the issues of safety and wellbeing have really come to the forefront during the pandemic and therefore warrant sufficient attention as individual topics due to the neglect of basic rights affecting nurses across the world. We have therefore added these two issues as additional policy foci.



Maro Verli, MSF. Jahun general hospital in Jigawa State, Nigeria.

SDNM Strategic & Policy Focus 1:

Invest in nursing education

The pandemic has highlighted the complex work of nurses and their ability to meet the increasing health demands of patients, to work with new technology, and with a multidisciplinary team. ICN's policy brief on *Nursing education and the emerging nursing workforce in COVID-19 pandemic* reported on disruptions to education caused by the pandemic which are impacting supply and development of the nursing workforce. It also highlighted challenges to attracting people into the nursing profession and to retaining the current workforce, including unfair pay and remuneration, and poor working conditions.

Research supporting the call for investment in nursing education shows:

- Better health outcomes for patients include significant reduction in mortality. (Aiken et al. 2014, Wieczorek-Wojcik 2022).
- The more nurses who complete a bachelor's degree, the more likely that nurses will go on to further post graduate education (National Academy of Medicine 2021).
- Post-graduate education leads to increased retention in the nursing workforce (National Academy of Medicine 2021).
- Increasing the domestic supply of nurses relieves over reliance on internationally educated nurses (Buchan & Catton 2020).
- Well educated nurses progress into senior leadership positions across the entire spectrum of health (McHugh & Lake 2010)

SDNM Strategic & Policy Focus 2:

Invest in nursing jobs

The 2020 SOWN report showed a shortage of 5.9 million nurses prior to the pandemic. The *Sustain and Retain* report warns of a possible 13 million shortage, including 4.7 million nurses retiring from the profession in the next 10 years due to the ageing nursing workforce, and a possible 10% of nurses, or 2.5 million, leaving the profession due to the COVID Effect.

The benefits for investing in nursing jobs include:

- Meeting the changing health needs and rising expectations of individuals and communities (Audet, Bourgault & Rochefort 2018; Fawaz, Hamdan-Mansour & Tassi 2018; Institute of Medicine 2011; Health Insights 2017)
- A sufficient number and proper skill mix of nurses (Audet, Bourgault & Rochefort 2018; Fawaz, Hamdan-Mansour & Tassi 2018; Institute of Medicine 2011; Health Insights 2017)
- The return on investment in health is estimated to be 9 to 1 (WHO 2016)
- Improved access to health care and making greater use of innovative health service delivery models (WHO 2016)
- Improved satisfaction and morale of nurses leading to improved public attraction to and retention of the profession (WHO 2016)

SDNM Strategic & Policy Focus 3:

Invest in nursing leadership

Nursing leadership is needed at all levels and across all settings to provide effective and relevant health services for patients and their families, individuals and communities. Nursing leadership is as important to the delivery of quality care as technical skills at the bedside. Now more than ever, we need nurses to lead the development and implementation of individual care plans, new and innovative models of care, integrated and team-based care, organisational policies and plans, research and innovation, board decision-making and legislation.

The benefits of including nurses in leadership positions are:

- Improved person-centred care (Stimpfel et al. 2016)
- Better care at a lower cost (Goetz, Janney & Ramsey 2011; Teigg et al. 2015)
- Better working environments (Stimpfel et al. 2016; Twigg & McCullough 2014)
- Improved quality and safety leading to better patient outcomes (McHugh et al. 2016)
- Increased job satisfaction and retention of nurses (Stimpfel et al. 2016; Twigg & McCullough 2014)

SDNM Strategic & Policy Focus 4:

Invest in nurses for service delivery

Along with underinvestment, nurses face many barriers to working to their full scope of practice and for career progression. Not only is there a strong need to build capacity of the workforce through domestic supply and education, there is also a real need to retain the current workforce. One of the ways that this can be achieved is using the knowledge, skills and capabilities of the profession and enabling career progression in clinical, leadership and academic roles.

Investing in nursing service delivery can lead to:

- Improved access to highly qualified healthcare professionals and healthcare
- Cost-effective and efficient health services
- Optimally utilising nurses' skills and qualifications
- High levels of patient satisfaction and improved health outcomes
- Improved access to health care and making greater use of innovative health service delivery models
- Improved satisfaction and morale of nurses leading to improved public attraction to the profession, recruitment and retention.



Additional ICN Policy Focus 5:

Invest in and prioritise the safety of nurse and healthcare workers

Over the last two years, nurses and other healthcare workers have had high levels of exposure to the COVID-19 virus, exacerbated by the lack of protection, timely vaccination and support needed to perform their work in a safe and healthy environment. In addition, nurses and physicians are 16 times more likely to experience violence in the workplace as compared to other service workers The conditions of work of nurses and other health professionals not only affects their own rights, but also the rights of those requiring access to quality and affordable healthcare.

The benefits of protecting the safety of nurses include:

- Reduced hospital acquired infections
- Greater productivity, increased job satisfaction and improved retention of nurses
- Improved workplace health and safety, which improves patient safety and patient outcomes
- Supporting stronger and more resilient health systems
- Reduction in workplace induced injury and illnesses and improved health and wellbeing
- Improved return on investment.

Additional ICN Policy Focus 6:

Invest in and prioritise care for the health and wellbeing of nurses

Overwhelmed, stretched past their limits and facing anxiety, nurses' physical and psychological wellbeing has been under attack during the pandemic. They have been asked to make complicated choices and decisions over a long period of time and are experiencing high levels of chronic exposure to acute psychologically traumatic events, as well as high workloads, violence in the workplace and burnout. It is time to fully recognise and address the inherent occupational stresses and burdens that nurses bear on behalf of societies.

Investment in the health and wellbeing of nurses will result in other benefits:

- Improved health of nurses, and the quality of patient care and health outcomes
- Meet the obligations of Article 23 of the Universal Declaration of Human Rights (UN 1948)
- A high performing organisational culture
- A safe, satisfied and healthy workforce is the foundation of a strong and resilient health system
- Improving worker wellbeing lowers the costs of occupational harm and contributes to minimising patient harm (de Bienassis, Slawomirski & Klazinga 2021).



At the end of each policy focus, the report offers clear actions that the different stakeholders can take to deliver on the need for investment. Stakeholders include nurse and professional bodies, the community, health service providers, governments, and international organisations.

The second part of the report looks at the vitally important role that nurses have in addressing global health challenges and securing global health. It examines how nurses, as the largest group of health professions, are key to the success of the United Nations Sustainable Development Goals and Universal Health Coverage. With the impact of COVID-19, the global nursing shortage could be as high as 13 million within the next few years (ICN 2021a) unless we act now to invest in the profession. The report looks at the impact of investing in the nursing profession on other health priorities including noncommunicable diseases; mental health and wellbeing; humanitarian crises; gender equality and the empowerment of women; and the need for global solidarity for health equity.

We encourage all stakeholders to read this IND report alongside the SDNM as an action-oriented guide to implementing the strategic directions and policy priorities for nursing and midwifery.

Stephen Gerard Kelly, ICRC. Beirut, Rafik Hariri University hospital. Lina has been working for the ICRC for one year. Ali is a 10-year-old-patient. Lina took care of him since he arrived at the hospital.



Time for transformation

Despite the innumerable challenges that COVID-19 has thrown at health systems around the globe, there has been an impressive degree of adaption and innovation. This has not happened by chance, but by the ingenuity of the nursing workforce as it has found novel solutions to the problems.

As such, there has been growing community appreciation of the work, courage and professionalism of nurses across the world. This focus of attention means that there is an opportunity to harness and capitalise on that energy to undertake actions that can deliver a meaningful shift to high-quality health systems that can meet current and future health challenges.

There can be no high-quality health systems without highly skilled, committed and motivated nurses. This International Nurses Day (IND) report seeks to provide tangible interventions that will lead to improvements in health systems and improve global health. They should not be seen as independent piecemeal quality improvement interventions, but should be considered in terms of intertwined and interconnected actions that build on each other in an effort to make whole.

Recognise, respect and invest

We do not just need a rebuild of our health systems, we need transformation. This begins with the fundamentals of recognising and respecting the rights of those authorised, accountable and entrusted to care for individuals and communities. Transformation will require investment in nursing education, jobs and leadership. But it begins with recognising and adhering to the fundamental rights of every nurse and health care worker.



Tracy Makhlouf, MSF. Tackling COVID-19 in Lebanon, through prevention and vaccination.

A defining moment

Will this extraordinary time lead to a much-needed seismic shift in how healthcare is delivered? The convergence of forces—a pandemic; rapid advancement in medical science; an explosion of digital technologies and data analytics; informed and empowered consumers; societal crises; a stretched workforce—could all prove to be the catalysts for the transformation that healthcare has promised the world for so long (Allen 2021).

With all the devastating impacts that have occurred, changes in approaches have accelerated to meet the demand. Nurses have been pivotal in leading the healthcare response with new and adaptive care delivery models, and clinical innovations. The public has started to recognise and appreciate the skill, scientific knowledge, leadership and professionalism of nurses.

However, the health workforce, particularly nurses, have borne a heavy load over a long period of time. Never before has healthcare required more to be known, more to be done, more to planned, and never has it been more complex. Much has been asked and much has been given. It is taking its toll. Underinvestment, underresourcing and failure to meet the obligations outlined in the Universal Declaration of Human Rights have placed the nursing profession in a very precarious place. Before the pandemic, the world was almost six million nurses short. Within just a few years, this number could be more like 13 million (ICN 2021a).

This is an emergency, and it will exacerbate the health crisis and socio-economic development across the world. If progress towards the SDGs is to be realised, transformative actions to change health systems must be undertaken urgently. Now is the time to reconsider how to build resilient, high quality, health systems shaped by their most important resource—the healthcare workforce. We ask that countries seize the political and moral imperative provided by the pandemic to transform their health systems so that they meet the needs of individuals and communities now and into the future.

The International Council of Nurses (ICN) boldly urges and calls to action nations to invest in nursing, respect rights and advance and monitor this transformation.

Not a moment to lose

Deputy Secretary-General of the United Nations, Amina Mohammed, gave a stark warning regarding the world's commitment to the Sustainable Development Goals (SDGs) (UN 2022). She stated that "We are far from where we should be—and the pandemic has pushed us further off course. The indicators on poverty, hunger, education and jobs are all moving in the wrong direction."

The recent blueprint to galvanise action towards the SDGs released by the United Nations (UN 2021) states that the world is at its biggest shared test since World War II and that humanity faces a "stark and urgent choice: a breakdown or a breakthrough." It calls for the world to come together for the common good.

ICN supports that call, and we recognise that nurses have an enormous and pivotal role to play. This IND report seeks to provide clear guidance and strategic actions required to enable nurses to perform their roles and responsibilities to address global health priorities.

Drivers for change

Patient preferences

Consumers' voice

Informed & empowered





Patient healthcare expectations continue increasing

Patients are a driving paradigm shift in our approach to healthcare. There is a growing evolution in the partnership between the health service provider and the consumer. There is increasing patient preference to be treated out of hospitals and closer to home and community (Geng et al. 2021).

Workforce shortages

Service demand Skills shortage





The gap between capacity and demand continues growing

There are global nursing and other health workforce shortages, which are particularly prevalent in rural areas and vulnerable population services such as aged care. With a combined skills shortage and the demand to improve the quality, accessibility and affordability of healthcare, priority will need to be given to workforce retention, education, regulation, incentives, personal and professional support (WHO 2020a).

Integrated, person-centred care

Connected health systems

Chronic and complex care needs





Health needs are changing and increasing

Health systems should respond to the overall needs of a person, including their physical and mental wellbeing. Integrated, personcentred care means partnering with patients, their carers and family, and health and social care providers. This requires innovative models of care, so that the health system is more seamless, effective and efficient across the entire care continuum.

Digital disruption

Virtual healthcare Artificial intelligence





Rapid adoption of technologies is changing healthcare delivery

Technological advancements and virtual healthcare have shifted many services towards remote care. Despite the pandemic, this has served to improve patient access to care. Other developments such as artificial intelligence and machine learning will also play key roles in supporting both consumers and health systems. They will put consumers in control of their health and wellbeing and enable health service providers to better understand the patterns and needs of people (Wilson 2021).

Demand for services

Growing burden of disease

Mental health and wellbeing needs





The complexity of care and the demand for services

Demand for healthcare services continues to grow with the increase prevalence of preventable diseases, suboptimal use of healthcare resources and an ageing population. Demand will need to be addressed by providing the right care, at the right time, in the right place by the right provider (Remes et al. 2020).

Better value

Outcome focused

Cost effective





Achieving meaningful and affordable outcomes

Healthcare is an enormous cost to countries' budgets, but when appropriately managed, there can be incredible returns on investment. The aim of high-quality healthcare is to balance health outcomes that matter to patients at a price that is affordable (Remes et al. 2020).

Global health priorities

Health equity

Health security





A global shared vision and action

Progressively realising the right to health means systematically identifying and eliminating inequities resulting from differences in health, social, economic and other living conditions. To achieve this, countries must work together and create sustainable solutions to the world's biggest problems. "No one is safe until everyone is safe" (UNICEF 2021). Action to end poverty, rescue the planet and build a peaceful world is vital.

How to use this IND toolkit

The IND toolkit aligns with key documents such as the World Health Organization's (WHO) <u>Global Strategic</u> <u>Directions for Nursing and Midwifery: 2021-2025</u> (SDNM); '<u>WHO State of the World's Nursing report</u> (SOWN)' and the International Centre for Nurse Migration (ICNM)'s <u>Sustain and Retain in 2022 and Beyond</u>.

In particular, this work supports the implementation of the SDNM by providing practical guidance required by multiple stakeholders for effective realisation of their aims. It also showcases case studies as real-life examples in action. As such, it is a toolkit that provides multisectoral guidance to various stakeholders.

Expected outcomes: Outcomes provide a target for stakeholders to aspire to when considering the investments.

Actions: The actions are geared to various stakeholders and are activities that support the realisation of the strategic goals. It should be noted that the actions are not an exhaustive list, but a means by which progress can be made. Country context should be taken into account, and progress will vary depending on the stages of the development of the health system and the associated health workforce.

Part 1: Invest in Nursing and Respect Rights



SDNM Strategic & Policy Focus 1: Invest in nursing education

The pandemic has shown to the world the complex critical thinking that nurses employ in performance of their services in caring for patients. Nurses are scientific professionals whose practices are evidence informed. This is not limited to any specific area such as Intensive Care Units (ICUs) which have borne the brunt of the sickest patients, but extends across the care continuum. As we continue to address current challenges and the increasing health demands of our populations, adapting to new treatments and technologies and collaborating across the various sectors, it is essential that nurses have solid educational foundations. This includes undergraduate degrees, post graduate degrees and continuing professional development.

However, despite the many benefits of education and continuing professional development, there continues to be major underinvestment in this area. Despite business and policy leaders recognising the benefits of education for individuals and societies, debate over policies that promote the progression of nurse education persists. It is hard to reconcile the fact that nursing is the largest and most expensive component of the labour market for health systems, and yet there is limited investment in education progression. This is a critical obstruction to the momentum of health systems towards reaching their potential.



ICAP. The Global Nurse Capacity building Program works to strengthen the quantity and quality of the nursing and midwifery workforce in sub-Saharan Africa.

ICN strongly encourages health systems and countries around the world to place a high value on the education of their nursing staff. Investment in nursing education will further drive the health system to deliver care that individuals and communities need by i) improving knowledge and competence; ii) increasing confidence in clinical and leadership skills, critical thinking and decision making; and iii) increasing job satisfaction and retention. Such investment will be a great catalyst for positive transformation.

Rapid transformation of healthcare for an influx of patients—Italy

Towards the end of February 2020, the northern regions of Italy suffered a massive influx of critically ill patients requiring respiratory support. Within days, hospitals with 10 to 15 ICU beds had to treat 30 to 40 more patients with respiratory failure every day. This crisis lasted for more than two months, and a massive logistical operation began to create capacity. Hospitals were rapidly transformed, redesigned and expanded with new beds. With this expansion came an increasing demand for a skilled workforce to care for this influx of patients, which required a reorganisation of the entire nursing workforce (Imbriaco, Monesi & Ferrari. 2021). As well as leadership and management challenges, nurses also needed to respond to the complicated care needs of the patients being admitted. Patients often required complex and high-risk procedures, such as endotracheal intubations, percutaneous tracheostomies, continuous renal replacement therapy, multiple medical therapies and other critical care procedures. Nurses are responsible for monitoring the signs and symptoms of patients in how they respond to the treatments they are providing (Imbriaco, Monesi & Ferrari 2021).

Adapting student nurse learning to support quality education—Thailand

The COVID-19 pandemic has caused significant challenges and obstacles for student learning. The Boromarajonani College of Nursing implemented several strategies to support students. Theseincluded adequately resourcing students with personal protective equipment (PPE) and other infection, prevention and control (IPC) resources; enabling students to study online; creating flexible arrangements for onsite simulated learning; creating new learning resources and adapting examinations; and supporting the wellbeing needs of students. As a result of the initiatives, less than 5% of students were infected by COVID-19; students graduated on time; and the quality of education was maintained (Turner 2021).

Competency based education reducing medication errors—China

The Second Affiliated Hospital of Zhejiang University School of Medicine in China has implemented innovative models of education based on 'Knowledge-Attitude-Practice' to achieve competencies in medication management. As a result, the incidence of drug errors by new graduates was reduced by 60% (Xu et al. 2021).

Benefits of investing in nursing education



Better health outcomes for patients include significant reduction in mortality. In Europe it was found that a 10% increase in the proportion of nurses with a bachelor's degree in hospitals is associated with a 7% decrease in mortality (Aiken et al. 2014; Wieczorek-Wojcik 2022).



The more nurses who complete a bachelor's degree, the more likely that nurses will go on to further post graduate education, particularly into Advanced Practice Nursing roles (National Academy of Medicine 2021).



Post-graduate education leads to increased retention in the nursing workforce (National Academy of Medicine 2021).



Increasing the domestic supply of nurses relieves over-reliance on internationally educated nurses (Buchan & Catton 2020).



Well educated nurses progress into senior leadership positions across the entire spectrum of health, including policy development and executive leadership (McHugh & Lake 2010).

Evidence of underinvestment in nursing education



Between and within countries, there is variable consistency with entry to practice education programmes (WHO 2021a).



Often there are limited or no accreditation standards assessing the quality of education programmes (WHO 2021a).



Due to existing shortages, the ageing of the nursing workforce and what ICN has termed the growing COVID-19 Effect, it is estimated that up to 13 million nurses will be needed to fill the global nurse shortage gap in the future (ICN 2021a).



Due to the insufficient domestic supply of nurses, many high-income countries are reliant on internationally educated nurses to fill their workforce gaps (Socha-Dietrich & Dumont 2021).



55% of ICN member national nurses' associations reported that their health systems invested in continuing professional development for nurses. However, the majority of this was for IPC rather than the clinical specialty area (ICN Survey 2020).



The lack of support from employers is a major barrier to undertaking post graduate nursing education (Aiken et al. 2014, Ng, Eley & Tuckett 2016, Pittman et al. 2012).



High-income countries have more than three times the nurse graduation rate of low-income countries (WHO 2020a).



Nasir Ghafoor, MSF. Maternal and newborn healthcare in Al Qanawis, Yemen.

Expected outcomes from investing in nursing education

- The improved performance of health systems, by valuing and leveraging the education of nurses to deliver quality and efficient care, results in better health outcomes
- Countries are able to become self-sufficient in their nursing workforce capacity to meet or surpass health system needs and potential surge demand
- Nurses have the requisite knowledge, competencies and confidence to meet the health needs of populations and contribute to the SDGs
- The public has increased confidence in nursing and a greater understanding of the legitimate scope of nursing practice
- Advancement of scientific research and inquiry expands the evidence base for practice

Actions required for successful delivery



Nurses and professional bodies

- Prioritise investment in education as a means to improve health system outcomes and effectiveness in discussions with governments and organisations
- Build and support a culture that prioritises education
- · Support the development of standards and competencies required for contemporary nursing practice
- Assist members to pursue further education both inside and outside nursing
- Advocate to employers the need to support study leave for nurses
- Advance a common standard of education for entry to practice
- Lead and participate in robust research and quality improvement designs progressing the links between nursing education and clinical practice



Public

- Understand the role and contributions of nursing in contemporary healthcare
- Demand a system that values the education of nurses given its relationship to patient safety and cost effectiveness
- · Recognise and respect the scientific professionalism of nursing and nurses' contribution to health



Health service providers

- Invest in the continuing education of nurses
- Plan career pathways with nurses that acknowledge higher educational attainment
- Promote interprofessional scientific inquiry, learning and partnerships
- Monitor integrated metrics for patient and healthcare worker safety and quality care indicators
- Foster supportive environments that enable nurses to pursue education opportunities
- Expand formal academic partnerships
- Provide opportunities for student learning and clinical placements



Tyumen Regional Nurses Association, Russia.



Governments

- · Plan and invest in growing the domestic production of nurses to meet the health system demand
- Establish minimum standards for nursing education and quality assurance—this includes entry-to-practice standards and lifelong learning
- Support the development of competency-based education programmes that meet quality standards and population health needs
- Support and plan for the education of nurses with physicians and other health professionals as students and as they progress throughout their career
- Establish standards for continuing professional development and monitoring it
- Advance the process for the accreditation of education programmes and providers to ensure standards are met for contemporary nursing practice
- Increase emphasis on educational faculty development and career development
- Ensure that faculty staff have the required skills, competencies and experience



International organisations

- Report to the World Health Assembly and to the public progress on the SDNM 2021-2025
- Advise and advocate for common standards for entry to practice and advanced practice
- Facilitate engagement between regulators to establish baseline global standards of practice
- Advance policy changes to support nursing education and the removal of regulatory barriers that impede working to full of scope of practice
- Review and update the Nursing Personnel Convention 1977 to emphasise the importance of nursing education
- Support gatherings of nurse researchers from education and practice to broaden diversity of thought and innovation



Vincenzo Livieri, MSF. Medical Academy ceremony, Sierra Leone.



The nursing workforce shortage is a greater threat than the COVID-19 pandemic. Nurses are at the forefront of the COVID-19 response and have leading roles in every aspect, including preventing, testing, tracing, screening, isolating, vaccinating, treating and rehabilitating patients. They continue addressing all of the increasing non-COVID related work that persists. Nurses have been the backbone of the health system response. However, with no respite, increasing demand, under-resourcing and no reprieve in sight, they are leaving the profession at extraordinarily high rates. Despite nurses doing their best, there will be gaps in the provision of care, and this workforce shortage is a public health crisis that will be felt for years to come.

Some may say our workforce shortage was caused by the pandemic. Although the pandemic may have exposed and exacerbated this issue, nursing associations, WHO, researchers, labour market economists, the Organisation for Economic Co-operation and Development (OECD), ICN and others have been sounding the alarm for years that the number of nurses was falling short of demand across the world.

It is recognised that the factors behind the drivers for workforce supply are complex in a global environment. Part of this problem is that countries are at different stages of development due to variable fiscal capacities. However, there are a number of commonalities across all countries, including decades of poor planning, development and under resourcing. Examples of this include poor working conditions; the lack of necessary resources to provide appropriate care; failure to adopt safe staffing levels; inadequate regulatory and credentialling practices; out of date regulations; and policies that prevent nurses from working to their full education, scope and expertise. Workforce shortages are leading to high rates of burnout and turnover, which is significantly detrimental to both patients and nurses (Buchan, Catton & Shaffer 2022).



WHO / Blink Media - Hannah Reyes Morales Surgeon and oncologist Marie Dione Sacdalan (right) is vaccinated against COVID-19 by Nurse Rodelia Reyes (left) at the Philippine General Hospital in Manila, Philippines.

Commenting on a recent report by the ICNM titled <u>Sustain and Retain in 2022 and Beyond</u> co-author ICN Chief Executive Officer Howard Catton called for immediate action, stating:

"We can no longer afford to undervalue and underfund the nursing profession, not only for the sake of the health of nurses, but for the protection and sustainability of our entire global health system. Let's be clear: we are not talking about stop-gap solutions, getting through the current pandemic, or even preparing for the next. We are talking about being able to address all the healthcare needs that have built up and been delayed since the onset of the pandemic. If we do not address all these present and urgent needs in a sustainable way over the next decade, the WHO's ambition of Universal Health Coverage will be thwarted." (ICN 2022).

The nursing workforce shortage can no longer be ignored. We cannot have a healthy world until we commit and address this chronic problem.

Promoting women's health: nursing in the community—India

To improve women's health in a local community, an innovative nurse-led model of care was developed. Nurses worked with the community to identify issues and barriers to accessing women's health services. One of the largest gaps was the knowledge and understanding of services required. After the establishment of nurse-led clinics, there were many improvements to the health of women. For example, the pap-smear uptake increased from a baseline of 4.1% of women in the community to over 71% (George & Batra 2021).

Better working conditions for nurses—Switzerland

A referendum was held in Switzerland in 2021 to address the country's nurses' working conditions. As a result of a positive vote, nurses will be supported with better pay, education and working conditions. This public show of support recognises the valuable contribution of nurses and demonstrates its commitment to putting their support into action.

Pierre Fromentin / MSF. Earthquake Response – Haiti.



Benefits of investing in nursing jobs



Meeting the changing health needs and rising expectations of individuals and communities (Audet, Bourgault & Rochefort 2018; Fawaz Hamdan-Mansour & Tassi 2018; Institute of Medicine 2011; Health Insights 2017).



A sufficient number and proper skill mix of nurses (Audet, Bourgault & Rochefort 2018; Fawaz Hamdan-Mansour & Tassi 2018; Institute of Medicine 2011; Health Insights 2017).



WHO (2016) estimates the return on investment in health to be 9 to 1.



Improved access to healthcare and making greater use of innovative health service delivery models (WHO 2016).



Improved satisfaction and morale of nurses leading to improved public attraction to and retention of the profession (WHO 2016).

Evidence of underinvestment in nursing jobs



Many countries' pay rates for nurses have either remained flat or decreased in real terms (OECD 2021).



Due to existing nursing shortages, the ageing of the nursing workforce and the growing COVID-19 effect, ICN estimates up to 13 million nurses will be needed to fill the global nurse shortage gap in the future (ICN 2021a).



90% of national nursing associations are significantly concerned that heavy workloads and insufficient resourcing, burnout and stress related to the pandemic response are the drivers resulting in increased numbers of nurses who have left the profession and increased reported rates of intention to leave this year and when the pandemic is over (ICN 2021a).



Due to insufficient domestic supply of nurses, many high-income countries are reliant on overseas educated nurses to fill their workforce gaps (OECD 2019).



80% of nurses report that they are over-skilled for the roles they are performing (OECD 2016).



Thousands of lives could have been saved with adequate levels of staffing and skill mix (McHugh et al. 2021).



The density of nurses in low-income countries is 9.1 nurses per 10,000 population compared to 107.7 per 10,000 population in high-income economies (WHO 2020a).



Alyona Syneko, ICRC. (South Sudan) Jonglei state, Waat, primary healthcare clinic supported by the ICRC. An ICRC nurse is attending to a child.

Expected outcomes from investing in meaningful nursing jobs

- A health system that builds the domestic capacity of nurses and supports ethical recruitment and international development
- The right number of nurses, with the right skills and expertise, in the right areas to meet the health needs of populations
- A health system that adequately rewards, renumerates, and recognises the work and worth of nurses thereby improving the recruitment and retention of nurses
- Increased return on investment by utilising nurses to work to their full scope of practice including supporting the career development affecting both career progression and the advancement of all health professionals
- A detailed understanding of current and future workforce supply versus demand with detailed strategies, plans and interventions to meet demand

Actions required for successful delivery



Nurses and professional bodies

- Support scaling up and maintaining a competent nursing workforce
- Advocate and lead appropriate, resourced, targeted workforce policies
- Ensure the quality standards of nursing practice and provide support for matching scope of practice with education and nursing competencies
- Build and support a culture that prioritises education
- Influence quality and appropriate licensure and registration requirements to practice



Public

- · Call for the development of nursing workforce plans that meet population needs and are adequately resourced
- Demand contemporary regulation of the nursing profession that ensures the protection of the public
- · Call for the public reporting of workforce datasets



Health service providers

- Provide a safe working environment and better working conditions
- Remove barriers and build a culture of support to enable nurses to work to their full scope of practice
- Plan and implement initiatives that promote nurse retention and improve nursing satisfaction
- Ensure nursing presence at the health planning and policy level
- Build capacity to support the recruitment and professional development of new graduates
- Address the issues of recognition, reward and remuneration
- Implement actions to support safe staffing and decent working conditions
- Invest in senior nursing leadership positions with sufficient resourcing



Governments

- · Develop and fund nursing workforce plans with a focus on the right skills in the right numbers and in the right places
- Establish and implement strategies and actions to retain nursesvfor further information see <u>Sustain and Retain in 2022 and Beyond</u>.
- Monitor and report on progress against the SDNM to the World Health Assembly.
- Incentivise the attractiveness of nursing as a career option
- Build domestic capacity through investing in high-quality education and life-long learning
- Ensure the protection and security of all health workers and health facilities in all settings
- Promote and support the ethical migration of nurses
- · Develop regulations or policies to support safe staffing, decent working conditions and build domestic capacity of nurses
- Strengthen key regulatory functions for licensure and accreditation
- Conduct nurse workforce impact statements on a regular basis



International organisations

- Support the immediate update of the SOWN analysis and regular monitoring of the global nursing workforce for effective workforce planning at regional and global level (Buchan, Catton & Shaffer 2022)
- Advocate and support workforce planning and development of nurses in low income and vulnerable states (Buchan, Catton & Shaffer 2022)
- Report to the World Health Assembly and the public progress on SDNM and the SOWN report
- Influence accountability activities that promote the investment in decent jobs for nurses
- Encourage global data exchange on the health labour market
- Advise and advocate standards for the ethical migration of nurses and other health workers.
- Facilitate engagement between regulators to establish baseline global standards of practice
- Advise and advocate for the standards on ethical migration of nurses





Invest in nursing leadership

Throughout history, nurses have been at the forefront of transformation and reform to improve the health and wellbeing of individuals and communities. Whenever there are challenges, nurses have been proactively involved in providing optimal and realistic solutions. Whether it be sanitation and hygiene, humane treatment of people with mental illness, data and analytics, creating innovative models of care, gender equality, addressing the social determinants of health, or improving access to care, nurses

have been a trusted voice leading to better health outcomes.

Nursing leaders and leadership have not always been valued. There are often barriers to nurses participating as full partners with physicians and other health professionals in high-level decision making and policy development. One of the root causes of this is often the belief that nurses are "functional doers" who just follow instructions. This is in complete contrast to the reality of the profession, the members of which are autonomous, informed, decision makers whose actions are based in scientific principles, education, evidence and experience (Institute of Medicine 2011).

Nurse leadership is needed at every level across all settings in order to deliver effective health services that matter to patients and their families, individuals and communities. The leadership of nurses is just as important to providing quality care as are technical abilities at the bedside. Now more than ever, we need nurses to lead in developing individual care plans, new innovative models of care, integrated and team-based care, organisational policies and plans, research and research translation, board room decision making and shaping meaningful and relevant legislation.

Alliance of Nurses for Health Environments. Nurses meet with the Obama Administration in 2016 to address nursing's contribution to mitigating the effects of climate change.



Robin Waudo, ICRC. (Zimbabwe) Makoni District. A nurse gives a refresher course on malaria awareness to community health workers who volunteer to perform community awareness and mobilization on health issues.

Protecting the vulnerable patients in long term care facilities—Canada

COVID-19 has disproportionality affected Long-Term-Care (LTC) in Canada with approximately four out of five deaths occurring in these facilities. Susan Poirier is a Registered Nurse and Administrator at a not-forprofit LTC Facility. She worked with the team and residents at the facility and engaged them to support decision making. Through Susan's leadership, they proactively implemented IPC measures including the training of all staff in appropriate use of PPE prior to recommendations coming out from the Department of Health. The entire facility was redesigned to develop isolation rooms for those who were showing signs of illness. They undertook planning through 'mock' scenarios. From the very beginning, Susan built a culture that recognised the contributions of her staff in order to build strong organisational culture and a trusting environment. Susan has built a team of leaders throughout the facility, who have all been actively involved in the decision-making process. As a result of this work, the residents have been protected, staff morale is high, and 100% of the staff are fully vaccinated. Findings from research have found a key indicator to positive outcomes in LTC is nursing leadership (Poirier 2021).

Leading in government in times of great need—Israel

Shoshy Goldberg is the Government Chief Nursing Officer in Israel's Ministry of Health. In this role, she is responsible for the 70,000 nurses in the country and for leading health policy as it relates to nursing. In the early stages of the pandemic, Shoshy recognised that the health system did not have routine and adequate data collection and reporting, which could provide real-time analysis to support decision making. She immediately addressed this situation and worked with the country's largest university to provide timely, informative and accurate reports to understand the gaps in service delivery and make fast acting decisions to address them. As a result of her successful work to address problems, Shoshy was tasked with overseeing all healthcare professionals. She has been inspiring and leading the health workforce as it addresses continuing and emerging health challenges (Goldberg 2021).

Benefits when nurses are included in leadership positions



Improved person-centred care (Stimpfel et al. 2016).



Better care at a lower cost, i.e. better value health services (Goetz, Janney & Ramsey 2011; Teigg et al. 2015).



Better working environments, including high performing organisational culture (Stimpfel et al. 2016; Twigg & McCullough 2014).



Improved quality and safety leading to better patient outcomes (McHugh et al. 2016).



Increased job satisfaction and retention of nurses (Stimpfel et al. 2016; Twigg & McCullough 2014).

University of Victoria Media Services. Dr Kelli Stajduhar leads an interdisciplinary academic and community collaborative research project entitled Equity in Palliative Approaches to Care that shows how homeless and barely housed people face the challenge of navigating many complex systems, including housing, social care, and health care.



Evidence of underinvestment in nursing leadership



Women form 70% of the global health workforce, but only 25% of leadership roles (WHO 2020b).



Approximately two thirds (about 67%) of WHO Member States report having a nominated government senior nursing officer or a central point of contact for nursing. However, they may not have the authority and full range of responsibilities associated with this position (ICN Survey 2021).



Nurses—59% of all health workers—are significantly under-represented in global and national health leadership roles (WHO 2021b).



1 in 4 national nursing associations report that senior nurse leaders have not been involved in high level decision making during the pandemic (ICN Survey 2021).



2 in 5 national nursing associations report that specialised nurses in IPC have not been involved in establishing policies or plans regarding IPC (ICN Survey 2021).

Expected outcomes of investing in nursing leadership

- Health policy and plans are inclusive of the patient experiences and of health service delivery
- Nurses are confident and articulate in participating in policy conversations, solution framing and the management and performance of health systems
- A high performing organisational culture that promotes positive patient outcomes and experiences and moves the health system towards greater gender equity
- Senior nursing input into workforce, infrastructure and budget allocation ensures the appropriate and efficient use of resources that promotes patient safety
- Nursing experts and leaders are actively engaged in advisory committees, commissions, boards and international peak bodies, such as WHO and other United Nations entities in order to improve meaningful and grassroot solutions

Actions required for successful delivery



Nurses

- Mentor emerging nurse leaders
- Develop and implement leadership competencies
- Support and encourage nurse leaders
- Progress in areas of learning regarding finance and budgets, regulatory frameworks and policy development
- Utilise your skills, knowledge and attributes as a voice to lead
- Prioritise your own health to better lead others
- Build alliances and relationships with those inside and outside the health sector
- Translate new research findings to impact policy and practice



Public

- Understand the role of nurses as leaders in the health system
- Call for greater representation of nurses in leadership positions





Health service providers

- Create an environment whose organisational culture values nursing leadership
- Infuse the nursing perspective into organisational strategy
- Support leadership programmes for nurses
- Recognise the contribution of nursing leadership in high performing health systems
- Ensure nursing presence at the health planning and policy level
- · Build and support nurses' professional development, including explicit career ladders, and promotion potential



Governments

- Involve nurses in policy development and political engagement
- Appoint and empower a Government Chief Nurse within the Ministry of Health
- Effectively utilise nurses in public engagement about broader health policy needs
- Monitor and report the SOWN report and the SDNM progress



International organisations

- Involve nursing experts and leaders as full partners in health policy and plans
- Advocate for the recruitment of Government Chief Nurses and improved representation in high-level forums and meetings
- Advise and support standards, skills and competencies for Government Chief Nurses
- Support the network of global nursing leaders to facilitate knowledge exchange



Alberto Giuliani. A nurse at San Salvatore Hospital in Pesaro, Italy at the peak of the COVID-19 pandemic.

SDNM Strategic & Policy Focus 4: Invest in nurses for service delivery

The evidence is clear that advanced practice nurses (APNs) and nurse practitioners improve access to care and offer safe and effective healthcare and high patient satisfaction. Yet despite the mountain of evidence in support of these roles, many barriers exist today as they did decades ago.

They include:

- regulatory policies that limit APN scope of practice and role autonomy
- ii) imbalance of power and opportunities to influence healthcare policy and decision making
- **iii)** poor access to and inadequate advanced practice nursing education
- iv) lack of stakeholder awareness, understanding and support of advanced practice nursing roles¹ (Zegler et al 2021).

These could be summed up as the continual under-investment lack of support and devaluing APN roles to advance global health and build health workforce capacity.

OECD research (2016) found that **80% of nurses stated that** they were over-skilled for the roles they were performing resulting in a sense of underappreciation and poor job satisfaction. Despite the enormous experience and capabilities, artificial barriers prevent them working to the full extent of their practice or from progressing in their career. Nurses can do more, but their skills are not fully appreciated or utilised. This is an enormous contributor to dissatisfaction in the profession. Policies and investments must evolve and change if we are to maximise and realise the potential of nurses and meet the health needs of populations.

Job satisfaction and retention are crucial elements to growing and sustaining the nursing workforce. One of the most common reasons cited for nurses leaving the profession is poor job satisfaction. This of course is influenced by a number of factors, including autonomy, job stress, pay, workload and a culture that diminishes the role of the profession in the delivery of essential health services (Kurth et al. 2016). All of these issues need to be addressed urgently to ensure that there is a nursing workforce that can support the attainment of UHC and meet the healthcare demands of current and future global health security issues, non-communicable diseases and ageing populations.

 $^{^{\}rm 1}$ These are examples only. There are several other barriers that can be found in the report.



P. Phutpheng, WHO. (Thailand) Nurses work at the clinic at Samut Sakhon Hospital for people with suspected COVID-19 symptoms.

Adapting practice to address health needs—nurse anaesthetists

Across the world, there has been an increasing number of nurse anaesthetists (NAs) employed to address the demand for surgical and anaesthetic services. COVID-19 further showcased the invaluable skillset of NAs. Due to staff shortages, NAs pivoted from traditional anaesthesia roles to provide care in ICUs, house intubation teams, ventilator management, triage, and consultative services. Flexibility of the NAs' advanced practice nursing skills and commitment to care globally has been key in meeting critical care requirement for COVID-19 patients (Rowles 2021).



Benefits of investing in nursing service delivery



Improved access to highly qualified healthcare professionals and healthcare.



Cost-effective and efficient health services.



Making the best use of nurses' skills and qualifications.



High levels of patient satisfaction and improved health outcomes.



Improved access to healthcare and making greater use of innovative health service delivery models.



Improved satisfaction and morale of nurses leading to improved public attraction to the profession, recruitment and retention.

Evidence of underinvestment in service delivery



Professional regulations and regulatory systems that often prevent nurses working to their full scope of practice (WHO 2021a).



Inadequate or inappropriate funding models that support service delivery models by nurses (Institute of Medicine 2011; Marceau et al. 2021).



Artificial barriers enacted or enforced by the medical profession on nursing practice (Institute of Medicine 2011; ICN 2020; Boyko, Carter & Bryant-Lukosius 2016).



80% of nurses report that they are over-skilled for the roles they are performing (OECD 2016).



Thousands of lives could have been saved with adequate levels of staffing and skill mix (Aiken et al. 2014, Aiken 2018; Ball et al. 2018; Brooks Carthon 2019).



Mack Alix Mushitsi, MSF. Paediatric Unit - Magaria, Niger.

Expected outcomes of investing in service delivery

- Improved access to high quality and affordable health systems by enabling nurses to work to their full scope of practice
- Maintaining high standards of safety through quality assurance mechanisms that verify the education and experience of nurses
- A health system where nurses are valued as full partners in the multidisciplinary treatment team thereby improving recruitment and retention
- Improved health outcomes, global health security and economic growth
- An increased number of APNs address country health demands

Actions required for successful delivery



Nurses and professional bodies

- Support scaling up and maintaining a competent nursing workforce
- Influence and lead in nursing regulatory reform
- Ensure the quality standards of nursing practice and provide support for matching scope of practice with education and nursing competencies
- Advance an appropriate regulatory system to support advanced practice
- Advocate for a master's or higher level of education for APNs
- Lead and develop standards of practice for APNs
- Expand nursing research and evidence particularly to support the development of business cases for nurses working to their full scope of practice



Public

- Advocate for healthcare working environments that support optimised service delivery by nurses
- Demand a high-quality nursing regulatory system that supports nurses to practice in a safe, competent and ethical manner to meet the health needs of individuals and communities
- Advocate for increased, accurate and positive portrayals of nurses in the media



Health service providers

- Ensure safe staffing levels with an appropriate mix of education, skills and experience to ensure patient care needs are met
- Support a safe working environment and condition that support staff to deliver quality care
- Provide opportunities for nurses to develop their knowledge, skills and competencies
- · Remove barriers and build a culture of support to enable nurses to work to their full scope of practice
- Build and support the development of a career pathway for nurses including the development of advanced practice nurses.
- Create an organisational culture that promotes collaboration and respect between health professionals
- Offer professional development, including explicit career ladders, promotion potential
- · Utilise nursing skills and knowledge appropriately and effectively to improve access to health services



Governments

- Develop appropriate and current regulatory frameworks to support nursing practice and to protect the public
- Remove regulatory barriers preventing nurses working to their full scope of practice
- · Adopt systems and processes that ensure safe staffing and manageable workloads
- Invest in innovative nursing models of care
- Monitor and report on progress on the SDNM and SOWN to the World Health Assembly
- Remove barriers that hinder nurses career progression and working to their full scope of practice
- Develop workforce plans that incorporate advanced practice and clinical specialisation
- Actively explore the potential for APNs to improve quality, relevance and access to health services



International organisations

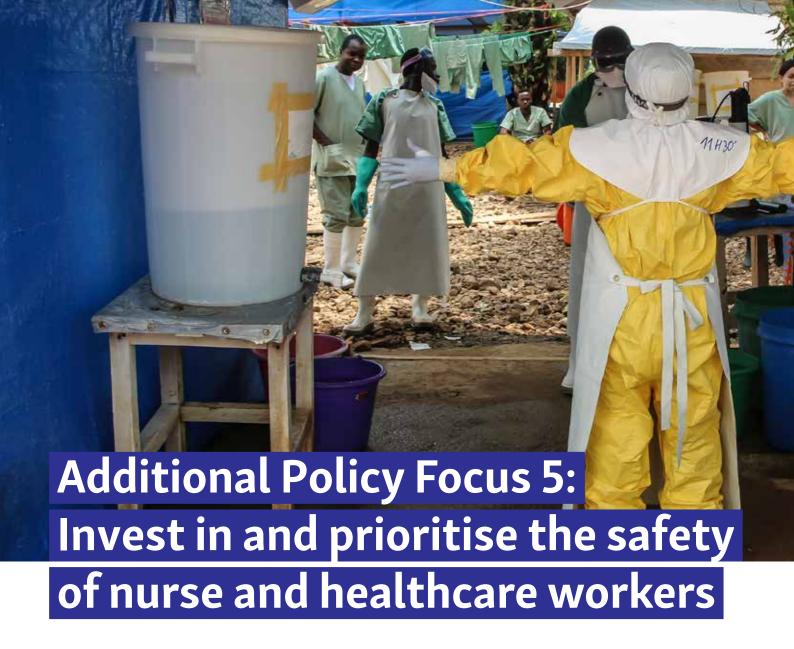
- Promote best practice models and evidence related to safe staffing and manageable workloads
- Promote best practice models and evidence related to positive practice environments
- Include nursing experts in key pieces of policy work
- Collect and report data on nurses working to full scope of practice
- Advise and advocate for advanced practice nursing and regulatory reform
- Support engagement between regulators on baseline global standards of practice
- Advocate for policy changes to support nursing education and the removal of regulatory barriers that impede the broadening of scope of practice
- Report to the World Health Assembly and the public progress on the SDNM and the SOWN report



Virginie Nguyen Hoang, ICRC. (Central African Republic) Bangui, communitarian hospital. Nurses clean and disinfect the leg of a patient that will have a skin graft after suffering injuries in a car accident.



Thomas Glass, ICRC. (Afghanistan) Kandahar, Mirwais hospital, pediatric ward. Shagofa, a pediatric nurse who has been working here for four months. She is one of the very few female nurses.



Protect the rights of nurses and other healthcare workers to build a strong healthcare system

Over the last two years, nurses and other healthcare workers have had high levels of exposure to the COVID-19 virus. This is in addition to the physical and mental distress of their heavy workloads. This risk has taken a toll on health workers who are at the forefront of protecting the health of individuals and communities. WHO estimates that from January 2020 to May 2021 at least 180,000 health and care workers died as a result of COVID-19 (WHO 2021b). These deaths are a terrible tragedy. In addition to the human toll, the ever-expanding ripple effect is the growing and irreplaceable gap in the health workforce leading the world's pandemic response.

"At the start of the pandemic, the provincial ministry advised health care service providers to reuse N95 masks due to shortages. They were locked up at my facility. We had a patient with TB in isolation on the unit and we had one mask for the shift that we would take off and keep on a paper towel with our names written on it. Some would use them for a few days."

RN, Ontario, Canada



Carl Theunis / MSF. Ebola response in Mangina, Democratic Republic of Congo.

Providing safe, quality home care during the COVID-19 pandemic —Canada

At the beginning of the pandemic, acute healthcare facilities such as hospitals were prioritised for goods and services such as PPE and other IPC resources. This led to shortages in many community and primary health care services. SE Health, a not-for profit social enterprise in Ontario, Canada caring for people in their homes and communities, had to quickly adapt to the challenges of supply disruption and lack of IPC resources. They achieved this through several strategies including: uniting with similar services to share resources and best practice models; greater engagement with frontline staff and supporting nurse leaders; working with procurement to balance science with critical needs and priorities; development of digital solutions such as electronic screening, competency assessment tools, and dashboards for monitoring performance; development of one source of truth guidance materials and novel ideas to improve their visualisation and application; and the improvement of virtual healthcare services. This resulted in a safer workplace whilst also prioritising access to health services in the community (Brooke, Fu & Virani 2021).

The issue of the safety of healthcare workers arises because of lack of protection and support essential for performing their work in a safe and healthy environment. This includes access to quality PPE, vaccinations, effective prevention and control procedures and policies, sufficient time to rest, and access to mental health and other social support services. The conditions of work of nurses and other health professionals not only affects their own rights, but also the rights of those requiring access to quality and affordable healthcare.

It is important that urgent action is taken now and in the future to protect the health, safety and wellbeing of healthcare workers. This is a basic human right as indicated in the Universal Declaration of Human Rights (UN 1948, Art. 23) which says, everyone has the right to healthy working conditions, just and favourable conditions of work (including fair wages), the right to social protection, and the right to effective participation including freedom of expression.

The COVID-19 pandemic has largely been an experience of continual failures and has highlighted serious gaps in the safety and rights of healthcare workers. The bottom line is that these failings must be addressed if countries seek to move forward with strong health systems. They are also vital for strengthening global health security. Failure to do so will result in catastrophic consequences for the lives of billions of people around the world.

Laurie Bonnaud, MSF. Palestine.



The health sector is among the most hazardous sectors for health and safety



While health workers represent less than 3% of the global population, they represented around 14% of COVID-19 cases (ILO 2021).



Globally, major gaps in basic water, sanitation and hygiene (WASH) services exist in healthcare facilities; one quarter of healthcare facilities have no basic water services; 10% have no sanitation services (WHO 2020c).



Over 180,000 healthcare workers have died to COVID-19 (WHO 2021b).



As of September 2021, 2 in 5 healthcare workers were fully vaccinated, with considerable variations across regions and economic groupings (WHO 2021b).



A total of 54% of health workers in low- and middle-income countries have latent tuberculosis; that is 25 times higher than the general population (ILO/WHO 2020).



In the 2014-2016 Ebola outbreak in West Africa, the risk of infection among health workers was 21 to 32 times higher than in the general adult population (ILO/WHO 2020).



According to the OECD, healthcare is now the most unsafe work environment in terms of occupational injury—nurses are injured at three times the rate of construction workers (de Bienassis, Slawomirski & Klazinga 2021).



Up to 80% of health workers suffer a sharps injury and are thus exposed to several serious pathogens including HIV, and Hepatitis B and C (de Bienassis, Slawomirski & Klazinga 2021).



Nurses and physicians are 16 times more likely to experience violence in the workplace as compared to other service workers (de Bienassis, Slawomirhki & Klazinga 2021).



Violent events across the world against nurses and other health professionals ranged from 15.0% to 54.0% with a mean prevalence of 32%, and physical abuse ranged from 4.6% to 22% (Vento, Cainelli & Vallone 2020).



Between 2016 and 2020 there were 3,789 incidents affecting the delivery of healthcare in 49 countries (Maurer 2021).

Benefits of protecting the safety of nurses



Reduced hospital acquired infections (Haque et al. 2020).



Greater productivity, increased job satisfaction and improved retention of nurses (WHO 2021a; ILO/WHO 2020).



Improved workplace health and safety, which improves patient safety and patient outcomes (ILO/WHO 2020).



Supporting stronger and more resilient health systems (ILO/WHO 2020).



Reduction in workplace induced injury and illnesses and improved health and wellbeing (ILO/WHO 2020).



Improved return on investment (de Bienassis, Slawomirski & Klazinga 2021).

Expected outcomes of protecting the safety of nurses

- · A workplace where employees, visitors, patients and others feel safe and protected
- A workplace that provides employees with the resources required to effectively and efficiently do their work
- Healthcare workers' rights are met
- · Reduced transmission of infections thereby improving health security
- A productive and healthy workforce

Actions required for successful delivery



Nurses and nursing organisations

- Include workplace health and safety (WPHS) in undergraduate education programmes and continuing professional development
- Get vaccinated with approved and appropriate vaccines and promote vaccines as an effective means of public health
- Lead in the identification of gaps in WPHS and support effective accreditation of facilities
- Ensure the correct use of PPE and support appropriate utilisation of IPC
- Advocate for the collection WPHS data, monitoring and its reporting
- Support the development of policies and procedures to protect healthcare workers
- Research best practice related to WPHS



Public

- Support healthcare workers and promote an environment of respect
- Undertake healthy behaviours and promote accurate public health messages
- Recognise and honour the sacrifice of healthcare workers during and beyond the pandemic
- Call out violence against healthcare workers
- Demand governments and health service providers adhere to legal instruments related to workplace health and safety



Health service providers

- Invest in training, tools and resources for a safer healthcare workforce, ensuring that HCWs have sufficient IPC training and safety equipment, and career paths for IPC professionals (Resolve to Save Lives et al. 2021)
- Plan ahead and have sufficient PPE stock as well as hygiene, cleaning and other supplies
- Achieve requirements for health worker safety in accreditation standards
- Monitor, review and report integrated metrics for patient safety, healthcare worker safety, and quality care indicators
- Promote vaccination of all healthcare workers against all vaccine preventable infections
- Ensure availability of PPE at all times with appropriate quality, quantity and appropriate fit
- Implement strategies to reduce violence against healthcare workers
- Influence and implement safe staffing levels with appropriate skill mix of staff
- Invest and support health professionals to have an adequate amount of appropriate resources to effectively perform their iobs
- Protect worker safety and wellbeing through resourcing, testing, immunisation, training and zero tolerance to violence against healthcare workers



Governments

- Ensure the implementation of the WHO-ILO Joint global framework for national occupational health programmes adopted in 2010 (ILO/WHO 2020)
- Utilise the WHO & ILO 'Caring for those who care: Guide for the development and implementation of occupational health and safety programmes for health workers' to improve the quality and safety of care and safeguard the health workforce (ILO/WHO 2020)
- Update legal protections to reflect the hazards health workers face regarding exposure to COVID-19
- Endorse the WHO Health Worker Safety Charter by signing up to it and supporting its implementation
- Adopt the ILO <u>Nursing Personnel Convention 1977</u> and other relevant standards
- Undertake joint external evaluations; implement activities to fill identified gaps; measure and report progress
- Full implementation of IPC and WASH standards (Resolve to Save Lives 2021)
- Plan and invest in adequate supplies and resources required for epidemics; consider working with local manufacturers to meet supply and demand of IPC equipment
- Improve data collection and accountability by tracking and reporting health worker illnesses, deaths, impacts on employment in outbreak contexts, and underlying causes of illness and deaths
- · Undertake actions to monitor, prevent, reduce and address violence against healthcare workers
- Create national plans for health security and other preparations as necessary
- Develop, implement and monitor laws, standards, guidelines and codes of practice on occupational health and safety
- Implement and monitor national policies and programmes for the occupational health and safety of health workers (this includes the structures of work, such as working hours, shifts, workloads, etc.)



International organisations

- Review and update joint external evaluations and existing international health regulations
- Review and update the ILO Nursing Personnel Convention
- · Adopt and implement new indicators to measure safe healthcare facilities and healthcare worker safety
- Monitor progress of countries against joint external evaluations and support countries with the implementation of improvements
- Report to the World Health Assembly the number of healthcare worker infections and deaths from healthcare-associated infections
- · Develop policies and plans related to workplace health and safety to support low-income countries
- Report to the World Health Assembly and the public progress on the WHO Health Worker Safety Charter
- Develop international benchmarks and standards for safe staffing levels



Keeping nurses physically and psychologically healthy

Nurses have demonstrated their strength and resilience throughout the course of the pandemic and its subsequent waves. However, working in stressful or challenging environments with repeated exposures to potentially traumatic events for long periods of time with little time for recovery is a risk factor to physical and psychological wellbeing. Nurses have been at the forefront of care in health systems across the world that at times have been overwhelmed and stretched past their limits in terms of capacity and resources.

Each day, nurses have also been placed in morally difficult situations due to resource shortages, such as inadequate oxygen supplies, insufficient numbers of ECMO machines that support heart and lung functions, and shortages of hospital beds and staff. In some situations routine aspects of care, such as basic hygiene, have been neglected, further contributing to nurses' moral distress (Rainbow, Littzen & Bethel 2021; ICN 2021b).

"We would go home to shower not just because we didn't want to risk exposing loved ones, but to attempt to wash off trauma, wash away the guilt of wondering if we could do more."

Grace DeFrank, Registered Nurse

Nurses are working in the thick of death, stress, suffering and trauma. During the pandemic, they have been burdened with unrealistic expectations such as working with inadequate resources, staffing and safety precautions. Nurses have been asked to make complicated choices and decisions over a long period of time. They are experiencing 'moral injury,' which is affecting them personally and will have long term consequences on the profession and the broader healthcare system.



Caring for the health and wellbeing of nurses in an Emergency Department —Taiwan

Nurses were asked about strategies to care for their mental health. Key actions identified by nurses included: bonus payments; decreasing non-nursing work; ilncreasing protective supplies; adding more leave; and improving access and availability of meals. The emergency department responded by purchasing high-quality PPE and other IPC; increasing administrative staff to assist nurses; reducing time spent in high-risk areas; and coordinating with local restaurants to assist in ordering and delivering meals. Discussions have also begun on bonuses (Yang et al 2021).

Russian Nurses Association.

Nurses around the world are experiencing high levels of exposure to potentially psychologically traumatic events, exacerbated by high workloads, violence in the workplace and burnout. Stelnicki et al. (2021) reveal that the cumulative effects of repeated exposure to these types of stressors have the potential to result in poorer mental health and functioning. It should be noted that even before the pandemic began, while the profession has been extraordinarily resilient, there were high levels of poor mental health and wellbeing caused by workplace issues. COVID-19 has simply exacerbated the problem and brought renewed attention on the occupational hazards, staff shortages, lack or resources and limited appropriate training. The harm and potential risks faced by nurses has resulted in a workforce that is leaving the profession at unprecedented rates.

The psychological impacts of COVID-19 on nurses and other healthcare workers are readily apparent. To get through this situation, and to meet the current and future health needs, will require a collective effort to adopt systemic change to lessen or eliminate many of the risk factors affecting the profession. It is time to fully recognise and address the stresses and burdens that nurses bear on behalf of societies. Now is the time to act.

Nursing Standard.



Benefits of caring for the carers



Improving the health of nurses improves the quality of patient care and health outcomes (ILO/WHO 2020).



Meet the obligations of Article 23 of the Universal Declaration of Human Rights (UN 1948).



A high performing organisational culture (ILO/WHO 2020).



A safe, satisfied and healthy workforce is the foundation of a strong and resilient health system.



Improving worker wellbeing has intrinsic value, lowers the costs of occupational harm (estimated at up to 2% of health spending) and contributes to minimising patient harm (estimated at up to 12% of health spending) (de Bienassis, Slawomirski & Klazinga 2021).

Evidence of underinvestment in caring for nurses' psychological health



Nurses experience symptoms of post-traumatic stress disorder (PTSD), depression and anxiety more frequently than the general population even before the pandemic (Stelnicki et al 2021; Doolittle, Anderssen & Perreaux 2020).



Multiple countries report high levels of depression, insomnia, psychological distress, and vicarious traumatisation related to COVID-19 (Tan et al. 2020; Lai, Ma & Wang 2020; Li et al. 2020). The global average prevalence of mental health problems for PTSD, anxiety, and depression was 49% (Saragih et al 2021).



Health workers have been over-represented in terms of COVID-19 infections and mortality, as well as having physical and mental strain caused by the demands of the ongoing COVID-19 crisis (de Bienassis, Slawomirski & Klazinga 2021).



Nurses are facing stigma and discrimination all over the world (Bagcchi 2021).



Child and Adolescent Health Service, Western Australia.

Expected outcomes of investing in the health and wellbeing of nurses

- A strong resilient and high-performing health system enabled by health worker wellbeing
- Improved patient outcomes and experience
- A positive organisational culture that enhances job satisfaction thereby improving the recruitment and retention of nurses
- Meeting the obligations as outlined in Article 23 of the Universal Declaration of Human Rights
- Improved return on investment by lowering absenteeism rates, reduced workers compensation, greater productivity and higher performance

Actions required for successful delivery



Nurses and professional bodies

- · Communicate with colleagues and check in with each other
- Provide additional support to staff, early career nurses and students
- Seek opportunities to recognise contributions, boost each other's wellbeing
- Build and support a team environment and positive workplace culture
- Advocate for the resources required to treat and care for the emotional and psychosocial needs of nurses and other healthcare workers
- · Lead and participate in the design and development of plans and policies to support health and wellbeing
- Incorporate nurses' health and wellbeing in undergraduate programmes
- Prioritise one's own health and wellbeing by maintaining healthy behaviours and attitudes



Public

- Show support for nurses and other healthcare workers
- Demand a system that values the health and wellbeing of nurses



Health service providers

- Invest in safe staffing levels and adequate resources to enable a safe working environment
- Prioritise the needs of nurses by providing provisions such as short duty and adequate rest hours, sufficient protective supplies, online support services and due recognition (Varghese et al. 2021)
- Communicate regularly, openly and honestly with staff
- Monitor and review the health and wellbeing of healthcare workers while being vigilant for signs of psychological distress
- Provide supportive environments that enable nurses to pursue access to care required
- Destigmatise seeking mental health support
- Build and invest in a positive organisational culture including equipping members and teams with a greater degree of control over their work
- Recognise and celebrate the contributions of nurses and other healthcare workers
- Undertake comprehensive organisational risk assessments
- Research and implement best practices for caring for the health and wellbeing of staff, e.g. flexible working arrangements, staff rotation, etc.
- Influence and enable access to mental wellbeing and social support services for health workers, including advice on work-life balance and risk assessment and mitigation to tackle burnout, enhance wellbeing and promote resilience (WHO 2021c)
- Renumerate and reward nurses fairly for their work



Governments

- · Update disaster preparedness plans to have provisions to address mental health of nurses
- Greater investment in addressing workforce shortages
- Support and endorse the WHO Health Worker Safety Charter by signing up to it and supporting its implementation
- Plan and invest in appropriately supporting the health and wellbeing of nurses and other health professionals
- Develop and implement national policies and programmes for the occupational health and safety
 of health workers
- · Increase efforts to de-stigmatise mental health and combat the stigmatisation of frontline healthcare workers
- Adequately resource and remunerate (including formal work entitlements such as sick leave) to ensure that workers are not harmed by their work
- Build mental health services to meet current and future demand
- Create national knowledge bases (information, tools, and resources) designed to improve the resilience and wellbeing needs of workers and their leaders in times of crisis, recovery, and rebuilding
- Ensure adequate staffing levels in healthcare systems and fair pay for workers (Sovold et al. 2021)
- Engage frontline healthcare workers in the political decision-making processes and in co-creating new policy development (Sovold et al. 2021)



International organisations

- Unite to support the health and wellbeing of healthcare workers
- Advocate for countries to agree on a care compact to protect the healthcare workers' rights, decent work and practice environments
- Support the uptake of the WHO's Self-Help Plus by countries
- Advocate for a whole of society approach to mental health
- Provide countries with guidance, evidence and best practices in caring for the health and wellbeing of nurses
- Review and update the ILO Nursing Personnel Convention to include the mental health of nurses
- Monitor, report and provide status updates on the health and wellbeing of nurses and other healthcare workers to the World Health Assembly



Good health, good care, good nurses—a prescription for a prosperous world

The first section has provided justification and evidence about the need to urgently invest in nursing and respect the rights of nurses. This section builds on that by demonstrating the vitally important role that nurses have in addressing global health challenges.

COVID-19 continues to dominate much of the news cycle, social media and public discourse. At the time of writing, the death toll is over six million people with more than 490 million people diagnosed with it (worldometer 5 April 2022). It is also estimated that well over 180,000 healthcare workers have lost their lives to the virus. Whilst COVID-19 is affecting every aspect of global health and development now, there are many other priorities that deserve our attention. The following are six key examples of global health priorities and how nurses will be pivotal in addressing them. It provides a concrete rationale for the reasons we need to invest in nurses and respect their rights.

United Nations Sustainable Development Goals (SDGs) and Universal Health Coverage (UHC)

COVID-19 is having a disproportionate effect on the poor and vulnerable. This ranges from economic recovery to unequal access to vaccines; from widening job and income losses to divergence in learning. The World Bank (Gopalakrishnan 2021) recently reported that extreme poverty rose for the first time in over 20 years meaning that 100 million more people are living on less than \$2 a day. WHO has also stated that the pandemic is likely to stall progress towards UHC (WHO 2021d). Key examples of this include the disruption to childhood immunisation with an estimated 23 million children missing out on routine vaccines; and more than half of countries having disruptions to services providing screening and treatment of diabetes, cancer, and high blood pressure.

At the current trajectory, the SDGs and UHC targets will not be achieved by 2030. There needs to be renewed commitment and action to ensure that 'no one is left behind.' Part of this means further investment in health and social support, with increased



Multidisciplinary teams revitalising Primary Health Care in rural areas —Samoa

Samoa is a population of approximately 200,000 people and faces significant health challenges with the rise in noncommunicable diseases. In an innovative attempt to reduce the non-communicable disease burden, Samoa has deployed multidisciplinary teams to engage with communities and integrate Primary Health Care services with rural facilities and district hospitals. Nurses in particular will take on crucial roles within the multi-disciplinary team and play a critical role in the service delivery chain including screening, early detection, chronic disease management, infectious disease control, immunisation, and community outreach (World Bank 2021).

Athit Perawongmetha, CDC. Vietnam, this male nurse was in the process of administering flu vaccine to a young boy.

focus on primary healthcare and models of care that provide essential care closer to home.

Nurses are the largest group of health professionals providing essential healthcare around the world. Even prior to the pandemic, there were not enough nurses to meet the development goals. The SOWN report highlighted a global shortage of six million nurses. With the impact of COVID-19, this number could be as high as 13 million within the next few years (ICN 2021a). Addressing this issue to ensure that nurses can deliver on their commitment to the health of individuals and communities requires investment in nursing and respect for their rights.

>1/2 billion

People are pushed or pushed further into extreme poverty due to healthcare costs.
(WHO 2021d)

Nurses by their ingenuity, knowledge and understanding of the patient need, provide an incredible return of investment. When communities go into COVID lockdown, large numbers of people lose access to traditional care to keep them healthy. Reduced access ranges from maternal and newborn care to rehabilitation, communicable to noncommunicable services to treat and prevent ill health. Despite the disruption to traditional services, nurses have been working hard to maintain or improve access to quality and affordable health services. Nurses have been coordinating care, establishing telemedicine clinics, developing apps and providing other services closer to where people live. It is hoped that the innovations developed throughout the pandemic will not only be sustained into the future but can be capitalised on to progress new service delivery models. This will improve global health by broadening access to known interventions, improving cost-effectiveness of treatments, preventing disease, slowing the ageing process and improving the patient experience of care.

The prioritising of health as an investment

Health is often taken for granted until something goes wrong. Over the last century, there have been major advancements in sanitation, hygiene, nutrition and healthcare. As the health of populations improves, so too has economic growth and prosperity. Health promotes economic growth by expanding the labour force and boosting productivity while also delivering enormous social benefits. Economists (Manyika, Smit & Woetzel 2020) have highlighted that there has been a focus on healthcare cost containment rather than seeing it as an investment in societies. The pandemic has clearly demonstrated the importance of just how much health matters to individuals, communities and the global economy. Initial estimates from the International Monetary Fund estimate the cost of the pandemic at approximately \$12.5 trillion (Gripas 2022).

COVID-19 is a small element of broader health issues. There are many other health issues that are coming into the spotlight such as diabetes.

In April 2021, the WHO reported some alarming statistics related to diabetes, including that the risk of premature death from diabetes is rising; over the last 40 years, the number of people with diabetes has quadrupled; a high proportion admitted to hospitals who are severely ill from COVID-19 also have diabetes

as a comorbidity (WHO 2021e). This demonstrates the need for even more urgent action to prevent and treat diabetes.

Diabetes is just one part of the noncommunicable disease (NCD) burden. NCDs claim the lives of 41 million people each year which is equivalent to 71% of all deaths.

If the world could reimagine health and healthcare, there are amazing opportunities to improve social cohesion and economic prosperity. By implementing and using interventions that already exist, there could be a 40% reduction in the global disease burden resulting in a \$12 trillion boost to the global economy (Manyika, Smit & Woetzel 2020). These gains can be achieved by creating cleaner and safer environments; encouraging and supporting healthier behaviours; addressing the social determinants of health; enabling access to vaccines; and improving access to evidence-based treatments and therapies.

These solutions can only be realised with investment in the health workforce, particularly nursing. Further investment meant ensuring that there are sufficient numbers of nurses who are 'fit for purpose' and 'fit to practice.' It also means that nurses need to be involved in more than just clinical practice, they need to be involved and be leaders in high level decision making, influencing government policies and regulations.

\$12.5 trillion

The estimated cost impact of COVID-19.

40%

Reduction in the global burden of disease by using known interventions.

\$12 trillion (USD)

The benefits to the global economy by 2040 by investing in health.

70%

Of all deaths globally relate to an NCD.

Undergraduate education saves lives and money—Poland

Research in Poland has found that having nurses with higher education brings significant cost benefits to the health system and reduces inpatient mortality. Increasing the number of nurses with an undergraduate degree led to a 3% base cost savings and reduced mortality from 9.42 death per 1,000 inpatient bed days to 8.41 per 1,000 inpatient bed days (Wieczorek-Wojcik et al. 2022).

Mental health and wellbeing

In July 2021, the seven-time Olympic artistic gymnast Simone Biles withdrew from the Tokyo Olympic games due to concerns about her mental health (Bregman 2021). This event became a defining theme of the games and would spark a much-needed global conversation. A world-wide focus on mental health is long overdue, but it is simply not enough to discuss and raise awareness, positive action must be taken. Dr Tedros Adhanom Ghebreyesus, Director-General of the WHO, when reviewing the current state of Mental Health stated,

"It is extremely concerning that, despite the evident and increasing need for mental health services, which has become even more acute during the COVID-19 pandemic, good intentions are not being met with investment... We must dramatically accelerate the scale-up of investment in mental health, because there is no health without mental health."

(WHO 2021f).

The pandemic and its effects of trauma, stress and isolation will add to the urgency of addressing this global health priority. There will be a tremendous need for healthcare services to address PTSD, depression, anxiety, addictions, psychosis and much more. This will only continue to grow as the pandemic lingers.

The WHO Mental Health Atlas (2021g) states that "human resources are the most valuable asset of any mental health service". Health professionals, particularly nurses, are responsible for health promotion and the prevention, treatment and rehabilitation of mental health conditions. **Globally, nurses represent 44% of the mental health workforce**. Mental health nursing focuses on the care of people with mental illness or distress. Mental health nurses work with their clients to promote psychological wellbeing, emotional health and physical wellbeing.

Despite the enormous benefits that mental health nurses can provide, they are severely under-resourced. This is similar to the entire specialty as only **2.1% of governments health budget is spent on mental health** (WHO 2021g). Access to quality and affordable services is increasingly difficult. At a time when the pandemic is highlighting the need for mental health support, countries need to invest in mental health. As the 2021 campaign slogan stated: "Mental healthcare for all: let's make it a reality" (WHO 2021h).

Reducing the stigma of mental health in high schools—Australia

In Victoria, all high schools receive funding for a mental health practitioner. Tania is a mental health school nurse whose work has been very beneficial to the school. The most notable benefit is the extra level of wellbeing support in the school that has helped break the stigma surrounding mental health issues. Part of this has been the building of a community to reduce the feeling students have of being alone. Whilst Tania has a role in early identification and intervention of mental health issues for students, she also supports the training and development of teachers, building their capability to identify mental health issues within their classrooms. This work has resulted in a collaborative and whole school approach to improving mental health and wellbeing (Victoria State Government 2021).

970 million

People suffering from mental illness in 2019. (WHO 2021g)

2.1%

The amount of government health budget spent on mental health. (WHO 2021g)

New and persistent humanitarian crises

In 2022, along with the ongoing pandemic, we are facing a humanitarian crisis in Ukraine. In the first week, more than a million refugees from Ukraine crossed borders into neighbouring countries, and many more are on the move both inside and outside the country (UNHCR 2022). According to the United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA 2022), there are ongoing humanitarian crises in the Democratic Republic of Congo (with over 27 million people in need), in Ethiopia (over 25 million), in Afghanistan (over 24 million, and in Yemen (over 20 million) to name just a few. These unacceptable numbers represents children, women and men facing violent attacks, loss of homes, food insecurity and the breakdown of health services, with health facilities left without supplies and health workers.

In 2022, it is expected that there will be a record number of people requiring humanitarian aid worldwide—274 million people (UNOCHA 2022). We are witnessing a number of troubling trends, including forced displacement, higher levels of food insecurity through famine, the concentration of vaccine inequity, a surge in conflict and violence, and the growing intersection between climate, hunger and conflict (UNOCHA 2022).

At the forefront of providing healthcare in humanitarian crises are nurses. In fact, it is estimated that their impact cannot be matched by any other health professional.

According to Médecins Sans Frontières (MSF), nurses in general deliver 80 to 90% of healthcare worldwide (Gilday 2018). Nurses working in humanitarian crisis settings provide critical healthcare to people who are in emergency situations. Responding to catastrophic events such as natural disasters and armed conflicts, these nurses apply their expertise in providing wholistic care under the most challenging conditions.

ICN has produced <u>Core Competencies in Disaster Nursing</u> which outline what nurses should know and be able to do for the effective prevention, preparedness, response and recovery from disasters.

Dealing with mass casualty incidents—Afghanistan

In October 2021, a suicide bomber killed and injured hundreds of worshippers inside a packed mosque in Kunduz, Norther Afghanistan. Multiple serious casualties were taken to the MSF trauma centre. This set off a well-rehearsed response to the management of mass casualties, where teams are organised to manage a major influx of patients to save as many lives as possible. It is estimated that in this event, 100 major casualties with severe shrapnel injuries arrived in two hours. Among many other roles and responsibilities, nurses are often responsible for triaging the patients, ensuring that priority is given to those most likely to survive. Difficult and complex decisions are made by extremely courageous and skilful nurses (Feinmann 2022)

274 million

People in 2022 are expected to need humanitarian aid. This is a 17% increase from the record number in 2021.

(UNOCHA 2022)



Benedikt Van Loo. Disaster relief, Haiti.

Gender equity contributions and challenges for women

Health professionals who are the backbone of the pandemic response, have given so much over a long period of time to provide healthcare to individuals and communities. The resilience of health systems and the lives that have been saved are in no small part due to the enormous contribution of women who represent 70% of the health and social workforce. In addition, it has been women who have led a number of scientific breakthroughs (WHO 2021i).

However, at the same time, women and girls are facing heightened health challenges. The pandemic has exacerbated existing inequalities and disrupted access to vital health and support services. A recent study (WHO 2021j) has shown that 1 in 3 women have now experience physical or sexual violence by an intimate partner or sexual violence from a non-partner. Women have lost their jobs at higher rates than men, and 47 million additional women have been pushed into extreme poverty. Many girls have also lost access to education due to school closures and child pregnancies have increased as a result. It is possible, that the gender inequality gap will be widened. And in health, gender related barriers in jobs and disruption to education may hinder the growth of the health workforce for years to come. These factors, particularly violence against women should be seen as a global public health threat.

This issue is particularly relevant to nursing. Nursing is a highly female dominant profession (approximately 90% of the nursing workforce is female) and it provides the world with an interesting opportunity. The SDGs emphasise the importance of gender equality as a means of progressing social and economic development. Vitally important to this is improving access for women to high quality healthcare and strengthening financial security. The Triple Impact report by the All-Party Parliamentary Group on Global Health (2016) showed that progress in this area is possible through investing in nursing. "Investing in nursing and raising its status will have the additional effects of empowering more women socially, politically and economically, and helping establish their status as important figures in their local communities." To summarise, the employment of nurses brings benefits in both health and gender equality.

736 million

women (1 in 3) are subjected to physical or sexual violence by an intimate partner or sexual violence from a non-partner. (WHO 2021)

Nursing science providing real time solutions

Nurse scientists are undertaking critical research in the battle against COVID-19. This ranges from mitigating the spread of COVID-19 through to the study of treating and caring for people and populations who have contracted the virus. Nurse scientists also translate empirical evidence into actionable solutions that can be used by health professionals around the world. Nurses are uniquely placed to study 'big data' as they can apply it to real-world clinical phenomena. There is also a growing trend where nurses have extended their research to colleagues worldwide. They have been effectively working with different regions to study the differences in treatment and outcome. This research often includes a focus on culture, psychological distress and the social determinants of health. Clearly, nurse scientists are well placed to study human stress responses to adverse events: they are making valuable contributions to health and wellbeing on a daily basis (Pickler et al. 2020).

A lot of things stop due to pandemics... violence is not one of them—Forensic nurses

In 2021, Dr Tedros Adhanom Ghebreyesus stated "Violence against women is endemic in every country and culture." (WHO 2021j) This has enormous impacts on both women's physical and mental health. In many countries, forensic nurses have been an effective solution in addressing some of the health needs associated with violence against women. Forensic nurses are registered or advanced practice nurses who have received specific education and provide specialised care for patients who are experiencing acute and long-term health consequences associated with victimisation or violence, and/or have unmet evidentiary needs relative to having been victimised or accused of victimisation. Over the last two years, many of these services have been disrupted resulting in poorer access to services by women. As a result, forensic nurses adjusted their models of care and established clinics outside of the hospitals and closer to community services. In addition, they also developed virtual clinics. These models aim to improve access to care despite the many challenges of lockdowns (Nash 2021).

Global solidarity for health equity

Over the last two years, the scientific community defied even the most ambitious expectations and rolled out a COVID-19 vaccine in record time. But that was not the only vaccine that had a major impact in 2021. In October, the first authorised malaria vaccine was approved for use and is being distributed in countries across the African region. This vaccine reduces the risk of contracting malaria by 40% and will save hundreds of thousands of children's lives every year. Other major achievements include the introduction of a licensed Ebola vaccine and the launch of a new global plan to tackle meningitis (WHO 2021i). However, there are still a number of hurdles before those who need these vaccines will be able to access them. A global effort requires more than just funding. It requires cooperation, logistics, storage facilities, processes, document and most importantly, someone to administer the vaccines safely and effectively.

Many of these elements have been disrupted or poorly implemented in some regions during the pandemic. The evidence for this is the inequitable distribution and access to vaccines. The United Nations reports that as many as eight times as many boosters are administered globally every day than are primary doses in low-income countries. Vulnerable people remain most at risk. In December 2021, it was estimated that only 1 in 4 healthcare workers in Africa had been fully vaccinate despite serving on the pandemic's front lines (Dodson 2021).

The pandemic has exposed weaknesses in global health security. For much of the last two years unity seems to have been in crisis mode. Wealthier countries have been hoarding vaccines whilst others struggle to gain access. This is not just limited to vaccines but also to essential medicines, such as insulin and to other technologies. To overcome this crisis and prevent the next one requires commitment and action towards solidarity between nations, institutions, communities and individuals. As Ursula von der Leyen, President of the European Commission, and Dr Tedros Adhanom Ghebreyesus, WHO Director General, stated, "A global pandemic requires a world effort to end it—none of us will be safe until everyone is safe." (Ghebreyesus & von der Leyen 2020)

The global nursing community has been a leader in the field of bringing countries together to respond to crises. Decades before the establishment of the United Nations and the WHO, nurses were working collaboratively to address public health issues by sharing evidenced based practice and innovative models of care. The nursing professions has grown and developed through an approach that seeks to evolve together. Today, this partnership continues with the sharing of resources, best practices, innovative models of care, nursing research and education.

1 in 4

Rachel House. Nurse Rina, Indonesia. Health care workers in Africa have been fully vaccinated. (United Nations 2021)



Marko Kokic, ICRC. (Afghanistan) Kandahar, Mirwais Hospital, paediatric ward. The ICRC Teaching Nurse checks on a child.

Since the start of the pandemic, ICN has consistently championed the roles and the rights of nurses. Now, in this International Nurses Day report, we have provided a blueprint and resource for what is necessary to take the whole world towards a brighter future for healthcare everywhere. It will not be easy: the damage the pandemic has done has been devastating, not just to all the individuals directly affected by it, but to the entire population of the world, to our societies and economies, and to the healthcare systems that we all rely on.

This IND report can be used as a toolkit of actions needed to implement the directions and policy priorities of the SDNM. All the actions contained within are consistent with the SDNM and the recommendations of the State of the World's Nursing report. In addition, as shown by the Sustain and Retain in 2022 and Beyond report, the safety, health and wellbeing of nurses is in crisis, therefore the report also includes specific actions to address these concerns.

The world will not drift out of the pandemic and into a better future. What is needed is concerted government action that follows a bold, brave and decisive ten-year plan. A plan that is fully funded, has clearly defined actions and measurable outcomes, and will support and strengthen nurses and the whole healthcare workforce to deliver health for all is required. In this document, ICN has revealed the road map that needs to be followed: it is now up to governments to set their countries on the way to recovery by investing in nurses and nursing to make better health a reality for everyone everywhere.

References

Aiken, L.H. (2018). Evidence-based Nurse Staffing: ICN's New Position Statement. *International Nursing Review*. 65(4): p. 469-471.

Aiken, L.H. et al. (2014). 'Nurse staffing and education and hospital mortality in nine European: a retrospective observational study', *The Lancet*, 383(9931): p. 1824-1830.

Allen, S. (2021). 2022 Global Health Outlook. Are we finally seeing the long promised-transformation? Available at: https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Life-Sciences-Health-Care/gx-health-care-outlook-Final.pdf. [Accessed 10 Jan. 2022].

All-Party Parliamentary Group on Global Health (2016). Triple Impact – how developing nursing will improve health, promote gender equality and support economic growth. Available at: https://globalhealth.inparliament.uk/sites/globalhealth.inparliament.uk/files/2020-12/DIGITAL%20APPG%20Triple%20Impact%20%283%29.pdf. [Accessed 24 Feb. 2022].

Audet, L.A., Bourgault, P. and Rochefort, C.M. (2018). 'Associations between nurse education and experience and the risk of mortality and adverse events in acute care hospitals: A systematic review of observational studies'. *International Journal of Nursing Studies*. 80: p. 128-146.

Bagcchi, S. (2020). 'Stigma during the COVID-19 pandemic'. Lancet Infectious Diseases. 20(7): p. 782.

Ball, J.E., et al. (2018). Post-operative mortality, missed care and nurse staffing in nine countries: A cross-sectional study. International Journal of Nursing Studies. 78: p. 10-15.

Boyko, J.A., Carter, N. and Bryant-Lukosius, D. (2016). 'Assessing the Spread and Uptake of a Framework for Introducing and Evaluating Advanced Practice Nursing Roles'. Worldviews Evid Based Nurs. 13(4): p. 277-84.

Bregman, S. (2021). 'Exclusive! Simone Biles on sparking mental health conversation: "We're going through it together.". Available at: https://olympics.com/en/news/simone-biles-exclusive-mental-health-advice-future. [Accessed 24 Feb. 2022].

Brooke, J., Fu, K., and Virani T. (2021). Overcoming systemic barriers to provide safe, quality home care during the COVID-19 pandemic. ICN Congress, Nov., Virtual.

Brooks Carthon, J.M., et al. (2019). Association of Nurse Engagement and Nurse Staffing on Patient Safety. J Nurs Care Qual. 34(1): p. 40-46.

Buchan, J. and Catton, H. (2020). COVID-19 and the international supply of nurses. Available from: https://www.icn.ch/system/files/documents/2020-07/COVID19_internationalsup-plyofnurses_Report_FINAL.pdf. 2020 [Accessed 30 Nov. 2020]ited 2020 30 November];

Buchan, J., Catton, H. and Shaffer, F.A. (2022). Sustain and Retain in 2022 and Beyond: The global nursing workforce and the COVID-19 pandemic. International Centre on Nurse Migration. Available at: https://www.icn.ch/publications. [Accessed 24 Feb. 2022].

de Bienassis, K., Slawomirski, L. and Klazinga N. (2021). The Economics of Patient Safety Part IV: Safety in the Workplace - Occupational safety as the bedrock of resilient health systems, OECD. Available at: https://www.oecd-ilibrary.org/social-issues-migration-health/the-economics-of-patient-safety-part-iv-safety-in-the-workplace-b25b8c39-en. [Accessed 24 Feb. 2022].

Dodson, K. (2021) COVID-19 dominated global health in 2021. Will 2022 be the same? [Blog]. United Nations Foundation. Available at: https://unfoundation.org/blog/post/covid-19-dominated-global-health-in-2021-will-2022-be-the-same/. [Accessed 24 Jan. 2022].

Doolittle, R., Anderssen, E. and Perreaux, L. (2020). 'In Canada's coronavirus fight, front-line workers miss their families, fear the worst and hope they're ready.' *The Globe and Mail*. 4 April. Available at: https://www.theglobeandmail.com/canada/article-in-canadas-coronavirus-fight-front-line-workers-miss-their-families/. [Accessed 24 Feb. 2022].

Fawaz, M.A., Hamdan-Mansour, A.M. and Tassi, A. (2018). 'Challenges facing nursing education in the advanced healthcare environment'. *International Journal of Africa Nursing Sciences*. 9: p. 105-110.

Feinmann, J. (2022). The BMJ appeal 2021-22: "Doctors must raise their voices to advocate for those in Afghanistan". BMJ [online], 376:o78.

Geng, S., et al. (2021). Health Care's New Reality Is Dynamic, Digital—and Here to Stay. Boston Consulting Group. Available at: https://www.bcg.com/publications/2021/dynamic-and-digital-new-reality-for-health-care. [Accessed: 10 January 2022].

George, J. and K. Batra (2021). Effect of a Community Based Nurse Led Intervention in improving Cervical Cancer behavour among women - a randomised controlled trial, International Council of Nurses Congress. November, Virtual.

Ghebreyesus, T.A. and von der leyen, U. (2020c).'A global pandemic requires a world effort to end it – none of us will be safe until everyone is safe'. 30 Sept. Available at: https://www.who.int/news-room/commentaries/detail/a-global-pandemic-requires-a-world-effort-to-end-it-none-of-us-will-be-safe-until-everyone-is-safe. [Accessed 25 Jan. 2022].

Gilday, J. (2028). Innovation: A day in the life of a humanitarian nursing team - the start. [Blog]. Doctors Without Borders. 29 Oct. Available at: https://blogs.msf.org/bloggersjosie/innovation-day-life-humanitarian-nursing-team-start. [Accessed 17 Jan. 2022].

Goetz, K., Janney, M. and Ramsey, K. (2011). 'When nursing takes ownership of financial outcomes: achieving exceptional financial performance through leadership, strategy, and execution'. *Nurs Econ.* 29(4): p. 173-82.

Goldberg, S. (2021). *How to use data for better policymaking,* International Council of Nurses Congress. November, Virtual.

Gopalakrishnan, V., et al. (2021). 2021 Year in Review in 11 Charts: The Inequality Pandemic. World Bank Group. Available at: https://www.worldbank.org/en/news/feature/2021/12/20/year-2021-in-review-the-inequality-pandemic. [Accessed 24 Feb. 2022].

Gripas, Y. (2022). 'IMF sees cost of COVID pandemic rising beyond \$12.5 trillion estimate'. Reuters. Available at: <a href="https://www.reuters.com/business/imf-sees-cost-covid-pandemic-rising-beyond-125-trillion-estimate-2022-01-20/#:~:text=WASHINGTON%2C%20Jan%2020%20(Reuters),global%20lender%20said%20on%20Thursday. [Accessed 25 Jan. 2022].

Haque, M., et al. (2020). 'Strategies to Prevent Healthcare-Associated Infections: A Narrative Overview'. Risk management and healthcare policy. 13: p. 1765-1780.

Health Insights (2017). 'The importance of continuing education as a nurse'. *HealthTimes*. Available from: https://healthtimes.com.au/hub/nurse-education/41/guidance/healthinsights/the-importance-of-continuing-education-as-a-nurse/2592/. [Accessed 10 March 2022].

Imbriaco, G., Monesi, A. and Ferrari, P. (2021). Nursing perspectives from an Italian ICU. *Nursing*, 51(1): p. 46-51.

Institute of Medicine (US) Committee on the Robert Wood Johnson Foundation Initiative on the Future of Nursing (2011). *The Future of Nursing: Leading Change, Advancing Health*. Natioanl Acadmies Press.

International Council of Nurses (2020). *Guidelines on Advanced Practice Nursing 2020*. Available at: https://www.icn.ch/system/files/2021-07/ICN_APN%20Report_EN.pdf. [Accessed 10 March 2022].

International Council of Nurses (2021a). The Global Nursing Shortage and Nurse Retention. Available at: https://www.icn.ch/sites/default/files/inline-files/ICN%20Policy%20Brief_Nurse%20Shortage%20and%20Retention.pdf. [Accessed 21 Nov. 2021].

International Council of Nurses (2021b). The ICN Code of Ethics for Nurses. Available at: https://www.icn.ch/system/files/2021-10/ICN_Code-of-Ethics_EN_Web_0.pdf. [Accessed 9 March 2022].

International Council of Nurses (2022). "New report calls for global action plan to address nursing workforce crisis and prevent an avoidable healthcare disaster". ICN Press release, 24 Jan.. Available at: https://www.icn.ch/news/new-report-calls-global-action-plan-address-nursing-workforce-crisis-and-prevent-avoidable. [Accessed 24 Feb. 2022].

International Labour Organization (2021). 'ILO/WHO partnership to protect health workers'. 5 May. Available at: https://www.ilo.org/budapest/whats-new/WCMS_789882/lang--ja/index.htm. [Accessed 18 Nov. 2021].

International Labour Organization / World Health Organization (2020). Caring for those who care: National Programmes for Occupational Health for Health Workers. Available at: https://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---sector/documents/publication/wcms_824090.pdf. [Accessed 18 Nov. 2021].

Kurth, A.E., et al. (2016). Investing in Nurses is a Prerequisite for Ensuring Universal Health Coverage. *J Assoc Nurses AIDS Care*, 2016. 27(3): p. 344-54.

 $\label{lambda} Lai, J., Ma, S. and Wang Y. (2020). Factors associated with mental health outcomes among health care workers exposed to coronavirus disease 2019. \textit{JAMA network open, 3}(3):e203976.$

Li, Z., et al. (2020). Vicarious traumatization in the general public, members, and non-members of medical teams aiding in COVID-19 control. *Brain, behavior, and immunity*, 88:916-919.

Marceau, R., et al. (2021). 'A Critical Analysis of Funding Models: Sustainability of the Nurse Practitioner Role in Canada'. *The Journal for Nurse Practitioners*. 17(9): p. 1112-1117.

Maurer, P. (2021). 5 years on, there has not been significant change: access to health care continues to be impeded. International Committee of the Red Cross. 5 May. Available at: https://www.icrc.org/en/document/5-years-there-has-not-been-significant-change-access-health-care-continues-be-impeded. [Accessed 8 Feb. 2022].

McHugh, M.D. and Lake, E.T. (2010). 'Understanding clinical expertise: nurse education, experience, and the hospital context'. Research in nursing & health, 2010. 33(4): p. 276-287.

McHugh, M.D., et al. (2016). 'Better Nurse Staffing and Nurse Work Environments Associated With Increased Survival of In-Hospital Cardiac Arrest Patients'. Med Care. 54(1): p. 74-80.

McHugh, M.D., et al. (2021). 'Effects of nurse-to-patient ratio legislation on nurse staffing and patient mortality, readmissions, and length of stay: a prospective study in a panel of hospitals'. Lancet, 397(10288): p. 1905-1913.

Nash, K. (2021). A lot of things stop due to pandemics... violence isn't one of them: How nurses continued to provide medical-forensic healthcare to patients impacted by violence during the COVID-19 crisis, International Council of Nurses Congress. November, Virtual.

National Academy of Medicine (2021). 'The Future of Nursing 2020-2030: Charting a Path to Achieve Health Equity'. Washington DC: The National Academies of Sciences, Engineering & Medicine.

Ng, L., Eley, R. and Tuckett, A. (2016).' Exploring factors affecting registered nurses' pursuit of postgraduate education in Australia: Postgraduate education in Australia'. Nursing & Health Sciences, 18(4):435-441.

OECD (2016). Health Workforce Policies in OECD Countries. Available at: https://www.oecd.org/health/health-systems/Health-workforce-policies-in-oecd-countries-Policy-brief.pdf. [Accessed 21 Nov. 2021].

OECD (2019). Recent Trends in International Migration of Doctors, Nurses and Medical Students. Available at: https://www.oecd.org/health/recent-trends-in-international-migration-of-doctors-nurses-and-medical-students-5571ef48-en.htm. [Accessed 24 Feb. 2022]

Pickler, R.H., et al. (2020). Nursing Science and COVID-19. Nurs Outlook. 68(5): p. 685-688.

Pittman, P., et al. (2012). Investing in Nurse Education: Is there a Business Case for Health Care Employers? George Washington University.

Poirier , S. (2021).'Creating a care system for healthy ageing'. International Council of Nurses Congress. November, Virtual.

Rainbow, J., Littzen, C. and Bethel, C. 'Nurses don't want to be hailed as 'heroes' during a pandemic – they want more resources and support'. The Conversation. Available at: https://theconversation.com/nurses-dont-want-to-be-hailed-as-heroes-during-a-pandemic-they-want-more-resources-and-support-167763. [Accessed 21 Nov. 2021].

Remes, J. et al. (2020). Prioritizing health: A prescription for prosperity, McKinsey. Available at: https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/prioritizing-health-a-prescription-for-prosperity. [Accessed 24 Feb. 2022]

Resolve to Save Lives, et al. (2021). Protecting Health Care Workers: A Need for Urgent Action. 2021 [Accessed 2021 18 November]; Available at: https://preventepidemics.org/wp-content/uploads/2021/01/RTSL_Protecting-Health-Care-Workers.pdf.

Rowles, J. (2021). The global history and contributions of the nurse anesthetist, International Council of Nurses Congress. November, Virtual.

Saragih, I.D., et al. (2021). Global prevalence of mental health problems among healthcare workers during the Covid-19 pandemic: A systematic review and meta-analysis. *Int J Nurs Stud*, 2021. 121: p. 104002.

Institute of Medicine (US) (2011). The Future of Nursing: Leading change, advancing health. Committee on the Robert Wood Johnson Foundation Initiatives on the Future of Nursing, at the Institute of medicine. Washington DC: National Academies Press. PMID: 24983041.

Socha-Dietrich, K. and Dumont, J. (2021).' International migration and movement of nursing personnel to and within OECD countries - 2000 to 2018: Developments in countries of destination and impact on countries of origin.' OECD Health Working Papers, No. 125, OECD Publishing: Paris. Available at: https://www.oecd.org/health/international-migration-and-movement-of-nursing-personnel-to-and-within-oecd-countries-2000-to-2018-b286a957-en.htm. [Accessed 18 Nov. 2021].

Sovold, L.E., et al. (2021). Prioritizing the Mental Health and Well-Being of Healthcare Workers: An Urgent Global Public Health Priority. Front Public Health. 9: p. 679397.

Stelnicki, A.M., Carleton, R.N. and Reichert, C. (2021). Nurses' Mental Health and Well-Being: COVID-19 Impacts. Can J Nurs Res, 52(3): p. 237-239.

Stimpfel, A.W., et al. (2016). "Hospitals Known for Nursing Excellence Associated with Better Hospital Experience for Patients". *Health Serv Res.* 51(3): p. 1120-34.

Tan, B., et al. (2021). Psychological Impact of the COVID-19 Pandemic on Health Care Workers in Singapore. *Annals of Internal Medicine*, 173(4).

Turner, K. (2021). COVID-19 situation administration: An experience of a nursing college in Thailand, International Council of Nurses Congress. November, Virtual.

Twigg, D.E., et al. (2015). "Is there an economic case for investing in nursing care--what does the literature tell us?" *J Adv Nurs.* 71(5): p. 975-90.

Twigg, D. and McCullough, K. (2014). "Nurse retention: a review of strategies to create and enhance positive practice environments in clinical settings". Int J Nurs Stud. 51(1): p. 85-92.

UNICEF (2021). 'No-one is safe until everyone is safe – why we need a global response to COVID-19'. 23 May. Available at: https://www.unicef.org/press-releases/no-one-safe-until-everyone-safe-why-we-need-global-response-covid-19. [Accessed 10 Jan. 2022].

United Nations (1948). *Universal Declaration of Human Rights*. Available at: https://www.un.org/en/about-us/universal-declaration-of-human-rights.

United Nations (2021). *Our Common Agenda* – Report of the Secretary-General. United Nations: New York. Available at: https://www.un.org/en/content/common-agenda-re-port/ [Accessed 1 March 2022].

United Nations (2022). 'COVID's pushed us 'further off course' from Global Goals: Mohammed'. 3 Feb. Available at: https://news.un.org/en/story/2022/02/1111252. [Accessed 14 February].

United Nations High Commission for Refugees (2022). operational Data Portal. Ukraine refugee situation. [Accessed 9 march 2022].

United Nations Office for the Coordination of Humanitarian Affairs (2022). *Global Humanitarian Overview 2022*. United Nations: New York. Available at: https://gho.unocha.org/. [Accessed 9 March 2022]

Varghese, A., et al. (2021). 'Decline in the mental health of nurses across the globe during COVID-19: A systematic review and meta-analysis'. *Journal of Global Health*. 11: p. 05009-05009.

Vento, S., Cainelli, F. and Vallone, A. (2020). 'Violence Against Healthcare Workers: A Worldwide Phenomenon With Serious Consequences'. *Frontiers in Public Health*. 8: 570459.

Victoria State Government (2021). Mental health practitioners in secondary schools. Education and Training Department. Available at: https://www.education.vic.gov.au/school/teachers/health/mentalhealth/Pages/mental-health-practitioners-secondary.aspx. [Accessed 16 Jan. 2022].

Wieczorek-Wójcik, B., et al. (2022). 'Cost-Effectiveness Analysis of Improving Nurses' Education Level in the Context of In-Hospital Mortality'. *International Journal of Environmental Research and Public Health*, 19(2): p. 996.

Wilson, T. (2021). No longer science fiction, AI and robotics are transforming healthcare. Available at: https://www.pwc.com/gx/en/industries/healthcare/publications/ai-robotics-new-health/transforming-healthcare.html. [Accessed 10 Jan. 2022].

The World Bank (2021). Samoa Deploys Multidisciplinary Teams to Revitalize Primary Health Care in Rural Areas. Available at: https://www.worldbank.org/en/programs/multidonor-trust-fund-for-integrating-externally-financed-health-programs/brief/samoa-deploys-multidisciplinary-teams-to-revitalize-primary-health-care-in-rural-areas. [Accessed 15 Jan. 2022].

World Health Organization (2016). Working for health and growth: investing in the health workforce. High-Level Commission on Health Employment and Economic Growth, WHO: Geneva. Available at: https://www.who.int/publications/i/item/9789241511308. [Accessed 1 March 2022].

World Health Organization (2020a), State of the world's nursing 2020: investing in education, jobs and leadership. Available at: https://apps.who.int/iris/han-dle/10665/331677. [Accessed 1 March 2022].

World Health Organization (2020b). Policy Brief: Gender, equity and leadership in the global health and social workforce. Available at: <a href="https://www.who.int/docs/default-source/health-workforce/ghwn-geh-policy-brief-for-consultation.pdf?sfvrsn=f48aa7b_4#:~:text=Women%20may%20hold%2070%25%20of,women%20and%20led%20by%20men.&text=An%20additional%2018%20million%20health,to%20achieve%20UHC%20by%202030. [Accessed 28 Nov. 2021].

World Health Organization (2020c). Global progress report on WASH in health care facilities. Fundamentals first. Available at: https://www.who.int/publications/i/item/9789240017542. [Accessed 1 March 2022].

World Health Organization (2021a). Global strategic directions for nursing and midwifery 2021-2025. Available at: https://www.who.int/publications/i/item/9789240033863. [Accessed 1 March 2022].

World Health Organization (2021b). 'Health and Care Worker Deaths during COVID-19'. Available at: https://www.who.int/news/item/20-10-2021-health-and-care-worker-deaths-during-covid-19. [Accessed 18 Nov. 2021].

World Health Organization (2021c). Global patient safety action plan 2021–2030: towards eliminating avoidable harm in health care. Available at: https://www.who.int/teams/integrated-health-services/patient-safety/policy/global-patient-safety-action-plan. [Accessed 1 March 2022].

World Health Organization (2021d). 'More than half a billion people pushed or pushed further into extreme poverty due to health care costs'. Available at: https://www.who.int/news/item/12-12-2021-more-than-half-a-billion-people-pushed-or-pushed-further-into-extreme-poverty-due-to-health-care-costs. [Accessed 1 March 2022].

World Health Organization (2021e). 'New WHO Global Compact to speed up action to tackle diabetes'. Available at: https://www.who.int/news/item/14-04-2021-new-who-global-compact-to-speed-up-action-to-tackle-diabetes. [Accessed 25 Jan. 2022].

World Health Organization (2021f). 'WHO report highlights global shortfall in investment in mental health'. Available at: https://www.who.int/news/item/08-10-2021-who-report-highlights-global-shortfall-in-investment-in-mental-health. [Accessed 15 Jan. 2022].

World Health Organization (2021g). *Mental health atlas 2020*. Available at: https://www.who.int/publications/i/item/9789240036703. [Accessed 1 March 2022].

World Health Organization (2021h). 'World Mental Health Day 2021 - Mental health care for all: let's make it a reality'. Available at: health-care-for-all-let-s-make-it-a-reality. [Accessed 15 Jan. 2022].

World Health Organization (2021). '10 key global health moments from 2021'. Available at: https://www.who.int/news-room/spotlight/10-key-global-health-moments-from-2021. [Accessed 15 Jan. 2022].

World Health Organization (2021j). 'Devastatingly pervasive: 1 in 3 women globally experience violence'. Available at: https://www.who.int/news/item/09-03-2021-devastatingly-pervasive-1-in-3-women-globally-experience-violence. [Accessed 19 Jan. 2022].

Worldometer (2022). COVID-19 Coronavirus Pandemic. Available at: https://www.worldometers.info/coronavirus/. [Accessed 9 March 2022].

Xu, S., Li, D. and Lui, J. (2021). 'Application of multi-mode drug delivery training based on Knowledge-attitude-practice in safety education of new nurses'. International Council of Nurses Congress. November, Virtual.

Yang, B.J., et al. (2021). 'An Exploratory Study on Emergency Department Nurses' Demands Evaluation under COVID-19'. International Council of Nurses Congress. November, Virtual.

Ziegler, E., et al. (2021). 'The response and impact of advanced practice nurses for addressing health and health system needs resulting from the COVID-19 pandemic'. International Council of Nurses Congress. November, Virtual.

