Leveraging nurse practitioner capacities to achieve global health for all: COVID-19 and beyond

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Aim: To argue that nurse practitioners have been under-utilized generally in the current global health environment, creating barriers to achieving universal health coverage and the Sustainable Development Goals.

Background: Nurse practitioners are advanced practice nurses possessing expert knowledge and leadership skills that can be optimized to narrow disparities and ensure access to high-quality health care globally. Nurses worldwide have been challenged to meet global public health needs in the context of COVID-19 (SARS-CoV-2 virus), and there are early indications that nurse practitioners are being called upon to the full extent of their capabilities in the current pandemic.

Sources of evidence: PubMed; Google Scholar; the International Council of Nurses; World Health Organization; United Nations; and the experiences of the authors.

Discussion: Several international reports, nursing and health organizations have called for continued investment in and development of nursing to improve mechanisms that promote cost-effective and universally accessible care. Expanding nurse practitioner scopes of practice across nations will leverage their clinical capacities, policy and advocacy skills, and talents to lead at all levels.

Conclusion: Ongoing empirical data and policy change is needed to enable the full scope and strategic utilization of nurse practitioners across healthcare systems and contexts.

Implications for nursing practice, and nursing and health policy: Widespread education regarding nurse practitioner capacities for interdisciplinary partners, policymakers and the public is needed. Policies that safely expand their roles are critical. Role titles and remuneration reflective of their scope and service are required to lead, sustain and grow the workforce internationally.

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**Aim**

In this paper, we recognize the vital role that advanced practice nurses (APNs) play around the world, innovating practice and helping to reform health care and policies. We have a particular focus on one type of APN, the nurse practitioner (NP). Our aim here is to argue that NPs are under-utilized generally in today’s dynamic healthcare environments and in strategic measures to achieve universal health coverage (UHC) and the Sustainable Development Goals (SDGs), set against the backdrop of a far-reaching and growing global pandemic.

**Background**

In this, the International Year of the Nurse and the Midwife, nurses everywhere are confronted with, and responding to enormous challenges of the COVID-19 (SARS-CoV-2) pandemic, proving their worth, gaining respect and trust, but sadly also suffering the consequences of their work on the frontline with rising rates of health worker infections and mortality. Continued investment in nursing leadership and innovation throughout this global public health emergency will help establish historical worldwide recognition of their unique professional skills and values (Rosa et al. 2020). Nurses have always been at the centre of early detection, triage and health promotion during infectious outbreaks, so it is no surprise they are critical contributors during the COVID-19 pandemic (Turale et al. 2020) and in the world’s acquisition of new skills and knowledge. Further, in most novel infectious diseases, the art and science of nursing care is the mainstay of the treatment plan.

The latter half of the 20th century saw the development and the implementation of a new specialty for the profession, the APN. There has been significant global interest and development of the NP role, especially within high-income countries, for example North America, Europe, the Caribbean, Australia and New Zealand, where education is offered at masters level with the USA moving towards doctoral-level studies (Maier et al. 2017, International Council of Nurses [ICN] 2020). Additionally, many low- and middle-income countries are looking to formally develop the APN role as a response to the disparities in UHC. The recently released ICN Guidelines on Advanced Practice Nursing (ICN 2020a, p.6) define an APN ‘as a generalist or specialised nurse who has acquired, through additional graduate education (minimum masters degree), the expert knowledge base, complex decision-making skills and clinical competencies for Advanced Nursing Practice, the characteristics of which are shaped by the context in which they are credentialed to practice’. These Guidelines focus on the two most common roles of APNs globally: the clinical nurse specialist (CNS) and the NP. The ICN defines an NPs as an APN ‘who integrates clinical skills associated with nursing and medicine in order to assess, diagnose and manage patients in primary healthcare settings and acute care populations as well as ongoing care for populations with chronic illness’ (ICN 2020a, p.6). Further, NPs are subject to the particular scope of ANP which integrates nursing and medicine to meet the holistic needs of their patients and which is regulated in their country of employment.

**Sources of evidence**

PubMed; Google Scholar; the ICN; World Health Organization (WHO); United Nations (UN); and the experiences of the authors.

**Discussion**

**Nurse practitioners and COVID-19**

As the world attends to the health quake that is COVID-19, disparities between nations, rich and poor communities, and the healthy and seriously ill are growing. The ways that densely populated nations from low- to middle-income countries handle these next weeks, months and perhaps years are crucial to the welfare of global public health. Meanwhile, how healthcare systems are leveraging their workforce skills is accelerating not only COVID-19 identification and treatment but also bringing us closer to the ideals of UHC for all people. For example, amid the resource constraints during this pandemic, a number of state-level governments in the United States have suspended the requirement for APNs to hold collaborative practice agreements with physicians, thereby granting nurse anaesthetists and NPs full practice authority. This allows clinicians, such as NPs, to perform at the highest level of their training and competency and respond accordingly to the emerging needs of the public – duties they have been both prepared for and licensed to fulfil. For example, due to acute physician shortages and high patient workloads because of the COVID-19 pandemic in the United States, NPs have stepped up to fill vital roles in patient care (Sampedro et al. 2020).

There is no doubt that NPs together with other nurses and healthcare workers have been called upon to work in crisis...
situations in this pandemic, to find innovative ways of delivering care, while trying to manage communications with distressed relatives and patients, troubled populations and dislocated communities faced with high unemployment, hunger or the threat of homelessness. Healthcare systems have faced an existential crisis, trying to attend to the needs of patients and the public in highly politicized climates and when supply chains have been severely hampered, mismanaged or altogether in chaos. Our experience has been that NPs, as highly educated health professionals, have been overstretched in their daily work, assisting staff to try to maintain high levels of care for high numbers of critically ill people, and giving advice about how staff can protect themselves and others. In many locations around the world, APNs, including NPs, have not yet paused to write of their experiences, to undertake research and publish. But this will come when time, funding and energy reserves are available. There is no doubt that well into the future, we will need nurses with expert knowledge and strong leadership skills, and NPs are well-positioned to help lead the profession in innovative practices and healthcare reform, to help fill the gaps in care and lead other nurses to gain their voices in policy and policymaking.

Achieving the Sustainable Development Goals

International policy reports have suggested that enhancing the nursing workforce will not only help achieve the Sustainable Development Goals (SDGs) – in particular better health, greater gender equality and stronger economies – but also help the world to realize high-quality, cost-effective UHC (All-Party Parliamentary Group on Global Health 2016; Crisp et al. 2018). Roughly 400 million people worldwide do not have access to basic and essential health services (World Health Organization [WHO] 2015) and about 58% of countries have less than 40 nurses and midwives per 10,000 people (United Nations 2019). In addition to limited fiscal, technological, human and physical health resources, there is ineffective optimization of workforce personnel and geographic distribution inequities between low- and high-income regions and urban and rural areas within the healthcare sector. The WHO has advocated that policies in all countries be considered that ensure the most effective use of available health professionals, including APNs and midwives (WHO 2016a, 2020). Nurse practitioners represent an under-utilized component of the workforce with the potential to transform care across cultures in the context of severe resource constraints.

Although roughly 70 countries worldwide have established NP and/or APN roles or are considering the introduction of these roles into their respective health system (ICN 2020b), the monitoring and effectiveness of their utilization and contribution to patient outcomes is limited in some regions – particularly in low- and middle-income countries. In Africa, for example, this gap is being addressed by the Angolophone Africa Advanced Practice Nurse (APN) Coalition in collaboration with key regional/international APN stakeholders and the African Forum for Primary Health Care (AfroPHC n.d.).

Extant empirical data on NP effectiveness are favourable and demonstrate that NPs improve quality measures for patients in a number of settings while lowering care expenditures, and they also have comparable patient outcomes to medical colleagues (McCleery et al 2014; Pirret et al 2015; Stanik-Hutt et al 2013). Also specific specialty NP data show examples of positive outcomes for residents in long-term care facilities (Kilpatrick et al. 2020), patients presenting with chest pain in rural areas (Roche et al. 2017), patients in need of morphine to manage serious health-related suffering in low-income countries (Knaul et al. 2018) and patients needing antiretroviral initiation and re-prescription in primary care clinics in resource-poor health clinics (Fairall et al. 2012). Systematic analyses suggest NP performance leads to comparable physician outcomes with improved access for rural and remote populations and increased cost-effectiveness (Horrocks et al. 2002; Martin-Misener et al. 2015; Yang et al. 2020). NPs also demonstrate high rates of patient satisfaction, spend more consultation time with patients and are likely to have an increased number of return visits when compared to other primary care providers (Laurant et al. 2018). Contrary to much debate, it is not about a contest among professions: NPs vs. physicians. The essential goal is that of achieving trans-disciplinary partnership to deliver high-quality and cost-effective UHC in alignment with the WHO (2016b, 2020).

Conclusion

Additional empirical data are needed to substantiate NPs' cost-effective integration and leadership across a broad range of practice settings and to demonstrate the association between their care delivery and improved patient outcomes. Leveraging the NP role will be imperative to consider not just during the ongoing months, and possibly years, of the COVID-19 pandemic but also well into the future to create a world where no one is left behind and equitable and accessible health care for all populations becomes a global reality.

Implications for nursing, and nursing and health policy

There are a number of action steps needed among all disciplines at local and global levels. First, we must educate
healthcare providers and the public on how NPs increase access to equitable services. NPs are prepared to deliver biopsychosocial, holistic patient and community-level care that incorporates expert knowledge of diagnosis, prescribing, treatment and leadership strategies. The provision of health promotion and education, and the prevention of disease, is a strong focus of NPs; such important work reduces the burden of care on patients, on the cost of care and on healthcare systems (Davidson 2020).

Second, health systems must deliberately encourage policies that expand practice independence for NPs to fill a dire gap in care delivery, especially in low-resource countries, rural settings, and for poor and/or marginalized populations. The strategic application of evidence-based models and adoption of clearly defined scopes of practice, educational preparation requirements, credentialing and regulation standards have been endorsed and advocated by several national/specialty associations and is foundational to achieving UHC (National Council of State Boards of Nursing APRN Advisory Committee 2008). Furthermore, appropriate and commensurate compensation reflective of responsibilities in an era of increased responsibility and expanded leadership amid COVID-19 is imperative. Healthcare leaders should encourage rapid uptake of these policies at institutional and local levels to role model workforce optimization and improve high-quality outcomes. Ministries of health, in partnership with national nursing associations and universities, have an opportunity to advance NP roles in much-needed settings, such as community health, palliative care, and disaster and crisis management.

Third, it is imperative that we use titles reflective of the competent, compassionate, ethical, capable and committed patient advocates that NPs are trained to be. Descriptions such as ‘physician extenders’, ‘task shifting’ or ‘mid-level providers’ do little to instil patient trust nor do they empower NPs to provide optimal, autonomous and evidence-based care services. They should be referred to in the literature and across care domains as ‘Nurse Practitioners’ to reflect their unique contribution and professional preparation.

For a moment, consider our collective aspiration of high-quality, cost-effective UHC that leaves no one behind, demonstrates equity for the marginalized and the minoritized among us, and advances worldwide realization of the SDGs. Expanding the NP role is crucial to this vision. NPs are under-utilized globally but have the potential to impact healthcare outcomes in our world’s most underserved areas. For example, in a study in Thailand, licensed APNs considered that they could not gain a sense of fulfilment in their work or their professional goals because they had inadequate support systems, an unsatisfactory work–life balance, and poor or unclear policy frameworks in which to operate nationally or locally within their roles and responsibilities. They clearly believed they were under-utilized in the Thai health system (Bukalee et al. 2017).

Looking to the future
The ICN Guidelines on Advanced Nursing Practice (ICN 2020a, p.26) argue that ‘issues of governance, education and ongoing research within and between countries, along with exploration of Advanced Practice Nursing beyond that of the CNS and NP’ warrant further scholarly exploration. Relevant policies and professional standards that support and guide advanced nursing roles into routine healthcare service provision are needed now and into the future. Nurses clearly have a policymaking role to step up and contribute to these areas, including being involved in data collection on APN roles.

There is no doubt the COVID-19 pandemic has changed the face of health care in 2020 and such changes will last years into the future as economic recession, fear and uncertainty, and social dislocation hit countries hard. At the time of writing this, and against the backdrop of mounting infections, rising rates of sickness and spiralling death rates, NPs are being stretched in every nursing specialty, including aged care, palliative care and paediatric care. They are being called upon to help lead the profession and sometimes substitute for physicians where there are increased rates of health worker infection. When such nurses are free to pause in their vital work, it is critical that they reflect on changes to their roles and responsibilities during the pandemic to research and plan for the future, and to provide evidence of their abilities and knowledge that have helped to change the face of health care. Such changes undoubtedly have focused on using technology more smartly to deliver health and nursing care, prudent use of scarce resources, even in high-income countries, triaging of large numbers of patients, and the way in which patients, their friends and relatives interact with nurses.

Let there be no doubt that the COVID-19 pandemic is dramatically highlighting gaps in adequate supply and numbers of skilled nurses, such as those who can operate in intensive care settings, in the complexities of aged care, and primary health and public health settings, and in the training, retraining and the retention of nurses in the workforce of many countries (Buchanan & Catton 2020).

After the COVID-19 crisis has subsided, there will be inevitable and long-lasting changes to healthcare systems, how healthcare practitioners operate, and how patients/clients access or receive care. Many facets of our society in everyday life will have changed and as humans we will need to have made adjustments to what various media are referring to as

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‘the new normal’. This future vision must include a strong effort by governments and nurse and health leaders to focus on strategic planning and resourcing the adequate supply and skill mix of nurses. This clearly includes those needed for advanced practice roles in many settings, including CNs and NPs (Buchan & Catton 2020).

Nurse practitioners have the potential to be definitive change agents for the profession at the intersection of practice, policy and leadership. Their training in advanced clinical care positions them to respond to individual and community-based needs for the public, particularly during the COVID-19 era and in the likely event of future public health emergencies. Ongoing empirical data and health policy that supports the safe expansion of NPs’ practice is critical to determining their influence in the future.

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