GUEST EDITORIAL: **Jinny Willis**

2020, the International Year of the Nurse and Midwife and the COVID-19 pandemic

Jinny Willis, BSc(hons), PhD, *is the principal researcher at the New Zealand Nurses Organisation, Christchurch.*

As 2020, the International Year of the Nurse and Midwife dawned, a novel coronavirus, SARS-CoV-2, emerged as a global threat. COVID-19, as it came to be known, was first described in Wuhan, China; the rest, as they say, is history. While many celebrations of nursing and midwifery could not take place, or remain on hold, the profession quietly continued to provide care. The pandemic has increased the visibility and appreciation of nurses worldwide (Fidele, 2020). Some might suggest the many occasions planned to celebrate the profession could not have achieved such a profile, but at what cost?

In New Zealand, there were 167 cases of COVID-19 among health-care workers as at June 12, 2020, representing 11 percent of all cases (Ministry of Health, 2020). Nurses (49) and health-care assistants, caregivers or support workers (79) represented almost three-quarters (73 percent) of those infected. More than half of these cases, 96 individuals (57 percent), were infected in the workplace. A quarter of those infected in the workplace, 42 people (25.1 percent), were likely to have been infected by a patient, resident or client; 32 people (19.2 percent) were found to have been infected by another health-care worker. Nine health-care workers were hospitalised, with two cases requiring intensive care.

The International Council of Nurses (ICN) aimed to find out the number of nurses and other health-care workers who had contracted or lost their lives due to COVID-19 since the virus outbreak began, but was constrained by the lack of systematic recording of data across member countries. A survey undertaken for the first two weeks of August revealed that 1097 nurses had died from COVID-19 across 44 countries – likely an underestimate, due to the lack of standardised data collection (ICN, 2020). In addition, the prevalence of COVID-19 infections among health-care workers ranged from 1 percent to 32 percent, with a mean of 10 percent. The findings also reveal moderate to severe shortages of PPE, and lack of consistency around recognition of COVID-19 as an occupational disease and compensation for health-care workers affected by COVID-19. Further evidence from a large prospective observational study of 2,135,190 individuals, comprised of front-line health-care workers and the general community using a COVID-19 symptom app in the United Kingdom and the United States, also revealed rates of COVID-19 infection in front-line health-care workers that were in the order of 11 to 12-fold higher than in the general community (Nguyen, 2020). Adjusting for biases in testing frequency between the two groups, and any other possible confounders, at least a three-fold increase in risk remained in the health-care workers. It is clear that morbidity and mortality for health-care workers is high.

Ethical tensions for nurses during the pandemic added to an already difficult scenario. McKenna (2020) notes the tensions between nurses' duty of care to patients and their duty of care to their whānau and family members. It is sufficiently difficult for those nurses in the "sandwich generation", that is, those who have the care of children as well as parents, without the extra demands of a pandemic. Nurses were justifiably concerned about returning from work and infecting household members, particularly those who were vulnerable to COVID-19. The ICN survey showed high levels of mental distress among nurses (ICN, 2020). Indeed, in some jurisdictions, suicides among health-care workers have been reported.

Jinny Willis

The New Zealand response to COVID-19 was among the most successful in the world (Baker, 2020). The co-ordinated "all-of-government" response, including border control measures; community transmission controls; case-based control measures; and health, well-being and economic support measures resulted in a conclusion of the elimination phase of the pandemic 103 days after notification of the first case (Baker, 2020). The response ensured that the health system was not overwhelmed by cases; indeed, a relatively small proportion of the total cases (1569) required hospitalisation, and deaths (22) were low. A five week lock-down proved to be the "pandemic breaker" and very good compliance by the New Zealand population, got the job done.

The New Zealand approach to eliminating COVID-19 and minimising the impact of the disease ensured that hospitals were not overwhelmed by inpatients. However, preparation for an unknown number of COVID-19 cases that might require treatment caused disruptions to essential health services. The World Health Organization (WHO) examined the impact of COVID-19 on a tracer set of up to 25 essential health services across the life course among the five WHO regions and found widespread reductions in essential services, with greater impact on low and middle-income countries (WHO, 2020). These services included: elective surgery; outpatient services; preventive services; diagnosis, treatment and rehabilitative services; and palliative services. The impact of these disruptions cannot be quantified at this time and indeed may not be apparent for years to come.

Most of the cases of COVID-19 in New Zealand were encountered in the community. Nurses were deployed in community-based assessment centres (CBACs), in contact tracing and more recently in managed isolation facilities. While the use of PPE in hospitals is routine, the use of PPE in nurses and health-care workers in the community is less usual. Donning and doffing of PPE is not necessarily intuitive, and correct fit is extremely important. In addition, despite the existence of pandemic plans from the days of SARS-1, preparedness was imperfect at best. The New Zealand Nurses Organisation

(NZNO), in collaboration with the McGuinness Institute, undertook a survey of NZNO members towards the end of Alert level 4 and into Alert level 3. Questions addressed: how safe members felt at work in regard to the human coronavirus; preparedness to use PPE appropriately; confidence that the district health board (DHB)/employer was able to provide the PPE needed; and confidence that New Zealand had the necessary PPE stock. Free-text responses were also invited. Some health-care workers reported very good access to PPE and communication about its use; however, a significant number of comments indicated that there was a lag in access to PPE in the early days of the pandemic. A number of nurses also reported that there were insufficient staff to allow change of PPE once contaminated or saturated. There was also a clear perception of rationing.

The Office of the Auditor General (2020) subsequently conducted an investigation and examined the system for managing PPE stock, how the stock was mobilised to DHBs to maintain adequate supply and distribution, as well as the process for procuring PPE. The findings were consistent with the experiences NZNO members reported. Fenton (2020) believes that the findings of inadequate stock of PPE, inequity in access to PPE across the health and disability system and complacency towards emergency preparedness reported by the Auditor-General are ethical concerns. At the very least, the Health and Safety at Work Act (HSWA, 2015), includes a requirement to manage workplace hazards "so far as is reasonably practicable".

New Zealand has relied on internationally qualified nurses for a very long time; consequently, internationally qualified nurses comprise 27 percent of the New Zealand registered nursing workforce (NCNZ, 2019). A Business and Economic Resesarch (BERL) report (Nana, 2013) predicts our reliance on nurses trained beyond New Zealand until 2035. What impact then, the current border closure? At some point a trade-off between protecting New Zealanders from imported cases of COVID-19 and adequacy of the nursing workforce is needed. New Zealand has to commit to "growing our own" nurses to reduce the reliance on overseas nurses for whom we must compete with other labour markets. This strategy would potentially have the additional benefit of boosting the numbers of Māori, Pacific and male nurses to better reflect the New Zealand population. However, the effect of the pandemic on recruitment of nursing students for 2021 and beyond is unknown. Preparation of students for tertiary study has likely been affected by disruption in course work associated with COVID-19 lockdowns.

The pandemic necessitated new ways of working that may persist. Reduction in provision of some essential services was accompanied by new ways of interacting with patients and delivery of care. An example is the move to telehealth, or virtual consultations, in a number of different settings. Atmore and Stokes (2020) report changes in consultations in a Dunedin urban general practice, comparing patient characteristics and reasons for engaging with the practice in 2019 and immediately post-COVID-19 in 2020. Virtual consultations increased from 30 to 70 percent between the two observation periods, while age group, gender, ethnicity and deprivation quintile, as well as investigations and types of referral, were similar between the periods.

The need for pandemic preparedness, as raised in the report of the Auditor-General, cannot be overstated. The National Ethics Advisory Committee undertook a consultation process as part of a revision of the guideline for allocation of resources during scarcity (NEAC, 2020). The principles include best use of the available resources, minimising harm and taking care not to exacerbate any existing inequity or inequalities. The COVID-19 fatality rates for Māori are estimated to be 50 percent higher than for non-Māori (Steyn, 2020). It is vital therefore to consider the impacts for different sectors of the population. Also, special attention needs to be given to high-risk groups such as the elderly and those in aged residential care where the majority of deaths occurred in New Zealand in the first wave of COVID-19.

As the International Year of the Nurse and Midwife draws to a close, it is time to reflect and to celebrate the contribution of nurses, along with the rest of the health-care community, to the COVID-19 response in New Zealand and across the globe. Despite risk to themselves, family and whānau, nurses continued to deliver care in all contexts and inevitably were over-represented among COVID-19 cases. It is also timely to reflect on how some of the problems encountered with provision and access to PPE, and other impediments to safe working environments for nurses, might be addressed, particularly without an end to the pandemic in sight.

References

Atmore, C., & Stokes, T. (2020). Turning on a dime – pre- and post-COVID-19 consultation patterns in an urban general practice. New Zealand Medical Journal, 133(1523).

Baker, M. G., Wilson, N., & Anglemyer, A. (2020). Successful Elimination of Covid-19 Transmission in New Zealand. *New England Journal of Medicine, 383,* e56. doi:10.1056/NEJMc2025203

Fedele, R. (2020). The impact of a global pandemic on the international year of the nurse and midwife. *Australian Nursing & Midwifery Journal, 27*(1), 18-20.

Fenton, E. (2020). Management of personal protective equipment in New Zealand during the COVID-19 pandemic: report from the Auditor-General. *New Zealand Medical Journal, 133*(1522).

International Council of Nurses. (2020). *Protecting nurses from COVID-19 a top priority: A survey of ICN's national nursing associations.* International Council of Nurses.

McGuinness, W. (2020). *Survey Insights: An analysis of the 2020 NZNO PPE Survey.* McGuinness Institute and New Zealand Nurses Organisation.

Ministry of Health (2020). *COVID19 in Health Care and Support Workers in Aotearoa New Zealand.* Ministry of Health.

Nana, G., Stokes, F., Molano, W., & Dixon, H. (2013). *NEW ZEALAND NURSES: workforce planning 2010-2035*. BERL.

National Ethics Advisory Committee. (2020). *Ethics and Equity: Resource Allocation and COVID-19.* Ministry of Health.

Nguyen, L. H., Drew, D. A., Graham, M. S., Joshi, A. D., Guo, C-G., Mehta, R. S., Warner, E. T., Sikavi, D. R., Lo, C-H., Kwon, S., Song, M., Mucci, L. A., Stampfer, M. J., Willett, W. C., Eliassen, A. H., Hart, J. E., Chavarro, J. E., Rich-Edwards, J. W., Davies, R., Capdevila, J., Lee, K. A., Lochlainn, M. N., Varsavsky, T., Sudre, C. H., Cardoso, M. J., Wolf, J., Spector, T. D., Ourselin, S., Steves, C. J., Chan, A. T., on behalf of the Coronavirus Pandemic Epidemiology Consortium. (2020). Risk of COVID-19 among front-line health-care workers and the general community: a prospective cohort study. *Lancet Public Health 2020, 5*(9), e475–83. https://doi.org/10.1016/S2468-2667(20)30164-X

Nursing Council of New Zealand. (2019). *The New Zealand Nursing Workforce: A profile of Nurse Practitioners, Registered Nurses and Enrolled Nurses 2018-2019.* Te Kaunihera Tapuhi o Aotearoa/Nursing Council of New Zealand.

Office of the Auditor General. (2020). *Ministry of Health: Management of personal protective equipment in response to Covid-19.* https://oag.parliament.nz/2020/ppe/docs/ppe.pdf

World Health Organization. (2020). *Pulse survey on continuity of essential health services during the COVID-19 pandemic.* Interim report, August 27, 2020.