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### Reflecting on the Impact of Cardiovascular Nurses in Australia and New Zealand in the International Year of the Nurse and Midwife



Caleb Ferguson, PhD, FESC, FACN, FCSANZ a,\*,1, Sally C. Inglis, PhD, FCSANZ b,2, Robyn Gallagher, PhD, FESC, FAHA c,3, Patricia M. Davidson, PhD, FAHA, FAAN, FACN d,4

"Nursing is the glue that holds everything together"

Patricia M. Davidson [1]

To sav 2020 has been difficult and challenging is an understatement. Signalled the International Year of the Nurse and Midwife, in the bicentenary of Florence Nightingale's birth, we thought there would be celebrations, filled with joy and time for reflection. 2020 has diverged far from this plan. Across the world, individuals, families, and communities have been devastated. Moreover, it is evident that our work as nurses is becoming more challenging during these unprecedented and uncertain times. COVID-19 has not only created illness and suffering but propelled the world into a serious global economic recession and laid bare cracks in society with many traditionally underserved and vulnerable people suffering more.

During the COVID-19 pandemic, cardiovascular nurses have demonstrated strong, cohesive leadership through the writing of the Cardiac Society of Australia and New Zealand (CSANZ) COVID-19 Cardiovascular Nursing Care Consensus Statement (published in this journal), as well as working on the frontlines in our hospitals and communities [2]. The joint consensus statement was prepared by an expert writing group comprised of members of the CSANZ Cardiovascular Nursing Council and the CSANZ Interventional Nurses Council [3]. The statement is aimed to support cardiovascular nurses to reduce the risk of virus transmission whilst delivering care by adapting to novel models of care, and to educate and inform nurses of the cardiovascular implications of COVID-19. The rapid development of this Statement was impressive, and demonstrates the high levels of leadership, commitment, cohesion, collaboration, and engagement of these nurses. Expert cardiovascular nursing input was also sought for the CSANZ Statements on rural and remote cardiology [4], and the provision of secondary prevention and cardiovascular rehabilitation during the pandemic [5].

### The Breadth of Cardiovascular **Nursing**

Nurses comprise the single largest discipline cohort of registered health care professionals, and we often stand at the forefront of health care delivery. We are a highly skilled and educated workforce who provide care across the lifespan, across diverse care settings—caring for newborns to supercentenarians. Perhaps never before in history has the role of nurses, nor the value or outstanding contributions of nurses in

<sup>&</sup>lt;sup>a</sup>Western Sydney Nursing & Midwifery Research Centre, Western Sydney Local Health District & Western Sydney University, Blacktown Hospital, Sydney, NSW, Australia

bIMPACCT and School of Nursing & Midwifery, Faculty of Health, University of Technology Sydney, Sydney, NSW, Australia

Charles Perkins Centre & Sydney Nursing School, Faculty of Medicine and Health, University of Sydney, Sydney, NSW, Australia

<sup>&</sup>lt;sup>d</sup>School of Nursing, Johns Hopkins University, Baltimore, MA, USA

<sup>\*</sup>Corresponding author at: Western Sydney Nursing & Midwifery Research Centre, Western Sydney Local Health District & Western Sydney University, Blacktown Hospital, Sydney, NSW, Australia, Email: c.ferguson@westernsydney.edu.au

<sup>&</sup>lt;sup>1</sup>Current Cardiovascular Nursing Editor, *Heart, Lung and Circulation*; Current Secretary of the Cardiovascular Nursing Council, CSANZ.

<sup>&</sup>lt;sup>2</sup>Current Chair, Cardiovascular Nursing Council, CSANZ.

<sup>&</sup>lt;sup>3</sup>Immediate Past Chair, Cardiovascular Nursing Council, CSANZ.

<sup>&</sup>lt;sup>4</sup>Immediate Past Cardiovascular Nursing Editor, Heart, Lung and Circulation; Past Chair, Cardiovascular Nursing Council, CSANZ.

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health care been so public and prominent across the globe. It is therefore timely that 2020 is recognised by the World Health Organization as the International Year of the Nurse and Midwife: the pandemic has not only demonstrated the value of nursing but the power of multidisciplinary teams that include nurses—health professionals working together to improve the lives of individuals, families and communities.

## The Influence of Cardiovascular Nurses

Cardiovascular nurses have an outstanding record of accomplishment in leading and delivering world-class clinical, public health, and other health services as well as epidemiological research that is impactful. Nurse clinicians and scientists in the Australian and New Zealand region "punch above their weight" in science, innovation, and clinical care. Nursing is consistently ranked as 'well above world standard' across several universities, and many Australian universities have featured near the top of global University rankings for the nursing discipline.

Cardiovascular nursing leadership is strikingly evident in CSANZ. At time of writing, there are 373 (234, Australia; 139, New Zealand) registered cardiovascular nurse members of CSANZ. Of these, professorial appointments across universities and research institutes in Australia and New Zealand are common with, 13 members holding professorial titles, and a further 21 having completed PhDs, including six elected fellows of the CSANZ. Several nurse members hold multiple fellowships including of the American Heart Association (FAHA) and the European Society of Cardiology (FESC), reinforcing their international reputation in cardiovascular care.

Amongst our current cardiovascular nursing research leaders are National Heart and Medical Research Council (NHMRC) Investigator Fellows, Heart Foundation Future Leader Fellows and alumni, and chief investigators on numerous NHMRC, Medical Research Future Fund (MRFF) and Heart Foundation grants, amongst many other national and international competitive funding sources, driving evidence-based health care policy, clinical care and implementation science. Strong records of accomplishment in competitive research funding attests to the impact and track records of cardiovascular nurse research leaders, especially against the highly and increasingly competitive research funding landscape [6].

# **Contributing to Cardiovascular Research**

Our cardiovascular nurses have made plentiful and notable contributions to science and to model-of-care innovation, with worldwide research and impact. Research led by CSANZ cardiovascular nursing members has been published in prominent medical and cardiovascular journals internationally, including the *New England Journal of Medicine, The* 

Lancet, The British Medical Journal (The BMJ), Cochrane Database of Systematic Reviews, Circulation, Journal of the American College of Cardiology, and the European Journal of Heart Failure, and in leading nursing journals, such as the International Journal of Nursing Studies and the European Journal of Cardiovascular Nursing.

Internationally recognised research includes nurse-coordinated approaches to care delivery. This is exemplified by nurse-led interventions for weight loss in overweight and obese people with heart disease or nurse-delivered acute care interventions to reduce death and disability in stroke [7,8]. Further, nurses have helped answer questions on the most effective method to deliver care or the best strategy to educate our patients about their heart failure or atrial fibrillation [9–11]. Nurses have also pioneered important studies to characterise cardiovascular diseases and examine their treatment patterns, including research to understand hospitalisation trends [12], or benchmarking the quality of heart failure or atrial fibrillation management or cardiac rehabilitation [13–15].

Research that generates new robust, high-level evidence that informs guideline recommendations has also proven valuable. Important clinical questions have been answered through the development of pivotal Cochrane reviews to support the use of telehealth for heart failure or to evaluate new digital methods of heart failure education [16,17].

Nurse investigator-initiated research has been fundamental in: understanding issues of adherence; uptake of services, such as cardiac rehabilitation; translation of new evidence into practice; and, optimisation of therapies in practice. Examples include exploring barriers and enablers relating to the uptake of digital technologies or adherence and persistence to medications [18,19]. Advances have been made in the quest to understand and decrease inequity, especially in terms of access to evidence-based cardiovascular care [20]. Contributions include examining cardiovascular disease in women [21,22], in rural and remote populations [23], and in culturally and linguistically diverse populations [24].

A consistent thread throughout cardiovascular nursing research is the clear focus and ongoing commitment to patient-centred, family-focussed research and team science. Research spans across the continuum of care—from pre-hospital care, emergency cardiac care, nursing care pro-vided in the cardiac catheter lab, and cardio-surgical care to post-hospital care, such as hospital-in-the-home or research that advances novel models of cardiac rehabilitation and follow-up care.

### **Leading Implementation Science**

Nurses are most often the last stop in the journey medical science makes from the bench to the patient. Medication, treatment, exercise, and lifestyle change adherence is underpinned by tailored patient education and complex behavioural change strategies, most often provided, and reinforced, by nurses throughout the patients' journeys in the

1746 C. Ferguson et al.

health care system. The fundamental role of nurses in implementation science should not be overlooked. Nurses are the linchpin to changing practice, delivering care, and ensuring adherence and the sustainability of interventions in the long-term.

Engaging with nurses as partners and co-investigators throughout the research process will ensure successful implementation of new interventions and models of care. It is important that nurses are valued and active members of guideline and policy committees, and that they are provided with opportunities for leadership of these committees and their contribution recognised commensurate with their clinical and/or research leadership and expertise.

Our nurse practitioners, while fewer in number than our international colleagues, lead important patient care efficiency and effectiveness strategies. This is strongly evident in care of heart valve patients, provision of palliative care, or leading multidisciplinary heart failure services and in the development of chest pain clinics [25,26].

## Leaders, Advocates, Innovators, Educators and More

Australian and New Zealand cardiovascular nurses are committed and strong contributors to national and international policy discussions and advocates for cardiac patient care. Nurses are present in the Cardiovascular Nursing, Interventional Nursing, Prevention, Heart Failure and Digital Health Councils of CSANZ and make substantial contributions to the Society overall, including the CSANZ Scientific Committee, Education Committee, Professional and Ethical Standards Committee, and the Annual Scientific Meeting Program Committee, as well as many different working groups.

We lead discussions on secondary prevention, acute cardiac patient care including catheter laboratories, and have been at the forefront of responsive changes in care delivery during the current pandemic [27]. Nurses show strong leadership in patient-centred research including patient reported outcomes. We often lead the way through collaborating with patients and their families in practice and research from co-design to implementation. Not surprisingly, nurses are at the forefront of very innovative models of delivery, for which they are recognised internationally [28,29] Nurses are experts in identifying barriers and challenges in self-management and self-care for patients and take action by being in the vanguard of patient support strategies. Nurses have developed patient-education avatars, gamified applications, and incorporated trackers and engaged in social media in advance of other health disciplines [30–32].

CSANZ nurse members have created a legacy to change practice in resuscitation. Studies into out-of-hospital cardiac arrest have demonstrated issues in access to defibrillators and issues with equity for older people, and influenced policy for ambulance transport to percutaneous coronary intervention (PCI)-capable facilities as well as specific pre-hospital treatments [33]. Work continues in assessing the

availability and attitudes of bystanders [34]. Furthermore, nurse leaders contribute strongly to international guidelines for heart failure patient care and atrial fibrillation [35].

Cardiovascular nurses provide leadership across a range of settings and roles. Notable leadership roles held by nurses who began their careers caring for cardiovascular patients include the current CEO of the Heart Foundation, CEO of Her Heart, and executive leadership appointments at our higher education institutions along with numerous other nurses in executive roles throughout health care, university and research institutes and industry, not for profit and corporate organisations.

# Resilient in the Face of Uncertainty and Adversity

The COVID-19 pandemic has been a call to action that has been answered by health care professionals around the world, and that response has impacted our own health. In Australia recently, we see daily increases in infections amongst health care workers, with nurses alone representing 42% of the current burden of active cases of COVID-19 among health professionals, and representing 13% of the overall total of active cases in Victoria as at 9 August 2020 [36].

Nurses, in particular, have been at the forefront of caring for patients across the world and sadly too many have lost their lives [37]. Facing uncertainty and unnecessary death and suffering has led many health professionals to experience moral distress, particularly because we are unable to meet the needs of patients and their colleagues [38]. This will be an important issue to face as we recover and build on our resilience during and following the pandemic. Rather than being overcome by the challenges that face us, we will need to respond to some critical learnings from this pandemic. We have learned that preparedness and leadership matters, and that we need a robust public health infrastructure that can interface with all facets of the health system locally and globally. Workforce planning, supply chain management and leadership are of the utmost importance.

This pandemic has shown us that the people who are most vulnerable to cardiovascular disease are susceptible to COVID-19; that those with cardiovascular disease are at significant risk of poor outcomes, and that a whole new population of patients requiring cardiovascular care may be generated by COVID-19. This vulnerability underscores the importance of addressing the social determinants of health, and nurses are uniquely placed to advocate for equity in healthcare.

### **Closing Calls**

Australia and New Zealand have some of the most talented, brilliant, passionate, caring, and well-educated cardiovascular nurses in the world. Our nurses deliver high quality and evidence-based care, innovate practice, educate patients, develop, and implement policy, pioneer world-leading high impact research, and lead our organisations and health systems.

Considering the scope of nursing practice, high level of expertise and invaluable insights of nurses to the care team, in-depth understanding of psychosocial and physical wellbeing of people with cardiovascular disease, and the internationally recognised research track records of our cardiovascular nurse members, inclusiveness and partnering with expert cardiovascular nurses should be expected. Whether in committees, policymaking, publications or research funding applications, the absence of cardiovascular nursing input should be questioned and not excused. CSANZ can provide details of leading cardiovascular nursing experts across cardiovascular research, policy and clinical care to facilitate inclusiveness and partnership. As we work together during a once-in-a-century pandemic, take time to recognise the contributions in practice, health care delivery, research and policy of your nurse colleagues and actively facilitate opportunities to include nurses as partners in research, policy and healthcare delivery.

Lastly, a reminder that *Heart, Lung and Circulation* is committed to publishing articles across all aspects of cardiovascular care and welcomes submissions from cardiovascular nurses across the world.

#### Conflicts of Interest

No conflicts of interest to disclose.

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1748 C. Ferguson *et al.* 

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