Editorial Commentary on Oncology Nursing

The growth and development of oncology nursing in Australia: the past, present and the future

Raymond Javan Chan[1,2]^, Catherine Paterson[3]^, Patsy Yates[2]^, Reegan Knowles[1]^, Natalie Bradford[2]^

[1]Caring Futures Institute, College of Nursing and Health Sciences, Flinders University, Bedford Park, SA, Australia; [2]Cancer and Palliative Care Outcomes Centre, Queensland University of Technology, Brisbane, QLD, Australia; [3]Rehabilitation, Activity, Cancer, Exercise and Survivorship Research Group, University of Canberra, Bruce, ACT, Australia

Correspondence to: Prof. Raymond Javan Chan, RN, BN, MAppSc (Research), PhD, FACN, FAAN. Caring Futures Institute, College of Nursing and Health Sciences, Sturt Campus, Flinders University, Sturt Road, Bedford Park, SA 5042, Australia. Email: Raymond.Chan@flinders.edu.au.

Keywords: Cancer nursing; oncology nursing; Australia

Submitted Sep 30, 2022. Accepted for publication Apr 24, 2023. Published online May 18, 2023.
doi: 10.21037/apm-22-1124
View this article at: https://dx.doi.org/10.21037/apm-22-1124

Introduction

In Australia, there will be approximately 162,000 new cases of cancer diagnosis in 2022 (1). These figures equate to an average of over 440 Australians being diagnosed daily, of which many will be cared for by cancer nurses over multiple occasions across their cancer treatment trajectory and recovery. It is of critical importance that cancer care and health system leaders understand and reflect on the evolution and future development of the cancer nursing workforce to ensure quality cancer care now and in the future. Here, we provide an overview of cancer nursing in Australia, including a brief historical account of the evolution of cancer nursing, highlighting capacity and capabilities of nurses to inform future development of this important workforce. Of note, although this article highlights a more general focus on oncology nursing, the primary content also encompasses palliative nursing. As we know, palliative nursing focuses on the active and holistic healthcare of patients whose illnesses do not respond to curative therapies, especially those with end-stage cancers.

The past and present

Education

Approximately 10 years ago, Yates and Aranda [2013] provided an insightful reflection of the evolution of Australian cancer nursing over the preceding 40 years (2). This article, published in *Cancer Forum*, described the first specialist cancer nursing training, a radiotherapy-focused program, offered in the 1950s at the Peter MacCallum Cancer Centre. In the 1970s, specialist cancer nursing courses largely focused on knowledge of cancer biology and its treatment at the time. With nursing education fully transferred to the university sector between the 1980s and 1990s, post-graduate courses in cancer nursing were developed through various academic institutions. In the 2000s, The National Cancer Nursing Education Project (EdCaN) Professional Development Model for Nursing in Cancer Control (3), led by Aranda and Yates was first published. This resource has been fundamental in guiding the design and implementation of specialist nursing

^ ORCID: Raymond Javan Chan, 0000-0003-0248-7046; Catherine Paterson, 0000-0002-1249-6782; Patsy Yates, 0000-0001-8946-8504; Reegan Knowles, 0000-0002-7237-6678; Natalie Bradford, 0000-0003-1602-4544.

Table 1 Members of the CNSA Professorial Advisory Council

Professor Sanchia Aranda (Vic)
Professor Natalie Bradford (QLD)
Professor Raymond Chan (SA)
Professor Marion Eckert (SA)
Professor Mei Krishnasamy (Vic)
Professor Sandie McCarthy (QLD)
Professor Leanne Monterosso (WA)
Professor Catherine Paterson (ACT)
Professor Jane Phillips (QLD)
Professor Karen Strickland (WA)
Professor Benjamin Tan (NT)
Professor Kate White (NSW)
Professor Anne Williams (WA)
Distinguished Professor Patsy Yates (QLD)

CNSA, the Cancer Nurses Society of Australia; ACT, Australian Capital Territory; NSW, New South Wales; NT, Northern Territory; Vic, Victoria; SA, South Australia; QLD, Queensland; WA, Western Australia.

training and post-graduate programs. Today, in addition to these formal, accredited educational programs, a range of training and educational resources on specialised topics are now available through government, non-government, and professional organisations such as Cancer Institute New South Wales (NSW); the Australian Cancer Survivorship Centre; local cancer councils; and the Cancer Nurses Society of Australia (CNSA).

Workforce

With cancer nursing recognised as a speciality, and with an emerging identity, educational programs continued to shape the workforce, developing skilled, capable, and knowledgeable specialist cancer nurses. However, as this workforce developed, nursing shortages across the globe in the early 2000s posed significant challenges. While cancer nurses reported high levels of job satisfaction and personal accomplishment, they also reported excessive workloads, dissatisfaction with pay and a lack of professional support, as well as emotional exhaustion (4). Failures with workforce planning in speciality areas such as cancer nursing are an important contributor to this problem. However, the CNSA is currently leading national initiatives to understand workforce data to inform future planning and development of strategies to overcome and address these challenges.

With the shift over the last several decades of cancer care delivered as a hospital inpatient to now a model largely focused on ambulatory and community care, the cancer nursing workforce has needed to be agile and adapt to the expanding scope of oncology nursing practice. Many cancer treatments such as systematic therapies, radiation therapy, and supportive care are now provided in the ambulatory care setting. In other words, care delivery is required both in hospital, and in the community care settings. To optimise care delivery in the ambulatory setting, cancer nursing specialist roles have evolved across the country (often in hospital-based such as cancer care coordinators or clinical nurse specialists). These advanced practice roles have the capacity to (I) provide evidence-informed supportive care interventions; (II) provide care coordination within the multidisciplinary team across both acute and community services (face-to-face or telephone); and (III) deliver nurse-led clinics by providing timely, tailored, and accessible person-centred care responsive to patient needs across the cancer care continuum. It is however important to acknowledge inequities in patient access to specialist cancer nurses in Australia, which is compounded by complexities in private and public cancer services, the political landscape and funding infrastructure. In keeping with other cancer specialist nursing roles, such as those in the United Kingdom (UK), these roles are highly specialised with advanced levels of clinical skills and decision-making capabilities, often expert in one tumour stream, and they keep abreast of the latest and ever-evolving advancements in treatment therapeutics. There is also an emergence of cancer nurses solely working in the community setting such as those working for cancer councils and charity organisations.

Research

Compared to many other countries, Australia with a population of just 26 million, has a high number of senior cancer nurse researchers. At the time of this manuscript being submitted, there are 13 members on the Professorial Advisory Council of the CNSA who are full professors with an interest in cancer control (*Table 1*). While cancer may not represent 100% of their research portfolio, it is important to acknowledge this expertise in research, research training and research translation that the cancer nursing profession and cancer care community can access.

Australian cancer nurse researchers have demonstrated successes in nationally competitive funding schemes (e.g., National Health and Medical Research Council and Medical Research Future Funds). These nurses often pioneer research efforts into relatively under-researched areas that are important priorities to patients such as patient self-management, symptom management and innovative models of care. As their work often examines complex issues, cancer nurse researchers are often at the forefront of using innovative research methods such as adaptive trials, hybrid implementation effectiveness designs, co-design approaches and mixed-methods studies. The success of these research efforts is important to both advancing the proposed work to improve patient care and outcomes, and further developing the evidence base to highlight the important contribution of cancer nurses across the continuum of care. The present and the future of nurse-led research in cancer care does not only rest on professorial leaders, but that "*everyone is a leader*", and it is critical to acknowledge that there are generations of cancer nurse researchers who are either leaders or emerging leaders, not all based in an academic setting and not all nurses have a dedicated research component to their role. Cancer nurse leaders with research skills and training are required to continue to build capacity and capability in knowledge generation and translation to inform cancer nursing practice and multidisciplinary cancer control efforts more widely.

What does the future hold?

What should we hold on to?

In their recent editorial published in *Cancer Nursing* (5), Chan and Kitson highlighted the danger of nurses being our "own worst enemies" by always going the extra mile to fill gaps in the system. The rapidly advancing cancer treatments and ever-changing environment require cancer nurses to be highly adaptable to the pressures and continual evolving impacts of the coronavirus disease 2019 (COVID-19) pandemic (6). It is widely acknowledged that the nursing profession always goes that extra mile to fill system gaps and are highly dynamic to take on other roles as the need arises. While such efforts and qualities are commendable, the nursing profession continues to compensate for wide healthcare system defects, plugging service delivery gaps, which may inadvertently cause excessive workloads, dissatisfaction with pay, and a lack of professional support. Chan and Kitson further highlighted the importance of recommitting ourselves to person-centred and individualised care (5). It is also critical to safeguard our roles as nurses in meeting a person's fundamental care needs, which includes establishing and maintain a trusting and therapeutic relationship, integrating physical, psychosocial and relational care needs (7).

In 2021, Krishnasamy and colleagues conducted a qualitative study with specialist cancer nurses to define expertise in cancer nursing practice (8). The findings from this study illustrated the key characteristics of cancer nursing expert practice in Australia which included: knowledge, leadership, adaptability, communication, motivation, patient-centred care, organisation, and contribution to culture. Building upon this foundational research work the research team are currently conducting a national Delphi study to further develop clarity and consensus on the role of cancer nurses and their expert contribution in the wider multidisciplinary team. This work will be helpful to enable clear articulation of the role and contribution of cancer nurses in delivering value to patients, organisations and healthcare systems.

Rethinking and advancing models of care

It is important that cancer nurses continue to articulate and profess their values, while demonstrating expertise in the discipline, speciality knowledge, professional attributes they bring to the multidisciplinary cancer care team. There are several important areas for further developments and consideration by the profession.

Firstly, cancer nurses are best placed within the multidisciplinary team to provide, timely, accessible, and responsive care to address what matters most to patients and their families by implementing and responding to patient-reported outcomes (PROs). Despite the Level I evidence which has identified the benefits of nurses responding to PROs in routine clinical practice to improve patient outcomes, systemic implementation remains slow. Cancer nurses should demonstrate leadership and role modelling in cancer services by championing implementation efforts to maximise the system's capabilities in rolling out PROs to inform the development of shared self-management care plans. Evidence has underscored that cancer nursing can improve survival outcomes, quality of life and optimise experiences of care through PROs (9).

Secondly, as cancer care demands and costs continue to increase at an all-time high, cancer nurses must consider innovative solutions to address these challenges. In the

design of future cancer services, health service planners must adopt a top-of-license approach and ensure that cancer nurses are empowered to work to their full scopes of practice. This approach can help optimise patient outcomes, enhance access, and reduce inequity. Increasing the number of cancer nurse practitioners in community and relevant cancer centre settings will also be central to future cancer service re-design models. With the recent developments of the Health Professionals Prescribing Pathway (HPPP) (10), and future enablement of non-medical prescribing (11,12), there may be other innovative opportunities for registered nurse prescribers in cancer to address service delivery gaps.

Finally, cancer nurses are central to optimising supported self-management for people affected by cancer (13). Albert Einstein's famous quote: "*Insanity is doing the same thing over and over again and expecting different results*", reflects the need for change in cancer nursing to optimise cancer care. Many cancer nurses work in an environment that does not always promote or facilitate time for sufficient, quality self-management support. Despite teachings such as Orem's self-care theory, quality self-management support skills and competencies have not been sufficiently embedded into undergraduate, post-graduate and on-the-job training of cancer nurses. Going forward, cancer nurses should focus on workforce development and implementation programs in providing quality self-management support (13). To fully enhance the embedment of self-management support into cancer services, such efforts should include skill enhancement at all levels of cancer nurses, and self-management care plans which are responsive to PROs.

Further research capacity building

Further work is required to build on the capacity Australia has in cancer nurse-led research. Cancer nursing academia and research should be a viable option for career progression. Leaders must continue to leverage our nationally competitive funding schemes (e.g., National Health and Medical Research Council and Medical Research Future Funds), and other funding sources to continue to build capacity and capability, by highlighting the skills cancer nurses possess with implementing research to practice and knowledge translation. Inadequate knowledge translation is a well-established and complex problem in healthcare, and nurses are well-placed to initiate, participate and advocate for problem identification, knowledge creation and synthesis, and implementation and evaluation of new knowledge into practice (14). In contemporary 21st century healthcare, cancer nurses with research education (PhD degrees, or Masters by Research degrees) are seldom employed in clinical settings (15). Australian leaders have demonstrated clear leadership and advancement of cancer nursing research in the university setting but research in the clinical setting has lagged considerably globally. Clinical joint appointments such as Chairs in Cancer Nursing may continue to be a key strategy of embedding the knowledge translation approach (16).

The integration of evidence-based practice (EBP) and knowledge translation into healthcare delivery is a priority for healthcare organisations worldwide because it is intrinsically linked to improved cost-effectiveness, clinical effectiveness, and high-quality patient care. In comparison to decades of investment and development in medical research (14,17), there has been relatively little investment in research activity for nursing healthcare professionals. Over the past 20 years, EBP has taken the centre stage in the improvements in health care. Going forward, there has recently been a call to all nurse leaders to bring the nursing workforce to go further to adopting a knowledge translation approach. Such advancement will require robust leadership, advanced nursing scholarship, well-coordinated planning, and workforce capacity building (14).

There is global recognition that advancing nursing research is fundamental to delivering effective, efficient, and equitable professional direct clinical care. Yet, nursing executive leaders grapple with many challenges in the task of increasing clinical research within their organizations. For example, cancer nurses in the clinical setting correctly prioritize the immediate care needs of their patients as their primary focus, and research is commonly viewed as an additional task, rather than an integral part of their professional clinical role in the EBP or knowledge translation process. Moreover, healthcare providers face other complex challenges including limited resources, lack of time and increased workload (18,19), whilst improving survival rates mean the needs of cancer populations continue to change (e.g., a greater emphasis on supportive and survivorship care) (20). The gravity of these challenges necessitates creative solutions and transformational leaders who are committed to the integration of research and practice. Solid clinical academic partnerships leverage clinical, intellectual and financial resources to generate new knowledge and translate that knowledge to innovate, real-world patient cancer care practices. A pathway for development of clinical academics at all levels is urgently required (21).

Conclusions

In this article, we have provided a descriptive overview of the evolution of the nursing profession, highlighting historical and continuing advances in education, workforce and research. Cancer nurses are best-placed to positively impact the future of cancer care through the provision of quality patient-centred care and optimising supported self-management for people affected by cancer. As the health system continue to face complex challenges including limited resources and changing needs of the cancer population, we call for actions to advance strategic capacity-building for increased focus on research, knowledge translation, and innovation in the nursing profession.

Acknowledgments

Funding: None.

Footnote

Provenance and Peer Review: This article was commissioned by the Guest Editors (Margaret Fitch and Annie Young) for the series "Oncology Nursing" published in *Annals of Palliative Medicine*. The article has undergone external peer review.

Peer Review File: Available at https://apm.amegroups.com/article/view/10.21037/apm-22-1124/prf

Conflicts of Interest: All authors have completed the ICMJE uniform disclosure form (available at https://apm.amegroups.com/article/view/10.21037/apm-22-1124/coif). The series "Oncology Nursing" was commissioned by the editorial office without any funding or sponsorship. The authors have no other conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

References

1. Australian Institute of Health and Welfare (AIHW) Cancer 2022 [cited 2022 July 7]. Available online: https://www.aihw.gov.au/reports/australias-health/cancer.
2. Yates P, Aranda S. 40 years of cancer nursing in Australia: The emergence of a specialty. Cancer Forum 2013;37:35-8.
3. Aranda S, Yates P. A national professional development framework for cancer nursing. 2nd edition. Canberra: The National Cancer Nursing Education Project (EdCan), Cancer Australia; 2009.
4. Barrett L, Yates P. Oncology/haematology nurses: a study of job satisfaction, burnout, and intention to leave the specialty. Aust Health Rev 2002;25:109-21.
5. Chan RJ, Kitson A. Future-Proofing Cancer Nursing: The Importance of Person-Centered Fundamental Care. Cancer Nurs 2022;45:335-6.
6. Paterson C, Gobel B, Gosselin T, et al. Oncology Nursing During a Pandemic: Critical Reflections in the Context of COVID-19. Semin Oncol Nurs 2020;36:151028.
7. Kitson A, Conroy T, Kuluski K, et al. Reclaiming and redefining the Fundamentals of Care: Nursing's response to meeting patients' basic human needs. Adelaide, South Australia: School of Nursing, University of Adelaide; 2013.
8. Krishnasamy M, Webb UMM, Babos SLC, et al. Defining Expertise in Cancer Nursing Practice. Cancer Nurs 2021;44:314-22.
9. Basch E, Deal AM, Kris MG, et al. Symptom Monitoring With Patient-Reported Outcomes During Routine Cancer Treatment: A Randomized Controlled Trial. J Clin Oncol 2016;34:557-65.
10. Health Workforce Australia Health Professionals Prescribing Pathway (HPPP) Project Final Report 2013 [cited 2022 28 September]. Available online: https://www.aims.org.au/documents/item/400
11. Fox A, Crawford-Williams F, Ria J, et al. Is the Australian nursing workforce ready to embrace prescribing under supervision? A cross-sectional survey. J Adv Nurs 2022;78:4082-91.
12. Fox A, Joseph R, Cardiff L, et al. Evidence-informed implementation of nurse prescribing under supervision: An integrative review. J Adv Nurs 2022;78:301-13.
13. Chan RJ, Mayer DK, Koczwara B, et al. Building Capacity in Cancer Nurses to Deliver Self-management Support: A

Call for Action Paper. Cancer Nurs 2020;43:341-2.
14. Chan RJ, Knowles R, Hunter S, et al. From Evidence-Based Practice to Knowledge Translation: What Is the Difference? What Are the Roles of Nurse Leaders? Semin Oncol Nurs 2023;39:151363.
15. Andreassen P, Christensen MK. "We're at a watershed": The positioning of PhD nurses in clinical practice. J Adv Nurs 2018. [Epub ahead of print]. doi: 10.1111/jan.13581.
16. Chan RJ, Bowers A, Barton-Burke M. Organizational Strategies for Building Capacity in Evidence-Based Oncology Nursing Practice: A Case Report of an Australian Tertiary Cancer Center. Nurs Clin North Am 2017;52:149-58.
17. Ranieri V, Barratt H, Fulop N, et al. Factors that influence career progression among postdoctoral clinical academics: a scoping review of the literature. BMJ Open 2016;6:e013523.
18. Yates P, Baker D, Barrett L, et al. Cancer nursing research in Queensland, Australia: barriers, priorities, and strategies for progress. Cancer Nurs 2002;25:167-80.
19. Gribben L, Semple CJ. Factors contributing to burnout and work-life balance in adult oncology nursing: An integrative review. Eur J Oncol Nurs 2021;50:101887.
20. Vardy JL, Chan RJ, Koczwara B, et al. Clinical Oncology Society of Australia position statement on cancer survivorship care. Aust J Gen Pract 2019;48:833-6.
21. AUKUH Clinical Academic Working Group Transforming healthcare through clinical academic roles in nursing, midwifery and allied health professions 2016 [cited 2022 September 22]. Available online: https://www.bda.uk.com/professional/research/transforming_healthcare_through_clinical_academic_roles_in_nursing_midwifery_and_allied_health_professionals

Cite this article as: Chan RJ, Paterson C, Yates P, Knowles R, Bradford N. The growth and development of oncology nursing in Australia: the past, present and the future. Ann Palliat Med 2023;12(5):986-991. doi: 10.21037/apm-22-1124

