PLENARY PRESENTATION

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The evolution of oncology nursing: Leading the path to change

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The roles and responsibilities of oncology nurses have rapidly transformed over the past century from general nurses providing bedside comfort care with few technological advances to advanced practice oncology nurses responsible for everything from performing invasive procedures to diagnostic interpretation and screening for cancer prevention. As cancer care continues to evolve, nurses will play a key role in the field of oncology, whether as specialized oncology nurses providing clinical care or as nurse researchers spearheading groundbreaking oncology research.

Oncology nursing has evolved significantly over the last century, as cancer becomes one of the leading causes of death globally. Current statistics show that almost 45% of Canadian women and 49% of men will develop cancer during their lifetime, and one out of every four Canadians will die from cancer (Canadian Cancer Society, 2018). This increase in cancer burden has left many oncology nurses stressed and burned out, as nursing resources are spread too thin to meet the care needs of cancer patients (Ko & Kiser-Larson, 2016). Bakker et al. (2006) found that Canadian nurses felt their workload had increased by as much as 30–50% through increased patient numbers. The situation is not unique to Canada; the role of oncology nurses is expanding and adapting to care needs and scarce resources internationally (So et al., 2016). Supporting oncology nurses is vital to ensure people with cancer are appropriately cared for and guided through their individual journeys in a time of utmost need and vulnerability (Komatsu & Yagasaki, 2014). As cancer rates continue to rise, we explore the role and responsibilities of the oncology nurse in cancer care by reflecting on where it all started, examining our current practices and thinking forward to the future and how to best practise nursing within oncology.

As cancer remains prevalent, the role of oncology nurses at the forefront of cancer care is more involved and complicated than its humble beginnings.

HISTORY OF ONCOLOGY NURSING

Over the last hundred years, cancer care has come a long way from general nurses caring for patients with cancer, using primarily bedside and comfort measures, to the development of oncology nursing as a specialty (Haylock, 2008) with a defined knowledge base, supported by research and expert practice. Without specialized education or training in oncology, early cancer nurses were often forced to be creative in caring for patients with various complications of cancer treatment, such as radiation burns and pain (Ferris, 1930). In the early 20th century cancer nursing was perceived as arduous, depressing and even dangerous work, as the prospects of cancer patients surviving were slim and nurses were often exposed to harmful chemicals (Barckley, 1985). Radiation was accepted as the therapeutic option for many forms of cancer by the 1920s. However, the way in which radiation was administered often left nurses in contact with dangerous substances, such as radium and radon (Haylock, 2008). Some nurses refused to take care of cancer patients, as they believed doing so posed a significant risk to their own health and ideas that cancer was contagious were well entrenched until the 1930s (Haylock, 2008). Another factor influencing the role of oncology nurses was the broader context of the shifting roles of women during World War I. As many men went off to war, nurses began to take on roles originally reserved for physicians, such as venipuncture (Haylock, 2011).

Oncology nursing has developed and changed over recent decades. In the 1940s, nursing of people with cancer began to change with the introduction...

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of oncology nursing as a specialty in the United States and the creation of specialized education and training for oncology nurses (Lusk, 2005). In 1947, the first university course in cancer nursing was offered at Columbia University and represented the beginning of a shift in oncology nursing education (Yarbro, 1996). By the 1950s, the full impact of cancer was starting to be realized, which led to the recognition that nurses required additional preparation to provide comprehensive care to those who had cancer (Peterson, 1954). Cancer care continued to change rapidly over the next few decades. According to Lynaugh (2008) “the period between 1950 and 1980 was a time of erratic, but fundamental change in every arena of nursing” (Lynaugh, 2008, p. 13). The 1960s saw an increase in the number of clinical trials in oncology and with this came the desire of care continuity from trial participants (Haylock, 2011). During this time of rapid change, the role of the oncology nurses evolved from a primarily task-oriented care role to integral member of the cancer care team, often serving as liaison between clinical investigators and other disciplines that were becoming common to cancer care teams (Haylock, 2011). During this time of change, nursing leaders in oncology saw the need and an opportunity to found societies and associations of cancer nurses across various countries to support nurses and share oncology nursing knowledge. The International Society of Nurses in Cancer Care (ISNCC) was founded in 1984 (International Society of Nurses in Cancer Care [ISNCC], 2018) and in conjunction, the first cancer nursing journal, Cancer Nursing: An International Journal for Cancer Care was established in 1978 (Cancer Nursing, 2018). Shortly after ISNCC, the Canadian Association of Nurses in Oncology (CANO/ACIO) was founded in 1985, by a unanimous vote of more than 300 Canadian oncology nurses, with the goal to create a professional body to support other Canadian nurses working with cancer patients and advocate for appropriate care for patients and roles for oncology nurses (CANO/ACIO, 2018).

**SUPPORTING THE PROFESSIONAL DEVELOPMENT OF ONCOLOGY NURSING**

The role of CANO/ACIO has evolved since its inception along with the changing field of oncology nursing, most notably with the development of the CANO/ACIO Standards of Care for oncology nursing in the early 2000s (CANO/ACIO, 2017). These nine standards of care were intended to reflect the core components of oncology nursing and include: individualized/holistic care, family-centered care, self-determination, navigating the system, coordinated continuous care, supportive therapeutic relationship, evidence-based care, professional care, and leadership (CANO/ACIO, 2017). Standards were developed to guide oncology nurses in their work, but the mechanisms by which these apply to the day-to-day practice of oncology nursing in Canada are less understood. One study found a lack of awareness of CANO standards of care among oncology nurses, as well as a disconnect between predefined roles and enactment of these roles (Lemonde & Payman, 2015). Oncology nurses were most challenged in taking on leadership roles and engaging in professional development, warranting the further development of leaders in the field of oncology nursing (Lemonde & Payman, 2015).

While many studies have shown that relational nursing leadership is significantly related to improved outcomes for the nursing workforce, the work environment (Cummings et al., 2018) and for patients (Wong, Cummings, & Ducharme, 2013), it is helpful to understand what leadership is and how it applies to the role of the oncology nurse. Leadership is being able to see the present for what it really is, seeing the future for what it could be, and then taking action to close the gap between today’s reality and the preferred future of tomorrow (Cummings, 2012). For the nursing leaders in the early 1980s who envisioned that oncology nursing societies were needed to support nurses in their roles to provide the best care, education and support for those living with cancer and their families, seeing what this future looked like and then moving on to actually build and sustain that future is an awesome feat. Likewise, we have many immediate opportunities to envision and act to build a preferred future with our patients every shift, every day, every year. In many different ways, all oncology nurses can be leaders, as they envision, advocate and innovate ways that caring with and for their patients can be improved, expectations can be discussed and outcomes can be changed. It may mean that there is something you will do differently tomorrow that will lead to different outcomes.
for your patients. You will listen differently, advocate more clearly, prepare your care with new knowledge, take on a new perspective, and see the work and its problems differently. Nursing leadership is characterized by critical thinking, action and advocacy across all roles, practice settings and domains of nursing practice (Truant & Chan, 2017).

LOOKING TO THE FUTURE

While it is important to examine the history of oncology nursing, we must also consider where the future of oncology nursing is headed. One way in which oncology nursing is changing is in the increased specialization and advancement of nurse training, including an increase of specialized oncology nurses and Professional Cancer Navigators. Professional Navigators are nurses who provide continuity for patients and their families throughout the entire cancer treatment process by helping them navigate the system and liaising with other healthcare professionals and community agencies on their behalf (Cook et al., 2013). The future is pointing towards an increase in advanced practice nurses (APNs), as they function to meet both the medical and nursing needs of patients through a model of collaboration, shared responsibility, and accountability (Rieger & Yarbro, 2003). Most provinces in Canada now have APNs in oncology that provide advanced nursing care to patients and families.

The role of oncology nurses will continue to evolve, as research expands and cancer treatment options change. One such emerging health sciences research model is Precision Health, which uses very large datasets (“Big” data), an individual’s genetic makeup, environmental exposures and lifestyle to create and apply a program of illness prevention, detection and intervention that is tailored to that individual (Nevidjon, 2018). The origins of Precision Health began as personalized medicine built on early genome research to identify what kinds of treatments would be more or less effective in certain populations, groups and individuals. Precision Health is now an interdisciplinary research approach to refining our knowledge about effectiveness of treatment, and risk per patient. Nurse researchers play a key role in exploring the possibilities for Precision Health to improve treatment for oncology patients and reduce the harmful side effects experienced from traditional chemotherapy. One such nursing oncology researcher from the University of Alberta, Dr. Edith Pituskin, is leading Cardiotoxicity Prevention Research Initiative (CAPRI), the development of a database that aims to identify risk of cardiotoxicity in individuals receiving chemotherapy for breast cancer. Her work aims to develop a biomarker that identifies this risk and then to eventually give the health team a decision-making tool that supports personalized, safer chemotherapy treatment. “CAPRI will lead to a system that enables the treatment team to identify, based on a simple blood test, who is at risk of major complications from chemotherapy and possibly alter the therapy or start another intervention early” (Young, 2017). As treatment for cancer evolves, oncology nurses will require continued education to understand how Precision Health can inform prevention and treatment options for individual patients. It will allow oncology nurses to provide more individualized care, and will also come with increased responsibility to provide education and support for patient decision-making related to their diagnosis and treatment options. Understanding the social, ethical and legal frameworks around Precision Health and its implications for patients will become increasingly important for the oncology nurse in the future.

The roles and responsibilities of oncology nurses have rapidly transformed over the past century from general nurses providing bedside comfort care with few technological advances to advanced practice oncology nurses responsible for everything from performing invasive procedures such as bone marrow aspiration, and biopsies, to diagnostic interpretation and screening for cancer prevention (Bishop, 2009). As cancer care continues to evolve, nurses will play a key role in the field of oncology, whether as specialized oncology nurses providing clinical care, or as nurse researchers spearheading groundbreaking oncology research. The future of oncology nursing is bright.

REFERENCES


