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Editorial

Addressing the global pediatric oncology nursing workforce gap: An overdue imperative

Effective childhood cancer care requires a specialized pediatric oncology nursing workforce. Childhood cancer is an increasing pediatric disease burden worldwide[1] as mortality from common infectious diseases is successfully addressed. Treatment for cancer is now available in most countries. Even in Africa, a continent with the lowest per capita GDP,[2] most countries have facilities that offer pediatric oncology treatment.[3]

The World Health Organization (WHO) Global Initiative for Childhood Cancer, begun in 2018, acknowledges the regional disparity in childhood cancer survival and aims to increase survival to at least 60% worldwide. By partnering with the WHO Member State Ministries of Health, the initiative's CureAll strategy has already shown dramatic achievements in several early focus countries and Member States are joining monthly. Six common cancers representing 50–60% of all childhood cancers are targeted; however, reaching this goal is not possible without well-educated pediatric oncology nurses in low- and middle-income country (LMIC) settings where 90% of children and adolescents live.

Pediatric nursing began in the US in the mid 19th century when children's hospitals were established, such as the Children's Hospital of Philadelphia, in Pennsylvania. In 1895, the first pediatric nurse training program was begun at this hospital due to the growing need for specialized care.[4] In Europe, the first children's hospital was founded in 1802, in Paris, France, and later, the Hospital for Sick Children in Great Ormond Street in 1852 in London, England; both dates represent the beginning of pediatric nursing in those countries.[5]

In Asia the earliest documentation of children's health concerns is a 7th century opus medicus by Ch'ao Yüan-fang in China. General nursing training began in the late 19th century at the West Gate Red House Hospital in Shanghai, which was supported by Western missionary nurses.[6,7] Although pediatric nursing training is currently available in China, e.g., Sichuan University Western China Second University, nursing specialties are not officially recognized.[8,9]

In Pakistan, the first pediatric outpatient department was opened in February 1948 by Dr SMK Wasti in the Mayo Hospital, in Lahore.[10] In 1962, pediatrics was included in postgraduate medical studies. In 2008, it was made mandatory for nurses to train for one year after their nursing diploma was completed to be granted a bachelor of science in clinical nursing and in 2011, in the Sindh province (includes Karachi), a diploma in pediatric nursing is available.

In high-income country settings, pediatric oncology nurse training is conducted through hospital-based orientation and continuing education programs (generally up to six months), with supervision and mentorship by senior nurses before independent practice. Advanced practice nursing education is in university-based graduate and doctoral programs. In LMIC settings, pediatric oncology nursing orientation and continuing education are generally informal, intermittent, or disjointed (often dependent on fragmented trainings from international partners or sporadic virtual teaching) or are non-existent.[11] Professional recognition of pediatric oncology nursing as a specialty in these settings is rare.

In the US, since 1993, pediatric oncology nursing specialization is recognized through the Certified Pediatric Oncology Nurse (CPON®) exam and credential (now includes hematology-CPHON®). In Canada, the Canadian Nurses Association has certification programs (includes an exam) for oncology nurses and pediatric nurses, but not pediatric oncology nurses. Other high-income countries may or may not have professional recognition for oncology nurses or pediatric oncology nurses. A survey done in 2019 by the European Oncology Nurses Society of hospitals across Europe revealed that only 5/13 responding countries had specialty recognition for oncology nurses in general, thus the pediatric oncology nurse specialization is also lagging.[12]

In China, the Ministry of Health 2010–2015 document issued a training outline (2–3 months) for five nursing specialties including oncology nursing.[9] One aim of the Chinese Nursing Association, with 24 specialty societies (including pediatric and oncology] is to address nursing professional competence.[13] This is the first step towards developing a pediatric oncology nursing specialty in a country with a projected 22,875 new cases in 2015 alone.[14]

LMIC pediatric oncology nursing training programs are recent. For example, in Karachi, Pakistan, since 2009, Indus Hospital has offered a one-year nurse technician specialty training in pediatric oncology and a nurse-led two-week pediatric oncology nursing training course (offered twice a year) for nurses from across Pakistan, surrounding countries and Africa supported by the Sanofi Espoir Foundation grant as part of a larger childhood cancer project. Unfortunately, despite this specialized training, pediatric oncology nurses are not yet recognized as specialty practitioners.

In Nepal, in 2006, Kathmandu University began a Bachelor of Nursing in Oncology, and in 2012, a 3-month hospital-based basic oncology nursing program was begun at the P. Koirala Memorial Cancer Hospital. Later, in 2018, the same hospital joined with Pokhara University to offer a three-year bachelor of nursing science in oncology.[15] A similar program in pediatric oncology nursing is not yet documented.

In high-income settings, “pediatric oncology” is understood to include infancy through adolescence and young adults. Whereas, in many LMICs, pediatric oncology is confined to younger children, for example, below 14 years of age (e.g., Indonesia). Since children are not miniature adults, it is critical that nurses caring for this population understand the complexities of their early growth and development, as well as their biomedical, psychosocial, mental, and spiritual health needs.

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Each pediatric age group has distinct psychosocial needs, and this is where the needs and support of siblings, parents/caregivers and extended families are prioritized. The complexity of this psychosocial care is reflected in the 15 standards published in the Pediatric Blood & Cancer journal and available for free from the Mattie Miracle Foundation in the US.[16] Thus, pediatric oncology nurses must be competent in determining the needs of children and adolescents in various stages of maturity and managing parenting and sibling relationships in extremely stressful conditions over many months. Additionally, pediatric oncology nurse researchers are desperately needed in LMIC to investigate and document the local evidence required to provide effective nursing care.[17]

Pediatric oncology nurse specialization is only possible when both education and clinical mentoring are provided. On-the-job training without a fundamental knowledge base of childhood cancer and treatment does not allow for competent and safe nursing. On the other hand, teaching theoretical concepts and facts about childhood cancer without providing clinical mentorship is inadequate preparation to deliver appropriate nursing care to this population. Placing nurses in the position of caring for children and adolescents with cancer without the necessary education and mentoring contributes to low job motivation, fear for personal safety, and job dissatisfaction.[18,19]

2020, the Year of the Nurse as recognized by the WHO, International Council of Nursing and Nursing NOW, also saw the start of a corona virus pandemic. As this pandemic continues, it has brought into stark relief the critical role of the nursing workforce worldwide as oncology nurses have been remanded to Covid-19 wards and many nurses worldwide have either burned out or quit nursing, retired, or died. This has contributed to a worsening of the pre-2020 nursing shortage globally.

In May 2021, the WHO Director General submitted a "Health workforce: Global Strategic Directions for Nursing and Midwifery" report to the World Health Assembly, in which he called for "Strengthening education capacity and quality".[20] Work towards this has already begun. For example, in 2017, nurses attending the Philippines National Childhood Cancer Control Workshop identified four pediatric oncology nursing priorities including, "Promotion of capacity building for quality cancer care and outcomes through enhanced opportunities for nurses' professional development and specialization …".[21] The WHO Global Initiative for Childhood Cancer has generated significant progress in pediatric oncology nursing initiatives. For example, Peru established a nursing committee that identified education as a top priority and Ghana initiated a year-long pediatric oncology certification program in collaboration with the Ghana College of Nurses and Midwifes in Accra.

Every patient with a childhood cancer deserves optimal nursing care, and even in resource-restrained settings, nursing care can make a positive difference. We now have the world's attention focused on the critical role of nursing in managing a pandemic and in healthcare generally as well as the global nursing shortage. Given the long history of specialization in many countries for pediatric nursing, the time is overdue for the same level of education and professional recognition for pediatric oncology nurses. Childhood cancer has not paused for the pandemic. Specialized pediatric oncology nurses are required to deliver locally researched and documented evidence-based nursing care essential to improving survival, ensuring effective end-of-life care, and monitoring and supporting survivors over years. Ministries of Health, hospital administrations and stakeholders everywhere must take advantage of WHO guidance and support in achieving a well-prepared pediatric oncology nursing workforce in all facilities to return these young patients to health so they may contribute to their societies as productive adults. Global disparities in pediatric oncology care must be acknowledged, addressed, and eliminated. This cannot happen without specialized pediatric oncology nurses. Health is a human right, as guaranteed by the Constitution of the WHO and the Office of the United Nations High Commissioner for Human Rights.[22] Children and adolescents with cancer everywhere have a right to health and so a right to well-educated pediatric oncology nurses and health workforce.

Declaration of competing interest

None declared.

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