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an International Perspective

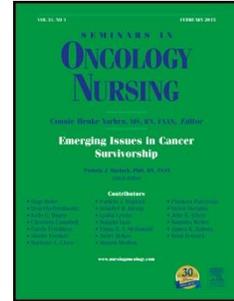
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## **Educational preparation of nurses caring for older people with cancer: an international perspective**

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### **Abstract**

Objectives: To review the education available in Europe and the USA for nurses caring for older people with cancer.

Data sources: Nursing literature, published guidelines, and professional nursing organizations websites:

Conclusion: The educational needs of nurses caring for older cancer patients have not been well defined to date, resulting in a mixed international picture of preparation.

Implication for nursing practice: As the number of older people with cancer grows, the resulting complexities of patient and family care needs have significant implications for the role of nursing.

### **Key words**

**Gero-oncology, nursing education, nursing practice, aged, oncology nursing, education**

Cancer is a major health challenge for older people. Nurses have a critical role in maintaining optimal health and quality of life for older people and families through their cancer journey. However, insufficient attention has been given to the development of a nursing workforce that is able to provide this support. Ensuring the “right staff, right place, right time, right skills” with the growing needs of an ageing population have created a global crisis in the health workforce across health care specialties, including oncology.<sup>1</sup> Education is an important part of the solution to this crisis, but there is a lack of agreement as to how nursing should meet these challenges. This article reviews educational opportunities for nurses in Europe and the United States and provides recommendations for the nursing workforce to develop further competencies in caring for older people with cancer.

Older adults with cancer are more likely to have comorbidities and other problems associated with their age, such as dementia, depression, stroke, diabetes, and problems related to continence, nutrition, risk of falls, functional decline, polypharmacy, and delirium,<sup>2</sup> which may affect their response to treatment, the need to modify their treatment plan and the supportive care that is needed. Older adults are a heterogeneous group and require a comprehensive assessment to tailor their treatment and plan of care. Their families are also more likely to need psychosocial support during and perhaps beyond the cancer treatment trajectory.<sup>3-5</sup> Nurses play a leading role in ensuring that these elements of care are in place. However, they require skills and knowledge of common clinical issues that occur in old age to enable them to help the patient and family develop goals for treatment, care, and quality of life. Education should include knowledge of cancers common in older patients including breast, prostate, gastrointestinal, and lung, the pathophysiology of these cancers, review of common chemotherapy regimens, and evidenced-based nursing interventions for older patients and families.<sup>6</sup>

There is a need to consider the educational needs of specialist nurses working with older patients with cancer, as they will most likely provide support to people with the most complex needs. However, there are few examples internationally of nurses working in a specialist gero-oncology capacity. In France, for instance, the concept of specialist geriatric oncology clinics and the key role of specialist nursing in care and support of older cancer patients are well established in a number of centers. In the UK and Sweden, the nurse specialist role tends to be defined by tumor type, and so services, including nursing, that focus specifically on older cancer patients, are a rarity. In African

countries, there is little public or professional awareness of the issues related to the older adult with cancer, and specialist services have not been developed.<sup>7</sup> Internationally, nursing has a role to play in the provision of specialty services but the gerontological nursing specialist role for the older cancer patient has not been well -defined to date.

With regard to educational provision, gerontological nursing and oncology nursing have tended to be taught separately from each other both in undergraduate and graduate programs. Given that there are existing concerns about a lack of consistent undergraduate education focused on either of these fields, it is likely that pre-licensure nursing students do not get exposed to the need for the integration of skills and knowledge from both fields together.<sup>8-10</sup> In continuing education, there is greater potential for an integrated approach and the development of specialist roles that encompass oncology and gerontology. However, this review identified limited educational provision that specifically supports nurse specialist roles in gero-oncology. In Europe, there are some specific post-graduate courses ranging from 2-3 day courses to full tertiary programs with diplomas, targeted at a range of professionals including nurses.<sup>7</sup> There are also some online resources freely available on the internet and targeted at health care professionals.<sup>11</sup> In USA and a few other countries, as detailed below, nurses working in organizations registered with the Nurses Improving Care of Health System Elders (NICHE) program, can access educational resources on nursing older people with cancer. However, these resources are not available across the nursing workforce and a lack of published research means it is not known if nurses access them and, if they do, their impact on nursing practice. Given that gero-oncological nurse specialist roles are relatively rare, it is perhaps not surprising that educational provision in this field of nursing is in its infancy.

The following sections review examples from Europe and the USA that discuss positives changes in nursing education and care for older patients with cancer.

### **Europe**

In many European countries, the role of nursing in gerontological oncology care is well recognized by patient groups and specialist teams. However, workforce planning within health services often neglects the skill and education required to provide such support for patients with cancer and their families.<sup>12</sup> Cancer care is becoming more complex with the changing and increasing complexity of comorbid conditions, which is demanding wider range of skills and critical thinking among nurses working in gerontological oncology.<sup>13</sup> Social and economic pressures are also influencing education in Europe with the move of nursing pre-licensure courses into higher education.<sup>14</sup> A range of key influencing factors in Europe are creating a climate in which investment in nursing education in gero-oncology nursing is increasingly recognized as important, but remains hard to fully implement.

### *The harmonization of European nursing education*

A number of features of nursing education in Europe are relevant to the way in which educational provision has been shaped. Academic credits and quality assurance guidance reflect the Bologna agreement, which introduced the harmonization of educational levels across Europe.<sup>15</sup> This agreement prompted the development of a common, three-tier system of bachelors, masters and doctoral degrees. A common European Credit Transfer System (ECTS), allows learners to combine studies at different European centers to develop their professional qualifications. These are now well recognized within some parts of Europe and has clearly put a focus on the joint development of curricula in nursing education.<sup>15</sup> However, in a context of constrained public finances, nurses are finding it increasingly difficult to get time for or funding to allow further continuing professional development within many European Union (EU) academic institutions.<sup>16 17</sup>

As in other parts of the world, health care in Europe is shifting rapidly in response to technological and scientific innovations, in addition to rising consumer expectations. Reform of health services is a common phenomenon, but these reforms are often implemented rapidly with little consideration of workforce implications. As a consequence, a constantly developing and flexible nursing workforce is required.<sup>18 19</sup> In many countries there are shortages of nurses as a result of future retirement and workforce numbers fluctuating. In Europe, a sufficient numbers of nurses being educated is not offsetting the retirement of nurses and in Italy, for example, there is a shortage of nurses. Unfilled specialist training places are also found within, for example, other professions seem more attractive in Sweden France, and Hungary.<sup>16</sup>

### *European influence on cancer nursing education*

There have been a number of positive efforts to improve the European (EU) climate for nursing education in relation to older adults living with cancer. Political imperatives to improve older adults' care through EU directives (guidelines) include the healthy ageing program and long-term care for the older adult, which have provided additional incentives for nurses and other health care professionals to improve their gerontological knowledge. Other mechanisms have provided incentives for improvements in cancer care in general. For instance, the EU Commission (the EU's executive body) recently called for action to reduce inequalities in cancer outcomes in Europe.<sup>20</sup> The vital role of the different professions with a focus on nursing in the provision of cancer therapy, rehabilitation and end-of-life care was highlighted in this call for action.

### *International Society of Geriatric Oncology*

The International Society of Geriatric Oncology (SIOG) is a multidisciplinary society which aims to foster the development of health professionals in the field of geriatric oncology in order to optimize

treatment of older adults with cancer. Through its work, SIOG has played a part in the development of the role of nursing in the European context, resulting in the development of the Nursing and Allied Health Professional Group in 2014. The purpose of this group is to develop and nominate excellence in geriatric oncology nursing through education, clinical practice, research and advocacy. This is a rather new initiative and to date effects can so far mainly be seen at the annual conference with the development of special interest sessions.<sup>21</sup> On the SIOG website, there are a number of educational resources targeted at clinicians working with older people with cancer.<sup>11</sup>

#### *European Oncology Nursing Society*

Another example of a positive initiative in Europe is the European Oncology Nursing Society (EONS) Cancer Nursing Curriculum that provides eight modules that can be taken over a single period of 40 weeks. The curriculum, currently under review, is designed as a framework for future educational development, and EONS members are advised to adapt it as necessary to meet their own professional needs for cancer nursing within their own country. In addition, guidance on supervision of practice, training facilities and quality assurance requirements are also provided in the curriculum. One module focuses specifically on cancer in older adults.<sup>22</sup> As illustrated in Table 1, the key domains highlighted are the context of care; the impact of cancer on people and their families, including survivorship; cancer pathology and treatment; nursing assessment and intervention, including symptom management and end-of life care; and decision making and communication. The module provides a useful reference point for individual nurses seeking to assess their competency in caring for older cancer patients, but also for educational providers and their funders to plan the development of suitable provision.

This specialist module has made an impact on learning resources and provided guidance for structuring the learning content of educational programs across several European countries. This impact has been strengthened particularly by the provision of support for translation of the curriculum as part of the package.<sup>22,23</sup> Future development of new specialist curricula and advancing levels of practice through consensus and expert panels identify these curricula as a gold standard of professional education across Europe.

#### **USA**

In the USA, gerontological content has been widely integrated within the curriculum of schools awarding the baccalaureate degree in nursing and this has been driven by the work of the national Geriatric Nursing Education Consortium (GNEC) (see below). Berman et al<sup>24</sup> reported a significant increase in gerontological curriculum content (63% vs 92%) between 1997 and 2003. While this study has not been updated, findings from a 2014 evaluation of the impact of the GNEC reported

that of 344 participating schools, 281 (81.7%) had updated or enhanced their senior-level nursing courses by adding evidenced-based geriatric content.<sup>25</sup>

However there are few schools of nursing offering an oncology course for baccalaureate students. Erickson et al<sup>26</sup> found that key oncology concepts and evidenced-base care about cancer nursing are taught in adult health nursing courses and clinical rotations. A recent national survey sought to identify the key cancer concepts taught in U.S. nursing programs.<sup>27</sup> Review of major cancers and goals of cancer treatment ranked high (3.67 and 3.64 on a scale of 0-5), whereas sexuality and scope and standards of oncology nursing ranked lower (3.1 and 3.0). They also identified a lack of time within the curriculum and limited access to resources as significant barriers to teaching oncology content.

The National Comprehensive Care Network (NCCN) provides guidelines for the care of older adults with cancer as essential education for nurses and other healthcare professionals. These can be accessed at their website.<sup>28</sup> A number of professional healthcare organizations (nursing, medicine and foundations focused on health) have made important contributions to preparing registered nurses to care for older adults including those diagnosed and living with cancer. Their contributions are described below.

#### *American Association of Colleges of Nursing*

The American Association of Colleges of Nursing (AACN) is dedicated to setting standards and providing resources that advance nursing education, research and practice. Through the Essentials Series, the AACN provides guidelines for curricula in baccalaureate schools of nursing. They have also created a supplement with the support of the John A. Hartford Foundation of baccalaureate competencies and curricular guidelines for the nursing care of older adults.<sup>29</sup> The document follows the format of The Essentials of Baccalaureate Education of Professional Nursing Practice<sup>30</sup> adding gero-competency statements to each of the nine essentials. The document contains a list of websites and resources some of which offer oncology specific information. While the guidelines focused on the care of older adults are now more than five years old, the websites identified as resources for schools of nursing and nurses are updated on an ongoing basis.

#### *National Gerontological Nursing Association*

The National Gerontological Nursing Association (NGNA) represents clinical nurses, educators and researchers focused on the care of older adults across the continuum of care settings. Through an annual convention, state chapters and webinars, the association seeks to improve the care provided to older adults. In 2015 the NGNA issued a position paper focused on gerontological nursing education in nursing programs (diploma, Associate, and Baccalaureate) and continuing education

programs.<sup>31</sup> The document makes five important recommendations for nurse educators that prepare registered nurses in all programs and these are shown in Table 2.

*John A. Hartford Foundation*

Nursing care of older adults in the U.S. has been significantly enhanced through the longstanding commitment of the John A. Hartford Foundation. They have supported the Hartford Institute for Geriatric Nursing to include the Nurses Improving Care of Health System Elders (NICHE), the program formerly known as the Building Academic Geriatric Nursing Capacity Program (BAGNC) and the Geriatric Nursing Education Consortium.

With the support of the foundation New York University began to test nursing care models in the hospital setting in 1992. This project now known as NICHE was intended to improve the care environment for the older adults by focusing on nursing practice. NICHE now based at the New York University College of Nursing helps hospitals in the U.S, Canada, Bermuda, and Singapore improve care for older adults. Their mission is to provide guidelines and tools to change the culture of care for older hospitalized adults. Currently there are more than 620 hospitals and healthcare agencies participating in the program. They also provide important and specific educational content related to the nursing care of older adults with cancer.<sup>32</sup>

The Foundation's Trustees approved funding for the BAGNC program in 2000. The goal was to fund up to 10 pre-doctoral scholars and 10 post-doctoral fellows annually;<sup>33</sup> funding has continued through 2015 and more than 200 scholars and fellows have received support. While the focus was on the development of gerontological nurse scientists, educators, and leaders, their impact on undergraduate nursing education has been significant. In a 2011 evaluation brief, the Foundation reported that scholars and fellows had taught more than 11,000 undergraduate nursing students in courses that contained at least 50% gerontological content.<sup>34</sup> Another important function of these scholars and fellows has been the dissemination of research findings that support best education, practice, and innovation in care of older adults.

To further support gerontological nursing education at the baccalaureate level, the foundation in 2005 awarded a \$2.48 million grant to the American Association of Colleges of Nursing.<sup>35</sup> The Hartford Institute for Geriatric Nursing, housed at the New York University College of Nursing was responsible for coordinating the activities of Geriatric Nursing Consortium (GNEC). Specifically, GNEC focused on the following four goals; 1) increase gerontological content in senior level nursing courses; 2) educate faculty in U.S. baccalaureate schools on basic gerontological nursing and the use of available resources; 3) support trained faculty in their schools of nursing as they revise curricula and work to improve gerontological nursing education; and 4) provide faculty with innovative

resources to help educate their students. These goals were accomplished through the participation of more than 800 nursing faculty from every state in the U.S. in six, two-day Faculty Development Institutes. Participating faculty shared materials with colleagues and they have used these materials to revise their courses. Importantly, the series contained a paper entitled “Assessment and Management of Cancer Related to Older Adults with Complex Care Needs.” The module remains a useful tool for the preparation of nursing students and all of the materials are available on the ConsultGeri website.<sup>36</sup>

#### *American Nurses Association*

The American Nurses Association (ANA) has a web based program entitled the Nurse Competence in Aging which is focused on “enhancing the geriatric competence - the knowledge, skills and attitudes - of the 400,000 nurses who are professionally identified as members of approximately 55 specialty nursing” including the Oncology Nursing Society.<sup>37</sup> The site has links to these specialty organizations, gerontological certification, and the ANA GeroNurseOnline website.<sup>38</sup> The ANA has also developed the document *Scope and Standards of Practice for Gerontological Nursing*.<sup>39</sup> These standards provide specific criteria for basic gerontological practice of registered nurses. The American Nurses Credentialing Center (ANCC), a subsidiary of ANA, offers a gerontological nursing board certification for registered nurses.

#### *Oncology Nursing Society*

The USA equivalent of EONS (see above), the Oncology Nursing Society (ONS) is a member based organization that served nearly 120,000 oncology nurses in 2014 through evidence-based education programs designed to enhance treatment and care for patients with cancer and their families. Through the Society’s online resource center, annual Congress, regional meetings, local chapters, ONS Communities, and the Oncology Nursing Certification Corporation nurses can access oncology content that prepares them to provide evidence-based care for older adults. In 2011 ONS published a position statement *Lifelong Learning for Professional Oncology Nurses* that identifies the expected professional behaviors for oncology nurses to continuously update their skills and contribute to the education of nurses and other members of the healthcare team. ONS is currently revising their Standards of Oncology Nursing Education: Generalist and Advanced Practice Levels. These standards are provided to “enhance the quality of oncology nursing education and promote the standardization of oncology nursing academic preparation”. These materials are available on their website.<sup>40</sup> The Oncology Nursing Certification Corporation (ONCC), an independent affiliate of ONS offers certification for both U.S. and international nurses and more than 37,000 are currently certified by ONCC.<sup>41</sup> Coleman et al<sup>42</sup> found that nurses certified in oncology had higher levels of

knowledge related to pain and followed guidelines for managing chemotherapy induced nausea and vomiting more than non-certified nurses. These findings support the benefit of certification on patient care outcomes.

### **Conclusion**

Those at the frontline of nursing education face many challenges in cancer education and the skills needed by oncology nurses for the future. In addition to improving nursing curriculum in geriatric oncology nursing, nurses need to further define their role and competence in providing complex care to older adults with cancer.

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**Table 1: Modules in European Oncology Nursing Society Curriculum for cancer in older people<sup>22</sup>**

- The context of care in older people: to encourage the student to analyse the impact of cancer in an ageing society in a national and European context.
- Impact of cancer on older people and their carers: to provide the student with an understanding of the impact of cancer on older patients and their informal carers.
- Basic science and treatment of cancer in older people: to provide students with a basic understanding of how cancer develops in older people and the factors that contribute to cancer development in the older host.
- Nursing assessment and intervention in older people: to provide the student with the knowledge and understanding to assess the multidimensional needs of older people with cancer.
- Decision making and communication: to provide the student with the skills required to communicate effectively, respectfully, and compassionately with older people with cancer and their families.

**Table 2: National Gerontological Nursing Association (NGNA) Recommendations for Pre-license Registered Nurse programs (Diploma, Associate, and Baccalaureate)**

Recommendation 1: Develop program outcomes and curricula that incorporate the recommended Baccalaureate Competencies and Curricular Guidelines for the Nursing Care of Older Adults (2010) for teaching gerontological nursing evidence-based practice Across didactic and clinical courses.

Recommendation 2: Integrate gerontological nursing learning experiences into inter-professional education opportunities for students across disciplines.

Recommendation 3: Explore strategies for students to minor or specialize in gerontological nursing, such as option for internships or honors programs.

Recommendation 4: Faculty teaching in pre-licensure programs (Diploma, Associate, Baccalaureate, Master's will maintain current preparation and expertise in nursing care of older adults for the courses involving gerontology and to seek national certification in gerontological nursing.

Recommendation 5: All practicing nurses who provide care for older adults in the U. S. will participate in annual gerontological nursing continuing education in order to maintain and enhance competence.

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