Oncology Certified Nurse Specialist in Japan

Hiroko Komatsu*

Faculty of Nursing and Medical Care, Keio University, Japan

*For reprints and all correspondence: Hiroko Komatsu, Faculty of Nursing and Medical Care, Keio University, 35 Shinano-machi Shinjuku-ku, Tokyo 160-8582, Japan. E-mail: hkomatsu@sfc.keio.ac.jp

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The purpose of this article is to review a historical perspective of the Certified Nurse Specialist role and current trends in nursing education and practice of the Oncology Certified Nurse Specialist. Since the initiation of Certified Nurse Specialist credentialing system in 1995, 193 Oncology Certified Nurse Specialists have practiced in clinical settings. The Oncology Certified Nurse Specialist credentials committee, the Association of Nursing Programs in University and the Association of Oncology Certified Nurse Specialists play the important part to maintain a high level of Oncology Certified Nurse Specialist competencies in Japan. The Oncology Certified Nurse Specialist should promote the outcomes research to assess the effectiveness of nursing intervention by the Oncology Certified Nurse Specialist, and participate in the interdisciplinary research by collaborating with other health professionals to realize the ongoing cancer reforms in Japan.

Key words: advanced practice nursing — clinical oncology — nursing education

INTRODUCTION

As of April 2010, there are 193 Certified Nurse Specialists (CNSs) specialized in oncology nursing in Japan. The CNS credentialing system had been initiated in 1994. The role of the CNS realizes advanced education and specialization at the graduate level. Although the number of oncology CNSs (OCNSs) is not sufficient, the complex care needs of patients with cancer have created opportunities for role expansion for advanced practice nurses in a variety of oncology practice settings (1). The purpose of this article is to review a historical perspective of the CNS role and current trends in nursing education and practice of the OCNS.

HISTORY OF CNS ROLE

The title of CNS is given to a registered nurse who has met specific graduate degree educational requirements, has expert clinical knowledge and provides direct patient care. Diversified healthcare needs, advanced/complex/specialized medicine, improved social status of the nursing profession and the advancement in nursing education have led to the development of CNS in Japan. In response to the government panel report on ‘the need for fostering of nurse specialists with specialty nursing expertise’ in 1987 (2), the Japanese Nursing Association (JNA), the Japanese Association of Nursing Programs in University (JANPU) and other nursing organizations launched the first stage of discussion on the purpose, role, areas of specialty and credentialing system of the CNS. Ever since the CNS credentials committee was set up in the JNA in 1990, the members have contributed their input through discussions. After the establishment of the CNS system was approved at the general assembly of the JNA in 1994, the CNS credentialing system officially started. With this background, the certification of CNS requires no national qualifications. Tables 1 and 2 show the CNS credentialing system by the JNA (3) including its purpose, the CNS role, specialty areas, eligibility criteria and renewal.

CNS competencies build upon the registered nursing practice. Certification as a CNS requires a minimum 5-year clinical experience, and a master’s degree with a total of 26 credits in the CNS program from an accredited educational institution. After the graduate education, 1 year of clinical practice in a specialized role is necessary. The candidates must pass the JNA’s CNS examination in their chosen specialty area, and then they can practice as board certified. Once granted, certification is effective for 5 years, and the individuals must apply for recertification based on demonstration of continuing education credits. As of April 2010, there are 451 CNSs in 10 specialty areas, including oncology nursing, psychiatric mental health nursing and critical care nursing.

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The JANPU accredits the education programs for the CNSs. The purpose of the JANPU is ‘to achieve the mission of higher education institutions of nursing science in terms of contributing to the development of academic scholarship and education through the mutual collaboration and cooperation of universities of nursing’. The JANPU established an accrediting commission for the programs in 1998, and conducted an intensive review of the prepared material and written report of the university seeking the accreditation status according to the target points set for the nurse specialist curriculum (4). To date, 37 OCNS programs have been accredited by the JANPU. In 2007, the Association of Certified Nurse Specialists was founded by CNSs ‘to improve the quality of nursing care through involvement of quality assurance or other activities for advanced practice; to make policy recommendations for maintaining and promotion of people’s health; and to act to achieve the goals’ (5). As shown in Fig. 1, the CNS credentials committee, accrediting commission for masters programs and Association of CNSs maintain a high level of CNS competencies in Japan as an integrated quality systems.

**OCNS EDUCATION**

As mentioned above, the CNS must be a graduate of the master’s program with accumulated nursing experience. For the CNS certification, there are 37 Masters of Science nursing degree programs accredited by the JANPU available, while the program comprises a total of 26 credits required for the certification examination.

As a CNS program, the OCNS master’s program at the St Luke’s College of Nursing is described. There are 15 master’s programs available and 80 students enrolled at the St Luke’s College of Nursing. The OCNS program aims to develop competencies for leadership at an advanced practice level in the care of oncology patients and their

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Table 1. The JNA Certified Nurse Specialist (CNS) system (1)

| Purpose: To contribute to development of health care as well as advancement of the nursing profession by ensuring a supply of highly skilled and well-educated CNSs in specialty areas for the provision of high quality of nursing care to individuals, families and groups who face complex and difficult problems. |
| CNS role: The CNS is a licensed registered nurse who has an advanced practice skills set focused into a specific field of nursing. The CNS uses his/her expertise in practice, direct care, teaching, consultation, collaboration, ethical coordination and research. |
| Specialty areas: Cancer Nursing, Psychiatric Mental Health Nursing, Critical Care Nursing, Child Health Nursing, Chronic Care Nursing, Community Health Nursing, Gerontological Nursing, Women’s Health Nursing, Infection Control Nursing and Family Health Nursing. |

From the Certification and Regulation of Certified Nurse Specialist 1995 (Japanese Nursing Association).

Table 2. JNA CNS system (2)

| CNS certification eligibility criteria |
| Be a registered nurse who is licensed to practice as a public health nurse, midwife or clinical nurse |
| Has a minimum of 5-year experience in clinical practice (a minimum of 3-year experience in a defined specialty area) |
| Has a master’s degree in a defined area of nursing specialty from an accredited educational institution with a total of 26 credits in the certified nurse specialist program ⇒ 1-year clinical experience |

Certification process

First-stage examination: review of CV
Second-stage examination: written examination
Renewal every 5 years (activity report and continuing education credits are required)

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![Figure 1. The integrated quality system for CNS competencies in Japan.](image-url)
families. The explosion of scientific and technological discoveries in cancer care as well as the shift of care settings requires advanced practice oncology nurses to deliver complex care in new settings. The cancer care continuum (prevention, screening, care for acute illness and palliative care) becomes a focus of the education and clinical practice. Future leaders in oncology nursing must have clinical innovative skills to lead interdisciplinary cancer-related teams and to design and implement innovative healthcare practices.

All students, regardless of specialty, are required to take the core courses: Cancer Pathophysiology and Disease Management, Advanced Health Assessment in Oncology Nursing, Oncology Nursing I (Advanced Practice Concepts in Cancer Care Continuum), Oncology Nursing II (Symptom and Problem Management), Oncology Nursing III (Common Problem in Cancer Care) and Clinical Practicum and Residency in Advanced Practice Role. CNS competencies and role development, experience of the educator role and the application of ethics in CNS practice are included in the curriculum. This curriculum is also involved in the methodology of improving patient outcomes, and system and change theories for exercising the leadership skills of the CNS role.

In recent years, not only nurses and healthcare professionals but also the general public call for realizing a new curriculum for the CNS. A looming shortage of physicians, which is a major cause of the exhaustion of human resources in medicine, addresses the growing need for nurses to serve as substitutes for physicians under the standardized care process for the patient with a stable condition.

In a rapidly changing society, the nursing schools must be committed to preparing the next generation of the CNSs who will participate in the diagnosis and treatment. To strengthen the core subjects which cover the knowledge related to the diagnosis and treatment, and expand the range of discretion, the following three areas should be enforced in the CNS curriculum: ‘Advanced Physical Assessment,’ ‘Advanced Physiology/Pathophysiology’ and ‘Advanced Pharmacology’. The JANPU commission recommends the completion a transition to the new curriculum with a total of 35 credits including the above three contents, by the earliest possible time, within 5 years or by 2013 (6).

CURRENT STATUS OF CNS

Currently, OCNSs work in multiple settings, including hospitals, clinics, palliative care team/hospice, home nursing and with specific populations in cancer prevention. In 2009, a survey on the OCNS role was conducted with 117 OCNSs in Japan (7). The percentages of the participants’ by their workplace were similar, among nursing administration, in-patient units and outpatient clinics. The OCNSs fulfilled the CNS roles as practitioners with professional expertise to enhance the quality of nursing care, consultants or educators for staff nurses, researchers, coordinators for healthcare needs and ethical coordinators. Of the OCNSs, 30% worked in the palliative care field.

How the OCNS implements advanced practices and demonstrates professional achievements in palliative care are described with a specific example. Ms D works at the nursing management department in a general hospital in Tokyo. To improve the quality of palliative care in the hospital, she collaborates with other professionals in the outpatient palliative care clinic and the palliative care team. She applies evidence-based critical reasoning, adapts care to the lived realities of patients in different contexts and achieves this by building mutual trust and establishing a partnership with patients. The effects generated in clinical practice by her activities based on her competencies of advanced practice are highlighted. An advanced lung cancer patient was scheduled to be transferred from the palliative care unit to another hospital due to stent insertion for expansion of the primary bronchus in accordance with his hope and choice. It was the day before the transfer. The nursing staffs decided to provide care to him at the palliative care unit, however, Ms D called an emergency case conference at the unit to discuss his decision on invasive treatment despite a high risk of tracheal obstruction with physicians, staff nurses and the hospital chaplain, and to ensure the best care setting to respect his will. In the result, this patient received care not at the palliative care unit but at the intensive care unit with emergency respiratory management for tracheal obstruction until being transferred. By this decision, the patient’s safety was ensured, and at the same time, his will was respected. This is a successful case of collaboration among healthcare professionals. This process also promoted the sharing of responsibility in ethical issues among healthcare professionals and their job satisfaction. Advanced practice nursing services provided by Ms D in the palliative care setting is illustrated in Fig. 2.

![Figure 2. Impacts of Oncology Certified Nurse Specialist practice on patient and system outcomes in palliative care.](image-url)
EFFECTS OF OCNS PRACTICES

Outcomes of the OCNS practice are limited to descriptive data in the above case report. I accumulated and analyzed descriptive data on the definition and process of the OCNS consultation practice in the typical case reports from seven refereed journals (8–14) published between 1995 and 2009 in the Ichushi (http://www.jamas.or.jp/index.html). As a result, the OCNS consultation practice can be defined as follows: an interactive process of developing self-confidence as a nurse, and extending the knowledge and experiences as a consultee to improve patient’s outcomes as much as possible by collaboration between the consultant and the consultee. Through this process, the quality of cancer nursing as well as medical care is assured even with changing needs of cancer patients. The following specified interventions were identified in the OCNS consultation: (i) comprehensive assessment of patients with complex psychological problems such as total pain and treatment decision-making, (ii) patient education and counseling services, (iii) monitoring and evaluation and (iv) mobilization of resources. Analyzing the process of these specified interventions in the consultation practice revealed that the OCNSs were accountable for managing high risk, clinically complex or resource-intensive patients to optimize clinical, functional and cost outcomes. However, no clear evidence was found to substantiate how the effects of OCNS practices were reflected in patient outcomes and what improvement and achievement were made in the cancer care delivery system. More research is needed to verify the impacts of OCNS practices on the quality of medicine, cost and patient satisfaction.

Cunningham reviewed selected empirical literature examining outcomes of oncology advanced practice (1). These outcomes included patient’s symptoms, distress, pain, current concerns, mood states, functional status, health perceptions, complications, hospitalizations and length of stay. The most sensitive outcome measures of the OCNS intervention are critical for the advancement of knowledge. Moreover, outcomes that are most meaningful to patients with cancer will affect the quality of cancer care delivered (15–17). Strong evidence is needed from well-designed trials to present the impacts of the OCNS interventions with specific focus on the complex care needs of patients with cancer.

THE FUTURE VISION OF THE OCNS

Future knowledge builds on what was learned in the past. This review on the OCNS role, history of the education system, current trends and impacts of the OCNS practice highlights the need for expanding the OCNS role in the cancer care delivery system toward the middle of the 21st century.

The first challenge is to increase the number of OCNS training courses provided at graduate schools to 100 within the next year or two. It is estimated that more than 500 OCNS candidates are produced each year. Now, it is critical to ensure and improve the competencies of OCNSs who work actively as a change agent to identify complex health problems and opportunities of improving nurse-specific outcomes in delivering care, and to develop innovative solutions. A new credentialing system is expected to have both quantity and quality effects of OCNSs in oncology nursing. The JANPU proposes to shift the OCNS credentials committee from the JNA to third-party credentials by individual nursing societies. The Japanese Society of Cancer Nursing should be committed to develop core competencies, core curriculum and job description for the OCNS certification and renewal examinations.

The second challenge is to expand the OCNS role. Diagnosis and treatment of health problems are not included in the OCNS role. In the clinical setting of oncology care, adverse events and pain are managed at the discretion of the OCNS. The medical treatment should be regarded as a skill in which roles, responsibilities and authority of physicians and nurses coexist. Both medical and nursing associations specialized in oncology need to begin the groundwork for future shared responsibilities and roles based on mutual trust as well as development of rules and a structured relationship. Nursing Division of the Ministry of Health, Labor and Welfare conducted an interview survey on how to collaborate between nurse and physician in providing medical treatment. The results show that, in the field of oncology nursing, the nurses practically provide medical treatment including ‘securing blood vessels for the administration of anticancer drugs and adjusting the infusion rates’ and ‘emergency treatment such as drug administration as alleviation and protection to the adverse event of the anticancer drug’ at their discretion in cooperation with physicians.

The future clinical setting will require a new regime where highly educated CNSs can autonomously exercise their professional skills, enhance their functional role to expand their discretionary limits and perform their new role in the diagnosis and treatment. In other words, OCNSs are expected to acquire their competencies of disease and symptom/complication management through specialized training, including the medical model in diagnosis and prescribing treatment. Lastly, the OCNS of the future should promote the outcomes research to assess the effectiveness of their nursing intervention, and participate in interdisciplinary research by collaborating with other health professionals to shape the ongoing cancer reforms in Japan.

CONCLUSION

Although only 193 OCNSs are practicing in Japan, the quality of OCNS education and career development are founded on the integrated system of the accrediting system for OCNS graduate programs, credentialing system and the Association of CNS. In fact, the number of OCNSs is increasing. Case reports demonstrate that nursing interventions by OCNSs improve the patient satisfaction and the quality of life. A strong knowledge base in outcomes
research is required of OCNS leaders of the future to measure their effectiveness in improving healthcare.

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**Conflict of interest statement**

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