Implementing a Dedicated Education Unit: A Practice Partnership With Oncology Nurses

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An urgent need exists to identify innovative and evidence-based educational methods to help oncology nurses provide safe and high-quality patient care. One promising solution is the dedicated education unit (DEU) educational model, which partners nursing faculty and skilled nursing clinicians to facilitate the clinical experience of undergraduate baccalaureate nursing students. This article describes the collaborative DEU initiative developed between a university school of nursing and a tertiary cancer center to provide senior nursing students with an innovative method to develop their competencies in oncology nursing practice and care.

Oncology nursing is a rapidly changing profession because of the increasing complexity of patient care, growing use of sophisticated technological methods, and changing demographics of the nation’s population and nursing workforce. Those characteristics support the need for oncology nurses to participate in lifelong learning and quality improvement initiatives to ensure safe and high-quality care will be provided to all patients and survivors living with cancer. The significant impact of these trends on the quality of nursing education and the future of healthcare is a major concern in the United States. In fact, a Institute of Medicine (IOM, 2011) report, The Future of Nursing: Leading Change, Advancing Health, noted that new and novel education models that encourage collaborations among communities, healthcare institutions, and business organizations were needed to better equip nurses to deliver high-quality care.

Over time, nursing education has identified numerous models to increase the education, preparation, and availability of baccalaureate-prepared nurses (IOM, 2011; Wurmser & Bliss-Holtz, 2011). One method has been the use of academic-practice partnerships to promote the evidence-based practice needed in oncology nursing (IOM, 2011). This article describes an innovative academic-practice partnership model initiated to develop clinical skills and knowledge of senior nursing students in oncology nursing care. This new approach, the dedicated education unit (DEU), provides a structured environment that integrates academic and clinical practice to enhance the learning experience of future oncology nurses.

The Innovative Dedicated Education Unit Model

In 1997, the School of Nursing at Flinders University of Australia developed a model to improve undergraduate nurses’ clinical education and experience (Edgecombe, Wotton, Gonda, & Mason, 1999). Traditionally, nursing rotations had consisted of short placements in diverse clinical settings and locations. In those rotations, a common role expected of the unit’s nursing staff was to teach, support, and supervise novice students. Clinical staff often faced several challenges to fulfilling that role, including limited time and effort, perceptions that nursing faculty did not provide adequate supervision of students in the clinical setting, and inadequate problem-solving skills required of students to increase their knowledge and skills.

To address these challenges and improve nursing education, Flinders University of Australia developed a nursing educational approach (the DEU) designed to provide an optimal teaching-learning clinical environment for nursing students. The model blended evidence-based teaching approaches used by expert nursing faculty with clinical expertise, support, guidance, and role modeling of seasoned nursing staff (Gonda, Wotton, Edgecombe, & Mason, 1999). Clinical instructors assigned to the DEU were charged with planning and supervising student experiences. As part of the partnership, academic faculty developed, implemented, and evaluated the curriculum, in addition to evaluating the students. When needed, the academic faculty worked directly with students and conducted multidisciplinary conferences for students and clinical instructors.
The academic and service partnership model recruited eligible hospital staff nurses to become clinical instructors and collaborate with nursing faculty to facilitate the clinical education of undergraduate nursing students (Forbes, Hickey, & White, 2010). Each DEU clinical instructor was paired with two nursing students to guide them in their patient care assignments, facilitating a one-on-one relationship between the nursing student and DEU clinical instructor. That model contributed to better academic outcomes such as improved clinical skills and refined problem-solving competencies needed to provide optimal oncology nursing care. The approach gave student nurses the experience and knowledge needed to plan and implement the complex nursing care required for today’s patients or survivors living with cancer.

Case Example of a Dedicated Education Unit

Through a partnership between the School of Nursing at the University at Buffalo and the Department of Nursing at Roswell Park Cancer Institute, a DEU was implemented in a hematology/oncology inpatient floor consisting of 28 beds and a ratio of three patients to one nurse. Patients routinely were hospitalized for 3–4 weeks while receiving high-dose chemotherapy or immunotherapy or while recovering from treatment-related side effects. Nursing care, which included complete head-to-toe assessment every eight hours, was documented in an electronic medical record. In addition, standard operating procedures (SOPs) addressed how to handle changes in vital signs and laboratory results. For example, if a newly diagnosed patient with acute myelogenous leukemia developed a fever, the first step in the SOP was to collect blood, urine, and sputum cultures and request a chest x-ray. Once those procedures were completed, a staff nurse would initiate a broad spectrum antibiotic regimen.

Staff nurses with at least two years of clinical experience on the unit and completion of the hospital’s preceptorship course were eligible to apply as DEU clinical instructors. Despite the large number of staff who initially volunteered to participate in the program, only nine candidates out of a staff of 36 applied for the DEU clinical instructor positions, and four nurses ranging from 2–17 years of experience were selected by the nurse manager. All nurses participated in a one-day orientation, which included (a) an introduction to the different types of nursing programs (traditional and accelerated baccalaureate nursing); (b) overview of the background and implementation of previous DEUs; (c) clinical course overviews; and (d) responsibilities for students, DEU clinical instructors, nurse managers, and nurse faculty. Sessions focused on developing critical thinking, providing constructive feedback, maintaining appropriate documentation, performing unbiased student clinical evaluations, and recognizing teachable moments. The nurse manager, DEU clinical instructors, assigned hospital nurse educator, and nursing faculty attended the workshop. Once the orientation was completed, the nurse manager and nurse faculty met to plan how to implement the model with senior nursing students. Initially, the nurse manager and faculty member chose to assign two students to each DEU clinical instructor. The goal was to match experienced senior staff nurses (now DEU clinical instructors) with students who needed more help to develop skills in patient-centered care. The DEU clinical instructors were assigned lighter patient assignments (two patients, rather than three) so students would have sufficient time to learn basic skills required for providing safe and high-quality nursing care. The DEU instructors also paced their clinical teaching to accommodate the students’ progressive mastery of nursing procedures, techniques, and organizational skills. The clinical experiences of students and DEU instructors were monitored to identify gaps in the program or areas that needed improvement.

Quality Outcomes in Nursing Education

Based on anecdotal feedback, it seemed students and clinical instructors alike benefitted from the DEU approach (see Figure 1). Prior to implementing the model, the widespread perception was that staff nurses did not want students to provide nursing care to their patients. That perception led students to report feeling intimidated by staff nurses and having staff nurses show their frustrations when teaching students. After the DEU model was implemented, the unit nursing staff’s satisfaction with the students significantly increased. Several DEU clinical instructors reported that they enjoyed being a mentor to the students and looked forward to the DEU clinical days. They further commented that by being aware of the student’s strengths and weaknesses, they had a greater sense of the students’ ability to perform clinical skills at the bedside. Students who participated in the DEU experience also benefited in several ways, such as (a) having increased opportunities to practice their skills and critical thinking compared to students in traditional clinical settings, (b) being provided with consistent patient assignments, and (c) having the same DEU clinical instructor to work with on their clinical days. An unexpected benefit was that employers believed graduates who participated in the DEU educational program were better prepared to provide safe, high-quality, and
compassionate nursing care. As a result, five of six student nurses who applied for a position were successfully hired in one clinical setting. The DEU model seemed to provide a win-win situation for the nursing students and nursing staff. Both groups enjoyed the benefits of a dynamic learning environment that improved oncology nursing practice. The overall conclusion was that the DEU program graduates were better prepared to handle the real world of oncology nursing.

**Implications for Oncology Nursing**

A hematology/oncology unit within a comprehensive cancer center proved to be an ideal setting to implement this academic-practice DEU model. Through the coaching, mentoring, and clinical expertise of DEU clinical instructors, as well as from academic preparation provided by expert faculty, students were able to integrate the science and clinical practice of oncology nursing.

Implementing an oncology nursing-focused DEU in this cancer center proved to be a successful educational model as reported by nursing students, DEU instructors, and faculty. With the predicted nursing and faculty shortages, identifying innovative educational models and evaluating these models to assess changes in the quality, safety, and satisfaction of nursing education and patient outcomes are crucial. Using academic-practice partnerships such as DEUs to improve nursing education and promote safe, high-quality oncology nursing care is a novel way to better educate and equip a future nursing workforce to handle the mounting changes in oncology nursing care, science, and technology.

**References**


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