What Does It Mean to Be an Oncology Nurse? Reexamining the Life Cycle Concepts

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The Oncology Nursing Society (ONS) Life Cycle of the Oncology Nurse Task Force began its work in 1989 and was summarized in the *Oncology Nursing Forum* (*ONF*) (McDonnell & Ferrell, 1992). The "Life Cycle" work began based on interest in recruitment and retention of oncology nurses. This interest led to a pilot study and a multisite study of the meaning of oncology nursing.

The pilot study described the "essence of oncology nursing" (Cohen & Sarter, 1992) as

> . . . being on the front lines of a war against death, disfigurement, and intense human suffering. It requires the performance, prioritization, and coordination of multiple complex tasks. It involves handling frequent unexpected crises, both physiologic and psychological. It carries the rewards of reversing a fatal illness, balanced by the ever-present reality of death. Working with patients with cancer requires constant vigilance in monitoring for sudden problems and life-threatening errors. The cancer nurse's empathy is sharpened by the awareness that "this could be me or my loved one." Finally, working with patients with cancer means "being there" for people in their most private moments of suffering and responding to the heights and depths of their responses to this suffering (p. 1485).

The multisite study resulted in several papers published as a supplement to *ONF* (Cohen, Haberman, & Steeves, 1994). Haberman, Germino, Maliski, Stafford-Fox, and Rice (1994) provided greater insight into the experiences of individual oncology nurses. Large macro issues of the profession, ONS, roles, and global themes were discussed by the Life Cycle Task Force. Reports from the Life Cycle Task Force and publications of the two studies were reviewed, and 21 key concepts were identified (see Figure 1).

Purpose/Objectives: To summarize the current research pertaining to the concepts initially examined by the Oncology Nursing Society Life Cycle of the Oncology Nurse Task Force and related projects completed in 1994.

Data Sources: Published articles on the 21 concepts from the Oncology Nursing Society Life Cycle of the Oncology Nurse Task Force work. Research published in English from 1995–2009 was obtained from PubMed, CINAHL®, PsycINFO, ISI Science, and EBSCO Health Source®: Nursing/Academic Edition databases.

Data Synthesis: Most of the concepts identified from the Oncology Nursing Society Life Cycle of the Oncology Nurse Task Force have been examined in the literature. Relationships and witnessing suffering were common concepts among studies of the meaning of oncology nursing. Nurses provide holistic care, and not surprisingly, holistic interventions have been found useful to support nurses. Interventions included storytelling, clinical support of nurses, workshops to find balance in lives, and dream work. Additional support comes from mentoring.

Conclusions: The research identified was primarily descriptive, with very few interventions reported. Findings have been consistent over time in diverse countries.

Implications for Nursing: This review indicates that although the healthcare system has changed significantly in 15 years, nurses' experiences of providing care to patients with cancer have remained consistent. The need for interventions to support nurses remains.

Methods

Since the Life Cycle study publications in 1994, many changes have occurred in cancer care and oncology nursing. ONS was interested in evaluating research done to examine these concepts and convened a task force to re-examine them. This task force had several conference calls, and the authors of this article proceeded with a literature search and the writing of this article. PubMed, CINAHL®, PsycINFO, ISI Science, and the EBSCO Health Source®: Nursing/Academic Edition databases were

Concepts for Which Research Was Found

- Experience or meaning of oncology nursing
- Nature of work, cancer, outcomes, patient acuity, and workload
- Diverse roles
- Stressors
- Burnout
- Support needs: social and instrumental
- Mentoring, role modeling, and personal and professional development
- Work-life balance and competing demands
- Healthcare reform
- Family and patient involvement
- Technology and treatment
- Advanced practice nursing
- Certification
- Specialization and scope of work
- Case management

Concepts for Which No Research Was Found

- Recruitment and retention
- Environment, setting, and workplace issues
- Career trajectory (life cycle)
- Recognition and rewards
- Volunteer organizations (Oncology Nursing Society) and volunteerism
- Age (generation), styles, expectations, and coping

Figure 1. Key Concepts From the Oncology Nursing Society Life Cycle of the Oncology Nurse Task Force

searched to identify research published in English from 1995–2009. Searches used keywords that were combinations of the 21 concepts identified from the original Life Cycle articles. Several concepts overlapped, and although all concepts had a great deal written about them, no research was located for six concepts. These concepts are described at the end of the findings section.

Findings

Experience or Meaning of Oncology Nursing

The meaning of oncology nursing is the most global concept, and studies that examined this topic also included other concepts. Studies were conducted in Johannesburg, South Africa; London, England; Ireland; and the United States. Common themes concerned the unique nurse-patient relationship and challenging interpersonal relationships with members of the multiprofessional team and management (Berterö, 1999; Dowling, 2008; Quinn, 2003; van Rooyen, le Roux, & Kotze, 2008). Perry (2008) described oncology nurses' experiences as having moments of connection, making moments matter, and having energizing moments.

Research in the United States included a study with pediatric oncology nurses (Olson et al., 1998). Positive experiences dealt with nurses' experiences with patients dying or recovering or with the close relationships that develop between nurses and patients. Nurses identified

changes in values and behaviors related to providing more empathic care and in perspective (accepting limitations of care). In negative experiences, nurses regretted perceived inadequacy in handling situations, witnessed patient suffering that they felt unable to relieve, and had guilt, anger, or dread. Categories in these data included relating to others, experiencing life, death and dying, being aware of self as nurse, and experiencing diminishing qualities about the nursing situation, such as betraying trust, patient suffering, and grief and loss (Clarke-Steffen, 1998).

These studies focused on nurses' perspectives and were all qualitative except for one tool development article (Steen, Burghen, Hinds, Srivastava, & Tong, 2003). Findings were similar despite that studies were conducted in several countries. Common themes included dealing with dying patients, developing close relationships, caring, and witnessing suffering.

Nature of Work, Cancer, Outcomes, Patient Acuity, and Workload

Closely related to the meaning of oncology nursing is the nature of the work. Studies conducted in several countries found that oncology nursing involved varied activities. Nurses in New South Wales, Australia, perceived themselves to have a major influence on the positive attitudes of patients with cancer and felt obligated to provide support and encouragement to patients based on patients' values and beliefs (O'Baugh, Wilkes, Luke, & George, 2008).

Studies have examined nurses' experiences administering chemotherapy. Nurses in the United Kingdom reported initially being frightened and anxious and were more confident with support from knowledgeable role models and after chemotherapy education (Verity, Wiseman, Ream, Teasdale, & Richardson, 2008). Administering chemotherapy resulted in "damage" from seeing patients' suffering and being involved in dilemmas regarding administering chemotherapy (Saltmarsh & De Vries, 2008). Additional studies in Northern Ireland and in the United States found that nurses had both positive—enhancing autonomy and skills—and negative experiences that resulted in a perceived decrease in their caring roles (Fall-Dickson & Rose, 1999; McIlfatrick, Sullivan, & McKenna, 2006).

Palliative and end-of-life care has been found to be rewarding and challenging. Nurses who reported spending more time with terminally ill or dying patients reported more positive attitudes (Dunn, Otten, & Stephens, 2005). Nurses' attitudes toward death were not related to their attitudes about caring for dying patients.

Phenomenologic studies of nurses caring for dying patients have found that nurses experience closeness with patients that has great meaning or their relationships may not include an intense engagement (Perry, 2009; Rittman, Paige, Rivera, Sutphin, & Godown, 1997).

Modulating involvement helped manage emotional demands of practice. High standards of practice included preserving hope, easing the struggle, providing for a peaceful death, and providing privacy. Similar findings were reported in palliative care nurses in New South Wales (Wilke, Boxer, & White, 2003). Some nurses reported suffering personal distress as a consequence and found patient isolation and altered body image challenging. Physical illness and the emotional issues of patients, their families, and fellow palliative care workers have been found to saturate nurses (Jones, 1999). To protect themselves, nurses might assimilate the emotional traumas of others into physical symptoms. An environment conducive to making sense of illness experiences and integrating them into a meaningful life continuum was recommended.

Oncology nurses described the healthcare context in which palliative care occurs as having limited time for addressing complex issues, emphasizing prolonging life, and challenging care coordination (Ferrell, 2006; Pavlish & Ceronsky, 2007). Although nurses expressed a desire to help patients exercise choice, few felt able to discuss resuscitation or to act as advocates with physicians (Bass, 2003).

Oncology nurses who provided excellent care and made strong connections with patients were usually very satisfied with their careers (Perry, 2006). They also felt they were making a difference when they "see patients through" the care trajectory. Nurses accomplish this, in part, by helping people live on, individualizing care, enabling hope, and helping individuals find meaning.

Diverse Roles

A part of the experience of oncology nursing is that nurses have multiple responsibilities and roles in cancer-related care. Nurses were educators, counselors, patient advocates, compassionate caregivers, care coordinators, managers, listeners, navigators, and members of a multiprofessional team (Fillion et al., 2006; Hoelz, Sladek, & Michaelson, 2007; Willard & Luker, 2007). Additional roles include physical care, emotional support, patient and family education, consultation to address psychological issues, assessment and triage, symptom management, administrative responsibilities, and research (Shepard & Kelvin, 1999; Skott & Eriksson, 2005). Nurses collaborate to give patient-centered care and support to patients and their families (Willard & Luker, 2007). Competencies in oncology include holistically assessing patients and families; having knowledge of health promotion and family therapy; developing skills in communication, relationship building, teamwork, and problem-solving; and being mature as professional leaders (Fillion et al., 2006).

The nurse navigator, a relatively new role in oncology nursing, provides access to healthcare services,

coordinates care, and decreases barriers to care in complex healthcare systems, particularly for medically underserved populations (Freeman, Muth, & Kerner, 1995). Nurse navigator roles vary by institution, have differing foci such as distress reduction or disease-specific issues, and provide support and guidance as patient advocates in multidisciplinary teams (Fillion et al., 2006; Palmieri et al., 2009).

As members of multiprofessional teams, oncology nurse specialists cite challenges related to acceptance by physician colleagues and insufficient organizational support for their roles. These challenges may impair nurses' abilities to provide supportive care to clients. Building relationships and establishing role boundaries are used to overcome barriers (Willard & Luker, 2007).

Stressors

Stressors identified by oncology nurses have been examined in several countries. Nurses in the United Kingdom were found to thrive in a stressful occupation when caring for others in a multidisciplinary team (Gambles, Wilkinson, & Dissanayake, 2003). McNeal (1997) found that oncology nurses had low levels of stress and both high hope and perceived social support.

Members of the Canadian Association of Nurses in Oncology identified the top problems in their practice to be anxiety, coping and stress management, bereavement and death, fatigue, metastatic disease, comfort, pain management, quality of life, cancer recurrence, and nurse burnout (Fitch, Bakker, & Conlon, 1999). Oncology nurses from London, England, described their work as stressful, developed boundaries or "detachment," found some people difficult, and felt both good about themselves and also at times felt a sense of failure (Pearce, 1998). In addition, because this study was conducted during the winter, working during the holidays stirred emotions. Nurses also saw time as a resource, and lack of time was a stressor because cancer involves "situations where people haven't got a second chance" (Pearce, 1998, p. 236).

These nurses felt they were not valued by colleagues, managers, the organization, or society. They felt the study provided a chance to reflect and make sense of their experiences.

Nurses in Taiwan caring for patients who were dying in intensive care units felt fear, guilt, compassion, grief, and an opportunity for growth (Yang & McIlfatrick, 2001). Stressors included relationships with physicians or families, concealing prognoses from patients, and resuscitation orders. Coping strategies included religion and providing good nursing care.

Stress was related to individual, group, institutional, and cultural levels and included existential dimensions in Sweden (Ekedahl & Wengström, 2007). Primary coping strategies among these Swedish nurses included

general boundary demarcation and support strategies. Other strategies were periodically changing activity, emotional outlets, and focusing on the here and now (Ekedahl & Wengström, 2006). The strategies can be functional or dysfunctional.

Pålsson and Norberg (1995) identified several stressors, including coming too close to patients and their families; keeping and restoring patients' hope; conflicting opinions; feeling powerless; meeting unrealistic demands; patients' trust in alternative medicine; feeling disgust, shame, and guilt; relationships to patients' families; communication gaps; and problems in the home care of seriously ill patients. Dutch nurses caring for patients with cancer in pain experienced powerlessness, dilemmas concerning physical care and opiates, and discrepancy between pain relief goals and feasibility. Sharing feelings of powerlessness and standing back from a situation were identified as effective coping strategies (de Schepper, Francke, & Abu-Saad, 1997).

Oncology nurses perceive staff relationships and emotional demands, system demands, pathologic processes affecting patients and families, care restrictions, ethical concerns, suffering, and the death and dying process as stressful (de Carvalho, Muller, de Carvalho, & de Souza Melo, 2005; Florio, 1997). Coping included positive involvement in cancer treatment, instrumental and emotional support from coworkers, positive reappraisal, developing a growth perspective, affective regulation, balancing work stress, negative coping, apathy, withdrawal, and catharsis.

Nurses caring for children with cancer identified diagnosis, parents, shortage of nursing staff, deaths, and relapse as stressors (Harding, 1996; McCarron, 1995). Suggested solutions were mentoring, co-counseling, peer supervision, staff training, stress monitoring, group work, debriefing, regular liaison for staff, and outside interests.

Burnout

Burnout has been investigated in relation to occupational stress, difficult situations, perceived determinants of risks, and perceived support factors. Blomberg and Sahlberg-Blom (2007) found that team members handled difficult situations through daily reflection and balanced closeness with distancing themselves. Methods of relaxation found to decrease burnout were talking to friends, using humor, drinking coffee or eating, and watching television (Kash et al., 2000). This study also found that perception of oneself as religious lowered the risk of burnout. Quattrin et al. (2006) found high levels of emotional exhaustion among oncology nurses in Italy and recommended individual coping strategies and support groups to decrease burnout. Nurses identified disorganization as an important cause of stress. A study in Turkey found a negative impact on quality of life among oncology nurses when compared with similar studies of nursing in other specialties (Ergun, Oran, & Bender, 2005).

Emotional exhaustion has been found to be higher in older nurses (Quattrin et al., 2006), in younger nurses, and also among nurses with less education (Wu, Zhu, Wang, Wang, & Lan, 2007). Features found to be related to burnout included excessive workload (Barrett & Yates, 2002; Sherman, Edwards, Simonton, & Mehta, 2006; Wu et al., 2007) and dissatisfaction with pay (Barrett & Yates, 2002). Pålsson, Hallberg, Norberg, and Björvell (1996) found that burnout affects people in different ways as a result of individual personality traits, whereas Feldstein and Gemma (1995) found that confrontations with death and dying in oncology led to above-normal levels of despair, social isolation, and somatization. Self-transcendence was identified as finding meaning in life and death (Hunnibell, Reed, Quinn-Griffin, & Fitzpatrick, 2008). Differences in self-transcendence between hospice and oncology nurses were significant, and nurses who implemented self-transcendence were less likely to experience burnout.

Support Needs: Social and Instrumental

The meaning of oncology nursing and the stressors nurses experience indicate nurses need support doing this important work. Studies related to support needs of oncology nurses identified different support roles, needs, and instrumental tactics. Stressors, emotional exhaustion, and depersonalization were positively correlated in Australian nurses (Barnard, Street, & Love, 2006). A weak positive correlation also was found between peer support and personal accomplishment.

Several interventions have been found to be helpful. Macpherson (2008) found peer-supported storytelling among pediatric oncology nurses to be a valuable grieving tool. A clinical support nurse reduced work-related stress for pediatric oncology nurses, especially for those younger than age 40 (Chang, Kicis, & Sangha, 2007). Fitch, Matyas, and Robinette (2006) evaluated a workshop that helped caregivers balance their work and personal lives and assisted with coping strategies. Self-care, verbal expression of suffering and loss, and relaxation techniques were explored. Benefits were the values of connection, support, and stories. A final intervention dealt with nurses analyzing their dreams. Nurses were found to be more aware of their own feelings and those around them after participating in group dream work (Cohen & Bumbaugh, 2004).

Mentoring, Role Modeling, and Personal and Professional Development

Mentoring is another support for oncology nurses. Booth, Luker, Costello, and Dows (2003) found

substantial practice development needs, particularly in relation to organizational support and guidance, educational support, resources, and access to evidence among specialist nurses working in cancer and palliative care in England, Scotland, and Wales. Oncology nurses reported that personal and collegial attitudes contribute to their development as professionals. The nursing team plays an integral role in the development of oncology nurses' identities and fulfills a supportive function by providing caring and demonstrating respect for each other (Wengström & Ekedahl, 2006).

Wyatt (2007) found that an oncology nursing course was perceived to have a positive impact, especially on knowledge, communication skills, patient care, and attitudes toward cancer, symptom management, and emotional support. Although organizations such as ONS have offered mentoring opportunities for professional growth, to date, no studies have examined interventions to meet mentoring needs of oncology nurses.

Work-Life Balance and Competing Demands With Healthcare Reform

Although a great deal has been written about these topics, only indirectly related research was found. One study related work demand with healthcare reform. Canadian nurses described changes in oncology nursing over the past decade (Bakker, Fitch, Green, Butler, & Olson, 2006). More patients had increased acuity; were more knowledgeable, effective consumers of health care; were aware of cutbacks and shortages; and vocalized their concerns. Expectations of nurses also increased, including both nursing and non-nursing tasks, as positions were cut. In addition, cultural norms of nursing practice and social forces often were not compatible. Finally, nurses described "finding the way" as a behavior used to manage the changing healthcare environment and make meaning out of their work in cancer care. Overall, the findings portray Canadian oncology nurses in "survival mode" and "juggling" to balance the demands of clinical settings with the care they provide.

Another study described lead cancer nurses, a role created as part of the reform of the National Health Service in the United Kingdom (Kirshbaum, Booth, & Luker, 2004). Lead cancer nurses are senior nurses who take on the new role with continuing clinical responsibilities. Enhancing factors were the ability to use decision-making power, build alliances, and accommodate to changing environments. Factors hindering nurses were major changes in service and policy, restricted resources, and the cancer site-specific structure of health service provisions. Partnerships with local healthcare organizations and wider audiences were recommended to further contributions of lead cancer nurses. Both studies illustrate challenges and opportunities for oncology nurses when healthcare systems change.

Family and Patient Involvement

Nurses value family support. A phenomenologic study in Cyprus (Charalambous, Papadopoulous, & Beadsmoore, 2008) interpreted quality nursing care as "easily accessible care delivered by clinically competent nurses and supported by the family which considers the patients' need for spiritual or religious care, communication, emotional support, and information giving" (p. 441).

Oncology nurses identified the emotional burden of the supportive care role as a key challenge, along with healthcare systems that are not responsive to needs of families (Turner et al., 2007). Adamsen and Rasmussen (2003) found that nurses function as social networkers in self-help groups and use their contextual competence by consciously encouraging relationships between fellow patients.

Technology and Treatment

Several articles have addressed updated cancer treatments and modern technology for cancer-related care. Dickerson, Boehmke, Ogle, and Brown (2005) described experiences of oncology nurses using the Internet in their practice—varying degrees of Internet integration in practice environments, changing schools of thought, developing Internet use for professional practice, redefining relationships, and new nursing skills.

Computer technology has been studied. Im and Chee (2006a) developed an online decision support computer program to support assessment of cancer pain. Most nurses evaluated the program as appropriate, accurate, and useful. User satisfaction differed based on gender, religion, ethnicity, job title, and specialization (Im & Chee, 2006b). Nurses' and patients' evaluations on the use of a computer-based multidimensional measure of symptoms, quality of life, and treatment of side effects agreed (Fortner, Baldwin, Schwartzberg, & Houts, 2006). Kim et al. (2006) found that computerized order entry reduced chemotherapy errors.

Telephone technology also has been used in monitoring and providing aid to patients (Downe-Wamboldt et al., 2007; Kaunonen, Aalto, Tarkka, & Paunonen, 2000; Maguire, McCann, Miller, & Kearney, 2008; Overend et al., 2008; Wilkinson & Sloan, 2009; Young et al., 2008). Patient satisfaction also was high in these studies.

Current technologies used in cancer treatment continuously are evolving. These studies indicated that computer technology could be an efficient method for collecting information and reducing errors in cancer-related care. The suggestion that technology may redefine relationships is important to explore because relationships are key to oncology nursing.

Advanced Practice Nursing

The number and role of advanced practice nurses (APNs) continue to evolve. Three studies described advanced practice oncology nursing roles, barriers, and practice issues (Bryant-Lukosius et al., 2007; Kinney, Hawkins, & Hudmon, 1997; Lynch, Cope, & Murphy-Ende, 2001).

Numerous APN issues continue to be unresolved. Cunningham (2006) studied oncology APN use of Agency for Healthcare Policy and Research clinical practice guidelines (CPGs). Consistency between CPGs and interventions for pain, incontinence, and depression were 91%, 80%, and 69%, respectively. Consistency did not predict outcomes; however, the levels of consistency suggested that oncology APNs were aware of some CPGs more than others.

Case management with women with breast cancer also has been studied. Carroll (1998) found that 40% of clinical nurse specialist (CNS) roles were spent facilitating patient treatment choice. Facilitation occurred in different stages and was influenced by structural and contextual factors. These CNSs found it stressful to strive for a neutral role and ascertain what patients really wanted. A randomized clinical trial found that APNs improved some aspects of quality of life but did not lower costs (Ritz et al., 2000).

Loftus and McDowell (2000) explored contributions of oncology clinical nurse specialists (OCNSs). Issues related to the developmental needs of these nurses included uncertain ground, boundaries, support, and reflective practice. OCNSs often provide support in difficult circumstances and lack clarity regarding their counseling roles. OCNSs believe aspects of their roles are unique, and a comparative study of CNSs in other specialties could be undertaken. Research is needed to determine cost-effectiveness, advantages, and disease-specific populations that would benefit from APN services.

Certification

The American Board of Nursing Specialties (ABNS) found that certified and noncertified nurses agreed with value statements on certified practice (Niebuhr & Biel, 2007). In an earlier survey by ABNS (Stromborg et al., 2005), nurse managers preferred hiring certified over noncertified nurses. Managers who were never certified were less likely to hire certified over noncertified nurses. Only 30% of managers reported greater satisfaction among patients and families with the care they received from a certified nurse.

In a survey of ONS members, certification was correlated weakly with cohesion, commitment, and satisfaction (Hughes et al., 2001). Work setting, rather than certification, accounted for differences in job perceptions.

Job perceptions were most positive in settings with a high percentage of patients with cancer, a high percentage of RNs, and monetary support for continuing education. Oncology nurses' certification was not associated with job perceptions that employers valued. Another study found that the primary reasons oncology nurses obtain and retain certification include the desire for personal achievement, professional growth, and development. Oncology certified nurses® (OCN®s) were more likely to work in settings in which employers supported professional development through continuing nursing education (Coleman et al., 1999). Certification also has been associated with high levels of professionalism and empowerment (Gaberson, Schroeter, Killen, & Valentine, 2003; Wynd, 2003).

McMillan, Heusinkveld, Chai, Miller-Murphy, and Huang (2002) conducted a role delineation study of basic oncology nursing practice. The highest ranking items for both frequency and importance pertained to professional performance, patient and family education, comfort, protective mechanisms, and coping. The lowest ranked activities pertained to research, prevention, detection, and sexuality.

Patients cared for by OCN®s did not have superior outcomes compared to those cared for by noncertified nurses (Frank-Stromborg et al., 2002). No differences were found with respect to pain assessments, assessment of fatigue at admission, unplanned visits or admissions to care facilities, and unscheduled home visits. OCN®s documented more postadmission fatigue assessments; however, patients of OCN®s had more infections and less documented patient teaching regarding infection.

Specialization and Scope of Work

Position papers and standards have been written about specialty and scope of practice. Studies have examined the effects of specialized nurses on the treatment of patients with cancer (Garvican, Grimsey, Littlejohns, Lowndes, & Sacks, 1998; Goodwin, Satish, Anderson, Nattinger, & Freeman, 2003; Koinberg, Fridlund, Engholm, & Homberg, 2004; Liebert et al., 2003; McArdle et al., 1996; Ritz et al., 2000; Wengström, Häggmark, & Forsberg, 2001). Although these studies do not examine the process or experience of nurses, they demonstrate that specialization improved several patient outcomes, including physical and psychosocial well-being.

Case Management

Case management has been described from several perspectives. A survey of directors of cancer screening programs found that case management programs had either a task focus or a self-identity focus (Lillquist, 2008). Task-focus partnerships undertook a broader range of tasks but were less likely to report autonomy

in making program changes. Self-identity partnerships were less likely to report difficulties with other agencies and scored high on innovation, involvement in work, and interest in client service. Nurse case managers (NCMs) described spending most time on activities such as tracking diagnostic test results, communicating with clients, assessing client needs, and educating clients (Fawcett, Schutt, Gall, Cruz, & Woodford, 2007). The most frequently performed activity was documenting services; the least was discharging clients. Strategies are needed that remove barriers to NCM practice activities.

Another study described and categorized NCM interventions—assessment, facilitation, coordination, advocacy, teaching, support, collaborative problem solving, and keeping track. NCMs tailored interventions by combining categories for each patient to meet his or her needs. This tailoring and execution of interventions depended on the knowledge, experience, and skill of each NCM (Maliski, Clerkin, & Litwin, 2004). Sherrod and Richardson (2003) used a case management model to implement a faith-based initiative to promote breast cancer screening in a rural African American population. In this study, volunteers encouraged their friends to have mammograms. Faith-based initiatives can help identify strategies to provide cost-effective, quality, and accessible care across the continuum of health care in many settings. Careful planning and collaboration of case managers with community resources and other disciplines can strengthen partnerships, eliminate disparities, and improve outcomes for vulnerable populations.

In a randomized prospective trial, Jennings-Sanders, Kuo, Anderson, Freeman, and Goodwin (2005) found that older women living alone required more NCM contacts, and NCMs helped these women achieve positive health outcomes. Another study found that a nurse-managed smoking cessation program was effective, inexpensive, and acceptable for hospitalized smokers (Smith, Reilly, Houston-Miller, DeBusk, & Taylor, 2002).

Concepts for Which No Research Was Found

No research was found about recruitment and retention; environment, setting, and workplace issues; and career trajectory (life cycle). No specific research was found on recognition and rewards; however, this topic was described in work on the meaning of oncology nursing. In examining research related to volunteer organizations such as ONS, two studies addressed volunteerism in nursing, but neither was specific to oncology nurses (Alotaibi, 2007; Deleskey, 2003). Perceptions and motivations for volunteerism by oncology nurses, especially with regard to participation in oncology professional organizations, have not been studied. In addition, although a great deal has been written about generational differences, no research

specifically addressed age. Several articles compared novice to experienced nurses, but these may not represent different generations. Ages were either not reported or had a wide range; for example, one study reported on a sample of nursing students with ages ranging from 18–48 years (Cunningham, Copp, Collins, & Bater, 2006).

Discussion

This review indicates that although the healthcare system has changed in 15 years, nurses' experiences of providing care to patients with cancer have remained consistent. Research has examined most of the concepts from the Life Cycle Task Force. Findings have been consistent over time and across different countries. Relationships, caring, and witnessing suffering were common among studies of the meaning of oncology nursing. Nurses continue to see oncology nursing as both stressful and rewarding. Nurses provide holistic care, and, not surprisingly, holistic interventions have been found useful to support nurses. Interventions include storytelling, clinical support nurses, workshops for finding balance in lives, and dream work. The research found was primarily descriptive, with very small samples and few interventions reported. In addition, as roles change and evolve, studies of the effectiveness on costs and other outcomes are needed. Technology has changed, and it may alter relationships. Because this is a key aspect of oncology nursing, evaluating this change would be useful.

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