

Nurse Faculty Beliefs and Teaching Practices for the Care of the Cancer Survivor in Undergraduate Nursing Curricula

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Abstract As the number of individuals surviving cancer continues to rise, short- and long-term effects of cancer and its treatment that result in physical, psychosocial, and spiritual needs unique to the care of the cancer survivor has not been addressed in nursing curricula. The Institute of Medicine (IOM, 2005) recommends that all health care providers are educated on the care of cancer survivors. This descriptive qualitative study explored faculty beliefs and practices regarding the inclusion of caring for the cancer survivor in undergraduate nursing curricula. Faculty knowledge of the term "cancer survivor" and their beliefs and practices regarding the placement of theory and clinical experiences on cancer survivorship were explored through face-to-face semistructured interviews. Qualitative content analysis revealed themes and patterns related to the barriers and facilitators for disseminating information on the gap in content on care of the cancer survivor. Seven themes emerged from the content analysis of the interviews. These were as follows: (1) descriptions of cancer survivorship; (2) beliefs on inclusion of cancer survivorship care within undergraduate nursing curriculum; (3) established content on cancer survivorship care: teaching practices; (4) gaps in content on cancer survivorship care; (5) lack of supportive literature on cancer survivorship care; (6) clinical sites providing opportunities for cancer survivorship care: planned versus unplanned; and (7) barriers and facilitators to the inclusion of cancer survivorship in undergraduate nursing curricula. This study reveals the need for faculty

education on the care of cancer survivors and a revision of undergraduate curriculum content.

Keywords Cancer survivorship \cdot Nursing education \cdot Nursing education and cancer survivorship \cdot Teaching practices on cancer survivorship

Introduction

While more people are being diagnosed with cancer at earlier stages and surviving cancer for longer periods of time than ever before, nurses are ill prepared to deal with the unique concerns that cancer survivors face on a daily basis. It is estimated that there are nearly 14.5 million cancer survivors in the USA who require follow-up for the detection of recurrences and new primary tumors, diagnosis, and treatment for the late effects of cancer treatments [1, 2]. Additionally, cancer survivors require nursing interventions for the maintenance of appropriate self-care for residual impairments that result from cancer treatments, to address health problems unrelated to cancer, and promote healthy behaviors, especially those that reduce cancer risks [1]. This growing population of cancer survivors with their unique health care needs must be addressed in the education of nurses. The Institute of Medicine's (IOM) report [3] From Cancer Patient to Cancer Survivor: Lost in Transition recognizes the need for research in the care that is provided to cancer survivors by health professionals. The IOM identified cancer survivorship care as content that should be included in the education of nurses as well as other disciplines including physicians, rehabilitation specialists, and psychosocial and mental health providers. Most nursing students receive little or no education on the specific health care needs of cancer survivors in their undergraduate curricula [4].

In 1986, the National Coalition for Cancer Survivorship (NCCS) was formed by 23 founding members who redefined

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the term *cancer survivor* from an individual who remained cancer free for 5 years to an individual who is a survivor from the moment of diagnosis throughout their lifespan [5]. It was the intent of the founders of the NCCS to give recognition to survivorship as a continuum of cancer control and recognize that different needs may be experienced during the "seasons of survivorship" [5].

The definition of a cancer survivor is now widely recognized as an individual who has been diagnosed with cancer and is still living. The individual is a "survivor" from the day that they are diagnosed, as they are surviving their disease [6]. Three distinct phases of survivorship have been identified. The acute stage is the time surrounding initial diagnosis where staging is done and treatment decisions are made and initiated. The extended stage begins when intense treatment is completed and the patient enters possible remission. The permanent stage of survivorship is defined as achievement of a cure or extended or long-term survival [6]. Within each stage, the individual experiences physical and psychosocial effects that result from their cancer diagnosis and treatment.

The literature has provided research on the health care needs of cancer survivors and studies related to the lack of knowledge among nurses regarding survivorship issues [1, 2, 7]. There was a need to investigate whether the health care needs of cancer survivors were being addressed in nursing curricula, both in the classroom and clinical settings. As a profession, nurses are uniquely qualified to care for cancer survivors who are coping with a variety of issues unique to survivorship [4]. Ferrell, Virani, Smith, and Juarez [8] describe the need for nurses to address physical burdens (fatigue, menopausal symptoms, nutrition, sleep disturbances, short- and long-term physical sequelae of treatment), psychological concerns (fear, anxiety, depression, uncertainty), social concerns (sexuality, fertility, appearance, counseling of partners and children, and economics and employment), and spiritual care (respect for diversity, hope, uncertainty, and meaning in illness).

There are many implications of the care of the cancer survivor's current status of development on nursing practice, research, and knowledge development. Cancer survivorship care plans (CSCPs) are utilized in nursing practice to address the cancer survivor's long-term care needs that are related to the type of cancer the individual had, the treatment received along with its potential side effects, and recommendations for follow-up [6]. While patients are actively being treated for cancer, nurses are cognizant of treatment side effects; however, long-term side effects of treatment are less likely to be addressed by nurses in practice [1]. This issue is an area of research that has been identified by the IOM [3] as one that is necessary to increase knowledge development not only for nurses but also in other health professions that care for cancer survivors. Other components of the CSCP address preventive practices, how to maintain health and well-being, information on legal protections related to employment and health

insurance, and psychosocial concerns [6]. Nurses are in a unique position to counsel cancer survivors on the beneficial effects of exercise in reducing breast cancer recurrence or dietary choices that may reduce one's risk of certain types of cancers [8]. Nurses are qualified to lead a multidisciplinary team approach to cancer survivorship care with a variety of healthcare providers. Such Lockhart et al. [7] conducted the most recent and comprehensive study that addressed undergraduate oncology content in nursing curricula. A national sample of nurse faculty was surveyed to explore the depth of oncology nursing content taught in prelicensure nursing curricula, the perceived importance of this content, barriers to providing this content, and the use of resources that were oncology-related [7]. Cancer survivorship content was rated amongst the lowest in relation to depth and importance of oncology content in this study due to a lack of time to include survivorship in the curriculum [7]. Since little research has been done in nursing education and cancer survivorship, exploring the beliefs and practices of nursing faculty on the importance of including this content was an appropriate way to gain insight into the educational needs of student nurses in caring for cancer survivors.

Methods

A qualitative descriptive study is the design of choice when descriptions of phenomena are desired [9]. The qualitative descriptive design was appropriate for this study as it entailed inquiring into the subject of faculty beliefs and practices regarding the inclusion of content on the care of the cancer survivor in undergraduate nursing curriculum. The qualitative descriptive study provides a comprehensive summary of data that is directly observed in order to describe patterns and regularities in the data [9].

Sampling

Purposive and convenience sampling were utilized as nurse faculty who teach in baccalaureate nursing programs were asked to volunteer to participate in the study. Sample size was less important as the goal was to select participants who could provide the appropriate amount of detail regarding the phenomenon being studied. The sample was purposive in that participants who could provide information-rich data were selected and convenient in that the geographical area was limited to two states. Choosing faculty who were currently teaching in baccalaureate nursing programs was appropriate for this study. Institutional Review Board (IRB) approval was obtained as well as individual consent from the participants who agreed to be interviewed for this study. After obtaining IRB approval, emails were sent out to baccalaureate nursing faculty in two northeastern states whose programs were within a 2-



hour driving radius for the principal investigator. The email contained a Letter of Information to Consent to Participate in Research explaining the purpose of the study and a request to interview individual faculty. This email explained that the interview would be face-to-face and audiotaped; informed consent and confidentiality would be provided.

Participants

The population and sample consisted of 14 baccalaureate nursing faculty from six schools of nursing in two northeastern states. Even though this study was limited to two states, an attempt to get differing viewpoints from faculty at different academic institutions was desired.

Data Saturation

The principle of data saturation is used in qualitative research to guide decisions on sample size as it refers to the repetition and redundancy of themes and categories in the data, resulting in no further need for data collection [10, 11]. The purpose of data saturation in qualitative research is to ensure replication in categories, which verifies and ensures comprehension and completeness of data [10, 11]. As new participants are brought into the study and are interviewed, saturation is reached when the interviewer no longer obtains new information and redundancy is achieved [10–13].

Data Collection

The study was guided by naturalistic inquiry to include neutral, natural settings that were convenient to the participants, and the principal researcher was the instrument for data collection and interpretation [14]. Trustworthiness criteria, vital to naturalistic inquiry, included simultaneous data collection and analysis, intense listening and gentle probing for data that is rich and comprehensive, interviews that were audiotaped and then transcribed immediately, the use of field notes and memos to describe and analyze findings, and member checking (75 % of transcripts), where participants reviewed their own transcripts to confirm authentic representation.

Data collection began in March of 2015 and concluded in May of 2015. Data collection was achieved through face-to-face semi structured interviews that were audiotaped and then immediately transcribed by the principal investigator. The open-ended questions asked during the interview were derived from the research questions and the literature review of the study. Interviews ranged from 20 min to one and one half hours in length. Table 1 highlights the open-ended questions asked during the interviews. The location of the interview was at the convenience of the individual being interviewed.



Table 1 Interview guide and questions

Part 1: Demographic

- 1. How long have you been teaching?
- 2. What is your area of specialty?
- 3. What do you currently teach?
- 4. Have you done any continuing education on care of cancer survivors?
- 5. When was the last time the courses and curriculum in your program were reviewed/revised?

Part 2: Beliefs and Practices about Cancer Survivorship Care

Definition of cancer survivorship was provided here. "For my study, I am using the definition of cancer survivorship provided by the National Coalition for Cancer Survivorship (NCCS) which states that survivorship encompasses the time of diagnosis through the balance of life, and includes family, friends, and caregivers".

- How do you define cancer survivorship care? (Probe: do you include family and caregivers?)
- 2. Do you believe that content related to caring for needs of the cancer survivor belongs in undergraduate nursing education? (**Probe**: can you explain more about that?)
- 3. What is currently taught in your curriculum regarding physical, psychosocial or spiritual needs of the cancer survivor? (**Probe**: if it is not taught, was it ever discussed as a content area that should be included in the curriculum? **Probe**: are the 4 components per Morgan included—prevention and detection of new or recurrent cancers; surveillance for cancer spread, recurrence, or second cancers; intervention for consequences of cancer and its treatment; coordination between professionals to ensure the survivors health care needs are met **Probe**: Is care of the cancer survivor content taught in one course or is it taught throughout the curriculum? **Probe**: How was the placement of the content determined?
- 4. Do you assign textbook or journal articles for students to read on care of the cancer survivor topics that may be included on tests? (Probe: are students tested on this content?)
- Describe the inpatient and community clinical experiences where your students provide care for cancer survivors. (Probe: CT Challenge, Cancer Centers)
- 6. Do you perceive barriers or facilitators in integrating care of the cancer survivor content into your curriculum? (Probe: if so, what are they? Probe: barriers such as lack of time and lack of faculty knowledge on cancer survivorship content. Probe: facilitators such as critical reflection on cancer experiences and lifelong effects; changes in meaning perspectives due to previous clinical experiences with cancer patients)

Data Analysis

Qualitative content analysis was used for the purpose of recognition of meaning by analysis of the content of narrative data to identify not only the prominent themes but also the patterns among the themes [11, 15]. The data analysis began with organization through classification and indexing via category schemes, followed by data coding. Important concepts and themes that emerged from the data were identified as category schemes and then coded to determine which category scheme the concept or theme was assigned. This is a reductionist method of converting data to smaller, more manageable units that can be retrieved and reviewed to represent the data

more efficiently [15]. A second coder with experience in qualitative content analysis reviewed all of the transcripts for validation of concepts and themes to ensure rigor of the content analysis [11]. Descriptive statistics are provided to describe the characteristics of the participants including frequencies and means of the demographic data.

Results

Introductory emails describing the purpose of this study were sent to 243 faculty from 16 schools of nursing in two northeastern states in the USA. Two schools were identified as ineligible. One institution required separate IRB approval. The other was ineligible due to the principle investigator's enrollment as a doctoral student at the institution. Table 2 outlines the characteristics of the final sample. All faculty

Table 2 Demographic characteristics of nursing faculty in the study (N=14)

Characteristic	M		SD		Range
Length of time teaching (years)	11.38		8.35		0.83-2
Last revision of program (years)	1.93		1.84		0.33-7
Characteristic		n		%	
Area of specialty					
Medical/surgical		7		50	
Pediatrics		2		14	
Critical care		2		14	
Psychiatric/mental health		1		7	
Maternal/child		1		7	
Cardiology		1		7	
Home care		1		7	
Geriatrics		1		7	
Current teaching assignment					
Medical/surgical		6		43	
Transition practicum		4		29	
Health assessment		3		21	
Fundamentals		3		21	
Maternal/pediatric		2		14	
Holistic care		1		7	
Community health		1		7	
Critical care		1		7	
Geriatric health		1		7	
Nursing research		1		7	
Simulation		1		7	
Continuing education					
No		11		79	
Yes		2		14	
Can't Recall		1		7	

Note: Participants identified more than one area of specialty and teaching assignment

taught in undergraduate nursing programs. The length of teaching time of the faculty ranged from 10 months to 24 years, with a mean of 11.38 years of teaching. The majority (50 %) of participants identified medical-surgical nursing as their area of specialty; other specialty areas that were predominant were pediatric nursing (14 %) and critical care nursing (14 %). Teaching assignments included medical-surgical courses (43 %) with lesser percentages of participants teaching in transition courses, health assessment, fundamentals, and maternal child nursing. Most participants (79 %) had not performed continuing education on the care of the cancer survivor. The mean was 1.93 years for review or revision of curricula, which ranged from 4 months to 7 years.

Content Analysis

Content analysis of the interviews resulted in seven themes. The themes were as follows: (1) descriptions of cancer survivorship; (2) beliefs on inclusion of cancer survivorship care within undergraduate nursing curriculum; (3) established content on cancer survivorship care: teaching practices; (4) gaps in content on cancer survivorship care; (5) curricular lack of supportive literature on cancer survivorship care; (6) clinical sites providing opportunities for cancer survivorship care: planned versus unplanned; and (7) barriers and facilitators to the inclusion of cancer survivorship in undergraduate nursing curricula.

Descriptions of Cancer Survivorship

Less than half of those interviewed (42 %) defined cancer survivorship care that was consistent with the NCCS definition, or a holistic description about the patient experience that addresses needs and care from diagnosis to end-of-life. Those participants with definitions that were inconsistent (57 %) with the NCCS definition of cancer survivorship care viewed cancer survivorship as an experience that begins once acute treatment ends; participants did not have a "clear definition" of cancer survivorship; participants did not include family, friends, and caregivers in the definition; and it was necessary for the patient to have survived 5 years after their initial diagnosis in order to be considered a survivor.

Beliefs on Inclusion of Cancer Survivorship Care Within Undergraduate Nursing Curriculum

While nearly all faculty (92 %) believed that cancer survivorship care belongs in undergraduate nursing programs, the same number of faculty (92 %) identified a gap in their curriculum regarding the physical, psychosocial, and spiritual needs of the cancer survivor. The belief that cancer survivorship belongs in undergraduate nursing curricula is due to most participants' perceptions that the numbers of cancer survivors are "staggering" across all age groups and specialties. Faculty attributed



the gap in content to multiple barriers, including faculty lack of knowledge and awareness of the needs of cancer survivors.

Established Content on Cancer Survivorship Care: Teaching Practices

Participants reported covering content related to the acute stage of survivorship that surrounds the initial time of diagnosis when patients are in the acute stage of treatment (42 %), along with end-of-life and hospice care. These areas were also identified as "BSN Essentials." Survivorship content was, for the most part, reported as being taught briefly and covering "limited aspects of care." The extended and permanent stage of survivorship was integrated into only 14 % of curricula. Participants stated that topics such as surgical interventions and treatments such as chemotherapy and radiation along with side effects would be topics covered on NCLEX-RN so these participants included these topics in their courses.

Gaps in Content on Cancer Survivorship Care

Forty-three percent of the participants did not teach cancer survivorship at all, reporting that it is not tested on the NCLEX-RN, and while it is an important topic, there is no time in the curriculum to include survivorship care.

Curricular Lack of Supportive Literature on Cancer Survivorship Care

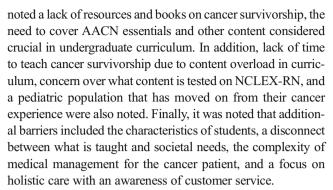
Twenty-one percent of participants included no literature or testing on cancer survivorship care in their program. Twenty-one percent of faculty included a limited amount of literature and testing on cancer survivorship care in their program. Fifty-seven percent of participants reported that extremely limited literature may be included in their curriculum but they were unsure.

Clinical Sites Providing Opportunities for Cancer Survivorship Care: Planned Versus Unplanned

Fourteen percent of participants described clinical opportunities that were planned experiences for patients in all stages of survivorship. Thirty-six percent of faculty stated that there were no clinical learning opportunities for cancer survivorship care. Fifty percent of the faculty interviewed described clinical experiences where students provide care for cancer patients but the experiences focused on acute, end-of-life, or hospice stages of care only.

Barriers and Facilitators to the Inclusion of Cancer Survivorship in Undergraduate Nursing Curricula

Participants reported barriers such as lack of faculty knowledge and awareness of cancer survivorship needs. They also



Facilitators included faculty whose beliefs were strong that cancer survivorship must be included in the curriculum and use of media to inform the public about the needs of cancer survivors. It was suggested that increasing faculty awareness on the health care needs of cancer survivors, holistic training of faculty, and inclusion of the family as co-survivors would facilitate curricular integration. In addition, faculty reported that a supportive Dean and Program Chair; ELNEC (End-of-Life Nursing Consortium)-threaded curriculum, and correlation of classroom content on survivorship and clinical practice as facilitators would also facilitate curricular integration. Finally, additional facilitators included students who are cancer survivors and the use of simulation in the educational setting with a scenario on cancer survivorship.

Discussion

The four components of cancer survivorship care that nurses must address to ensure that the health care needs of cancer survivors are met include the following: (a) prevention and detection of new and recurrent cancers; (b) surveillance for cancer spread, recurrence, or second cancers; (c) intervention for consequences of cancer and its treatment; and (d) coordination between specialists and primary care providers [1, 3]. The IOM [3] recommendations released by *From Cancer Patient to Cancer Survivor: Lost in Transition* calls for the establishment and provision of appropriate care to cancer survivors by all healthcare providers as a distinct stage of cancer care. The findings of this study reveal that these four components are not routinely addressed in undergraduate nursing curricula. Of the fourteen participants, only two (14.2 %) reported including these content areas in their teaching practices.

While 92 % of participants stated that content related to caring for the needs of cancer survivors belonged in undergraduate nursing education, the same percentage of respondents believe that it is neglected and reported cancer survivorship as a gap in their curricula. This was demonstrated in the study's sample as only 14 % of participants included care of the patient that expanded upon the acute stage of cancer survivorship, to include the extended and permanent stages of survivorship. Participants also assigned limited or no academic and clinical



literature on cancer survivorship care in their current undergraduate nursing programs. Students have ample opportunity to provide care for cancer patients during clinical experiences; however, 50 % of faculty reported that the clinical experiences were not planned cancer survivorship experiences grounded in cancer survivorship concepts and interventions.

Interprofessional care of the cancer survivor through the use of multiple disciplines and care models is discussed in the literature to address health care gaps for survivors [16, 17]. The IOM [3] identified the importance of educating nurses, physicians, rehabilitation specialists, and psychosocial and mental health providers on content that is related to the care of the cancer survivor. The development of the CSCP as a tool for multiple disciplines to coordinate care needs of the cancer survivor in multiple settings is discussed in the literature review [6, 18]. In this study, no participants mentioned the use of the CSCP in their teaching practices. Only one participant (7 %) in this study reported the importance of interprofessional care for cancer survivors. This participant viewed cancer survivorship from a multidisciplinary perspective and stated she "believes it takes multiple disciplines to empower families to care for their loved ones who are cancer survivors."

The findings of this study did not support the literature review on interprofessional care and collaboration with other disciplines in the care of the cancer survivor. Interprofessional care was not found to be evident in established content on cancer survivorship care; thus, it would be included as a gap in content on cancer survivorship care. In addition, the study participants reported no supportive literature or planned clinical experiences that would include interprofessional care or collaboration with other disciplines in clinical practice or on a CSCP.

This study supported Such Lockhart et al.'s [7] finding of lack of time as a barrier to inclusion of cancer survivorship content in undergraduate nursing curriculum. However, this study is different from Such Lockhart et al.'s in that 92 % of participants believed that cancer survivorship care should be included in undergraduate nursing education. Similarly, Uijtdehaage et al. [19] identified a significant gap in a comprehensive curriculum for medical schools resulting in physicians who are not prepared for caring for cancer survivors. This study supported these findings with the identification of the theme: gaps in content on cancer survivorship care. Uijtdehaage et al. [19] conducted an additional study in which a cancer survivorship curriculum was implemented for an intervention group. The intervention group demonstrated improvement in the educational outcomes for the critical components of survivorship care [19].

This study revealed a frequent concern expressed by faculty that cancer survivorship content is not included on the NCLEX-RN exam and The Essentials of Baccalaureate Education for Professional Nursing Practice (BSN Essentials). Faculty reported that there is an emphasis on NCLEX-RN scores in their programs, which is why they

teach care of the acutely ill cancer patient because that is what they perceive is being tested on the NCLEX-RN exam. Curriculum mapping of undergraduate nursing programs by faculty to determine the appropriate placement of content is necessary as it relates to current nursing practice, BSN Essentials, as well as the NCLEX-RN test plan.

Discussion of the results of this study in relation to the development of nursing licensure examinations that include content on care of the cancer survivor would be appropriate with the National Council of State Boards of Nursing (NCSBN). Policy implications may also include discussion with the American Association of Colleges of Nursing (AACN) to include care of the cancer survivor in the BSN Essentials.

Educational practice changes that are recommended based on this study include the following: (a) professional development for faculty, (b) designate a faculty "lead" for integration of cancer survivorship into baccalaureate programs, (c) integrate cancer survivorship into every course across the curriculum, (d) provide community clinical experiences for students that are planned for the cancer survivor such as the CT Challenge and other survivorship centers, (e) utilize interprofessional settings for clinical experiences such as cancer centers, (f) integrate evolving case studies and simulations of cancer survivors that follow patients over time and in multiple courses as their complexity of care increases, and (g) use online resources for developing CSCPs.

Future research is needed on this topic for both undergraduate and graduate programs. Replication of this study for graduate nursing programs to explore if a gap in cancer survivorship education exists is also appropriate. It is vital to explore if nurse practitioners that will serve as primary care providers are prepared to care for individuals who are cancer survivors. This can be achieved through a replication of this study or through a quantitative descriptive survey of graduate faculty to include questions on specific content that may be covered on cancer survivorship care in graduate nursing programs.

Conclusion

Education of nursing faculty on the current definition of cancer survivorship is critical to the inclusion of this content in undergraduate nursing curricula. This not only include the NCCS definition of the cancer survivor but also the recognition of the acute, extended, and permanent stages of cancer survivorship along with the nursing care that is needed for survivors during these stages [6]. While the IOM report [3] From Cancer Patient to Cancer Survivor: Lost in Transition identified cancer survivorship as content that required research in provision of care and inclusion in nursing education, there remains a significant gap in this area regarding nursing education 11 years after the report has been published.



In addition to the stages of cancer survivorship, faculty must be educated on the four components of cancer survivorship care that all nurses must provide to cancer survivors. These four components of care include the following: prevention and detection of new and recurrent cancers; surveillance for cancer spread, recurrence, or second cancers; intervention for consequences of cancer and its treatment; and coordination between specialists and primary care providers to ensure that the health needs of the survivor are met [1, 3].

A review of current undergraduate curriculum and what is necessary for prelicensure BSN students to know upon entering into practice regarding cancer survivorship is a dialogue that must occur amongst faculty. Cancer is the second leading cause of death in the USA with record numbers of individuals surviving with this disease [2]. It is second only to heart disease in incidence in the USA, and yet would faculty consider not covering nursing care of the patient with congestive heart failure in their curriculum?

Compliance with Ethical Standards Institutional Review Board (IRB) approval was obtained as well as individual consent from the participants who agreed to be interviewed for this study.

References

- Chubak J, Tuzzio L, Hsu C, Alfano CM, Rabin BA, Hornbrook MC, Nekhlyudov L (2012) Providing care for cancer survivors in integrated health care delivery systems: practices, challenges, and research opportunities. J Oncol Pract 8(3):184–189. doi:10.1200/JOP.2011.000312
- DeSantis CE, Lin CC, Mariotto AB, Siegel RL, Stein KD, Kramer JL, Jemal A (2014) Cancer treatment and survivorship statistics, 2014. CA Cancer J Clin 64:252–271. doi:10.3322/caac.21235
- Institute of Medicine of the National Academies (2005) From cancer patient to cancer survivor: lost in transition. Report recommendations. Retrieved from http://iom.edu/Reports/2005/From-Cancer-Patient-to-Cancer-Survivor-Lost-in-Transition.aspx
- Klemp JR, Frazier LM, Glennon C, Trunecek E, Irwin M (2011) Improving cancer survivorship care: oncology nurses' educational

- needs and preferred methods of learning. J Cancer Educ 26:234–242. doi:10.1007/s13187-011-0193-3
- Rowland JH, Hewitt M, Ganz PA (2006) Cancer survivorship: a new challenge in delivering quality cancer care. J Clin Oncol 24(32):5101–5104. doi:10.1200/JCO.2006.09.2700
- Morgan MA (2009) Cancer survivorship: history, quality-of-life issues, and the evolving multidisciplinary approach to implementation of cancer survivorship care plans. Oncol Nurs Forum 36(4): 429–436. doi:10.1188/09.ONF.429-436
- Such Lockhart J, Galioto M, Oberleitner MG, George K, Van Deusen-Morrison JK, Davis A, Mayer DK (2013) A national survey of oncology content in prelicensure registered nurse programs. J Nurs Educ 52(7):383–390. doi:10.3928/01484834-20130529-01
- Ferrell BR, Virani R, Smith S, Juarez G (2003) The role of oncology nursing to ensure quality care for cancer survivors: a report commissioned by the national cancer policy board and institute of medicine. Oncol Nurs Forum 30(1):E1–E11. doi:10.1188/03.ONF.E1-E11
- Sandelowski M (2000) Whatever happened to qualitative description? Res Nurs Health 23:334–340. doi:10.1002/1098-240 X(200008)23:4<334::AID-NUR9>3.0.CO;2-G
- Morse JM (1995) The significance of saturation. Qual Health Res 5(2):147–149. doi:10.1177/104973239500500201
- Polit DF, Beck CT (2012) Nursing research: Generating and assessing evidence for nursing practice, 9th edn. Wolters Kluwer Health/Lippincott Williams & Wilkins, Philadephia, PA
- Bowen GA (2008) Naturalistic inquiry and the saturation concept: research note. Qual Res 8(1):137–152. doi:10.1177/1468794107085301
- Hays DG, Singh AA (2012) Qualitative inquiry in clinical and educational settings. The Guilford Press, New York
- Lincoln YS, Guba EG (1985) Naturalistic inquiry. Sage Publications, Newbury Park, CA
- Krippenendorff K (2013) Content analysis: An introduction to its methodology, 3rd edn. Sage Publications, Los Angeles, CA
- Cooper JM, Loeb SJ, Smith CA (2010) The primary care nurse practitioner and cancer survivorship care. J Am Acad Nurse Pract 22:394–402. doi:10.1111/j.1745-7599.2010.00528.x
- McCorkle R, Ercolano E, Lazenby M, Schulman-Green D, Schilling L, Lorig K, Wagner E (2011) Self-management: enabling and empowering patients living with cancer as a chronic illness. CA Cancer J Clin 61(1):50–62. doi:10.3322/caac.20093
- Donofrio Angelucci D (2013) The role of PTs in cancer survivor programs. PT Motion 24–31:19
- Uijtdehaage S, Hauer KE, Stuber M, Go VL, Rajagopalan S, Wilkerson L (2009) Preparedness for caring of cancer survivors: a multi-institutional study of medical students and oncology fellows. J Cancer Educ 24:28–32. doi:10.1080/08858190802665260

