Original Article

Nursing Students' Perspectives on Assisting Cancer Patients

Sevgisun Kapucu¹, Hulya Deniz Bulut²

¹Department of Internal Diseases Nursing, Faculty of Nursing, Hacettepe University, Ankara, Turkey, ²Department of Nursing, Faculty of Health Sciences, Gazi University, Ankara, Turkey



Corresponding author: Sevgisun Kapucu, PhD, RN

Associate Professor, Department of Internal Diseases Nursing,

Faculty of Nursing, Hacettepe University, Ankara, Turkey

Tel: +903123051580/124; Fax: +903123127085

E-mail: sevgisun@hacettepe.edu.tr

Received: May 22, 2017; Accepted: July 10, 2017

ABSTRACT

Objective: The objective of this study was to examine the experiences of student nurses who have provided care to cancer patients. **Methods:** A mixed method approach consisting of semistructured focus groups (n = 61) and a survey questionnaire (n = 129) was used in the study. Student nurses were first interviewed, and then, a questionnaire was developed for them to answer. Following the content analysis, three themes and 19 subthemes were identified. Frequency and percent were used for qualitative data. **Results:** Among the student nurses, 80.6% reported that working with cancer patients was "difficult." Difficulties experienced by the student nurses included patients rejecting their care, a large number

of problems cases encountered when providing care to cancer patients, communication problems (38.0%), working with patients and attendants who fear death, and problems arising from family attendants who obstruct care. The majority of students experienced patients fearing death (28.7%) and felt feelings such as pity (71.1%), sadness (50.0%), and fear of cancer (41.9%) during their internships in oncology clinics. Conclusions: Students should be supported by instructors and oncology nurses, and nursing curricula should contain topics on how to best approach cancer patients.

Key words: Cancer, education, nursing students, patients

Introduction

Although they are not among the care members of an oncology team, student nurses participate in giving care to cancer patients during their clinical training. Despite positive developments and innovations in cancer treatment in recent years, symptom control and quality of care for cancer patients remain challenging, and complications

are frequent.^[1,2] In cases where even professional nurses experience difficulty in providing care to cancer patients, student nurses are typically unable to provide adequate care, and sometimes develop negative attitudes or behaviors toward this group of patients.

Several studies^[2-7] in the literature have shown that student nurses have an almost equal fear of cancer and

This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

For reprints contact: reprints@medknow.com

Cite this article as: Kapucu S, Bulut HD. Nursing students' perspectives on assisting cancer patients. Asia Pac J Oncol Nurs 2018;5:99-106.

Access this article online

Quick Response Code:



Website: www.apjon.org

DOI:

10.4103/apjon.apjon_44_17

death as their patients. Therefore, in nursing education, it is important to train student nurses on how to form positive relations with cancer patients and their families as well as how to approach the emotional problems of patients concerning their ailments. A number of studies^[8-11] recommend that nurses should be properly trained on cancer patient care and treatment, including communication, psychosocial support, and caring for terminal illnesses. Indeed, Sanford *et al.*^[4] have shown that difficulties faced in communicating with cancer patients and their families were significant among student nurses practicing end of life care, and recommend that students be better trained to overcome such challenges.

As cancer has become more chronic in nature, nursing faculty and clinical educators must rethink how the education and clinical experiences of students must occur throughout the trajectory of a cancer illness. [4] The literature also suggests that nurses working with cancer patients often feel inadequate and put under stress. Such feelings may be brought about by communication difficulties with patients and their relatives, conflict with team members, or psychological difficulties due to coping with a patient's worsened state of health or death, all of which are common sources of stress and burnout. [12-15]

Based on our observations in hospital settings and experiences as clinical instructors, we believe that student nurses indeed do have difficulty working with cancer patients. Examining student experiences with cancer patients and identifying the problems, they face will help improve their preclinical training and provide better care for cancer patients. Therefore, this study aims to identify the difficulties, student nurses experience when providing care to cancer patients, and based on the findings, to discuss how nursing curricula might be revised to alleviate such difficulties.

Methods

Study design

A sequential explanatory mixed method design (qualitative and quantitative methods used together) was selected for this study.

Setting and sample

The participants of this study were junior students selected from two nursing schools in Ankara, Turkey. These students were selected because they represent the youngest group of students with cancer patient experience, and because they were observed by their educators to have had difficulty with such experiences. The junior students had got in both universities, nursing education lasts 4 years (eight semesters), and upon graduation, students are awarded a BA degree in general nursing in both universities. Junior nursing

students take medical nursing and surgical nursing courses for one semester and receive practical training during these courses within hospitals. Such students are also expected to provide care to cancer patients, particularly in oncology clinics (hematology, general oncology, surgical oncology, surgery, and chemotherapy).

In this qualitative study, the entire universe was sampled and all of the junior nursing student volunteers were sampled in both universities. There were a total of 157 junior students between the two universities, and of those, 129 (82.1%) volunteered to participate in the study (students who participated in the focus groups were also included in the quantitative analysis). Qualitative data were then collected from 61 nursing students (with cancer patient experience) using a focus group method.

Ethical considerations

Both the universities involved and the students who participated in the study gave their written consent to participate. The study was conducted in accordance with the principles of the Declaration of Helsinki. As the National Ethics Committees were temporarily closed during the study in Ankara, approval from them was not possible.

Measurements/instruments

We used a semistructured question form [Box 1] to collect qualitative data and a question form consisting of 14 questions for the quantitative data. Quantitative data were collected through six questions related to sociodemographic characteristics, and eight questions related to care experiences with cancer patients and student perceptions of cancer.

Data collection and analysis

Qualitative data collection and analysis

Six focus group discussions were held with 61 nursing students. The sample of this study consisted only of students who agreed to participate in the study voluntarily. All focus group discussions were held in an appropriate room in the hospital and school. Before beginning the focus

Box 1: Questions for focus group interview

How do you feel when you are working with cancer patients?

Do you think you are ready to work with cancer patients?

Do you think it is difficult to work with cancer patients?

Do you have difficulties providing care to cancer patients? Can you describe these difficulties?

Why do you think you are having these difficulties?

Who supported you when you had difficulties with patients?

How did you overcome the problems you had when working with cancer patients?

What are your suggestions for minimizing the difficulties faced?

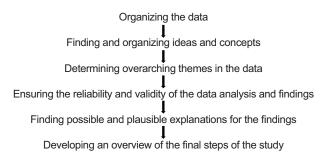
group discussions, the aim of the study was explained to the students. Each group included 8–12 participants, all of which remained anonymous save for giving their age and a name for use in the group discussions. Each group's interview lasted for roughly 40 min.

Six focus groups were conducted that involved eight open-ended questions to drive the discussion. We did not need the additional questions, but rather sought to assist the students' understanding of these questions and request greater detail [Box 1]. The researchers ensured, however, that each question on the data collection schedule was sufficiently addressed. The discussions were tape-recorded and notes were made concerning group dynamics, particular reactions, and the number of participants endorsing a view, among other observations, which were later added to the transcriptions. The written material was analyzed and interpreted to determine. The transcribed data from the focus groups were assessed by the focus group moderator, who acted as recorders and kept field notes. [16] The units of analysis for this study were words or concepts, themes (3 themes and 19 subthemes emerged from the qualitative data analysis [Figure 1]), and the numbers of subjects who described the same concepts or themes.

The interview forms were presented to two expert cancer nurses for validity-reliability of the study, and we performed the pilot work. The researchers were trained on interview methods by taking course. Formal systems were adopted for the analysis of the qualitative data to assist the two researchers to determine the meaning of the data more easily. These systems involved coding techniques for

finding and marking underlying ideas in the data, grouping similar kinds of information together in categories, and relating different ideas and themes to one another. During analysis, the transcripts were coded line-by-line to allow the researchers to uncover underlying meanings in the data. Similar stories were grouped together, patterns of experiences were identified and labeled, and data saturation was reached. The transcribed data from the focus group discussions were grouped by theme and concept, and the statements of the participants were coded numerically according to these groupings. The main purpose of grouping and coding was to make data analysis easier.

The schema of qualitative data analysis^[18]



Collection of quantitative survey data and analysis

Quantitative data were collected using a question form consisting of 14 questions related to the sociodemographic characteristics of the participants and their experiences and perceptions concerning cancer patient care. The questionnaire, which consisted of open-ended and

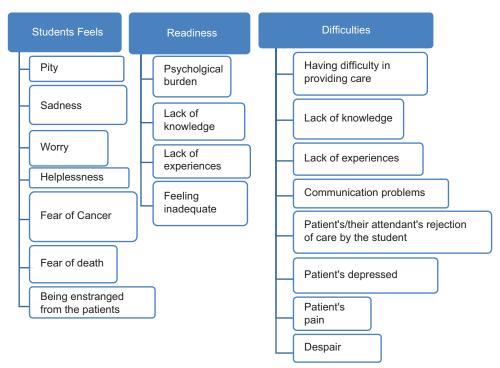


Figure 1: Themes and subthemes

closed-ended questions (formulated based on the data collected in the focus groups), was administered to the junior nursing students in both nursing schools by a researcher not employed by the school. The questionnaires took roughly 30 min to complete, and volunteer nurse students who participated in the focus groups were included in the sample. Statistical analysis of the study data was performed using the IBM SPSS for Windows version 21.0 (SPSS Inc., Chicago, IL, USA) package program, which was used to calculate frequency and percentage distributions within the quantitative data during the second stage of the study.

Results

According to the quantitative study results, the mean age of the nursing students was 20.6 ± 0.01 (minimum: 18, maximum: 25), all of which were female: 85.3% had not had any communication problems with cancer patients, 62% talked about cancer information from their medical lessons, 78.3% had never had a family member with cancer, 75.2% had experience in giving oncology patient care, and 87.6% had received social and medical support from their clinical nursing faculty or assistants and clinical nurses. Among all the students, 80.6% found it difficult to work with cancer patients, while 85.3% expressed difficulty providing care to cancer patients. In addition, 27.1% of the 2^{nd} year nurse students did not consider themselves ready to work with cancer patients.

Concerning the qualitative data analysis, three themes and 19 subthemes emerged. These themes which are presented in Figure 1.

The first theme: Students' feelings

The majority of the students experienced feelings of worry (74.4%), pity (71%), sadness (50%), helplessness (50%), fear of cancer (41.9%) and death (28.7%), and estrangement from a patient (7%) while working in oncology services [Table 1].

The following are sample responses about:

Feelings of worry

"I am in constant fear of losing the patient any moment... When I come back next week, will he be still here?... What if he dies?" (student 39), "I am going through everything with the patients. If the prognosis is good, I am happy... When the prognosis is bad, I too get depressed together with the patient... I fear that the patient is going to die... This worries me" (student 57).

Feelings of pity

"I feel really sorry for these patients, because I know they are going to die..." (student 3), "If the patient's prognosis is bad, I feel pity for them." (student 7), "When my patient

Table 1: Student's feelings and difficulties $(n=129)$	
	п (%)
Feelings	
Worry	96 (74.4)
Pity	71 (71.0)
Sadness	60 (50.0)
Helplessness	60 (50.0)
Fear of cancer	54 (41.9)
Fear of death	37 (28.7)
Being estranged from the patient	9 (7.0)
Difficulties	
Lack of experience	85 (65.9)
Patient's depressed	79 (61.2)
Having difficulty in providing care	71 (55.0)
Patient's pain	67 (51.9)
Despair	67 (51.9)
Patient's/their attendant's rejection of care by the student	65 (50.4)
Communication problems	49 (38.0)
Lack of knowledge	43 (33.3)

has a fever, he cannot walk, he needs me more than ever. I give him his water, and help him with everything. I feel really sorry for him." (student 17), "When his condition gets worse, I feel powerless, I feel inadequate, I don't know what to do" (student 23).

Feelings of sadness

"My patient is very young and he is too young to die, I am very upset for him" (student 1), "It is as if the patient is a relative of mine. She suffers a lot, I feel really sad for her." (student 21), "She kept crying all the time... I tried to empathize, I know the stages of leukemia... I know how it ends... I felt really sad." (student 49), "He is too young to die... I feel really terrible... It is not like a patient with a broken leg..." (student 54).

Feelings of helplessness

"My patient kept getting worse and worse... There was nothing I could do... I felt helpless... (student 19), "I do everything that I can to make my patient comfortable... But, she has so much pain... The medication she gets does not stop her pain... Unfortunately, we cannot help her" (student 43), "When it is cancer, God help you... This is it! This is the end of the road. There is a chance that they may get better, but mostly we are helpless... society also treats them like they are going to die soon" (student 55).

Fear of cancer/death

"I am very afraid that somebody from my family will get cancer (student 5)," "Thank God I don't smoke. I hope I don't get it." (student 16, "I saw all the symptoms in myself... I diagnosed myself with lymphoma... I went to see a doctor... I got myself examined... Now I thank God..." (student 51).

The second theme: Readiness

Among the students, 27.1% did not consider themselves to be ready to work in oncology services. The findings from focus groups and the quantitative data show that the students feel under "psychological pressure when working with a cancer patient," "that they do not have the required knowledge or experience," and "inadequate."

Student statements concerning readiness

"I don't feel ready in emotional terms... I lack knowledge and experience... (student 4), "There was a patient with leukemia... She was dying... I cried... I wasn't ready." (student 11), "Cancer patients are usually in a terrible mood... I am not ready..." (student 45).

The third theme: Difficulties faced by students

Eight subthemes were determined among the data concerning difficulties experienced by the students: lack of experience (65.9%), depressed patients (61.2%), difficulty in providing care (55%), patients' pain (51.9%), despair (51.9%), student care rejected (50.4%), communication problems (38%), and lack of knowledge (33.3%) [Table 1].

Student statements concerning difficulties

"The patient rejects care..." (student 12), "We can't take information on them, they don't want to speak with us" (student 20), "Oncology patients have got a lot physiological and psychological problems" (student 23), "The patient had severe pain... I didn't know what to do..." (student 35), "I had a patient in the terminal stage... She was getting close to death every day... There was no way I could save her... I cried so much..." (student 37), "... He didn't allow me to measure his blood pressure... He told me to stop asking questions... (student 50).

Among the students, 55% were able to overcome their problems, while 87.6% received support for the problems they had. A total of 31.8% received support from instructors, 27.4% from nurses, and 31% from peers. In terms of strategies to overcome these problems, their recommendations include greater support from hospital personnel and instructors, experience-sharing sessions among peers, working with a mentor, and interning for this course in the 3rd or 4th year.

Discussion

The findings of our study can help nursing instructors, students, and health-care team members to understand the difficulties and experiences that student nurses experience when caring for cancer patients. One of the major findings of this study is that difficult to work with cancer patients in terms of their personal characteristics and in terms of

practical measures to assist them. Cancer patients have complex care requirements due to their symptoms and the side effects of medications, and therefore, nurses who work with them need to be experienced and knowledgeable about oncology. [2,5,11] The findings of this study are in line with those of prior studies that have shown students in the field to have difficulty working with this group of patients. [2,4,5,11,19] In what follows, the findings will be discussed according to the study's three major themes.

The first theme: Students' feelings

The student nurses reported that they usually had negative feelings (e.g., worry, pity, and sadness) when providing care for cancer patients. The students found themselves to be negatively affected, in psychological terms, particularly when they were working with patients who are in a terminal stages or have severe pain. [19,20] Another feeling which was common among students was the fear of getting cancer, which they considered to be a terminal illness. The students reported that this was one of the reasons why they avoided working in oncology clinics in general.

Indeed, Sanford et al.[4] found that student nurses had difficulty working with the terminally ill and speaking of illness in their presence as well as feelings of inadequacy. Kav et al.[2] found that student nurses were afraid of physically hurting cancer patients (risk of infection), had difficulty approaching patients in severe pain, and had general difficulty providing care to this group. In their study conducted with 2nd- and 3rd-year nursing students, King-Okoye and Arber[11] found, contrary to the findings of the present study and prior studies, that students perceived working with end-of-life patients as a positive experience. Sanford et al., [4] on the other hand, found that students had both negative and positive experiences, largely depending on the patient and his or her family. We are of the opinion that cultural factors may have also played a role in the negative feelings of participants in the present study. Attitudes toward death and terminal illnesses are different in the Turkish culture compared to those in the west. When patients and their families have difficulty accepting or talking about death and enter into a period of early bereavement before death, health professionals may have difficulty handling such issues.

In a study conducted in Turkey,^[5] student nurses stated that they experienced extreme anxiety when their first clinical experience was in an oncology service, particularly in hematology: "When I first heard about hematology... I asked some of my friends from upper classes... I felt uncomfortable, fear, and anxiety," "There are patients that are seriously ill. How I am going to care for them or give medications?," "Hematology is a difficult clinic. Patients

are too sensitive. One of my patients is too introverted and looks like he has removed himself from life. He does not want to talk. All of the patients have anxiety." We are of the opinion that cultural factors may have also played a role in the students' negative feelings.

The second theme: Readiness

In the quantitative part of the study, the majority of the students reported that they were ready to work with cancer patients, whereas in the qualitative part, many stated that they were unready. The students also reported that working with such patients posed a heavy psychological burden, and that they felt helpless and inadequate (due to lack of knowledge and experience) when working with them. Previous studies have reported similar findings, with oncology nurses and student nurses found to have similar problems. [1,2,21] Cunningham *et al.* [1] observed that effective preclinical preparation for patient care had positive effects and recommend that students who are to work with cancer nurses undergo sufficient preclinical preparation.

A Royal College of Nursing report^[22] recommends modifications to preregistration education to ensure that all nurses are aware of the required knowledge, skills, and attitudes necessary to provide both initial and ongoing care to people affected by cancer. Furthermore, the National Institute for Clinical Excellence^[23] has recently recommended national guidelines for the preparation of a "suitably trained workforce" so as to provide supportive and palliative care services to people with cancer. Copp *et al.*^[14] found that, to be able to overcome issues in dealing with cancer patients, health-care professionals should have good communication skills, strategies for dealing with various problems, and solid theoretical knowledge as they observed that health-care providers who were trained in these qualities to have an easier time working with cancer patients.

The third theme: Difficulties faced by students

The student nurses reported various issues the obstructed care when providing care to cancer patients, including difficulty providing physically care, communication problems, and failure to provide effective care due to the refusal/prevention of care by a patient or a patient's attendants. The students' lack of knowledge and experience, family fears of patients getting hurt, patient depression, patient pain, and feelings of despair were found to be the main reasons for this issue. Therefore, we recommend that students receive more effective preclinical training on cancer patients and their specific problems.

Lloyd-Williams and Field^[20] found that student nurses did not receive sufficient instruction on palliative care during their training, thus leading them to have difficulty working with this group of patients in their subsequent

professional lives. Nau *et al.*^[24] observed that student nurses may often encounter aggressive patients in clinics, and therefore, recommend that their training should discuss how to deal with such patients. In another study, using qualitative methods to examine the problems, student nurses encounter with cancer patients, Sanford *et al.*^[4] found that students had particular difficulty dealing with patients in the terminal stage and those with severe pain.

Teaching students to communicate with and care for dying patients and their families have never been an easy task. Kostak *et al.*^[6] found students to experience problems related to communication, sadness, helplessness, fear, anxiety, resentment, and anger. In addition, the students were found to be most affected by the effects of the patients' disease, invasive procedures on pediatric cancer patients, and their families during the process of caring for them in oncology clinics.

In line with the present study, a study conducted in Turkey by Kav *et al.*^[2] found students to have communication problems and to experience feelings such as despair and fear. Furthermore, Yildiz and Akansel^[5] have reported nursing students to experience anxiety, difficulties in communicating with cancer patients, and to have observed certain negative practices related to patient care and treatment. It could be argued that the feelings of students have for cancer patients may lead them to have communication problems with patients and their families. In addition, such feelings can make it more difficult for students to form proper relationships with patients and their families in providing continued care.

As cancer has become more prevalent in nature, nursing faculty and clinical educators must carefully consider the potential clinical experiences of students throughout the trajectory of a cancer illness and how to educate for them. [4] The volunteer nurse students suggested the need for orientation programs, a facilitator's introduction to an oncology team, organizing meetings to share experiences, extending the duration of practice placements, and organizing motivational activities. Preceptors, nurses, and peers were found to be the most common sources of support in this study. The study also found that student nurses received support from clinical instructors, clinical nurses, and peers in dealing with various problems.

Effective clinical education is essential to improve nursing students' attitudes toward treating cancer patients. Such education should include choosing appropriate oncology clinics, orienting students, mentorships and role modeling by staff and teachers, continuous feedback, and support for students in terms of communication with and caring for cancer patients. O'Connor and Fitzsimmons^[25]

have provided suggestions as to what cancer nursing content should be included in undergraduate preregistration curricula and highlight providing such a curriculum for the basic training of nurses.

While the majority of studies in the literature report that students perceive their experiences with cancer patients to be negative, a qualitative study conducted with 2nd- and 3rd-year nursing students by King-Okoye and Arber^[11] found students to view their experiences as useful despite having difficulties. The findings of this study suggest that a graduated and continual experiential training program concerning the care of cancer patients is needed in our country. Such a program should be graduated across 4 years and cover attitudes to cancer, the biology of cancer, risk factors, treatment modalities, psychosocial care, and specific communication and reflective practice skills, such as breaking bad news, handling strong emotions, and providing supportive care.

Training methods fit for these purposes should also be developed. Ratanawongsa *et al.*^[19] found their training method for teaching 3rd-year medical students about terminally ill patients to have positive results. Similarly, Tishelman *et al.*^[26] found a simulation program developed for student nurses working with advanced stage cancer patients to have positive effects on the students. Finally, using the nursing training method they developed, Charalambous and Kaite^[7] found that student experiences remained positive.

Conclusion

The results of this study suggest that nursing students who care for cancer patients may have various negative feelings and difficulties in doing so. Such difficulties include communication problems, fear of death, and feelings toward cancer patients, such as pity and sadness. Training should therefore be offered to nursing students in oncology units as part of their nursing school curricula. In addition, faculty members, nurses, and other team members should give extra support to students who give care to oncology patients in practice settings. Based on the results of this study, we added an elective "oncology nursing" course (2 h a week) to the 2nd-year curricula in our school.

Acknowledgments

We would like to express our thanks to our 2nd-year students who participated in the study.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

References

- Cunningham SM, Copp G, Collins B, Bater M. Pre-registration nursing students' experience of caring for cancer patients. Eur J Oncol Nurs 2006;10:59-67.
- Kav S, Citak EA, Akman A, Erdemir F. Nursing students' perceptions towards cancer and caring for cancer patients in Turkey. Nurse Educ Pract 2013;13:4-10.
- 3. Can G, Akin S, Aydiner A, Ozdilli K, Durna Z. Evaluation of the effect of care given by nursing students on oncology patients' satisfaction. Eur J Oncol Nurs 2008;12:387-92.
- 4. Sanford J, Townsend-Rocchiccioli J, Quiett K, Trimm D. "I see my mother's face": Student nurse experiences caring for cancer patients. Eur J Oncol Nurs 2011;15:46-52.
- Yildiz H, Akansel N. Beginning level nursing students' experiences with cancer patients in their first clinical placement: A qualitative appraisal in Turkey. Asian Pac J Cancer Prev 2011;12:2611-5.
- Kostak MA, Mutlu A, Bilsel A. Experiences of nursing students in caring for pediatric cancer patients. Asian Pac J Cancer Prev 2014;15:1955-60.
- Charalambous A, Kaite C. Undergraduate nursing students caring for cancer patients: Hermeneutic phenomenological insights of their experiences. BMC Health Serv Res 2013;13:63.
- 8. Hek G, Langton H, Blunden G. Cancer nursing education. Nurs Stand 2000;14:31.
- Radwin L. Oncology patients' perceptions of quality nursing care. Res Nurs Health 2000;23:179-90.
- Richardson A, Miller M, Potter H. Developing, delivering and evaluating cancer nursing services: Searching for a United Kingdom evidence base for practice. Cancer Nurs 2002:25:404-15.
- King-Okoye M, Arber A. 'It stays with me': The experiences
 of second- and third-year student nurses when caring for
 patients with cancer. Eur J Cancer Care (Engl) 2014;23:441-9.
- Corner J. Nurses' experiences of cancer. Eur J Cancer Care (Engl) 2002;11:193-9.
- Isikhan V, Comez T, Danis MZ. Job stress and coping strategies in health care professionals working with cancer patients. Eur J Oncol Nurs 2004;8:234-44.
- Copp G, Caldwell K, Atwal A, Brett-Richards M, Coleman K. Preparation for cancer care: Perceptions of newly qualified health care professionals. Eur J Oncol Nurs 2007;11:159-67.
- 15. Gill F, Duffy A. Caring for cancer patients on non-specialist wards. Br J Nurs 2010;19:761-7.
- Elo S, Kyngäs H. The qualitative content analysis process.
 J Adv Nurs 2008;62:107-15.
- 17. Rubin HJ, Rubin I. Qualitative Interviewing: The Art of Hearing Data. London: Sage Pubications; 1995.
- Morse JM, Field PA. Qualitative Research Methods for Health Professionals. Thousand Oaks, CA: Sage; 1995.
- Ratanawongsa N, Teherani A, Hauer KE. Third-year medical students' experiences with dying patients during the internal medicine clerkship: A qualitative study of the informal curriculum. Acad Med 2005;80:641-7.
- Lloyd-Williams M, Field D. Are undergraduate nurses taught palliative care during their training? Nurse Educ Today 2002;22:589-92.
- Zhao FF, Lei XL, He W, Gu YH, Li DW. The study of perceived stress, coping strategy and self-efficacy of Chinese undergraduate nursing students in clinical practice. Int J Nurs Pract 2015;21:401-9.

- 22. Royal College of Nursing. A Framework for Adult Cancer Nursing. London: Royal College of Nursing; 2003.
- National Institute for Clinical Excellence. Press Release 2004/2015; 2004. Available from: http://www.nice.org. uk. [Last accessed on 2016 Sep 13].
- Nau J, Dassen T, Halfens R, Needham I. Nursing students' experiences in managing patient aggression. Nurse Educ Today 2007;27:933-46.
- O'Connor SJ, Fitzsimmons D. Embedding cancer care within pre-registration nurse education programmes: Policy, practice and opportunities for change. Eur J Oncol Nurs 2005;9:341-50.
- Tishelman C, Bergenmar M, Bernhardson BM, Blomberg K, Börjeson S, Foderus H, et al. Using undergraduate nursing students as mediators in a knowledge transfer programme for care for patients with advanced cancer. Eur J Cancer Care (Engl) 2008;17:253-60.