Exploring oncology nurses' perception of the consequences of clinical empathy in patients and nurses: a qualitative study

Maryam Sedaghati Kesbakhi[1] · Camelia Rohani[2]

Abstract

Purpose Clinical empathy is the ability to understand the patient's situation, perspective, feelings, and actions, based on the patient's perception, in a helping or therapeutic way. This study was conducted with the aim of exploring oncology nurses' perception of the consequences of clinical empathy in patients and nurses and the factors influencing it.

Methods A qualitative study was conducted by semi-structured face-to-face interviews. The participants were 6 male and 9 female oncology nurses who were selected by purposive sampling. Data were analyzed using conventional content analysis.

Results The theme of "empathy as a double-sided mirror" was created, based on oncology nurses' perception of the effects of clinical empathy in patients and nurses. Two themes of "organizational factors" and "contextual factors" were generated in response to influencing factors on clinical empathy.

Conclusions By awareness of the effects of clinical empathy, controlling the barriers and strengthening the facilitators, there is a possibility to design interventional programs to develop empathy as a clinical competency in oncology nurses.

Keywords Clinical empathy · Content analysis · Influencing factors · Oncology nursing · Qualitative study

Introduction

Empathy is the basis or essence of the quality of nursing care [1]. For more than a century, empathy has been considered as the core of a therapeutic relationship [2]. Empathy is a complex, multidimensional, and dynamic concept, so in scientific literature the conceptualization of empathy has been stated by different words: emotional, moral, cognitive, behavioral, and clinical empathy [3]. Clinical empathy is defined as compassionate professionalism and the ability to understand the patient's situation, perspective, feelings, and actions in a helping or therapeutic way [4]. Clinical empathy has emotional,

metacognitive, contextual, and interpersonal dimensions and its measurement is not easy [3].

In oncology wards, development of the nurse-patient empathic communication is very important for patients because it relieves mental stress [5], reduces anxiety, gives pain control, and increases emotional compatibility and hope [6]. Clinical empathy has many benefits such as increased patient satisfaction, better adherence to treatments, help to more accurate diagnosis, reduction of distress and illness symptoms as well as the improvement of quality of life in patients [7, 8]. The results of studies indicate that empathy maximizes patient care management, reduces the financial needs of the health care system, shortens the treatment period, and reduces the need for resources [9, 10]. The results of a qualitative study in Pakistan showed that cancer patients need an empathic nurse. Empathic nurses sense the vulnerability of the patients and respond accordingly; however, some patients are dissatisfied with their communication with nurses and suffer from anxiety [11]. Although there is a positive relationship between empathy, patient outcomes, and the clinical competency of healthcare personnel, there is still ambiguity about the influence of empathy on nurses [12]. In general, empathy as a laborious emotional effort requires energy, resources, and an appropriate environment for achieving the best results.

✉ Camelia Rohani
camelia.rohani@sbmu.ac.ir; cameliarohani@yahoo.com

Maryam Sedaghati Kesbakhi
Maryam.sedaghati77@gmail.com

1 Department of Nursing, School of Medical Sciences, Tonekabon Branch, Islamic Azad University, Tonekabon, Iran

2 Department of Community Health Nursing, School of Nursing and Midwifery, Shahid Beheshti University of Medical Sciences, Vali-Asr Avenue, Cross of Vali-Asr and Neiaiesh Highway, Opposite to Rajaee Heart Hospital, Tehran 1996835119, Iran

Emotional distress, high workload, being responsible for very ill and dying patients, and having no time for self-care can lead to compassion fatigue. These multiple stresses in healthcare personnel may lead to insomnia, marital conflicts, substance abuse, and job attrition [13]. On the other hand, factors such as being very self-critical, having conflicting feelings regarding work, and being young and inexperienced can increase compassion fatigue and burnout in nurses, following empathy with patients.

There are controversial results about the relationship between empathy and burnout, as well as empathy and job stress among nurses [14]. Eight of ten articles in a systematic review study revealed a negative relationship between empathy and burnout. One article supported the positive relationship between empathy and burnout. One study showed inconsistent evidence, with positive and negative correlations between different subscales of empathy and burnout [15]. Other research results showed that high and low levels of "cognitive empathy" are associated with high degrees of depression in individuals, but moderate empathy creates the highest protection against depression [16]. These controversial results can be due to quantitative research results, since they cannot adequately reveal the concept of empathy and its relationships with other phenomenon [17].

Moreover, nurses' scope of practice needs requisite skills, i.e., social skills, expertise, experience, and priority setting. Social skills are important for establishing confident empathic communication. Also, personality and the clinical environment can influence nurses' empathy. Work environment factors like lack of time, lack of support from colleagues, anxiety for patients, exposure to negative attitudes of healthcare personnel, and workload can be barriers for nurses' empathy [18].
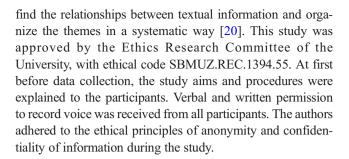
Thus, the present qualitative study was designed with the aim of exploring oncology nurses' perception of the consequences of clinical empathy in patients and nurses and its influential factors. Two main questions of the study were as follows: (1) How do oncology nurses perceive the consequences of clinical empathy in their patients and themselves? (2) What are the factors that influence oncology nurses perceptions of clinical empathy?

Methods

Study design

This qualitative study is part of a larger project with a mixed-methods sequential explanatory design. The objective of the project was to explore empathy in the nurse-patient relationship in oncology wards within the cultural context of Iran [19].

This qualitative study was designed by conventional content analysis method. Content analysis is the process of analyzing, organizing, and integrating qualitative data in order to find the relationships between textual information and organize the themes in a systematic way [20]. This study was approved by the Ethics Research Committee of the University, with ethical code SBMUZ.REC.1394.55. At first before data collection, the study aims and procedures were explained to the participants. Verbal and written permission to record voice was received from all participants. The authors adhered to the ethical principles of anonymity and confidentiality of information during the study.

Sampling and data collection

Fifteen oncology nurses (6 male, 9 female) in the age range of 24–50 years participated in this study. They were selected through purposive sampling from oncology wards of educational hospitals affiliated to three medical universities. For maximum variation, participants were selected from a previous study [18], according to the scores of the level of empathy on the normal distribution curve: the minimum, maximum, and average scores.

The data were collected through 15 semi-structured interviews with participants. The nurses were interviewed in a private room in the hospitals after agreeing on time and place. Before the beginning of the study, the research objectives, the reasons for recording the interview, the voluntary participation, and the confidentiality of the information and the identity of the interviewees were explained. Interview questions included the following: "please explain your experience about the effects of empathy on your patients and yourself?", "please tell your experience of the factors influencing empathy with your patients?", "please describe your experience about facilitators and barriers of empathy with your patients?". The interviews were recorded using a digital device, and then transcribed by MAXQDA 10 Software. The duration of the interviews was between 17 and 45 min. The data collection continued up to data saturation, when no new information was generated and redundancy was achieved in the interviews. Twelve participants were interviewed and after interviewing with participant number 13, no more new information was obtained. To test whether data saturation has been achieved, two additional interviews were conducted.

Data saturation comes when no new information emerges, and there is redundancy in the interviews. To ensure that no new information emerges, involving one or two new cases is suggested [20].

Data analysis

In order to analyze the information, the recorded interviews were managed by MAXQDA version 10 and word-by-word typed in a Word file at the first opportunity after the interview. To ensure the accuracy of the information, the information

typed in the Word file was matched to the recorded information through numeric codes assigned to each participant. To analyze the qualitative data, the Graneheim and Lundman content analysis method was used [21]. This method includes the following steps: transcribing of the entire interview immediately after each interview, reading the entire text to achieve a general understanding of its content, identifying the meaning units and extracting primary codes, classifying similar codes in comprehensive subcategories and categories (manifest content), and then determining the themes (the latent content). In this way, first meaning units were identified in sentences or paragraphs in the context of the interviews, and then they were condensed. The condensed meaning units were abstracted and labeled as primary codes. In primary coding, the text of each interview was read several times, and its original sentences were extracted and recorded. Next, the related codes were extracted and placed in a subcategory based on similarity. Afterwards, similar subcategories were placed in one main category, and ultimately themes were determined [21].

For the rigor of the study, four important criteria—credibility, conformability, dependability, and transferability—were evaluated [20]. For credibility, the first author was continuously involved with participants and research data for several months during the process of data collection and analysis. Also, transcribed interviews and extracted codes were discussed and confirmed by three participants. Moreover, extracted codes, subcategories, categories, and themes were discussed in the research team. Conformability of the study was kept by reporting the data in detail, recording accurately, and keeping all the study documents. To assess dependability of the study, the research analysis process was independently checked by three external reviewers with doctoral degrees in nursing. For transferability of the study, the authors tried to explain the method section of the study in detail for future researches.

Results

The mean age of participants in this study was 34.9 ± 6.7. The rest of the participants characteristics are shown in Table 1.

From analysis of interviews, 729 primary codes, 23 subcategories, 8 categories, and 3 themes were created. The various codes were compared based on similarities and differences and sorted into 23 subcategories and 8 categories, which make the manifest content. The subcategories and categories were discussed by the research team and revised. Finally, the latent content (the underlying meaning of the categories) was formulated into the three themes. Themes, subcategories, and categories, along with an example of participants quotes, are shown in Table 2.

In response to the first study question "How do oncology nurses perceive the consequences of clinical empathy in their patients and themselves?", the theme of "empathy as a double-sided mirror" was created, and in response to the second study question "What are the factors that influence oncology nurses perceptions of clinical empathy?", the two themes of "organizational factors" and "contextual factors" were generated.

Empathy as a double-sided mirror

According to the nurses' experiences about the consequences of clinical empathy in their patients and themselves, the theme of "empathy as a double-sided mirror" was formulated. It captured two categories of the positive and negative effects of empathy. Positive effects of empathy show that empathy can be beneficial to both the patient and the nurse. The category of positive effects of empathy included "benefit for the patient" and "benefit for the nurse." In another side, negative effects of empathy show that empathy may have devastating effects on nurses. The category of negative effects of empathy included "nurse's psychological vulnerability" and "nurse's physical vulnerability." Both positive and negative effects of empathy were stated by participants for oncology nurses, while positive effects were described only for patients (Table 2).

Organizational factors

Organizational factors play an important role in implementation of empathy in the healthcare systems. Based on the nurses' experiences of factors that influence nurses' perceptions of clinical empathy, the theme of organizational factors was formulated. It captured three categories of "organizational defects," "management factors," and "communication-professional nursing issues." Organizational weaknesses can affect the empathy of nurses. The category of organizational defects according to nurses' experiences included "multiple tasks and roles," "workload," "poor working conditions," and "financial difficulties." The category of "management factors" showed that the managers like the hospital chief managers, supervisors, and head nurses in healthcare systems can both motivate or be a barrier for nurses' empathy with patients. "Communication-professional nursing issues" was the other category of organizational factors. Problems and issues related to communication within the healthcare team and the healthcare organization can affect the nurses' empathy. By nurses' experiences, this category included "reaction of colleagues," "professional support," "coordination and communication within and outside of the organization," and "professional interaction" (Table 2).

Contextual factors

Contextual factors reflect unique characteristics of a particular context, a group or individual. According to the nurses'
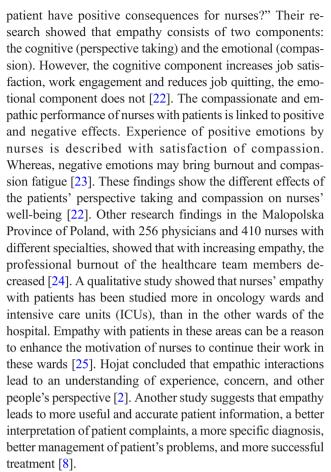
Table 1 Participants characteristics (*n* = 15)

Variable	Classification	*N* (%)
Gender	Male	6 (40)
	Female	9 (60)
Type of ward	Hematology	4 (26.6)
	Oncology	8 (53.4)
	Stem cell transplantation	3 (20)
Marital status	Single	4 (26.6)
	Married	11 (73.3)
Job title	Nurse	13 (86.7)
	Head nurse	2 (13.3)
Work experience in oncology field (year)	< 1	2 (13.3)
	1–4	8 (53.3)
	≥ 5	5 (33.3)

experiences about factors that influence nurses' perceptions of clinical empathy, the theme of "contextual factors" was also formulated. It captured the three categories of "patient's and family's characteristics," "nurse's characteristics," and "environmental-cultural features." The patient-family's characteristics such as unnecessary interference and not having enough knowledge can be effective on nurses' empathy. The category of patient-family's characteristics included "patient vulnerability," "recognition and acceptance of the disease," "patient-family's expectations," and "patient-family's communication-behavior characteristics." "Nurses' characteristics" such as their abilities, spiritual issues, and mood can affect their empathy with the patient. The category of "nurse's characteristics" included "scientific and clinical competency," "religious-spiritual characteristics," and "good humor." Cultural factors and specific features of some type of hospital wards such as psychiatry, oncology, elderly, and pediatric wards can affect nurses' empathy. The category of "environmental-cultural features" included "specific characteristics of oncology ward" and "cultural condition" (Table 2).

Discussion

This qualitative study was conducted with the aim of exploring oncology nurses' perception of the consequences of clinical empathy in patients and nurses and its influential factors. From the overall results of this study, three themes of "empathy as a double-sided mirror," "organizational factors," and "contextual factors" were formulated.

In the present study, both positive and negative consequences of empathy were experienced by oncology nurses. They stated feelings of tranquility and psychological satisfaction in the subcategory of benefit of empathy for the nurse. Dal Santo and his colleagues tried to answer the main question in their research "does the emotional interaction with the patient have positive consequences for nurses?" Their research showed that empathy consists of two components: the cognitive (perspective taking) and the emotional (compassion). However, the cognitive component increases job satisfaction, work engagement and reduces job quitting, the emotional component does not [22]. The compassionate and empathic performance of nurses with patients is linked to positive and negative effects. Experience of positive emotions by nurses is described with satisfaction of compassion. Whereas, negative emotions may bring burnout and compassion fatigue [23]. These findings show the different effects of the patients' perspective taking and compassion on nurses' well-being [22]. Other research findings in the Malopolska Province of Poland, with 256 physicians and 410 nurses with different specialties, showed that with increasing empathy, the professional burnout of the healthcare team members decreased [24]. A qualitative study showed that nurses' empathy with patients has been studied more in oncology wards and intensive care units (ICUs), than in the other wards of the hospital. Empathy with patients in these areas can be a reason to enhance the motivation of nurses to continue their work in these wards [25]. Hojat concluded that empathic interactions lead to an understanding of experience, concern, and other people's perspective [2]. Another study suggests that empathy leads to more useful and accurate patient information, a better interpretation of patient complaints, a more specific diagnosis, better management of patient's problems, and more successful treatment [8].

In a study with French nurses, the cognitive component of empathy showed a positive and significant relationship with work engagement, while the emotional component did not show this relationship. Research results in Iranian oncology nurses revealed that there is a negative relationship between nurses' empathy and their burnout [5].

In our study the subcategory of benefit of empathy for the patient included these codes, i.e., patient satisfaction, more motivation for cooperation with the nurse, more follow-up treatment, internal reassurance, and patient's good mood. In this regard, evidence shows that clinical empathy has a positive effect on well-being and life satisfaction of the patient [26]. In addition, empathic interactions lead to positive effects in the patient, including greater satisfaction and better adaptation to the disease [2]. The results of a study on empathy in the field of oncology showed interesting results. There was a significant relationship between oncology nurses' empathy and cellular immunity in lung cancer patients. By developing nurses' empathy, the percentage of patient's B cell (B lymphocytes) and NK cell (natural killer cells) increased [27]. Many cancer patients suffer from a variety of negative emotions, such as anxiety, depression, and psychological discomfort [28, 29]. These negative emotions are activated by the axis of the hypothalamus-pituitary-adrenal and the autonomic nervous system, which in turn leads to release a large amount of

Table 2 Themes, categories, subcategories, and examples of participants quotations

Themes	Categories	Subcategories	Examples of participants' quotes
Empathy as a double-sided mirror	Positive effects	Benefit for the patient	"I think empathy with patients can motivate them to follow their treatments." [Nurse, 11]
		Benefit for the nurse	"In my opinion, if there would be empathy and a good communication, it creates inner satisfaction." [Nurse, 8]
	Negative effects	Nurse's psychological Vulnerability	"Sometimes, when I see the death of my patients, it affects me a lot. Especially this happens for the patients that I have a higher level of empathy with them. When you see dying of your patient, it makes you very sad and nervous." [Nurse, 12]
		Nurse's physical vulnerability	"In my opinion, the more you try for the patient the more you lose your energy, it means you put more stress on yourself and it causes your physical body will get hurt." [Nurse, 2]
Organizational factors	Organizational defects	Multiple tasks and roles	"When several responsibilities and roles are assigned to the nurses, for example, they are responsible for caring of their patients, infection control, training, accreditation, participation in accreditation courses, and in various workshops and continuing education courses… it takes energy from the individual and reduces their efficiency." [Nurse, 6]
		Workload	"In my opinion, sometimes, like today, I had a lot of workloads, for example, I had several patients…(during interview she was sad and with tears in her eyes continued…) one of them died during the treatment, another one needed to tracheostomy, while the next one needed me to be close to her …..and at that time I felt doing my nursing tasks is really preferable to making a type of therapeutic communication with her, because the main care of one of my patient was not done." [Nurse, 15]
		Poor working conditions	"I think nursing is a very hard job, my work environment is very tense and all these things can influence in my empathic relationship with the patient." [Nurse, 15]
"In my opinion, the patient has not much time, the nurse has no time at all, and our ward problem is that more nursing staff should be employed, and all nurses in our ward should be trained as experts for this kind of communication …. I mean for empathic communication, so that they can feel more responsibility and put more time to communicate with patients. It seems that the lack of time and lack of nursing staff are our main problems in this ward." [Nurse, 13]
		Financial difficulties	"I believe that the wages they give us for doing our tasks in nursing job are very low." [Nurse, 14]
	Management factors	Problems and facilities related to management	"In my experience empathy with the patient is a necessary part of our caring, but none of the nursing managers check it. For example, the night or day supervisor comes to the ward and wants you only a report for number of the patients in the ward and the number of the patients who are in a bad condition and need special care. But the supervisor does not ask you how much empathy did you do with your patients? How was reaction of your patients? Nobody ask you! In my opinion this means that there is a shortage in this type of supervision." [Nurse, 7]
"In my opinion, there should be a maximum nurses' rotation in theses wards. Both in terms of the side effects of chemotherapy for nurses and in terms of psychological complications following empathy with patients in these wards." [Nurse, 4]
		Motivational factors	"I think there are also a number of issues that make nurses discourage. For example, you work as a nurse, you are trying hard in your job. Even you have no enough time for caring of your patients due to workload, high number of the patients….you do empathy with your patients. The doctor visits their patients only a short time during round of the ward, however the nurses stay a long time with the patients and meet their needs. But, when something bad happens, the nurses are blamed for that. For example, in our context, when everything is good, the people say, what a good hospital, in this case they say that the doctors are expert in this hospital. But, when something goes wrong, typically, when a patient dies, the people say the nurses were unskilled in this hospital. In general, if the people in our society always blame the nurses, it is so bad and disappointing for the nurses….. it is discouraging them to do empathy with their patients." [Nurse, 12]
Communication-professional nursing issues	Reaction of colleagues		"In my opinion, if you spend more time next to the patients' bedside … spend a lot of time in their room and do empathy with them, sometimes other nurses ridicule you and this kind of reactions is very annoying." [Nurse, 15]
	Professional support		"I think, I as a nurse really need to be supported by the head nurse and hospital, so I can do caring for my patients." [Nurse, 7]
	Coordination and communication within and outside of the organization		"I think instructions and rules about accreditation are constantly changing in the Ministry of Health that you have to coordinate with them, also these changes have an effect on nurses' empathy, because it takes a lot of time to get to know them." [Nurse, 8]
	Professional interaction		

Table 2 (continued)

Themes	Categories	Subcategories	Examples of participants' quotes
			"Rarely some of my patients ask me if they can have my phone number … I am not satisfied, but I feel I have to give them my phone number. I always try to make a good relationship with them and when they need I would be close to them and do empathy with them, … within the framework of my professional relationships rules…not further, so they respect me and this means that the nurse–patient relationship is in the right direction." [Nurse, 5]
Contextual factors	Patient–family's characteristics	Patient vulnerability	"In my opinion, each patient has his own individual characteristic, some of them are agitated and their level of tolerance is low, they are touchy, and every superficial issue can make them feel discomfort." [Nurse, 13]
		Recognition and acceptance of the disease	"I think patients who are more conscious about their situation also have more fears, because they know many things about their disease. Patients who are aware of their situation are less likely to interact and are more depressed and silent and may be have afraid of continuing their illness." [Nurse, 14]
		Patient–family's expectations	"In my opinion, sometimes, when our ward is crowded, the patient's family expect that nurses only pay attention to their patient. Because their patient is in the last days of his life. I think that their expectation is wrong. Because we cannot spend our time only with one patient." [Nurse, 11]
		Patient–family's communication- behavior characteristics	"I believe that some patients are really moody and stern and do not like to communicate with others and like to be in isolation and like to be alone." [Nurse, 12]
	Nurse's characteristics	Scientific and clinical competency	"In my opinion, patients who themselves and their family are agitated; it is difficult for me to handle them." [Nurse, 10] "In my opinion, it is necessary for me to update my academic knowledge. Academic knowledge is the most important thing that a good nurse or other healthcare team members who work with the patient in the hospital should update; because it can be very helpful for the patients." [Nurse, 7] "I am a more skilled nurse in comparison to my colleagues; if the other nurses can be successful at fifth try for IV injection, for example, I can be successful at the first time. In my opinion a skilled nurse can be successful for making a good communication with the patient. Clinical competency can influence an empathetic relationship with the patient, also." [Nurse, 2]
		Religious-spiritual characteristics	"I believe that life and death are universal human experiences … I believed that if I do not work well for my patients, God also will compensate for it. So I try to do my best in my job." [Nurse, 2]
		Good humor	"I think the nurses who work in the oncology wards of the hospital should behave lively, have some humor and patience and be happy." [Nurse, 10]
	Environmental-cultural features	Specific characteristics of oncology ward	"In my opinion, the type of hospital ward is very important. I think working in obstetrics and gynecology ward is very different from oncology ward; because most of my cancer patients in our ward are in the line of the last hope in their life. All these things can affect my empathy with them as a nurse." [Nurse, 8]
		Cultural condition	"In my experience some patients have a set of specific moral characteristics which they can be related to our religion. For example, during caring of the male patients I should be very careful and notice to my closeness and touch. Therefore, I try to act based on our culture, religion and Islamic teachings. But if the patient is a woman, I can empathize with her easily with a small touch, but because of our culture, it is not easy for me to communicate empathically with a male patient." [Nurse, 11]

adrenal glucocorticoid and catecholamines in the blood stream. These substances reduce the immune system [30]. Nurses' empathy positively affects the patients' immune system by influencing their psychological dimension [27].

Other findings of our study showed negative effects of empathy in oncology nurses. Exhaustion, fatigue, discomfort and nervousness, imagination of the disease in themselves and the family, anxiety, and burnout were stated by the participants. Earlier studies indicate evidence of high levels of stress among nurses in oncology settings [31]. Nurses who are working in oncology wards experience high levels of stress, compassionate fatigue, and burnout. Research findings in Australia indicated that more than 70% of oncology nurses experienced moderate to severe stress. Burnout was a result of nurses' physical and mental fatigue and particularly observed in wards where the emotional involvement of nurses with patients was higher [32]. Contrary to these results, in a study conducted in Spain, a significant relationship was found between high level of empathy and low level of burnout between nurses [33]. However, the results of a systematic review showed that the relationship between empathy and burnout is very complicated. It seems that the ability to self-regulate emotions during empathic communications reduces the risk of burnout [23].

Oncology nurses in our study explained a set of organizational factors affecting their clinical empathy with the patient. The organizational factors consist of 3 categories and 10 subcategories with examples of the following semantic units: having different responsibilities as a nurse, high workload, lack of enough time for empathy with patients, management problems in the ward, and disregard of the empathetic communication of oncology nurses by managers. In a qualitative study, factors including job strain, task-centeredness, no formal training, poor manager support, and nurse-patient gender imbalance were mentioned by oncology nurses as barriers to empathy [34]. The results of a quantitative research showed that organizational factors such as staffing and resource adequacy, management ability, leadership, and support of nurses have a negative relationship with compassionate fatigue, after controlling for the demographic characteristics of nurses (gender, social status, ward type, work shift, type of employment, illness, years of experience in the current situation) [35]. Therefore, the importance of continuing professional support in organizations is undeniable [36]. Supervisors in healthcare organizations play an important role in controlling the emotional load of nurses, the needs related to their job. They can give them support to do their job better [37].

According to our results, contextual factors were also affecting oncology nurses' empathy through the characteristics of cancer patients and their family, the characters of oncology nurses, and environmental-cultural features. In the area of patient's characteristics, i.e., acceptance of the disease, trusting the nurse, level of perception, and patient's sensitivity, our results were in line with a qualitative study [38]. Moreover, characters of oncology nurses such as appropriate behavior and positive attitude, taking the time with the patient, listening to and empathy with patients were mentioned as essential nurses' competencies in our study, comparable to a study in Dutch [39]. Nurses' religious beliefs affect job motivation and positive views towards the patient and caring in nursing [40]. Spiritual competency was raised for oncology nurses as a main competency in a qualitative research in Iran [41]. The findings of our study were similar to this study in relation to the spiritual-religious beliefs of oncology nurses as one of the characters of them. Furthermore, nurses who are hopeful and have a positive attitude to the future have a practical thought in dealing with problems. They show an appropriate behavior and moral attitude to the patient, and can develop a good communication with them [42].

In a qualitative research based on patients' narratives, caregiver characteristics for caring were categorized into the four categories: kind-hearted caregiver, thoughtful caregiver, mutually oriented caregiver, and helpful caregiver [43]. These characteristics were apparent in subcategories of human beings, care through physical contact, communication, laughter and joke in care, and a sense of two-way interaction. The caregivers' personal characteristics, like kindness, understanding, and courage, give patients hope and strength as well as increase self-esteem and build trust in the caregiver [43]. Patience is another personal characteristics that was extracted from narratives of patients about necessary caregivers' characteristics [43].

In our study, participants pointed to issues such as the effect of cultural similarity between the patient and the nurse for a good empathic communication, and stated that empathy is more likely to occur if these similarities are greater. Therefore, it can be argued that the empathic communication is a process that is influenced by the cultural background of the healthcare provider and the patient [44]. In addition, social understanding and individuals' behavior are influenced by their awareness of the cultural environment [45]. The result of a study by Taheri et al. showed that cultural variables are important factors in the quality and quantity of empathy with the patient [46]. Nevertheless, oncology nurses in our study referred to the specific characteristics of the oncology wards and claimed that the specific atmosphere of the oncology wards, including the long-term hospitalization of cancer patients, would make nurses more empathic. Although the comparison of nurses' empathy based on type of the hospital ward is not easy, the results of a quantitative study showed that nurses working in oncology wards showed higher empathy in comparison with nurses in other wards [18].

In summary, the findings of this study can increase the body knowledge of nursing regarding to consequences of clinical empathy in cancer patients and oncology nurses as well as influential factors on clinical empathy in our context. These

findings can be used as a guide for nurse managers, planners, and nursing care providers in oncology settings to strengthen facilitators of clinical empathy and reduction of empathy inhibitors. Clinical empathy with cancer patients can be developed by applying strategies, such as the employing of experienced nurses in oncology wards rather than novice ones, managing the healthcare organization to meet standards, for example employing a sufficient number of qualified oncology nurses, introducing empathy as one of the most important competencies for oncology nurses, and holding workshops and training courses.

One of the strengths of this study is the selection of participants based on the level of empathy from the findings of a previous research [47]. Due to the qualitative data analysis, the generalization of the findings should be done with caution. In the future research, it is recommended to explore the perception of cancer patients, patient's family members, and physicians of the consequences of clinical empathy.

Conclusions

From the results of this qualitative content analysis based on interviews with oncology nurses about consequences of clinical empathy and influencing factors, three themes of the "empathy as a double-sided mirror," "organizational factors," and "contextual factors" were created. Thus, clinical empathy with cancer patients can be developed by oncology nurses through special strategies, such as employing of experienced qualified nurses in oncology wards rather than novice nurses, and managing the healthcare organization to meet the standards. Removing or modifying cultural-environmental barriers are also important in oncology settings. Furthermore, welcoming the experience of oncology nurses' empathy with their patients by the healthcare organization and giving support increase the motivation for empathetic communication and improve patients' quality of life and their satisfaction.

Compliance with ethical standards

Conflict of interest   There are no conflicts of interest.

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