

## Exploring the Emotional Concerns of Oncology Nurses: A Qualitative Study

### Abstract

**Background:** Nursing care for patients with cancer is related to the nurses' ability to manage their emotions and having appropriate behaviors in the clinical setting. Oncology nurses are emotionally influenced by their communication with cancer patients. Thus, this qualitative study was conducted to explore nurses' emotional concerns in oncology wards. **Materials and Methods:** This qualitative content analysis was performed among 14 oncology nurses in the oncology wards of cancer hospitals in the east and southeast of Iran (South Khorasan and Sistan and Baluchestan Provinces). The study participants were selected through purposeful sampling. Data were collected through face-to-face, semi-structured interviews until data saturation was reached from January to September 2020. The interviews were analyzed after being typed word by word, based on Graneheim and Lundman (2004). **Results:** The themes and subthemes that emerged from the data were related to the emotional concerns of oncology nurses. The main themes included emotional involvement and attachment (feeling of frustration in nurses, nurses' suffering from painful experiences, and nurses' emotional dependence), emotional ambiguity (nurses' uncertainty emotions, avoidance of expressing real emotions, and having a positive mindset to maintain the patient's positive mood), and emotional exhaustion (persistent chronic stress, excessive worrying about possible harms, and feelings of mental and physical exhaustion). **Conclusions:** Based on the study results, cancer patient nursing care can be distressing and stressful for nurses. Oncology nurses have many emotional concerns in caring for cancer patients. The experiences of oncology nurses provide new insight into how to manage their emotional concerns.

**Keywords:** Emotions, mental health, nurses, oncology nursing, qualitative research

### Introduction

In oncology wards, where patients spend the last days of their life and experience significant amount of pain and suffering,<sup>[1,2]</sup> oncology nurses, as key members of healthcare teams who spend significant amount of time with cancer patients during all stages of their disease,<sup>[2]</sup> are the primary caregivers and active companions of these patients and may face many challenges in the process of care delivery.<sup>[3]</sup> Oncology nurses are exposed to many emotional problems, such as discomfort, helplessness, guilt, and difficulty managing and coping with negative emotions during care.<sup>[1,2]</sup> Providing support to cancer patients and their families requires significant mental and emotional involvement on the part of the caregivers.<sup>[3]</sup> The results of various studies in Jordan, Saudi Arabia, have shown that oncology nurses experience

job burnout, occupational stress, work-life conflict, death anxiety, and emotional fatigue.<sup>[4,5]</sup> Nurses who cannot easily cope with their negative emotions will not be able to provide support to cancer patients.<sup>[2]</sup>

Generally, the emotional problems of oncology ward nurses are very important, considering the conditions of the ward and the hospitalized patients. Patients also expect nurses to show caring behaviors and increase their attention and sensitivity to their emotional and physical needs.<sup>[6]</sup> Caring for cancer patients in the oncology ward can be emotionally exhausting.<sup>[7]</sup> Nurses are emotionally influenced by the experiences of cancer patients because of their close relationship with them and their families.<sup>[8]</sup> Therefore, nurses' emotions play a major role in the processes and outcomes of cancer patient care. The results of studies have revealed that improving nurses' emotional health results in an increase in patient

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satisfaction, patient safety, and the quality indices of care.<sup>[9,10]</sup> Experiencing problems like burnout can have a negative impact on healthcare quality and patient safety in a number of ways, such as exhaustion or withdrawal of emotional energy from work, depersonalization and less time spent by care providers with patients with cognitive impairments, including attention deficits, which can lead to errors.<sup>[10,11]</sup> Oncology nurses experiences can be influenced by cultural beliefs and context.<sup>[12]</sup> Iranian nurses are emotionally involved in caring for their patients, but pay less attention to their own emotional needs and Iranian oncology nurses' ability to manage their emotions in the face of painful situations is low,<sup>[13]</sup> and problems such as burnout and compassion fatigue have been less considered among them.<sup>[14]</sup>

Although there have been various quantitative studies on burnout, occupational stress, and compassion fatigue in oncology nurses, and interventions have been proposed for these problems,<sup>[15-17]</sup> few studies have assessed the emotional concerns of Iranian oncology nurses, and little is known about how Iranian nurses interpret their emotional problems in caring for cancer patients. The results of the present study can help nurses obtain a better understanding of the phenomenon. These results can also be used to investigate different dimensions of this phenomenon to provide appropriate emotional support for oncology nurses, and consequently, improve care delivery for cancer patients. Therefore, this qualitative study aimed to explore the experiences and emotional concerns of oncology nurses using a conventional content analysis method.

## Materials and Methods

This qualitative study was part of a greater study conducted using a conventional content analysis approach.<sup>[18]</sup> The research setting included the oncology wards of cancer hospitals in the east and southeast of Iran (South Khorasan and Sistan and Baluchestan Provinces) between January and September 2020. The inclusion criteria were willingness to participate in the study voluntarily, no difficulty in communicating, having the ability to understand Persian, and nursing activity with at least 2 years of experience in the oncology ward. The exclusion criterion was the participant's refusal to continue the interview. The study sample included nurses and head nurses working in the oncology wards of cancer hospitals in the east and southeast of Iran. The participants were selected via purposeful sampling, and deep, semi-structured, face-to-face interviews were conducted to collect the data until data saturation. The nurses were informed that they could withdraw from the study any time, and written and oral consent was obtained from them.

The interviews started with an open question (e.g., What are your experiences in caring for cancer patients?) and were continued with targeted questions on emotional concerns (e.g., What emotional concerns have you had in caring for cancer patients since working in the oncology ward? and How do you deal with emotional distress in

oncology ward?). During the interviews, the researcher encouraged the nurses to share their experiences without directing the conversation. Moreover, exploratory questions (e.g., Can you explain more? or When you say., do you mean...?) were also asked as needed during the interviews. At the end of the interview, the participant was asked if he/she had any comments or discussions. The interviews were conducted in all the three shifts: morning, evening, and night (selected by the participant) in a comfortable environment in the hospital and oncology wards. Of the 16 oncology nurses interviewed, 14 oncology nurses participated in the analysis process; 2 nurses refused to continue the study during the interviews due to high workload and reluctance. The duration of each interview was 45–60 min in one or two sessions. The interviews were conducted in the Persian language between January and September 2020 after obtaining permission to record the interviews (using two recording devices). Then, the interviews were transcribed word by word in Persian. In addition, field notes were also taken to gather information.

In this study, the data analysis process was based on the steps proposed by Graneheim and Lundman (2004).<sup>[19]</sup> The coding process was performed by the first researcher (a nursing doctoral student), who had expertise in qualitative studies; also in addition, two nursing professors, who specialized in qualitative research, guided the process of coding and analysis. The unit of analysis in this study was the interview content, and the semantic units were the sentences or paragraphs in the interview transcript. To extract the content of the interviews, the audio files were transcribed verbatim immediately after each interview. The transcripts were reviewed by the researchers several times to become immersed in the data and gain an overview of the oncology nurses' emotional experiences. Next, each keyword or sentence was given a code. In this stage, the first-level coding process was performed through identification and formation of the codes. Next, similar codes were placed together in groups, and the subcategories were formed. Then, to make the codes more homogeneous, categories were identified, and similar categories were merged. Finally, the main themes were extracted, thus increasing the level of abstraction. To ensure the inclusion of all data in the categories, the researcher reviewed the transcripts of the interviews again and examined the extracted codes, which increased the accuracy of information classification. After 14 interviews, no additional data were found, and no new codes, subthemes, and theme occurred in the data, so the data were saturated. MAXQDA software (version 2020; VERBI GmbH, Berlin, Germany) was used to manage the data.

To insure the trustworthiness of data in this study, the study was ensured based on the four Lincoln and Guba criteria.<sup>[20]</sup> To ensure credibility, the researchers engaged themselves in fieldwork for prolonged period of time and were persistent with data collection, and spent sufficient time developing trust and relationships with the oncology nurses. The findings were reviewed by the participants (member

checking), and finally, approved by experienced professors of the research team (peer debriefing). To ensure the transferability of the findings, nurses with different demographic characteristics and experiences were included in the study. To investigate the dependability of the findings, another researcher, who was not involved in the research, was provided with the results, and his conclusions were compared with that of the main researcher. To ensure confirmability, other professors reviewed the findings, and we tried to avoid judgments based on our assumptions in the process of data collection and analysis. Moreover, during data collection, the interviewer tried to collect the information carefully avoiding bias.

### Ethical considerations

This study was approved by the Research Ethics Committee of Birjand University of Medical Sciences, Iran (IR.BUMS.REC.1398.323) and the ethical considerations included giving the necessary explanations to the participants, obtaining oral and written consent from nurses, obtaining permission from the participants to record the interviews, not using the names of the participants at any stage of the study, respecting the views, opinions, and beliefs of the participants, and non-interference of the researcher's knowledge and beliefs.

### Results

In total, 14 oncology nurses participated in the study. The demographic information of the nurses is provided in Table 1. The themes were extracted from the interviews, according to the purpose of the study. After merging similar themes, they were categorized into three main themes: emotional involvement and attachment (frustrated feeling in nurses, nurses' suffering from painful experiences, and nurses' emotional dependence), emotional ambiguity (nurses' uncertainty emotions, avoidance of expressing real emotions, having a positive mindset to maintain the patient's positive mood), and emotional exhaustion (persistent chronic stress, excessive worrying about possible harms, mental and physical exhaustion). The subthemes and codes related to the three themes are listed in Table 2.

#### Emotional involvement and attachment

One of the themes of the present study was emotional involvement and attachment. Oncology nurses often feel frustrated working in oncology wards and suffer from painful situations, which can result in their emotional dependence. The nurses shared their experiences of frustration with the patients' treatments and loss of hope about the future. They believed that their work in the oncology ward is useless, which had negative effects on them. A participant reported "It is unbearable for me to come here and work in an environment where I do not hope for any cure. Treatments sometimes increase the patient's suffering; we make the patient's condition so severe that he will only suffer" (P6). Another participant

**Table 1: The nurses' demographic characteristics**

| Characteristics  | Mean (SD)<br>[Minimum–Maximum] |
|--|--------------------------------|
| <b>Oncology Nurses (n=14)</b>                              |                                |
| Age (years)  | 34.28 (6.06) [25-45]           |
| Years of oncology nursing experience                       | 10.82 (5.86) [3-22]            |
|  | <b>Number (%)</b>              |
| Gender   |                                |
| Female   | 11 (78.60)                     |
| Male   | 3 (21.40)                      |
| Marital status   |                                |
| Married  | 12 (85.70)                     |
| Single   | 2 (14.30)                      |
| Educational level  |                                |
| Bachelor of Science in Nursing                             | 13 (92.90)                     |
| Master of Science in Nursing<br>(Medical Surgical Nursing) | 1 (7.10)                       |
| Role   |                                |
| Nurse  | 11 (78.60)                     |
| Head nurse   | 3 (21.40)                      |

stated "Many patients have a negative attitude toward the oncology ward, and the ward has a frustrating atmosphere; this affects us negatively and makes us feel bad" (P9).

Oncology nurses' experiences indicated their concerns about the painful treatments of cancer patients, the moment of their death, waiting for the cancer patient to die, and being bothered by their pain. For example, one participant described his/her experience as follows: "When we make an emotional connection with another person, it is harder to bear his/her suffering, compared to a person that we do not know" (P8).

Another participant said "Tumors cause pain in the peripheral nervous system. The patient has no mobility and is in pain. Naturally, we get upset when we see that the patient is in pain" (P6).

Oncology nurses are always concerned about their patients' well-being and inquire about it, even when they are on their days off. Furthermore, patients, due to their close relationship with nurses, only request care by their own nurses. Moreover, given nurses' interactions with the patients outside the ward, they consider them as family members and may be negatively affected by their problems and grieve over their death, as they would for a family member. Overall, emotional communication with the family of a patient is an important factor in coping with the patient's death. It seems that the emotional burden on nurses has made them emotionally dependent on their patients. A participant stated "If I take a week of leave, I will call the ward every day and ask about my patients' conditions" (P8).

Another participant stated "This is a critical ward because the patients see me a lot and expect only me to take care of them" (P9).





In this regard, another participant stated *“I really love working with patients, provided that they are not terminal. they wish you good things because you are taking care of them. It makes you feel very good..., but when I see them getting worse, it is really hard for me to bear it. I do not know whether to leave the ward or not”* (P8).

The oncology nurses' close emotional relationship with the patients creates high expectations in patients and their companions, leading to the nurses' acceptance of the patient's will and tolerance of his/her bad temper and aggression. One participant described his/her experience as follows: *“The patient may become aggressive and say something inappropriate to the nurse, but we have to react with a smile. Well, we cannot treat patients harshly, we tolerate these conditions”* (P2).

Another participant stated: *“No matter how much they argue with us, no matter what they tell us, we accept it all and tell them that they are right, because they are really miserable. They can give up hope easily as their disease progresses”* (P1).

Nurses usually pretend to be happy when seeing the patient's deteriorating condition; in other words, they hide their real emotions to boost the patient's mood. For example, one participant described his/her experience as follows: *“The patient's condition may be good at first, but it changes gradually, and we find out that they may not recover. However, we have to keep up appearances and have a smile on our faces to maintain the patient's positive mood. We must tell them that they will definitely get better, but we know that we are only pretending”* (P5).

### Emotional exhaustion

Persistent chronic stress, excessive worrying about possible harms, and feeling of mental and physical exhaustion lead nurses toward emotional exhaustion.

Oncology nurses experience persistent and overwhelming stress in drug care situations. They feel stressed at the beginning of each shift due to their fear of what is to come. They also experience stress at the beginning of their career due to their limited experience of caring for patients. Their stress is exacerbated by the progression of the patient's disease, and they feel stressed about providing oncology care during the COVID-19 pandemic. One of the participants commented: *“We still feel stressed about medicine prescriptions, both the dose of drugs and drug errors.... Sometimes, for example, there are drug similarities, and a drug may be prescribed incorrectly..., after all these years of working in the ward, the anxiety still remains”* (P6).

Another participant stated: *“When we start the shift, we do not know what will happen by the end of the day ... Will the patient get worse? Will it be CPR? Especially, there is a lack of equipment in our hospital, and there is no access to advanced equipment, so it is quite stressful for us”* (P4).

Another participant said: *“Since our patients are high-risk, their immune system is generally suppressed. During the*

*current COVID-19 pandemic, we are concerned about the spread of the corona virus”* (P7).

According to the oncology nurses, working in the oncology ward leads to negative thoughts due to nurses' exposure to patients' death. Moreover, concerns are raised about the health status of nurses due to their exposure to chemotherapy drugs. Persistence of bad mentality in nurses working in oncology wards can lead to excessive worrying about possible harms. A participant stated: *“I ask a lot of questions about the living conditions of my patients.... Once, a patient told me that when she was diagnosed with cancer, her husband abandoned her. This type of exposure affects us significantly and we may become pessimistic about everything ... when I think about the patient's problems, I feel bad for myself and my mood changes instantly”* (P11).

A participant reported: *“I did not think caring for my patients would bother me so much. During the first week, I was extremely annoyed and irritated. I even thought I had breast cancer, so I went for a sonography and made sure I had no problems”* (P4).

Another participant stated: *“Allergies, headaches, and dizziness are so common among our nurses”* (P5).

Nurses who care for young cancer patients may suffer from mental exhaustion after seeing the bad condition of their patients; also in addition, working long shifts increases their physical exhaustion. The difficulty of nurses' job is doubled by the bad condition of cancer patients. This mental pressure on nurses in oncology wards imposes a psychological burden on nurses in caring for cancer patients. For example, one participant stated: *“For a while, I tried to stay away from the oncology ward, because I was very upset mentally”* (P1).

Another participant said: *“I think someone who works here burns out quickly due to excessive stress”* (P3).

### Discussion

According to the nurses' experiences, oncology nurses are exposed to painful situations. One of these painful situations is the painful moment of their patient's death. Wazqar considered a patient's death as one of the most important causes of nurses' job stress and emotional stress.<sup>[5]</sup> Moreover, according to the experiences of oncology nurses participating in this study, nurses wished to avoid their patient's death. In this regard, Funes *et al.*<sup>[21]</sup> showed that nurses grieved over the death of their patients. It seems, the severity and extent of grief and sadness caused by the patient's death depend on several factors, including empathy, nurse-patient communication, and nurses' lower ability to control their emotions in the face of painful situations. In addition, in the present study, emotional dependence was mentioned in the experiences of oncology nurses. Wentzel *et al.*<sup>[8]</sup> also believed that nurses

were deeply concerned about their emotional involvement and attachment.

Emotional ambiguity was the second main theme of the present study. Emotional ambiguity in this study refers to emotional dissonance. According to Pugh *et al.*,<sup>[22]</sup> emotional dissonance is defined as the conflict between genuinely felt emotions and emotions required to be displayed in organizations. Workers may experience emotional dissonance when the emotional expression required by the job's protocol clashes with their inner or "real" feelings.<sup>[22]</sup> Moreover, Nwozichi associated emotional instability with death and dying in oncology nurses.<sup>[6]</sup>

Another experience of oncology nurses was having a positive mindset and a smiling face in interactions with cancer patients to maintain their positive mood; therefore, hiding emotions is unavoidable in the workplace. People whose profession depends on social interactions are sometimes required to hide their true feelings and show emotions expected of the profession.<sup>[23]</sup> Similarly, nurses need to control their emotions and expressions to deliver the best care. Therefore, hiding emotions is inevitable for nurses,<sup>[24]</sup> especially for those who are in contact with critically ill and terminally ill patients; in other words, they feel the need to hide their true feelings. The forced smile of oncology nurses in our study was also reported by Pugh *et al.*<sup>[22]</sup>

Nurses expect themselves to remain strong in the face of suffering and death and cope with difficult situations, and to act as magicians who are able to cope with the situation, which may not necessarily match their emotions.<sup>[6]</sup> Avoidance of showing true emotions, confused feelings, and contradictions in the nurses' experiences of caring for cancer patients were evident in the present study. Nurses are directly involved in public health. Therefore, they are expected to pay close attention to how they treat their patients and maintain a sense of humor and stay calm under stressful situations. Nurses should also try to remain calm, even when the patient or his/her companion is harsh and ignorant. Consequently, nurses may pay less attention to their own true feelings to satisfy the patient's needs and hide their true emotions in their experiences.

The third theme of this study, which was extracted from the experiences of oncology nurses, was emotional exhaustion. Exhaustion includes negative feelings and attitudes associated with different feelings, such as weakness and burnout, and interferes with the individual's ability to play a role. Nwozichi *et al.*<sup>[6]</sup> and Permarupan *et al.*<sup>[17]</sup> also reported that nurses who experience burnout usually suffer from physical, emotional, and mental exhaustion, which play a significant role in the low level of care quality indices, incomplete treatment process, and delayed patient recovery.

An important finding of the present study was persistent and exhausting stress in oncology nurses that continued throughout their work shift (even before the shift). Moreover,

adherence to drug care standards at the beginning of each shift, fear of what may happen during the shift, and lack of experience in providing care in the early months of work and especially when the patient is deteriorating were described by the nurses. Ko and Kiser-Larson also found that oncology nurses, as compared to other nurses, are exposed to additional job stressors, such as patient death, emergency situations, relationship issues with the nursing team and work-process situations.<sup>[25]</sup> Overall, the nurses' daily exposure to the suffering of patients, patients' death, and the mourning of those around them severely affects them psychologically. These tensions are harmful,<sup>[26]</sup> lead to poor patient care, and increase the incidence of care errors. Moreover, when nurses are emotionally involved, they are unable to make an appropriate clinical decision to care for their patients, and the quality of care is reduced.<sup>[27]</sup>

In the present study, nurses stated that mental fatigue due to caring for young cancer patients, exhaustion due to long work shifts, workplace challenges, and fatigue caused by the patient's disease can lead to physical and mental exhaustion. Another experience of oncology nurses in the present study was the nurses' stress in caring for cancer patients during the COVID-19 pandemic. Fabi *et al.*<sup>[28]</sup> also identified COVID-19 as a public health emergency and international concern.<sup>[28]</sup> Moreover, according to a survey of Italian cancer wards, it was found that cancer patients were vulnerable to COVID-19 disease, thus leading to emotional problems and overwork in their caregivers.

Consistent with the results of the present study, Fabi *et al.*<sup>[28]</sup> stated that the prevalence of stress among healthcare workers during the COVID-19 pandemic was 90%, and the healthcare workers also experienced other negative feelings, such as fear, emotional shock, and depression.

For clinical implications, nurses need to be emotionally supported to provide supportive care for cancer patients. Because oncology nurses lacked the necessary skills to deal with their emotions when caring for cancer patients in the oncology ward, emotional support programs are needed to help them cope with painful situations and exhibit emotional self-care in the face of emotional problems associated with cancer care.

In this study, there were barriers to nurses' participation in the study due to the outbreak of COVID-19 disease, and it was difficult to access oncology nurses due to transportation limitations to other parts of Iran, and a small sample of oncology nurses were available, so all participants were selected from two provinces of Iran. Nevertheless, it seems that this study, like other qualitative studies, does not have a highly balanced generalizability, although efforts were made to maximize the diversity of participants.

## Conclusion

The results showed that oncology nurses' experience of providing care for cancer patients is distressing and stressful.

Therefore, these nurses become a client and require support programs to provide effective care for cancer patients. Failure to pay adequate attention to these emotional concerns can cause harm to nurses. It also has many consequences for the patients and the healthcare system, as it reduces the care quality indices, increases the incidence of care errors, and results in poor clinical decisions and incomplete treatment. Therefore, the experiences of oncology nurses provide new insight into how to manage emotional concerns, and illustrate how important it is to support nurses by conducting support programs to reduce their emotional concerns.

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### Conflicts of interest

Nothing to declare.

### References

1. Chuah PF, Lim M, Choo SL, Woo GY, To HK, Lau KY, *et al.* A qualitative study on oncology nurses' experiences of providing palliative care in the acute care setting. *Proc Singapore Healthcare* 2017;17-25. doi:10.1177/2010105816660322.
2. Zamanzadeh V, Azimzadeh R, Rahmani A, Valizadeh L. Oncology patients' and professional nurses' perceptions of important nurse caring behaviors. *BMC Nurs* 2010;9. <https://doi.org/10.1186/1472-6955-9-10>.
3. Yang WF, Lee RZ, Kuparasundram S, Tan T, Chan YH, Griva K, *et al.* Cancer caregivers unmet needs and emotional states across cancer treatment phases. *PLoS One* 2021;16:e0255901. doi: 10.1371/journal.pone.0255901.
4. Al Zoubi AM, Saifan AR, Alrimawi I, Aljabery MA. Challenges facing oncology nurses in Jordan: A qualitative study. *Int J Health Plann Manage* 2020;35:247-61.
5. Wazqar DY. Oncology nurses' perceptions of work stress and its sources in a university-teaching hospital: A qualitative study. *Nursing open* 2018;6:100-8.
6. Nwozichi CU, Guino-O TA, Madu AM, Hormazabal-Salgado R, Jimoh MA, Arungwa OT. The troubled nurse: A qualitative study of psychoemotional effects of cancer care on nurses in a Nigerian cancer care setting. *Asia Pac J Oncol Nurs* 2020;7:328-35.
7. Ortega-Campos E, Vargas-Román K, Velando-Soriano A, Suleiman-Martos N, Cañadas-de la Fuente GA, Albenidín-García L, *et al.* Compassion fatigue, compassion satisfaction, and burnout in oncology nurses: A systematic review and meta-analysis. *Sustainability* 2020;12:72. <https://doi.org/10.3390/su12010072>.
8. Wentzel D, Collins A, Brysiewicz P. Describing compassion fatigue from the perspective of oncology nurses in Durban, South Africa. *Health SA* 2019;24:1279. doi: 10.4102/hsag.v24i0.1279.
9. Heyhoe J, Birks Y, Harrison R, O'Hara JK, Cracknell A, Lawton R. The role of emotion in patient safety: Are we brave enough to scratch beneath the surface? *J Royal Soc Med* 2016;109:52-8.
10. Blackburn LM, Thompson K, Frankenfield R, Harding A, Lindsey A. The THRIVE© program: Building oncology nurse resilience through self-care strategies. *Oncol Nurs Forum* 2020;1:47:E25-34.
11. Salyers MP, Bonfils KA, Luther L, Firmin RL, White DA, Adams EL, *et al.* The relationship between professional burnout and quality and safety in healthcare: A meta-analysis. *J Gen Intern Med* 2017;32:475-82.
12. Alimohammadi N, Taleghani F, Mohammadi E, Akbarian R. Nursing in Islamic thought: Reflection on application nursing metaparadigm concept: A philosophical inquiry. *Iran J Nurs Midwifery Res* 2013;18:272-9.
13. Mojarad FA, Jouybari L, Sanagoo A. Rocky road ahead of nursing presence in the oncology care unit: A qualitative study. *Open Access Maced J Med Sci* 2018;6:2221-7.
14. Phillips CS, Volker DL. Riding the roller coaster: A qualitative study of oncology nurses' emotional experience in caring for patients and their families. *Cancer Nurs* 2020;43:283-90.
15. Zamanzadeh V, Jasemi M, Valizadeh L, Keogh B, Taleghani F. Effective factors in providing holistic care: A qualitative study. *Indian Palliat Care* 2015;21:214-24.
16. Wentzel D, Brysiewicz P. Integrative review of facility interventions to manage compassion fatigue in oncology nurses. *Oncol Nurs Forum* 2017;44:124-40.
17. Permarupan PY, Al Mamun A, Samy NK, Saufi RA, Hayat N. Predicting nurses burnout through quality of work life and psychological empowerment: A study towards sustainable healthcare services in Malaysia. *Sustainability* 2020;12:388. doi: 10.3390/su12010388.
18. Hsieh HF, Shannon SE. Three approaches to qualitative content analysis. *Qual Health Res* 2005;15:1277-88.
19. Graneheim UH, Lundman B. Qualitative content analysis in nursing research: Concepts, procedures and measures to achieve trustworthiness. *Nurse Educ Today* 2004;24:105-12.
20. Lincoln, YS. Guba, EG. But is it rigorous? Trustworthiness and authenticity in naturalistic evaluation. *N Dir Eval* 1986;30:73-84.
21. Funes MM, Moraes MW, Cunha ML, Almeida FA. Caring for cancer patients facing death: Nurse's perception and experience. *Rev Bras Enferm* 2020;73:e20190686. doi: 10.1590/0034-7167-2019-0686.
22. Pugh SD, Groth M, Hennig-Thurau T. Willing and able to fake emotions: A closer examination of the link between emotional dissonance and employee well-being. *J Appl Psychol* 2011;96:377-90.
23. Lovatt M, Nanton V, Roberts J, Ingleton C, Noble B, Pitt E, *et al.* The provision of emotional labour by health care assistants caring for dying cancer patients in the community: A qualitative study into the experiences of health care assistants and bereaved family carers. *Int J Nurs Stud* 2015;52:271-9.
24. Drach-Zahavy A, Yagil D, Cohen I. Social model of emotional labour and client satisfaction: Exploring inter- and intrapersonal characteristics of the client – provider encounter. *Work Stress* 2017;31:182-208.
25. Ko W, Kiser-Larson N. Stress levels of nurses in oncology outpatient units. *Clin J Oncol Nurs* 2016;20:158-64.
26. Shi H, Shan B, Zheng J, Zhang Y, Zhang J, Hu X. Grief as a mediator of the relationship between empathy and compassion fatigue. *Psychooncology* 2022. doi: 10.1002/pon.5875.
27. Kozłowski D, Hutchinson M, Hurley J, Rowley J, Sutherland J. The role of emotion in clinical decision making: An integrative literature review. *BMC Med Educ* 2017;17:255.
28. Fabi A, Pugliese P, Falbo PT, Corsi D, Fabbri MA, Vincenzi B, *et al.* The experience of oncology healthcare providers in the central Italy during the covid-19 lockdown. *Cancers* 2020;12:1-9. doi: 10.3390/cancers12103031.