

## A Descriptive Qualitative Study of Nurses' Experience in Providing Anxiety First Aid to Patients with Cancer

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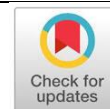
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### Abstract

**Background:** Anxiety is a crucial issue in patients with cancer. Excessive and undetectable anxiety in cancer patients will contribute to the worsening of cancer patients' conditions. Therefore, nurses play a crucial role in providing anxiety first aid for cancer patients.

**Objective:** The purpose of the study is to explore nurses' experience in delivering anxiety first aid to patients with cancer.

**Methods:** The study is a descriptive qualitative design and reported following COREQ. The study was conducted in a public hospital in Surakarta, Indonesia. The study included sixteen oncology nurses selected using a purposive sampling technique. Five head nurses participated in the focus group discussion, while the other eleven primary nurses conducted in-depth interviews. The focus group discussion lasted approximately 90 minutes, while each nurse's in-depth interview lasted approximately 60 minutes. The data analysis used the Colaizzi method.

**Results:** The study indicated five themes, including 1) factors that cause anxiety, 2) psychosocial interventions for anxiety first aid, 3) peer support, 4) healthcare constraints, and 5) expectations for improving healthcare quality.

**Conclusion:** The study highlighted factors that cause anxiety, psychosocial interventions for anxiety, first aid, peer support, treatment constraints, and expectations for improvement of health care services. To improve healthcare services for patients with cancer, it is important to establish a digital-based mental health support system, such as a friendly digital platform that serves as an instrument for healthcare providers to conduct timely and precise screenings and manage anxiety, thereby alleviating the burden of nurses' already considerable workloads.

**Keywords:** anxiety; anxiety first aid; nurses' experience; cancer patient

### INTRODUCTION

Psychological distress is common in patients with cancer, such as depression, stress, and anxiety. Anxiety is a feeling of discomfort and fear caused by anticipation of danger ([Keliat & Pasaribu, 2016](#); [Videbeck, 2020](#)). The study indicated that of patients diagnosed with cancer, 46% suffer mild levels of symptomatic anxiety ([Nikbakhsh et al., 2014](#)). The other data identified that the prevalence of anxiety was observed to be 13.8%, and the level of anxiety was significantly higher for patients in rehabilitation compared to patients during inpatient and outpatient treatment ([Goerling et al., 2023](#)). Other studies showed that anxiety is most prevalent

in patients with cancer undergoing chemotherapy ([Singh et al., 2015](#)).

Excessive anxiety in chemotherapy patients can decrease motivation in carrying out chemotherapy. It will stimulate sympathetic nerves, increasing heart rate and blood pressure. Anxiety that occurs continuously and is not addressed immediately can cause panic attacks. Panic attacks harm individuals both physically and psychologically ([Hapter et al., 2008](#)). Excessive and undetectable anxiety in cancer patients will contribute to the failure of chemotherapy programs and the worsening of cancer patients' conditions ([Nurgali et al., 2018](#)).

Nurses are at the forefront of the healthcare system, providing comprehensive care to patients with cancer. They play a crucial role in managing this anxiety through comprehensive nursing care and an essential role in providing psychosocial support for cancer patients ([Iacorossi et al., 2020](#)). The study results show that not all nurses know that their patients are anxious and need help. Nurses often accumulate common, everyday tasks, such as alleviating the anxiety of patients and families, as individual and personal practical knowledge ([Mitani et al., 2016](#)). It seems essential to standardize all nurses in providing quality anxiety care to cancer patients.

The current situation is that the anxiety of patients with cancer lacks early detection mechanisms, and anxiety first aid in oncology wards has not been exceptional. A preliminary study in the public hospital in Surakarta in March 2024 showed that there is no specific system for anticipating anxiety in patients with cancer from the beginning of care. Some patients have not received as much attention regardless of whether anxiety persists.

Studying nurses' practice experiences allows one to grasp better how nursing care is given. The purpose of each activity performed for the client is often not visible; we may obtain such individual knowledge effectively by analyzing nurses' narratives. A study has to be performed to explore further how nurses' experience in providing anxiety first aid might serve as the framework for policies to establish an anxiety first aid system for cancer patients. The purpose of the study was to explore the experience of nurses in providing anxiety first aid to patients with cancer.

## **METHOD**

This descriptive qualitative study explores nurses' experience in providing anxiety first aid for cancer patients. The transparency of the study's reporting was assessed using the Consolidated Criteria for Reporting Qualitative Health Research (COREQ).

### **Sample and setting**

The study was conducted from June until July 2024, involving sixteen oncology nurses in a public hospital

in Surakarta, Indonesia. The sampling technique used purposive sampling technique. Five head nurses participated in the focus group discussion, while the other eleven primary nurses conducted in-depth interviews. The focus group discussion lasted approximately 90 minutes, while each nurse's in-depth interview lasted approximately 60 minutes.

## **Data analysis**

Colaizzi's method was used for data analysis. The data analysis process started by listening to the recordings and repeated readings of the transcripts during the transcribing process. Audio recordings were transcribed verbatim by the research team within a day and reviewed by two researchers to ensure accuracy. The process of data analysis involved some steps: 1) Reading the transcribed verbatim, 2) Extracting significant sentences, 3) Creating the meanings, 4) Clustering the themes, 5) Describing the theme, 6) Identifying essential structure, 7) Returning analyzed data back to the participants. The data were encoded and formulated into themes and subthemes. The representative statements from participants were selected (Singh & Arulappan, 2023). The researcher also conducted data analysis by cross-checking to provide triangulation.

## **Research ethics**

Participants were informed about the research objectives and the content of the interview guide and given the freedom to withdraw at any stage of the study. The interview guide used broad, open-ended questions focused on nurses' experience providing anxiety first aid to cancer patients. The study has ethical clearance from the Health Research Ethics Committee of Dr Moewardi General Hospital, with number 787/III/HREC/2024.

## **RESULT**

The study identified five themes and twenty-one categories presented in table 1.

**Table 1. Themes, categories, and sample quotes**

Themes	Categories	Sample quotes
Factors that cause anxiety	<ol style="list-style-type: none"> <li>1. First experience</li> <li>2. Lack of education and information</li> <li>3. Doom-scrolling</li> <li>4. Lack of family support</li> </ol>	<ol style="list-style-type: none"> <li>1. "... they (patients) feel so afraid to face the first chemotherapy; their first experience will make them so anxious..." (P1)</li> <li>2. "Patients are all anxious, especially the first cycle with chemotherapy... why are they anxious... they lack information..." (P3)</li> <li>3. "They lack knowledge and like to search on Google constantly and get scary information..." (P11)</li> <li>4. "The patient has no support system, a very less supportive environment; sometimes, for example, we just ask the patient is already crying, because yes, maybe from his mind he may be very sick, why is my family not supportive..." (P4)</li> </ol>
Psychosocial interventions for anxiety first aid	<ol style="list-style-type: none"> <li>1. Providing education</li> <li>2. Therapeutic communication</li> <li>3. Relaxation</li> <li>4. Distraction</li> <li>5. Spiritual care</li> <li>6. Psycho-pharmacotherapy: benzodiazepine</li> <li>7. Counseling</li> <li>8. Interprofessional collaboration</li> </ol>	<ol style="list-style-type: none"> <li>1. "... We educate patients as well as education about chemotherapy, especially for patients who are new to chemo for the first time..." (P14)</li> <li>2. "...We do communicate, we invite jokes so that we do not have to be stressed this time, we do not have high anxiety, communication is calming and soothing, we invite humor..." (P1)</li> <li>3. "...we provide relaxation ..." (P11)</li> <li>4. "... and distraction, but if moderate or severe level we do a collaboration with the doctor for medication..." (P11)</li> <li>5. "...Regarding the patient's psyche, then strengthen spiritually if we can indeed do it ourselves, we do it ourselves or call a chaplain ..." (P12)</li> <li>6. "... If my patient, the patient usually has high anxiety who cannot sleep at night, his blood pressure rises, he is treated with a sub-psychosomatic doctor; usually the patient will be given the drug alprazolam at night, taught relaxation as well." (P1)</li> <li>7. "... counseling, yes, we do counseling if needed" (P2)</li> <li>8. "We collaborate with psychologists, pharmacists, and other professionals for patients with severe anxiety..." (P9)</li> </ol>
Peer support	Peer support	<p>"...If the family is just waiting in the lobby with the family of another patient chatting, he can ask how to do mental support or open up to a chemo patient, the patient talks to the patient next to him, support each other, it can reduce anxiety..." (P14)</p> <p>"... here the patient can adapt in such a way by learning from his next friend..." (P5)</p>
Treatment constraints	<ol style="list-style-type: none"> <li>1. No anxiety first aid system is easily accessible to all health workers.</li> <li>2. Educational facilities still need to be optimal.</li> <li>3. Nurses experienced overwork</li> <li>4. Uncooperative families</li> </ol>	<ol style="list-style-type: none"> <li>1. "... The obstacle is that in the oncology ward here, BOR is above 110%, above 110%, so it is like a patient whose status has not gone home; there are already patients sitting in the waiting room..." (P12)</li> <li>2. "...There is no system or mechanism at the beginning, just in case. Ideally, it should have entered a fixed procedure at the beginning to anticipate the patient's anxiety..." (P1)</li> </ol>

Themes	Categories	Sample quotes
		3. "...Nurses concurrently treating many patients" (P9) 4. " There is no support system for the family, sometimes we just ask the patient and the patient is already crying, ... Maybe I am seriously ill in her mind but my family is empty, her husband doesn't want to take care of her..." (P4)
Expectations for improvement of healthcare quality	1. The existence of a digitalized anxiety first aid system that is easily accessible to all health workers  2. Optimizing the implementation of patient-centered care. There is an increase in audiovisual-based educational media and facilities for anxiety management	1. "...for example quiz; yes, for example, the Google form is simple, there is a choice of what is felt, maybe later there will be another analysis, maybe there are other measurements you do not know, later with the list of questions, we do not need to use paper one by one, so maybe the patient can access it by himself or his family, for example, you can open this application barcode and then scan it, and a list of questions can appear, Later, you can detect the level of anxiety, then the scoring appears, and what are the actions and who needs to do it..."(P4)  2. "... For television (TV), we have proposed that every place in each room has a TV, so for example, a certain hour is filled with education..."(P12)

Table 1 shows five themes, twenty categories, and a sample of quotes. The themes included factors that cause anxiety, psychosocial interventions for anxiety, first aid, peer support, treatment constraints, and expectations for improving health care quality.

## DISCUSSION

The findings address factors that cause anxiety, such as first experience with chemotherapy, lack of education and information, doom-scrolling, and lack of family support. The previous study showed that patients receiving their first cycle of chemotherapy have significantly higher levels of anxiety as compared to patients receiving subsequent cycles of chemotherapy ([Parmar et al., 2022](#)). Cancer patients who undergo chemotherapy for the first time will feel anxiety because of the possibilities that can occur during chemotherapy. Patients often experience fear of side effects and action of chemotherapy. If the nurses and other health workers do not provide adequate education to patients, the patients will lack knowledge and worsen their anxiety. The previous study indicated that anxiety is associated with "the unknown." "The unknown" means the patients do not understand the details of treatments, place, environment, and how severe their disease is. Patients with cancer experienced anxiety, anticipating results, next steps

in management, and side effects. The anxiety associated with treatment was felt most strongly at the start of their cancer journey. This was generally relieved once participants had a clear plan, although this could induce anxiety through an awareness of treatment options becoming limited as the disease progressed ([Gimson et al., 2022](#)).

The other finding as a factor causing anxiety for patients with cancer is doom scrolling. Doom scrolling is the tendency of patients to scroll through lousy news about cancer diseases continuously. The previous study showed that doom-scrolling is related to anxiety. In a crisis, the patients will look for bad news, which worsens their anxiety ([Salisbury, 2023](#)). The other factor that caused anxiety was a lack of family support. Lack of family support will cause patients to feel unsafe and will decrease their comfort zone. They will feel uncertain and lonely. It is related to anxiety ([Sari et al., 2019](#)).

The study indicated some psychosocial interventions for anxiety first aid, such as providing education, therapeutic communication, relaxation, distraction, spiritual care, counseling, inter-professional collaboration, and Psycho pharmacotherapy: benzodiazepine. The previous findings identified that personalized education

involving physicians for medical treatment and nursing staff for pre-treatment care reduced anxiety in patients with chemotherapy ([Li et al., 2021](#)). One of the patients' basic needs is information need. Providing adequate education about the diagnosis and treatment can improve the patient's knowledge and help them release anxiety.

The other crucial psychosocial intervention is therapeutic communication. Therapeutic communication is an invaluable approach to interactions with patients. A previous study showed that therapeutic communication significantly reduced anxiety in female cancer patients. However, a vice versa finding is that there is no correlation between nurses' communication and anxiety in cancer patients. Although nurses had good communication, the patient's anxiety was still at a high level ([Larira et al., 2023](#)).

The other study showed that relaxation, distraction, spiritual care, and counseling can lower anxiety in patients with cancer. Psychosocial interventions are effective for anxiety first aid ([Jarden et al., 2013](#); [Nguyen et al., 2023](#); [Sanjida et al., 2018](#); [Sari et al., 2020](#)). Relaxation exercise decreases pain and anxiety in patients who are undergoing colorectal cancer surgery. It is also relatively increased tissue oxygenation, appearing as an effective, safe, and practicable nursing intervention ([Ozhanli & Akyuz, 2022](#)). Benson relaxation decreases anxiety and improves quality of life. Using this technique could improve health-related outcomes in cancer patients. Spiritual care reduces anxiety in adolescents with cancer ([Doust et al., 2020](#)).

The findings showed that peer support is essential for anxiety first aid. The patients with cancer feel better after having peer support. Peer support is as crucial as the role of nurses' therapeutic communication. The previous finding addressed the positive association between cancer peer support and the three components of psychological empowerment among cancer patients. The patients' active coping, self-efficacy, and knowledge increased significantly after having peer support ([Ziegler et al., 2022](#)). Peer support has significant effects on improving quality of life and self-efficacy, as well as alleviating anxiety among patients with cancer ([Zhang et al., 2022](#)).

Oncology nurses experience the constraints of health care. No anxiety early detection system is accessible to both patients and nurses. A previous study indicated that patients felt more prepared for their treatment after watching the video using multimedia than using a pamphlet ([Dawdy et al., 2018](#)). Nurses also experience constraints with overwork due to the limited number of nurses on guard. This condition causes comprehensive healthcare for patients to be less than optimal. The last obstacle is uncooperative family can hinder patient care. The research showed that there is a negative and strong correlation between family support and anxiety in patients with cancer. The less family support, the higher the anxiety level ([Sari et al., 2019](#); [Wang et al., 2023](#)).

The oncology nurses hope an early detection and anxiety first aid system based on accessible digital technology will exist. Patients will be handled comprehensively using a digitalized system for detection and anxiety first aid, and nurses can carry out the anxiety first aid. They need supporting media to handle the case. They are willing to optimize the implementation of patient-centered care. The government should facilitate a comprehensive healthcare system for patients with cancer and hold more shelters so that the burden of patient anxiety is reduced evenly and hold more shelters so that the burden of patient anxiety is reduced.

These findings would be pivotal points for policy-making consideration for the public hospitals and government to integrate the technology into anxiety first aid for cancer patients. To improve the quality of healthcare for cancer patients, it is essential to develop a digital-based mental health support system, such as a friendly digital platform that serves as a screening instrument and supporting media for anxiety management, thereby alleviating the workload of the health workforce already considerable workloads.

### Limitations of the study

There are some limitations to this study. The study was conducted in one hospital in Surakarta, which covered the data in a singular place, constraining generalization in a wider scope. Many hospitals, both government and private, have nurses with various conditions and experience in providing anxiety first aid to cancer patients.

### Recommendation for future study

Future research recommendations include expanding the place of study to both public and private hospitals, which can make data heterogeneous and improve data quality. Further study could identify the influence of cultural and organizational factors on not only the delivery of anxiety first aid but also the role of family support. Additionally, future research should also consist of the other health workforce's role in providing anxiety first aid for cancer patients. Another crucial recommendation for future study is developing a digital platform or integrating technology into the mental health system to improve the health of cancer patients in the hospital.

### CONCLUSION

The study highlighted five themes: factors that cause anxiety, psychosocial interventions for anxiety first aid, peer support, treatment constraints, and expectations for improving healthcare quality. To improve health care quality for cancer patients, it is necessary to facilitate an early detection system for anxiety and anxiety first aid based on digital technology. Establishing a digital-based mental health support system, such as a user-friendly digital platform that serves as an instrument for healthcare providers to conduct timely and precise screenings and manage anxiety, alleviates the burden of nurses' already considerable workloads.

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