### RESEARCH

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# How do work in oncology unit nurses experience hospice care provision in China? A descriptive phenomenological study



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### Abstract

**Objectives** To explore the experiences and perceptions of oncology nurses providing hospice care in Chinese mainland.

**Methods** A descriptive phenomenological research method was utilized to describe experience of hospice care among oncology nurses. Eighteen oncology nurses were selected for interviews using purposive sampling from four grade A tertiary hospitals in Wuhan, Hubei province, China. The face-to-face semi-structured interviews were used to collect data. Data were recorded using NVivo 12.0 and analyzed using the Colaizzi's 7-step phenomenological data analysis method.

**Results** The interview data generated five major themes: (1) end-of-life care for oncology patients, (2) support and care for family members, (3) self-limitation and psychological distress, (4) culture and external environment constraints, and (5) self-coping and gains.

**Conclusions** In Chinese mainland, oncology nurses encountered barriers and negative emotions in conducting hospice care, but have also made strides in the promotion of hospice care. In the future, the use of different traditional Chinese medicine technology to facilitate symptom management in end-of-life patients should be explored, and more tools to assist in providing psychological care and communication should be developed.

Keywords Cancer, Chinese medicine, Experience, Hospice care, Nursing practice, Qualitative research

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### Introduction

As medical technology continues to advance, many patients at the end of their lives can be kept alive with life-support treatment. However, although life support techniques can prolong patients' lives, they can also perpetuate unnecessary suffering and greatly reduce the patient's quality of life and quality of death [1, 2]. As a result, hospice care has gradually entered the global healthcare system.

Hospice care is the special care of people who are at the end of life and have stopped treatment to cure or control their disease. Hospice care provided by health professionals, social workers, and others includes medical and psychological support to help end-of-life patients gain peace, comfort, and dignity by managing pain and other uncomfortable symptoms, while providing support services to the patient's family [3]. Hospice care is similar to palliative care, but also different from palliative care. Hospice care will only provide symptom relief, not the cure for the illness. However, in palliative care, patients do not have to give up treatments that may cure the serious illness. Unlike palliative care, which begins at the time of diagnosis, and can be applied throughout the disease according to the patient's needs, not just at the end of life, hospice care is for patients who are at the end of their lives, usually with a survival time of six months or less [4]. In China, patients who are expected to survive for six months can be considered to be in the end-of-life stage, except those who are dying due to accidental injuries [5]. Hospice care is the practice of the palliative care model at the end of life among patients, and palliative care is an expansion and extension of the hospice care philosophy and model.

As the morbidity of patients with cancer continues to increase in all regions of the world [6, 7], hospice care has received increasing attention. After more than 50 years of development, western developed countries such as the UK, the USA, Canada and Australia have become more mature in the development of hospice care, with a wide audience, and have formed a more comprehensive system. It has integrated it into primary health care to form an innovative hospice model [8-11]. Its mature model and successful experience are of some use to China. China started late and is still in the development stages of building hospice care, but is in great demand. In recent years, China has paid increasing attention to hospice care and issued a series of policies and documents to promote the development of hospice care, such as the Hospice Care Practice Guidelines (Trial) was first released in 2017 [12], and two notices were issued regarding on pilot hospice care work in several cities across the country in 2017 and 2019 [13]. However, in the 2021 ranking of the quality of death and dying in 81 countries around the world, the Chinese mainland ranked 53rd [14]. In 2022, there were about 4.82 million new cancer cases and 3.21 million cancer deaths in China [15]. However, hospice care in China is still in its infancy, and there are many problems that need to be solved, such as shortage of human resources and poor quality of hospice passport care [16].

Nurses play a key role in providing hospice care. Therefore, understanding the work experience of nurses is important in facilitating the advancement of hospice care. Studies have found that nurses improved their selfprofessional identity and sense of accomplishment as well as changed their attitudes toward death during the implementation of hospice care [17, 18]. However, nurses faced many challenges. Many nurses lack confidence and knowledge, especially in communication [19]. They are not adequately equipped to participate in end-of-life discussions with cancer patients and family caregivers [20]. Besides facing complex end-of-life issues, hospice care nurses experience numerous emotional and psychological dilemmas from significant burnout and job stress [21, 22]. However, it is important to note that most of these studies have been conducted in developed countries. There is a lack of relevant reports on the experience of hospice care for oncology nurses in Chinese mainland, especially after the publication of relevant working guidelines and documents in recent years.

Therefore, the aim of our study was to explore the experiences and perceptions of oncology nurses in providing hospice care through a qualitative study, in order to provide a basis and rationale for the development of hospice care services in China.

### Methods

### Study design

This study used a descriptive phenomenological research method. Qualitative data were collected through semistructured interviews with nurses. This study followed the Consolidated Criteria for Reporting Qualitative Research (COREQ) checklist to report findings.

### Sample and setting

Our study used a purposive sampling method to select nurses from oncology departments in four grade A tertiary hospitals for face-to-face interviews between April and June 2022 in Wuhan, Hubei province, China. These nurses were recommended by the director of the hospital's director of nursing via email. Participants had to be: (1) registered nurses, (2)  $\geq$  18 years old, (3) have cared for end-of-life cancer patients $\geq$ 2 years. Nurses currently on leave or in training at other hospitals were excluded. The sample size was evaluated for adequacy using the principle of information saturation, and no new topics emerged indicating that information saturation had been reached [23]. No one refused to participate or dropped out.

### Data collection

The face-to-face in-depth interview was used to collect data. The interviews were led by two trained researchers (YJH and QPZ). The interviewer (YJH) was pursuing a master's degree, she had studied and been trained in qualitative research, and had an interested in the topic. The other interviewer (QPZ) was also pursuing a master's degree and she had ten years of clinical experience. Based on the literature review, a preliminary interview guide was designed. Pre-interviews were conducted with two nurses to ensure the semi-structured interview questions were understandable and answerable. Then, the preliminary interview outline was further modified and improved to form a formal interview guide to ensure consistency and adherence to the research questions (see Additional file 1). The guide covered three topics: (1) current implementation of hospice care in China, (2) experiences and feelings of implementing hospice care in China locally, and (3) factors influencing the implementation of hospice care efforts in China or the participant's place of employment.

The researcher had no contact with the participants before the study began. Before the interview commenced, the purpose and significance of this interview, basic concepts, and research-related contents were briefly introduced by a researcher (YJH), and the interviewer was informed that the interview would be recorded and transcribed by two researchers (YJH and QPZ). After informed consent and demographic characteristics were obtained from the interviewees, two researchers (YJH and QPZ) chose a quiet, undisturbed interview setting in the hospital. No one else was present except the researchers and participants. They conducted face-to-face interviews, each lasting approximately 25-60 min. The researcher recorded the interviews using audio recordings and handwritten notes to ensure completeness and accuracy of the content. The data quality was ensured through the use of appropriate interview techniques such as repetition, summary, and silence. The researchers did not impose any inducements or implement any interventions during the interviews. Repeat interviews were not conducted in this study. In this study, two researchers used IFLYTEK heard to transcribe the interview into text within 24 h of each interview [24]. To protect participants' privacy, all data was identified and replaced with an alternate subject ID (e.g., N1=Participant 1).

### Data analysis

Colaizzi's 7-step phenomenological data analysis method was used to analyze the data, the steps of which includes comprehensively familiarizing with the data, recognizing meaning statements, generating initial codes, gathering themes, conducting thorough descriptions, producing the fundamental structure of the phenomenon, sending the fundamental structure to participants to validate credibility [25]. In this study, Colaizzi's steps were as follows: (1) after the interviews were completed, the recorded data and other relevant information, such as non-verbal data from the interviewees, were carefully read and promptly collated into written form by two researchers; (2) meaningful descriptions were distilled by the two researchers (YJH and QPZ) in NVivo (QSR International Pty Ltd. 12th edition, 2018); (3) two researchers compared the codes, categorized and refined similar codes; (4) organized codes in a certain order or theme; (5) the themes were described and compared by the two researchers in detail until consensus was reached; (6) the original data and the extracted themes were passed to the experts of the research team for checking and organizing; and (7) the data were sent to the participants via email to verify whether the data matched their expressed wishes, enhancing the credibility of the results.

### Rigor

To ensure the credibility and validity of the qualitative study, the following methods were adopted: (1) investigator triangulation: the researchers analyzed and compared the data independently, discussed it among the research team to maximize the authenticity of the study's findings and limit bias; (2) Multi-level analysis and confirmation: following initial analysis, the researchers sent their analysis back to the interviewees to ensure the interviewees' meanings and interpretations were accurately expressed in the study report; (3) reflexivity: researchers had learned interview techniques before conducting the interviews so that they could remain neutral and avoid giving any hints during the interviews. The interviewers adopted appropriate interviewing techniques, and the interviewees' non-verbal expressions such as face expressions, gestures, and eyes were observed and handwritten recorded to ensure the data integrity.

### Findings

A total of 18 oncology nurses were interviewed in our study. The mean age of the participants was 37.56 years (SD=8.62); the youngest was 28, and the oldest was 54. Their experience working in hospice care ranged from 2 to 25 years. The general information of the interviewees is detailed in Table 1. The average length of the interviews was  $52.66 \pm 4.78$  min.

Five major themes and fourteen subthemes were identified. The thematic analysis framework and the coding tree with the main themes and sub-themes are shown in Fig. 1.

**Table 1**Demographic characteristics of the participants (N = 18)

Demographic characteristics	n(%)
Age (years)	
21–30	2(11.1%)
31–40	11(61.1%)
41–50	2(11.1%)
51–60	3(16.7%)
Gender	
Female	18(100%)
Male	0(0.0%)
Marital status	
Single	1(5.6%)
Married	17(94.4%)
Education	
Junior college	1(5.6%)
Bachelor	15(83.3%)
Master	2(11.1%)
Years of working in hospice care (years)	
2–5	13(72.2%)
6–10	1(5.6%)
11–15	3(16.7%)
>15	1(5.6%)
Whether the department has a hospice ward	
Yes	7(38.9%)
No	11(61.1%)
Whether have attended hospice care training	
Yes	17(94.4%)
No	1(5.6%)
Whether have obtained the hospice care nurse specialist certificate*	
Yes	14(77.8%)
No	4(22.2%)

\*The hospice nurse certificate issued by the Chinese Nursing Association

### Theme 1: end-of-life care for oncology patients Use of traditional Chinese medicine technology

Some participants with traditional Chinese medicine backgrounds indicated that they found that traditional Chinese medicine technology in caring for oncology patients could facilitate the effectiveness of symptom management in end-of-life patients.

"We also do some traditional Chinese medicine technology, such as ear acupressure, acupressure and acupoint application of Chinese herb for pain, vomiting, edema, and other symptoms, and then we will also work with some physiotherapy instruments to promote muscle circulation." (N11, 31 years old).

### Psychological care

The participants found that the diagnosis of cancer had a negative impact on patients' mental psychology. Therefore, the participants have paid more attention to the psychological problems of patients. However, because the participants are not professional psychotherapists, there are still problems that cannot be handled well in clinical practice. Therefore, the participants strive to enlist the support of multidisciplinary team members.

"We used a mood thermometer to assess a patient's psychological status. If we identify a patient with a high score, we will make a shift handover, ..., and pay special attention to the patient's emotion and behaviors." (N15, 28 years old).

"For patients with high scores on the psychological distress screen, we can address some problems. But when we feel the patient needs a counselor' intervention, we ask for a counsellor's consultation so that the patient can have one-on-one treatment." (N6, 32 years old).

### Social support

The participants reported that they were doing some work to meet the social support needs of patients at the end of their lives, but not enough. When necessary or available, the participants contacted social workers on multidisciplinary teams to better meet the social support needs of patients and families.

"If the patient has other needs, such as the need for a haircut or something like that, we will also contact the social worker to provide some channels." (N11, 31 years old).

"In terms of social support, such as financial assistance, stress reduction for caregivers, etc., these are all things those social workers are doing." (N6, 32 years old).

### Spiritual care

The participants have found that respecting the patient's wishes during normal contact with the patient and encouraging the patient's family to respect the patient's wishes in all aspects of treatment and life can keep the patient optimistic and positive at the end of life.

"We teach families how to understand what the patient is thinking, when they communicate with the patient, they must listen to the patient." (N12, 36 years old).

The participants have found that using an individualized approach to spiritual care can guide each patient to feel and affirm the meaning and value of life in a variety of ways.

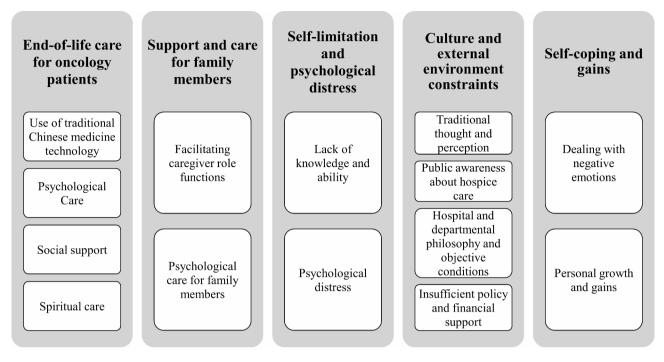


Fig. 1 Thematic framework for qualitative interviews

"One of our patients is a teacher. We celebrated her the last Teacher's Day in the hospital room. She was so moved that tears flowed from her eyes, even though she could not speak. And her family took a video to keep as a memento." (N11, 31 years old).

# Theme 2: Support and care for family members *Facilitating caregiver role functions*

The participants found that most of the families of terminal patients not only want to accompany and take care of the patients, but also want to alleviate the patients' symptoms. Therefore, the participants guided the family members to understand the physiological and psychological characteristics of the tumor patients and master some basic nursing knowledge and methods.

"As the patient's symptoms get worse, they will be accompanied by a variety of complications and discomfort, and we will tell the family in detail why they are experiencing such symptoms and how to care for them." (N18, 54 years old).

The participants found that after the death of a patient, the family members often had no time to sort through emotions to make funeral arrangements, but still wished for the deceased patient to have the best service possible. Thus, the participants comforted the family members after the death of the patient, and assisted in taking care of the body. "After the death of a patient, the family will be very sad and cry, we will comfort them by patting them on the shoulder, and assist them in wiping the patient's body and changing their clothes if they need to." (N15, 28 years old).

### Psychological care for family members

The participants found that family members faced increased work as a caregiver, causing severe psychological stress and mental symptoms. The grief and helplessness generated by the families of deceased patients often last for a long time from the time the patient's death. The participants regularly provided grief counseling to the families, encouraged them to release their emotions, and helped the family remember the good times of the deceased's life.

"When patients are hospitalized repeatedly in unbearable pain, the families can be very stressful, and our nurses and hospice care team will follow up as soon as they are concerned and assessed the family's situation." (N4, 51 years old).

"On the third anniversary of a patient's death, we held a memorial service for him in our demonstration room. Those closest to the patient came to remember and recall the patient." (N2, 45 years old).

### Theme 3: self-limitation and psychological distress Lack of knowledge and ability

The participants generally felt that their ability to implement hospice care and their communication skills were inadequate, and several mentioned that their knowledge of professional psychological guidance and the use of hospice care tools were still lacking.

"Sometimes patients and families express their psychological stress and sadness, but I think my psychological care skills are not enough, so I think I cannot help them well." (N15, 28 years old).

"If you want to communicate with patients about some topics in depth, you need to use some mediums, ..., such as the Heart to Heart Café, but strong communication skills and psychological knowledge are also needed to really use these tools." (N2, 45 years old).

### Psychological distress

The participants' own psychological emotions can also affect the implementation of hospice care. The participants indicated that in clinical work, they have struggled with seeing patients in pain, and experience increased psychological pressure.

"When I hear some patients say that they have gone through so much pain and spent a lot of money on treatment but still not cured, I feel very sorry and sad and have negative emotions for a while." (N13, 42 years old).

"I would feel a sense of accomplishment in my heart if I saved a person's life, but all I face every day is death." (N16, 53 years old).

# Theme 4: culture and external environment constraints *Traditional thought and perception*

The participants mentioned that many advanced oncology patients and their families avoid talking about death and related topics, expecting the medical staff to continue providing curative treatment to keep the patients alive.

"...some patients are very reluctant to talk about death-related topics, choosing to avoid them." (N12, 36 years old).

*"Families worried whether abandoning active treatment would be a sign of unfilial behavior." (N14, 29 years old).* 

### Public awareness about hospice care

During the implementation of hospice care, the participants found that patients' resistance to hospice care and death, as well as the general lack of understanding in society as a whole, affected its overall success. Some participants believed that it was necessary to set up relevant professional education, establish the foundations for hospice care in formal education and increase acceptance of the hospice care for the whole population through various ways, such as exhibition boards and videos.

"I think there needs to be a national hospice care promotion campaign. People don't want to talk about death, especially when they come to the hospital, because they think they're there for treatment." (N13, 42 years old).

"I think we can make promotional boards for lifedeath education and hospice care, and we can also let the public know about these through video platforms." (N7, 35 years old).

## Hospital and departmental philosophy and objective conditions

The participants believed that the Lack of awareness of hospice care among leaders, doctors, and colleagues affected the development of hospice care. Some participants mentioned that many healthcare workers were unwilling to spend time on hospice care for end-of-life patients due to the difficulty of care or taboos about death. And some participants indicated that the lack of multidisciplinary teams affected the implementation of hospice care.

"I wanted to put some hospice care panels in the corridors of the unit before, but the head nurse of the unit thought it would make people feel like they were seeing death instead of hope for life." (N17, 32 years old).

"While I would love to spend more time providing hospice care at the end of life, some of the nurses I work with don't want to do it because it's so difficult." (N1, 32 years old).

"We only have a few full-time social workers, although there will be some part-time social workers, but the part-time staff is very mobile and will be less professional." (N8, 31 years old).

The participants generally agreed that opening appropriate hospice care settings would improve the quality of patients' lives. For example, single-room units can fully protect patients' privacy and dignity; however, accessibility of these settings is currently lacking. "Due to the increasing number of inpatients, we do not have a separate ward dedicated to hospice care for end-of-life patients, which results in a lack of a quiet, comfortable hospice environment for patients at the end of their lives." (N1, 32 years old).

The participants spoke of a hierarchical referral model and hospice home care. Some participants believed that hospice care could mainly be in a model guided by tertiary hospitals and implemented by lower-level hospitals. Some participants felt that hospital-community linkages should be established. The home environment was also more comfortable and quieter for the patients, and the participants could visit the home to provide guidance.

"Hospice care can be implemented in lower-level hospitals where beds are more abundant. And if there are particularly difficult symptoms or psychological problems, they can seek help from the higherlevel hospital." (N2, 45 years old).

"...because community hospitals don't have that many patients, but it has enough beds and staff." (N9, 38 years old).

"The patient will be more comfortable at home, the environment will be more familiar, and it will be easier for relatives to visit him." (N8, 31 years old).

### Insufficient policy and financial support

The participants indicated that many hospice care items are currently not covered by national medical insurance in China. Therefore, the participants found that many family members were unwilling to accept part of the hospice care program because of financial problems.

"We now have very good treatment methods, such as pain relief devices or aromatic oil assistance, etc. However, due to the lack of medical insurance policies, many treatments do not reduce the cost..." (N9, 38 years old).

"...there was no charge for psychological communication and scrubbing the patient's body." (N10, 35 years old).

The participants found that there was a lack of financial support for hospice care from the government and social groups. In order to reduce the national economic pressure, a strong appeal could be made to more social groups to focus on hospice care and provide financial support.

"Under the financial support of philanthropists and corresponding foundations, the whole ward environ-

*ment can be built to make patients more comfortable." (N2, 45 years old). "I only know that there is a sanatorium established* 

by Li Ka Shing Foundation, but other social support is not enough." (N1, 32 years old).

### Theme 5: self-coping and gains Dealing with negative emotions

The participants reported facing emotional obstacles in hospice care work, and while some participants were able to quickly resolve these emotions on their own, others were greatly affected by the patient's distress and took longer to recover.

"I have an optimistic personality, and sometimes when I face something bad at work, I digest it by myself and it basically doesn't affect me much." (N1, 32 years old).

"The facial expressions of dying patients, the stiffness of their limbs or very serious wounds, would often come to my mind for a long period of time." (N3, 32 years old).

The participants discussed their encounters with emotional strife, stating that initially it took longer to process, but after a while, they learned healthy coping mechanisms to deal with their emotions.

"When I have negative emotions, I would talk to my colleagues and my family and hope they can pay more attention to their health." (N15, 28 years old). "Listen to music, sleep or watch some more relaxing and pleasant videos to cheer me up and try not to think about these things after work." (N3, 32 years old).

### Personal growth and gains

The participants have mastered knowledge related to the patient's diseases and treatment through study and training, and use their learned knowledge and skills to alleviate patients' negative emotions. The participants have learned many new methods of care and stress reduction, which fostered improvements in the abilities of other departmental colleagues and the whole nursing team.

"In addition to learning about the patient's disease and medication, I learned to understand the patient's personality through psychological care, gain insight into the patient's negative mindset." (N7, 35 years old).

"After I went out to study, I grew up myself and came back to carry out some activities, such as taking my colleagues to carry out Balint groups, and also taking the nurses in the department to carry out some stress-reducing activities." (N11, 31 years old).

Some participants said that equal and harmonious healthcare relationships at hospice care work gave them a sense of respect and belonging, in addition, helping endof-life patients relieved their physical and mental pains and the respect and recognition of their family members also brought them a sense of achievement and value.

"Within hospice care, both the doctors and nurses are in a state of great respect for each other." (N1, 32 years old).

"When patient' families appreciated and recognized me, I feel rewarded and fulfilled to do this and willing to keep doing it." (N6, 32 years old).

The participants' own mindsets changed as they administered hospice care to oncology patients, with the vast majority of interviewees reporting that they were calmer in the face of everyday matters and death. Learning through hospice care nurses has established a more positive outlook on life and a more inclusive approach to healthcare.

"After being exposed to hospice care, I had a whole new perspective on cancer and death, and my mindset also changed subtly." (N14, 29 years old). "I have become more accepting and tolerant of things; I have become more peaceful about people and things around me with a more positive side." (N7, 35 years old).

In terms of personal and family life, the participants said they mapped their experiences at work to their lives to improve poor lifestyles and develop a good routine. And they believed that they grew closer to their families and paid more attention to the care and companionship of those closest to them, while also helping them gain experience in caring for their loved ones.

"I feel that life is precious, pay more attention to my daily life, start to stay up less, and seek medical treatment in time when I am sick. And after conducting a period of hospice care, it makes you want to express your emotions more and appreciate the time you have with your family more." (N15, 35 years old).

### Discussion

The findings from this qualitative study reveal that Chinese oncology nurses provide multifaceted hospice care and support for patients and families. Although troubled and hindered by lack of knowledge related to the implementation of hospice care, psychological disturbance, traditional culture and external environment, nurses explored and learned how to cope with the negative emotions of providing hospice care and gained a variety of skills from the experience.

It should be noted that traditional Chinese medicine technology has been used in end-of-life care for oncology patients. Some of the nurses in our study have used traditional Chinese medicine technology such as auricular acupuncture, acupuncture, and acupressure to eliminate pain and vomiting, and their effectiveness has been recognized by patients. Past research has also concluded that nurses believe that traditional Chinese medicine plays an important role in promoting the effect of symptom management of advanced cancer patients as a unique Chinese treatment in hospice care [26]. In other countries, nurses' care for oncology patients with palliative care needs often includes have usually used medication management s and behavioral intervention therapies (e.g., mindfulness and music) to control symptoms [27, 28].

In terms of psychological care, unlike previous studies that found Chinese nurses' inadequate assessment of patient's emotions and poor effective in relieving psychological distress [29], the oncology nurses in our study were able to effectively assess patients' and family members' negative emotions through mood thermometers and psychological distress screening scales and other methods, and basically relieve negative emotions through providing individualized counseling for patients' conditions. However, the nurses also indicated that more complex psychological issues it was harder to manage, often requiring the input of the multidisciplinary team, especially the input of a social worker or psychologists.

Oncology nurses in our study perceived that they lacked communication skills and the confidence to communicate well with patients and their families. Hospice care nurses may find certain conversations difficult due to the broad competencies they require to provide quality end-of-life care and the challenging nature of these of-life discussions [30]. Previous studies have found that nurses' perceptions of their communication effectiveness (e.g., knowing what to say when discussing death and/or having emotional conversations) is not related to years of nursing experience [31]. Therefore, similar to other nurses, Chinese oncology nurses also wanted to improve their communication confidence by undertaking courses and appropriate tools. Previous research has shown that other nurses in other countries mainly consider training through hospice care and communication courses

to improve communication confidence and hospice care competence [32, 33]. The Heart to Heart Card Game is an easy-to-use tool, originally designed for Chinese Americans to help Chinese healthcare providers initiate endof-life conversations [34, 35]. The Heart to Heart Card Game, was an effective communication tool that enables nurses to assist families to appreciate the patient's wishes for end-of-life care and those living with advanced cancer to maintain a more stable mental state [36]. In our study, the oncology nurses felt that their ability to use communication tools such as the Heart to Heart Card Game needed to be improved.

It has been shown that both cultural background and religious beliefs have a significant impact on the implementation of hospice care [37, 38]. Traditional Chinese ideology regards death as taboo [39] The lack of education about hospice care and the profound influence of the traditional Chinese concept of "filial piety" has led many people to resist hospice care. This makes it difficult for oncology nurses to find appropriate ways to help patients living with advanced cancer and families to access hospice care. There was a Chinese study that argued that patients with advanced cancer should be kept away from the information of imminent death to maintain hope and faith in their fight against cancer [40]. In contrast, the interviewers in our study believed that communicating with patients about dying and providing life-death education would allow patients and families to prepare for death in advance and help patients achieve some of their unfulfilled wishes. A Canadian qualitative study also found that oncology clinic nurses outlined different strategies to reduce fear, such as replacing palliative care with terms such as "supportive care" or "pain management" in discussions, and educating patients about the significance of early palliative care and correcting their assumptions that palliative care also involves an end to disease-oriented oncology interventions [41]. In addition, it has been found that patient involvement in information delivery and decision support produced significant positive effects on outcomes such as patient motivation and quality of life [42]. Thus, oncology nurses can lead patient engagement in the understanding and decision-making of hospice care related information.

In our study, we found that the hospital environments, national policies, and financial support also influenced nurse implementation of hospice care. Regarding the hospital environment, nurses reported a lack of separate hospice care units or wards as a lack of space for patients to be cared for or to communicate individually with their families, as well as a significant factor in the difficulty of implementing hospice care. An Australian qualitative study found that the privacy of a hospital room can help patients pass away peacefully and their families cope with bereavement [43]. In terms of policy, the implementation

of hospice care has also been affected by inadequate health insurance policies in China. Currently, hospice care in China is not covered by Rural and Urban Resident Basic Medical Insurance, and only long-term care insurance adds hospice care and can meet the needs of patients who need to occupy beds for long periods of time and have associated high medical costs [44], but long-term care insurance is still in the national pilot program. The oncology nurses in our study also suggest that hospice care development needs to access other sources of financial support and social capital. Countries where hospice care is well developed have adequate resources to ensure its development, as it is covered by health insurance and funded by religious communities, charities, and cancer foundations [45].

The Chinese oncology nurses also mentioned that hospice care should be carried out in the community, in hospitals of different levels, and at home to promote the rational use of good healthcare resources. The hospitalcommunity-home linkage model can effectively utilize community resources, which is an effective way to provide continuity of care for patients [46]. Homogeneous management can be implemented between different levels of hospitals, higher-level hospitals can provide technical support to lower-level hospitals to improve their medical standards, and the resources of both sides can be used rationally. Our study found that many patients or family members ask the nurse if home care is available during the end-of-life stage. Research has shown that caregivers who cared for terminally ill patients at home according to their patients' wishes felt a sense of accomplishment as well as personal growth, not only allowing patients to pass away peacefully in a place they are familiar with, but also reducing the cost of treatment and relieving stress on the family [47, 48].

Our study showed that some nurses are greatly affected by patient distress and take longer to recover, while most nurses cope with negative emotions by themselves or choosing positive ways to cope. Positive activities and coping styles reduce job stress and increase mental health at work [49, 50]. The Chinese oncology nurses in our study indicated that when faced with negative emotions due to works, they would usually relieve their emotions and deal with problems by listening to songs, reading, drawing, confiding in family members or colleagues, seeking help from leaders and so on. These methods are all positive activities and coping styles that can effectively help nurses cope with negative emotions and work stress.

### Implications for nursing practice and research

In terms of implications for Chinese nursing practice, this study proposes that the use of different traditional Chinese medicine techniques to facilitate symptom management in hospice care patients should be explored. More tools to assist in providing psychological care and communication should be developed and used in hospice care, thereby improving the quality of end-of-life care for Chinese patients. In terms of implications for research and policy, this study suggests that hospice care training and psychological guidance for Chinese nurses should be strengthened, hospice care and life-death education should be enhanced, the construction of hospice care systems and facilities should be improved, and financial and policy support should be reinforced.

### Limitation

The oncology nurse participants in our study were all from large tertiary hospitals in one province in China, so their views may not be representative of the experiences of other oncology nurses working in other hospitals. Secondly, our study only focused on Chinese oncology nurses' experience with hospice care. However, hospice care should be provided by a multidisciplinary team, and including different members' experiences would be more conducive to facilitating hospice care implementation. Moreover, all participants were female nurses, which may not be fully representative the Chinese oncology nursing workforce.

### Conclusions

Chinese mainland oncology nurses have provided multifaceted hospice care services for patients and families, and nurses believe traditional Chinese medicine techniques can promote the effect of symptom management of end-of-life patients. In the process of hospice care, nurses encounter obstacles due to the influence of traditional concepts, nurses' own lack of hospice care knowledge and communication confidence, and the constraints of the external environment. Some of the negative emotions that nurses experience during providing hospice care take a prolonged adjustment period. Nevertheless, nurses have also made strides in the promotion of hospice care. This study suggests that the need to enhance hospice care training and psychological support for nurses, laying the foundation for improving the quality of hospice care and the quality of life for patients in advanced stages of life. This study also sheds light on the need for more relevant future research and policy to explore hospice care enhancement techniques and tools to assist in providing psychological care and communication.

### Supplementary Information

The online version contains supplementary material available at https://doi.or g/10.1186/s12904-024-01597-y.

Supplementary Material 1

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### Author contributions

YH: Conceptualization; Resources; Formal analysis; Investigation; Methodology; Data curation; Writing-original draft; Writing-review & editing. QZ: Conceptualization; Resources; Formal analysis; Investigation; Methodology; Data curation; Writing-original draft; Writing-review & editing. CW: Funding acquisition; Resources; Writing-review & editing. HW: Conceptualization; Resources; Investigation; Project administration. JZ: Data curation; Formal analysis; Software. JC: Data curation; Software. QZ: Resources; Methodology; Writing-review & editing; Supervision. JB: Resources; Writing-review & editing; Supervision; Project administration. JH: Resources; Data curation; Writingreview & editing; Supervision. ZZ: Funding acquisition; Methodology; Project administration; Writing-review & editing; Supervision; Validation. YL: Resources; Data curation; Project administration; Writing-review & editing; Supervision; Validation.

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### Data availability

No datasets were generated or analysed during the current study.

### Declarations

### Ethics approval and consent to participate

The study was approved by the Wuhan University School Medical Research Ethics Committee (IRB 2020YF2001). Confirmation that informed consent has been obtained from all participant or their legal guardians in the study. In addition, the researchers asked the subjects to sign an informed consent form to indicate their consent before recruitment. All methods were performed by relevant guidelines and regulations.

### **Consent for publication**

Not applicable as this paper does not include any details about individuals.

### **Competing interests**

The authors declare no competing interests.

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