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End-of-life care in rural China: the crucial role and challenges of village doctors

Changhui Song¹ , Min Feng² and Hui Xie^{3*}

Abstract

Objective Quality hospice and palliative care are particularly challenging in rural China. This qualitative study aimed to explore the critical role of village doctors in the end-of-life care of rural China amidst challenges posed by an aging population.

Methods Forty-six semistructured interviews were conducted in 38 villages across Henan and Shandong Provinces in China. Data were analyzed via thematic analysis.

Results Village doctors with at least five years of medical practice were recruited from the student interviewers' hometowns. Among the 46 village doctors aged 35–78 years, 32 respondents were male (69.6%), with an average duration of professional practice of 29.2 years. Five thematic findings, guided by the multidimensional supportive care needs model, were identified, including *symptom management as central to end-of-life care*, *verbal consolation as ancillary services*, the *absence of spiritual care*, *social support and economic assistance*, and *a lack of informational resources and support*. Village doctors have focused primarily on symptom management and basic medical care and have contended with limited resources, strict regulations on narcotic drugs, and cultural taboos against death. Serving as frontline healthcare providers, they navigated complex familial decision-making, offered indirect psychological support, and often avoided direct discussions about terminal prognoses.

Conclusion Despite these challenges, village doctors' deep community roots and trusted relationships ensure continuity and cost-effective end-of-life care. Enhancing their role through improved training and policy support could markedly optimize care quality and accessibility in rural China, addressing disparities and promoting dignified care for patients and their families.

Keywords End-of-life care, Palliative care, Village Doctors, Qualitative study, Death anxiety, Rural China

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Introduction

Hospice and palliative care are essential components of the right to health, yet these services remain underdeveloped in mainland China - a concerning issue given the rapidly aging population [1]. As of 2023, Chinese individuals aged 65 and older accounted for 15.4% of the population, or 216.8 million people [2], leading to an increased demand for healthcare, particularly in the areas of chronic illness and end-of-life care. Cancer has emerged as one of the leading causes of death in China. Nationwide data reveals that while the crude cancer mortality rate increased from 108.3 per 100,000 in 1990–1992 to 170.1 per 100,000 in 2015 [3], the age-standardized mortality rate decreased from 94.4 per 100,000 to 77.9 per 100,000 [4]. This suggests that the rise in cancer mortality is primarily attributable to the aging population, highlighting the urgent need for cancer care services [1, 3].

Significant disparities in end-of-life care and quality of death persist between urban and rural areas in China. Rural elderly people often have less access to end-of-life services and face more severe conditions [5]. Barriers to end-of-life care in rural areas include poverty, low health literacy, inadequate health insurance coverage, lack of disease awareness and preventive measures, insufficient in-home care training, limited diagnostic capabilities, and the absence of standardized screening protocols [6].

Traditional values also play a significant role in shaping end-of-life care in rural China. Many patients and families prefer to spend their final moments at home, adhering to the belief that “falling leaves returning to their roots” (落叶归根) [7]. While this cultural reference reflects deep-seated traditions, it also presents challenges in ensuring proper care [8].

Village doctors, historically referred to as “barefoot doctors”, have been central to primary care in rural China since the 1960s [9]. These barefoot doctors were initially farmers who received basic medical and paramedical training to provide healthcare within rural communities [10]. Their role was to ensure healthcare access for rural residents. In the early 1980s, China officially replaced the term “barefoot doctor” with “village doctor”. Today, village doctors continue to play a crucial role in rural healthcare, offering preventive care, basic medical support, and family planning services [9], thereby contributing significantly to the modernization of China's healthcare system.

Adapting healthcare models to address the evolving needs of rural populations is critical for end-of-life care. Models such as the “Shi Rong Model” (施榕模式) [8], “Jian Yang Model” (简阳模式) [6], and “Shi Shi Model” (石狮模式) [5] represent significant regional efforts to enhance palliative care access. For instance, the Shi Rong Model, developed in 1992 [8, 11], centers on family-based care by integrating village doctors in palliative services for

rural communities. However, due to limited training, village doctors could only provide basic care, and the model remained largely confined to the Shanghai and Jiangsu-Zhejiang regions [12]. In 2012, Dr. Zhou's team introduced the Jian Yang Model, training healthcare providers in Jianyang's township health centers and village clinics to deliver home-based palliative care to terminal cancer patients [6]. This approach significantly improved patients' quality of life by providing free pain management medication and psychological support [13]. Established in 2021, the Shi Shi Model focuses on community-centered palliative care by training local healthcare providers/village doctors to deliver basic end-of-life care in Shi Shi city in Fujian province [5]. While these models have shown success regionally, scaling them nationally may require more standardized training and resources to meet the needs of rural populations.

Theoretical framework

This study is guided by the Multidimensional Supportive Care Needs Model [14], which explores how interdisciplinary teams can deliver palliative care services to oncology patients across five dimensions: physical, psychological, social, spiritual, and informational needs. Physical care involves alleviating end-of-life physical discomfort such as pain, breathlessness, fatigue, and diminished appetite, thereby enhancing comfort for patients. Psychological care assists both patients and their families in coping with anxiety, depression, and despondency, facilitating acceptance of death and adjustment to new life circumstances. Social care focuses on maintaining positive relationships between patients and their families, ensuring supportive living environment, and alleviating economic burdens. Spiritual care respects individual religious beliefs, supports patients in finding meaning and value, and preserves dignity. Information care provides patients with accurate understanding of their illness and advance directives and empowers families with essential home care knowledge.

These interconnected needs underscore the holistic approach to enhance end-of-life quality, aligning with the principles of hospice care services. However, research on end-of-life care in rural China is still limited [15], and the role of village doctors in providing these services remains understudied.

To address this gap, our qualitative study aims to assess the participation of village doctors in end-of-life care across 38 villages in Henan and Shandong Provinces. By exploring the feasibility of integrating these healthcare providers into end-of-life care services, we offer practical recommendations for enhancing care delivery in rural China.

Method

Participants and procedure

We selected thirteen second- or third-year college students majoring in social work, sociology, and public health to serve as student interviewers. These students completed two comprehensive training sessions in June 2023, covering the research design, interview protocols, and techniques.

An initial draft of the interview guideline was formulated based on the constructs of the Multidimensional Supportive Care Needs Model [14], which emphasized holistic care, including physical, psychological, social, spiritual, information needs. The model provided a comprehensive framework that allowed us to address the multifaceted challenges experienced by the elderly population in rural end-of-life care. This draft was designed to capture these various dimensions, with particular attention to areas such as pain management, emotional well-being, family involvement, and the communication of care-related information. To ensure that the interview questions were contextually appropriate and culturally sensitive, the draft was carefully reviewed by a multidisciplinary group of researchers specializing in gerontology, public health, and social work.

Next, six face-to-face semistructured interviews were conducted by two student interviewers and CS to refine the interview guidelines (Supplemental Table 1). The questions were reordered and refined to adopt a more colloquial tone to accommodate the local dialect and culture. Most interviews took place between July and September 2023 in the student interviewers' hometowns. Purposive and snowball sampling methods were used to recruit village doctors through the student interviewers during their summer break in hometowns, enhancing sample diversity and reducing interview barriers. The student interviewers' familiarity with rural society dynamics, ability to assimilate within the research setting, and proficiency in communicating in the local dialect facilitated rapport-building with village doctors.

Eligibility criteria required respondents to be a doctor in a local clinic or town clinics, have experience caring for dying patients, and have at least five years of health-related/medical practices in village. The study focused on end-of-life care, a priority given the unique circumstances of patients and families returning from urban hospitals with terminal diagnoses (life expectancy ≤ 6 months) and relying on village doctors as primary caregivers.

In Henan and Shandong Provinces, each village typically has at least one medical clinic staffed by village doctors. The student interviewers approached village doctors in their local areas and obtained oral consent before each interview. Verbatim transcripts were sent to CS for evaluation and feedback. Although data saturation was

approach after the 13th interview, we continued interviewing to explore nuanced perspectives and capture diversity across different villages. Most interviews took place in village clinics or the village doctors' home and lasted between 20 and 58 min.

Adopting a phenomenological approach [16], this methodology allowed for an in-depth exploration of the experiences of this population within a specific context. Meanwhile, student interviewers were also instructed to write reflexive field notes after each interview, reflecting on their positionality and the interview process. Additionally, debriefing sessions were held to discuss challenges, and common themes encountered during interviews. The study was designed and developed following in accordance with the consolidated criteria for reporting qualitative research (COREQ) [17].

Data analysis

All interviews were audio-recorded and transcribed verbatim by student interviewers, supplemented by field notes. The content validity of the translations was cross-checked against field notes and transcripts by CS, FM, & HX. Thematic analysis was employed via a data reduction approach to organize themes relevant to the research question [18, 19]. Major themes were identified, refined, and specified, with selected quotes used to illustrate key findings. Chinese transcripts were selectively translated into English for data presentation.

Research ethics

The study was approved by the Institutional Review Board (IRB) at Henan Normal University in China (CSA2023001) and adhered to rigorous ethical standards. The student interviewers elicited informed consent and minimized harm during recruitment. The respondents' identities and their villages were anonymized to protect confidentiality.

Results

Demographic characteristics

Table 1 presents the demographic characteristics of the study participants. A total of 46 village doctors, aged 35–78 years, from 38 towns and villages in Henan ($n = 19$) and Shandong ($n = 19$) Provinces participated. The sample included 32 males (69.6%), with an average of 29.2 years of professional practice.

Most doctors employed a combination of Western and Chinese medicine, while four exclusively practiced traditional Chinese medicine. With respect to education, 31 respondents had completed high school or less, 13 had vocational or junior college education, and 2 held bachelor's degrees or higher.

Thematic analysis revealed five key themes in the doctors' service experiences, reflecting a caregiving approach

Table 1 Participant demographics (N=46)

Variable	N (%)
Age in years, median (range)	52.7 (35–78)
Gender	
Male	32 (69.6)
Female	14 (30.4)
Education	
≤ High school	31 (67.4)
Vocational/junior college degree	13 (28.3)
Bachelor's degree or above	2 (4.3)
Years of practice	29.2 (12–62)
Major/types of medical practices	
Combination of Chinese and Western medicine	42 (91.2)
Chinese traditional	2 (4.4)
Western medicine	2 (4.4)

shaped by local kinship, social obligations, and family requests rather than a standardized model of end-of-life care.

Theme 1: symptom management as central to end-of-life care

Symptom management was identified as a critical theme in end-of-life care provided by our respondents. Typically, terminally ill patients discharged from urban hospitals with limited treatment options often return home to spend their final days peacefully, reflecting the cultural tradition of “falling leaves returning to their roots”. In this context, village doctors play a pivotal role in managing symptoms through home visits.

Village doctors frequently encounter challenges in pain management due to a lack of authorization to prescribe narcotic drugs. Patients often rely on higher-level hospitals for such medications. Two examples from Li and Zhou illustrate this issue:

“Many patients who came to our village health clinic were no longer accepted by hospitals. Their days were numbered after being ‘sentenced to death’ by the hospitals. All I can do was to give them painkillers or advise their family to take the case to a higher-level hospital for injections.” (Li, 18 years of practice).
“Since we do not have a license to handle narcotic analgesics, we mainly use over-the-counter pain relievers.... I explained to the family members that they could go to the hospitals and ask the doctors to prescribe narcotic analgesics. However, I can only give you a shot at home.” (Zhou, 47 years of practice).

To manage frailty caused by end-of-life anorexia or disease-induced syndromes, respondents regularly administered nutritional injections (e.g., albumin, lipid emulsion, and amino acids) and traditional Chinese herbal remedies during home visits.

“There was an elderly man who had terminal-stage esophageal cancer. He was bony, and it was heart-wrenching to watch.... I prescribed some nourishing and tonifying Chinese herbs. Combining Chinese and Western medicine treatments, we observed some positive effects.” (Shi, 28 years of practice).

Traditional Chinese medicine serves as a source of hope and comfort for end-of-life patients and their families, offering therapeutic benefits through acupuncture, massage, and moxibustion to alleviate pain and improve overall well-being.

Village doctors also mentioned their involvement in daily care, such as debridement for bedsores and changing catheters and dressings, which are crucial but often unfamiliar to families.

“Some patients returned from hospitals with urinary catheters, so we either removed them or replaced them with new catheters. Other patients had sutures or stitches that needed to be changed, so we replaced the dressings and threads.” (Su, 35 years of practice).

Despite their primary responsibility for pain reduction and symptom management, three respondents explicitly expressed reluctance to treat terminally ill patients due to fear of medical disputes and legal repercussions. Yun (22 years of practice) stated, “I worry about medical disputes. Once, a patient was almost at the end, and the family asked me to check on them. Initially, I did. However, people in the village told me not to do it. Since then, when someone is in such a critical condition, I do not go anymore. If I cannot give them a definite answer, if something goes wrong, it is my fault. Usually, in such cases, I just tell them to go to the hospital”.

Notably, one respondent indirectly referenced experiences related to assisted suicide, though the sensitivity of the topic limited further discussion. They described a case involving an elderly patient who had suffered a cerebral hemorrhage, leading to partial paralysis. When the hemorrhage reoccurred, both the patient and her family endured significant suffering. This conversation was documented in filed notes; however, when probed further, this respondent declined to elaborate. During recruitment, several interview requests were also declined due to the sensitivity of end-of-life care, with village doctors citing fears of legal repercussions from patients’ families. The absence of clear policies and regulations on end-of-life care in rural China amplifies these challenges, exposing village doctors to legal risks. Limited access to essential medicines and inconsistent medical protocols further complicates the provision of effective pain management and comprehensive care in rural settings.

Theme 2: verbal consolation as ancillary services

Our respondents offered emotional support to patients and their families, addressing various psychological stresses, such as death anxiety and caregiver burdens. However, their ability to provide emotional comfort is often constrained by cultural norms or local customs.

Within the cultural context of “cherishing life and avoiding death”, many respondents avoided directly discussing terminal illnesses to alleviate patients’ anxiety. Many patients, especially elderly individuals, were unaware of their illness, and their families were unwilling to disclose it. As a result, village doctors offered limited psychological relief and spiritual companionship, often providing comforting words to encourage patients to eat and drink.

“I focus mainly on comforting the emotions of patients and their families, avoiding putting psychological pressure on patients. I encourage them to eat and drink more to replenish their energy. I reassure patients with words such as, ‘It is okay, you will be better in a few days, just relax.” (Zhou, 47 years of practice).

This approach reflected a cultural taboo against openly discussing death, leading patients to be unaware of their prognosis. Despite this, patients exhibited behaviors that indicate their awareness of declining health, such as refusing treatment or expressing anxiety.

“I served an elderly person who was particularly afraid of dying. He would tightly grasp onto anything he could hold and keep his eyes open, even when he needed to rest, because he was afraid.... I would certainly comfort him by saying, ‘It is okay; you can live for a long time.” (Chen, 22 years of practice).

Despite these challenges, the respondents recognized the importance of patient-centered care and empathy. They emphasized the need to support patients and their families emotionally, guiding them toward acceptance and comfort during the end-of-life process.

“I have to be careful with my choice of words, learn to listen to the patient’s feelings, and show empathy. When dealing with family members, they also need to accept reality and not blame others. Instead, they should focus more on how to make the patient’s last days as comfortable as possible so that the patient can leave this world without fear, pain, or regret.” (Chu, 25 years of practice).

In summary, while facing significant cultural and communication challenges, village doctors strive to provide

essential emotional support to patients and their families, aiming to increase their quality of life and ensure a dignified end-of-life experience.

Theme 3: social support and economic assistance

In rural China, village doctors are deeply embedded in the sociocultural fabric of their communities. Consequently, their role in social welfare primarily involves providing direct and indirect economic support to terminally ill patients. Some respondents helped with medical documentation for illness subsidies and facilitated elderly certification for free healthcare services and subsidized healthcare services.

“If families encounter financial difficulties, our health center communicates with the village party branch to allocate funds from the village” (Cao, 30 years of practice).

They also support family caregivers, reducing family conflicts and stress by encouraging companionship and understanding.

“I would tell the patients’ families that the best comfort is companionship, allowing the patients to feel the warmth and happiness brought by their loved ones. This could make the families feel better as well. Similarly, I would also advise patients to complain less about their families and show more understanding.” (Chen, 22 years of practice).

Some village doctors also participated in funeral ceremonies, blending their medical roles with local customs. They often confused end-of-life care with funeral arrangements and managed ceremonies to preserve traditions and avoid excessive spending. Zhang, who served as both a village official and a village doctor, was responsible not only for medical care but also for managing ceremonial events in the village. He remarked:

“Often, we rely on rural doctors for managing these ceremonies, as they are usually around and know the local customs well.... In rural areas, funeral arrangements need to be managed collectively.... We generally advocate for ‘nurturing during life and simplicity in death,’ ensuring that patients eat well while alive and have modest funerals after passing.” (Zhang, 23 years of practice).

Zhang referred to “end-of-life care” as the attention village officials paid to the funeral ceremonies of terminally ill patients. By managing these ceremonies centrally, they preserve local customs and culture while mitigating excessive spending and competition. Therefore, in

addition to assisting economically disadvantaged terminally ill patients in applying for subsidies to alleviate family financial burdens, village doctors do not engage in other social care services.

Theme 4: absence of spiritual care

Spiritual care is notably absent in the end-of-life care services provided by village doctors. The respondents viewed spiritual care primarily as respecting patients' religious beliefs or customs, often involving unconventional methods such as eating "sacred" animals or drinking "holy" water. Village doctors typically refrained from integrating spirituality into their care practices to avoid conflict and respect patient choices.

"I do not agree with using certain rituals to treat illnesses, but I will also not intervene as respect....I once had a patient who believed his illness required him to consume geckos -five of them - and drink gecko blood....No matter what you say, he insists he's right. If you try to argue too much, he will think you're delaying his treatment. Therefore, I did not interfere even though I do not agree with him." (Zheng, 24 years of practice).

Village doctors are willing to cooperate with spiritual practices if they do not harm, often providing support for practices such as bible reading and prayer. However, they acknowledged that these practices offered mainly psychological comfort rather than medical benefits.

"Christian families often read the Bible and pray to Jesus beside the patient, hoping to reduce their suffering and help them go to heaven.... There are also unconventional treatments, such as drinking water boiled with frogs or iron tree leaves.... We cannot stop them, but we need to explain that it might not have any real effect and is more for psychological comfort." (Wei, 23 years of practice).

Interestingly, a few village doctors noted that spiritual support, such as embracing Christianity, could positively impact patients' emotional well-being and even influence their physical condition.

"Some patients may be medically predicted to live for a year, but with a strong spiritual foundation and the will to live, they could live for three years without any issues. This situation is quite common; psychological factors are key in this context." (Zheng, 24 years of practice).

Overall, while spiritual support is significant for end-of-life care, village doctors often lack expertise and

resources to incorporate it effectively due to cultural, social, and political constraints.

Theme 5: lack of informational resources and support

Village doctors encounter numerous challenges when communicating with terminally ill patients and their families. Influenced by poverty, family dynamics, and traditional beliefs, our respondents often provided informal assessments while avoiding the disclosure of terminal diagnoses directly to patients. Instead, they typically first informed family members and determined their readiness before discussing the illness's severity with the patient.

"We usually inform the family members about the patient's condition first, and after discussing with them... In most cases, we will tell the patient who the condition is not as serious as it actually is to reduce their psychological burden." (Xie, 26 years of practice).

Despite efforts to offer comfort, such reassurance was often inadequate. Village doctors must carefully manage their communication to balance hope with realism, as overoptimism can lead to greater distress if the patient's condition worsens, as illustrated by Sun's observation.

"As long as the condition does not continue to deteriorate, they believe you in the short term. However, if you keep saying these things and the condition continues to deteriorate, they will figure it out themselves." (Sun, 24 years of practice).

In cases where doctors had established closer relationships with patients, they focused on preparing families both practically and psychologically for the patient's death. This preparation involved assisting families with arrangements such as funeral planning, which could be challenging in rural settings.

"Before the patient passes away, when you see that the patient is no longer able to recover, beyond saving, you talk to the family first. You prepare them mentally, explaining that the patient cannot be brought back, and help them make appropriate and rational arrangements for what comes next.... We rarely discuss these things with the patient." (Zhou, 47 years of practice).

The guidance provided by village doctors mainly includes care instructions, symptom management, and end-of-life preparation. Given the limited medical resources and low health literacy in rural areas, doctors play a crucial role

in educating families on caregiving practices and the use of medical devices. He highlights the importance of clear explanations to help families manage care and prevent complications.

Discussion

This qualitative study highlights the essential role of village doctors in rural China's end-of-life care. They focus on symptom management and basic medical care, bridging some of the gaps between urban and rural end-of-life care services. However, strict narcotic regulations and local cultural barriers (e.g., the custom of spending their final moments at home “落叶归根”; traditional family values surrounding death and dying) that limit the disclosure of medical conditions impede effective pain relief and psychological support, leading to suboptimal care. Despite these challenges, village doctors provide vital emergency care and culturally sensitive services that are both accessible and sustainable within their communities.

Village doctors' efforts in symptom management and basic care address disparities in quality of end-of-life care between urban and rural areas. Restrictions on narcotic drugs and inadequate infrastructure, such as a lack of refrigeration, hinder effective pain management [6, 7]. These limitations highlight the disparity in end-of-life care quality between rural and urban settings. Village doctors also play a crucial role in providing care to patients deemed “beyond treatment” by larger hospitals, offering around-the-clock support that is particularly valuable for families with limited resources. Their services are tailored to local cultural contexts, making them accessible and sustainable.

However, the poor quality of death in rural areas is exacerbated by a limited understanding of end-of-life care and health knowledge among residents [5]. This lack of comprehensive care, along with limited involvement in addressing psychological and spiritual distress, further complicates their efforts. The concept of “total pain” [20] includes economic pain, reflecting the financial burden on rural families. Discussions of “physician-assisted suicide” among some village doctors underscore the urgent need for improved end-of-life care services and highlight the ethical and legal dilemmas faced in these complex situations.

Our findings show that village doctors play a limited role in addressing psychological pain, largely because “familialism in medical decision-making” is prevalent in rural areas [5, 7, 8, 21]. Families often withhold the true nature of the illness from patients to “protect” them, and village doctors typically follow this practice, providing minimal direct psychological support. Instead, their focus is on patients' daily needs, such as food and sleep. This approach can increase patient anxiety and prevent meaningful farewells, leading to regrets [22]. Training

township and village healthcare personnel could enhance these services.

Village doctors offer unique advantages due to their deep community ties and understanding of local customs. Their familiarity with rural life allows them to provide culturally sensitive care and build trust with patients and families. This trust fosters better acceptance of care and ensures continuity in home care. Compared to urban hospitals, village doctors also offer more cost-effective services as their services incur lower personal costs and rely on limited resources, reducing financial strain on patients. Engaging them in palliative care could significantly improve the quality of death for rural residents, promoting equity and accessibility in healthcare.

A comparison with village doctors in other countries could offer valuable insights into the challenges and successes of rural healthcare delivery in similar settings. For instance, in countries like Bangladesh and India, village doctors or community health workers play a crucial role in primary healthcare, often operating as the first point of contact in underserved areas [23, 24]. In both contexts, they are responsible for a range of services, from basic medical care to health education and disease prevention, similar to the roles observed in rural China. However, variations in healthcare infrastructure, training opportunities, and government support highlight significant differences in the effectiveness and scope of care provided. By examining the experiences of village doctors across different countries, we can better understand how systemic factors influence their ability to meet the complex health needs of rural populations.

Implications

To improve end-of-life care services in rural China, collaboration with village doctors should be strengthened and include multidisciplinary teams involving social workers, nursing homes, family members, and urban hospitals. Cultural initiatives should focus on enhancing basic health education, access to social services, and death education in rural communities. These efforts will help villagers understand the value of end-of-life care in improving quality of life for terminally ill patients and supporting families in bereavement. Policy changes are needed to relax narcotic drug regulations and invest in infrastructure and training for village doctors [22]. Improving their skills in pain management, psychological support, and spiritual care, while raising awareness about hospice and palliative care, will lead to more effective services and a better quality of death for patients in rural areas.

Limitations

There are a few limitations that need to be highlighted. First, interviews at village clinics were often interrupted

by patient visits, affecting the depth and continuity of the interviews and the privacy of the discussions. For many student interviewers, their first qualitative interviews limited their ability to delve deeper into certain topics. Additionally, ethical and legal dilemmas surrounding certain topics (e.g., cultural taboos of death and physician-assisted suicide) prevented detailed exploration despite their contentious yet analytically rich potential for future research.

Moreover, a comprehensive understanding of what constitutes a good death and quality of end-of-life care in rural settings requires perspectives from both villagers and families of patients. However, students also noted villagers' enthusiasm in sharing stories about their relationships with village doctors during medical visits (as mentioned by 5 respondents). In contrast, 14 respondents mentioned that many village doctors were reluctant to discuss end-of-life care due to cultural taboos and misconceptions about end-of-life care, which affected the effectiveness and depth of the interviews. Further studies should address these limitations and explore ways to engage village doctors more openly in discussions about end-of-life care.

Conclusion

In conclusion, while village doctors are a critical resource for end-of-life care in rural China, their capacity to provide comprehensive care is limited by a range of factors. Addressing these challenges requires concerted efforts to develop and implement policies that support their training and protect them from legal risks, as well as initiatives to foster open communication about end-of-life issues within rural communities. By strengthening the support system for village doctors, it is possible to improve the quality of end-of-life care available to terminally ill patients in rural China, as well as improve death education in rural areas.

Supplementary Information

The online version contains supplementary material available at <https://doi.org/10.1186/s12904-025-01755-w>.

Supplementary Material 1

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Author contributions

CS: conceptualization, methodology, data curation and analysis, supervision, writing, editing MF: coordination, data curation and analysis, writing, editing HX: conceptualization, methodology, data curation and analysis, writing, editing.

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Data availability

The data supporting this study cannot be made available due to the ongoing of a larger research project.

Declarations

Ethics approval and consent to participate

This study was approved by the Institutional Review Board of Henan Normal University, China.

Competing interests

The authors declare no competing interests.

Conflict of interest

The authors have no relevant financial or non-financial interests to disclose.

Consent to participate

Oral informed consent was obtained from all respondents in the study.

Consent for publication

We provide our consent for the publication of this manuscript should it be accepted for publication.

Code availability (software application or custom code)

Not applicable.

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References

1. Lu Y, Gu Y, Yu W. Hospice and palliative care in China: development and challenges. *Asia-Pacific J Oncol Nurs*. 2018;5(1):26–32.
2. Ma S. China populations: US\$970 billion 'silver economy' deemed pivotal to overcoming pyramid paradox. *South China Morning Post. Economy/Economic Indicators*. [10 July 2024]. Available from: https://www.scmp.com/economy/economic-indicators/article/3253473/china-population-us970-billion-silver-economy-deemed-pivotal-overcoming-pyramid-paradox?campaign=3253473%26;module=perpetual_scroll_0%26;pgtype=article
3. Sun D, Li H, Cao M, He S, Lei L, Peng J, Chen W. Cancer burden in China: trends, risk factors and prevention. *Cancer Biology Med*. 2020;17(4):879.
4. Wei W, Zeng H, Zheng R, Zhang S, An L, Chen R, Wang S, Sun K, Matsuda T, Bray F, He J. Cancer registration in China and its role in cancer prevention and control. *Lancet Oncol*. 2020;21(7):342–9.
5. Li Z, Fang L. Dilemma and way out for hospice care in rural China. *J Minzu Univ China*. 2022;49(3):109–16. In Chinese.
6. Zhou K, Luo Z, Jiang J, Li J, Shou F, Fang H, Zhou K, Li P. Study on hospice care of terminally ill cancer patients in rural areas. *World Latest Med Inform*. 2017;17(29):11–3. In Chinese.
7. Zhao S, Jing J. Línzhōng Guānhuái Shìjiāo Xià Mínzú Rónghé guāilǚxíng Zhī Tàn suǒ [临终关怀视角下民族融合规律性之探索]. *Qinghai Social Sci*. 2023;5:133–40. In Chinese.
8. Shi R. Ethical prospects of hospice in Chinese rural families in 21st century. *Acta Academiae Medicinae Suzhou*. 2000;20(2):6–8. In Chinese.
9. Zhang D, Unschuld PU. China's barefoot Doctor: past, present, and future. *Lancet*. 2008;372(9653):1865–7.
10. Hu D, Zhu W, Fu Y, Zhang M, Zhao Y, Hanson K, Martinez-Alvarez M, Liu X. Development of village Doctors in China: financial compensation and health system support. *Int J Equity Health*. 2017;16:1–7.
11. Shi R. The measure of investigation and development of Shanghai dying concern hospital. *Chin Med Ethics*. 1992;4:34–7. In Chinese.
12. Li Z, Zhao D, Li M, Jia C, Tu A. Analysis of multiple practice paths of rural hospice care. *Med Philos*. 2022;43(4):31–4. In Chinese.
13. Jing J. Medical social ecology viewed from death narrative. *Thinking*. 2022;48(1):105–17. In Chinese.

14. Hui D, Hannon BL, Zimmermann C, Bruera E. Improving patient and caregiver outcomes in oncology: Team-based, timely, and targeted palliative care. *Cancer J Clin*. 2018;68(5):356–76.
15. Zhu S, Zhu H, Zhang X, Liu K, Chen Z, Yang X, Sun C, Xie W, Xu Q, Li W, Pang D, Cui Y, Wang H. Care needs of dying patients and their family caregivers in hospice and palliative care in Mainland China: a meta-synthesis of qualitative and quantitative studies. *BMJ Open*. 2021;11(11), e051717.
16. Swinton J, Mowat H. Practical theology and qualitative research. London, UK: SCM; 2006.
17. Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *Int J Qual Health Care*. 2007;19(6):349–57.
18. Braun V, Clarke V. Using thematic analysis in psychology. *Qualitative Res Psychol*. 2006;3(2):77–101.
19. Braun V, Clarke V. Supporting best practice in reflexive thematic analysis reporting in palliative medicine: A review of published research and introduction to the reflexive thematic analysis reporting guidelines (RTARG). *Palliat Med*. 2024;38(6):608–16.
20. Saunders C. Nature and management of terminal pain. In: Shotter EF, editor. *Matters of life and death*. London: Dartman, Longman, and Todd; 1970. pp. 15–26.
21. Jeon E, Jing J. A study of end-of-life care communication and decision-making in China by exploring filial piety and medical information concealment. *Asian J Med Humanit*. 2023;2(1):20230006.
22. Wang J. How to have a good death: narrative dilemmas and narrative reconstruction in patients with advanced cancer. *Social Constr*. 2023;4:72–84. In Chinese.
23. Mahmood SS, Iqbal M, Hanifi SM, Wahed T, Bhuiya A. Are village Doctors' in Bangladesh a curse or a blessing? *BMC Int Health Hum Rights*. 2010;10:1–0.
24. Mayank G, Ankita K, Joshy LE, Singh S, Lal B, Choudhary S, Marcus S, Grewal A, Goyal LD, Kakkar R. Community-based palliative care needs and barriers to access among cancer patients in rural North India: A participatory action research. *BMC Palliat Care*. 2024;23(1):240.

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