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Observational Study

Survey on hospice care attitude of family members of advanced cancer patients at different ages

Xiao-Li Liu, Lun-Lan Li

Specialty type: Medicine, research and experimental**Provenance and peer review:** Unsolicited article; Externally peer reviewed.**Peer-review model:** Single blind**Peer-review report's classification****Scientific Quality:** Grade C**Novelty:** Grade B**Creativity or Innovation:** Grade B**Scientific Significance:** Grade B**P-Reviewer:** Omori T, Japan**Received:** April 24, 2024**Revised:** May 20, 2024**Accepted:** June 6, 2024**Published online:** July 26, 2024**Processing time:** 68 Days and 0.7 Hours**Xiao-Li Liu**, Department of Oncology, Hefei Third People's Hospital, Hefei 230000, Anhui Province, China**Xiao-Li Liu**, Department of Nursing, School of Nursing, Anhui Medical University, Hefei 230000, Anhui Province, China**Lun-Lan Li**, Department of Human Resources, The First Affiliated Hospital of Anhui Medical University, Hefei 230000, Anhui Province, China**Corresponding author:** Lun-Lan Li, MNurs, Associate Chief Nurse, Department of Personnel Office, The First Affiliated Hospital of Anhui Medical University, No. 218 Jixi Road, Shushan District, Hefei 230000, Anhui Province, China. liusanyyuan@163.com**Abstract****BACKGROUND**

Hospice care plays an important role in improving the quality of life of advanced cancer patients, but controversy remains over whether age affects the attitudes of family members toward hospice care.

AIM

To investigate the attitudes of family members of advanced cancer patients of different ages toward hospice care.

METHODS

The study participants were 175 family members of patients with advanced cancer from January 2020 and October 2022. The participants were divided into youth (< 40 years, $n = 65$), middle-aged (40–60 years, $n = 59$), and elderly (> 60 years, $n = 51$) groups. Researchers investigated and compared the degree of awareness regarding hospice care, attitudes, and whether the family members of patients would choose hospice care.

RESULTS

Among the family members of 175 patients, approximately 28% (49/175) were aware of hospice care. Awareness of hospice care, the proportion of hospice care acceptance and adaptation attitudes, and the proportion of those who chose hospice care in the youth group were higher in the middle-aged and elderly groups ($P < 0.05$). No statistically significant difference was found in these three indicators between the middle-aged and elderly groups ($P > 0.05$). Hospice care

was chosen mainly to relieve pain and reduce unnecessary treatment, whereas the reasons for not choosing hospice care were mainly distrust and ethical concerns.

CONCLUSION

The family members of patients with advanced cancer had relatively low awareness of hospice care, while youth had a higher awareness of hospice care, acceptance, and adaptation attitudes, and were more willing to choose hospice care.

Key Words: Hospice care; Attitude; Advanced cancer; Family members; Age; Awareness; Acceptance

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Core Tip: Hospice care refers to providing physical, psychological, spiritual, and humanistic care services for end-stage or elderly patients before their death, which can help alleviate their pain and improve their quality of life. However, the family members of patients generally lack awareness of hospice care, and age is an important factor affecting their attitude towards hospice care. We found that compared to middle-aged and elderly family members, young family members have a higher awareness, acceptance, and compliance attitude towards hospice care, and are more willing to choose hospice care.

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INTRODUCTION

Cancer is a major cause of death worldwide. For patients in the late stage of cancer, severe cancer pain not only reduces their quality of life but also brings great psychological stimulation and family burden both to them and to their families[1, 2]. Despite continuous improvement in medical technology in China and significant progress in cancer treatment technology in recent years, extending the survival cycle of patients with advanced cancer remains difficult. In clinical practice, the purpose of treatment and nursing is to reduce pain[3,4]. Hospice care refers to providing physical, psychological, spiritual, and humanistic care services for end-stage or elderly patients before their death, controlling pain and discomfort symptoms, improving the quality of life, and helping patients pass away comfortably, peacefully, and with dignity[5,6]. However, Zheng *et al*[7] showed that residents generally lack awareness of hospice care. Currently, controversy remains over whether age affects the attitudes of family members of patients with advanced cancer toward hospice care. In this study, 175 family members of advanced cancer patients admitted in the oncology department of our hospital from January 2020 to October 2022 were selected as survey participants to investigate their attitudes toward hospice care at different ages.

MATERIALS AND METHODS

General information

As study participants, we selected 175 family members of advanced cancer patients in the oncology department of our hospital from January 2020 to October 2022. According to the age of the patient's family members, they were divided into a youth group (< 40 years old, a total of 65 cases), a middle-aged group (40–60 years old, a total of 59 cases), and an elderly group (> 60 years old, a total of 51 cases). The patient and their family members are aware of this study and had signed informed consent forms; The Ethics Committee of our institution had approved this study. The inclusion guarantee was as follows: (1) The patient had advanced cancer and an expected survival period of > 6 months; (2) One patient corresponded to one family member and was the primary caregiver or caregiver of the patient during hospitalization; (3) The patient had the ability to understand, communicate, and communicate normally; and (4) The patient was ≥ 20 years old. Exclusion criteria were as follows: (1) Individuals with a low degree of cooperation; and (2) Individuals with a history of mental illness or mental illness. General information on the three groups is as follows: 31 males and 34 females were in the youth group, with an age range of 20 to 39 years old and an average age of (31.25 ± 8.55) years; in terms of their education level, 9 individuals had completed primary school or below, 18 had completed junior high school; 20 had completed high school or vocational school; and 18 had completed college or above. A total of 26 males and 34 females were classified in the middle-aged group, with an age range of 40 to 59 years old and an average age of (50.13 ± 7.11) years; in terms of their education level, 12 had completed primary school or below; 23 had completed junior high school; 15 had completed high school or vocational school; and 9 had completed college or above. Twenty-four males and 27 females were in the elderly group, with an age range of 62 to 79 years and an average age of (68.59 ± 7.82)

years; in terms of education level, 19 individuals had completed primary school or below; 15 had completed junior high school; 11 had completed high school or vocational school; and 6 had completed college or above.

Methods

Before the investigation, investigators needed to receive training on hospice care, investigation methods, and techniques for patients with advanced cancer. Through one-on-one questioning, the survey was conducted to determine the following: (1) The awareness of hospice care among the family members of advanced cancer patients. By asking the patient's family members and evaluating whether they had heard of hospice care, the survey was divided into three categories: Know, understood some, and not heard of; (2) Our hospital designed a questionnaire on the attitudes of family members of late-stage cancer patients toward hospice care. The content includes the patient's basic situation and personal attitudes toward hospice care, with a total score of 100 points. The acceptance and compliance scores were greater than 80 points; the attitude was ambiguous between 50–80 points; and the rejection and rejection scores were less than 50 points. The questionnaire was filled out by the patient's family members after the investigators explained the purpose and significance of the survey, as well as the filling method; and (3) The scale for whether family members of late-stage cancer patients will choose hospice care and reasons: This scale is filled out by the patient's family members themselves and is divided into two items: "Will choose" (reasons include alleviating pain, providing medical information, providing funeral services, and avoiding unnecessary treatment) and "not choose" (reasons include distrust, not delaying patient life, not being popular enough, and related to ethics), and each item has a corresponding reason, the patient's family selects the reason based on their own choice.

Observation indicators

Observe and compare the awareness of hospice care among the family members of three groups of patients.

Observe and compare the attitudes of family members of three groups of patients toward hospice care.

Observe and compare whether the family members of the three groups of patients will choose hospice care.

Statistical analysis

The data for this study were processed using SPSS 22.0 statistical software, and econometric data that conform to normal distribution were represented by mean \pm SD, and intergroup comparisons were conducted using *t*-tests. Count data were represented by (%), while intergroup comparisons were made using χ^2 Inspection, Inspection Level $\alpha = 0.05$. $P < 0.05$ was considered a statistically significant difference in comparison.

RESULTS

Comparison of the awareness of hospice care among the family members of three groups of patients

The awareness of hospice care among the family members of the 175 advanced cancer patients was 28.00% (49/175). The awareness of hospice care in the youth group was higher than that in the middle-aged and elderly groups ($P < 0.05$), and no statistically significant difference was observed between the middle-aged and elderly groups ($P > 0.05$), as shown in Table 1.

Comparison of attitudes of family members of three groups of patients toward hospice care

The proportion of acceptance and compliance attitudes toward hospice care in the youth group was higher than that in the middle-aged and elderly groups ($P < 0.05$), and no statistically significant difference was observed between the middle-aged and elderly groups ($P > 0.05$), as shown in Table 2.

Comparing whether three groups of patients would choose hospice care

The proportion of participants choosing hospice care was higher among the youth group than among the middle-aged and elderly groups ($P < 0.05$), and no statistically significant difference was observed between the middle-aged and elderly groups ($P > 0.05$), as shown in Table 3.

Reasons for choosing or not choosing

The main reasons for choosing hospice care are to alleviate pain and reduce unnecessary treatment, while the main reasons for not choosing hospice care are lack of trust and ethical considerations; the data are shown in Table 4.

DISCUSSION

In 2019, research suggested that the total number of deaths from malignant tumors among people aged 25 or above in China was 2.69 million, including 740000, 1.091 million, 198000, and 728000 deaths from malignant tumors due to population aging, population growth, age incidence rate, and mortality of malignant tumors, respectively[8]. In the context of an aging society, the number of cancer patients has increased, and the cancer mortality rate is relatively high. Hospice care is a common nursing service for advanced cancer patients. Yao and Huang[9] indicated that hospice care can effectively improve the negative emotions of advanced cancer patients and have a positive effect on their negative

Table 1 Comparison of awareness of hospice care among family members of three groups of patients, n (%)

Groups	n	Know	Understood some	Not heard of
Youth group	65	20 (30.77)	27 (41.54)	18 (27.69)
Middle-aged group ¹	59	26 (44.07)	12 (20.34)	21 (35.59)
Elderly group ¹	51	18 (35.29)	10 (19.61)	23 (45.10)
χ^2		10.747		
P value		0.030 ^a		

^a $P < 0.05$.¹Compared to youth group.**Table 2 Comparison of attitudes of family members of three groups of patients toward hospice care, n (%)**

Group	n	Accept and adapt	Ambiguous attitude	Not accepting or rejecting
Youth group	65	38 (58.46)	16 (24.62)	11 (16.92)
Middle-aged group ¹	59	20 (33.90)	24 (40.68)	15 (25.42)
Elderly group ¹	51	16 (31.37)	13 (25.49)	22 (43.14)
χ^2	--	16.911		
P value	--	0.002 ^a		

^a $P < 0.05$.¹Compared to youth group.**Table 3 Comparison of whether three groups of patients would choose hospice care, n (%)**

Group	n	Choose	No choose
Youth group	65	41 (63.08)	24 (36.92)
Middle-aged group ¹	59	25 (42.37)	34 (57.63)
Elderly group ¹	51	20 (39.22)	31 (50.78)
χ^2	--	8.143	
P value	--	0.017 ^a	

^a $P < 0.05$.¹Compared to youth group.

psychological symptoms. Ye and Mao[10] found that hospice care can help alleviate the self-perceived burden of end-stage cancer patients, alleviate their fear and avoidance of approaching death, and improve their quality of life. These research findings indicate that hospice care has multiple positive effects among patients with advanced cancer. However, there is a certain relationship between whether advanced cancer patients receive hospice care and their family members, and the attitude of patient family members toward hospice care is influenced by factors such as age, family income, and educational level[11,12].

For the factors related to the attitudes of family members of advanced cancer patients toward hospice care, this study mainly investigates age. Comparison of the awareness and attitudes of family members of late-stage cancer patients at different age groups toward hospice care revealed that the awareness of hospice care among the family members of 175 late-stage cancer patients was 28.00% (49/175), and the awareness of hospice care in the youth group was higher than that in the middle-aged and elderly groups ($P < 0.05$). The proportion of acceptance and compliance attitudes toward hospice care in the youth group was higher than that in the middle-aged and elderly groups ($P < 0.05$). This result suggests that the awareness of hospice care among family members of late-stage cancer patients is relatively low. Compared with the families of middle-aged and elderly late-stage cancer patients, youth family members have a higher awareness of hospice care and a greater attitude of acceptance and compliance. Phongtankuel *et al*[13] reported a significantly negative correlation between the quality of life of family caregivers and the age of caregivers for end-of-life care patients. Hospice care is a humane and scientific care plan provided to patients with advanced cancer, which can alleviate patients' cancer

Table 4 Specific reasons, *n* (%)

Reasons	Number	Constituent ratio
Choose	89	
Relieve Pain		33 (37.08)
Provide medical information		21 (23.60)
Providing Funeral Services		8 (8.99)
Avoiding unnecessary treatment		25 (28.09)
No choose	86	
Distrust		28 (32.56)
Not delaying patient lifespan		17 (19.77)
Insufficient Popularization		16 (18.60)
Ethics related		23 (26.74)

pain and physical discomfort, improve their quality of life, enable them to accept death with dignity and peace and spend a meaningful remaining life[14,15]. However, the popularization of hospice care in China has been relatively slow, and most advanced cancer patients and their families have a low level of understanding of hospice care[16,17]. The families of youth have a relatively high level of education and a high acceptance of new things. When medical staff provide hospice care and health education, they can understand the purpose and significance of the care and thus have an attitude of understanding and acceptance. One study suggests that caregiver education level was strongly associated with hospice quality[18]. Meanwhile, compared with the families of middle-aged and elderly patients, the families of youth patients have more ways to receive external information and have a certain level of awareness of hospice care. The family members of youth patients who have a certain understanding of hospice care have a greater attitude of acceptance and adaptation to the care. This study also investigated whether family members of advanced cancer patients at different age groups would choose hospice care. The results showed that the proportion of youth choosing hospice care was higher than that of middle-aged and elderly groups ($P < 0.05$). This result suggests that, compared to family members of middle-aged and elderly patients, family members of youth patients are more likely to choose hospice care, which is related to the higher acceptance of hospice care by family members of youth patients[19]. In addition, although this study found that family members of youth patients have a positive attitude toward hospice care, their awareness of hospice care is low, and they opt against hospice care for reasons of lack of trust and ethical concerns. In this regard, strengthening health education regarding hospice care among family members of patients with advanced cancer is necessary to improve their understanding of and trust in hospice care. According to Shalev *et al*[20], it is necessary to enhance the knowledge and skills of caregivers in order to improve their caregiving abilities. Simultaneously, targeted health education can be conducted for family members of patients in different age groups to maximize their acceptance and promote the popularization and social acceptance of hospice care.

CONCLUSION

The findings of this study imply that family members of patients with late-stage cancer have relatively low awareness of hospice care. Compared with the family members of middle-aged and elderly patients with late-stage cancer, youth family members have a higher awareness of hospice care, a greater attitude of acceptance and compliance, and a greater willingness to choose hospice care. However, due to the small sample size of this study and the ongoing need to discuss the rationality of sample selection, more research sample sizes need to be included in the future to ensure sample diversity and further validate the conclusions of this study.

FOOTNOTES

Author contributions: Liu XL contributed to writing original draft, conceptualization, resources, supervision, methodology, formal analysis and validation; Li LL contributed to the investigation, software, data curation, writing review and editing.

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REFERENCES

- Amano K, Maeda I, Morita T, Masukawa K, Kizawa Y, Tsuneto S, Shima Y, Miyashita M. Beliefs and Perceptions About Parental Nutrition and Hydration by Family Members of Patients With Advanced Cancer Admitted to Palliative Care Units: A Nationwide Survey of Bereaved Family Members in Japan. *J Pain Symptom Manage* 2020; **60**: 355-361 [PMID: [32169541](https://pubmed.ncbi.nlm.nih.gov/32169541/) DOI: [10.1016/j.jpainsymman.2020.03.006](https://doi.org/10.1016/j.jpainsymman.2020.03.006)]
- Cai B, Zhu MJ. [Efficacy of hospice care based on analysis of psychological characteristics in patients with advanced cancer]. *Zhongguo Zhongliu Linchuang Yu Kangfu* 2022; **29**: 1141-1144 [DOI: [10.13455/j.cnki.cjcor.2022.09.30](https://doi.org/10.13455/j.cnki.cjcor.2022.09.30)]
- Xu DD, Ye S, Chen SH, Wang GA, Chen JX, Gao X. [Investigation on the current situation and influencing factors of attitudes and training needs of hospice care among nursing staff in hainan province]. *Zhongguo Yixue Lunxue* 2023; **36**: 57-63 [DOI: [10.12332/j.issn.2095-6525.2022.09.032](https://doi.org/10.12332/j.issn.2095-6525.2022.09.032)]
- Li CY, Liu MM, Wei YH, He LY, Zhang HZ. [Effect of palliative care on mental state, sleep quality and life quality of terminal cancer patients]. *Huli Yanjiu* 2021; **35**: 3188-3190 [DOI: [10.12102/j.issn.1009-6493.2021.17.036](https://doi.org/10.12102/j.issn.1009-6493.2021.17.036)]
- Chen DH, Fu LW, Lu C, Duan YH, Guan T, Cheng Y. [Study on hospice care intention and its influencing factors of Shenzhen residents]. *Xiandai Yufang Yixue* 2022; **49**: 2956-2962 [DOI: [10.20043/j.cnki.MPM.202110376](https://doi.org/10.20043/j.cnki.MPM.202110376)]
- Zheng LP, Lu ZQ, Huang Z, Zhang XJ. [Qualitative study on attitudes of advanced cancer patients and family caregivers towards information seeking for shared decision making in palliative care department]. *Hulixue Zazhi* 2022; **37**: 25-28 [DOI: [10.3870/j.issn.1001-4152.2022.08.025](https://doi.org/10.3870/j.issn.1001-4152.2022.08.025)]
- Zheng XY, Pan SH, Chen WQ, Chen CC, Chen YX, Wu DJ. [Survey on residents' cognition status and choice intention to hospice care]. *Zhongguo Yixue Lunxue* 2021; **34**: 1003-1009 [DOI: [10.12026/j.issn.1001-8565.2021.08.18](https://doi.org/10.12026/j.issn.1001-8565.2021.08.18)]
- Xia CF, Chen WQ. [Fractions and trends of cancer burden attributable to population ageing in China]. *Zhonghua Zhong Liu Za Zhi* 2022; **44**: 79-85 [PMID: [35073652](https://pubmed.ncbi.nlm.nih.gov/35073652/) DOI: [10.3760/cma.j.cn112152-20211012-00756](https://doi.org/10.3760/cma.j.cn112152-20211012-00756)]
- Yao F, Huang ZC. [The improvement of psychological status in patients with advanced tumors through palliative care]. *Neimenggu Yikedaxue Xuebao* 2020; **42**: 34-36 [DOI: [10.16343/j.cnki.issn.2095-512x.2020.s1.012](https://doi.org/10.16343/j.cnki.issn.2095-512x.2020.s1.012)]
- Ye PJ, Mao XF. [The impact of palliative care on the self perceived burden, life attitude, and quality of life of end-stage cancer patients]. *Yixue Linchuang Yanjiu* 2021; **38**: 625-627 [DOI: [10.3969/j.issn.1671-7171.2021.04.044](https://doi.org/10.3969/j.issn.1671-7171.2021.04.044)]
- Yoo SH, Lee J, Kang JH, Maeng CH, Kim YJ, Song EK, Koh Y, Yun HJ, Shim HJ, Kwon JH, Nam EM, Kang E, Choo J, Yun YH. Association of illness understanding with advance care planning and end-of-life care preferences for advanced cancer patients and their family members. *Support Care Cancer* 2020; **28**: 2959-2967 [PMID: [31768736](https://pubmed.ncbi.nlm.nih.gov/31768736/) DOI: [10.1007/s00520-019-05174-5](https://doi.org/10.1007/s00520-019-05174-5)]
- Zhen HL, Cheng QQ, Shen YY, Gong YW. [Needs of patients receiving hospice care at home: the countermeasures]. *Hulixue Zazhi* 2021; **36**: 19-22 [DOI: [10.3870/j.issn.1001-4152.2021.19.019](https://doi.org/10.3870/j.issn.1001-4152.2021.19.019)]
- Phongtankuel V, Reid MC, Czaja SJ, Teresi J, Eimicke JP, Kong JX, Prigerson H, Shalev A, Dignam R, Baughn R, Adelman RD. Caregiver-Reported Quality Measures and Their Correlates in Home Hospice Care. *Palliat Med Rep* 2020; **1**: 111-118 [PMID: [32856023](https://pubmed.ncbi.nlm.nih.gov/32856023/) DOI: [10.1089/pmr.2020.0055](https://doi.org/10.1089/pmr.2020.0055)]
- Lei SY, Wang Y, Xie J, Zhang XF, Qiao L, Bai T, Liu AL. [Impacts of multidisciplinary collaboration-based hospice care on negative emotions and psychological stress of main caregivers of cancer patients]. *Zhongguo Zhongliu Linchuang Yu Kangfu* 2021; **28**: 1071-1074 [DOI: [10.13455/j.cnki.cjcor.2021.09.13](https://doi.org/10.13455/j.cnki.cjcor.2021.09.13)]
- Yang S, Zhao HX, Niu XM, Chen C, Zhang WJ, Ge XH, Lu Y, Ma L, Shi XX, Yu DH. Hospice care resource utilization related to cancer management and hospice care physicians and nurses' occupational satisfaction: A survey from community healthcare institutions in shanghai's central districts. *Zhongguo Quankeyixue* 2021; **24**: 1541-1545 [DOI: [10.12114/j.issn.1007-9572.2021.00.138](https://doi.org/10.12114/j.issn.1007-9572.2021.00.138)]
- Zhang YL, Zeng Y. [Exploration of the psychological counseling effect of end-of-life care on patients with advanced malignant tumors and their families]. *Zhongguo Zhongliu Fangzhi Zazhi* 2020; **27**: 290-292 [DOI: [10.3969/j.issn.1006-7256.2017.13.011](https://doi.org/10.3969/j.issn.1006-7256.2017.13.011)]
- Peng PP. [The application of hospice care in advanced cervical cancer and its influence on the psychological stress and sleep quality of patients at the end of life]. *Shiyong Fuke Neifenmi Dianzizazhi* 2023; **10**: 121-123 [DOI: [10.3969/j.issn.2095-8803.2023.09.039](https://doi.org/10.3969/j.issn.2095-8803.2023.09.039)]
- Quigley DD, Parast L, Haas A, Elliott MN, Teno JM, Anhang Price R. Differences in Caregiver Reports of the Quality of Hospice Care Across Settings. *J Am Geriatr Soc* 2020; **68**: 1218-1225 [PMID: [32039474](https://pubmed.ncbi.nlm.nih.gov/32039474/) DOI: [10.1111/jgs.16361](https://doi.org/10.1111/jgs.16361)]
- Parast L, Tolpadi AA, Teno JM, Elliott MN, Price RA. Hospice Care Experiences Among Cancer Patients and Their Caregivers. *J Gen Intern Med* 2021; **36**: 961-969 [PMID: [33469741](https://pubmed.ncbi.nlm.nih.gov/33469741/) DOI: [10.1007/s11606-020-06490-x](https://doi.org/10.1007/s11606-020-06490-x)]
- Shalev A, Phongtankuel V, Reid MC, Czaja SJ, Dignam R, Baughn R, Newmark M, Prigerson HG, Teresi J, Adelman RD. Home Hospice Caregivers' Perceived Information Needs. *Am J Hosp Palliat Care* 2019; **36**: 302-307 [PMID: [30301363](https://pubmed.ncbi.nlm.nih.gov/30301363/) DOI: [10.1177/1049909118805413](https://doi.org/10.1177/1049909118805413)]



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