

In the Context of Integrated Healthcare and Nursing Services, the Study Explores the Production Dilemmas and Optimization of End-of-life Care Services in the Context of Aging Population in Guangxi - based on a Survey of an End-of-life Care Pilot Project in Guangxi

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Abstract: *With the continuous deepening of China's aging population, the number of the elderly has been increasing, and the mortality rate has been rising year by year. At the end of life, people often face psychological fear and physical pain. End-of-life care plays an important role in improving the quality of life of the elderly at the end of life. End-of-life care is an extremely important link in integrated healthcare and nursing services, and it is also an effective measure promoted by the state to cope with aging population. It aims to provide end-of-life care for the elderly in China and ensure the last leg of their life journey. This study takes an end-of-life care pilot project in Guangxi as an example and conducts a field survey on the implementation of end-of-life care services in relevant nursing homes. It also conducts semi-structured interviews with 13 end-of-life care workers and analyzes the data using Nvivo software. The study aims to explore the production dilemmas of end-of-life care services in the context of integrated healthcare and nursing services and propose relevant optimization measures.*

Keywords: End-of-life care; Integrated healthcare and nursing services; Production dilemm.

1. Introduction

In the guiding opinions on further promoting the development of the combination of medical care and old-age care, The State Council pointed out that promoting the combination of medical care and old-age care is an important measure to optimize the supply of elderly health and old-age services, and an important way to actively respond to the aging population and enhance the sense of gain and satisfaction of the elderly [1]. In December 2021, The State Council issued the "14th Five-Year Plan for the Development of the National Cause for Aging and the Elderly Service System" (Guofa [2021] No. 35), which clearly calls for the development of hospice services [2]. The establishment and improvement of hospice care service system is the inevitable requirement of healthy aging. According to the data of Guangxi Bureau of Statistics, by the end of 2020, the permanent resident population aged 60 and above in Guangxi will reach 8,363,800, accounting for 16.69% of the total resident population, among which the semi-disabled elderly population will reach more than 1.2 million [3]. Guangxi is the most populated area of ethnic minorities in our country, and its aging degree has exceeded the national average level. Therefore, exploring the dilemma and optimization path of hospice care service cooperation production under the background of the combination of medical and nursing care has positive significance for alleviating the pressure of aging on the elderly medical and nursing services in Guangxi.

2. The Necessity of Building Cooperative Production of Hospice Care Services Under

the Background of Combination of Medical and Nursing Care

China first proposed the concept of the combination of medical and nursing care in 2013, issued relevant special policies in 2015, and launched a national pilot in 2016, aiming to explore the integrated supply path and model for providing continuous services of "nursing, medical, health, nursing and health" for the elderly [4]. Hospice care refers to providing physical, psychological and spiritual care and humanistic care services for terminally ill or elderly patients before their death, controlling pain and discomfort symptoms, improving life quality, and helping patients die comfortably, peacefully and with dignity [5]. The connotation of the combination of medical care and nursing includes the content of "hospice care", which gives support to the elderly from different perspectives of "body, mental and psychological, social and soul". Hospice care is an important means of combining medical and nursing care. With the in-depth implementation of the national basic family planning policy and economic and social transformation, the function of family care is weakening, and the elderly's demand for professional care institutions and community services is increasing. In particular, the elderly over 80 years old with high incidence of chronic diseases urgently need systematic, comprehensive, convenient and low-cost medical services. The aging of population intensifies the shortage of medical and old-age care resources, and puts forward requirements for improving the allocation and utilization of social resources. The traditional nursing model of the aged can not meet the comprehensive nursing needs of the elderly. A new model of health care for the elderly must therefore be implemented.

However, the supply of medical and elderly care resources is inadequate and independent of each other to meet the needs of today's elderly. Therefore, it is very necessary to provide hospice and nursing care services for the elderly based on nursing homes.

3. Development Status of Hospice Care for Nursing Homes in Guangxi

From the perspective of service demand, according to the latest statistics released by the Ministry of Civil Affairs, by the end of 2023, the number of elderly people aged 60 and above in China has reached 280 million [6]. This data not only reveals the grim reality of China's aging population, but also highlights the urgent need for hospice services in society. According to the survey, about 70% of the elderly expressed a strong desire to receive professional and humanized hospice care services at the end of life. The continuous growth of this demand is not only a major challenge to the social service system, but also an important driving force for the improvement and development of China's pension and medical service system. From the number of service institutions, by the end of 2022, Guangxi has a total of 12,896 elderly service institutions and facilities, with a total of 272,000 elderly beds. Among them, 12,769 elderly care institutions were registered to provide accommodation, down 0.86% from 2021 and up 0.35% from 2020 [7]. From the perspective of service quality, under the guidance of policies, the quality of hospice care services in nursing homes has been significantly improved. Many institutions have introduced multidisciplinary teams, including doctors, nurses, psychotherapists, social workers, etc., to provide patients with comprehensive physical and mental social care. The doctor is responsible for assessing the patient's physical condition and developing a personalized treatment and care plan; Nurses are responsible for daily nursing and care work to ensure the comfort and safety of patients; Psychotherapists help patients and their families to relieve anxiety and fear and enhance courage and confidence in the face of life and death through psychological counseling and intervention; Social workers coordinate social resources to provide necessary help and support to patients and their families. In addition, the government has strengthened the supervision and evaluation of hospice care services in nursing homes to ensure the continuous improvement of service quality. Through regular inspection and evaluation, the government can timely understand the problems and deficiencies in the service process of various agencies, and provide targeted guidance and help.

3.1 Reasons for the Development of Hospice Care in Nursing Homes

There are multiple and complex reasons behind the rapid development of hospice care services in nursing homes. Among them: the aging trend of the population, the change of family structure, the improvement of the medical service system and policy support. As these factors continue to evolve, so will the need and importance of nursing home hospice services.

1) Population aging trend

With the aging trend becoming more and more obvious in our country, the number of the elderly population shows an increasing trend. Aging is not only an increase in number, but also means that the health needs and service needs of the elderly population are diversified and complicated. According to relevant data, by the end of 2023, the elderly population aged 60 and above in Guangxi was 9.3719 million, accounting for 18.64% of the region's permanent population; The elderly population aged 65 and above is 6.941,800, accounting for 13.81% of the district's resident population [8]. It is expected that by 2030, the elderly population aged 60 and above in the region will exceed 10 million, with an aging rate of more than 20%. This trend puts higher demands on the elderly care service system, and the demand for hospice care services is also growing rapidly. Nursing homes, as the main institutions providing hospice care services, need to continuously improve the quality of services to meet the needs of the growing elderly population.

2) The improvement of the medical service system

With the continuous progress of medical technology and the continuous improvement of medical service system, people pay more and more attention to the quality and dignity of life at the end of life. Under this background, nursing home hospice service has gradually become an important choice to meet people's needs at the end of life with its all-round and multi-level care characteristics. By the end of 2023, Guangxi has 12,800 facilities and 263,000 beds for the elderly, 1,321 institutions and 94,000 beds for the elderly [9]. The services include medical care, psychological and spiritual support and care, providing diversified services for the elderly. Patients at the end of their lives are provided with a full range of medical care and psychological support. Moreover, due to the development and innovation of medical technology, hospice care services in nursing homes have also achieved remarkable results in relieving pain and improving quality of life, further enhancing their service value and social recognition.

3) Policy support

Government support for elderly care and hospice services is an important factor in promoting its development. In recent years, a series of policies and measures have been introduced to encourage and support nursing homes to carry out hospice care services. For example, the 14th Five-Year Plan for the Development of the National Cause for Aging and the Plan for the Elderly Service System clearly proposes to improve the elderly service system and promote nursing homes to provide diversified elderly care services, including hospice care services [9]. In addition, the government also encourages nursing homes to improve service quality and capacity by providing financial subsidies and tax incentives. These policies and measures provide a strong guarantee and support for the development of hospice services in nursing homes.

4. Interview and Analysis of Hospice Care Awareness in Nursing Homes in Guangxi

In this study, interviews of 13 nursing home workers in several pilot cities of Guangxi Province were analyzed. The steps of encoding with Nvivo software are as follows: First, the text of 13 hospice cases is imported into the software;

Second, a preliminary coding node is created based on the core themes of the worker's career choice, attitude towards hospice work and recommendations for hospice services, supplemented by other relevant information. Third, each interview text is carefully analyzed in the software to identify fragments of information related to the core topic and coded according to pre-set nodes. In this process, nodes are adjusted or added to ensure the accurate classification of data; Fourth, after the coding is completed, all nodes are sorted and summarized. Through comparative analysis, the relevant nodes are classified to form a tree structure, and the hierarchical relationship and conceptual connection between the data are revealed. The motivations of those who choose to work in the hospice of nursing homes, including volunteers, carers, social workers and health care staff, are diverse and profound. These career choices are not only influenced by personal qualities, but also closely related to the industry prospects revealed by official authoritative data. First, from the perspective of personal qualities, these workers generally show a high degree of empathy, patience, and responsibility. In the 13 interview records, when asked about the most important quality in the job, the answers were 11% empathy, 56% patience and 33% responsibility, as shown in Figure 9 below. They are willing to provide warmth and care to people in the final stages of life and help the dying and their families face the challenges of death. In addition, they often have excellent communication skills and emotional management skills to remain calm under tension and pressure and provide psychological support to residents.

Secondly, from the perspective of industry prospects, the work of hospice areas in nursing homes is increasingly recognized and valued by the society. With the advent of an aging society, the demand for hospice services is also increasing. There are a total of 387,000 nursing institutions and facilities nationwide, with a total number of 8.294 million nursing beds, among which 40,587 nursing institutions are

registered to provide accommodation nationwide, an increase of 1.6% compared with 2021 and 41.6% compared with 2018 [10]. The number and scale of hospice areas in nursing homes are growing steadily. It provides a stable career development prospect for related practitioners. In addition, the government and society are also actively promoting the development of hospice services, providing practitioners with a good working environment and welfare benefits. Moreover, these career choices are in line with one's career plans and values. Volunteers may wish to enhance their social responsibility and realize their personal value by participating in hospice services; Carers and social workers may use their expertise to provide comprehensive care to the dying; Medical professionals, on the other hand, are expected to use their medical expertise to alleviate the suffering and symptoms of the dying. The work in hospice areas of nursing homes not only requires practitioners with specific personal qualities, but also needs to provide them with more stable career prospects and a wide range of industry opportunities, which may effectively promote the continuous development of hospice services, so that the terminally ill and their families can enjoy more humane and professional care services.

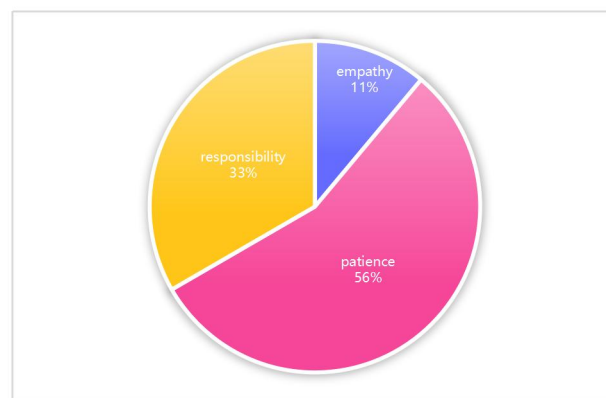


Figure 1: Responsibility, empathy, patience

Table 1: Summary of the basic information of the interviewees

name	sex	age	Education	occupation	identity	duration	location	time
SMX	female	55 years old	Junior high school	Nursing worker	Nursing worker	25 minutes	Baise city Huayu le nursing home	January 12, 2024
HYF	male	40 years old	Senior high school	Nursing worker	Nursing worker	22 minutes	Baise city Huayu le nursing home	January 12, 2024
HSM	female	42 years old	Junior college	Nursing worker	Nursing worker	27 minutes	Guangxi medical da Ren 'ai elderly care Service center	January 22, 2024
SL	male	38 years old	Junior college	Nursing worker	Nursing worker	20 minutes	Guangxi medical da Ren 'ai elderly care Service center	January 22, 2024
MXQ	female	96 years old	Primary school	no	Old Man	35 minutes	Baise city Huayu le nursing home	January 22, 2024
WXQ	female	97 years old	no	no	Old Man	32 minutes	Guangxi medical da Ren 'ai elderly care Service center	January 23, 2024
LMY	female	78 years old	Primary school	no	Old Man	25 minutes	Guangxi medical da Ren 'ai elderly care Service center	January 23, 2024
WX	female	86 years old	no	no	Old Man	30 minutes	Guangxi medical da Ren 'ai elderly care Service center	January 23, 2024
LXK	male	76 years old	Primary school	no	Old Man	28 minutes	Guangxi medical da Ren 'ai elderly care Service center	January 23, 2024
QL	female	23 years old	Undergraduate course	student	volunteer	10 minutes	Baise city Huayu le nursing home	January 23, 2024
HYY	female	21 years old	Undergraduate course	student	volunteer	15 minutes	Guangxi medical da Ren 'ai elderly care Service center	January 24, 2024
LSM	male	24 years old	Undergraduate course	student	volunteer	27 minutes	Guangxi medical da Ren 'ai elderly care Service center	January 24, 2024

5. Realistic Dilemma of the Development of Cooperative Production of Hospice Care Services in Guangxi

This paper studies the far-reaching significance of hospice care in nursing homes, the applicability of cooperative production theory, analyzes the needs, institutional and policy environment of hospice care, discusses the development

prospects and the impact of personal quality, and points out the restrictive problems faced by modern hospice care, such as the lack of professional staff and service facilities. Previously, this paper has studied the profound significance of hospice care in nursing homes, elaborated the concept of cooperative production theory, analyzed the applicability of cooperative production theory in hospice care in nursing homes, and studied the demand, institutional structure and policy environment of hospice care in nursing homes in China. Factors such as population aging, changes in family structure, improvement of medical service system and temporary care policy support are analyzed. The development prospect of hospice care and the influence of personal quality of job-seekers are discussed, as well as the influence of old-age care fees on family members and elderly people's choice of old-age care are discussed. Since the reform and opening up, China has begun to actively carry out the research and practice of hospice, and it has continued to develop under the promotion of national policies and social concerns. However, the development of modern hospice has also exposed many outstanding problems that limit its development, mainly the lack of professional staff and service facilities, poor communication and cooperation, and the contradiction between service standardization and individuation.

5.1 Lack of Professional Personnel and Service Facilities

In the field investigation and research, the author found that the development of hospice care in Baise Huayule Nursing Home is much different from that in Guangxi Medical Da Ren 'ai Nursing Home Service Center, and the development of hospice care in nursing homes is seriously polarized. The existing use area of Baise Huayu Le Nursing Home for the elderly is 5536m², with 210 beds. The work and life of the staff and the elderly are almost completed in one building. Although this compact layout facilitates the management and enhances the interaction and contact between the elderly and the staff to a certain extent, the space in the building is small. It is difficult to supplement the construction of basic life and entertainment facilities such as maintenance activities area, chess and card room, nostalgia room, etc. In the limited space, the medical equipment is not complete, resulting in the elderly are mostly transferred to the nearest hospital for medical treatment when they are sick. Moreover, the small service institutions and the high development difficulty affect the career choice of social workers, medical personnel, nurses and other staff. The staff who have been working in the hospital are also facing problems such as high work pressure and difficult salary promotion. These problems not only affect the work enthusiasm and career development of the staff, but also restrict the entry of Huayu Le Home for the elderly. Step development and service quality improvement. In real life, the number of people who are as difficult or more difficult to develop as the Huayu Le elderly care home in Baise City is not a small number, and it can be foreseen that there is still a long way to go for hospice care for nursing homes in China.

5.2 Lack of Communication and Cooperation

1) Poor communication between medical institutions and pension institutions

Cooperative production theory emphasizes information sharing and resource integration between the two parties. However, in practice, there are often barriers to information sharing between medical institutions and elderly care institutions. On the one hand, the elderly in nursing homes are inconvenient to be referred for medical treatment mainly because many nursing homes are located far away from medical institutions, and nearby medical resources are relatively scarce. On the other hand, due to the decline of physical function and mobility of the elderly, coupled with the fact that some elderly people suffer from a variety of chronic diseases and need frequent medical treatment, the lack of efficient communication channels between medical institutions and pension institutions leads to the elderly people being unable to obtain the necessary medical services in time when they are referred to medical institutions, which brings great troubles to their referral for medical treatment. It not only affects the health of the elderly, but also increases the waste of medical resources.

2) Poor communication between the elderly and the service staff

In the aged care service, the communication between the elderly and service personnel occupies a pivotal position. Through field research, it was learned from the relevant staff that the main factors affecting the effectiveness of communication include the aging of the elderly, fluctuations in health status, and possible emotional fluctuations. In terms of the four main manifestations of communication difficulties, a total of 10 staff reported that the elderly did not follow the doctor's advice and insisted on taking specific food; 13 staff members said that they had encountered elderly people watching online videos, became interested in the drugs recommended in the videos, bought them by themselves, and asked nursing staff to help them use them; Nine staff members stated that communication was hampered by language barriers; The same 10 staff members mentioned that they were often reluctant to communicate with carers when the elderly were depressed. As shown in Figure 10 below. Due to the poor communication and cooperation in nursing homes, it not only troubles the daily operation of elderly care services, but also poses a potential threat to the physical and mental health of the elderly. First, communication barriers make it difficult for the elderly to understand medical instructions, which may lead to inappropriate food intake, resulting in nutritional imbalance and even aggravating existing health problems. Secondly, in the absence of effective communication, the elderly may blindly purchase and use drugs according to the recommendations in online videos, which undoubtedly increases the risk of drug use and may lead to adverse drug reactions or adverse interactions with other drugs. In addition, due to the language barrier, it is difficult for caregivers to accurately grasp the needs and feelings of the elderly, which not only reduces the quality of service, but also makes the elderly feel helpless and confused when faced with problems. Finally, when the elderly are depressed, they may opt for silence due to poor communication and cooperation, which may mask some deep-seated mental health problems, such as loneliness, anxiety or depression.

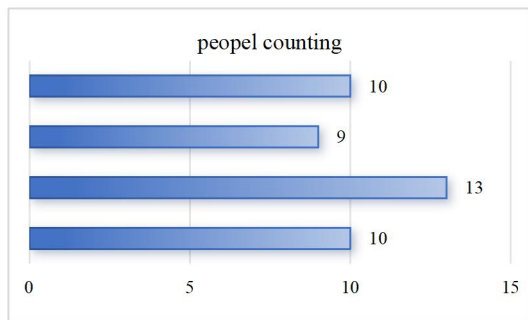


Figure 2: Four main manifestations of communication difficulties

5.3 Contradiction between Service Standardization and Individuation

In the existing nursing home hospice service system, the balance between service standardization and individuation has been concerned. The standardized service process is essential to ensure the quality and efficiency of the service, which covers multiple core links such as pain control, psychological comfort, daily life care, and aims to provide basic and unified care for each elderly person at the end of life. However, each terminally elderly person has unique personal characteristics and needs, which are derived from their cultural background, religious beliefs, family environment and other dimensions, and thus affect their expectations and acceptance of hospice care. In China, the elderly who are deeply influenced by traditional culture often attach more importance to family affection and filial piety, and they expect to be accompanied and cared for by their families in the final stage of life. At the same time, for terminally elderly people who believe in religion, religious belief is an important support for their spiritual world, so it is particularly important to fully respect and meet their religious needs in the process of care. In addition, each family has its own unique emotional atmosphere and kinship bonds, which also need to be fully considered when providing services for nursing homes.

6. Optimization Path for the Development of Cooperative Production of Hospice Care Services in Guangxi

6.1 Optimize Resource Allocation and Utilization

In terms of human resources: In order to optimize production efficiency and improve overall quality, we need to collaborate from multiple dimensions. First, increase the level of compensation and benefits to attract and retain top talent both inside and outside the industry. Second, strengthen vocational training and education to ensure that workers' skills and knowledge keep up with The Times and meet production needs. In addition, the establishment of a fair and transparent incentive mechanism and evaluation system can stimulate the potential of employees and promote their continuous innovation and progress. At the same time, we can not ignore the improvement of the working environment and atmosphere. A comfortable and harmonious working environment can not only enhance employee satisfaction and sense of belonging, but also indirectly promote production efficiency and product quality. Therefore, we should strive to create a collaborative and supportive culture in which every employee involved in co-production feels respected and accomplished. In terms of

material resources: First of all, we must strengthen the financing and management work to increase the investment and renewal of medical equipment. Secondly, based on the theory of cooperative production, nursing homes can establish cooperative relations with nearby medical institutions to provide more convenient referral services for the elderly. For example, nursing homes can reach close cooperation with medical institutions, and medical institutions can open green channels for patients referred by nursing homes, and the elderly can quickly obtain professional medical services when they need higher level treatment, ensuring that their health is timely and effective.

6.2 Strengthen Communication and Cooperation

Strengthening communication and cooperation can effectively deal with the communication problems between the elderly and nursing staff in the elderly care service. Staff should be patient and empathetic, respect the emotional state of the elderly and avoid forcing them to communicate; By observing the behavior and expression of the elderly, we can understand their emotional changes and provide appropriate care and support. In addition, staff are encouraged to establish a trusting relationship with the elderly, so that the elderly feel safe and cared for, and are more willing to share their feelings.

6.3 Balance Service Standardization and Personalization

Under the guidance of cooperative production theory, nursing homes should seek a balance between standardization and individuation when providing elderly care services. The uniformity of service standards is the key to ensure the efficient operation and service quality of nursing homes. However, nursing homes should also be flexible and responsive to the unique needs of each senior. This requires nursing homes to fully consider the individual differences of the elderly when formulating standards, including physical conditions, psychological needs, cultural background and so on. Nursing homes can strike this balance in a number of ways. For example, setting basic service standards while allowing for personalized adjustments in specific situations. Staff training should also focus on flexibility and resilience in order to better meet the individual needs of the elderly. This balance not only helps to improve the quality of life of the elderly, but also is the key to the sustainable development and competitiveness of nursing homes.

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