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Research Article

Demand for Community Medical-Nursing Combined Services among the Empty-Nest Elderly in China: A Qualitative Study

Qianru Liu , ^{1,2} Yaqi Yu, ^{2,3} Xiaoru Wu, ^{1,2} Yu Sun, ⁴ Yongli Lyu, ¹ Kuilan Cao, ¹ Yaling Wang, ¹ and Li Geng ¹

¹Union Hospital, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China ²School of Nursing, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China ³Tongji Hospital, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China ⁴School of Nursing, Wuhan University, Wuhan, China

Correspondence should be addressed to Li Geng; xhhlbgl@163.com

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Currently, the number of empty-nest elders in China is rapidly increasing, and their overall health situation is not optimistic. The Chinese government has developed a series of policies to promote the community medical-nursing combined model to meet the health and pension care needs of elderly individuals. The demand for community medical-nursing combined services among empty-nest elders plays a decisive role in providing these services and must be fully recognized before these services are offered. However, only a few quantitative studies have focused on the demand for community medical-nursing combined services, and these studies failed to capture the complexity and dynamic nature of this demand. To address this research gap, this study innovatively conducted a descriptive and qualitative study to explore the demand for these services. Following the principle of data saturation, 14 empty-nest elders from communities in Wuhan, Hubei Province, were recruited using the purposive sampling method. Semistructured interviews were used to collect qualitative data. The inductive content analysis approach was used to analyze the data. The results revealed that Chinese empty-nesters' demand for community medical-nursing combined services was diverse and specific and comprised three themes (basic elderly care services, medical and nursing services, and psychospiritual support services), with fifteen subthemes. This study provides insights into the unique demand and implementation strategies for community medical-nursing services among empty-nest elders in China. Recommendations to enhance the intelligent elderly care system, infrastructure construction, and elderly care talent in the future provision of services for this particular group of people are provided.

1. Introduction

The empty-nest elderly are those who live alone or with spouses since they have no children or their children have left the house to study or work [1]. Affected by psychological factors such as "falling leaves to the roots" and "shame of nursing homes" in traditional Chinese culture or the inability to bear the economic burden of institutional care, the elderly prefer to live at home [2]. Accelerated urbanization, modernization, and shrinking family size, all contribute to the growing severity of the empty-nest phenomenon [3].

Based on data from the Fourth Sample Survey on the Living Conditions of the Elderly in Urban and Rural China [4], the proportion of empty-nest elders will increase from 51.3% in 2015 to 90% in 2030. Empty-nest elders are more likely to encounter psychological problems such as loneliness and depression than nonempty-nest elders [5]. Moreover, among empty-nest elders, hypertension, cerebrovascular disease, and other severe or chronic illnesses are relatively common [6]. In addition, as living standards improve, older people are more aware of self-care than ever before and aspire to have a happy and high quality of life in old age and

to achieve the goal of active aging; therefore, their demand for health and pension care services tends to diversify to meet their growing needs for a better life [7, 8]. All of these factors have created new obstacles and challenges for developing empty-nest elderly care in China, pointing to the need for close attention to the issue of targeted care for the empty-nest elderly.

The Chinese government has developed the community medical-nursing combined model [9] to address the challenges of an aging population and meet the health and pension care needs of the elderly. The community medicalnursing combined model addresses the problem of separation of health care and pension care [10]. This model, like the program of all-inclusive care for the elderly (PACE) in the United States [11] and the long-term care insurance (LTCI) program in Japan [12], provides medical services, nursing, and rehabilitation to the elderly through fully integrating the elderly care resources of community pension service centers and community health service centers [13]. Substantial evidence has been provided that this model may deliver high-quality and specialized services, improve the management of chronic diseases, lessen loneliness, and enhance the self-care abilities of older people [14, 15]. The demand for community medical-nursing combination services is affected by changes in family structure, making empty-nesters' needs distinct from those living with children, especially in China, where Confucian filial piety culture is prevalent [16, 17]. The Integrated Care for Older People (ICOPE) guideline, released in 2017 by the World Health Organization (WHO), states that services must be person-centered and need-driven [18]. Therefore, the demand for community medical-nursing combined services among empty-nest elders plays a decisive role in the provision of these services and must be fully recognized before these services are offered.

Due to the common phenomenon of empty-nesters in developed countries [19], there has been extensive research on empty-nesters' demand for community medical-nursing combined services, also known as integrated care services. A review of the literature showed that most scholars had used quantitative research to conduct comprehensive geriatric assessments (CAGs) of older adults to explore their needs [20]. Using well-established tools such as the EASY-care tool [21] and the GRACE assessment tool [22], as well as several self-administered questionnaires [23], researchers have found that the needs of older people include physical, psychological, functional, social, and environmental domains. In addition, serval researchers have utilized a combination of qualitative and quantitative techniques to understand the requirements of elderly individuals. Using a mixed method of questionnaires and group interviews, Yi et al. [24] discovered that empty-nesters required food preparation, meals-on-wheels, house repairs, outing support, health supplement connections, and phone-based condition checks.

Research on community medical-nursing combined services for the empty-nest elderly in China has centered on management and connotations [25, 26], while less focus has been placed on demand. Li [27] generally concluded, based

on a questionnaire survey, that empty-nesters require services in the categories of life care, spiritual comfort, and medical care, but did not provide details on the specifics of the categories' contents. The survey conducted by Xu [28] using a self-administered questionnaire revealed that emptynesters expected medical services such as health advice, intravenous injections, pharmaceutical guidance, and emergency assistance, as well as care services such as escort chats, telephone hotlines, legal advice, mutual cultural support, and recreation. Both of these studies were quantitative research studies, which fall short of capturing the complexity and dynamic nature of human and social science phenomena [29]. Qualitative research can yield more confidential information from specific interviews with emptynest elders and dig deeper into the demand for community medical-nursing services [29]. However, to our knowledge, there is no qualitative study exploring the demand for community medical-nursing services among empty-nest elders in China.

To contribute to this research deficiency, a qualitative study was conducted for the first time to comprehend the community medical-nursing service needs of empty-nesters. In this paper, we attempt to address the following two questions: (1) what are the demands of Chinese emptynesters for community medical-nursing combined services? and (2) based on the findings, how can we adapt to their unique needs while enabling senior care staff to provide individualized care, improve the standard of care, and advance an aging-friendly society? A descriptive qualitative study was conducted to address these two questions, which involved purposive sampling to select the sample, semi-structured interviews to collect the data, and inductive qualitative content analysis to analyze the data.

2. Methods

2.1. Study Design. This study followed the standards for reporting qualitative research (SRQR) [30]. A descriptive qualitative study was conducted to comprehensively and directly explore the demand for community medical-nursing combined services among empty-nest elders [31].

2.2. Participants. The study was approved by the ethics committee of the School of Tongji Medical College, Huazhong University of Science and Technology (2022-S111). A purposive sampling method was used to recruit elderly people who were eligible for the study from communities in Wuhan, Hubei Province, China, from June to July 2022. The inclusion criteria were as follows: (1) 60 years of age or older, (2) lived alone or only with their spouse, (3) aged at home rather than in institutions, and (4) could cooperate effectively with this study with normal cognition and clear thinking. Elderly individuals with a history of psychiatric disorders were excluded. The sample size was determined by the principle of data saturation, which means that interviews were stopped when no new codes emerged from the data [32]. A total of 14 empty-nesters were included in this study. The demographic characteristics of the participants are shown in Table 1.

Table 1: The demographic characteristics of the participants (N=14).

Participant	Age	Gender	Education level	Marital status	Income per month (RMB)	Number of chronic diseases	Type of medical insurance
X1	73	Female	Bachelor	Married	0009<	>3	Medical insurance for urban workers
X2	78	Female	Bachelor	Married	>0009	>3	Medical insurance for urban workers
Х3	29	Male	Bachelor	Married	>0009	>3	Free medical treatment
X4	70	Male	Senior high school	Married	>0009	2	Medical insurance for urban workers
X5	19	Female	Junior college	Married	4001 - 6000	None	Medical insurance for urban workers
X6	62	Male	Senior high school	Married	2001 - 4000	None	Medical insurance for urban workers
X7	62	Male	Senior high school	Divorced	4001 - 6000	>3	Medical insurance for urban residents
X8	74	Female	Junior college	Married	2001-4000	>3	Medical insurance for urban workers
6X	19	Female	Elementary school	Married	4001-6000	1	Medical insurance for urban workers
X10	81	Male	Junior high school	Widowed	>0000	13	Medical insurance for urban workers
X11	64	Female	Senior high school	Widowed	2001-4000	2	Medical insurance for urban workers
X12	99	Male	Senior high school	Married	4001 - 6000	1	Medical insurance for urban workers
X13	06	Male	Senior high school	Widowed	>0000	>3	Free medical treatment
X14	71	Female	Technical secondary school	Married	2001 - 4000	1	Medical insurance for urban workers

To ensure the participants' privacy, the numbers X1–X14 are used instead of the participants' designation.

2.3. Data Collection. Semistructured interviews were conducted using a face-to-face approach. To ensure the study's rigor, the interviewer learned the interview techniques before conducting the interviews so that the researcher could remain neutral and avoid biasing the respondents during the interviews. Based on the literature review and expert consultation, interview questions were developed. To understand the suitability of the interview outline, a preliminary pilot study was conducted with three empty-nest elders. After revision and adjustment, the open-ended interview questions were finally determined: (1) Can you give examples of community medical-nursing combined services you have received? (2) How was your experience with these services? (3) What other services would you like to receive the most?

With the help of community workers, the interviews were arranged in the respondents' homes to ensure they could talk freely in a comfortable and quiet environment. Before the formal interview, the interviewees were introduced to the purpose, meaning, and likely duration of the interview. The participants were informed by the researcher that the interview had to be audio recorded throughout and that they could refuse to answer any questions or withdraw from the study at any time. After written informed consent was signed, demographic data were collected, and then an in-depth interview was conducted. The interviewees' nonverbal expressions, such as facial expressions, movements, and eyes, were observed and recorded during the interviews. At the end of the interviews, gifts were given to each elderly interviewee. The interviews lasted between 32 and 68 minutes, with an average of 40 minutes. All interviews were completed by the first author. During all interviews, no one was present but the interviewer and the interviewee.

Several challenges were encountered during the data collection process. During the interviews, several respondents used a non-Mandarin dialect unintentionally, although they were requested to use Mandarin. In such cases, the interviewer would repeat the expression in Mandarin and ask the participants for accuracy. Second, some elderly people tend to stray from the topic in interviews. At these times, the interviewer would ask the interview's outline questions again at the appropriate time to focus the interviewees' attention.

2.4. Data Analysis. Inductive qualitative content analysis was used to analyze the qualitative data [33]. Within 24 hours of the interview, two researchers independently transcribed the audio material and notes into text, and the two textual materials were checked to form an accurate and complete text profile. Once the textual profile had been identified, the content analysis began (see Figure 1), with each text profile being a unit of analysis. Each text profile was initially read repeatedly to gain an overall understanding. Next, the text profile was coded with the explanation annotated alongside later reviews. Then, all codes were categorized and distilled into subthemes and

themes according to their relevance and degree of connection. Weekly sessions were held with all researchers to discuss the appropriateness of these subthemes and themes, which were continually adapted until a consensus was reached. Finally, text profiles and themes were sent to participants to verify whether the data matched their expressed wishes to enhance the credibility of the results.

3. Results

After the qualitative data were analyzed, a total of three categories (basic elderly care services, medical and nursing services, and psychospiritual support services), with fifteen themes, were distilled. The subthemes and themes are shown in Figure 2.

3.1. Theme 1 Basic Elderly Care Services

3.1.1. Catering Services. Some empty-nest elders believed that establishing community restaurants, which provide meal provision and delivery services, could solve their problems of difficulty cooking and eating. In addition, eating together with other older people could strengthen neighborhood communication and reduce loneliness.

"I am at home alone. Cooking is a hassle for me. It would be nice to have a community restaurant where I can eat with my neighbors and spend time with them to relieve my loneliness." (X11)

"We can now have meals delivered to our homes by the community for people aged 90 and above. I think this is very good and hope it will be maintained in the future." (X13)

3.1.2. Housekeeping Services. Some participants said that as their mobility declined, they would like the community to provide them with services such as house cleaning, nannies, and electrical maintenance to create a suitable home environment.

"My back hurts every time I clean now, I cannot do it at all, and my children are not with us to help. There is still a need for the community to address the issue of house cleaning." (X2)

"It would be very beneficial for us if the community could provide cleaning services twice a week or the community could assign a nanny to each home." (X3)

3.1.3. Online Care. Some people would like the community to quickly solve their problems online through methods such as distributing telephones or setting up WeChat groups.

"Our community is currently setting up a WeChat group. I hope this platform will keep developing so we can communicate with the community staff in the group to solve any problems." (X3)

"If the telephones were distributed, I could call them for help without going out, and they would solve the problem for me online. Unnecessary mobility and hassle can be reduced if the community provides such services for us." (X14)

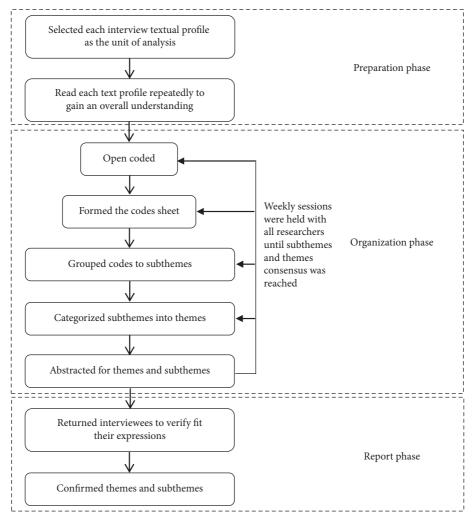


FIGURE 1: The inductive qualitative content analysis process of the qualitative data.

3.1.4. Assistance with Going out. Some empty-nesters indicated that they had difficulty going up and down stairs due to reduced mobility and would like help from the community. For example, "I (X11) am currently suffering from osteoporosis. Going up and down stairs is difficult, and I would like the community to help." Some elders also said they were unable to use the online taxi-hailing service and hoped that the community could provide volunteer transport or assist in hailing a taxi. "Some older people's minds are not clear, and when they encounter a situation where they have to go out, they would like the community to help call a taxi so that they can wait in place to get on." (X3).

3.2. Theme 2 Medical and Nursing Services

3.2.1. Health Management. Older people recognized that, as they aged, the functions and structures of all major systems and organs in the body were subject to degenerative changes and that the risk of many specific diseases increased with age. They hoped that their health status could be monitored comprehensively through regular community medical

check-ups, the establishment of health archive services, and targeted health guidance based on their health status. For example, "The community hospital has created a health archive for me, and after annual check-ups, I am given detailed guidance based on the information recorded in the health archive. These are beneficial services that meet my needs." (X2).

3.2.2. Home-Based Health Care. Some empty-nesters expressed a desire for medical staff to provide home-based health care for them. "I (X12) am a terminal cancer patient, and I would like doctors and nurses to visit me at home and give me painkillers to relieve my pain." Some participants indicated that the home-based health care service allows them to receive a continuation of the treatment interrupted by the hospital at home, which facilitates their recovery and relieves the pressure of caring for their spouse. "I (X3) have some basic illnesses that require long-term treatment, and although my condition is stable, I often need to be hospitalized. My children cannot take care of me because they are not around, and my partner gets tired of

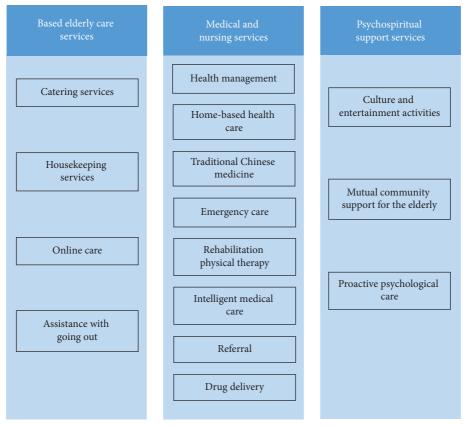


FIGURE 2: Themes and subthemes based on the analysis of the participants.

staying with me in the hospital every time. If there were a home-based health care service, doctors could regularly visit me at home. It would be better for both my partner and me."

3.2.3. Traditional Chinese Medicine. Some seniors consider that traditional Chinese medicine services, including traditional Chinese medicine treatments and traditional Chinese medicine care techniques such as acupuncture and dietary supplements, have many advantages and want them to be implemented widely in the community.

"If traditional Chinese medicine services were available in the community, doctors could take my pulse and prescribe some Chinese medicine. I think the health condition can be regulated very well through Chinese medicine treatment." (X5)

"I have to go a long way for acupuncture and massage. It would be convenient for me if the community had these traditional Chinese medical care techniques." (X11)

3.2.4. Emergency Care. Empty-nesters indicated that they are often unable to cope with sudden safety or health emergencies and would like the community to provide emergency call systems for them and respond quickly to health and safety emergencies.

"I hope that if there is an emergency, I can turn to the community health service center, and medical personnel can get to our home quickly and solve the problem because the community hospital is closer than other hospitals." (X8)

"I live alone at home and do not know what to do in case of an emergency, so it is good that the community installs an emergency call button in the home." (X11)

3.2.5. Rehabilitation Physical Therapy. Some participants felt that rehabilitation physical therapy could prompt recovery from acute disease, help improve chronic disease conditions, and relieve pain, so there was a greater demand for this service to be provided in the community.

"I have a severe degree of osteoporosis, and I need the community to provide physiotherapy services." (X11)

"It would be great if the community could provide physiotherapy services. Older people are often in discomfort, and physiotherapy can relieve the situation." (X14)

3.2.6. Intelligent Medical Care. Some empty-nest elders expressed their wish for the community to equip them with wearable health devices. For example, X2 said, "Nowadays, blood oxygen saturation and heart rate can be monitored by watches, and it would be good for the community to give

elderly people watches to monitor our health." Elders also mentioned their demand for community hospitals to provide online doctor appointments and medical consultation services. "It's great that I (X2) can ask the community doctors directly online for anything I need." Some empty-nesters said they had difficulty using intelligent medical services and needed constant reinforcement and assistance. "My children and I live in different cities, and usually, I go to the hospital with my partner. Nowadays, many steps have to be taken on a smart device when visiting a doctor, and we are sometimes not sure how to do it and need someone to guide us." (X1).

3.2.7. Referral. Some empty-nesters said they would like community doctors to provide professional consultation guidance when they need to be referred from community health service centers to high-level hospitals. "Sometimes, we don't know which department to visit when we go to a high-level hospital. Much trouble could be saved if community doctors could provide us with consultation and guidance services." (X2). Some elderly people also expressed the demand for a referral service that provides convenient and seamless transfers from community health service centers to high-level hospitals. "It would be better if the community health service center could link with other high-level hospitals to help us with direct referrals." (X5).

3.2.8. Drug Delivery. Some elders indicated that they sometimes have difficulty going to community health service centers or pharmacies to get their medication on time and would like the community to provide a medication delivery service. "I (X1) have many chronic illnesses and cannot stop my medication for a day, but sometimes it is difficult for me to go out, and I was hoping a medication delivery service could be provided to bring the medication I need to my home according to the medical advice."

3.3. Theme 3 Psychospiritual Support Services

3.3.1. Culture and Entertainment Activities. Some emptynest elders said they hoped the community could provide space for seniors' recreation and organize cultural and entertainment activities to improve their monotonous lives and gain emotional support and spiritual comfort.

"The community should have recreational activities, such as dancing in the morning or holding a chess tournament." (X6)

"It is hoped that the community can provide recreational venues for the elderly where we can get together to chat and play chess or do other recreational activities." (X10)

3.3.2. Mutual Community Support for the Elderly. Mutual community support for the elderly means that the elderly help and mentally support each other. Empty-nesters have an increased need for support from friends and neighbors due to the lack of family member support. They hoped that a mutual support platform would be organized

and established in the community, and they expressed great interest in joining.

"There are some younger elders in the community, and the community could organize them to help look after the older ones." (X9)

"As long as the elderly are in good health, it would be great if the community could organize a group of older people to help each other." (X11)

3.3.3. Proactive Psychological Care. Some empty-nesters expressed the hope that community workers would take the initiative to make home visits or phone calls to care for the elders' well-being and health conditions, as well as ask about their needs. For example, X11 described, "The community should always be proactive in caring for people like me who live alone. This is also a psychological comfort for me."

4. Discussion

Through this first qualitative study, we investigated the more in-depth and detailed community medical-nursing combined service requirements of empty-nest elders. Age, gender, education, and monthly income were considered to ensure maximum variation in the sample. Through interviews with 14 empty-nesters, we found that the demand for empty-nesters comprised three themes: basic elderly care services, medical and nursing services, and psychospiritual support services.

This study revealed that the category of medical and nursing services was highly demanded by participants, similar to Hu et al. [34] prior study. Unsurprisingly, health management services were in high demand among emptynesters. As people age, they become more concerned about their health, whether empty-nesters or not, and they require services such as regular medical check-ups, the establishment of health archives, and health education to understand and improve their health condition [35]. Home-based healthcare services enable older people to receive home visits from doctors, nurses, and physiotherapists. Patients can be treated and receive nursing care in a familiar home environment according to their treatment needs [36]. Demand for this service is relatively high among empty-nesters, perhaps because the absence of their children increases the inconvenience of medical services and the burden of an equally aging spouse accompanying them to the hospital [37]. Elderly individuals usually suffer from multiorgan and multisystem diseases as well as subclinical states, which are often difficult for Western medicine to cope with, while the holistic diagnosis and treatment of traditional Chinese medical techniques are in line with the physiological and pathological characteristics of this age group. In addition, health care exercises, medicinal food, and dietary supplements in traditional Chinese medical techniques are suitable for elders' lifestyles and easily accepted. Thus, whether people are empty-nesters or not, as a health resource unique to China, traditional Chinese medical services are in great demand [38]. Empty-nest elders, especially those living alone, are more susceptible to urgent incidents with a lower likelihood of being identified and dealt with promptly [39]. This could explain why the empty-nesters in this study expressed a demand for community-based emergency care services, such as alarm services in the case of emergencies and timely emergency treatment services. As a group with a high prevalence of physical dysfunction and disability, elderly individuals frequently require professional rehabilitation services to promote recovery and alleviate pain [40], as evidenced by the high demand for physical therapy rehabilitation services in this study. The findings of this study also indicated that empty-nesters had a demand for intelligent health care services, such as an online doctorpatient interactive consultation, which was consistent with the findings of Wong et al. [41] study in that intelligent medical care services provide appropriate and alternative care options for empty-nesters whose children do not accompany them to medical appointments. Irizarry et al. [42] argue that the elderly need guidance when using intelligent health care since they have less access to and experience with technology, and the participating seniors in this study were no exception. The demand for referral and medication delivery services may be related to poor health literacy, fewer available medical resources, and deteriorating physical function [6, 43].

This study also found that participants desired the category of basic elderly care services. For basic elderly care services, empty-nesters most frequently mentioned a desire for catering services. The empty-nest elderly preferred to establish community canteens and meal delivery services, possibly due to the complicated process of purchasing ingredients and cooking by themselves as well as their diverse meal requirements [44]. Consistent with the findings of Kaur [45], most empty-nesters in this study said that they also required community assistance in daily housekeeping services, as maintaining their living environment was difficult due to their reduced mobility and the inability to rely on their children. The provision of online services can make it easier for empty-nesters to solve problems without the help of their children, as approachability and availability of services are important factors influencing the demand for services [46], which may explain why they demand online care services in our study. At the same time, empty-nesters needed community-based help for necessary outings, probably because instrumental help (e.g., access to transportation when required) is less likely to be available from friends or neighbors [47].

In addition to medical and nursing services and basic elderly care services, the category of psychospiritual support services was also frequently expressed by participants, perhaps because the concept of group living is deeply ingrained in the Chinese elderly and empty-nesters desire intimate relationships with neighbors and friends due to the departure of their children [48]. Organizing cultural and recreational activities in the community as a practical method to reduce loneliness and social isolation among older people [49] was strongly advocated by empty-nesters. Lacking care from their children, empty-nesters also wanted to be provided with mutual community support for the aged

to look after each other, enrich their lives, and realize the value of their twilight years [50]. Participants' need for proactive care services can be explained by the fact that empty-nesters have higher levels of psychological stress and more significant care needs than those living with their children [51].

As mentioned above, empty-nesters had specific demands due to their challenging situation of lacking care and company from children. Sustained efforts are needed to satisfy the demands of the empty-nesting elderly, and this study provides the following suggestions.

An intelligent elderly care system should be established to promote the informatization and intelligence of the elderly care service supply. First, efforts should be made to strengthen the top-level design and build a new community medical-nursing combined services network system with information interoperability and resource sharing, allowing health information such as health archives and electronic medical archives to be shared when elderly individuals are referred to both high-level hospitals and community health service centers. Subsequently, a platform offering online care services, such as online consultations and housekeeping appointments, is required for the empty-nest elderly using digital and network technologies. In addition, to further enhance health management competence, intelligent health services should be enriched by cutting-edge technologies, such as the Internet of Things, cloud computing, and artificial intelligence. For example, community health service centers should establish health archives for empty-nest elders and provide online medical consultation, online referral guidelines, and online health education according to their health conditions and demand. Then, the supply of ageappropriate smart elderly health and pension care products should be expanded to empty-nest elders, such as wearable watches, fall prevention devices, and emergency call devices to remotely detect their living and health conditions. In addition, their ability to use intelligent technology should also be enhanced; thus, when designing devices, it is necessary to provide age-appropriate devices with simple operations and interfaces, taking into account the perceptual and cognitive characteristics of the empty-nest elderly. On the other hand, the elderly need sufficient time to adapt to intelligent services [52]. If the training preferences and requirements of the elderly are clarified and satisfied, a divide in the use of technology, also known as the digital divide, can be solved [53, 54]. Therefore, a specific amount of time and frequency of community assistance is essential to assist them in mastering and using intelligent services.

The construction of convenient and diversified infrastructure should be strengthened to improve the community's medical and recreational facilities, guided by the demand of empty-nest elders. Vacant sites in the community can be renovated into activity venues for elderly individuals, equipped with the best possible equipment and recreational facilities, to engage in cultural recreation and entertainment activities and guide the empty-nesters to actively participate in these activities. Otherwise, canteens with a high radius and a friendly dining environment should be built to solve the problem of complex meals for empty-nesters. In

addition, regular family visits should be conducted to evaluate and repair concealed safety threats such as water, electricity, gas, and drainage problems. Furthermore, barrier-free facilities such as lifts and antislip ramps should be developed in the community to establish a suitable living environment for empty-nest elders. Most importantly, healthcare facilities need to be provided by community health centers, such as sufficient sick beds and adequate equipment for basic medical treatment and rehabilitation.

A sufficient number of skilled and qualified personnel for elderly services must be established and strengthened, including health care personnel such as general doctors, nurses, rehabilitation therapists, and pension care personnel. Staff in health care professions could offer services such as traditional Chinese medicine, drug delivery, rehabilitation, and home health care to empty-nesters, while pension care workers could help with running errands and housekeeping. All elderly care personnel should ensure that they are licensed to work. To this end, universities should not only emphasize education in gerontology and nursing to train professional medical personnel but also offer courses related to elderly services and social work to train elderly care personnel in theoretical knowledge and skills related to elderly services. To improve the supervision of staff providing care for elderly individuals, training and testing procedures should be increased. Concurrently, we should reinforce policy guidance and develop a scientific incentive mechanism to provide a comfortable employment atmosphere for personnel, enhance the social recognition of elderly care personnel, and attract more professionals to invest in the development of elderly care. In addition, volunteers should be encouraged to participate in elderly care. For example, community staff could organize mutual community support for elderly individuals, allowing them to use their respective strengths to address the needs of both the elderly who have no one to look after them and the elderly who want something to do.

There are several limitations to this study. We took complete account of age, gender, education, and monthly income when selecting the sample to maximize sample differentiation and achieve data saturation. However, due to time and funding limitations, we only conducted in-depth interviews with 14 empty-nesters in Wuhan, Hubei Province. The demands of empty-nesters may vary by region. In addition, we were unable to interview empty-nesters who were completely incapable of taking care of themselves, and these elders may have more unique needs and insights. To increase the robustness of the findings, future research is expected to select empty-nesters in multiple areas, including those with poor self-care abilities.

5. Conclusions

This study first used a qualitative approach to explore the demand and implementation strategies for community medical-nursing combined services among empty-nest elders. The results demonstrated that three categories of services (basic elderly care services, medical and nursing services, and psychospiritual support services) were in

demand by empty-nesters due to their circumstances of lacking care and accompaniment from children. The intelligent elderly care system, infrastructure construction, and elderly care talent should be enhanced to adapt to their unique needs. This study will contribute to improving the future provision of personalized community medicalnursing combined services for this particular group of people. In the future, this study could be further developed by using mixed qualitative and quantitative methods to comprehensively explore empty-nesters' demands and the complexity and dynamics of their needs.

Data Availability

The data that support the findings of this study are available from the corresponding author, Li Geng, upon reasonable request.

Conflicts of Interest

The authors declare that there are no conflicts of interest regarding the publication of this paper.

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