# Investigation on the Supply and Demand of Medical-nursing Combined Services in Rural Nursing Homes: A Case Study of Zizhou and Suide

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**Abstract:** Aging is an irreversible fundamental trend, and it is of utmost importance to promote the pension industry with the concept of "integrating medical services and elderly services" in both present and future periods. In comparison to urban areas, rural regions have a larger absolute number of elderly individuals, higher proportions of young age and disability, as well as lower coverage rates of pension facilities. Therefore, it is necessary for the promotion of integrating medical services and elderly services in rural areas to align with the specific circumstances of each region. Based on an analysis of the background development regarding the integration of medical services and elderly services in northern Shaanxi's rural areas, this study has discovered that due to constraints such as scale, personnel availability, funding limitations, etc., there remains a significant gap in terms of integrating medical services and elderly services within rural nursing homes in northern Shaanxi. It is suggested to grasp the window period of rural aging, and increase the supply of rural medical and elderly care integrated services from the four aspects of changing concepts, policy formulation, optimizing systems, and financial support.

# 1. Introduction

The issue of providing for the elderly in rural areas is a significant social and livelihood concern [1]. In comparison to their urban counterparts, the rural elderly population not only exceeds them in absolute numbers but also in relative proportions. According to the seventh National Census, the percentage of individuals aged 60 and above in rural areas was 23.81% and 17.72%, respectively, which is 7.99 and 6.61 percentage points higher than that of urban areas [2]. Among the younger elderly, there is a higher prevalence of disabilities along with lower levels of physical health and notable mental health issues, necessitating both general life care and medical attention. The coverage rate of elderly care facilities in rural regions significantly lags behind that of urban areas<sup>[3]</sup>, resulting in a larger disparity between supply and demand for eldercare services specifically related to on-site doctor visits, housework assistance, day care programs, and rehabilitation nursing [4]. Research indicates that the majority of rural elders face severe economic challenges as their primary sources of income are pensions or financial support from their children; thus affording living expenses becomes difficult while combining it with high-level medical care services becomes even more extravagant. To address pension-related concerns caused by aging populations in rural areas, the "14th Five-Year Plan" for National Old-age Development has outlined goals aimed at supplying comprehensive old-age services across both urban and rural regions while benefiting all citizens through inclusive measures designed to bridge existing gaps within rural eldercare services. Enriching integrated models encompassing medical care alongside nursing emerges as an essential approach towards resolving aging-related issues within these regions<sup>[5]</sup>. Based on the investigation of the operation of rural pension institutions in northern Shaanxi and the development of the combination of medical care and nursing, this paper analyzes the difficulties faced and discusses the solutions.

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#### 2. Literature review

The aging problem originated from developed countries, such as the UK, Japan and the United States, which have accumulated rich experience in the field of combination of medical care and elderly care [6]. Although scholars have different views on the concept and connotation of the combination of medical care and elderly care, they generally believe that the combination of medical care and elderly care is a mode of elderly care that integrates medical services, life care services, health rehabilitation and hospice care, and focuses on providing disease prevention services, such as health assessment, guidance and consultation. It is considered to be an effective way to solve the current pension problem<sup>[7]</sup>. However, there is no agreement on how to conduct differentiated practices based on regional, urban-rural and group characteristics.

# 2.1. The necessity of combining medical care and elderly care in rural areas

Li Ling et al. (2022) pointed out that the elderly in rural areas have different characteristics in the annual care market. Therefore, in the development of the combination of medical care, we should not simply copy the city, but should take a combination of medical care with rural characteristics<sup>[4]</sup>. Liu Hongyin (2021) believes that the field <sup>[8]</sup> is easy to be ignored in the combination of medical care and nursing care.

## 2.2. Mode of combining medical care and elderly care in rural areas

The combination of medical care and elderly care in rural China is mainly carried out through the integration of internal resources and the introduction of external resources [9][10]. Internal resource integration can be divided into two types in terms of independence: one is the "two-room integration" mode of co-construction of day care room for the elderly and village health room [11]; The second is the "agreement and cooperation" mode between pension institutions and township health centers, the latter is independent of each other; The introduction of external market resources is divided into: introducing high-quality medical and nursing service chain companies in the market, promoting the balanced development of the elderly care service market, and the government building information resource platform for home-based community care; It can be seen that government departments play a crucial role in integrating resources and cultivating a fair and competitive market environment for integrated medical and elderly care services. Liu et al. (2020) showed that the three types of combined care models of hospital, nursing home and "hospital + nursing home" can significantly reduce the loneliness of the elderly, improve their subjective well-being, and improve the quality of life for the elderly [12].

# 2.3. Paths for integrating medical care and elderly care in rural areas

According to Liu Hongyin (2021), achieving a balance between the supply and demand of integrated medical and elderly care services, as well as fostering effective cooperation between medical and elderly care institutions, is crucial for the development of rural combined medical and elderly care services [8]. Li Ling et al. suggested to start with the development of special plans for the combination of medical care and elderly care in rural areas, build the operation mechanism of the combination of medical care and elderly care, integrate the existing medical and elderly care resources, improve the operation efficiency of the combination of medical care and elderly care, break through information barriers, and cultivate and attract professional talents<sup>[4]</sup>.

# 3. Survey of rural elderly care institutions in northern Shaanxi

Yulin city is located in the northernmost part of Shaanxi Province. Due to the extremely unbalanced reserves of natural resources in the region, the economy and society show significant differences between the north and the south. The "North two districts and four counties" is the agglomeration area of high-end energy and chemical bases, which has a siphon effect on the surrounding young and middle-aged people. Suide and Zizhou belong to the "five southern counties", which are dominated by agriculture and energy and resource exploitation, with relatively backward

economic development, and their per capita GDP only accounts for 1/4 and 1/6 of the regional average level respectively. Due to the outflow of young and middle-aged population to the surrounding developed areas, the aging problem is particularly serious. The proportion of the population aged 65 and above is 15.4% and 20.08% respectively, both of which are higher than the regional average level of 13%. Typical people get old before they get rich. In April 2023, the author led a survey team to select four rural nursing homes in Zizhou and Suide to carry out a survey on the demand and supply of combined medical and nursing services.

#### 3.1. Basic information

There are 9 nursing home institutions in the two counties, which are mainly public and private, and all belong to hybrid nursing home institutions. Four rural nursing homes located in towns were selected for investigation, accounting for about 50% of the total.

- (1) Zizhou county Ma Tigou Nursing Home, Covers an area of 8000 square meters, building area of 2780 square meters,88 beds,38 people were admitted, 10 of whom were treated in hospital, with an occupancy rate of 31.8%,No charge.
- (2) Zizhou county Lao Jun Dian nursing home, Covers an area of 13700 square meters, building area of 3600 square meters, 80 beds, 23 people were admitted, with an occupancy rate of 28.7%, No charge.
- (3) Suide county Renai maintenance and rehabilitation center, Covers an area of 5938 square meters, building area of 7861 square meters, 292 beds, 145 people were admitted, with an occupancy rate of 49.6%, No charge.
- (4) Suide county Mingzhou regional nursing home, Covers an area of 2333 square meters, building area of 5531 square meters, 340 beds, 117 people were admitted, with an occupancy rate of 48.7%. There is no charge for the elderly; Social foster care for the elderly is charged according to their self-care situation and service difficulty, with a fee range of 1500-4200 yuan.

The scale of rural pension institutions is generally small; Contrary to the expected situation of short supply, on the one hand, the traditional concept of home care for the rural elderly is deeply rooted, and the recognition of institutional care is low; On the other hand, the conditions for receiving the elderly are relatively strict. Most of the nursing homes supported by the Civil Affairs Bureau are limited to receiving the elderly with five guarantees, and the occupancy rate is less than 50%. The source of capital is single and limited, and it is difficult to make profits.

# 3.2. Demand of institutional medical and nursing care combined services

The elderly who live in the elderly care institutions are passively selected for family reasons or children reasons, and generally lack of spiritual life. The demand for the elderly stays in the daily physiological and living needs. The high satisfaction of daily life does not represent the high service level and level of the elderly care institutions, and the fundamental reason is the low demand level of the elderly.

#### 3.3. Supply of institutional medical and nursing care combined services

The main service forms of pension institutions are meal service, life care and basic nursing service; The ratio of medical staff is low, and the professionalism of medical services is insufficient. In terms of educational background and professional level, only a few medical staff have a bachelor's degree, and the vast majority of medical staff have less than a bachelor's degree, and have worked in institutions through short-term rural medical training and theoretical learning. They are not professional doctors, nor have they gone through systematic training, nor have they obtained relevant qualifications. The ratio of old-age care workers to all the elderly is about 1:9-1:15, while most of the care workers are middle-aged women who work in cities, have low education level and limited nursing knowledge. Due to high work pressure and complex work content, their service attitude and patience will be reduced, and they only pay attention to life care. The introduction or cooperation of medical resources is an effective way to promote the combination of medical care and elderly care under the existing resource constraints.

## 3.4. The reason for this phenomenon

The financial strength of pension institutions is weak, and it is insufficient to attract high-quality medical staff; For highly educated and high-quality talents, they are more willing to work in hospitals or cities. Rural pension institutions lack a promising development platform, competitive treatment, can not retain high-quality talents; There are no sound training institutions, and medical staff have no training opportunities before they take up their posts; There is no perfect incentive system in pension institutions, no system to restrain medical staff.

## 4. Policies and suggestions

The theory of welfare economics has proved that social welfare cannot be realized only by relying on the market, and the government is needed to avoid the profit-seeking and blindness of the market. In terms of increasing the supply of services combining medical care and elderly care, government departments have shifted from full responsibility in the initial stage to operation and management by social forces in the form of "entrusted management" and "leasing operation".

#### 4.1. Government Sector

# 4.1.1. Assume principal responsibility

At this stage, we should be committed to promoting the formation of a fair, competitive and orderly elderly care service market, and create a good market environment to attract more social forces to participate. First of all, in view of the fact that rural elderly care institutions are generally miniaturized and inclusive, they do not have the scale, hardware, capital and personnel security required for "nursing and medical care". At present, the integrated service of medical care and elderly care in rural areas should not be limited to new institutions, but should focus on building the integrated platform of medical care and elderly care from the mode of "agreement and cooperation" and "two-room integration" in the primary stage, and build grass-roots organizations by integrating existing medical and elderly care resources to improve the efficiency of resource utilization. Secondly, it is necessary to accelerate the establishment of industry standards and norms, and establish industry self-discipline mechanism to avoid service quality problems. Thirdly, the establishment of a third-party supervision and evaluation agency [13], "high quality and competitive price" procurement services, do a good job in "referee" and "buyer"; Finally, smooth supervision channels, increase supervision, strengthen coordination and communication between departments.

# 4.1.2. Orderly resolve the financial problems of pension institutions

Compared with ordinary pension institutions, medical-care combined institutions have the characteristics of large investment scale, long cycle, low profit margin and high risk, and the profit-seeking nature of capital will inevitably lead to insufficient supply. In the face of the dilemma of capital shortage, institutions will adjust according to market conditions. The most common practice is to lower the standard of "combination of medical care and elderly care" and tend to accept the elderly with good economic conditions and good health, which runs contrary to the original intention of establishing "combination of medical care and elderly care" institutions. To reduce cost pressure and relieve financial difficulties, government departments need to issue long-term preferential policies to guide social capital to enter the industry in an orderly manner. For example, through the allocation of special funds, banks are encouraged to provide low-interest loans, and preferential policies such as water and electricity costs, land transfer, house leasing, income taxes, and government subsidies are provided for the construction of institutions.

#### 4.1.3. Develop a multi-tiered long-term care security system

Because it is difficult to define the boundary of medical and pension expenses in practice, the current medical insurance system cannot bear the combined medical and pension expenses related to "medical"; In addition, most disabled elderly people cannot afford to pay for the services provided by integrated medical and nursing institutions, resulting in low occupancy rates, reduced

service standards or difficulties in maintaining these institutions due to high investment costs and low occupancy rates. Therefore, the government should formulate and improve the fund payment method as soon as possible, and establish a multi-level long-term care security system including insurance, welfare and assistance.

# 4.2. Elderly Care Service Industry Association

The existing old-age service providers lack internal motivation, and need external pressure such as government regulation, administrative supervision and public opinion drive to promote the quality of old-age service. In order to achieve this goal, elderly care service industry associations and other organizations should establish industry service standards, implement corresponding access thresholds, and supervise their implementation and carry out rating work. In addition, they should also take the initiative to show their service quality and level, and actively accept public supervision, so as to eliminate customers' concerns about the quality and environment of institutional elderly care services.

# 4.3. Elderly service institutions

Organizations should stimulate the internal motivation of employees to provide high-quality and competitive services. First, we will innovate the compensation system to encourage employees to improve their professional skills. Profit sharing method and ownership planning method can be adopted to stimulate the work motivation of employees in private pension institutions. In the period of good business performance, the organization can share part of the profits to the employees, or grant the management of the organization and excellent employees stocks, options and other rewards, which can help improve the initiative and enthusiasm of the employees; At the same time, skill pay is used to encourage employees to improve their professional skills<sup>[14]</sup>, especially the reward for core professional and technical qualifications such as medical practitioners, nurses, care workers and nutritionists should be increased, so as to stimulate employees' internal drive and improve their professional skills. Second, we will provide high-quality and low-cost inclusive medical and nursing services. Service quality is one of the most important factors to attract customers. Studies have shown that economic factors are the fundamental reason for the rural elderly not to choose institutional pension. Institutions should innovate business models and allow the elderly to take part-time positions when they are in good health, which not only reduces the cost burden of both parties but also makes up for the shortage of manpower, and better takes care of the disabled and mentally disabled elderly based on the needs of the caregivers.

#### 5. Conclusion

Effectively solving the problem of aging is an important task in this century, and providing universal benefits and comprehensive medical and elderly care services is an effective measure. Pension service has the dual attributes of public service and non-public service, which requires the joint participation of the market and the government. To promote active aging and healthy aging, it is necessary to give full play to the enthusiasm of all walks of life, and gradually form a multi-level and diversified elderly health service system led by the government and participated by social capital.

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#### References

- [1] Qian Xu,Xinxin Yin.(2020)Evaluation of the quality of rural pension service based on medical-nursing combined service: a case study of Qingdao city.Chinese Nursing Research, 34(19):3552-3556.
- [2] The proportion of people over 60 years old in rural areas is 7.99 percentage points higher than that in urban areas.2021-05-11.
- [3] Changyuan Li, Huiping Zhang.(2018)Inclusive development perspective of unbalance of rural old-age service development and adjustment. Journal of modern economy, 11:121-126.
- [4] Ling Li, Jiahui Li. (2021)Exploration of Integrating Pension Service with Medical Service in China[J]. Journal of China Agricultural University (Social Sciences), 38(04):100.
- [5] Notice of The State Council on printing and distributing the 14th Five-Year Plan for the Development of National Old-age Undertakings and old-age service system.2022-02-21.
- [6] Lijun Guo, Yong Bao, Chunyu Huang, et al.(2019)International successful system and policy analysis of "combination of medical care and elderly care" pension model. Chinese Journal of Gerontology, 39(04):975-981.
- [7] Lin Zhou,Li Li,Ying Zhang, et al.(2021) Understanding and discussion on the service mode of "Medical-Nursing Combined" in medical institutions. Chinese Hospitals,25(4):45-47.
- [8] Hong-yin Liu.(2021)Study on Countermeasures for the Combination of Medical and Health Care in Rural Areas. Health economic research, 38(03):21-23.
- [9] Xiaoming Liu, Jiongen Xiao, Xujiang Xu. (2020) Study on Recent Typical Modes of the "Combination of Medical Care and Pension" in China. Future development, 44(04):22-28.
- [10] Yanyan Li, Min Fang, Canyou Wang. (2023) Research on the optimization of combining medical care and elderly care in rural areas based on the practice in rural Heze of Shandong Province. Administration of health services in China, 40(02):132-135.
- [11] Meihua Jiang, Yanan Chen. (2021) Research on the Endowment Mode Development Relying on Medical Treatment and Endowment Combination in Rural Clinics. Modern Hospital Management, 19(04):5-8.
- [12] Le Liu, Luyan Zhou, Xuewen Li, et al. (2020) Loneliness and subjective well-being of the elderly under different types of combination of medical care and elderly care. Chinese Journal of Gerontology, 40(18):3990-3992.
- [13] Xiaomei Liu, Bingbing Liu, Hongbo Cheng. (2019) Research on the Construction of Operational Mechanism of Medical Service and Elderly Care Integration in Rural Areas. Journal of Yan bian University (Social Sciences), 52(02):99-107+143.
- [14] Xiang Zhou.(2020)Study on salary design of nursing staff in rural"combination of medical and nursing care"nursing homes in J province: From the perspective of ADL scale and standardized value model. Hubei Agricultural Sciences,59(20):188-191+214.