

Study on the Optimal Design of Rural Wisdom Pension in the Context of Rural Revitalization

Yi Xu

Anhui University of Finance and Economics, Hefei 233000, China.

Abstract: With the implementation of the rural revitalization strategy, rural wisdom pension gradually becomes an important direction for the development of rural society. The purpose of this paper is to study the optimization path of rural smart pension in the context of rural revitalization. By analyzing the definition, development status and dilemma of rural wisdom pension, key factors for optimizing rural wisdom pension are proposed, and the paths for enhancing rural wisdom pension are discussed. The research results show that strengthening infrastructure construction, improving service quality, and promoting information technology application are the key paths to realize rural smart aging. This study provides theoretical guidance and policy recommendations for the implementation of rural smart aging.

Keywords: Rural Revitalization; Rural Smart Aging; Optimization Path; Infrastructure; Information Technology

1. Definition and development status and dilemma of rural wisdom pension

1.1 Definition of rural wisdom pension

Rural smart elderly care refers to the use of advanced information technology and intelligent equipment to provide comprehensive elderly care services and care for rural elderly people and improve their quality of life and welfare level. Through the integration of social resources and technological means, rural smart aging can meet the needs of the elderly in life, medical care, health, culture and social interaction, and realize the happy aging of the elderly. The core concept of rural smart aging is to use intelligent technology means to provide powerful information support and convenient services to provide personalized and intelligent aging services for the elderly, so that they can live and participate in social activities independently, safely and conveniently.

1.2 The current situation of rural intelligent elderly care

At present, the development of rural wisdom elderly care in China is still relatively lagging behind, and the following aspects of the current situation exist:

(1) Imperfect infrastructure. The infrastructure in rural areas is relatively backward, including the inconvenience of water supply, power supply and transportation, which restricts the development of rural wisdom pension. Many rural areas are unable to provide various services and facilities required for the elderly in a timely manner due to the weak infrastructure, which brings many difficulties to the elderly services and the life of the elderly.

(2) Insufficient application of information technology. The lack of advanced information technology facilities in rural areas, such as broadband networks and intelligent terminals, leads to the limited coverage and quality of rural smart senior care services. In many rural areas, the use and data transmission of telemedicine and wisdom elderly care equipment are not available due to poor network environment and scarce information technology equipment, which affects the wisdom elderly care service and the quality of life of the elderly.

1.3 The current dilemmas faced by rural wisdom elderly care

Insufficient financial support. Rural wisdom elderly care requires a large amount of capital investment, including infrastructure

construction, equipment procurement and personnel training, etc. However, the financial resources of rural areas are relatively weak, and insufficient financial support has become a key issue limiting the development of rural wisdom elderly care. Due to the weak economic foundation and limited financial income in rural areas, many rural areas cannot provide enough funds to support the construction and operation of smart senior care.

2. Key factors for optimizing rural wisdom pension in the context of rural revitalization

2.1 Infrastructure construction

Infrastructure construction is one of the key factors for optimizing rural wisdom elderly care. Compared with urban areas, there is a big gap in infrastructure construction in rural areas. In order to achieve the goal of rural smart aging, rural areas need to strengthen infrastructure construction, including communication networks, improving roads, building bus stops and increasing the number of transportation, as well as IoT devices and hardware facilities for smart aging.

First, rural areas need to improve the coverage and speed of communication networks and increase the construction of 4G/5G base stations to improve the speed and stability of networks in rural areas to ensure that seniors enjoy the convenience of being connected to the outside world and to smart senior care services. High-speed and stable network connection is the foundation for realizing smart senior care in rural areas, which can realize interconnection between smart devices. Therefore, the government should strengthen the construction and optimization of communication infrastructure in rural areas, improve network quality and coverage, and ensure smooth transmission of information. It also needs to strengthen the construction of transportation infrastructure, and enhance the travel ability and accessibility of services for the elderly in rural areas by improving roads, building bus stops and increasing the number of transportation vehicles. Secondly, rural smart senior citizens need to be equipped with corresponding IOT devices and intelligent hardware facilities. For example, smart wearable devices, smart home devices, monitoring devices, etc. These devices can realize functions such as health monitoring, life assistance and safety protection for the elderly. Therefore, the government should increase the supply of IoT devices and construction of intelligent facilities in rural areas to provide the hardware facilities needed to support smart senior care. It also needs to optimize water supply, power supply and gas supply facilities to ensure the safety and convenience of water and electricity for elderly families and provide reliable energy support for the use of smart senior care devices.

2.2 Information technology application

First of all, rural areas can realize health monitoring and risk warning for the elderly by establishing an intelligent pension management platform. Through the Internet of Things technology, the physiological indicators and behavioral habits of the elderly can be monitored, the health condition of the elderly can be monitored and analyzed in real time, and early warnings and interventions can be made when abnormal conditions occur. This allows for the first detection of health problems of the elderly and the provision of timely medical and nursing services. Secondly, information technology can realize personalized services for rural wisdom elderly. Through big data analysis technology, personalized analysis and recommendations can be made for the health status, interests and habits of the elderly to provide them with personalized elderly care services. For example, customized health consultation and assisted living services can be provided according to the health status and geographical location of the elderly. Again, information technology can realize telemedicine and telecare services for rural smart senior citizens. Through video calling, remote monitoring and remote diagnosis technologies, the elderly can receive telemedicine guidance and nursing care services from doctors at home, reducing the difficulties and costs of medical and nursing care for the elderly on the go.

3. The path to enhance the rural wisdom pension in the context of rural revitalization

The proposal of rural revitalization strategy has provided a broad development space for rural wisdom elderly care. With the increase of the aging population in rural areas, how to improve the quality and level of rural wisdom elderly service has become an urgent problem to be solved at present. In the context of rural revitalization, strengthening infrastructure construction, promoting information technology application and improving service quality are the key paths for rural smart senior care.

3.1 Strengthen the construction of infrastructure

The improvement of transportation infrastructure is crucial for rural wise aging. The improvement of rural transportation conditions should be accelerated, roads should be built and maintained, and road accessibility and safety should be improved to facilitate the travel of the elderly. In addition, bus stations should be built and bus routes increased to provide convenience for the elderly to travel. The development of shared travel modes, such as shared bicycles and shared cars, can also be encouraged to meet the needs of the elderly for short-distance travel.

In addition, the coverage and quality of the communication network is one of the indispensable infrastructures for rural smart aging. It is necessary to strengthen the communication network in rural areas, expand the coverage of 4G/5G networks, improve network speed and stability, and solve the problems of insufficient network coverage and slow network speed in rural areas. In this way, the elderly can enjoy smart senior care services through the Internet and get convenience in many aspects such as medical care, health and social life.

3.2 Promote the application of information technology

The promotion and application of information technology is the core support of rural wisdom elderly care, through the application of information technology, the level and effect of rural wisdom elderly care can be improved.

First of all, the application of intelligent old-age care equipment should be promoted. Intelligent senior care equipment includes intelligent health monitoring equipment, intelligent home equipment, intelligent mobility devices, etc., which can help the elderly to better manage their health and improve the convenience of daily life. For example, intelligent health monitoring equipment can monitor the vital signs of the elderly in real time, discover abnormal conditions and provide corresponding early warning; intelligent home equipment can realize the control of intelligent lighting, temperature, gas, etc. to facilitate the life of the elderly; intelligent mobility equipment provides safety assistance for the elderly through induction, navigation and other functions.

3.4 Suggestions on the optimization path of rural wisdom elderly care in terms of policy

Formulate relevant policies to clarify the guiding direction and goals of supporting the development of rural wisdom elderly care. For the development of rural wisdom elderly care, the government should formulate relevant policies to clarify the guiding direction and goals of its development. The policy should include the definition, scope, development focus, preferential policies and support measures for rural wisdom elderly care, providing legal basis and policy support for rural wisdom elderly care. The government can organize experts, scholars and industry members to hold symposiums or seminars to formulate a special development plan for rural smart aging and clarify the focus and goals of future development. The government can also hold training courses or symposiums to improve the awareness and understanding of relevant staff and promote the implementation of policies.

4. Conclusion

Rural smart elderly care is an important direction for the development of rural elderly care in the context of rural revitalization. By strengthening infrastructure construction, improving service quality and promoting information technology application, the development path of rural smart elderly care can be optimized. This study provides important theoretical support and policy suggestions for the implementation of rural revitalization strategy.

References

- [1] Fan YM. A preliminary study on the smart elderly care model in rural areas [J]. *Agricultural science of Hubei Province*, 2019, 58 (19): 130-134.
- [2] Wang MY, Zhang YC. Cloud and Landing: Rural Elderly Care Problems and Path Selection in the "Internet plus" Era -- Based on the Research of Rural Smart Elderly Care Mode in Z Province [J]. *Social Work and Management*, 2022,22 (01): 78-85.
- [3] Tian XY, Zhang L. Research on the Smart Elderly Care Service Model in Rural Areas [J]. *Rural Agriculture Farmers (B Edition)*, 2021550 (02): 34-35.

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