

The Current Situation and Influencing Factors of the Development of Intelligent Pension under the Aging

based on the empirical analysis of Bengbu

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Abstract: In order to actively respond to the aging of population, the report of the 19th National Congress of the Communist Party of China clearly points out that it is necessary to build a policy system and social environment for the elderly, filial piety and respect for the elderly, promote the combination of medical care and support, and speed up the development of the aging cause and industry. In this context, Intelligent pension has become a new trend of pension in China, which has attracted great attention. Based on the results of field research in Bengbu City, this paper analyzes the current situation of Intelligent pension development, the factors affecting the development level of Intelligent pension and the problems existing in the development of Intelligent pension, and draws key conclusions and puts forward suggestions, in order to provide reference for the development of Intelligent pension in China.

Keywords: Intelligent pension; Bengbu city; Field research; Influencing factors; Empirical analysis

1. Introduction

At the same time, with the aging of population deepening with the social transformation and the change of social structure, the current home-based pension model is bound to be replaced by the model supported by the social pension service system. [1] In the context of the rapid development of the Internet, Intelligent pension has become a synonym for real-time, fast and efficient pension services, which can make up for the shortcomings of traditional home-based pension. However, there are some problems such as too single pension products, service fragmentation, lack of experience in Intelligent pension services and low acceptance rate of the elderly. In order to actively respond to the aging of the population, the report of the 19th National Congress of the Communist Party of China clearly points out that it is necessary to build a policy system and social environment for the elderly, filial piety and respect for the elderly, promote the combination of medical care and support, and accelerate the development of the aging cause and industry. In this context, Intelligent pension has become a new trend of pension in China, which has attracted great attention. In order to promote the comprehensive and sustainable development of the cause of aging, China needs to constantly solve the shortcomings of the existing model and innovate the Intelligent pension model. We take Bengbu City in Anhui Province as an example to carry out field interviews and questionnaires, in order to analyze and

study the current development status and influencing factors of Intelligent pension, and provide suggestions for the development of Intelligent pension in China.

2. Overview of Intelligent Pension

Intelligent pension refers to a new pension mode that uses the new generation of information technology products such as the Internet of things to effectively connect and optimize the allocation of individuals, families, communities, institutions and health pension resources, and improve the quality and efficiency of health pension services. It can provide relatively real-time, fast, efficient and Internet of things support by providing smart home and smart monitoring equipment. The elderly service can help the elderly at home, reduce the risk of their children's going to work and the elderly's staying at home alone, and make up for the deficiencies in the traditional way of home-based elderly care [2].

The concept of Intelligent pension in China first appeared in "digital pension" proposed in 2007. Although it started late, it has developed rapidly with the support of national policies in recent years. In 2012, the concept of "Intelligent pension" was formally put forward. After that, the State Council, the Ministry of civil affairs and other departments successively issued documents to promote the development of Intelligent pension, and carried out application pilot. So far, the pilot areas and enterprises are the focus of China's Intelligent pension development. By the end of 2018, there were 53 and 82 Intelligent pension

demonstration enterprises and Intelligent pension information enterprises in China. After years of development, the Intelligent pension pilot enterprises have been distributed in many provinces [3].

3. The Development Status of Intelligent Pension under the Aging

3.1. Current situation of pension industry in Bengbu

As one of the areas with fast aging population in Anhui Province, Bengbu City has reached the national standard of aging in 1997. By October 2018, the elderly aged over 60 in Bengbu accounted for 15% of the total population, reaching 565000, and the dependency ratio of the elderly population has been increasing in recent years.

With the deepening of aging, a diversified pension model emerged. According to the survey, by the end of 2017, Bengbu had 156 various pension institutions, 112 of which were public and 44 were private. On average, one thousand old people had 42.3 pension beds, which was higher than the national average of 27.2 at that time.

3.2. Residents' understanding and attitude towards Intelligent pension model

According to the survey, Bengbu residents only have the most "simple understanding" of the Intelligent pension model, while the number of "knowing" elderly is small, and a large number of people are in the "only heard" stage, which shows that the public's understanding of the Intelligent pension model is still low. For the reason that people are not willing to choose Intelligent pension, some

people are concerned about the high cost of Intelligent pension, which cannot provide the elderly with high "cost-effective" services, others think that Intelligent pension is not reliable, and most of these people know little about Intelligent pension. As for the satisfaction of the elderly in Bengbu City with the smart elderly care services they receive, among the surveyed elderly, the elderly who are very satisfied are less, the elderly who are relatively satisfied account for the majority, and some of the elderly think that they are generally or even dissatisfied; in general, more than half of the elderly hold a recognition attitude towards the existing level of smart elderly care services in the community.

To some extent, the above results reflect that the Intelligent pension service system of Bengbu City is not perfect, and it does not meet the pension needs of the elderly in Bengbu City, and it still needs continuous exploration, innovation and improvement.

4. Factors Affecting the Development Level of Intelligent Pension

4.1. Favorable factors for the development of Intelligent pension in Bengbu

The rapid growth of the elderly is not in harmony with the simple way of providing for the aged. It is predicted that the elderly in Bengbu will account for 25% - 30% of the total population in 30 years, and ordinary pension cannot meet such a huge demand, so the new pension model of Intelligent pension emerges.

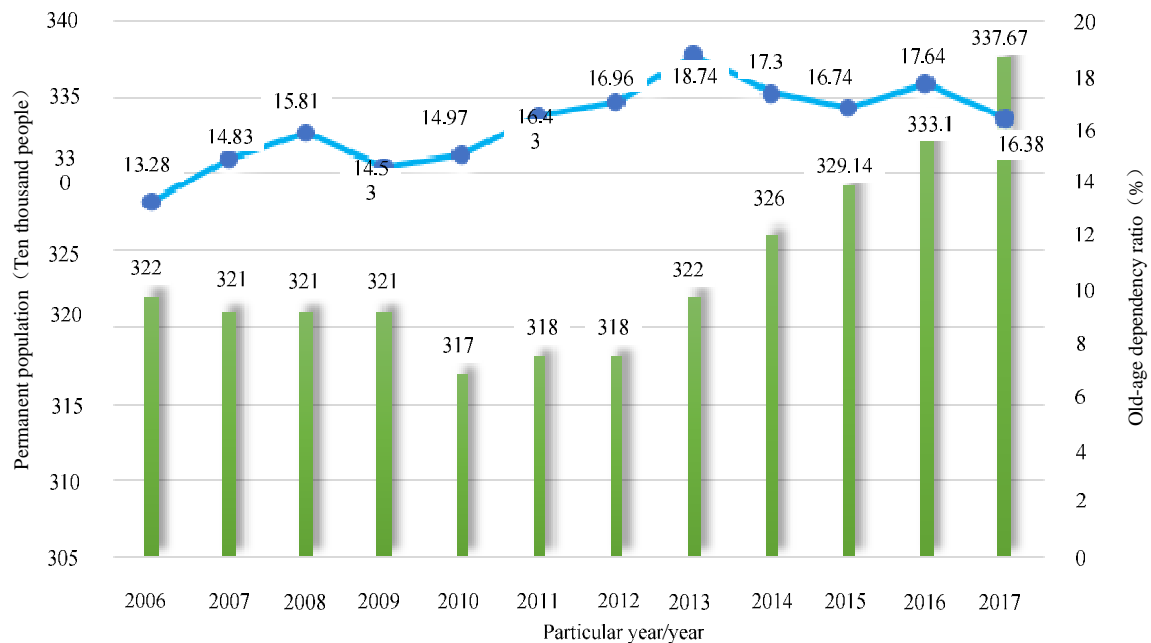


Figure 1. Ratio of permanent population to elderly support in Bengbu city data source: Anhui provincial bureau of statistics, national bureau of statistics

From Figure 1, it can be seen that the elderly care ratio in Bengbu has been rising slowly since 2010, and it has remained high in recent years. The increasingly severe aging situation is also a boost to the development of smart elderly care in Bengbu.

Promotion of relevant pension policies. In recent years, Bengbu City has responded to the national slogan of "actively responding to the aging of population". On the one hand, it has effectively implemented a number of policies to promote the development of Intelligent pension issued by many relevant departments of the country. On the other hand, it has actively formulated the development goals of Intelligent pension in Bengbu City, and accelerated the development of Intelligent pension through support, incentive and promotion.

The rapid development of science and technology. "Wisdom" is the main feature of Intelligent pension different

from traditional pension. The development of intelligent technology under the guidance of policy provides support for "wisdom", and becomes the key to the development of Intelligent pension industry in the new era. At home and abroad, information technology has been used to carry out Intelligent pension practice, and the launch of Intelligent pension pilot promotes industrial development, but also reflects the impact of technology level on the development of Intelligent pension in a country [4].

The improvement of population education level. The per capita education level also affects people's acceptance of the relatively new thing of Intelligent pension. Advanced concepts are closely related to the concept of personal health maintenance. Through the interaction between parents and children, the elderly can also access the knowledge related to Intelligent pension, which is conducive to the development of industry [5].

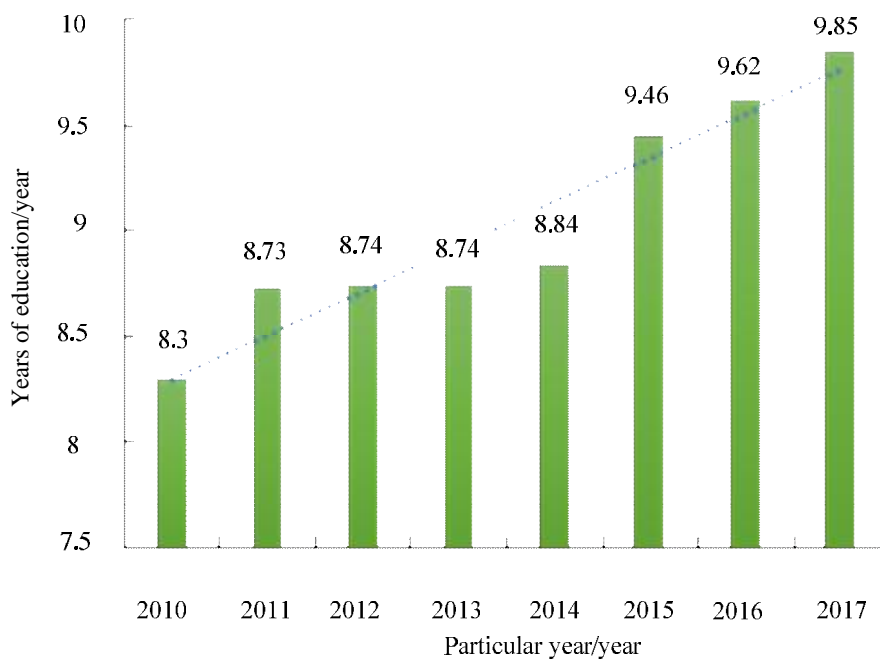


Figure 2. Years of education per capita in Bengbu data source: Anhui provincial bureau of statistics, national bureau of statistics

As can be seen from Figure 2, in recent years, the number of years of education per capita in Bengbu City has been increasing. With the development of this trend, the popularity of Intelligent pension will also be increasing.

4.2. Unfavorable factors for the development of intelligent pension in Bengbu.

The level of urban development is low. Economic development and the development of Intelligent pension are mutually promoting. Entrepreneurs are more willing to establish Intelligent pension enterprises in cities with more developed economies. Bengbu, as a third tier city,

has a low level of economic development, which to a large extent limits the development of Intelligent pension in Bengbu.

The population is less educated. People's ability to accept new things is often related to their personal knowledge level. At present, Bengbu's per capita education period is still about 10 years, and the illiteracy rate of the total population is relatively high, ranking higher among the cities in Anhui Province, which indirectly affects the promotion of Intelligent pension mode in the city.

Table 1. Average years of education and total illiteracy rate of each city in Anhui Province in 2017

City	Years of education per capita(year)	Ranking of years of Education	Total illiteracy rate (%)	Ranking of total illiteracy rate
Hefei City	11.26	1	4.53	15
Wuhu City	10.12	2	4.91	11
Bengbu City	9.85	3	5.21	8
Huaibei City	9.65	4	4.74	12
Huainan City	9.38	5	5.01	9
Tongling City	9.28	6	5.28	6
Ma'anshan City	9.16	7	4.68	13
Chizhou City	9.07	8	4.98	10
Anqing City	9.01	9	4.63	14
Huangshan City	9	10	3.26	16
Chuzhou City	8.98	11	5.25	7
Lu'an City	8.78	12	5.56	5
Xuancheng City	8.71	13	5.88	4
Suzhou City	8.67	14	6.79	2
Fuyang City	8.42	15	6.33	3
Bozhou City	8.3	16	7.08	1

Data source: Anhui Provincial Bureau of statistics, National Bureau of Statistics

The government's propaganda is not strong enough and the implementation efficiency is not high. Bengbu residents have a low understanding of Intelligent pension, and there are some misunderstandings and concerns, which is largely due to the government's inadequate publicity of this new pension model. In addition, this way of providing for the aged also has great controversy, and an efficient intelligent mode of providing for the aged needs to be maintained by multiple departments of the government. Once there is disagreement between departments, it is easy to cause the consequences of low efficiency in decision-making and implementation [6].

5. Problems in the Development of Intelligent Pension

Intelligent pension infrastructure is weak. Bengbu City is limited by the level of economic development, the elderly information management platform is not perfect, lack of good technical support, lack of research and development of various intelligent components, and the overall infrastructure is still weak.

There is a lack of intelligent elderly care talents and limited service ability. The requirement of intelligent pension for people is relatively strict, and it must be trained talents who have mastered professional skills. However, the current pension employees in Bengbu City are "two low and one small" -- one is the low level of education, and most of them are laid-off workers and "4050" with low level of education. There is no professional maintenance training institution in Bengbu, so most of the maintenance staff do not have the employment qualification certificate issued by the authority department, which cannot meet the requirements; secondly, the wage level is low, and the profitability of Bengbu Intelligent pension industry is weak, which leads to low wages of workers, which further leads to the lack and

loss of talents; thirdly, the number of employees is small, and the lack and loss of talents is to a large extent in the upper limit The development of Intelligent pension industry in Bengbu has been made.

At present, the Intelligent pension project in Bengbu City is still at a relatively low level. Whether it is a public or private pension institution, its staff, such as the maintenance staff, are mostly temporarily trained, and their professional level is uneven. It is difficult to scientifically and effectively solve the problems of approaching the elderly and understanding their needs, which affects the public's satisfaction with Intelligent pension services.

The popularity of smart elderly care and the sense of identity of the elderly are low. Limited by the economic level, the popularity of smart elderly care in Bengbu City is low, smart elderly care rooms and other equipment have not been promoted, and some rural information infrastructure is weak, resulting in individual towns still in a blank area. Under the influence of traditional concepts, the elderly have no sense of identity in terms of cognition, consumption ability, use ability and living habits, which further reduces their acceptance.

Intelligent pension products are single. As a new industry, Intelligent pension service products will be richer and richer, with great development potential, but the industry in Bengbu is still in its infancy. From the perspective of pension service products, the products commonly used by the elderly are still on the machines with low intelligent level, such as the elderly machine and pager, and the combination of information technology and pension service is relatively single; from the perspective of service provision, the services provided by Bengbu Intelligent pension focus more on health and life convenience, and are insufficient in other aspects, such as the spiritual needs of the elderly.

The industry lacks a unified standard and the ability of sustainable development is weak. There are not many existing Intelligent pension related documents about pension service standards, and some lack of scientific explanation and operation standards, which have little guidance on practice. Bengbu City has not yet established a unified service standard for the smart elderly care industry, there is no effective industry supervision, and it is difficult to ensure the quality of service. From the perspective of research, the operation ability of Bengbu pension service enterprises is weak, coupled with high service cost and low income of the elderly, lack of scale effect, resulting in low profitability and weak sustainable development ability [7].

6. Summary

Based on the research of Bengbu City, this paper analyzes the current situation of Intelligent pension development, the factors influencing the development level of Intelligent pension and the problems existing in the development of Intelligent pension under the aging of Bengbu City according to the research results, and draws the following conclusions:

The increasing aging of population has led to great pressure on the elderly in Bengbu City. However, the traditional institutional, home-based and community-based pension are difficult to meet the diversified and multi-level needs of the elderly. Therefore, the new generation of information technology products, such as the Internet of things, can be used to realize the effective docking of individuals, families, communities, institutions and healthy pension resources and optimize the allocation of Intelligent pension services And born.

The development level of Intelligent pension in Bengbu City is affected by many factors, and there are some problems such as lack of unified standards, weak infrastructure and single pension products, which lead to the low development level of Intelligent pension in Bengbu City at this stage.

The author believes that under the pressure of providing for the aged, the traditional mode of providing for the aged is bound to be replaced by the intelligent mode of providing for the aged. However, for Bengbu, a city with a low level of development, to face the severe challenge of providing for the aged, and to establish a perfect intelligent system of providing for the aged, we need to do the following:

(1) Build a Intelligent pension system led by the government and participated by multiple subjects. Bengbu's Intelligent pension industry is relatively fragile, unlike the economically developed areas, which can be introduced by pension institutions, so it is more necessary for the government to play a leading role in encouraging and

combining enterprises and pension institutions to jointly improve the Intelligent pension service system. The government should take the initiative to purchase relevant infrastructure, provide targeted policy support, and be the most powerful support for enterprises [8].

We will increase investment in Intelligent pension industry and strengthen the construction of pension service teams. To improve the confidence of enterprises to join the Intelligent pension industry, we need to learn from other cities with better Intelligent pension development, raise funds from various channels to increase industrial capital investment, and ensure the sustainable development of pension enterprises. In addition, Bengbu's Intelligent pension industry is in a state of contradiction that requires a large number of labor and the wages are generally not ideal. Based on the heavy work and insufficient labor force of the staff, we should improve the salary and treatment of the old-age employees, and set up a docking training institution to attract more people to join the old-age service team.

Unify industry standards and increase the promotion of smart elderly care services. Bengbu Municipal government should improve relevant supporting policies, establish a unified service standard for smart elderly care in this city, and exercise effective industry supervision to ensure the quality of service. At the same time, we will increase the publicity and promotion of smart elderly care services so that more elderly people can understand this service and enhance their sense of identity.

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