

Research on the Countermeasures of Improving Old-Age Security System in Tianjin Province under the Background of Population Aging

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Abstract: The aging of the population has become an escalating problem in China. This article is based on the background of aging population, focusing on the issue of elderly care security. A field investigation was conducted on the income level and satisfaction, elderly care willingness, elderly care mode, awareness and understanding of elderly care institutions, community elderly care services, elderly care service needs, and intelligent old-age care awareness of urban elderly people in Tianjin. Through questionnaire surveys, this article found that there are problems such as low income from pension, low recognition of institutional pension, imbalance between supply and demand of social pension, difficulties in adapting old residential areas to the elderly, and low penetration rate of intelligent pension. Then, the article proposes the following countermeasures: improving the multi-level elderly care security system, innovating the community elderly care model, enriching the content of elderly care services, achieving supply and demand docking, developing elderly care volunteer services, attracting various volunteers to join elderly care volunteer services, strengthening financial investment, highlighting community guidance, actively attracting social forces to participate in the aging friendly renovation of old residential areas, increasing the construction of intelligent elderly care services, and providing high-quality elderly care services.

Keywords: Security System; Population Aging; Community Care for the Elderly; Intelligent Old-age Care; Tianjin Province

1. Introduction

Population aging is a major global trend that affects all countries. According to recent

projections, the global population of older adults (those aged 60 and up) will grow by 39% between 2012 and 2050. This number will be higher in less developed countries than in more developed ones [1]. However, China's population aging is large-scale, deep-seated and fast-paced. China belongs to the developing countries of "growing old before getting rich", and the problem of old-age care is more severe. The international community generally believes that when the population aged 60 or over accounts for 10% of the total population of a country or region, the population aged 65 or above accounts for 7% of the total population of a country or region, which means that the population of the country or region is in an aging society [2]. According to the National Bureau of Statistics, there were more than 280 million people aged 60 and above in the country, accounting for 19.8% of the country's total population, of which 210 million were aged 65 and above, accounting for 14.9% of the country's total population by the end of 2022. Tianjin is one of the earliest cities in China to enter the aging society. By the end of 2022, among the permanent residents of Tianjin, the population over 60 years old reached 3.2 million, accounting for 23.5% of the total population, of which 3 million were registered elderly, accounting for 25.84%. Experts predict that the proportion of registered elderly people over 60 years old in our city may exceed 30% by 2026. At the same time, the decline in fertility rate and the increase in life expectancy (life expectancy in 2020 was 81.91 years) have become another feature of population aging. The intensification of aging has a significant impact on economic development, social security and social life.

Our government pays great attention to population aging. Since 2017, our leaders have made more than 30 important instructions,

instructions and speeches on the work of the elderly. The government actively respond to the aging of the population, build a policy system and social environment for the elderly, filial piety and respect for the elderly, promote the integration of medical care and elderly care, and accelerate the development of the cause and industry for the elderly. In 2022, our government further proposed to “implement the national strategy of actively responding to the aging of the population, develop the pension industry and the pension industry, optimize the services for the elderly who are alone and widowed, and promote the realization of basic pension services for all the elderly”. In 2019, our government issued the “National Medium and Long-term Plan for Actively Responding to Population Aging”; In 2020, our government deliberated and adopted the Proposal which made the implementation of actively responding to the rise of population aging a national strategy and advocating a positive outlook on ageing in the whole society; In 2021, our government issued the Opinions on Strengthening the Work on Aging in the New Era in order to comprehensively deploy and carry out the work on aging.

In 2014, Tianjin began to implement the “Tianjin Pension Service Promotion Regulations”, which was revised in 2020, providing important policy guidelines for promoting the healthy development of pension services; On June 25, 2022, the General Office of the Tianjin Municipal People's Government issued the “Specific Measures for Further Promoting the Development of the Aging Cause and the Construction of the Pension Service System in Tianjin”; On October 20, 2022, the Civil Affairs Bureau, the Municipal Development and Reform Commission, the Municipal Planning and Resources Bureau, and the Municipal Health Commission issued the proposal to cope with population aging; On November 29, 2022, the Civil Affairs Bureau and the Municipal Finance Bureau issued a notice on the “Administrative Measures for Subsidies for Elderly Care Institutions in Tianjin”, which stipulates the subsidy objects, subsidy standards, forms and service modes for home-based elderly care services; On November 2, 2022, 11 departments including the Civil Affairs Bureau issued a notice on 23 measures to deepen the development of embedded elderly

care service institutions. In addition, the city has also issued a series of norms and standards, such as the “Pension Service Information Management Platform Construction and Operation Specifications”, “Pension Institutions Meal Service Basic Specifications”, “Elderly Care Institutions Health File Management Specifications”, “Community Embedded Elderly Care Service Specifications”, “Home Care Staff Training Specifications” and so on. Our city has achieved certain results in dealing with the aging of the population, but there are still many problems. It is very important to research on old-age security.

2. Status Quo of Security System in Tianjin Province

2.1 Questionnaire Survey Design

In order to understand the status of old-age security and services in Tianjin, the research team investigated a number of communities, elderly care institutions, and elderly care service centers from July to October 2023, mainly using interview methods and questionnaire survey methods to survey the elderly who have lived in cities and towns for more than one year. The survey mainly surveyed the elderly who were over 60 years old and could communicate normally. A total of 350 questionnaires were distributed in this survey, 326 questionnaires were recovered, 7 invalid questionnaires were eliminated (missing or the options were the same), and 319 valid questionnaires were obtained, with a recovery rate of 97.9%. The questionnaire includes: pension income status, pension service needs of the elderly; the willingness of institutions to provide for the elderly, and the status of community pension services; intelligent old-age care.

2.2 Basic Information of the Respondents

Among the 319 valid questionnaires, 183 were males, accounting for 46.8%; 208 were females, accounting for 53.2%. In terms of age, there were 138 aged 60-64 accounting for 35.29%, and 79 aged 65-69 accounting for 20.2%; There were 86 aged 70-74 accounting for 21.99%, 57 aged 75-79 accounting for 14.58%, and 31 over 80 years old accounting for 7.93%. In terms of marital status, 116 were married, accounting for 29.67%, 27 were

separated, accounting for 6.91%, 103 were divorced, accounting for 26.43%, 123 were widowed, accounting for 31.46%, and 22 were unmarried, accounting for 5.63%. From the perspective of the current living mode, there are 65 people living with their children, accounting for 10.50%, 102 people living with their spouses, accounting for 31.97%, 81 people living alone, accounting for 25.39%, 29 people living in community pension institutions, accounting for 9.09%, and 42 people living in other institutions, accounting for 13.17%. Most of them live with their spouses. In terms of education level, 74.29% of the respondents had a high school degree or less.

2.3 Analysis of Questionnaire Results

2.3.1 Analysis of Pension Income

The survey results showed that there were 168 people with a monthly income of less than 3,000 yuan, accounting for 42.97%, 130 people with a monthly income of 3,000-5,000 yuan, accounting for 33.25%, 50 people with a monthly income of 5,000-8,000 yuan, accounting for 12.79%, and 42 people with a monthly income of more than 8,000 yuan, accounting for 11.00%. Most of the elderly group had an income of less than 5,000 yuan. From the perspective of income sources, the main sources of income for the elderly were pensions, support for other family members and pensions, accounting for 43.73%, 59.08% and 22.25% respectively. From the perspective of pension income satisfaction, there were 30 people who were very satisfied, accounting for 7.67%, 31 people who were relatively satisfied, accounting for 7.93%, 154 people who were generally satisfied, accounting for 39.39%, 119 people who were relatively dissatisfied, accounting for 30.43%, and 57 people who were very dissatisfied, accounting for 14.58%. It can be seen that the majority of the elderly group were not satisfied with the pension income. The main expenses were focused on living expenses, medical treatment, medicine, and subsidies for children and grandchildren.

2.3.2 Analysis of Identity Status and Willingness to Choose Institutions

The survey results showed that only 62.72% of the respondents thought that they understood the city's old-age security policies, but there were still 37.28% of the elderly who did not have a deep understanding of the

specific content of the old-age security policy. When asked about their views on old-age security, the problems reflected in the survey included, such as, "it was difficult and expensive to see a doctor", "the lack of emergency medical facilities and rescue equipment in the community", and "the low level of assistance for the poor elderly".

2.3.3 Analysis of the Elderly's Understanding of the Old-age Security Policy

The survey results showed that only 89 people chose institutional pension, and the willingness rate to move in was 22.76%. When asked about the degree of understanding of local pension institutions, 137 people chose not to know very much, accounting for 35.04%, 45 people chose not to know, accounting for 11.51%, and 44 and 57 people chose to know more and know very well, respectively, accounting for less. It can be seen that most of the elderly groups had less awareness of pension institutions. Even if some elderly people thought that they knew more about elderly care institutions, it was all hearsay and there was no accurate source. From the point of view of acceptable fees for pension institutions, there were 92 people who choose less than 1,000 yuan, accounting for 23.53%, 126 people who choose 1,001-2,000 yuan, accounting for 32.23%, 108 people who choose 2,001-3,000 yuan, accounting for 27.62%, and 65 people who were more than 3,000 yuan, accounting for only 16.62%. Most of the elderly believe that the fee standard of the pension institution should be less than 3,000 yuan. However, according to the survey of pension institutions, the charging standards of pension institutions with relatively good conditions were more than 3,000 yuan. This was a certain gap with the psychological expectations of the elderly.

In addition, from the perspective of the reasons for reluctance to enter the nursing institution, the main reasons were, such as, they were afraid that others will had a bad opinion of their children (69.82%), there was no family warmth (68.03%), concentration of the elderly, weakness, sickness and disability and a sense of depression (66.75%), poor hygiene (67.26%), poor food (58.06%), psychological unacceptability (40.15%), etc. The traditional concept of old-age care, the cognition of old-age institutions, the cost of old-age care institutions and psychological

factors affected the willingness of the elderly group to go to the institution for the elderly.

2.3.4 Analysis of Community Care Services

(1) Analysis of the status of community care services

Community care is the most important model of elderly care at present, which is a form of relying on the community to provide life care, medical care and spiritual comfort services for the elderly at home [3]. The survey results showed that 39.9% of the elderly said that there was no pension service in their community, and 27.37% of the elderly still did not know whether there was a pension service institution in the community. The coverage rate of community elderly care still needed to be improved. From the perspective of community care facilities, 31.46% of the respondents think that the community elderly care service facilities are sufficient, 34.27% answers thought that the facilities were insufficient, and 34.27% of the elderly did not know. In recent years, the city's day care centers have developed rapidly, and at present, 500 day-care centers have been built in the city, but there is still a large gap. Taking Wangdingdi Street in Nankai District as an example, there is only one care center in Yingshui Xili, which can be said to be a big gap compared with the number of elderly people who need to provide services. At the same time, during other surveys, it was found that some day care centers had formal problems and did not really provide services.

(2) Analysis of community pension service projects

From the perspective of participating in community pension service projects, 74.94% of the elderly did not join in community pension service projects. For the elderly care service projects, mainly focusing on fitness activities for the elderly, activity rooms for the elderly, schools for the elderly and public welfare activities for the elderly, only 18.67% had received mental health services. From the perspective of community geriatric medical services, only 30.69% of the elderly had received. The number of people who had received bathing assistance and home care services is even smaller. According to the survey on the demand for community elderly care services for the elderly, the higher proportions were day care (79.54%), home care services (65.47%), social services

(61.38%), home visit services (63.17%), pension policy publicity (48.85%), emergency assistance (44.5%), medical care guidance (32.48%), and home medical services (28.39%).

The survey results showed that most communities mainly provided cultural and sports activities, the activity venues were mostly activity rooms for the elderly, and the elderly care facilities are mostly fitness equipment, while the service forms with high demand such as day care, medical rehabilitation, emergency assistance, and spiritual comfort are difficult to provide, and there is a certain deviation between the content of community pension services and the needs of the elderly for pension services.

(3) Age-appropriate transformation

According to the data released by the relevant personnel of the National Health Commission, most of the elderly in China are elderly care at home and in the community, forming a "9073" pattern, that is, 90% of the elderly are self-taken care of by their families and adopt family-based home care; 7% of the elderly enjoy community-based home care services and provide day care; 3% of the elderly enjoy institutional pension services. This survey was mainly conducted in the old residential area, so most of the communities did not have elevators, but the proportion of elderly people who wanted to install elevators reaches more than 90%. In addition, 33.0% of the respondents were willing to renovate. It may be that 63.1% of the elderly believed that the interior of the house was not necessary to be renovated for the elderly, and 36.9% thought that it is necessary to renovate the interior of the house.

2.3.5 Analysis of the Implementation of Intelligent Old-age Care

As a new type of pension method, intelligent old-age care provides a feasible path to solve the problem of pension in China, and is also an important means for China to achieve healthy aging and active aging. Hedong District and Binhai New Area of our city are also the earliest areas to adopt intelligent old-age care. However, due to cost, technology and other reasons, there are many problems in the promotion and implementation of intelligent pension.

(1) Analysis of the cognitive status of intelligent old-age care

The survey results showed that the elderly's perception of intelligent old-age care was not ideal. 72.38% of the respondents did not know intelligent old-age care, and only 27.62% did know. Most of the elderly were slow to accept new things and are in a passive state, especially the lack of corresponding publicity and popularization, and the elderly had less understanding of intelligent old-age care. From the perspective of intelligent old-age care projects, the main equipments that has experienced intelligent old-age care were medical equipment (blood pressure monitor, blood glucose meter, blood lipid meter, electrocardiogram, forehead thermometer, etc.) (accounting for 58.06%) and intelligent bracelets (accounting for 42.97%), and fewer other intelligent devices were used, such as intelligent mattresses, intelligent smoking alarms, intelligent cameras, intelligent control appliances, intelligent switches, intelligent curtains, etc. From the perspective of demand for intelligent old-age care services, the demand intensity was higher for personnel positioning and safety (67.77%), door-to-door medical services (67.77%), daily care services (60.1%), cultural activities services (41.18%), mental health services (23.79%), etc.

The survey also found that the elderly were worried about intelligent, mainly focusing on the following problems: service quality is not up to standard (76.47%), it is difficult to timely feedback the physical condition of the elderly (75.96%), personal information leakage (49.39%), it was difficult to rescue in case of accidents (47.83%), and the cost of money is high (35.29%).

(2) Analysis of the results of intelligent old-age care professionals

Intelligent old-age care relies on science and technology, involving a number of high-tech technologies, such as high-precision sensors, 5G communications, intelligent wearable chips, intelligent interaction technology, genetic engineering technology, etc. Pension robots and other cutting-edge technology, wisdom of the high dependence on science and technology also means that the industry needs a large number of comprehensive talents with good technical capabilities, the scope of technology covers information, communications, medical and other fields, but this compound talent has been in a state of shortage, and the contradiction between input

and output has further increased the difficulty of talent training, so the development of the wisdom of the pension industry is more difficult. At present, only one university in Tianjin University of Technology has set up a gerontology major in our city, and the lack of talents in the pension service industry will also greatly affect the development of intelligent pension services.

3. Problems of Security System in Tianjin

3.1 Low Retirement Income and Poor Satisfaction

The results of the questionnaires showed that 42.97% of the elderly had an income of less than 3,000 yuan. If the income is low, it is natural that you cannot afford the high pension expenses. In addition to spending on living expenses and medical treatment, some elderly people also have to subsidize their children and grandchildren. According to the relevant data of the Tianjin Municipal Bureau of Statistics, in the first three quarters of 2023, the city's per capita consumption expenditure would be 25,719 yuan, and the average monthly consumption expenditure would be 2,858 yuan, while the monthly income of most elderly people would be less than 3,000 yuan. The cost of old-age care that the elderly can afford is very limited.

3.2 Low Recognition of Institutional Elderly Care and a Significant Gap in the Quality of Elderly Care Services

The results of the questionnaire showed that 22.67% of the elderly chose institutional pension, and most of the elderly are unwilling to choose institutional pension. The survey found that many elderly people are reluctant to go to nursing homes for a variety of reasons, one is to be separated from their loved ones, lack of care from their relatives, and will produce a sense of loneliness; Second, there are certain regulations and restrictions to be observed in nursing institutions, and independence and autonomy are lost, which is difficult for the elderly who are accustomed to living freely; Third, because the cost of pension institutions is high, the burden is more difficult; Fourth, there is concern about the quality of care, and nursing staff are not able to provide patient and personalized services.

3.3 Unbalanced Supply and Demand of

Community Elderly Care and Insufficient Care Services

The results of the questionnaire show that most of the community pension services are mostly concentrated in cultural entertainment and fitness activities, but there is still a big gap between this and the demand for pension services for the elderly. Due to the physical reasons of the elderly, there is a greater need for medical diagnosis, rehabilitation services, home care, medical care, and psychological comfort services, but it is difficult to provide these professional services due to the small number of professionals in community elderly care service centers or home care service centers. In addition, the survey found that the elderly who were relatively healthy can go to the community elderly care service center to enjoy certain elderly care services. However, for the elderly with disabilities and dementia, the care capacity of the elderly service center was obviously insufficient. How to integrate limited resources and maximize efficiency, there is still a great room for improvement in community elderly care services.

3.4 High Difficulty of Adapting Old Residential Areas and Low Enthusiasm of Social Forces to Participate in Transformation

The old community is densely populated, and the elderly care center and community elderly care service cannot meet the demand. The elderly need a place for daily leisure, communication, and exercise. Due to the small public space in the old community, the addition of various supporting facilities makes it difficult to adapt to the elderly. In addition, due to the lack of legal protection, lighting, noise and other problems, it is difficult to reach a consensus on residents' opinions, which leads to the slow progress of installing elevators. According to the survey, only one unit in a community in Nankai District has been equipped with an elevator, and there are 25 buildings in the community.

At present, the renovation of old communities for the elderly is mainly based on financial subsidies, and the enthusiasm of social subjects to participate is very low, mainly because of the low income, low return and difficulty in achieving profitability of such renovation projects. Relevant data show that in 2022, two-thirds of the provinces in the

transformation of old urban communities in the country attracted less than 10% of social force capital. How to mobilize the enthusiasm of social forces to participate in the transformation of the elderly is still a relatively important issue.

3.5 Low Penetration Rate of Intelligent Pension, and Few Professionals

The survey results show that the penetration rate of intelligent pension in our city is not high, and the proportion of respondents who have experienced intelligent pension products is relatively low. The main reason is that there are still deficiencies in capital, technology and talents. Although the technology related to intelligent health care for the elderly continues to improve, the practical technology and core technology are still relatively weak, and there is still a certain gap compared with the broad market demand. At the same time, in order to improve the function of some pension products, information technology is used more, the operation is cumbersome, and the product is suitable for the elderly and the operation friendliness is insufficient, resulting in the convenience of use, practicability, and economy are reduced, and the elderly and their children are not willing to buy, and the product penetration rate is low.

In addition, the wisdom of the pension industry involves many fields, such as information, hardware, medical care, services, finance, education, etc., which requires wisdom pension professionals to fully understand the knowledge of various fields, this kind of talent can be said to be very few, the entire wisdom of the pension industry talent is lacking, the development process is slow.

4. Analysis of Causes

4.1 Imperfect of The Old-age Security System

China's relevant old-age security system is not perfect, which will lead to the implementation at all levels can not be carried out well, resulting in the problem of old-age care has been stranded for a long time. In addition, for the pension problem under the aging of the population, the supervision of government departments is insufficient.

4.2 Shortage of Community Pension Service Staff and Insufficient Publicities

The number of community elderly care service workers is small, and most of them do not have relevant professional service knowledge and cannot provide professional services. The professional quality of the elderly service personnel in some communities is insufficient, and there are also certain problems in the service attitude towards the elderly. At the same time, due to low salary and limited career development, the loss of pension service personnel is serious.

According to the survey results, some elderly people do not know whether there were elderly care services in the community, and the main reason is that the publicity is not enough. Due to the lack of effective publicity, some elderly people do not know whether there are elderly care service institutions in the community or what elderly care services can be provided.

4.3 Imperfect Intelligent Old-age Care System, and Low Willingness to Learn Intelligent Old-age Care

Since 2012, the National Office on Ageing first put forward the concept of “intelligent elderly care”, and then put forward a number of plans and policies. However, due to the short development time of intelligent pension and the imperfect laws and regulations, most of the relevant policy documents are also guidance. Due to the imperfection of the system and mechanism, there is no unified market access mechanism for the community wisdom pension, and there is a lack of mature and perfect standards in the operation process, and the relevant service and product supply subjects are pouring into the pension market under the premise of no unified standard, and the non-standard market operation directly leads to uneven product quality, uneven service quality, and the supply of intelligent pension services and intelligent products is difficult to match with the actual needs of the elderly. In addition, because the elderly are older and have weakened learning ability, they often think that they cannot accept new things, and they are also worried about economic damage caused by operational errors, so they cannot accept “change” and hold a negative view of aging.

4.4 Lack of Emphasis on Elderly Care Issues

Many families are facing the problem of being old and young, but more families are focusing on “raising the young” and ignoring the “old-age care”. Many young people's views still have an incorrect understanding, thinking that “pension” is to give their parents living expenses or buy some daily necessities, but they can't accompany the elderly with their hearts, or consider their parents' needs for the elderly. The issue of family pension is still only at the material level. This view also leads to the low quality of elderly care services.

5. Countermeasures of Social Security Coping with Population Aging

In order to effectively respond to the challenges brought by the aging population to the economic and social development of our city, it is necessary to strengthen government investment, absorb the participation of multiple subjects, and take a variety of measures.

5.1 Improving the Multi-Level Old-age Security System and Extend the Content of Old-age Security

5.1.1 Continuing to Increase Financial Investment and Improving the Level of Basic Old-age Security

The first is to increase the level of pensions. The city needs to adjust the structure of fiscal expenditure, gradually increase the proportion of social security expenditure in fiscal expenditure, and further improve the level of pension income [3,4]. The second is to increase the basic protection for special groups, such as the extremely poor, the elderly on the verge of subsistence allowance and the subsistence allowance, and the disabled and semi-disabled elderly who are in financial difficulty, and provide corresponding subsidy and subsidy policies for the purchase of door-to-door life care, rehabilitation nursing and other services, so as to effectively meet the diversified and multi-level pension services for the elderly.

5.1.2 Vigorously Attracting Multiple Entities to Participate in the Development of Old-age Security, and Expanding the Funding Channels for Old-age Security

The development of the pension industry is far from enough to rely on government investment, and our government should

vigorously support private capital investment in the pension industry [5]. The government should provide preferential policy support, to attract social organizations, private enterprises and other participation in the development of pension insurance, pension institutions, so as to increase the source of funds for the pension industry. Our government should encourage and guide multiple entities to participate in the pension cause, such as enterprises, social organizations, individuals and other social forces through donations, the establishment of charitable funds and other ways to provide support and help for basic pension service funds.

5.1.3 Strengthening the Legislative Construction of Pension Insurance and Ensuring the Legislative Construction of Pension Insurance Funds

Through legislation to determine the safe investment mechanism of the pension insurance fund, to ensure the investment direction and investment type of the pension insurance fund, to ensure the preservation and appreciation of the value of the pension insurance fund; Intensify efforts to levy pension insurance, and pursue legal responsibility for non-payment and refusal to pay pension insurance; At the same time, establish and improve the basic pension insurance supervision system.

5.1.4 Expanding the Coverage of Enterprise Annuities

The government can introduce a series of supporting preferential policies to attract and encourage the growing and growing traditional advantageous industries and emerging industries in the region to establish enterprise annuity plans, and improve the coverage rate of enterprise employee annuity.

5.1.5 Continuing to Promote the Implementation of the Personal Pension System in Tianjin

Personal pension is a strategic measure to actively respond to the aging of the population [6]. In some developed countries, the second and third pillars have become an important source of pensions for middle-income and above groups.

The first is to increase the publicity and service of personal pensions, which can be publicized by going into the community and self-media, so that more people can understand and participate in the pension

wealth reserves, and attract more groups to participate in personal pensions, including flexible employees, migrant workers, etc. Second, it is necessary to improve the relevant policies and systems, ensure the management of pension assets, maintain and increase value, and increase the confidence of the people in personal pensions.

5.2 Innovating the Community Pension Model, Enriching the Content of Pension Services, and Realizing the Connection between Supply and Demand

Community-based elderly care is still the main mode of elderly care choices at present and in the future. Vigorously developing a diversified community pension model is a major strategy to actively respond to the aging of the population.

The first is to explore multi-format home-based elderly care models, such as “property services + elderly care services” and “community + elderly care institutions + elderly care services” models, and support communities, property enterprises and elderly care service institutions to cooperate in providing home-based elderly care services, break the boundaries between each other, and improve resource utilization.

The second is to vigorously develop models such as “group pension” and “sojourn pension”. In this pension model, the elderly can live together in a group to live together. Seniors can communicate together, take care of each other, and share the joys and sorrows of life together.

The second is to improve the capacity of community pension services and give full play to the role of the community as a bridge. New or renovated community elderly care facilities, providing warm services such as medical assistance, cleaning assistance, spiritual comfort, and universities for the elderly, to meet the diverse needs of the elderly; Vigorously develop “embedded” pension services and improve the level of community pension services.

5.2.1 Developing Volunteer Services for the Elderly, and Attracting all kinds of Volunteers to Join the Volunteer Services for the Elderly

First, we can learn from the German practice and set up a “storage of personal service time” [7]. Specifically, as long as citizens over the age of 18 can use vacations and holidays to go

to nursing homes, elderly service centers and other institutions to provide services to the elderly. The time spent by these volunteers can be stored and recorded. When you became old, you can take it from these stored personal service hours and ask others to serve you. One hand, it can cultivate young people to respect and love the elderly, and on the other hand, it also saves human resource costs and builds a harmonious and mutually helpful social pension security system.

The second is to attach importance to the development of human resources for the elderly, encourage the young and healthy elderly to help the elderly and disabled, and also realize the elderly to do something, reflecting the value of the elderly. The willingness of the young and healthy elderly to serve can be stimulated through appropriate material and spiritual incentives.

5.2.2 Improving the Supervision Mechanism of Community Elderly Care, and timely Evaluating and Feedback the Quality of Community Elderly Care Services

Relevant regulations on community pension services in our city should be introduced as soon as possible, the industry standards for community pension should be unified and standardized, and an effective supervision and feedback evaluation mechanism should be established to truly make home-based elderly care services have laws to follow and rules to follow.

5.3 Strengthening Government Functions, Highlighting Community Guidance, and Actively Attracting Social Forces to Participate in the Renovation of Old Communities, Which Is very Important for Improving the Quality of Elderly Care for the Elderly

5.3.1 Strengthening Government Functions and Enhancing the Determination of Age-Appropriate Transformation

First, the municipal government should introduce the old community renovation specifications as soon as possible. Stipulate clear standards, so that local transformation can continue to be promoted under the guidance of authoritative norms, and gradually form a standardized and standardized transformation mechanism. Second, the municipal government should set up a leading group for the renovation of the elderly, and

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cooperate with the Ministry of Housing and Urban-Rural Development, the Ministry of Civil Affairs, the Public Security and other departments to ensure the smooth progress of the renovation project. Third, increase the intensity of government financial support, include the transformation of the elderly into the financial budget projects, and determine that the special funds for the transformation can be put in place.

5.3.2 Highlighting Community Guidance and Ensuring the Motivation for Age-Appropriate Transformation

The community should strengthen publicity, so that the elderly group can clarify the effect and value of the age-appropriate transformation, and can be publicized through various channels such as community bulletin boards, WeChat public accounts, Tiktok, MicroBlog, etc., to deepen residents' understanding and cognition of the age-appropriate transformation. Residents can also be invited to have a practical experience and truly feel the convenience of age-appropriate renovation to life, so as to improve the enthusiasm of renovation.

5.3.3 Stimulating the Participation of Social Capital and Forming a Tension for Transformation

Financial difficulties are a major problem in the renovation of old communities for the elderly, and government financial support alone is far from enough. Therefore, guiding the orderly participation of social capital and leveraging market forces can provide resilience support for promoting age-appropriate transformation. The government can introduce relevant policies and incentives to guide and support real estate enterprises, pension institutions, decoration enterprises, property enterprises and other market entities to participate in the renovation business for the elderly, and attract various professional institutions and other social forces to invest in the design, renovation and operation of various facilities that need to be renovated through government procurement, paid use of new facilities, and implementation of asset rights and interests.

5.4 Increasing the Construction of Intelligent Pension Services and Providing High-Quality Pension Services

5.4.1 Improving the Top-level Design and

Giving Full Play to the Leading Role of the Government

The government promotes the formulation of laws and regulations on the development of the intelligent pension industry and the information security of the elderly; The government takes the lead in attracting multiple entities to participate in the construction of the intelligent pension service system through publicity and guidance, policy support, etc.; Establish and improve the supervision mechanism to ensure the healthy operation of the intelligent pension service system; Give the elderly intelligent pension subsidies and appropriately reduce the cost of intelligent pension products.

5.4.2 Strengthening the Publicity of Intelligent Pension and Strengthening the Intelligent Education of the Elderly

The first is to promote intelligent pension products and services through a variety of channels, such as television, hospitals, elderly service centers, pension institutions, bus stop signs, public service advertisements, WeChat moments, Weibo, etc. Second, public welfare activities can also be carried out by the community, inviting the Civil Affairs Bureau or intelligent pension service personnel to deeply interpret the pension policy, popularize the knowledge of intelligent pension for the elderly, so as to improve the understanding of the elderly on intelligent pension. Third, the community, the neighborhood cooperates with other parties, or through community volunteers, regularly organizes information technology training to improve the ability of the elderly to use intelligent phones, and guide the elderly to accept new things. Fourth, guide their children to join the propaganda team. Because the elderly's understanding of intelligent pension is easier through their children, their children can be mobilized to join the volunteer service team of intelligent pension to enhance the power of publicity.

5.4.3 Optimizing Intelligent Elderly Care Services and Products In order to Truly "Understand the Elderly"

The purpose of intelligent pension is to facilitate the life of the elderly, and then improve their sense of happiness and security [8]. Therefore, intelligent pension products should "understand the elderly" and "help the elderly", which not only has the precision of technology, but also has a humanistic

temperature. "Suitable for the elderly" refers to the fact that intelligent elderly care services and production should be suitable for the psychological and physiological characteristics of the elderly; "Understanding the elderly" refers to the need to meet the real and urgent needs of the elderly; "Helping the elderly" requires more diverse, more practical and more creative intelligent services and products; "Respect for the elderly" requires that digitalization is an option, not a must, for the elderly. In short, intelligent pension products and services should be practical and easy to use for the elderly. With the help of technology, the elderly can easily learn, or even use products and services without learning.

5.4.4 Strengthening the Training of Intelligent Pension Service Professionals in Our city, and Incorporating the Training of Pension Talents into Our People's Livelihood Projects

Promote the cooperation between the city's colleges and universities and pension institutions, with the help of the city's pension service and security association, pension service association and other organizations, add intelligent pension services and other related majors, and cultivate new pension service talents. At the same time, the salary and benefits of senior service talents should be improved to attract and retain professional talents.

5.5 Delaying the Receipt of Retirement Pension and Implement a Flexible Retirement System

The first is to delay the pension age. We can learn from the successful experience of other countries, and adjust according to the actual situation of our city, such as delaying the pension, which can increase on the basis of the original pension, so as to motivate the elderly to delay receiving the pension.

The second is to implement a flexible retirement system. Compared with EU countries, China's retirement age is significantly lower, and the labor force participation rate of the elderly is small, resulting in the premature withdrawal of the productive population from the labor market, resulting in a serious waste of labor resources. In addition, the earlier retirement age has also led to the deterioration of China's pension insurance income and expenditure, and the

pension problem has risen with the intensification of aging. According to the physical health of the elderly in our city, employment willingness and economic development, we can formulate a suitable flexible retirement policy in our city, and allow workers to independently determine the retirement age within a certain range. In order to achieve the purpose of incentivizing delayed retirement, it is also necessary to formulate corresponding incentive policies to guide them to delay retirement. We can follow Japan's example to promote the introduction of laws on the reemployment of the elderly, and attach importance to the social and cultural construction of the reemployment of the elderly.

5.6 Vigorously Developing the Pension Industry and the Pension Industry to Meet the Growing Demand for Elderly Services

The increasingly large elderly group will form a growing potential consumer market, providing development opportunities for the rise of the pension industry and the pension industry [9]. The plan for accelerating the development of the pension industry and the pension industry should be introduced as soon as possible, and the development of the pension industry should be included in the city's national economic and social development plan. Targeted investigation of the demand for elderly services, give preferential policies, increase the hierarchical classification of relevant enterprises to develop products and pension service projects for the elderly, build a platform, and help the healthy development of the pension industry.

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