Study on the Status Quo, Trend, Causes and Countermeasures of Population Aging in China

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Abstract: Due to the inevitable trend of social development and the change of family planning and birth idea, China's aging presents a large scale, and the characteristics of population aging fast are rare in the world. The consequent problems include the continuous shrinking of the size of the labor force, the heavy burden of social pensions, and the downward pressure on economic operations. Based on the relevant data of the Seventh Census and the latest theoretical research, this paper mainly analyzes the current situation, trend and causes of aging, and actively promotes the policy of postponing retirement, and puts forward specific solutions, including developing surplus labor force; establishing a redistribution system commensurate with the aging society; accelerating the construction of a sound and perfect social security system; developing high and new technology and develop artificial intelligence machines; improving the education system for the elderly, so as to provide useful reference for China to successfully cope with the aging population.

Keywords: population aging, economic development, cause analysis, countermeasures

1. Introduction

As high-level health care and continuous improvement of living standards, aging population is growing, which not only brought a certain amount of pressure to social economy, but also becomes a difficult problem that must be solved for the development of the social economy. This problem has spread from developed to developing countries and has become a global problem. Population aging is recognized worldwide in the 21st century is one of the important social problems, China has become the world's most populous country in the elderly and one of the fastest speed of aging. As the largest developing country, China has witnessed rapid economic development since reform and opening up. With the implementation of the family planning policy in the 1970s, the age structure of the population changed significantly. Since 2000, the population over 60 years old has accounted for 10% of China's total population, and China has entered an aging society. By the end of 2019, there were 176 million people aged 65 or above in China, more than the total population of Japan. In 2019 alone, there were 9.45 million more people aged 65 or above. At the same time, it is clear that the elderly population is aging, and the number of people 80 and older is growing by 5% annually. The number of people 80 years and older is predicted to reach over 74 million by 2040. Medical costs will rise as the elderly population grows, and in the future, the elderly population will consume almost half of all medical resources. The distribution of scarce medical resources is severely hampered by this change [1]. Although population aging is the trend of social development, China is still in the

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stage of development. In the case of a low national income level, the threshold of entering the aging society will bring problems including continuous shrinking of the size of the labor force, heavy social pension burden, and increasing downward pressure on the economic operation. This will inevitably bring obstacles and heavy burdens to China's economic development.

On the basis of relevant data of the seventh census and recent theoretical researches, this paper puts forward specific solutions based on the analysis of the current situation, trend and causes of aging, and actively promotes the policy of postponing retirement. Developing surplus labor force; accelerate the construction of a sound and perfect social security system; develop high and new technology, develop artificial intelligence machines; improve the education system for the elderly, and provide useful reference for the realization of happy aging at the individual level, harmonious aging at the social level, and successful aging at the national level.

2. The Present Situation and Development Tendency of China's Aging Population

2.1. The Concept of Aging

At the beginning of the 20th century, in the book "Population Age Classification and Mortality Research", Sambard first defined the population over 50 as the elderly population [2]. A country or region is considered to be an aging society when 10% of the population is aged 60 or above, or 7% of the population is aged 65 or above. In 1999, China has begun to enter the aging society. Considering the development situation of developed countries, when the population dynamics of modern society undergo structural or major turning changes, it will have a large influence on the economy.

2.2. Current Status and Trend of Elderly Population in China

2.2.1. The Large and Fast Speed Aging Scale

Due to the inevitable trend of social development and the change in family planning and birth concept, the characteristics of China's aging are rare in the world. Compared with the aging process of the population in any country in the world, the characteristics of the aging process of population in China are different. On the one hand, the population is growing rapidly; on the other hand, the population is aging rapidly. Compared with developed countries, it has the characteristics of a large base, fast growth and a heavy burden. Zeng Yi summed it up as the following characteristics: high speed, old age, large number of old people, large old-age dependency ratio, and large regional differences [3].

China has conducted seven population surveys since the People's Republic of China's founding, and the country is currently experiencing historical changes in the form of structural and quantitative pressures on population growth. The birth rate has barely increased since the second child's full liberalization, and the population's long-term development trajectory toward structural aging has not fundamentally changed.

In terms of population size, 191 million people will be over the age of 65 and 264 million people over 60 in 2020, respectively. According to estimates, China's elderly population will total about 300 million by 2025, more than 400 million by 2033, and more than 483 million by 2053. 66.67% of Asia's elderly population and 25% of the world's aging population will come from China [4].

In terms of the rate of aging, the population over 60 and the population over 65 are growing at sharply increasing rates, and the percent of the two age groups in the overall population is also sharply rising. China will unavoidably enter the period of accelerated aging society as a result of the gradual aging of those over 60.

2.2.2. The Shrank Size of the Labor Force

From 1981 to 2014 in China to improve the total factor productivity at the same time, optimize the distribution of the labor force, to optimize labor force structure and economic growth has played a positive role in [5], better ease the labor force decreased the negative factors. According to the latest census data for the seventh time, by 2020, the working population aged 15-64 China will reach 968 million. Since 2010, 15-64 - year - old labor population decline year by year, from 74.50% in 2010 to 70.60% by 2019, fell to 68.55% by 2020. For the first time, this proportion fell below 70%, and in the nine years from 2011 to 2019, the share of people aged 45-64 in China's labor force increased by 7.61%, from 33.74% in 2011 to 41.35% in 2019 [1]. This indicates that China's labour also in aging. It's known to all that the economy development is usually decided jointly by the ministry of technology, capital and labor [6], the change of the labor force is quietly influencing China's economic development. Research shows that skilled Labour needs to be increased by more than 15.4% it will eliminate the adverse effect of unskilled Labour to reduce 5% [7], with reduced labor can reduce people's income, spending and welfare level. Because of variation of domestic labor costs in the transfer of foreign investment strategy and investment focus, and China's small and mediumsized enterprises will appear workforce shortages in different degrees, so in the future, they will have to deal with industrial upgrading to bring a series of influence and change.

2.2.3. The Heavy Burden of Social Pensions

Due to the continuous decrease of labor supply and the proportion of the elderly soared, a considerable burden on social endowment. From 1989 to 2018, the Chinese town worker is basic endowment insurance fund increased from 11.8 billion yuan to 446.49 billion yuan, increased by 378 times [8]. Secondly, in terms of the dependency ratio, raising than the absolute level of China's population in 2020 about 44.66% [9], 44.66 per 100 workers must bear a parenting roles of non-labor population. In 2020, China's aging population bring-up ratio was 19.7%, 7.80% higher than in 2010 [10]. According to the China pension actuarial report 2019-2050, pension balance in 2017 reached 6.99 trillion yuan over the highest after gradually reduce, in 2035 to zero [11]. Compared with the developed countries, China's 2020 residents of commercial endowment insurance and personal savings endowment insurance is still in its infancy stage, enterprise annuity and the occupational pension accounts for only 29.98%, and the basic pension funds accounted for 70.02%, covering a population of more than 1 billion [12]. Sustainable development is facing a major challenge. As the aging process deepens, it will also increase the pressure on health care costs.

2.2.4. Not Rich First Old

Developed countries economic development and aging of the basic synchronization (entered an aging society in the developed countries per capita GDP is commonly 5000 ~ \$10000), and under the condition of the economy is not developed in China entered the aging society in advance. In other words, before to be able to provide for the elderly social wealth accumulation, the large population has been ageing. Population aging process of social and economic development, people's way of life, health and epidemic disease patterns have a huge impact.

2.2.5. The Uneven Overall Aging

More women than men: In consistent with the data released by the National Bureau of Statistics in 2015, the ratio of male to female over the age of 60 in China is 1:1.058, and 60% of the elderly female population is over 80 years old.

Regional imbalance: The distribution of the aging population in China is extremely unbalanced in the region, and the degree of aging in the eastern region is significantly faster than that in the western region, while the degree of aging in the Yangtze River Delta, the Pearl River Delta and the three economically developed regions of Beijing, Tianjin and Hebei is not the same.

Urban and rural inversion: The distribution of aging development is uneven, and the aging of cities in developed countries is higher than that of rural areas, while the aging of rural areas in China is more rapid than that of urban areas. In China, the proportion of elderly people in rural areas is higher than that in urban areas by 1.24%, and the rural-urban inversion will continue until 2040 [13].

3. The Causes of Population Aging in China

3.1. Increased Life Expectancy

Due to continuous development of national medical and health undertakings and improving of people's health level, China's aging population mortality is declining, the population average life expectancy is extended. Population's life expectancy and mortality is close to the level of developed countries, leading to the increasing number of elderly people. The proportion of the population is more and more big [14]. Longer life expectancy and changing demographics will have profound effects on society as a whole, and future aging-related changes are likely to have significant effects on our lifestyles and personal pursuits, as well as our relationships with people, across families, communities or societies.

3.2. The Falling Birth Rate and Fertility Rate

For a long time, so as to control the rapid population growth, relieve the pressure of population on economic and social development, since the 1980s, China has implemented the basic state policy of family planning, greatly reduce the fertility level of the whole society, caused the low fertility rate. In addition, the fertility rate are economic development and social changes caused by reduced fertility intentions. Nowadays, China's fertility rate is below the replacement level, the birth rate is falling. Youth population decline and ageing of the population increase, resulting in significant changes in population structure. As the middle of the 20th century the birth peak gradually aging population, fastest at the beginning of the 21st century will be China's ageing population.

3.3. The Change in the Concept of Fertility

To a certain degree of economic development, human birth concept will be influenced by many factors. First of all, the ancient Chinese often said that "raise children for the elderly". With the development of modern society and the gradual improvement of the pension system, the traditional concept has gradually disappeared. In particular, with the prominent contradiction between generations, there are obvious differences between the individuation of the young and the conservative thought of the old in the new era, and the pattern of Chinese contemporary traditional support is quietly changing. Secondly, due to the continuous improvement of women's economic and social status after the founding of the People's Republic of China, women today have the same professional status as men, and the employment environment and conditions for women in China are better than those in many countries and regions in the world. However, considering various pressures and work contents in the workplace, and avoiding adverse factors such as post adjustment and reduction of promotion space caused by childbirth. The proportion of women choosing to have fewer children is gradually increasing. Finally, the most fundamental reason for the decrease in fertility willingness is the high cost of raising children in China. Contemporary young people are faced with social and life pressures such as employment, promotion and social activities, and the new generation

of young people are faced with a lot of competitive pressures in their work. While young people are struggling to cope with the workplace pressure, high marriage costs, especially the bride price of young people's marriage and the housing price necessary for housing, have greatly inhibited their willingness to have children. Raising children will continue to take a lot of time and education costs, which have caused the young generation's willingness to have children is diminishing.

4. Countermeasures for China's Aging Population

4.1. Actively Promote the Policy of Delay Retirement

In 2021, China has clearly proposed factors to consider in delaying statutory retirement [15], and the government has planned to implement delayed retirement according to the actual situation in China. In the future, appropriate policy guidance and social support are needed to help individuals with different levels of education, social roles, and physical conditions realize their work aspirations. Depending on the specific situation of different industries, it is necessary to analyze the relationship between different industries and the allocation of labor resources, and understand the impact of retirement on employment. It is necessary to understand the impact of the delay of retirement age on the employment group of the industry from the national level and the characteristics of the industry, promote gradual retirement in a scientific and reasonable way, and take comprehensive policies in combination with the characteristics of the elderly population, develop suitable occupations in line with the physical and mental health of the elderly population, and reduce the competitive pressure on the young working group. While fully mobilizing the willingness of the elderly to work and giving full play to their work experience, employment guidance and policy support for young workers should be done well. The way to pay attention to and support or provide services for the elderly should be based on the premise of not increasing the burden or benefits of the young labor force [16], providing enough buffer time for the labor market in a gentle way.

4.2. Exploit Surplus Labor

China's labor-intensive production structure, so that China is also in the "demographic dividend" period, therefore, China should effectively play the role of "demographic dividend" according to the national conditions to promote economic development. To develop the surplus labor force in economically underdeveloped areas and rural areas, this requires changing the original household registration system that separates rural and urban areas, so that the flow of talents has policy support. In cities, equal employment opportunities and social welfare benefits should be provided to migrant employment groups, so that young labor forces can achieve full employment and make full use of the "demographic dividend".

4.3. Accelerate the Establishment of Sound Social Security System

The government should actively improve the social security system of form a complete set system, through policies and market regulations, change the pay-as-you-go pension system, establish the endowment security system covering both urban and rural residents and the old-age service system. Perfect pay more incentive mechanism, as a whole industry of social security benefits and determine the adjustment mechanism. Cities and towns to speed up the establishment of a multi-level old-age security system, in order to strengthen the management of pension fund investment, widen the channel of the public investment, improve the policy of transferring state-owned capital to enrich pension funds, so that pension insurance funds can effectively maintain and increase their value, and reasonably cope with the financial pressure of an aging population. Rural areas should establish and improve the rural old-age insurance system, solve the problem of rural old-age, encourage the return

of young labor force through industrial adjustment and rural revitalization, and slow down the trend of population aging. It is necessary to establish social and economic rights that are fair and just and share common prosperity. While improving social security policies and supporting services for the elderly, it is necessary to provide more jobs and entrepreneurship opportunities through market regulation, promote the positive flow of human resources, and enable more people to participate in services for the elderly, so as to accelerate the solution to the social governance problem of an aging society [17].

4.4. Develop High-tech and AI Machines

Machines with artificial intelligence can improve the development of social productivity, helps to relieve labor shortages, and the application of the machine of artificial intelligence can improve the level of the elderly care, reduce the workload with personnel, can save social Labour further.

4.5. Improve the Education System for the Elderly

The elderly labor force has the advantages of sufficient practical experience and wide social resources, but it also has the shortcomings of lagging behind The Times. With the birth of the first university for the elderly in Jinan, Shandong Province in 1983, there is no shortage of universities for the elderly in China. However, these universities for the elderly are almost aimed at safeguarding the elderly's physical and mental health, and take interest cultivation as an education model. In order to enable the elderly who are willing to re-employment to better adapt to social needs, master the working methods of information society. The education can be divided into interest classes and advanced classes, and the content of education can be innovated, and computer technology, we-media and other knowledge can be provided for the elderly to learn through further education, training, salon and other forms. In addition, according to the needs of all walks of life, enterprises and groups are encouraged to participate in the re-employment education of the elderly, so as to make the education for the elderly market-oriented and realize the reasonable allocation of educational resources for the elderly.

5. Conclusion

The aging of the population in China is becoming increasingly serious. The aging of the population is not only a humanitarian issue, but also a social development issue. It is also related to the realization of the Chinese Dream of the great rejuvenation of the Chinese nation and the strategic layout of the realization of the second centenary Goal. In the new era, China needs to be based on its national conditions, find a positive response to aging road with Chinese characteristics that is in line with China's population development status and development needs, co-construction, co-governance and sharing by multiple entities, create "China's new advantages", and finally realize happy aging at the individual level, harmonious aging at the social level, and successful aging at the national level.

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