

**Economic Effect Analysis of Public Health Expenditure in China** Zhen Liu<sup>1</sup>, Xiujing Jiang<sup>1</sup>, Dong-Joo Kim<sup>2</sup> 1. Major of Social Economy, Department of Social Economy and Business Administration, Woosuk University, Wanju-gun 55338, Korea.

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*Abstract:* Public health expenditure is the national expenditure for the prevention, monitoring and treatment of major diseases, especially infectious diseases, which helps promote economic development, social equity and improve the health of the masses. In 2021, the total public health expenditure in China will reach 7550 billion, which shows the importance the state attaches to public health expenditure. Based on this, this paper will elaborate the economic effect of public health expenditure in China from multiple perspectives, and put forward some suggestions for the reform of the medical system.

Keywords: Public Health Expenditure; Economic Effect; Medical System

# Introduction

Affected by the COVID-19 epidemic, China's investment in public health has continued to increase in recent years, which has contributed to the prevention of unexpected public health events and has also become an important force to promote social and economic growth. Analyzing the economic effect of public health expenditure can point out the direction for the future reform of the medical and health system, further clarify the government's responsibilities, strengthen public health investment, improve the rationality of expenditure allocation for preventing unexpected public health events, and give full play to the promotion role of public health expenditure on social economy and social equity.

# 1. Concept of public health expenditure

The so-called public health expenditure refers to the funds allocated by the central and local governments for health undertakings, that is, public health service funds, which are mainly used for public prevention, medical treatment, health care and other services. Specifically, at present, China's public health expenditure includes health service fees, Chinese medicine service fees, drug supervision and management fees, health administration fees, etc., covering public health and epidemic prevention institutions, public medical institutions, medical and health management institutions, and medical aid for unexpected public health events.

# 2. Efficiency of public health expenditure 2.1 Analysis on technical efficiency of public health expenditure

Against the background of the global spread of COVID-19, the Chinese government attaches great importance to public health. Both the absolute amount of public health expenditure and its proportion in GDP, fiscal expenditure and total health expenditure have increased, and the per capita health rate has continued to increase. In recent years, China has continuously optimized the health and health indicators in the health field represented by public epidemic prevention, and the expenditure efficiency has made a qualitative leap, which has attracted worldwide attention.

# 2.2 Analysis on the efficiency of public health expenditure allocation

According to the data released by the National Health Commission, in 2021, the number of hospitals increased by 1176 compared with the previous year, and the number of grass-roots medical and health institutions increased by 7754. This shows that the problem of attaching importance to cities and neglecting rural areas in China's traditional public health system has been solved to a certain extent, and the problem of unbalanced urban and rural development has been curbed to a certain extent. However, through the analysis of the utilization efficiency of health resources in urban and rural areas, it is suddenly found that the utilization efficiency of health resources in rural areas is generally lower than that in urban areas.

## 3. The public health service is public and external

As a welfare expenditure, public health service has the problem of public goods. According to this feature, public health services can be divided into prevention services and health care services as pure public goods and quasi public goods, and medical services as private products. Among them, the former can be specifically divided into basic medical and health services, maternal and child health care and public immunization plan. This part of public health services needs strong support from government departments in terms of funds and policies, while the latter needs to be adjusted through market mechanisms. At the same time, public health services have externalities. On the one hand, there are negative externalities in public health services, and the output and demand do not match. Only through the government's overall planning and expansion of public health expenditure can this gap be filled. On the other hand, public health services have positive externalities. Through the consumption of health service products, the masses can not only improve their own health status and improve their happiness, but also promote the improvement of social productivity and the development of the overall economy. Therefore, it is an important function of the government to increase public health expenditure and provide public health services, and it is also an important measure to obtain positive externalities.

#### 4. Direct output of public health expenditure

Social productive forces have realistic significance and long-term impact on China's economic development, and the development of social productive forces is based on good residents' health. If the people's physical quality is poor and there are various health problems, it will inevitably have a negative impact on economic growth through various channels. First of all, the poor physical quality of the broad masses of people will lead to the decline of personal income, the decrease of happiness, and the increase of psychological burden, which will eventually form a vicious circle and cause the loss of welfare. Moreover, this phenomenon will spread in the society, reduce the productivity level of the labor group, and eventually lead to the reduction of labor productivity and the loss of social welfare. Secondly, poor physical quality will, to a certain extent, adversely affect the education level of residents and restrict economic development. In addition, if the government departments do not pay attention to public expenditure, it will also lead to a decline in the proportion of productive population, a decrease in the number of working people, and a decrease in the proportion of total social savings and capital investment.

# 5. Suggestions on the development of public health expenditure in China 5.1 Increase public health expenditure

In recent years, the central and local governments have continued to increase the financial expenditure on health care, and the scale of the public health system has expanded day by day, but the growth rate is slow. The current level can not meet the growing demand for medical and health services of the masses. Moreover, the existing data show that the proportion of China's total medical and health financial expenditure to GDP at this stage has not reached the target of 5% proposed by the World Health Organization. Compared with developed countries, the public health financial investment is insufficient. For a long time to come, the threat of public health emergencies such as COVID-19 will continue to exist. At the same time, climate and environmental changes are increasingly frequent and the aging society is accelerating. This will be a severe challenge to China's medical and health undertakings. Therefore, the central and local governments should continue to increase the investment in public health financial expenditure, and increase its scale growth and its proportion in GDP on the existing basis. At the same time, relevant departments should promote the construction of a sound and fair medical and health system as soon as possible, ensure that public health services cover poor areas and poor people, and break the bottleneck of the current imbalance in the allocation of medical resources in urban and rural areas.

### 5.2 Adjusting the structure of public health expenditure

In the field of public health in China, the government departments play a coordinating and guiding role. Take the prevention and control of COVID-19 in the past two years as an example. Under the unified guidance of the government, public hospitals and medical institutions assume the main responsibility, while private hospitals and social organizations play a supporting role. Today, although the epidemic situation in China has been effectively contained, the overall situation of epidemic prevention and control is not clear. Normalized epidemic prevention and control has become an inevitable trend. Therefore, based on the actual development needs, government departments should properly adjust the structure of public

health financial expenditure, tilt resources and policies towards public hospitals, promote the high-quality development of public hospitals, and improve the prevention ability of public health emergencies and major public health events.

## 5.3 Overall planning of regional medical and health resources

At present, public health expenditure is an important part of the government's financial budget, and it is under the unified management of the government's financial budget. During the 14th Five Year Plan period, the reform of China's medical and health system was in full swing, but it is undeniable that the problem of unbalanced distribution of medical resources is difficult to be fundamentally and effectively solved in a short time. In the fourth and fifth tier cities and rural areas, the scarcity of medical resources still exists, affecting the fair performance of health care and financial expenditure. Therefore, in the future construction of the public health service system, the central government should provide policy guidance, and the provincial government should make overall planning for the medical and health resources in the region, play a good game of medical resources with the province as a unit, break the medical barriers of different cities and counties, and promote resource sharing. In particular, with the increasing popularization of information technology and big data technology, the sharing level of medical achievements and the utilization efficiency of medical resources can be improved through expert video guided surgery and inter provincial medical insurance reimbursement.

## 6. Concluding remarks

To sum up, under the direction of the healthy China strategy, the level of public health expenditure in China has been continuously improved, becoming an important force for social and economic development. Therefore, governments at all levels must objectively view the economic effects of public health expenditure, pay attention to the health of the masses, break the regional unbalanced development model, improve the efficiency and fairness of public health expenditure, and promote the healthy development of public health in China.

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