

Study on the Socioeconomic Impact of COVID-19 Vaccine Coverage Rate: A Case Study in Bengbu City, Anhui Province

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Abstract

In the context of the normalization of COVID-19 epidemic, China has vigorously promoted COVID-19 vaccination, and the vaccination rate will have a profound impact on China's social economy. This topic in Bengbu in Anhui Province as an example, through field investigation and data statistics, questionnaire survey method, based on the theory of a large number of Bengbu enterprise economic data, the education scientific research development dynamics, and through the establishment of regression model, the new crown vaccination rates as independent variables, social economic level as the dependent variable, the concrete analysis of the new champions league vaccination rates to Bengbu the influence of social economy, And then put forward constructive suggestions on the adverse effects of the high herd immunity threshold on the social and economic level.

Keywords

COVID-19 Epidemic; Socio-economic; Vaccination Rate.

1. Current Situation of COVID-19 Vaccination in China

According to the press conference of the Joint Prevention and Control Mechanism of the State Council, as of May 12, 2022, a total of 3.33 billion 5876 million doses of COVID-19 vaccine have been reported in China, with a total number of people vaccinated reaching 1.287195 million, and 1.25592 billion people have been fully vaccinated. Covering 91.3% of the total population and 88.85% of the total vaccinated population. A total of 762.897 million people received booster immunizations, including 33.449 million consecutively. According to the current national policy, COVID-19 vaccines are free of charge and scheduled for vaccination, following the basic principle of "informed, consented and voluntary". At the same time, people who meet the conditions should "receive all the coronavirus", so as to gradually build an immune barrier and block the spread of novel coronavirus in China.

A large number of studies have found that novel coronavirus can cause more serious complications and higher incidence of the original basic diseases. Therefore, Wang Huaqing, the chief expert of immunization program of Chinese Center for Disease Control and Prevention, emphasized that the elderly with chronic underlying diseases should be vaccinated all the time and complete with booster shots, so as to minimize their risk of severe illness and death. A series of relevant studies have shown that the novel coronavirus vaccine has a clear and significant effect on reducing severe illness and death. This is the reason why the virus has been mutating and the global consensus immunization strategy of whole course vaccination and booster shot

has not changed. Wu Zunyou, chief expert of epidemiology at the Chinese Center for Disease Control and Prevention, said COVID-19 vaccination should be further strengthened, as vaccination is the basic work of COVID-19 prevention and control.

Around the current according to the national requirements, the work to further strengthen the organization and implementation of the vaccination increased publicity, adjust measures to local conditions, the development train of thought at the same time, give full consideration to the elderly vaccination requirements, various convenient measures of continuation of previous vaccination work, promote accurate reservation, set up the old vaccination "green channel", carry out flow. The work of COVID-19 vaccination is progressing steadily.

2. The Socio-economic Impact of COVID-19 Vaccination Coverage

2.1. Government

With the spread of novel coronavirus, the economic development of all countries has been affected to some extent. Therefore, how to make more people willing to accept novel coronavirus is the primary task for all countries in economic recovery. The government should speed up the vaccination rate and establish a nationwide herd immunity situation as soon as possible, so as to strive for an early recovery of normal social and economic development. But equally, there are risks and opportunities. While the COVID-19 pandemic has slowed our economic growth, it has also brought new life to our economy. With the support of the country's policies, the current economic situation has been steadily developing in a good direction.

First of all, China has implemented free vaccination for all, realizing rapid vaccination and laying a foundation for economic recovery.

In the long run, the Chinese government's implementation of free COVID-19 vaccination nationwide is a good thing for the country and the people. Free vaccination for all will put some pressure on the economy for the time being, but it will speed up the process of nationwide vaccination. Data from the Ipsos Global Public Opinion Survey shows that China has the highest support for vaccinations among the 27 countries surveyed, at 97 percent. It is because of the welfare of this country that our citizens are willing to accept the COVID-19 vaccine. As of April 10, China had completed 164.471 million doses of immunization, tentatively ranking second in the world, according to a press conference of the national Prevention and control mechanism held by The State Council in April. More importantly, the sooner universal vaccination is achieved, the sooner a national herd immunity situation will be achieved. By then, China will be able to gradually fully open the catering, tourism and entertainment industries, and the medical sector, which has been highly stressed since the start of the coronavirus pandemic, will also be able to recover. The financial cost of free vaccines will also be recouped as the economy recovers. At the same time, China is actively promoting COVID-19-related research, paying more attention to innovative development and stimulating market vitality.

During the pandemic, a large number of industries related to COVID-19 and the novel coronavirus have been spawned. The Chinese government has recognized the market potential in this field and actively supported the novel coronavirus research, including research on vaccines and drugs, as well as on key and core technologies, to ensure the safety of funding. Promoting innovation in related industries can not only promote vaccination coverage, scientific and technological innovation, but also promote economic development. Feng Duoqia, president of the China Vaccine Industry Association, said at the Fifth Peking University Global Health and Innovation Communication Series Seminar that China has provided Novel coronavirus vaccine for more than 50 countries, millions of copies for the Global Novel Coronavirus Vaccine Consortium, and commercial supply of Novel coronavirus vaccine for dozens of countries. As of April 2021, China had exported 100 million doses of Novel coronavirus vaccine. The export of the vaccine not only relieves China's economic pressure, but

also improves the international vaccination coverage rate and makes China more comfortable in the process of foreign trade.

According to Bengbu Daily, by December 2021, more than 6.07 million Novel coronavirus vaccines had been vaccinated in Bengbu City, with the vaccination rate reaching 83.57%. The increase of vaccination rate has also played a certain role in promoting the economic development of Bengbu. Education in Bengbu has been basically restored. Universities have also carried out strict epidemic prevention in accordance with the requirements of Bengbu. Shopping malls and supermarkets are also making intensive preparations for the epidemic. According to the Bengbu Government Work Report 2021, the total import and export value of Bengbu increased by 38% this year, the total retail sales of social consumer goods increased by 6%, the general public budget revenue increased by 5.6%, and the per capita disposable income of urban residents increased by 8.5% and 9%. At the same time, the immunization of the population aged 3-11 years and above 60 years will be strengthened, and the immunization rate of Bengbu will be further improved. With the support of national policies, the economy of Bengbu will get rapid development.

2.2. The Public

Guangming Daily wrote, "COVID-19 vaccination has become a worldwide political issue. In the context of the self-evident competition in the economic and social development of countries, the number of vaccinations in each country is closely related to the formation of herd immunity." Whether a country's herd immunity situation can be formed or not is related to whether its economy and society can return to the normal track. However, epidemic prevention and control and herd immunity are not based on the total number of COVID-19 vaccines, but on the vaccination rate. Whether herd immunity can be established is closely related to the vaccination rate of the population. Wang Qinghua, chief expert of the immunization program of the Chinese Center for Disease Control and Prevention, also said that vaccines are the key to disease control, and to achieve sufficient population immunity, the vast majority of people need to be vaccinated. So in order to build herd immunity, it is necessary to increase the vaccination rate.

Through the research and analysis of the project "Study on the Socioeconomic Impact of COVID-19 Vaccine Coverage Rate: A Case Study of Bengbu City, Anhui Province", the results show that when the COVID-19 vaccine coverage rate increases, the social and economic situation of Bengbu people improves. For the people, social economy is not only about economic development, but also about population conditions, transportation, water and electricity, medical security, culture and sports, and other aspects of daily life. When herd immunity to establish gradually, people infection will be coronavirus will greatly reduce the probability of the health security of the people, a lot of community street also will no longer be blocked, people can open the door, into the society, back to work, the employment rate also began to improve, for the people, economic level, the better the quality of life too. People's travel restrictions have been reduced, and within a certain range, people can travel normally. Public buses and taxis have become active, and railway and air passenger transport to some areas has gradually resumed normal travel. More health care, period of SARS epidemic prevention and control strictly, go to a doctor difficult problem is more serious, the new crown patients may because resources run failed to timely medical treatment or dealt with in the hospital, and some people will go to a doctor sick for 24 hours without nucleic acid proof is restricted to delay the disease, caused the deterioration, but with the increase of new crown vaccination rates now, outbreak is stable, With the decrease of social pressure, medical security has gradually returned to the normal level. Students and children have returned to school, teaching patterns have resumed, and sports and sports events can be held as usual on the basis of preventive measures. People's

lives have gradually been put on the right track, with social and economic improvement and higher happiness index.

By July 12, 2022, 31 provinces (autonomous regions and municipalities directly under the Central government) and the Xinjiang Production and Construction Corps had reported receiving 3,409,697 million doses of the Novel coronavirus vaccine. (Source: Website of the NHC)

During the Spring Festival of 2020, Novel coronavirus spread rapidly across the country, and the outbreak of the epidemic added huge resistance to China's economic operation.

2.3. Three Industries

In order to explore the impact of the new vaccination rate on the three industries, we need to first understand the impact of COVID-19 on the three industries.

The outbreak of SARS in 2003 also affected the national economic development, which we can refer to. Compared with the SARS period in 2003, China's domestic industrial structure has undergone fundamental changes. The primary and secondary industries have declined, while the tertiary industry has exceeded 50%.

2.3.1. Primary Industry:

The primary industry is mainly composed of agricultural products and agricultural and sideline products. The impact of COVID-19 on the primary industry focuses on the difficulty in balancing supply and demand in the short term. COVID-19 has blocked logistics and cut off supplies of raw materials such as feed and fertilizer, leading to a decline in the productivity of primary industries and damage to industrial base infrastructure. In terms of demand, the demand of the primary industry decreased in the short term due to the nationwide demand for home quarantine during the COVID-19 pandemic and the short-term suppression of consumption. From these two points of view, agriculture, forestry, animal husbandry and fishery sectors will bear considerable pressure in the short term. In terms of enterprises, individual farmers and small enterprises will be eliminated due to the delay in the resumption of work. The aquaculture industry will be more large-scale, industrialized and safe, and the epidemic may promote industrial upgrading and integration.

Throughout the country large-scale new crown vaccine after the first industry quickly picks up, the first industry based on industry, the national people's lack of necessary agricultural products and agricultural and sideline products, every day in the country in order to return to work after vaccination and production farmers, agricultural product supply and demand will be quickly adjusted, therefore, and due to the outbreak of the integration and upgrading of industrial adjustment, let the first industry development more standardized and rational.

2.3.2. Secondary Industry

The outbreak occurred during the Spring Festival holiday, and some secondary industry enterprises were on holiday themselves. At the same time, most of the factories in the secondary industry had certain inventories and maintained production during the holiday, which mitigated the impact of the COVID-19 outbreak. However, due to the COVID-19 pandemic, the flow of labor force was blocked and logistics was limited, which affected the normal production of some enterprises. In addition, some countries and regions may reduce or suspend the import of related goods from China due to the COVID-19 pandemic, which has a certain negative impact on China's export commodity manufacturing industry. In the short term, the secondary industry will suffer a certain impact.

In the long term, as the impact of COVID-19 gradually fades after the vaccination, industrial production is expected to recover quickly and the impact of the epidemic is expected to be relatively limited.

2.3.3. Tertiary Industry:

Because the tertiary industry accounts for the largest proportion, and the tertiary industry is a service industry, compared with the primary and secondary industries, it mainly focuses on face-to-face business and consumers. In order to cope with the epidemic, the government implemented policies including "lockdown", traffic restriction and delay of the resumption of work to prevent the spread of the epidemic by restricting the flow of people. The tertiary industry involved in "eating, traveling, visiting, learning and transportation" will be hit hard in the short term. The third industry in the short term, on the other hand, although the hardest hit, but some of the industry instead of resistance, especially the service mode and change the way of purchase will also stimulate the third industry appeared some new sources of growth, including online retail, online education, online office and online medical, online games, logistics delivery will increase the explosion; After COVID-19 vaccination, the proportion of the tertiary industry in China will continue to increase in the future, so it is expected that the short-term impact of the pandemic will not change the general trend of the long-term development of the tertiary industry.

3. The Conclusion

As for China's economic development under the impact of the epidemic, we suggest the following: First, we need to strengthen the construction of public health infrastructure, which is a pressing task and also a requirement for the people's livelihood in China in the future; Second, while maintaining market players, we should stimulate the vitality of market players and stimulate business confidence. Third, in terms of demand-side reform, in addition to increasing investment, we should attach great importance to the strategic basis of "expanding domestic demand". It requires the increase of employment and personal income, which also come from the protection of market players. This is also the basis for realizing the goal of "double cycle" mutually promoting the new development pattern.

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