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Content

Communication and Cooperation - China Contributing its Role to the Global Fight against COVID-19



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At a press briefing held by the State Council Information Office on March 26, 2020, Xu Nanping, Vice Minister of Science and Technology, said that China has developed a whole set of treatment plans for novel coronavirus, and is willing to share them all with the world.

Sharing treatment plans without reservation

- 1. In treating mild and moderate cases, China has developed a series of traditional Chinese medicine and treatment plans that can effectively relieve symptoms and significantly increase the cure rate.
- 2. In antiviral treatment, drugs like chloroquine phosphate, Fapiravir and Carrimycin have shown some efficacy in clinical research, lowering the rate of conversion from moderate to severe and critical types.
- 3. In the treatment of severe and critical patients, a series of therapeutic drugs and treatment plans such as convalescent plasma, stem cells, Tocilizumab and artificial liver have been developed, which prove to be effective in reducing the fatality rate.

These achievements are the result of the hard work of China's scientific community, and also the collective wisdom humanity has gained in their prolonged battle against infectious diseases. They should be shared with other countries without hesitation to support the global fight against the epidemic.

Continuing to carry out joint research and increasing communication with international partners

Going forward, China will promote the sharing of technical solutions in three areas.

1. Promoting the sharing of research results

China has conducted a large amount of clinical trials during the outbreak, and will publish the results of preliminary clinical trials as soon as possible and share experience with international counterparts.

2. Conducting joint research

Drugs that showed good results in previous clinical trials, such as Fapiravir and chloroquine, are now under large-scale clinical trials in various countries. Meanwhile, China is also closely following some of

the new drugs selected by scientists in other countries for clinical trials. At the same time, China looks forward to working with other countries through international cooperation on multi-center clinical research. China is willing to participate in or initiate such research programs in collaboration with other members of the international community.

3. Intensifying communication

When it comes to drugs, each country has its own laws, regulations and customs, and a lot of work needs to be done when a drug is introduced to a country. China is now in close communication with many countries through video conference and other means to increase results sharing.

Collective response, collaborative research, results sharing

Although China has been able to contain the outbreak in a short time, raising the cure rate and lowering the fatality rate, there is still much to learn and explore. Facing global challenges and disasters like this one, the best results can be achieved only when we confront them together, study them together and share the results.

Chinese companies are working substantially with Inovio in the US on DNA vaccines, with BioNTech in Germany on mRNA vaccines, and with GSK in the UK on recombinant protein vaccines.

In addition to the timely sharing of scientific data, technical achievements and control strategies, China will continue to deepen scientific and technological cooperation and exchanges with other countries in epidemic control, patient treatment and basic research, and contribute to the global fight against the epidemic.



Members of the medical team sent by the Red Cross Society of China to assist COVID-19 prevention and treatment in Iraq taking a photo with local medical personnel after the successful installation of a mobile X-ray machine

Securing the sharing of scientific data and

information

1. Sharing genomic information

On January 11, China shared its genomic information without delay, creating the conditions for countries around the world to do virological studies, drug development and vaccine research.

In terms of data sharing, China has set up two platforms, i.e. the Global Coronavirus Data Sharing and Analysis System at the National Microbiological Science Data Center and the 2019 Novel Coronavirus Resource Bank at the National Center for Biotechnology Information. Both platforms have played an important role in data services, with the 2019 Novel Coronavirus Resource Bank accessed by more than 76,000 visitors from 152 countries and regions. At the same time, Chinese and international experts have analysed various aspects of the virus using data from the database and published high-quality articles.

2. Building the platform for sharing academic findings

The "platform for sharing research results on COVID-19 prevention and control" launched on the *Chinese Medical Journal* website has included 99 journals, with more than 700 papers and reports, and over 2.3 million views. Chinese scientists have published 54 papers on seven major journals, including *Lancet*, *New England Journal of Medicine* and the other two leading medical journals, as well as three other journals, i.e. *Science*, *Nature*, and *Cell*. The team led by academician Zhong Nanshan published papers analyzing 1,099 cases, and China CDC published articles examining more than 70,000 cases. These research results have provided references for global epidemic response.

3. Developing the mechanism for communication

First, Chinese scientists have participated in all the 10 working groups under the WHO framework. For example, Qin Chuan, a research fellow at the Institute of Zoology of the Chinese Academy of Medical Sciences, attended four meetings in 20 days for in-depth discussions with international colleagues on the subject of animal models.

Second, through science and technology counsellors in Chinese embassies, an effective communication mechanism has been established to hold video conferences and academic meetings with both government and non-government organizations in foreign countries.

In addition, there are also exchanges between NGOs and between scientists.

4. Conducting joint technology research and providing technology services

China is involved in international cooperation in all the five major research areas: clinical treatment and drugs, vaccine development, the virus origin tracing and transmission, detection reagents and equipment, and animal models. China is also increasing foreign aid. China has sent technologies and researchers to provide technical services, contributing Chinese formula and experience to hard-hit areas.

(Source: Ministry of Science and Technology)