

International Cooperation For The Coronavirus Combat

Results, Lessons, and Way Ahead



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Empathy and Solidarity:

The Only Rational Response in Global Epidemics Fight

More than 100 countries and regions have now reported confirmed cases of the novel coronavirus. Outside China, the number of newly confirmed cases has approached 30,000, with South Korea, Japan, Italy, and Iran being the worst hit. The WHO has not declared COVID-19 a pandemic, but, nonetheless, upgraded the global risk of the outbreak to "very high" on February 28. Threatened by a disease that is more contagious than SARS and MERS, will the world unify in solidarity to stop it from becoming a pandemic? Or will nations be so overwhelmed by growing fears as to adopt beggar-thyneighbor policies, weakening the foundations of global public health cooperation? Is the fast-spreading virus a wake-up call for the international community to act swiftly and in concert to build a safer globalized world? Or does it portend further deglobalization in a world already beset by virulent nationalism?

There are no easy answers to these questions. Things may take either direction. For example, upon learning about the coronavirus outbreak, the World Health Organization (WHO) gathered more than 400 world-class virologists and disease control experts via real and virtual platforms to examine the possible origins of the virus, make containment plans, and identify research priorities. As WHO chief scientist Soumya Swaminathan put it, this scientific solidarity in the face of a common enemy is unprecedented. But at the same time, stigmas associated with the disease are proliferating, and racism and xenophobia against Chinese and Asian descendants are growing. Worse still, some senior officials in the U.S. government are looking at the epidemic through the ideological prism, further poisoning the China-U.S. relationship at a time when they should have expressed sympathy and worked with their Chinese counterparts to kick-start bilateral health cooperation. The outcome of the current battle and, by extension, the prospects of global public health cooperation depend on whether uplifting stories prevail or negative narratives dominate.

Viruses respect no borders. The novel coronavirus could spread its way into a pandemic. Reviewing China's cooperation with others in the coronavirus battle and the lessons it holds is especially relevant at this critical juncture. How effective is international cooperation in helping China and the world contain the epidemic? What has China contributed to this global coronavirus combat? What are the flaws and vulnerabilities in global health governance that have been exposed in this crisis and what are the remedies? What is the best course of action for China and the world to outpace and finally prevail against the virus? This report attempts to answer these important questions in detail.

The report underscores the value of international coordination amid massive outbreaks of infectious diseases, especially those caused by new viruses. Services and sacrifices

by those fighting on the frontline open a precious window of opportunities for others to take precautions. Follow-up research cooperation, medical material assistance, and engagement with leading institutions are all essential to establishing at an early date a global science-based and effective prevention and control system. In a globalized world where infodemics, disinformation and rumors may follow on the heels of epidemics, international organizations like the WHO play an irreplaceable role in reducing panic and removing stigma.

It also illustrates China's measures, policies, and initiatives that have been praised by the WHO as recommended practices for international epidemic control, including, among others, a whole-of-government and whole-of-society response mechanism, effective social distancing techniques, timely and adequate information and knowledge sharing, and deep involvement in global medical research cooperation. Guiding all these response measures, the report emphasizes, is a holistic, science-based, targeted, and highly-contextual approach that is the most relevant lesson for any country hit by the deadly virus.

The report also identifies the major challenges for international epidemic control and global health emergency cooperation, which include the stark differences among nations in political system, social norms, national interests, and culture and tradition, disparate capacities in national public emergency preparedness, as well as regional and global security contingencies and crises. To meet these challenges, the report calls for updating an outdated health security concept, overcoming a curious "panic-neglect" cycle, mending flawed health emergency response mechanisms, and building up core monitoring and response capabilities in developing countries so that the IHR (2005) can be upheld amid health crises. It further underlines the importance of strengthening leadership and bridging resource shortfalls in global health cooperation, and calls for countering politicization and stigmatization of health emergencies.

The report makes five policy recommendations on how to contain the worldwide spread of the coronavirus: improving coordination among China, Japan, and South Korea so that the three can jointly play a leadership role in East Asian and global health governance; increasing health-care assistance to developing countries especially those least developed ones with low levels of emergency preparedness; increasing multilateral development banks' contributions to the international health system; accelerating the implementation of joint mechanisms for major public health emergencies; and increasing experience and knowledge sharing on epidemic prevention and control.

Countries vary in their national conditions and capabilities, and each epidemic outbreak has its own characteristics. As there is no silver bullet to address all epidemics, control measures should be customized and contextualized. But timely transmission route interruption, early detection, and effective treatment are essential in any prevention and control measures. China, as the main battlefield in the fight against the COVID-19

epidemic, has made the greatest efforts, taken the strictest measures, gained the most firsthand experience, and achieved the most remarkable results. It stands ready to share its experience with the international community and enhance cooperation with other countries and international organizations to win the war against the COVID-19 outbreak at an early date.

Empathy and solidarity, I believe, are the only rational response in global epidemics fight and what lead humanity to a safer globalized world. It is also a conviction that my colleagues try to confirm and convey in this report.

Chen Dongxiao

President, Shanghai Institutes for International Studies

March 9th, 2020

International Cooperation for the Coronavirus Combat:

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Even as China continues to make remarkable progress in its effort to contain the novel coronavirus, concerns are growing that the deadly virus is spreading worldwide at a faster pace. According to the WHO, as of March 7, 93 countries and regions outside China had reported a total of 21,110 confirmed cases of infection and the number is still rising. The WHO has raised its COVID-19 alert to the highest level and warned of a possible coronavirus pandemic. UN Secretary-General António Guterres has called on "all governments to step up and do everything possible to contain the disease." WHO Director-General Tedros Adhanom Ghebreyesus has repeated his appeal for the international community to act aggressively at this decisive point to contain the virus and save lives. Standing at the forefront, China has been playing a significant role in this emerging global battle with the virus, especially by strengthening cooperation with the international community. A timely review of these cooperation experiences will not only help China further curb the epidemic but also offer valuable lessons for humanity to better respond to future public health threats. Viruses know no borders, races, or ideologies. Only by increasing the awareness of humanity as one big family and strengthening cooperation capacity and mechanisms can we effectively contain the virus's worldwide spread and prevent the COVID-19 outbreak from turning into an economic, social, and security crisis that threatens world peace and prosperity.



Photo by Xinhua Agency

Why International Cooperation Matters

Massive outbreaks of infectious disease have always been a global challenge. From SARS to H1N1 and from Ebola to COVID-19, in addition to heavy human casualties, economic cooperation and cultural exchanges are also victims of each outbreak. In the early stages of the COVID-19 outbreak, as little is known about this new virus, China had paid a huge cost in life and resource to slow the spread of the novel coronavirus to the rest of the world. The quality of medical research and extent of follow-up control measures in the country where a virus first breaks out usually determine when and how a viral outbreak can be effectively contained (and, if possible, finally eradicated). What the world can do in the meantime is take full advantage of the window of opportunity opened by the frontline country's initial forceful measures to show full moral and material support in the face of a common challenge. In the current coronavirus battle, international cooperation has played a vital part.

First, it gets the world better prepared. China notified the WHO of the coronavirus outbreak and shared the virus's genome sequence early on, reducing the world's panic over this unknown deadly virus. It invited WHO experts on a field visit to epidemic areas, including the worst-hit Wuhan, to learn the latest developments and China's prevention and control measures that hold important lessons for other countries. In a resulting joint report Chinese experts and their WHO counterparts laid out in detail the medical research findings, emergency response measures, and future policy options regarding the coronavirus outbreak. Besides, Chinese scholars' research outcomes published in prestigious medical journals have become firsthand sources for later studies of this largely unknown novel coronavirus. Every English paper, each piece of clinical evidence, and every line of technical guidance done by Chinese scientists, public health experts, and frontline medical workers have become the most powerful tools for epidemic containment. It is their hard work and dedication that have slowed the transmission of the virus around the world.



Photo by Xinhua Agency

Second, biomedical research cooperation is essential in any prevention and control efforts. Pooling global medical resources for drug and vaccine research is imperative for international epidemic control, especially in those countries with low levels of public health emergency preparedness. At present, multiple joint research programs are under way. For example, scientists at Harvard Medical School have joined forces with an expert team led by Dr. Zhong Nanshan at the Guangzhou Institute of Respiratory Health to work on diagnostic reagents, vaccine development, and new drug research. Many leading research institutes are also selecting the most efficacious from existing drugs and vaccines for clinical trials in the hopes of identifying a specific cure as soon as possible.

Third, international aid helps alleviate shortages of medical supplies. Temporary shortages of protective gear in the early days of the outbreak exposed medical workers and the public to greater risks of infection. Demands for medical materials rose at an exponential rate. In the worst-hit areas, not only frontline doctors and nurses but also physicians of other departments and clinics, community-level officials, and patients with other ailments need protective suits to avoid being infected by asymptomatic carriers. As a result, demands for face masks and protective suits have soared far above normal levels. Despite the government's vigorous efforts to help manufacturers increase output, supply/demand balances remain tight. The good news is that donations of medical materials from foreign countries, Chinese expats, and international organizations have kept flowing into epidemic areas.



Photo by Xinhua Agency

Fourth, international organizations' expert opinions counter virus-induced stigmatization and politicization. Many countries and their people expressed sympathy and support for China's sufferings and prevention measures, but certain countries and media outlets, without any solid understanding of the routes and extent of virus transmission and how deadly the virus could be, accused the Chinese government of being inadequate in emergency response. Not long after the government imposed

lockdowns and travel restrictions in hard-hit areas, those detractors began to describe these forceful measures as draconian while neglecting their own control measures that went far beyond the WHO's recommendations. Groundless accusations only give rise to unreasonable fears and undermine international coordination in the coronavirus combat. They have been refuted by WHO expert opinions which applaud China's bold and decisive actions that have bought the world time. China has made the world safer by identifying the new pathogen and sharing its genome sequence at an early date so that other countries do not have to start from scratch.

Fifth, world-renowned academics lead the way in developing a measured and sciencebased response to the crisis. Noting the excessive prevention measures and extreme feelings in some Western countries, such as suspending flights to and from China, entry bans on Chinese tourists, and stigma, discrimination, and racism against Chinese and Asian descendants, 16 global health law scholars called in *The Lancet* for the dozens of countries to repeal their racism- and xenophobia-based policy decisions in violation of the International Health Regulations, such as travel restrictions against China. In a globalized world, cutting oneself off from the outside world to fend off the virus is not only unrealistic but carries enormous economic and political risks. Leading research institutions' advocacy of science, restraint, rationality, and proportionality is important for effective epidemic control and resuming economic and social connections in the crisis's aftermath.

Sixth, international coordination is the best way to mitigate the immediate economic impact from the outbreak and to revive global economic growth. Some media outlets exaggerated the impact's magnitude to short-sell China for private gains. Some predicted that the outbreak portended further deglobalization. As a result of panic selling on the global financial market, Dow Jones plummeted over 1,900 points in just two days and more than 10% within a week. Amid the growing market uncertainty, leading economists at the IMF and World Bank have helped reduce the financial panic by presenting objective and reasoned assessments of the epidemic's impact on the world economy. China is the world's major economic powerhouse and arguably the most important link in the global supply chain. With a combination of financial, fiscal, and tax measures, the Chinese government is helping businesses of all sizes, including foreign companies, minimize the economic fallout, and meanwhile further opening up the China market to create institutional incentives for the domestic and world economy.

What China Contributes to the Global Coronavirus Combat

Threatened by a newly identified virus that is far more contagious than the SARS outbreak, China has adopted unprecedented emergency measures in a declared "people's war." Thanks to the services and sacrifices of hundreds of thousands of medical workers, police officers, community-level officials, and young volunteers, optimistic signs emerged in late February when the daily number of new infections and deaths began to decline steadily. In a joint field-visit report, WHO experts and their

Chinese counterparts conclude that in implementing "a comprehensive set of nonpharmaceutical interventions...to interrupt the chains of transmission nationwide," China has provided "vital lessons for the global response."

First, as the first line of defense against the globally-spreading virus, China has adopted the most sweeping, stringent, and thoroughgoing measures, putting the whole nation into full gear. Whether the virus's global spread can be slowed depends to a large extent on how effectively it is curbed in China. Chinese health authorities have classified COVID-19 as a Category B disease requiring Category A measures, doing everything possible to minimize the epidemic's impact. Special meetings have been called at the central leadership level to make nation-wide emergency plans. Highest-level alerts have been activated all across the 31 provincial-level regions. People's movements in and out of Hubei province, especially its capital city of Wuhan, are strictly controlled. More than 330 medical teams of 41,600 health-care professionals from all across China including the military have come to the aid of Hubei. Makeshift medical facilities and square cabin hospitals have been put up. Premier Li Keqiang visited Wuhan to inspect prevention and control work and Vice Premier Sun Chunlan worked in Wuhan for more than one month to oversee local response measures.



Photo by Xinhua Agency

Second, China has opened a window of opportunity by timely updating the world on epidemic developments and sharing key clinical information. Encountering a new deadly coronavirus, China has acted swiftly. Upon learning about clusters of pneumonia cases in Wuhan caused by a virus of suspicious origin, the National Health Commission dispatched public-health experts on a field visit to Wuhan and publicized their findings immediately. Shortly afterward, it notified the WHO and shared the virus's genome sequence, enabling other countries to develop diagnostic reagents and take all necessary precautions. A daily reporting mechanism was put in place to provide maximum transparency. Acts of concealment and falsehood were severely punished. As more and more was known about the new virus, case statistics were refined and diagnostic capacity improved. For example, the more than 14, 000 new cases counted in Wuhan for February 12 was due to revised diagnostic criteria and tightened screening standards.

Third, case studies of cured patients and updated diagnosis and treatment schemes shared by China are the best technical guidance for other virus-impacted countries. There is no ready-made treatment program for a newly emerged pathogen like the novel coronavirus that is more contagious and faster-spreading than SARS and seasonal flu. Existing scientific knowledge and standard prevention measures have fallen short in responding to COVID-19. At present, flexibility proves to be the best policy. By far, China has released seven editions of clinical guidance, each incorporating the latest research findings and best treatment practices. Switching from a one-size-fits-all approach in the early days of the outbreak to a science-based, risk-informed, and phased approach with differentiated prevention and control measures for different regions, China's aggressive non-pharmaceutical interventions have changed the course of a rapidly escalating and deadly epidemic. As Dr. Bruce Aylward, head of the WHO field mission put it after a nine-day inspection tour in Beijing, Sichuan, Guangdong, and Hubei, China's approach is to try everything that is available and can work out, adapt and innovate old vaccines and therapeutics as long as they work against a new virus. He called for other countries to follow China's approach and try every means that can save lives.



Photo from Internet

Fourth, contributions and sacrifices made by the Chinese people have gained strong support and sympathy around the world. The forceful measures applied in Hubei and its capital city of Wuhan have proven to be effective in preventing the emergence of a new epicenter inside and outside China. While a sudden increase in new COVID-19

cases around the world is of concern, the spread of coronavirus is not yet a pandemic. Behind all the positive signs in China are the great sacrifices of the Chinese people who have chosen to cancel Lunar New Year reunion dinners, defer vacation schedules, and curb personal freedoms, not least those of the 59 million Hubei residents who have given up all their normal lives in exchange for the final victory against the coronavirus. Recognizing China's contributions, UN Secretary-General António Guterres has sent a message of gratitude for those in China who have been deprived of many aspects of normal life in doing a service to humanity.

Fifth, Chinese medical experts are working closely with their international counterparts on developing safe and effective vaccines and drugs against the coronavirus. As the scientific knowledge about the new virus remains limited, a more reliable and expedient solution is selecting the most efficacious from a broad spectrum of available antivirus drugs and vaccines. Currently, more than 20 vaccines are in development around the world, along with several therapeutic medicines. Harvard Medical School announced on February 24 a five-year \$115 million collaborative research initiative with the Guangzhou Institute of Respiratory Health funded by China Evergrande Group, a Fortune Global 500 company. Earlier, the Bill & Melinda Gates Foundation announced on February 5 that it would provide up to \$100 million for the global response to the novel coronavirus. Part of the fund will be used to support China's efforts to develop vaccines, treatments, and diagnostics.

China is not alone in this difficult time. As of March 5, more than 500 foreign dignitaries from over 120 countries and 300 political parties had expressed their support and sympathy for China's coronavirus combat. The United Nations and Group of 77 have commended China's anti-virus efforts. Regional multilateral institutions like the Shanghai Cooperation Organization, BRICS, ASEAN, and the African Union have released statements that expressed full support of China. A special meeting of health ministers from the 15 members of the Economic Community of West African States pledged full coordination with China on emergency response. A special meeting between Chinese and ASEAN foreign ministers held in Laos last month reached an agreement on mutual assistance to overcome this common challenge. WHO Director-General Dr. Tedros has repeatedly praised China's efforts, saying that it is "setting a new standard for outbreak response."

Obstacles to International Health Cooperation in a Globalized World

Higher levels of globalization characterized by growing cross-border flows of people, goods, and capital have also accelerated the global transmission of viruses and increased the likelihood of worldwide public health crises. No country is immune to globetrotting viruses and biosecurity is increasingly interdependent. The path toward global public health security must run through greater international cooperation. However, closer international coordination is hard to come by due to the stark differences among nations in political system, social norms, national interests, and

culture and tradition. Moreover, disparate capacities in national public emergency preparedness expose countries to different levels of health threat, making consensus building difficult and coordination even more so.

Inadequate Capacity Building

As much remains unknown about this new virus regarding its origin, pathogenesis, transmission dynamics, and virulence evolution, no one can say for certain how long this epidemic will last. Concerns are mounting as new cases of infection continue to rise worldwide. The WHO is calling on all countries to continue their containment measures, while preparing for community transmission if it occurs. As Dr. Tedros put it, "Although the window of opportunity is narrowing...we still have a chance to contain it. We have to prepare at the same time for any eventualities, because this outbreak could go any direction."



Photo by Xinhua Agency

To prevent the coronavirus from spreading its way into a pandemic, it is necessary to reinforce the first line of defense in China by strengthening international cooperation. The world needs to come to grips with the global health-care vulnerabilities exposed in the coronavirus crisis and fully recognize that a global challenge like the current epidemic requires a robust response at the global health system level. The fast spread of the virus outside China is especially disturbing because many countries still lack the necessary public health-care capabilities to contain COVID-19---a public health emergency of international concern. Threatened by a new deadly virus, the international community still cannot see eye to eye in either rhetoric or action. Ambivalence about non-pharmaceutical interventions in national preparedness planning and the contextual

nature of transmission dynamics of any outbreak usually lead to disparate prevention and control measures. All these facts have made a coordinated global response more difficult if not impossible.

Outdated Health Security Concept

For a long time, the world always finds itself in the curious cycle of "panic-neglect" whenever an epidemic or public health emergency strikes. An emergency is addressed when it arises but neglected as soon as it is over. After the 2003 SARS outbreak, China set up the world's largest online direct reporting system of notifiable epidemics and public health emergencies, which played an important role when the bird flu and African swine fever hit. In March 2013, a new virus that caused pneumonia was identified as H7N9 by Chinese medical experts, who followed up with a series of response measures such as close monitoring and rapid diagnosis, enabling the government to make science-based decisions to counter the new pathogen. The response was applauded by the WHO as "a global model" and boosted Chinese people's confidence in public health emergency response. Nonetheless, with the improvement of people's lives and acceleration of the pace of life, the focus of public health has shifted to the prevention of non-infectious diseases, such as cardiovascular and cerebrovascular diseases, tumors, diabetes, and non-contagious respiratory diseases, leading people to lower their guard against epidemics. China is not alone in this regard. Lack of preparedness for epidemics is prevalent worldwide. According to the Global Health Security Index published by the Johns Hopkins Center for Health Security, an assessment of global health security capabilities in 195 countries, no country is fully prepared for epidemics or pandemics, and each has important gaps to address in terms of response capacity and resources. Worse still, there is little evidence that most countries have tested important health security capacities or shown that they would be functional in a crisis.



Photo by Xinhua Agency

The WHO has been leading the way in combating global epidemics. It has a higher level of awareness and is more sensitive to public health emergencies than most of its member states. To better respond to potential threats, the organization launched the "Thirteenth General Programme of Work 2019–2023," in which a "triple billion" goal was proposed: achieving universal health coverage that benefits 1 billion more people; addressing health emergencies to better protect 1 billion more people; and helping 1 billion more people enjoy better health and well-being. The program also pointed out that, "Every country is vulnerable to epidemics and emergencies – the threat is universal." But not every country has the same risk management capacities in face of health emergency. "WHO's strategic priority is to build and sustain resilient national, regional and global capacities required to keep the world safe from epidemics and other health emergencies; and ensure that populations affected by acute and protracted emergencies have rapid access to essential life-saving health services including health promotion and disease prevention."

Referring to the novel coronavirus outbreak, Dr. Tedros underscored the fact the world has long operated on a cycle of panic and neglect, throwing money at an outbreak, and forgetting about it as soon as it's over and do nothing to prevent the next one. Billions of dollars have been spent on preparing for a terrorist attack, but little has been devoted to preparing for a potentially far more deadly virus. In May 2018, an independent Global Preparedness Monitoring Board was established by the WHO and the World Bank Group to provide appraisal about progress toward increased preparedness and response capacity for disease outbreaks and other emergencies with health consequences. In its first report released in 2019, the board concluded that "outbreaks have been on the rise for the past several decades and the spectre of a global health emergency looms large. For too long, we have allowed a cycle of panic and neglect when it comes to pandemics: we ramp up efforts when there is a serious threat, then quickly forget about them when the threat subsides. It is well past time to act." The COVID-19 outbreak at the end of 2019 has sent another warning that the consequences will be too grave to bear if preparedness for health emergency is neglected.

Flawed Response Mechanisms

Currently, the International Health Regulations (2005) is the legal framework for international cooperation on public health emergency response. It is a legally binding agreement between 196 countries including all WHO member states, aimed at limiting the spread of health risks internationally and minimizing the disruption of travel and trade. A new procedure was introduced into IHR (2005) that some serious public health events that endanger international public health may be declared under the Regulations public health emergencies of international concern (PHEIC). Undoubtedly, IHR (2005) is a "big step forward for international public health practice" and enables the WHO to prepare for and respond to any global health threat and facilitate collective actions to address that threat. This commitment involves not only close cooperation between WHO and its member states, but also collaboration between government departments,

administration at all levels, different sectors and disciplines.

According to IHR (2005), WHO member states have the obligation "to notify WHO of events that may constitute a public health emergency of international concern according to defined criteria." Fulfilling this obligation, the Chinese government notified the WHO of the COVID-19 outbreak, identified the pathogen swiftly, and shared its genome sequence. After two Emergency Committee meetings that reviewed the epidemic's progression, the WHO declared the COVID-19 outbreak a public health emergency of international concern. The Director-General accordingly advised the global community to demonstrate solidarity and cooperation, in compliance with Article 44 of the IHR (2005).

At present, some states parties to the IHR (2005) have not respond effectively to the outbreak and significant discrepancies exist between their reports and realities. Some of them failed to act in accordance with the IHR (2005) because they lack resources to set up monitoring system and build response capacities. Although the implementation of IHR (2005) is under the supervision of WHO, the Regulation is weak in binding its states parties to act accordingly as it does not include any punitive measures for those who fail to comply.

For instance, according to Article 43 of the IHR (2005), a State Party implementing additional health measures that significantly interfere with international traffic shall inform the WHO, within 48 hours of implementation, of such measures and their health rationale. The case will be reviewed by the WHO and the State Party may be advised otherwise. But in practice, many countries broke the rules and imposed travel restrictions on China without informing the WHO during the current coronavirus outbreak. In addition, without an evidence-based risk assessment, three cruise ships were delayed port clearance or denied entry to ports, which is a violation of the principle of "free pratique" for ships and the principle of proper care for all travelers. These practices have shown that with its legal authority being challenged, the IHR (2005) still has a long way to go before it can become a real powerful tool to strengthen our collective defense against public health emergencies.

Global Health Leadership Vacuum

Founded in 1948, the WHO is a specialized agency of the United Nations concerned with world public health. Its mission is to direct and coordinate international efforts in global health responses and the agency was once considered the global public health leader. With more and more non-state actors joining in, global public health governance has become increasingly fragmented, and the WHO's longstanding leadership role is being challenged. Given a diversified global public health system and the diminished role of traditional public health leaders, major questions have been raised about how to define the roles of national governments and international organizations like the WHO when an emergency arises, and who will stand out as the leader and coordinator of international efforts to fight against the next epidemic.

Governments, health authorities, and specialized agencies remain core actors in the current global public health system. National governments respond to common public health threats through various coordination mechanisms and the WHO is a leading coordinator of national response mechanisms. Since the COVID-19 outbreak, the WHO has acted swiftly and played an important role in guiding and coordinating international efforts. However, unlike sovereign governments which can put their whole bureaucracies into full gear with a highest-level alert or the UN Security Council which can adopt legally-binding resolutions assigning responsibility to its member states, the WHO has few leverages over national polices and actions. As a result, when the world is struck by a lasting public health emergency, the WHO can only consult and coordinate with governments of sovereign states and has difficulties in ensuring policy consistency and establishing an accountability system, which weakens WHO's authority and leadership.

An article published in *The Lancet* in 2014 attributes the failure of global health leadership during the Ebola crisis to an increasingly constrained WHO which has long suffered from shrinking budgets and brain drain which have undercut its rapid response capabilities. Moreover, although the organization requires all its 196 member states to respect the International Health Regulations, shore up public health capacity, monitor public health emergencies of international concern, and conduct cross-border cooperation, the Regulation lefts unclear the exact responsibilities required of states and does not sanction states for failing to cooperate.

Indeed, governments of sovereign states are obligated to take care of their people, but the international flow of public health risks makes it difficult for any country to fulfill its public health obligation alone. Collective actions against global health emergencies led by the WHO and other agencies sometimes conflicts with government's actions to protect its people's well-being. International cooperation is thus impeded and effective response to health threats is hard to be executed.

The Global Preparedness Monitoring Board (GPMB) emphasizes in its annual report the importance of strong political leadership in response to health threats at national and global levels. The GPMB calls for heads of government in every country to make commitment to preparedness by implementing their binding obligations under the International Health Regulations. Given the potential risk of a worldwide outbreak of COVID-19, it is time for national leaders to show global leadership and work hand in hand to integrate important resources so as to bring real benefits to all mankind.

Funding Shortfalls

As the novel coronavirus threatens to spread globally, the WHO is on high alert to the growing risk of its outbreak in countries with weaker health systems and response

capacities. Dr. Tedros Adhanom Ghebreyesus has warned that many African countries do not have a strong public health system and enough medical workers, which makes them vulnerable to this epidemic. To further curb the spread of the new coronavirus both inside and outside China, and protect countries with underdeveloped health care infrastructure, the WHO has launched an international strategic preparedness and response plan with a funding requirement of US\$675 million to cover February through April 2020. Fund raising remains the biggest challenge for the plan because subscribing organizations have been slow in action. Meanwhile, the WHO is also concerned that large sums will be channeled to develop vaccines instead of being used at where it is most needed, such as simple and life-saving interventions.



Photo from Internet

In the past few years, budget shortfalls have limited WHO's emergency response capacity building. After a 2011 funding shortfall, the WHO cut its already insufficient budget by nearly US\$600 million. The organization's emergency response units were reduced, with some epidemic control experts leaving the agency. Furthermore, the WHO controls only 30% of its budget, while member states control special funds as a leverage for agenda-setting. When Ebola broke out in West Africa in 2014, in developing its budget, the WHO relied on a misplaced confidence that it could mobilize funds rapidly in the face of a crisis, but waiting for donations only led to costly delays. Recurrence of global epidemics shows that the investment to prevent a public health emergency is far too little compared with how much is used to contain an actual outbreak.

Politicization and Stigmatization

To stigmatize is to mark an identifiable group of people, a place, or a country with stereotype and bias. For example, if an epidemic (such as COVID-19) starts to be

related with a certain group of people, although not everyone in this group is at a high risk of infection (such as Chinese living overseas), stigma is still likely to be imposed on them. After the COVID-19 breaks out, China's government, political system, and people became the target of discrimination and insult.

While the Chinese government and its people are fighting all-out against the epidemic, some governments and media outlets are trying to politicize this issue by disparaging Chinese efforts. Their discriminatory and punitive remarks about Chinese people and Wuhan citizens is hurting Chinese people's feelings as they are fighting this critical battle to safeguard themselves as well as global public health security. Some American politician even claimed that the spread of the coronavirus would be a boon for American workers. However, there are other voices in America that call on its government "to reduce stigma and unfriendly gestures toward people from China and Wuhan at this tense and sensitive moment."

Dr. Tedros has repeatedly called for the international community to stand together and stop politicizing and stigmatizing. He has warned that "the greatest enemy we face is not the virus itself; it's the stigma that turns us against each other. We must stop stigma and hate!" "It's easy to blame. It's easy to politicize. It's harder to tackle a problem together and find solutions together." The outbreak of the epidemic brings out the best and the worst of humankind. To stigmatize individuals or the whole nation will achieve nothing but undermining response efforts by distracting people's attention and turning people against each other.



A Chinese asked for a hug in the street/Photo from Internet

Sadly, there seems to be no stop for politicizing and stigmatizing, and it is even on the rise. Dr. Tedros spoke highly of China's emergency response, which has made him a target of personal attack by some foreign media. A signature campaign was launched online to demand his resignation. Old conspiracy theories have been dusted off about his running for WHO Director-General. The COVID-19 outbreak has triggered a round of political attacks against him, regardless of his hard efforts and great contributions

such as pressing ahead with WHO reform, building international public health capacity, and combating Ebola and COVID-19.

Politicization and stigmatization do nothing to help counter the epidemic but only give rise to confrontation and divisiveness that impede cross-border collaboration, undermining the already fragile global public health defense system. As Ronald Klain, White House Ebola Response Coordinator in the Obama Administration put it, "Saving lives, abroad and at home, turns on putting politics aside and allowing science, expertise, and sound decision making to govern our actions."

Regional Chaos

History has shown that diseases often come on the heels of conflicts and wars. Domestic and international chaos only exacerbate the spread of epidemics. For instance, the 1918 influenza pandemic that broke out during World War I caused more deaths than the war itself. More recently, the polio epidemic reemerged in parts of Pakistan and Afghanistan, and so did Ebola in the most unstable areas of Congo. The recurrence of these pandemics is inextricably linked to the turbulent regional security situation. In the last few years, eight in ten outbreaks requiring an international response have occurred in countries affected by fragility, conflict, and insecurity.

The nine-year war in Syria has created a serious humanitarian crisis in the country. Since December 1, 2019, nearly 520,000 have been forced to leave their homes, many for the second time. Conflicts have also damaged the vulnerable local health services. As of February 3, 2020, two separate attacks on health facilities had been verified, both in the northwest of the country, claiming 10 lives and injuring 30. At least 53 health facilities had suspended services due to security concerns. This has further limited access to basic healthcare, an increasing lack of basic medicines, and less protection against communicable diseases as a fragile immunization network, put in place by the WHO and its partners, is now disrupted.

One of the most important reasons why China has been able to mobilize personnel and resources from all sectors in a short period of time to fight against the COVID-19 epidemic is that it is a relatively stable society. Without peace, health is an unattainable dream. While we focus on reinforcing the defense capacity of health systems, we must also strive to maintain domestic stability and world peace.

As the novel coronavirus is wreaking havoc around the world, posing a severe challenge to the global public health system, all countries should consider it a test in building a human community with a shared future, and take joint actions to address the challenge. We should change the old mindset of neglecting health threats for fear of causing panic, and abandon discrimination and prejudices. We should respect and strengthen the regulatory framework for international cooperation in dealing with public health crises, and jointly shoulder the responsibility of safeguarding the security of mankind.

Joining Hands in Coronavirus Combat: Policy Recommendations

Having caused the most extensive infections, the novel coronavirus is the fastestspreading virus that is most difficult to contain in the history of the People's Republic China. At present, the epidemic is spreading rapidly in other parts of the world. Since February 25, the daily number of newly confirmed cases outside China has exceeded that within China. Among them, the spread of the epidemic is particularly rapid in Japan, South Korea, Italy, and Iran. It is imperative to strengthen the capacity building for international cooperation in the fight against the epidemic. To this end, we put forward the following suggestions:

First, China, Japan, and South Korea should strengthen cooperation in response to the COVID-19 epidemic, and together serve as the mainstay of health governance in Northeast Asia and even in Asia. In 2018, trilateral trade among China, Japan, and South Korea reached US\$720 billion, and investment approached US\$12 billion. The people enjoy ever closer ties, with over 30 million visits exchanged in 2018. The three countries have a combined population of 1.6 billion, accounting for 70% of East Asia's total; and their economies, with an aggregate GDP of nearly US\$21 trillion, take up nearly 90% of the East Asian economy. It is thus incumbent upon the three countries to shoulder the important task of facilitating shared progress and prosperity of the region. Trade volume among the three countries increased from US\$130 billion in 1999 to more than US\$720 billion in 2018. The continued spread of the COVID-19 epidemic will undoubtedly reduce Japan's economic growth rate by 0.2% to 0.45% in 2020.



"Together we fight against the virus" in London/ Photo by Xinhua Agency There are several established trilateral cooperation mechanisms in the field of regional

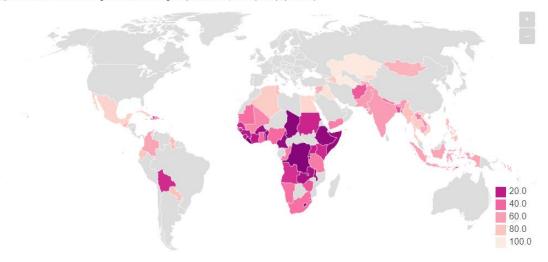
public health and disaster prevention and control, and the three countries have accumulated experience by jointly fighting against the epidemics of avian influenza and Middle East Respiratory Syndrome (MERS). The three countries can make full use of the existing mechanisms, and share information on pathology, clinical diagnosis and treatment, as well as experience in large-scale treatment and joint prevention and control via international teleconferences. Japan is at the forefront of medical equipment and pharmaceutical R&D, while China has advanced technologies in facial recognition and remote temperature monitoring. Japan will hold the Olympic Games this summer, and China will host the third China International Import Expo in November as well as the Beijing 2022 Winter Olympic Games and the Winter Paralympic Games. These events will attract heavy flows of people, increasing the risk of large-scale spread of known or unknown diseases. Researchers in the three countries should carry out joint clinical trials for specific drugs and vaccines, so as to provide the technical support for epidemic prevention in these large public events. At the same time, the cooperation will strengthen the trilateral ties and write a new chapter in the trilateral friendship.

Second, developed countries should increase health assistance to developing countries, especially the least developed countries with weak public health capacity, and help them build infrastructure systems to improve their response capacity to various diseases. Poor economies have prevented most developing countries from making large investments in health-care infrastructure and education, making them unable to cope with epidemics. The doctor-population ratio in Liberia is 1 doctor per 70,000 people; in contrast, the ratio in the UK is 1 doctor per 360 people. Jim Yong Kim, then president of the World Bank Group, once wrote "Without investments in safe schools, roads, electricity and telecommunications, countries won't be able to provide effective basic health services or contain the next outbreak."

From flu shots to face masks, many are taking extra measures to protect themselves from infection. But there is also a simple and effective way to help prevent the spread of infectious diseases—hand washing. Washing your hands with soap and water is an effective and inexpensive method to help prevent transmission of diseases such as diarrhea and respiratory infections. UNICEF estimates that children can reduce their risk of getting diarrhea by more than 40% by hand washing with soap and water. As a standard hygiene measure to prevent infections including the new coronavirus, the WHO advises the general public to practice hand washing with soap and water, and published a guideline on proper hand-washing techniques. Hand washing is now recognized as a top hygiene priority and is monitored as part of Sustainable Development Goal 6 (indicator 6.2).

The WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP) has estimated the population with basic hand-washing facilities defined as households that have hand-washing areas with soap and water. Some people might take these for granted, but there are still many who don't have basic handwashing facilities at home, especially in low-income and lower middle-income countries. Figure 1 shows the challenges to maintaining good hand hygiene. In 42 countries (54% of the countries with data), less than half of the population have basic hand-washing facilities with soap and water in their homes. The countries with little access are concentrated in Sub-Saharan Africa. For example, Liberia, Lesotho, the Democratic Republic of Congo, and Rwanda have especially low level of access (less than 5%). In other countries like Haiti, Vanuatu, Bolivia, and Timor-Leste, less than 30% of people have basic hand-washing facilities where they live.

Figure 1. Countries with Low Access to Basic Hand-washing Facilities are Concentrated in Sub-Saharan Africa



People with basic handwashing facilities including soap and water, 2017 (% of population)

It is worth noting that in addition to material assistance, China's "software" assistance is also a valuable resource. On January 18, 2017, Chinese President Xi Jinping visited the WHO---the first ever visit paid by China's President to the global public health agency. The two sides signed a memorandum of understanding on the Belt and Road Initiative, committing to working together to build a "Health Silk Road." Since the founding of the People's Republic, China has emerged from "poverty and ignorance" and made remarkable achievements in public health, and the physical health of the Chinese citizens have been dramatically improved. Compared with China's foreign medical assistance, experience accumulated by China in health governance as a "software" resource will facilitate the global health development. Then WHO Director-General Margaret Chan said in an interview that "As a middle-income country, China has invaluable experience in health governance, which is helpful for other middleincome and some low-income countries. Given the different socioeconomic conditions, China's challenges and experience in overcoming them will be more relevant than the high-income countries."

Third, international multilateral development banks are encouraged to increase their contributions to the international health system. WHO Director-General Dr. Tedros

Source: JMP (WHO/UNICEF); WDI (SH.STA.HYGN.ZS)

pointed out that "In the last few years, 80% of outbreaks requiring an international response have occurred in countries affected by fragility, conflict and insecurity." "The outbreaks of Ebola and COVID-19 underscore once again the vital importance for all countries to invest in preparedness and not panic." However, "the world spends billions of dollars preparing for a terrorist attack, but relatively little preparing for the attack of a virus, which could be far more deadly and far more damaging economically, politically and socially."

In recent years, China, together with other countries, has launched several global and regional multilateral development banks such as the Asian Infrastructure Investment Bank (AIIB) and the New Development Bank. After the COVID-19 outbreak, these institutions have offered timely assistance to China in various forms. Nonetheless, this emergency assistance should be carefully planned as long-term investment in global health governance. In recent years, the annual donation commitments in the health sector of the major international multilateral development banks (World Bank, Asian Development Bank, etc.) have accounted for 1/3 of the total commitments. The investment of the regional multilateral development banks in global and regional health is still insufficient, and financial support for health infrastructure should be increased according to the severity of epidemics. In addition, the New Development Bank can also learn from the World Bank, and build a "knowledge bank" that provides intellectual services, including health knowledge services and consultation.

Fourth, in order to further curb the cross-border spread of epidemics, in addition to taking proactive prevention and treatment measures, all countries should work together to reach a consensus and establish a joint mechanism for dealing with major public health emergencies. Epidemics have never respected borders. History has shown that the large-scale cross-border spread of an epidemic sometimes requires nothing more than a plane ticket. However, epidemic containment measures will not only limit the flows of people, goods, and capital, but also incur great economic losses. Foreign researchers have used statistics on air traffic between places of China (excluding Hubei given the mass quarantines already in place) and those in Africa to assess the risk of imported infections for each African country. Nigeria and Ethiopia are low-risk countries, but if factors such as population and political and social conditions are considered, become vulnerable. Morocco, Sudan, Angola, Tanzania, Ghana, and Kenya are at moderate risk of being the victims of imported infections. China has taken the initiative to send personnel to the most populous overseas transportation nodes for local Chinese expats to carry out epidemic prevention. The Addis Ababa Bole International Airport of Ethiopia is one of the main portals for Chinese to enter and leave Africa. Experts from the Chinese Center for Disease Control and Prevention are working closely with their counterparts from the WHO, the Africa Centres for Disease Control and Prevention, and the Ethiopian Public Health Institute, to monitor the health status of passengers at the Addis Ababa Bole International Airport.



Photo from Internet

China and Africa had been cooperating in epidemic prevention even before relevant official mechanisms were established. Chinese State Councilor and Foreign Minister Wang Yi attended the Fifth Lancang-Mekong Cooperation (LMC) Foreign Ministers' Meeting in Vientiane, Laos on February 20, 2020. Wang pointed out that "A long-term view should be taken and efforts should be made to explore the establishment of a joint mechanism for dealing with major public health emergencies in order to improve the health and medical level of the people in the region." To establish a joint mechanism for dealing with major public health emergencies, China and its partners should consider the urgency of the situation and build a basic framework before working on the details, which may buy us more time in the battle against the epidemic.

Fifth, China's experience and lessons in fighting against the epidemic could help other countries. Only with the joint efforts of all countries can we prevail over the epidemic. By the end of 2018, the total number of Chinese population in the mainland reached 1,395.38 million. Of this total, urban permanent residents numbered 831.37 million, accounting for 59.58% of the total population (the urbanization rate of permanent residents). The urbanization rate of population with household registration was 43.37%. The number of population who live in places other than their household registration areas reached 286 million, of which 241 million were floating population.

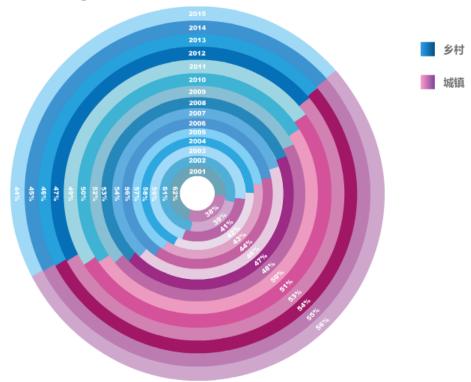


Figure 2. Urbanization Level in China

Source: National Bureau of Statistics of China.

The urbanization path in China is different from those of European and American countries. With a higher population density, China is facing greater risks of public health emergencies such as large-scale epidemics. Feng Kui, an expert on urbanization at the China Center for Urban Development of the National Development and Reform Commission, pointed out that compared with 2003 when SARS broke out, China's transportation system in 2020 is highly developed, increasing the mobility of population. The large number of floating population is one of the main causes of the rapid spread of the epidemic. However, with the help of technologies like artificial intelligence (AI) and big data, China has shifted from the traditional model of stringent prevention and control measures to a more agile and flexible model, and achieved satisfactory results in this regard. For example, as of February 13, China Unicom had established 13 big data models including the "regional population mobility," and developed big data platforms for risk prediction based on population mobility. 3017 data analysis reports were delivered to epidemic prevention and control departments at all levels. In short, China has given full play to its accumulated advantages in information technology, using digital technologies such as big data, AI, and cloud computing to reduce the huge economic and social burdens caused by excessive mobilization of social resources. In the meantime, technologies can reduce the risk of epidemic transmission, as smart devices and online platforms can limit direct contacts without disrupting information reporting, data analysis, and conference discussions.

Although countries vary in their national conditions and capabilities, and each epidemic outbreak has its own characteristics, mankind has been learning to prevent and control epidemics, thus there is no silver bullet to address all epidemics, and measures should be customized according to the specific situation. However, timely transmission route interruption, early detection, and effective treatment are essential in any prevention and control measures. China, as the main battlefield in the fight against the COVID-19 epidemic, has made the greatest efforts, taken the strictest measures, and gained the most firsthand experience. At present, China's prevention and control of the epidemic has achieved the most remarkable results. China stands ready to share its experience with the international community, and to enhance cooperation with other countries and international organizations, including the UN and the WHO. We believe that joint efforts at the international level is the key to winning the war against the COVID-19 outbreak at an early date.

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