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The Key Role of Multilateral Coordination in the U.S.-China Health Relationship

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Abstract

For decades, the WHO played a useful role in easy tensions during difficult times in the U.S.-China health relationship. That process failed during COVID-19, leaving the United States without an effective way to interface with China in a crisis. An international organization can suffer from agency slack or a lack of independence. But despite these potential pitfalls, it can provide useful services to its member states. Often overlooked are the ways an IO can help nations address bilateral concerns. It can coordinate, provide international recognition that encourages improvements, and it can ease sovereignty concerns. This paper examines the history of successful partnership and the problems that led to the failures of 2020. It makes recommendations for how to move forward.

Implications and Key Takeaways

- The United States should increase its support for the WHO, including an increase in basic budgetary support by itself and work with other developed nations to increase support, as well.

- The United States should support the strengthening of International Health Regulations, recognizing that greater scrutiny will also come to the United States.

- The United States should seek to develop for coronaviruses, and for other key viruses identified by the global public health community, an international surveillance regime similar to the influenza program the United States has supported since its inception. This should be for the full range of countries with a coronavirus risk.

- The United States should recognize that China is now a peer country producing public health and scientific excellence.

- The United States should fully staff its health activities in China, including CDC, NIH and FDA. It should also seek to resume cooperation agreements with Chinese scientific entities and focus on ensuring joint use of data.

- Much of the world still needs to be vaccinated. The United States should look at how to ensure that its efforts and those of the Chinese are complementary in getting maximum effective coverage, not competitive. This may well require additional research on using multiple vaccine types.

Introduction

The COVID-19 pandemic continues to have profound and negative effects around the world. Not only has it brought death and suffering to millions, but it has caused economic dislocation to hundreds of millions, reduced global interaction and brought significant political stress to many countries, arguably including the United States. International cooperation on COVID-19 has been weak, despite multiple promises by most leading countries to do more. COVAX, the global effort to provide vaccines to poor countries, has only delivered half its promised doses, and most recently has reported it can't do more without an immediate cash infusion.[1] And as the world continues to struggle mightily with new COVID variants, there seems to be little global effort to conduct the kind of surveillance for altogether new coronaviruses that there is for influenza, despite the fact that COVID was the third of these novel coronaviruses to emerge on the Asian landmass in the 21st century. As shown by the emergences of MERS in Saudi Arabia, and the global struggle to control COVID, these are not solely Chinese issues. However, it is impossible to foresee a situation where China is not critical to the global control of respiratory illness. It is simply too large, has too many people in close proximity to animals, and is too integral to global production capacity of vaccines, medicines and medical equipment, not to be one of the most essential players.

The United States has long been a leading advocate for efforts to control the spread of infectious disease with active involvement dating back to over a century, especially in the Western Hemisphere.[2] By World War II the United States was the largest global health donor, first contributing over 70 percent of the United Nations Relief and Rehabilitation Administration (UNRRA)'s budget and then committing to almost 40 percent of the World Health Organization (WHO)'s budget in the early years after the war.[3] While there was some isolationist pushback in Congress to the original WHO treaty, the U.S. administration was central to the design of the organization. By the early 1950s addressing global health disparities through UN agencies was seen as a key element of the U.S. efforts to counter communism. Ironically, the most significant impact of Congressional concern was a special provision that allowed the United States to withdraw from the treaty with only one year's notice, a provision that was actually used during the Trump administration,

although with less than a year to go in that administration, withdrawal was never actually effected.[4]

From the beginnings of the WHO, the United States had more capacity than the international organization and U.S. funding was essential to its operation. Thus, the United States could have chosen a different route, focusing resources on a unilateral overseas strategy of bilateral aid. But instead, support for WHO and working through WHO on key programs was a critical element of U.S. international health policy, particularly on infectious diseases ranging from small pox to influenza. And yet, when it came to COVID, the first year of the pandemic was marked by growing U.S. skepticism toward the WHO and toward international health efforts in general and a substantial reduction in U.S. material support for the WHO. 2020-2021 was the first period in the organization's history where the United States was not its largest donor.[5] The question then arises, what value did the United States gain by working through the WHO, an organization where the United States, while influential, could not dictate terms, rather than working independently and bilaterally? Conversely, was the failure to leverage the WHO during COVID a loss for the United States? And finally, looking forward, now that the United States has decided to reengage with the WHO, are there ways that that the United States can use multilateral participation as a way to advance its bilateral health relationship with China in ways that promote global health?

This essay will examine the role that multilateral engagement played in advancing U.S. health goals related to China, specifically related to infectious respiratory diseases. Because of China's large population of both humans and animals and the many opportunities they have to interact, Chinese health authorities' active involvement in collecting information on disease threats, whether it be the annual changes in the influenza virus or the emergence of new pathogens, has long been recognized.

The Relationship between the WHO and Member States

The WHO is a member-directed institution and yet often must confront individual members about health problems they might prefer not to divulge to a global audience. It is both a highly technical agency with its own staff, and it requires assistance from its member states to provide critical staffing and

infrastructure not just for emergencies but for its ongoing efforts. While the major focus of previous studies has been on whether the WHO has autonomy or is governed by the member states, with a focus on how the WHO carries out its role, the focus here is on the reverse, the role an IO can have not just in furthering its own goals (though they may coincide), but in facilitating relationships among member states. Specifically, I am looking at how interaction and support for the WHO has supported U.S. priorities, although this analysis is likely applicable to other members, especially those who actively support WHO programs, as well.

The WHO as a one vote per member organization has long been responsive to its developing country members' needs. While some developed countries, and particularly the United States are focused largely on infectious diseases that cross borders, developed country members have advocated efforts related to poverty, pharmaceutical access, and other issues with broad social and economic implications.[6] The public health literature focuses on the tensions in WHO priorities in terms of the voting membership, which with 192 members is heavily weighted toward the developing world, and budgetary constraints. In particular, as the agency grew to rely on extra-budgetary or project funding from the 1980s onward, it had to become increasingly responsive to the specific demands of donors.[7]

By contrast the international relations literature has framed the conflicting pressures at WHO either as a principal-agent conflict, where the voting method leads to agency slack[8] or from a constructivist viewpoint, where the same WHO professional staff are acting as "norm entrepreneurs."[9] In both cases, the basic question is how much WHO itself is shaping international health policy and acting as an independent institution. As Walt documents, this framing does not address the fact that a great deal of global health assistance capacity now resides in some of the member countries. Moreover, the WHO actively works to develop the member country expertise it then depends on through its support for domestic public health infrastructure and the network of Collaborating Centers and Essential Regulatory Laboratories.

More broadly the literature also takes seriously the services that international organizations (IOs) can provide to their member countries, including the provision of a centralized locus for cooperation and/or coordination and through IO independence, the ability to be able to act unilaterally on behalf

of global interests (Abbott and Snidal 1998), thus suggesting that IO independence is not always agency slack. However, these discussions simplify the complex nature of interactions between a highly technical agency that is in fact heavily reliant on information and cooperation from all its member states and on the even greater technical resources of its more prominent members. Moreover, it tends to put the IO in the center of the analysis. This essay turns that around to look at a bilateral relationship that in many ways was prioritized by both countries above the success of the IO, and yet, using the IO was critical to bilateral success. Without a successful intermediary at key moments, the bilateral relationship suffered greatly, to the detriment of both countries and the world.

The Groundwork: Influenza Cooperation within the WHO Network

WHO founded the international influenza surveillance network in 1952, with the United States as a founding member.[10] The United States and other major members were interested in ensuring globally effective surveillance and data analysis. When China began to be more active in international organizations in the 1970s, its surveillance was weak. Influenza surveillance is critically important, because even in the midst of a coronavirus pandemic, the international medical community continues to view seasonal influenza as a major health concern and pandemic influenza as an ever-present risk. Indeed, there have been new flu viruses of concern during the past two years.[11] The speed and severity of the 1918 flu pandemic and the fact that influenza viruses mutate much more rapidly than coronaviruses keep influenza high on epidemiologists' lists of concerns.[12] Many, but by no means all, influenzas of concern arise in China. Concern about developments in China has been heightened since the series of highly pathogenic H5N1 or bird flu outbreaks that occurred in Southern China and Hong Kong and then spread to Southeast Asia in 1996 – 2005 period.[13]

U.S. CDC began to explore the possibility for influenza surveillance cooperation with China in 1978 even before relations were normalized and the U.S.-China Science and Technology Umbrella Agreement were signed in 1979. Exchanges increased in the late 1980s and the first formal agreement was signed in 1989 between the U.S. CDC and the Chinese Institute

of Virology.[14] Under the agreement the United States helped the Chinese set up sentinel surveillance, i.e. a network of healthcare providers to collect influenza samples, and upgrade laboratory capacity. Once basic lab work was completed in China all the samples were sent to be analyzed at the U.S. CDC in Atlanta, which was also designated a WHO Collaborating Center. Initially the Chinese sent the U.S. CDC hundreds of samples a year.[15]

The WHO influenza program was organized around National Influenza Centers and then much more sophisticated Collaborating Centers, The Chinese Institute of Virology (which in 2002 became part of the brand-new China Center for Disease Control and Prevention or China CDC) was already designated a WHO National Influenza Center and thus the logical partner for U.S. CDC. Essential Laboratories and Reference Laboratories were in a much more limited number of locations. The United States, United Kingdom, Japan, and Australia all hosted Collaborating Centers where flu samples were analyzed and recommendations made, for epidemic and pandemic preparedness and for the composition of the annual flu vaccine.[16]

WHO's influenza program is both one of its most effective and longstanding efforts and highly dependent on member country capacity. The program provides coordination, data compilation and knowledge sharing. Each country designates a National Influenza Center, but these obviously have different levels of capacity and expertise. WHO then designates key nodes as Collaborating Centers to conduct more sophisticated laboratory analysis and compile data. The influenza program also operated as the WHO's key pandemic detection program, since everyone involved pre-SARS, and even most post-SARS, expected the next respiratory pandemic to be an influenza virus.[17] As both the United States and Japan became interested in supporting global influenza surveillance capacity, the WHO became the obvious venue for working out and deconflicting their assistance efforts. In 1998, the two countries agreed to fund their bilateral efforts through the WHO.[18]

WHO's role is more than facilitating aid coordination or compiling data. The China case, in particular, demonstrates how important an international organization is for providing an incentive structure for countries to upgrade their domestic infrastructure. U.S.-China cooperation to develop the Chinese influenza program progressed steadily through the 1990s with the United States assisting with laboratory capacity and helping the Chinese increase the number

of surveillance sites, although the overall scale was still rather modest. This was partly attributable to a bureaucracy that didn't promote its best young scientists quickly,[19] and partly that all of China's public health infrastructure was quite small and had not yet been formed (until 2002) into a government public health agency as opposed to a research institute.[20] In 2004 the United States and China agreed to a major increase in ambition with a new bilateral agreement focused specifically on elevating the Chinese contribution to the WHO system. A major goal was for China CDC to become a WHO Collaborating Center, a result achieved in 2008. Sentinel surveillance also grew dramatically, from a handful of sites in the 1980s to 3565 in 2006 all the way to 28,685 in 2014. At the same time the number of labs able to run state-of-the-art PCR tests rose from approximately one in each of China's 31 provinces to almost 400.[21] The WHO program created clear metrics for success that gave Chinese medical could advocate for internally. Indeed, a popular slogan in the years leading up to the 2004 agreement was that China should "get on the international track" (*yu guoji jiegui*), a slogan that realized its apex use during China's admission into another key UN-affiliated organization, the World Trade Organization.[22]

Both countries have benefited directly from the bilateral relationship, and from the WHO's role in coordinating, facilitating and providing imprimatur. The improvements in China led to a more complete set of samples and rapid analysis to inform the annual influenza vaccine. Chinese public health overall benefited from improvements in lab capacity and those 400+ PCR-equipped labs, which not only aid in addressing the ordinary burden of disease, but contributed to China's rapid effort to bring COVID-19 under control in 2020. The United States also gained directly from working with China. For decades the Chinese sent flu samples to the U.S. CDC in its role as a WHO Coordinating Center. WHO brought considerable extra prestige to the relationship and helped smooth any concerns over sovereignty and data sharing.

CRISIS Response: the WHO role during emergencies

Bird Flu

Influenza mutates constantly, and thus catching every one of these changes is essential for preparing for the annual influenza season and the appropriate

vaccine. In addition scientists are on the lookout for large changes, a major shift in type that means a much larger portion of the world's population is immunologically naïve and susceptible to the disease. This is what occurred in 1918 and then again in 1957, 1968 and 2009. The first of these was astonishingly deadly, killing an estimated 50-100 million people,[23] and both 1957 and 1968 were severe.[24] While the H1N1 pandemic of 2009 turned out to be milder than most with global deaths estimated at 189,000,[25] the concern remains that a more hazardous influenza might emerge. China is always at high risk because of the heavy concentration of people, poultry and pigs in close proximity, which the viruses move between.

A more fatal influenza was identified in Hong Kong in 1997, the H5N1 bird flu. This flu had jumped directly from birds to humans and was incredibly lethal, killing one-third of those infected. The concern was whether it would lead to sustained human-to-human transmission. Most of the cases seemed to come directly from contact with infected poultry. A massive cull of Hong Kong's poultry markets and new regulations on how to manage them seemed to control it.[26] However, Hong Kong is a populous city on a tiny landmass. It imports almost all of its food, mainly from China. The suspicion, later confirmed, was that the disease had originated in Southern China.[27] The WHO and the U.S. CDC wanted a greater understanding of the origins of the disease to try to prevent further outbreaks. This kind of outbreak, where sustained human-to-human transmission has not yet occurred, is controlled by widespread poultry culls of the type that Hong Kong conducted in 1997. I was living in the Southern Chinese city of Guangzhou at the time, and no culls were conducted, nor was the outbreak ever acknowledged to have affected the mainland side of the border. However, the general public stopped eating chicken in fear.[28]

Despite almost two decades of cooperation, including some staff in Beijing, the U.S. CDC found it much easier to work within a WHO-requested "mission" than to try to investigate this outbreak on their own. Investigation, in contrast to capacity-building, will raise many more sovereignty concerns. To achieve its aims WHO treaded lightly. There was no public accusation of hidden cases, but rather a polite request to visit Southern China to see if they could learn more about the disease's origins. The Chinese government allowed a mission to travel to Southern China in 1998 with U.S. CDC representatives as part of the group.

But that visit was described to me as a "complete whitewash" with the markets selling live birds shut down, and the group's request to see typical poultry production denied. Instead they were shown a video of a high-tech facility, not at all the average for late 1990s Guangdong.[29] Much of what we know about the nature of these southern food markets as the sources for H5N1 and then later for SARS was due to the quiet work of researchers in Hong Kong, who went regularly across the border in the wake of the original bird flu outbreak and collected samples from local markets. By 2006 Guan Yi and his colleagues had collected over 50,000 animal samples from six provinces.[30]

Despite the challenges of trying to obtain clear information in China, the need was only more obvious, and thus U.S. CDC continued to work both directly and with WHO to obtain more information. By 2002 the H5N1 bird flu started to emerge in nearby SE Asian countries, but before bird flu could command full expert attention, a new and more infectious disease emerged.

SARS

In the fall and winter of 2002 rumors began to emerge of a new and scary disease in South China. This was before widespread internet use in China, and the rumors spread by text message on cell phones. Friends warned each other not to go to hospitals. This new disease was ultimately named SARS and the virus that caused it SARS-COV-1. But no one knew that at the time, and the national government in Beijing didn't know anything. Local authorities in Guangdong did their best to keep the news from the Central Government, a pattern that repeated when SARS moved to other provinces, and then apparently at the early stages of the COVID-19 pandemic.

WHO received a note from an unofficial source informing it of the rumor about this disease on February 10, 2003, illustrating the importance of an international organization as a more neutral conduit than another government would be. The WHO formally requested information from the Chinese government, but was told it was "under control." Quickly, however, cases began to emerge in Hong Kong and SE Asia, as well as in Toronto, and WHO decided to send a team in investigate. U.S. CDC's influenza effort was led by Dr. Keiji Fukuda, who fortuitously was working on influenza issues in the region. Many at WHO and in the international medical community thought the mysterious disease was likely to be a novel influenza, and Dr. Fukuda was invited to

join the WHO team. Even with the WHO imprimatur getting access to the area with the outbreak took some time. The team arrived in China February 23 and did not visit Guangzhou until March 4.[31] (WHO issued its first alert for SARS on March 13).

WHO was legally limited, since existing International Health Regulations (IHRs) had mandatory reporting requirements for only three diseases and did not have explicit rules for travel restrictions. These gaps were addressed after SARS with a significant revision to the IHRs in 2004.[32] WHO Director General Gro Harlem Brundtland used the lack of rules to respond flexibly and threaten additional action.[33] Throughout March as additional countries reported cases and global concern grew, Brundtland and her representative in Beijing, Dr. Henk Bekedam, continued to urge greater transparency from the Chinese government and to offer assistance in combatting the disease.

U.S. CDC again became involved when a second WHO team was assembled with two CDC members of four total and began its visit to Beijing on March 23. The team was forced to wait until April 3 to get permission to visit Guangdong. The likely trigger for permission was WHO headquarters issuing its toughest travel warning yet on April 2. However, by the time the team arrived in Guangzhou the outbreak was indeed under control and their question was what was happening in Beijing.[34] It again took a number of days to get inside Beijing's hospitals. The team visited from April 10-15, but only heard about SARS cases at a military hospital on the final day of their visit. Beijing's outbreak had first been revealed by a retired military doctor and whistleblower, Dr. Jiang Yanyong.

Beijing ultimately announced its epidemic on April 20 and began to take vigorous steps to get the outbreak under control, including putting Vice Premier Wu Yi in charge of the Health Ministry, firing the Beijing Party Secretary and otherwise signaling its intention to hold the bureaucracy to account. At the same time Beijing began to welcome international assistance in the form of many more WHO missions, of which perhaps half the experts were U.S. CDC.

During the SARS period U.S. CDC and WHO worked closely together and with WHO in the official leadership role. DG Brundtland had the power to threaten the Chinese economy through her travel warnings, and these ensured that the Chinese paid attention to her concerns. Moreover,

travel warnings were issued for many countries, so the Chinese could not argue they were singled out. Despite the fact that the United States is a much stronger and wealthier institution, the United States deferred to the WHO to take action first and then followed with its own travel warnings. The Chinese government response was slower and more halting than WHO wished, due in part to central government reluctance, but in even greater part to the internal local and provincial cover-ups that made the Chinese central government unable to track their own epidemic for many months.

Once Chinese cooperation was assured, WHO needed the U.S. CDC as much as the reverse. Some 40 U.S. CDC staff were seconded to the WHO Beijing office to provide technical assistance after April 20. They entered China with UN documentation, rather than U.S. official passports. CDC Atlanta also assisted in sequencing the SARS genome.[35] For the Chinese in crisis, dealing with an international organization was both more urgent and more palatable that asking for bilateral assistance. This outbreak required social distancing and contact tracing, but it resolved relatively quickly. By July 2003 SARS had been eradicated worldwide.[36]

Post-SARS: The Golden Period for International Cooperation

After SARS, health cooperation blossomed. The return of H5N1 in 2004 and 2005, (which still was not transmitting rapidly human-to-human, but was moving rapidly through poultry stock, was highly lethal and carried the potential that a small mutation might make it more infectious), kept international focus on China and infectious disease. The China CDC, only founded in December 2002, right before SARS, began to expand in earnest and was focused on rapid detection of outbreaks. They reported these H5N1 outbreaks immediately to WHO and shared information with both bilateral and multilateral partners.

The United States began to increase its long-term on-the-ground health presence in China as well as high-level attention. Both CDC Director Julie Gerberding and HHS Secretary Tommy Thompson visited Beijing in 2003. The new agreement on flu was signed in 2004, contemplating additional staffing and support. The two countries began to negotiate for broader cooperation in

emerging disease detection. In 2005, President George W Bush and President Hu Jintao met twice, first at the UN and then when Bush visited Beijing in November. They signed an agreement to cooperate on avian influenza, both bilaterally and with the relevant IOs, including WHO and the Food and Agricultural Organization (FA0).[37]

China CDC was vigilant and prompt in reporting cases of H5N1. The major issue of concern for epidemiologists was that while the China CDC was identifying the human cases of avian influenza, the agricultural authorities weren't catching the bird outbreaks. It should have been much easier to find the birds, because thousands would get sick at once, but instead as a number of people noted to me at the time the humans were acting as the canaries. As a result, in reporting to Congress the United States still found China "uncooperative" in the sense that WHO was not receiving needed bird samples.[38]

Much of U.S.-China bilateral cooperation did not intersect that closely with the WHO's main efforts. But as one top Bush era official described the attitude of that time: "The presumption was that the Chinese were good actors that they were playing by the international rules that they were meeting international standards, both for quality and for ethics."[39] The United States had a CDC secondee working on childhood vaccinations at WHO's Beijing office for decades. WHO continue to have its very broad mandate, which the U.S. supported and for some of these years assigned an expert in tobacco control to WHO, as well. But the major U.S. bilateral effort focused much more narrowly on infectious disease. This included robust HIV/AIDS programs that had gotten underway just before the SARS outbreak. CDC's Global AIDS Program originally located itself in the same building as WHO Beijing but found to their surprise that they had much less coordination and interaction than expected.[40] Nevertheless, for both HIV/AIDS and influenza there were clear WHO counterparts. The focus the United States put on emerging infections was different. WHO did not have such a specific program. Thus, while relations were amicable throughout the Bush and Obama years, the U.S. bilateral program operated mainly without relying on WHO's diplomatic resources.

A Weakening of Relations

The complex web of a relationship between the United States, China, and the WHO began to fray in the later years of the Obama administration. While there was a strong commitment to the importance of a China relationship through 2016, there was already less optimism than there had been in earlier years.[41] There was a shift toward relying only on the bilateral relationship, and then disappointment with the results.

Bilateral cooperation during Ebola outbreak in West Africa had given the Obama administration hope that the bilateral relationship could be further developed to collaboratively address multilateral aims. WHO's response was widely criticized,[42] while the United States sent extraordinary numbers of staff and equipment to assist, including some 4000 from the U.S. CDC alone,[43] and the Chinese also had teams in West Africa.[44] The two countries had limited interaction with WHO. In Sierra Leone, the two countries' teams worked together, and they subsequently agreed to cooperate in helping to establish an Africa Centers for Disease Control and Prevention.[45]

From numerous interviews with officials from that time, the United States was already becoming concerned about Chinese cooperation in the Africa CDC project in the latter years of the Obama administration. One issue that came up in a number of anonymous interviews was the Chinese desire for samples. While the U.S. CDC had received many samples from China over the years and access to samples is often a key goal for U.S. CDC, there was considerable and growing suspicion of Chinese purposes in gaining samples. There came to be a view that the Chinese were trying to obtain DNA to "track individuals."[46] There doesn't appear to be evidence that the Chinese were using DNA to track anyone in Africa, but this issue became mixed with the actual cases of Chinese companies' sales of facial recognition and other types of surveillance equipment to African dictators.[47] At the same time there was also some concern about whether DNA collected in Africa might be used by Chinese biotech companies. These links were all vague, and certainly can't be documented using any public sources. However, they contributed to a growing sense of unease surrounding the relationship. But in the Obama administration, these concerns were balanced with concern for maintaining health ties with China.

In the early days of the Trump administration the health relationship appeared to be on track. Trump's short-lived first HHS Secretary, Tom Price,

visited China, and his second, Alex Azar, also discussed the possibility of a visit. But by 2018 the relationship was deteriorating with those in the field receiving little interest from Washington.[48] While U.S. health personnel in China continued to reach out to their WHO and bilateral counterparts, where there were actual WHO counterparts (which there weren't on the emerging infections portfolio),[49] these also diminished because others did not want to be affected by the increasingly negative overall relationship between China and the United States.[50] The overall science relationship got further bogged down by an eighteen month lapse in the renewal of the umbrella government-to-government cooperative agreement that only got renewed shortly before the COVID-19 outbreak.

CDC programs were also cut. Both the Global Disease Detection Program and the Field Epidemiology Training Programs were slashed.[51] At the same time a number of key NIH agreements also lapsed.[52]

Working in China also became more complex over this period. In April 2018, the Chinese State Council enacted regulations requiring international research go through government data centers before it could be used by foreign researchers.[53] In speaking to experts with decades of experience in multiple U.S. scientific agencies, they identified the changes in China as real, but believed that the best way to address them successfully was through government attention and action. Both NIH and NSF had successful collaborative programs, including on infectious disease that they were able to maintain. Government-to-government agreements have long been used to protect scientists from accusations of improper data handling. The CDC approach included both agreements and the physical presence of its scientists within the China CDC structure. With less support from Washington, reduced staffing and a lapsed umbrella agreement, much of this structure was declining, just as it was becoming more complex to work in China.

COVID-19-Starting from Behind

When a new virus emerged in central China that would rapidly lead to the worst pandemic in 102 years, the United States while not blind, but was severely limited when compared to its capacity a few years before. COVID-19, not yet identified, began circulating in Wuhan some time in November or

early December, and by late December the Wuhan government had put a notice on its website, which WHO's Beijing office spotted December 31. WHO requested information from the Chinese government in Beijing on January 1st and alerted the Global Outbreak Alert and Response Network (GOARN) on January 2.[54] By January 3, the Directors of the China CDC and U.S. CDC were speaking by phone,[55] and on January 6 U.S. CDC Director Robert Redfield sent an offer of assistance to the China CDC.[56]

There followed a period where the Chinese government reported some limited number of cases to the WHO and then stopped. But the Chinese published the full COVID-19 genome on January 11[57] and by January 22, 2020, it began reporting numbers regularly to WHO and allowed a WHO team to visit Wuhan.[58] By late January, the Chinese government had set up an effective program to control the disease, essentially closing down the entire province of Hubei, where Wuhan is located, setting up separate fever hospitals, and sending in some 9000 epidemiologists to assist with tracking and tracing. They also rapidly imposed lockdowns in the rest of China, with the result that the vast majority of cases for the first two years were in these early months in Wuhan and surrounding Hubei province. Until the omicron variant entered China in 2022, some 70 percent of China's 100,000+ cases were in Hubei province.[59] As a result, while China looked at first like it was doing badly, it then did quite well for two years. While without doubt the Chinese missed a number of early cases, it is now generally accepted that globally health systems are identifying no more than one-fourth of those infected.[60]

At the same time, the United States was having a difficult time incorporating information that was coming from China into its own response. The remaining U.S. personnel on the ground had little access to information with no regular contact with a China CDC that was both politically cautious and working round the clock.[61] It is unclear whether Redfield and those who advised him within U.S. CDC underestimated Chinese capacity or made a clumsy attempt to get a virus sample. Their offer to help map the genome was not needed—the Chinese published it shortly thereafter—and because of Chinese participation the NIH Human Genome Project, Chinese institutions' capacity was well-known in the United States.

Similarly, the United States seemed to be skeptical of WHO expertise. The U.S. CDC chose not to use a WHO-developed test[62] and then later did not

appear to use information gleaned by the U.S. expert on the second WHO mission to China in February 2020.[63] The United States had relied heavily on this type of expert during the early months of the SARS outbreak,[64] but in this case there was little evidence that any of the lessons learned, such as the importance of fever hospitals and isolating patients before they were symptomatic were transferred. While the U.S. CDC sent 4000 staff to West Africa during Ebola, and they knew from the WHO teams that China had sent 9000 contact tracers to Wuhan, no similar effort was organized to shore up support for New York and other hard-hit cities early in the pandemic. In fact, instead of using the insights available through participation in the WHO, the Trump administration first denied the problem, and then when it finally had to recognize it, chose to blame China,[65] blame WHO[66] and complain about the lack of unilateral access to China in January.

The United States also led the call for an investigation into the origins of SARS-COV-2. Determining viral origins is complex biological investigation, not a legal inquest, and it often takes years or even decades. SARS link to the civet cat was not determined until after the disease had been eradicated,[67] and HIV/AIDS origins were not narrowed to central Africa until decades into the epidemic.[68] A group of five of the world's top virologists published a paper in Nature Medicine in March 2020 that debunked the widespread rumor of a bioengineered SARS-COV-2 (where Chinese had blamed the U.S. Army and the United States had blamed a Chinese lab), suggested a lab leak was unlikely and that the most likely scenarios were a recent jump to humans from animals or an earlier jump with a subsequent mutation. Since then the debate has become even more heated, but the best estimate of virologists is that animal origins are most likely.[69] Moreover, looking at who the Chinese government chose to punish in Hubei and Wuhan—over 300 people,[70] and none from the Wuhan Institute of Virology—it does not appear that the Chinese government suspected the lab in any way. In fact, from the rapid response to the outbreak, including decontaminating the markets (a standard procedure for outbreaks in China) it appears that the local government believed there was an animal origin, but did not have a more precise sense than that. What is clear at this point is that efforts from the first WHO mission to look at origins stalled in the subsequent political controversy, and that the more time elapses, the

less likely that definitive evidence will be found. It may be, but as with HIV/AIDS, it may be approximate.

WHO, like any member-serving agency whose budget depends entirely on its members, has been perceived as highly solicitous of its largest members. What this tends to mean is that U.S. politicians tend to think the organization treated China too lightly, while the Chinese perceive the WHO as bowing to U.S. pressure.[71] Numerous career interlocutors pointed out to me that while the WHO is solicitous of China, it is even more so of the United States, given its position as one of the founders and historically the largest donor. The United States was demanded this WHO investigation even after it announced its planned departure from the organization. Since President Biden recommitted the United States to the WHO, his administration has not been visibly supportive of the WHO effort to look into virus origins. In fact, the administration announced its 90-day intelligence review of the origins right after the WHO mission's return,[72] contributing to the controversy that has derailed the WHO process. The intelligence review turned up no new information, with most members of the intelligence community having no opinion on the origins, and the few they did being split. When the intelligence community released more information in October of 2021, they acknowledged that it was highly unlikely that the origins would be determined.[73] But the review's release was accompanied by a highly critical press release from the White House, condemning Chinese lack of transparency and accusing the Chinese of "withholding information."[74] The problem with this framing is that while there has been poor communication between China and the United States, it does not appear that the Chinese are hiding information they have. There is no indication that they know the origins of the disease. The U.S. response, demanding an international inspection of the Wuhan lab, draws Chinese ire, since it is highly unlikely that the United States would invite such an inspection of one of its government research facilities. In fact, unlike in the 1990s when a number of China CDC personnel spent months at CDC Atlanta learning how to run a public health lab, U.S. facilities now are far more closed, and Chinese are required to get clearance months in advance and are limited in what they can access.

Thus, with COVID-19 the United States did not use the WHO as an effective partner. In multiple cases, the United States has found the WHO too

slow in its responses. The United States wanted greater pressure on China in the early days of COVID-19. WHO followed its usual approach of negotiating with the affected country—it has no power to simply barge in—and actually received a much more rapid response than was the case during SARS. However, COVID-19 turned out to be a much more rapidly progressing disease. Similarly, WHO did negotiate a mission to look into COVID origins, and that mission came out with a significant workplan. But the United States wanted an answer to COVID origins in 90 days, and chose to go it alone.

The United States had significant experience working with the WHO to address global health needs and to deal with the complexities of promoting global health bilaterally. Over the years, the WHO had helped in coordinating, in providing international recognition and prestige and in reducing sovereignty concerns. In pushing the WHO so hard on the COVID origins question, the United States has not advanced the science, and it has run directly into the sovereignty issues that WHO as a member organization tries to deal with diplomatically. There isn't a simple answer to how to work with China on global health or any other issue. But there are a set of issues, and health is one, where we can't achieve health and safety for ourselves, much less for others around the world, without cooperating. The evidence of the last several decades is that an international organization can be an effective partner, and without it the chances of success are even lower.

Conclusion

Working with multilateral organizations can be challenging. They need to be responsive to all their member states, but they convey real advantages. Especially in challenging times they have more access precisely because other countries are members, even if this means compromise. Neither a multilateral organization nor the United States is going to use threats of force for a health question, so the truth is the only tool any country or IO has is diplomacy. What is clear is that the WHO actually does gain important information from member countries. It is also often able to gain access for U.S. experts during health crises from H5N1 to COVID. It provides an incentive structure for other countries, including China, to improve their health efforts, and this has been remarkably effective in China, as demonstrated by its improved influenza surveillance.

While COVID has certainly been a challenge, the Chinese moved much more quickly than during SARS. Regrettably, the disease moved even more quickly. But that does not obviate the fact that both U.S. bilateral efforts and WHO engagement over the decade plus since SARS meant that the Chinese response was swifter and more effective than it had been 17 years earlier.

The United States and China now have a much more contentious overall relationship, and so the question is how best to use this experience for the current moment. We cannot assume that relations will operate as they did in the past, but given that the bilateral relationship is rocky, engaging through multilateral partners seems all the more urgent. The truth is that the United States was asked to join each WHO team. The failures to use this information effectively were domestic. Thus, to expand on the policy recommendations presented at the beginning of this paper:

- The United States should increase its support for the WHO, including an increase in basic budgetary support by itself and work with other developed nations to increase support, as well. WHO's major challenges with efficacy are due to under-funding. Working with peer nations with difficult relationships mean that having a respected and effective international organization is even more important.

- The United States should support the strengthening of International Health Regulations, recognizing that greater scrutiny will also come to the United States. To have better compliance by other nations will mean that U.S. failures, in particular the failure to better protect U.S. citizens from disease and death during the COVID pandemic, will be subjects addressed by the international community.

- The United States should seek to develop for coronaviruses, and for other key viruses identified by the global public health community, an international surveillance regime similar to the influenza program the United States has supported since its inception. Given that novel coronaviruses have emerged in as geographically disparate locations as Saudi Arabia and China, and that SARS-COV2 has now produced multiple variants, some type of global surveillance system similar to

influenza appears critical. The United States worked directly with China to enhance both its collection and lab capabilities within the WHO umbrella. A similar effort is needed for coronaviruses. Presenting this as global or regional will reduce the risk that such a proposal is viewed as simply criticism of China. Focusing purely on China makes no sense either technically or politicall

- The United States should recognize that China is now a peer country producing public health and scientific excellence. While there are many gaps in China's performance, there are also gaps in U.S. performance (as witnessed by our COVID response), and thus we should not expect that uniform excellence is the mark of a peer country. To this end it means we should actively seek to learn as much as we seek to teach, and encourage scientific cooperation that enhances our own capacities

- The United States should fully staff its health activities in China, including CDC, NIH and FDA. It should also seek to resume cooperation agreements with Chinese scientific entities and focus on ensuring joint use of data. The United States currently has unfilled positions at its mission in China, so increasing staff would not require new bilateral agreements. But new bilateral agreements will also be essential. In speaking with those who have worked on these in recent years, there is still interest in collaborative work in China. The need is for support from Washington.

- Much of the world still needs to be vaccinated. This is an effort where U.S.-China cooperation within a global umbrella could make substantial progress. There is a real need to work with the Chinese to ensure their large production capacity is used effectively. Areas of joint study could include heterologous vaccination regimens (a Chinese vaccine followed by an mRNA) as well as whether there are some possibilities for enhancing local vaccines' efficacy. Global vaccination should be framed as a global public good, not a competition, just as it has been in the eradication of smallpox and the ongoing effort to eradicate polio.

- China is now facing a new and challenging period in facing the virus, the United States should reach out with respect and concern. If the U.S. government can refrain from accusing China—for instance once again questioning data, when we ourselves have real data gaps—and instead address the fact that it is now facing real challenges, there may well be an opportunity to improve our work together. The Chinese are going to need to think in new ways about testing, vaccination and treatments, issues the United States has been facing for the last two years.

COVID-19 has brought challenges not seen in public health in a century. It unfortunately arose at a low point in U.S.-China relations. The overall relationship is likely to continue to be rocky. As the United States has recently seen in other conflicted situations, this makes the need for partnership even great. Over the years, WHO has been an effective partner for the United States. It will not do everything the United States wants, because it has to be responsive to its member countries, but it is effective and has always welcomed U.S. expertise. Through WHO teams and programs it has provided the United States with its best window into China when there is a health emergency. China is not the only country with disease risk, but because of the concentration of people and animals it will continue to be one major concern. We, thus, need to work both to improve our health relationship with the Chinese and to support the international organization whose mission it is to promote global health. COVID-19 is not the last pandemic we will face.

The views expressed are the author's alone, and do not represent the views of the U.S. Government or the Wilson Center.

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