Coping with Public Health Hazards in Post-SARS China

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Introduction

In the past decade, multiple disease outbreaks have emerged in China, including the SARS epidemic in 2002 to 2003, the H5N1 ("bird flu") outbreak in 2005 to 2006, the hand, food and mouth disease (HFMD) outbreak in 2008, and the H1N1 ("swine flu") pandemic in 2009. In the spring of 2013, the emergence of a new strain of bird flu (H7N9) in China has once again raised global concern over pandemic risks. As of May 17, a total of 131 laboratory-confirmed H7N9 cases and 36 deaths had been reported in at least 10 provinces/municipalities.¹

Additionally, in recent months, the concern over environmentally-driven public health hazards in China has grown. The off-the-chart level of PM2.5—the most harmful types of toxic smog—in north China in January, the reports of the existence of nearly 400 "cancer villages" —areas where pollution has contributed to unusually high rates of cancer—in February, and the discovery of about 20,000 pigs floating down Huangpu River in Shanghai in March all prove how the public awareness (and the severity) of these environmental-health concerns are increasing.

Improving Government Transparency

In addressing the H7N9 outbreak, the Chinese government has, overall, been quite transparent. The health authorities updated information on the infection cases and fatalities on a regular and timely basis, and the National Health and Family Planning Commission (NHFPC), the successor to the Ministry of Health, also shared information about the disease with Taiwan, Hong Kong, the World Health Organization (WHO) as well as the U.S. Centers for Disease Control and Prevention (CDC). The central and local health authorities quickly unveiled plans involving medical and non-medical interventions to contain the spread of the virus. The government also acted promptly to calm speculation about the possible linkage between H7N9 and the dead pigs in Shanghai. While questions were raised on why it took three weeks for the health authorities to publicize the first cases, it appears that this had more to do with the difficulties of isolating a novel strain of the virus rather than being a deliberate cover-up.

The government openness and transparency over H7N9 prevention and control has been accompanied by increased cooperation with the international community. Within a week of the outbreak, China shipped the virus samples to WHO reference laboratories for proper identification and development of vaccines. The NHFPC also invited WHO experts to visit areas affected by the virus. The H7N9 samples sent from China enabled the U.S. CDC to develop diagnostic kits and a vaccine for the virus in case it spread to America. As noted by a senior

CDC official, the information exchange with China has been "almost in real time." ² Indeed, since SARS, the U.S. CDC has been in regular contact with its Chinese counterparts.

The improving government transparency in the H7N9 outbreak is in sharp contrast to its response in the initial stage of the 2003 SARS epidemic, which was characterized by cover up and inaction.³ It is, of course, not the first time since the SARS crisis that the government is forthcoming about public health hazards. Drawing on lessons learned in the SARS debacle and driven by the revised International Health Regulations or IHR (2005), China has made tremendous investments in building core capacities to detect, assess, notify, and respond to public health emergencies. It has managed to construct the largest infectious disease surveillance and reporting system in the world and put in place a legal framework that aims to release disease-related information in a timely, accurate, and comprehensive manner. During the 2009 H1N1 pandemic, for example, the government swung into action from the very onset of the virus, and health authorities drummed up awareness of the dangers of the virus to make sure all intervention measures were widely broadcast and updates about the disease were regularly disseminated. The efforts to create a more open and transparent image can also be identified in areas beyond addressing public health emergencies. In January 2013, China began to release real-time, online data on PM2.5 in 74 major cities, and in the following month, admitted to the existence of "cancer villages." This was considered a small but significant step because up until very recently, the Chinese government avoided making a connection between pollution and disease.

Is the Move toward Transparency Irreversible?

The move toward growing transparency is by no means a linear or irreversible one. As indicated in Anhui province's handling of HFMD in 2008 and Shanghai's efforts to identify the causative agent of H7N9, most localities in China still do not have the capability to correctly and swiftly identify emerging infectious diseases. Critical central-local gaps in epidemiological and laboratory capacities, when coupled with an authoritarian political structure, may contribute to sustained cover-up, underreporting, or misreporting at the sub-national level. Moreover, as health is increasingly viewed as a "high politics" issue on government agenda, government response to public health emergencies can be hijacked by domestic political deliberations. As the 20th Anniversary of the Tiananmen crackdown (June 4) and the 60th anniversary of the founding of PRC (October 1) were around the corner during the 2009 H1N1 pandemic, for example, social-political stability became the dominant concern of government leaders, which led to lingering cover-up, underreporting, and delayed reporting of cases and fatalities.⁴

But in the meantime, technological revolution and the revised IHR have generated additional incentives for openness and transparency in coping with public health hazards in China. The Internet-based disease reporting system launched in the wake of SARS, for example, has enabled hospitals and township health centers to directly report suspected disease outbreaks to central health authorities. Furthermore, the revised IHR, by legitimizing the role of non-state actors in disease reporting, have broadened the space of disease surveillance beyond the duty of the sovereign states.

The Role of Civil Society

To be sure, the government today continues to impose various constraints on civil society's engagement in surveillance and response capacity building. Not only does the number and size of health-related NGOs in China remain small, but vast majority of them are heavily dependent upon international donors for support. Few NGOs work on addressing public health emergencies and most of them are focused on HIV/AIDS prevention and control. As the 2008 HFMD outbreak and the 2009 H1N1 pandemic have demonstrated, in the absence of effective NGO participation in risk communication and policy implementation, upward and downward information flows could be hindered, and the state could have too much leeway to violate the privacy and human rights of its citizens when responding to public health emergencies.⁵

That said, a civil society facilitated by the spread of social media is increasingly having its voices heard and its action felt in China's policy process. To the extent that short text messages were widely used by the Chinese during the SARS epidemic to exchange disease related information, during the H7N9 outbreak Chinese people have increasingly turned to microblogs or Weibo for receiving and spreading such information. Popular posts written by leading public intellectuals such as Li Chengpeng and entrepreneurs such as Ma Yun can potentially force the Chinese government to take public health-related concerns and criticisms more seriously. But such "online vigilantism" also runs the risk of taking on a life of its own by "reaching a foregone conclusion without the benefit of a full investigation," ⁶ which may not lead to effective, accurate risk communication. In the H7N9 outbreaks, for instance, the almost real-time disease alerts through social media and mainstream media outlets sent mixed signals on the nature of the virus in question. Also, the narrowing of time for response and alert could compromise government capacity to undertake effective measures for disease containment. Eager to come up with solutions to calm an anxious public, the government treatment and prevention guides advised the use of traditional medicines even though their effectiveness remained unknown and some had been found to cause serious adverse reactions.

How can U.S. Promote Transparency and Openness in China

Despite its opaque and often exclusive policy process, global players and norms do have a role to play in China's domestic health governance. Given the potential economic, social-political, even security implications of infectious disease outbreaks, it is in the interest of both the United States and China to collaborate closely in building disease surveillance and response capacities in China. As a global health leader, the U.S. should continue encouraging China to promote transparency and openness. In addition to cooperating with central health authorities in China, the U.S. CDC should consider shifting more resources to improve surveillance capacity at the subnational level. Also, while the U.S. should continue to provide financial and technical support to health-related NGOs in China, more attention and resources should be given to cultivating civil society groups that promote awareness, transparency and capacity building in addressing public health emergencies. Through deft use of social media, the United States could also play a critical role in elevating some "latent" public health problems (e.g., cancer villages) on the governmental agenda. In 2008, the U.S. embassy began to monitor Beijing's air quality level using a devise atop its building. By following the embassy's Twitter feed, Beijing residents became aware how serious the problem was. The growing awareness forced the Chinese government to become more transparent on the issue of air pollution. It began releasing figures on PM2.5 in early 2012.

NOTES

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¹ World Health Organization, Human infection with avian influenza A(H7N9) virus – update, May 17, 2013, at http://www.who.int/csr/don/2013 05 17/en/index.html

² Christina Larson, "CDC Races to Create a Vaccine for China's Latest Bird Flu Strain," *BusinessWeek*, April 10, 2013, at http://www.businessweek.com/articles/2013-04-10/cdc-races-to-create-a-vaccine-for-chinas-latest-bird-flu-strain

³ Yanzhong Huang, "Implications of SARS Epidemic for China's Public Health Infrastructure and Political System," Testimony before the Congressional-Executive Commission on China Roundtable on SARS, May 12, 2003

⁴ Yanzhong Huang, *Governing Health in Contemporary China* (London and New York: Routledge, 2013), esp. chapter 4.

⁵ *Ibid*.

⁶ "Why Is a 1995 Poisoning Case the Top Topic on Chinese Social Media?" A ChinaFile Coversation, May 7, 2013. Available at http://www.chinafile.com/why-1995-poisoning-case-top-topic-chinese-social-media

⁷ Yanzhong Huang, "China and Global Health Governance," Indiana University Research Center for Chinese Politics & Business, Working Paper #26, May 2012.