Contingency Measures During the COVID-19 Pandemic in China: An Analysis Based on a New Ethical Framework

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The target article by David Alfandre et al. (2021) offers a new ethical framework to guide COVID-19 contingency surge planning and response, and applies this ethical framework to three case examples. As the first country hit by the COVID-19 outbreak, China adopted many measures for hospital surge capacity planning, including Fangcang shelter hospitals, designated hospitals, and internet hospitals, along with emerging technologies, such as artificial intelligence, big data analysis, cloud computing, and 5G (Sun et al. 2021). However, no organizations or scholars have proposed an ethical framework to guide contingency practices in China.

In this commentary, we chose two contingency measures (telehealth and designated hospitals) which have been widely used in China during the COVID-19 pandemic, and analyze two examples based on the application of the ethical framework provided by Alfandre et al. (2021). We aim to illustrate how the contingency measures during the COVID-19 pandemic mediated the tensions between the values of both patient-centered care and public health in China, and wish to verify the applicability of the ethical framework through the analysis of the healthcare practices across cultures.

First, we try to identify the contingency phase of the COVID-19 pandemic in China. As the authors note, it is exceedingly difficult to identify the beginning of the contingency phase because there is usually no sentinel or hallmark event that marks the occasion (Alfandre et al. 2021). From the first reported cases of pneumonia of an unknown cause in Wuhan City (December 27, 2019) to the confirmation that the new coronavirus was transmitted between humans (January 19, 2020) (The State Council Information Office of the People’s Republic of China 2020), we think that it can be regarded as the “usual phase” because the supplies, staff, and spaces used were consistent with daily practices within the hospitals during this time (Hick et al. 2009). During this phase, China conducted etiological and epidemiological investigations and released the genome sequence of the novel coronavirus. From January 20, 2020, China decided to classify the novel coronavirus pneumonia as a Class B infectious disease and apply measures for the prevention and control of Class A infectious diseases. We think that this can be regarded as an event that marked the beginning of the “contingency phase.” On January 23, 2020, Wuhan’s outbound traffic was closed, and from January 23 to January 29, 2020, all provinces on the Chinese mainland activated the Level 1 public health emergency response (The State Council Information Office of the People’s Republic of China 2020). However, the situation became very serious with the rapid increase in newly confirmed cases in Hubei Province. With all the resources mobilized nationwide to assist Wuhan and Hubei, the epicenter Wuhan struggled through the “crisis phase” and gradually transited to the “contingency phase.” Instead, due to the most extreme measure, the 76-d lockdown of Wuhan, as well as the effective prevention and treatment across China, all provinces other
than Hubei avoided entering into a “crisis phase” during the COVID-19 pandemic. From May 2020, China started conducting COVID-19 prevention and control on an ongoing basis nationwide. As of May 31, 2020, a total of 83,017 confirmed cases were reported on the mainland, with a cure rate of 94.3% and a fatality rate of 5.6% (The State Council Information Office of the People’s Republic of China 2020). To sum up, except for the initial transient “usual phase” and a localized “crisis phase,” China has been largely operating in the “contingency phase” during the COVID-19 pandemic.

Next, we analyze the substantive values that are most applicable to the two cases based on the new ethical framework.

**CASE 1: TELEHEALTH**

Before the outbreak, digital technology was used to complement, optimize, and accelerate healthcare services in China. At the beginning of the COVID-19 outbreak, the Chinese government issued a series of policies to promote telehealth and removed the financial barrier from timely reimbursement and the physical barrier to receiving prescription refill delivery to address the most urgent needs (World Health Organization 2020). In a national cross-sectional study (Xu et al. 2021), 711 online hospitals were developed in mainland China as of July 2020. About one-third of these internet hospitals (30.2%) were established in 2020 in response to COVID-19, and Grade III hospitals (the best in China), accounted for a large proportion (62%).

All provinces implemented major public health emergency responses, which required people to reduce crowded gatherings and stay at home. Faced with the lack of any effective vaccine or medications (Zhang et al. 2020) and the fear of this unknown disease, people used telehealth to get “functionally equivalent care” because these online hospitals provided medical prescriptions, drug delivery services, medical insurance, chronic disease follow-up consultations, free fever clinic consultations, online booking, psychological counseling, web-based education, and so on. These services used various consulting methods, such as telephones, video, and SMS text messaging, involving the use of graphics to meet the individualized needs except for those who required clinical evaluation or treatment. Telehealth reduced unnecessary in-person health care visits, crowds gathering in physical hospitals, and the risk of COVID-19 transmission. Moreover, it relieved tension regarding offline medical resources, overcame geographic limitations, accelerated healthcare services, and augmented healthcare capacity (He et al. 2020; Xu et al. 2021). Finally, measures to ensure equity were advocated, such as enhanced community services and on-site inspections of the elderly, disabled, or populations unable or unwilling to opt for telehealth. Thus, similar to the telehealth example in the target article, we agree with Alliandre et al. that the substantive values most applicable to this case are the protection of the public from harm, patient-centered care, proportionality, and equity.

**CASE 2: DESIGNATED HOSPITALS**

Based on the experience of fever clinics and designated hospitals from the SARS epidemic in 2003 (Pang et al. 2003), China responded quickly to the emerging COVID-19 outbreak to screen suspected patients and transfer confirmed cases to designated hospitals for professional management (Lai et al. 2020). On January 27, 2020, the National Health Commission (NHC) in collaboration with Tencent Health released a navigational map that included 1,512 designated hospitals and 11,594 fever clinics for COVID-19 across China. The public could access the map through WeChat (a Facebook-like social software with more than 1 billion users in China) quickly and easily (CN-Healthcare 2020).

The decision to operate designated COVID-19 hospitals was a contingency strategy that helped reduce the risk of disease transmission and augment the surge capacity by allowing centralized and efficient use of the limited space, staff, and supplies rather than spreading them across multiple hospitals during the outbreak. It may optimize resource utilization and delay the scarcity of critical resources. Moreover, the wards for the COVID-19 patients in the designated hospital were generally designed to be isolated from other parts of the hospital, with the guarantee of equipment supply and staff training, to ensure both the protection of patients and staff as well as the normal functions of usual care. This approach could ensure equity because it is not likely to disproportionately burden or exclude certain populations of patients. Finally, as patients in other hospitals diagnosed with COVID-19 transferred to the designated hospital, this coordinated approach showed solidarity among healthcare institutions, helped non-COVID-19 designated hospitals preserve normal functions, and allowed patients access to a “functionally equivalent care” in low risk of disease transmission circumstances. Based on the new framework, the substantive values most applicable to this case are the protection of the public from harm, patient-centered care, proportionality, equity, and solidarity.
Finally, we believe that all five procedural values (inclusivity, reasonableness, openness and transparency, responsiveness, and accountability) should be applied because systematically considering these values helps ensure that the contingency plan is coordinated, clearly communicated, well-understood, widely accepted, properly implemented, and designed for accountability and quality review (Alfandre et al. 2021). For example, at the beginning of the outbreak, within 40 d, the Chinese government issued more than 150 regulations, notices, and announcements concerning medical treatment, health prevention and control, and material support; the NHC has released eight versions of Diagnosis and Treatment Protocol for COVID-19, and Protocol on Prevention and Control of COVID-19, till date. These decisions were publicly accessible, credible, accountable, and helped guide the establishment of mechanisms, indicators, and communications for the facility to return to usual practices, as well as mechanisms for quality evaluation and to address disputes and complaints.

However, the importance assigned to particular ethical values may vary according to cultural background. Unlike Western culture, which takes greater pride in freedom and democracy, traditional Chinese culture usually emphasizes collectivism and cohesion (Zhang et al. 2021). We believe that providing more opportunities to engage stakeholders in the decision-making process could promote the procedural value of “inclusivity” in China. As Alfandre et al. (2021) argue, this ethical framework is also applicable to medical decision-making in other public health emergencies and mass casualty events; thus, improving the deficiencies identified by the framework-based analysis will facilitate the responses to future epidemics in China.

In sum, we agree with Alfandre et al. (2021) that the application of this ethical framework will ideally lead to ethically stronger health care practices during the contingency phase.

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