

Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

Comment

Authoritarianism, outbreaks, and information politics

Are autocratic states such as China better equipped than their more democratic counterparts to respond to disease outbreaks? On Dec 31, 2019, China alerted WHO to an outbreak of pneumonia of unknown cause in the city of Wuhan in Hubei province. The epidemic quickly spread, with cases of a novel coronavirus (2019-nCoV) confirmed throughout China and elsewhere in Asia, Europe, North America, and Australia. The Chinese Government's forceful response has drawn praise from global health officials. Scholars and health leaders have long debated whether democracy improves, hinders, or is immaterial for public health.¹⁻³ Does this signal an authoritarian advantage in tackling outbreaks?

On the surface, the power of authoritarianism is on display in China's response to 2019-nCoV. The Huanan seafood market suspected as the outbreak source was closed and decontaminated within a day of the announcement. Within 3 days of confirmed human-tohuman transmission, with cases rising and the world's largest mass travel event underway for the lunar new year Spring Festival, the Chinese Government imposed an unprecedented cordon sanitaire. Movement of more than 50 million people across Hubei province was rapidly restricted, curtailing transportation inside cities and outbound transportation by air, train, and bus.4 Authorities halted Spring Festival celebrations in Beijing and restricted movement into other major cities. Two 1000-bed hospitals were built within days. These moves reflect a level of control only available to authoritarian governments. WHO officials have congratulated China for setting "a new standard for outbreak response".5

Yet, time is key to controlling outbreaks; getting good information and acting on it rapidly can halt outbreaks before they need emergency measures. The early history of the 2019-nCoV outbreak raises questions about whether this situation is an example of beneficial autocracy.

For Amartya Sen, authoritarian states face serious challenges in information and accountability.⁶ Governments in closed political systems, without open media and opposition parties, struggle to receive accurate information in a timely manner and to convey urgent information to the public. Governments can be the victims of their own propaganda, because the country's political institutions provide incentives to local officials to avoid sharing bad news with their central bosses and await instructions before acting.

Information politics in China undermined a rapid response to the 2019-nCoV outbreak. Health-care workers suspected an outbreak in early December, 2019,⁷ but information with which the public might have taken preventive measures was suppressed, and communication channels that might have alerted senior officials to the growing threat were shut down.⁸ Police detained a clinician and seven other people posting reports on 2019-nCoV, threatening punishment for spreading so-called rumors. Social media was censored; a preliminary analysis of Weibo and WeChat published on China's biggest online platform⁹ showed outbreak discussions were nearly non-existent through much of January, 2020, until the Chinese Government changed its official stance on Jan 20, 2020.

Through much of January, 2020, the Wuhan Municipal Health Commission reported no evidence of human-to-human transmission, no infection among health workers, that severe cases of disease caused by 2019-nCoV infection were confined to those with underlying conditions and older people, and that the Huanan seafood market was the source.¹¹ Reports in The Lancet⁷ and New England Journal of Medicine,¹² however, show that half of patients admitted to intensive-care units were aged 25-49 years, and two-thirds had no underlying illnesses. Human-tohuman transmission and health-worker infection were evident before the Chinese Government made an announcement.¹² This information either did not make it to authorities or the public were misinformed. The Mayor of Wuhan has said publicly that not only was information not revealed in a timely manner but also they did not use information effectively.¹⁰ By the time quarantine went into effect on Jan 23, 2020, five million people had left the city of Wuhan for holiday travel.¹⁰ Outbreaks were subsequently reported throughout China.

Without open media and an opposition to check on bureaucratic hierarchy, knowledge from the front lines of the 2019-nCoV outbreak did not reach Beijing. Weeks into the outbreak, leaders were forced to publicly threaten that officials withholding information "will be nailed on the pillar of shame for eternity".⁴



Published Online February 13, 2020 https://doi.org/10.1016/ S2468-2667(20)30030-X Is there an authoritarian advantage in disease response? It seems that authoritarian information politics inhibited a rapid response to the 2019-nCoV outbreak in China, which could have limited the crisis. It is not yet clear if the extraordinary cordons and influx of resources enabled by autocratic rule will prove a successful public health strategy. Yet, in building capacity to prevent, detect, and respond to outbreaks, democratic openness and competitive politics seem more asset than inadequacy.

I declare no competing interests.

Copyright @ 2020 The Author(s). Published by Elsevier Ltd. This is an Open Access article under the CC BY 4.0 license.

Matthew M Kavanagh matthew.kavanagh@georgetown.edu

Georgetown University, Washington, DC 20057, USA

- Ruger JP. Democracy and health. QJM 2005; **98**: 299–304.
 Gerring J, Thacker SC, Alfaro R. Democracy and human development.
- JPolit 2012; 74: 1–17.
- 3 Bollyky TJ, Templin T, Cohen M, Schoder D, Dieleman JL, Wigley S. The relationships between democratic experience, adult health, and cause-specific mortality in 170 countries between 1980 and 2016: an observational analysis. *Lancet* 2019; **393:** 1628–40.

- Qin A, Wang V. Wuhan, center of coronavirus outbreak, is being cut off by Chinese authorities. *New York Times*. Jan 24, 2020. https://www.nytimes. com/2020/01/22/world/asia/china-coronavirus-travel.html (accessed Feb 10, 2020).
- 5 WHO. WHO Emergencies Coronavirus Emergency Committee Second Meeting. Jan 30, 2020. https://www.who.int/docs/default-source/ coronaviruse/transcripts/ihr-emergency-committee-for-pneumonia-dueto-the-novel-coronavirus-2019-ncov-press-briefing-transcript-30012020. pdf?sfvrsn=c9463ac1_2 (accessed Feb 10, 2020).
- Sen A. Development as freedom. Oxford: Oxford University Press, 1999.
 Huang C, Wang Y, Li X, et al. Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. *Lancet* 2020; published online Jan 24. https://doi.org/10.1016/S0140-6736(20)30183-5.
- 8 Yuan L. China silences critics over deadly virus outbreak. New York Times. Jan 25, 2020. https://www.nytimes.com/2020/01/22/health/virus-corona. html (accessed Feb 11, 2020).
- 9 SINA. The mystery of the Wuhan epidemic: evidence from reptiles and text analysis. Jan 27, 2020. https://cj.sina.com.cn/articles/view/1961718870/74 ed745601900pcsq?autocallup=no (accessed Feb 11, 2020).
- 10 Zhenhua L. Wuhan Mayor offers to resign over coronavirus response. *Caixin* 2020; published online Jan 28. https://www.caixinglobal.com/2020-01-28/wuhan-mayor-offers-resignation-over-coronavirusresponse-101508899.html (accessed Feb 10, 2020).
- 11 Wuhan Municipal Health Commission. Questions and answers on pneumonia epidemic and new coronavirus infection. [In Chinese.] Jan 14, 2020. http://wjw.wuhan.gov.cn/front/web/ showDetail/2020011509040 (accessed Feb 11, 2020).
- 12 Li Q, Guan X, Wu P, et al. Early transmission dynamics in Wuhan, China, of novel coronavirus-infected pneumonia. N Engl J Med 2020; published online Jan 29. DOI:10.1056/NEJMoa2001316.