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.

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high as that observed in many high-income countries with the financial luxury of complete lockdowns for months on end. India has held on strong and has not witnessed a breakdown in the supply chain of health infrastructure despite the effect of the virus. India can also be proud of being a nation that has provided the same treatment to its rich and poor in this pandemic.

It is always easier to be wiser in hindsight. History will be the judge and jury for all decisions. Until then, let medical professionals work together with science in front and forget the politics of decisions.

We declare no competing interests.

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India's COVID-19 emergency: overarching conclusions belie facts

The Editors[1] draw attention to India's economic capabilities, the challenges of a huge diverse population, and the dangers of false optimism amidst a second wave of SARS-CoV-2. However, some overarching conclusions belie facts and evidence.

First, no single strategy has worked totally in a country's favour with regards to tackling the COVID-19 crisis. This struggle is evident from infection and mortality rates in countries with differing strategies.[2] No country has been largely effective in tackling COVID-19 except China, which should encourage scientific minds to question the numbers and basis for no novel variants being reported there without independent verification.

Second, statistical modelling estimates by the Institute for Health Metrics and Evaluation have been notably off-target previously in the USA.[3] The Indian Council of Medical Research modelling also might have been inaccurate, but to call it false and to then rely on future mortality estimates for India from the same Institute for Health Metrics and Evaluation is equally on thin ice.

Third, as of June 16, 2021, India's so-called botched vaccination campaign[1] is only third (after China and the USA) in terms of total numbers of vaccines administered, according to the *New York Times*' vaccination tracker and has achieved one of the highest rates of vaccination since its inception. The main challenge is in terms of the percentage population, considering that India's population is close to 1·3 billion people.

Lastly, for views such as "Modi's Government has seemed more intent on removing criticism…than trying to control the pandemic", "The government…creating mass confusion", "self-inflicted national catastrophe", and "Modi's actions in attempting to stifle criticism…are inexcusable",[1] diametrically opposite views exist. The point is that readers of scientific journals look for evidence-based views. The fact is that international flights continued from Wuhan, China during the initial COVID-19 outbreak and the Wuhan laboratory was hidden from scrutiny[4] requires investigation and scientific answers.

We declare no competing interests.

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Can India's COVID-19 emergency be fixed without politics?

Sanjay Kanojia/Getty Images

For the **New York Times' vaccination tracker** see https://www.nytimes.com/interactive/2021/world/covid-vaccinations-tracker.html

Although the 2021 surge of COVID-19 infection and death in India was aptly analysed by the Editors,[1] the two-pronged strategy strategy suggested to fix this problem overlooked a crucial aspect: the widespread corruption that has plagued the Indian healthcare system for a long time.[2] From the beginning of the pandemic, the Indian Council of Medical Research (ICMR), an apex body responsible for the handling of the COVID-19 pandemic, approached the pandemic with a method of non-transparency, and some of the therapies it promoted appeared to be influenced more by political reasons than scientific evidence.

For example, early in the pandemic, the ICMR went on a massive campaign to promote hydroxychloroquine for COVID-19, echoing similar political clamour made by Donald Trump. More shockingly, even after WHO stopped the multinational Solidarity trial of hydroxychloroquine against COVID-19 (because of serious adverse effects) and a large meta-analysis reported that hydroxychloroquine not only has no positive effect but also might increase mortality in patients with COVID-19 when used with azithromycin (a common practice in India),[3] the Indian National Task Force of the ICMR issued clinical guidance on April 22, 2021, recommending that doctors in India

use hydroxychloroquine for the treatment of home-bound patients with COVID-19.[4] It is questionable why Indian authorities have continued to promote the use of hydroxychloroquine in combating COVID-19 while ignoring overwhelming medical evidence against it.

The Indian Health Minister, himself a registered physician in allopathic medicine, caused huge national upheaval when he claimed on national television, without any scientific basis, that Coronil, a herbal drug, can actually prevent and cure COVID-19.[5] Even the Indian Medical Association, usually a close ally of the Indian Health Ministry, had to criticise such reckless promotion of a questionable therapy by the health minister.[5] There is no doubt that India urgently needs to change its course to curb the ongoing rampage by the second wave of infections by boosting the existing vaccination policy in a transparent manner and implementing meaningful measures to minimise virus transmission. Unfortunately, these crucial changes to save tens of thousands of Indians are not likely to happen until the deep-rooted corruption in the Indian medical system is eradicated.

KS is the founding president of People for Better Treatment. Further details of competing interests are available in the appendix.

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For the **Integrated Disease Surveillance Programme** see https://idsp.nic.in/

See **Online** for appendix

Time to reimagine India's health system

The denialism behind the ongoing SARS-CoV-2 outbreak in India[1] has been aggravated by the invisibility of public health professionals in epidemic response strategies. Indian public health associations were sidelined early on in the outbreak because they demanded responsibility from politicians; primarily, they demanded restraint from assembling crowds at political meetings.[2] India's outbreak response has had a mostly clinical approach. Surveillance, a key public health strategy, was weak, with decision making based on non-systematic data without denominators, and which has minimal use for informing disease control strategies. The Integrated Disease Surveillance Programme was established in India with investment from the World Bank in 2004. Although the goal of this programme was to strengthen disease surveillance, this agency was out of the picture until quite late in the outbreak.

A second public health approach, of community engagement and public communication, has also been relegated to the sidelines. Convincing populations to use face masks and implementing physical distancing in the seventh most densely populated country in the world requires an understanding of human behaviours and introducing context-appropriate interventions. The development of human resources with multidisciplinary skills was encouraged in the early 2000s, when considerable public resources went into the establishment of schools of public health in India. These trained human resources are still unused.

The outbreak in India highlights the need to separate clinical and public health functions.[3] The *Lancet* Citizens' Commission,[4] entrusted to reimagine the Indian health system, could be an excellent platform with which to develop a blueprint for this restructured health system, with interacting yet dichotomous responsibilities that would be better organised to protect its citizens.

I declare no competing interests.

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Department of Error

GBD 2017 Diet Collaborators. Health effects of dietary risks in 195 countries, 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017. Lancet *2019;* **393:** *1958–72*—For this Article, Nayu Ikeda should have been included in the GBD 2017 Diet Collaborators. This correction has been made to the online version as of June 24, 2021.

Kirenga BJ, Byakika-Kibwika P. Excess COVID-19 mortality among critically ill patients in Africa. Lancet *2021;* **397:** *1860–61*—In this Comment, paragraph 3 should have said "It is common in low-income countries to have expensive equipment that is non-functional due to poor maintenance or lack of skilled human resources. It has been estimated that 40% of the medical equipment in many low-income countries is out of service." This correction has been made to the online version as of June 24, 2021.

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Patel MG, Dorward J, Yu L-M, Hobbs FDR, Butler CC. Inclusion and diversity in the PRINCIPLE trial. Lancet *2021;* **397:** *2251–52*—The appendix of this Correspondence has been corrected as of June 24, 2021.