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India's pandemics

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As nightlife opens up in Europe and the United States, the flames of funeral pyres light up the sky over India's teeming cities.

Photo: Einar Nilsen

The country was gripped by a dawning optimism. Herd immunity had been reached in a number of places, and the pandemic was on its way out. Or so they thought. Prime Minister Narendra Modi gathered huge numbers of people during the election campaign in March and April and allowed millions of Indian pilgrims to travel to the city of Haridwar on the river Ganges during the Kumbh Mela religious festival. But this escalated into what may well be termed a perfect storm (1). The coronavirus was given free rein in a population of almost 1.4 billion people, of whom less than 2 % were fully vaccinated. The newly occurring Indian viral mutation designated B.1.617 possibly also contributed to an explosive increase in the infection rate. At the end of April, India represented almost half of all reported COVID-19 cases globally, with more than 400 000 registered infections daily – in addition to a large number of unreported cases.

Investment in health in this federal country – which bears one quarter of the global burden of tuberculosis cases – is among the lowest in the world. Only a little more than 1 % of GDP goes into public health services (2). Corresponding figures for the UK and the United States are 9 % and 16 %, respectively. There are also large differences between the 28 states, all of which pursue their own health policies. In 2018, India was ranked 145 out of 195 countries on quality of and access to health services, lower than China, Sri Lanka and Bangladesh (3). Incidentally, Norway was number 2 on the list, just below Iceland at the top.

A health service that functions marginally at best, collapses during a public health crisis such as the COVID-19 pandemic. The world's media have shared heartbreaking stories about people dying of the disease at home, in the street or in hospital because they did not receive the necessary medical assistance. The most pressing factor – the lack of medical oxygen – has been characterised as genocide by the high court in India's most populous state of Uttar Pradesh (4).

> ***«A health service that functions marginally at best, collapses during a public health crisis such as the COVID-19 pandemic»***

The system has failed, but the people have risen to the occasion. Via Twitter, Facebook and Instagram, oxygen cylinders, plasma donors and hospital beds are being obtained for strangers as well as friends and family members. The way in which Sikh temples are now offering oxygen inhalation to the poor, in addition to free meals, can serve as an illustration of Indian *jugaad*. The word, which is difficult to translate but has found its way into English, means finding unexpected and original solutions under difficult circumstances.

India, which eradicated polio with the world's largest vaccination programme, has paradoxically failed to vaccinate more than a small percentage of the population against COVID-19. The authorities have therefore needed to stop all vaccine exports. This entails a global health threat, because India is one of the world's largest producers of vaccines, including the AstraZeneca vaccine. Now vaccines and vaccine components will fail to be delivered to more than 70 nations. Low- and middle-income countries that should receive vaccines as part of the Covax programme are especially hard-hit.

The risk of complications from COVID-19 due to obesity appears to be particularly high among young adults (5). This is bad news for India, where more than 65 % of the population are under 35 and obesity is a significant public health problem along with diabetes (6). It is uncertain how great an impact the obesity epidemic is having during the second wave of infection, but Indian hospitals are reporting more serious trajectories in young patients than previously, and that many of these are obese (7).

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In Delhi, the world's most polluted capital city, facemasks were often required even before the coronavirus crisis. Smoke and exhaust, from industrial plants, agriculture and traffic, lie like a blanket over the epicentre of COVID-19, especially in the winter months, and constitute a considerable health risk for inhabitants. It is not much better in the other large cities: air pollution takes one child's life every three minutes and is the third leading cause of death in India (8). This slow-creeping pollution pandemic is less visible, but just as dangerous as the catastrophe we are now witnessing.

The situation in India serves as an important reminder of the importance of preventive public health work and a well-functioning health service. Right now, the fires must be extinguished, and the international community has stepped up. We have a moral duty to alleviate human suffering, but the efforts serve us all well, because the coronavirus pandemic will not end until it is over worldwide. Global vaccination is more urgent than ever. And that will need a dose of Indian *jugaad*.

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