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WHO director-general Tedros Adhanom Ghebreyesus is reviewing how the world responded to the early days of the COVID-19 pandemic.

WHY DID THE WORLD'S PANDEMIC WARNING SYSTEM FAIL FOR COVID?

Nearly one year ago, the World Health Organization sounded the alarm about the coronavirus, but its message was ignored.

By Amy Maxmen

The World Health Organization (WHO) sounded its highest alarm on 30 January 2020 – it declared a ‘public health emergency of international concern’, or PHEIC, signalling that a pandemic might be imminent. But few countries heeded the WHO’s call for testing, tracing and social distancing to curb the coronavirus. By mid-March, the virus had spread around the world. Now, health officials and researchers are evaluating why the organization’s warning system failed and how to overhaul it.

Many say the organization should have declared a PHEIC about a week earlier than it did. But the largest failing, researchers agree,

is that so many countries ignored it. Two new preliminary investigations – one from the WHO and another from an independent panel responsible for assessing the organization – attempt to unravel why.

“The biggest issue to me is that for six to eight weeks after the PHEIC declaration, countries, except for in Asia, sat on their hands,” says Joanne Liu, a former president of Médecins Sans Frontières (also known as Doctors without Borders), who serves on the independent panel.

World health officials evaluated potential improvements to the system during the WHO’s executive board meeting, held on 18–26 January. Talks will continue in advance of the annual World Health Assembly in May, when

any changes would occur. Some of the proposals include modifying the PHEIC alarm to have colour-coded warning levels, and getting countries to sign a new pandemic treaty.

The thorniest problem for the WHO, however, is how to persuade countries to heed its warnings. Liu says: “The real question is, what would it take for people to do something when a declaration happens?”

The PHEIC alarm originated in 2005, when the WHO overhauled its decades-old regulations about international health emergencies: 196 countries and territories agreed to alert the organization when outbreaks emerged, and gave it the power to declare a PHEIC. The WHO can sound this alarm if it deems an emergency extraordinary, if the emergency poses

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a risk to countries outside where it originated and if it requires an international response – meaning, in some cases, that it could have pandemic potential.

With each PHEIC, the WHO advises governments on how to deal with the emergency. For example, last January, WHO director-general Tedros Adhanom Ghebreyesus said of the COVID-19 outbreak, “It is still possible to interrupt virus spread, provided that countries put in place strong measures to detect disease early, isolate and treat cases, trace contacts and promote social-distancing measures.”

What’s in a name?

Liu admits that the term PHEIC isn’t as sexy as an emotive word, such as ‘pandemic’ or ‘emergency’. But researchers and health officials chose it partly because they wanted to avoid panic while encouraging world leaders to act according to WHO advice, says Gian Luca Burci, an international law specialist at the Graduate Institute of International and Development Studies in Geneva, Switzerland. Burci helped to revise the regulations in 2005.

In hindsight, that reasoning seems to be flawed. Several reports note that politicians and the public mainly ignored the PHEIC declaration and Tedros’s corresponding recommendations in January 2020, but started listening when the organization used the unofficial term ‘pandemic’ to describe COVID-19 in March, once the disease was spreading on multiple continents. Unlike the PHEIC, ‘pandemic’ is not a defined declaration, and countries haven’t agreed to take any actions once it’s used.

Despite the disproportionate response to the word pandemic, many scholars argue that changing the name of the WHO’s highest alarm wouldn’t be useful. “I don’t care for the term PHEIC,” says Alexandra Phelan, a global-health lawyer at Georgetown University in Washington DC, “but I worry that if we get too into the words, we miss the point that countries need to act appropriately when there is a declaration.”

Global-health scholars question why a PHEIC for COVID-19 wasn’t declared sooner. On 22 January 2020, Tedros convened a closed-door meeting of virologists, public-health researchers and certain government representatives – as the PHEIC process dictates. They decided that a warning wasn’t warranted, but a week later, the committee flipped its position. The delay might have cost the world time to contain the virus.

Still, a one-week lag in declaring a global emergency isn’t even the most concerning action that took place in the early days of the COVID-19 pandemic, critics say. When Tedros declared the PHEIC, he advised governments to move fast with public-health measures including tests and social distancing. He also asked them to resist bans on travel and trade because, historically, they had been of limited utility and are potentially harmful.

But governments around the world ignored those calls. For example, the United States did not roll out testing across the country until late February, and it banned some travel from China, where the virus was first discovered.

Countries seem to agree that to improve the world’s ability to respond to pandemics, the WHO should be transformed and bolstered. Speaking as a representative of the United States, Anthony Fauci, director of the US National Institute of Allergy and Infectious Diseases, told the WHO on 21 January that the country will reverse its withdrawal from the

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organization, initiated by former president Donald Trump, and will “work constructively with partners to strengthen and importantly reform the WHO”.

One change to strengthen the WHO could be a new treaty on pandemics, proposed by the president of the European Council, Charles Michel. On 20 January, Tedros said he would assemble a working group to explore this p. Still, the WHO probably wouldn’t have the ability to penalize countries that don’t comply with the treaty. “There’s no silver bullet here since you’re dealing with a community of nations, all of whom guard their sovereignty very closely,” says Steven Solomon, principal legal officer at the WHO.

The WHO therefore relies on diplomacy, which often boils down to praising or shaming countries. But the WHO’s appetite for criticism is limited by its reliance on donations from its member countries and on countries openly offering access and information – which could be withheld if leaders felt insulted. A case in point is that the WHO spent weeks gently persuading China to permit an international team of scientists to visit Wuhan after the outbreak was reported there. On the financing front, researchers say that a larger, reliable budget for the WHO would give the organization greater autonomy because it wouldn’t be dependent on fundraising amid a disaster.

To address communication concerns, Tedros has suggested adding a gradient of warnings to the PHEIC, coded by colour. The colours could separate emergencies that might evolve into a pandemic from those that are serious but won’t affect nations across the globe. Countries with outbreaks might more willingly share information if there were a low-grade alarm that was less likely to result in disruptions to people’s livelihoods or the economy.

Reforms won’t come until the World Health Assembly in May – at the earliest. The possibility of solutions being delayed or forgotten fills Liu with dread, because she recalls dozens of panels assessing failures in the response to the Ebola outbreak in West Africa in 2014–16. “Less than 10% of the recommendations were followed up on,” she says. “We have an amazing talent to outrage ourselves about a situation, but when it comes time to deliver any change, there is very little traction, and people go back to doing whatever they had done before.”

FAST-SPREADING COVID VARIANT CAN ELUDE IMMUNE RESPONSES

Early studies find that a variant of the virus identified in South Africa could compromise immunity.

By Ewen Callaway

Evidence is growing that some coronavirus variants could evade immune responses triggered by vaccines and previous infections. Researchers are trying to make sense of a tsunami of laboratory studies released last week that raise concerns about some emerging variants and mutations.

“Some of the data I’ve seen have really scared me,” says Daniel Altmann, an immunologist at Imperial College London, who worries that

some of the results could portend a reduction in the effectiveness of COVID-19 vaccines.

But the picture is murky, Altmann and other scientists emphasize. The studies – which examined the blood of small numbers of people who had recovered from COVID-19 or received a vaccine – probed only their antibodies’ capacity to ‘neutralize’ variants in laboratory tests, and not the wider effects of other components of their immune response.

Neither do the studies indicate whether the changes in antibody activity make any difference to the real-world effectiveness of