

COVID-19: An endemic pandemic? What does that mean?

To remind Global Fund Observer (GFO) readers; the first cases of the disease, linked to the SARS-CoV-2 virus, which causes COVID-19, were identified in Wuhan in the Hubei province of China at the end of 2019. On 30 January 2020, the World Health Organization (WHO) declared SARS-CoV-2 a Global Public Health Emergency. At this point COVID-19 was spreading rapidly. Just over a year later, in April 2021, there had been 132 million cases and almost 2.9 million deaths worldwide.

On 6 February 2022 the Johns Hopkins Coronavirus Resource Center recorded a cumulative total of 393,290,814 new cases, and 5,734,564 deaths across the world. More significantly, the number of new cases was at its highest level. In the week ending 23 January 2022 there were four times as many new cases, 23,280,000, than the previous peak of just under six million in April 2021. There was a slight decrease in the week ending 30 January. Daily global deaths peaked at 100,799 on 24 January 2021, when there were fewer than five million new cases. The number of deaths began to decline in May 2021, with some slight fluctuations. The most recent data show 73,902 deaths on 6 January.

Insights

COVID-19 is no longer an unknown quantity. It is clear how it spreads and that, for most people, an infection is little more than an inconvenience. This is, in part, due to the development and roll out of effective vaccines, especially in the countries of the Organisation for Economic Cooperation and Development (OECD). Drugs have, and are, being developed and will become more sophisticated, available, and, hopefully, cheaper over time. There is awareness of how to prevent transmissions using non-pharmaceutical interventions (NMIs) such as face masks, social distancing and lock downs. There is also a recognition that NMIs have economic, social and educational costs. Increasingly the theme is to learn to live with COVID.

The ability of the virus to mutate rapidly took many by surprise. In January 2022 the most common variant is Omicron. The Wall Street Journal noted: "The Omicron variant spreads so quickly and generally causes such a mild form of illness among vaccinated populations that countries are tolerating greater Covid-19 outbreaks, willingly letting infections balloon to levels that not long ago would have been treated as publichealth crises. ... offering a glimpse into a future in which Covid-19 becomes accepted as a fact of everyday life, like seasonal flu (and) .... coupled with the reality that the measures taken to contain earlier surges of the virus don't work as well ... Omicron, is informing the decision by policy makers to abandon restrictive steps aimed at containment amid growing public fatigue over restrictions."

What should we be measuring? The British Medical Journal (BMJ) noted: 'Since the emergence of the covid-19 pandemic in early 2020, governments and international agencies have reported regular data on covid-19 cases and deaths. These metrics have consistently been used to track the pandemic's effects on human lives. Many very useful data sets are produced by the Institute for Health Metrics and Evaluation.' Their Global Burden of Disease data and associated visualisations are fascinating. Unfortunately, they are not nimble enough to reflect COVID, yet. The WHO's 2021 World Health Statistics do attempt to include COVID, they give 2019 causes of death and show where COVID-19 would fit in 2020. The top six causes of death in 2019 were Ischaemic heart disease, Stroke, Chronic obstructive pulmonary disease (COPD), Lower respiratory infections, Neonatal conditions and Trachea, bronchus, lung cancers. In 2020 COVID-19 will be the fifth major cause of disease. But the pandemic is not just about illnesses and deaths caused by SARS-CoV-2. It has far-reaching effects—direct and indirect—with short- and long-term consequences for both individuals and populations.

As COVID-19 evolved, what are considered key data changed. This is important, especially since data need to provide input into policy making. In the first few months the number of cases and deaths captured the public's attention. Now we are aware of the limitations of our data and how we should interpret them. There is an additional problem, the diversity of the pandemic, responses and impact. Russian novelist Tolstoy wrote in his novel Anna Karenina, 'All happy families resemble one another, but each unhappy family is unhappy in its own way.' Each country's experience of Omicron is different. It ranges from the draconian travel restrictions imposed in New Zealand, to the laissez-faire attitude of Brazil, to denial in Tanzania, to the gross incompetence and mixed messaging in the UK. It is still hard to extract universal lessons from this confused picture.

The actual case numbers are, we know, an underestimate of the real number of infections. This is because most of those who are infected will not be ill or will have only mild symptoms. One way round this is seen in the UK. The Office of National Statistics in the UK is carrying out a continuous COVID prevalence survey from a representative sample of the population. This aims to identify how many people are still getting COVID-19, with or without symptoms; previously had COVID-19, with or without symptoms; and have had a strong response to a COVID-19 vaccination. This is the only realistic way to track the course of the epidemic; know if it is expanding or contracting; and collect data by age. In February 2022 the survey showed high levels of infection, particularly among younger people. This will be made more complex by reinfections, which are on the rise.

The numbers of people needing care is a good measure of demand and resource needs. As a result of the vaccination programmes, previous exposures and the less severe nature of Omicron the proportions of people needing health care in most OECD health services has eased. In the UK on 3 February there were 478 patients on ventilators down from the peak of 4,077 on 24 January 2021. The average number of deaths for the latest complete five-day period 30 January was 215. The peak was on the 19 January when the seven-day average was 1,364. Based on these data, it seems the disease is under control here. A similar trend is seen across Europe. It is very much harder to find comparable data in the rest of the world.

COVID-19 deaths are the ultimate metric, but even these are hard to measure with confidence. In the UK the daily update gives COVID deaths as those occurring within 28 days of a positive test. This results in overcounting, deaths may not be the result of COVID. A better indicator is the number of excess deaths. The BMJ argues that 'all-cause mortality ... captures both direct deaths from covid-19 and deaths caused indirectly by the pandemic. Data on all-cause mortality allow us to estimate the number of "excess deaths" by comparing all deaths during the pandemic with a reference estimate, the number of expected deaths had there been no pandemic'. The Economist produces excellent data and graphics on this, and it does not seem to be behind a paywall. WHO and the UN Department of Economic and Social Affairs have established a technical advisory group to estimate the global burden of excess mortality associated with the COVID-19 pandemic.

## What to watch for

Variants. It is possible that new and more deadly variants will emerge: the consensus is that this is unlikely. If this is the case, there is potential for society to return to the 'new' normality. However, Omicron seems to avoid some of the protection that vaccines should provide. There is growing evidence that reinfections are increasing, but they are, fortunately, less serious. This may have implications for the way we view COVID-19 and the response.

Data. There is a wealth of information available and much of it is clearly presented. The Our World in Data website (<a href="https://ourworldindata.org/coronavirus">https://ourworldindata.org/coronavirus</a>) provides one of the best and clearest sources. We urge readers to engage with these sites. There is a caveat – the output is only as good as the input, and unfortunately many poorer countries are struggling to collect, collate and report their data.

Social, economic and cultural consequences. Every time I write this phrase I am aware that we have not yet begun to scratch the surface of what COVID-19 actually means for us. This is where we need emphasis.

Long COVID. While hospitalisation and deaths can be counted, the issue of long COVID is not yet fully understood. These are the debilitating sequalae of an infection. The people who have the misfortune to be affected in this way will need long term support.

Declaring the Pandemic over too soon. Jeremy Farrar, former head of the Welcome Trust, warned in the British Guardian over the speed at which some people want to move on. "My concern is that there will be too fast a shift to saying it's all over and we will lose the humility of accepting that we're only two years into a novel human pathogen, that is still a huge amount of uncertainty,' he said, '… the most likely scenario is that there will be a transition to Omicron becoming endemic, as the variant is less severe than others, it is not the only possibility".

HIV and AIDS, COVID and other diseases.

When the Global Fund to Fight AIDS, TB and Malaria was established in January 2002, twenty years ago, the mandate seemed relatively simple: deal with these three major causes of morbidity and mortality. The

subsequent 18 years saw huge advances. New HIV infections reduced by 52% since the peak in 1997. The <u>number of people newly infected</u> fell from about 3.0 million people in 1997 to 1.5 million in 2020. AIDS-related deaths fell by 64% from the peak in 2004, when 1.9 million people died, to around 680,000 in 2020. Similar gains were seen for TB and malaria.

COVID-19 has put these gains under threat. People living with HIV (PLHIV) experience more severe outcomes, the risk of dying from COVID-19 is double that of the general population, and they have higher comorbidities. In mid-2021, most PLHIV did not have access to COVID-19 vaccines and the rollout remains sclerotic. Lockdowns disrupted HIV testing and led to steep drops in diagnoses and referrals for HIV treatment. <u>During the first COVID-19 lockdowns in 2020</u> testing declined by 41%, and referrals for diagnosis and treatment by 37%, compared with 2019.

As someone who has researched and written on HIV since 1987 this synergy between HIV and AIDS and COVID is extremely concerning. I have written on this, both in the GFO and African Journal of AIDS Research (AJAR). There is some, but not yet a great deal of scholarship looking at how the diseases interact. In my role as AJAR's Editor-in-Chief we have decided to act. In November 2021 we issued a call for papers for a special issue: on 'AIDS in the Time of COVID'. This will be the second issue of 2022 published in June. It would not be a 'spoiler' to inform readers that the speed and extent of spread and the consequences of COVID-19 are the headlines of the story.

Meanwhile, hot off the press, someone else has also decided to act. Last week <u>Reuters</u> reported that leading South African scientists will investigate the link between COVID-19 variants and untreated HIV in tandem, amid mounting evidence that the collision of the two pandemics could be generating new coronavirus variants.

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