

Mapping Covid-19

by Benjamin Hennig

On 31 December 2019, a previously unknown virus disease, now known as Covid-19, was reported to the World Health Organization's (WHO) country office in China. Three weeks later, on 21 January 2020, WHO started releasing regular situation reports of the spread of the disease which was declared a 'Public Health Emergency of International Concern' on 30 January. On 11 March, Covid-19 was characterised as a global pandemic due to 'the alarming levels of spread and severity'.

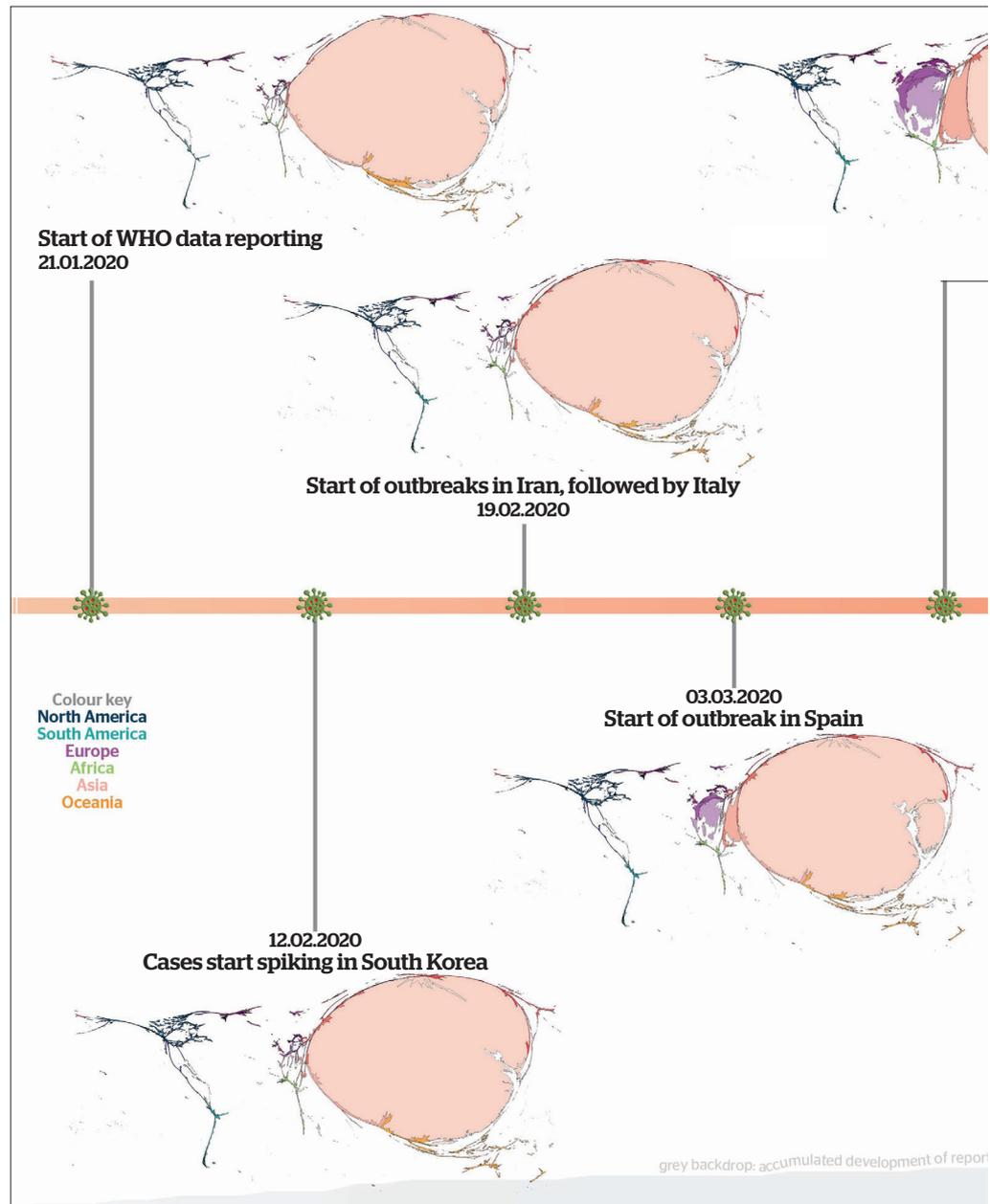
In late April, four months after the first emergence in China and three months after regular global data updates started being published, reported cases exceeded the three million mark and the number of deaths confirmed as being due to Covid-19 exceeded 200,000.

The spread of the virus is still a highly dynamic and evolving situation. Neither concluding reflections nor a full assessment of its global impact can be made at this stage. At the same time, does the data provide some valuable insights into the development of this crisis within the – so far – predominately wealthier part of the world?

This cartogram series is a visualisation of the accumulated (hence growing) number of confirmed cases of Covid-19 recorded by WHO between late January and early May, with further adjustments made using data provided by the European Centre for Disease Prevention and Control.

The shape and size of all the maps maintain the same area over time, rather than grow in size. This allows the changing share of accumulated reported cases in the major parts of the world to become more visible. The area of the chart shown as a grey backdrop gives an indication of how the total case numbers have been rising over the same time period covered by the cartograms.

It is important to keep in mind that the figures used here reflect those of reported cases, to which a lot of factors contribute. As well as providing a

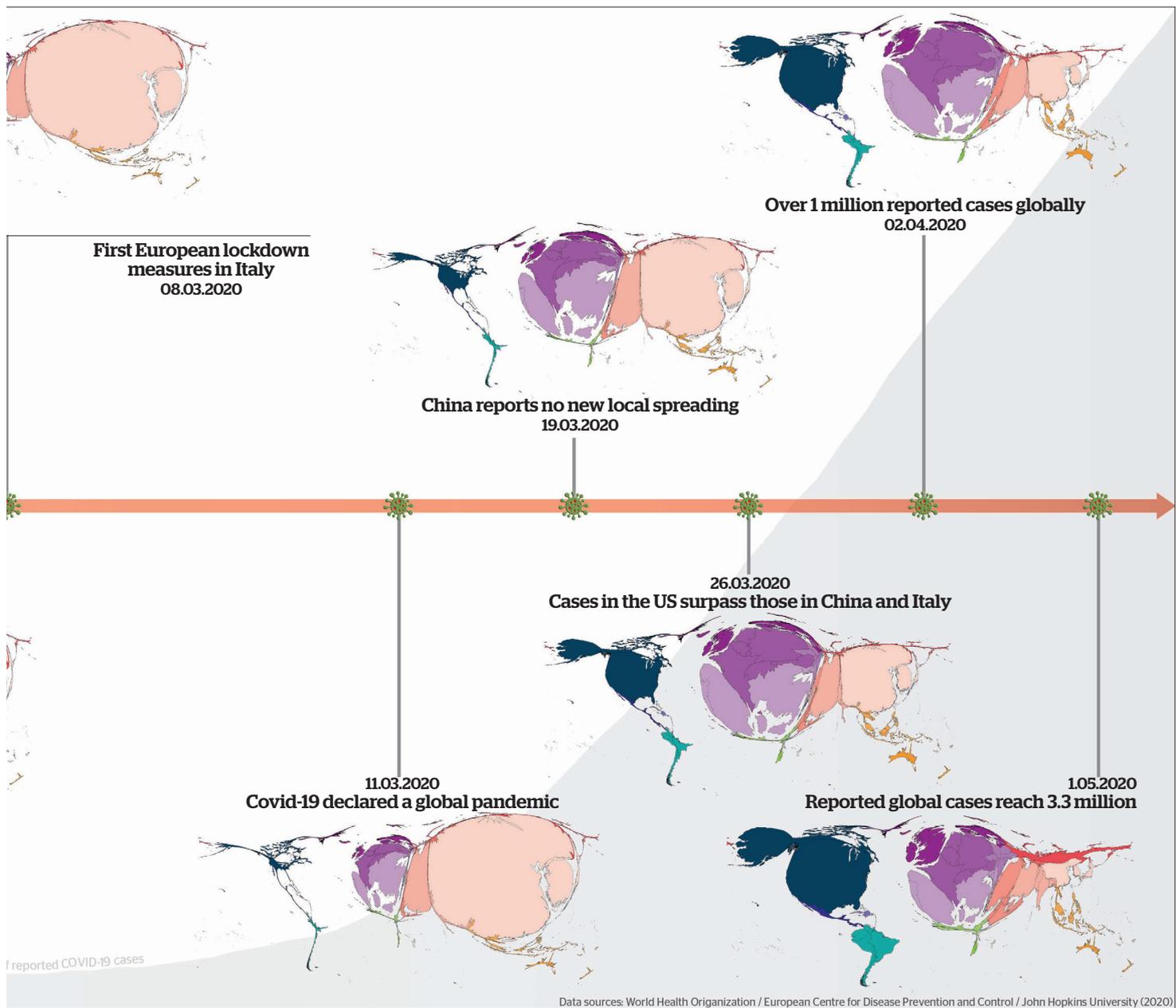


somewhat comparable global picture of the actual spread of the disease itself, these statistics may also reflect the places that have tests, can afford to test and choose to test. The real case figures will remain unknown. It is very likely that total case numbers are considerably higher than that reported, and that the degree to which they are higher is highly variable between different countries.

The evolving case numbers (and deaths) show how Covid-19 has hit

the most connected countries in our globalised world first and, so far, in the most extreme way. This is unlike other epidemics in recent decades which mostly affected the poorer parts of the world and hence appeared more distant and more abstract in the minds of Western societies.

The maps illustrate how it took two months from the initial outbreak in China for the virus to start spreading beyond Asia in late February. From the first major outbreak in Europe, which



happened in Italy, it did not take long for the virus to sweep across the continent. The USA became the next hotspot – it then took just a few weeks to become the country with the highest number of reported cases and confirmed deaths globally, a position which the country retains at the date of writing.

At the same time, new cases started levelling off, or in some instances going down in Europe, while South America and Russia also began to emerge in the global picture.

Despite all the caveats associated with these statistics, this map series highlights how the virus became the pandemic that previous outbreaks such as SARS (2002-2004) and H1N1 (2009) did not. Covid-19 spread through the most connected parts of the world and affected the wealthier nations that are well linked through air travel and are characterised by vivid and frequent global interconnectivity.

Yet, a second wave of cases in Singapore and increasing case numbers

in South America, Russia and elsewhere shows that this pandemic is far from over and will continue to affect large parts of the world's population in the months to come. ●

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