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## Transitioning to endemicity with COVID-19 research

With the wave of new cases of COVID-19 sparked by the omicron (B.1.1.529) variant of SARS-CoV-2 apparently in decline worldwide, some authorities have claimed that the end of the pandemic is near. It is nevertheless worth bearing in mind that in the last week of January 2022 alone, 22 million cases and 59 000 deaths were reported worldwide. The good news is that—at least in highly vaccinated countries—the link between cases and deaths seems to have been weakened, if not quite broken. COVID-19 is becoming an endemic disease that will always be with us. Endemic does not necessarily mean mild, but there are signs that with high levels of population immunity, the severity of COVID-19 becomes closer to that of seasonal influenza, after accounting for patient age and underlying conditions.

The successive waves of the COVID-19 pandemic have provoked an unprecedented explosion of research activity on the disease. An analysis based on the medical subject heading (MeSH) terms given to papers indexed in PubMed shows just how COVID-19 has dominated biomedical research publications over the past 2 years. During the decade 2010–19, the five diseases with the most research publications per year were breast neoplasia, HIV infection, obesity, lung neoplasia, and type 2 diabetes. Papers on breast neoplasia increased from 10 080 in 2010 to 12 205 in 2019, and those on HIV from 8142 in 2010 to 8694 in 2019. However, although these numbers increased in 2020 in line with historical trends, they were completely outstripped by COVID-19 with more than 50 000 publications in the same year. In 2021, the number of COVID-19 papers reached more than 78 000, whereas publications on all the pre-pandemic top five diseases fell—breast neoplasia to 10 746 and HIV to 7775, the latter below the level of 2010.

As editors of *The Lancet Infectious Diseases*, we observed towards the end of 2021 a decrease in the number and quality of research articles submitted on subjects other than COVID-19. Concerned that this “covidisation” of the research enterprise might have long-term effects, we contacted the 23 members of the journal’s international advisory board (IAB) to ask about their experience of research during the pandemic. Some IAB members noted that their clinical responsibilities and most of their research activities had been devoted to COVID-19. Others had worked on COVID-19 while continuing their previous

research activities, meaning very heavy workloads with an impact on staff mental health. People with public health experience were redirected to work on COVID-19 and away—for example—from responsibilities related to antimicrobial resistance. Most concerning was the experience of several IAB members whose research had been disrupted by travel restrictions, difficulty recruiting patients, the closure of laboratories, and problems with staff recruitment and retention. One IAB member said that industry-sponsored clinical trials in infectious diseases had almost “ground to a halt” (a phrase used by other respondents), with the exception of those related to COVID-19. Redirection of funding was also noted as an issue. Some IAB members noted disruption to the control of tuberculosis (among other diseases) caused by the pandemic, a concern supported by the WHO *Global tuberculosis report 2021*, which found that the pandemic has reversed progress in providing tuberculosis services and in reducing the burden of disease.

Not all was doom and gloom from our IAB members, with some reporting new opportunities for research collaborations. And on the disease-control front there is still some good news, with the Carter Center announcing on Jan 26 that just 14 human cases of Guinea worm disease (dracunculiasis) had occurred in four countries in 2021 compared with 27 cases in six countries in 2020, bringing ever closer the goal of eradicating this disease. Nevertheless, the overall picture that emerges from the analysis of research publications and the experience of our IAB members is one of delay and disruption to research on any topic other than COVID-19.

The vast research effort that has gone into COVID-19 over the past 2 years should be celebrated as a great human achievement—it has given us the tools to turn a pandemic disease into a manageable, endemic one. Better vaccines and treatments will be required to maintain this success, and large parts of the world’s population still do not have access to vaccines. However, research organisations, funding bodies, and industry should now lead a compensatory effort that, applying lessons learned from combatting COVID-19, redirects research towards the control of infectious diseases (and, indeed, non-communicable diseases) that take a toll of human life year in and year out.

■ *The Lancet Infectious Diseases*



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For more on the **end of the pandemic** see **Comment Lancet** 2022; **399**: 417–19

For **analysis of research publications by disease** see <https://sci70.sysbio.tools/>

For the **Global tuberculosis report 2021** see <https://www.who.int/publications/i/item/9789240037021>

For more on **dracunculiasis eradication** see <https://www.cartercenter.org/news/pr/2022/guinea-worm-worldwide-cases-announcement-012622.html>