



COVID-19: the global health emergency is over for the WHO, but not yet for laboratory medicine

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Tedros Adhanom Ghebreyesus, the director general of the World Health Organization (WHO), recently shared publicly that the Emergency Committee for coronavirus disease 2019 (COVID-19) has decided to no longer consider this disease an international health emergency, although it should still be considered a global health threat (1,2). This decision was essentially based on a steady decline in mortality rates and hospitalizations, and to the remarkable degree of immunity to severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Although many of us will greet this news with relief, as it more or less looks like there is light at the end of the tunnel, we are not really convinced that laboratory medicine should let its guard down for some time to come and for many reasons.

The first and most important of these reasons is that the pandemic will be with us for a long time. According to WHO, 441,290 new SARS-CoV-2 infections were officially diagnosed worldwide last week, a figure that does not include the huge amount of “private” testing that does not show up in the official statistics (and will be even more overlooked in the future as the burden of home testing increases) (3). Thus, the mantra of “test, test, test” to which we have already become accustomed will be the paradigm of the future coexistence with this new virus. Rapid diagnosis, timely isolation and/or introduction of effective measures (e.g., face masks) that could stop

household and community infection will require the use of diagnostic tools that must be rapid, user-friendly and inexpensive, but also accurate enough to allow the reliable identification of infected individuals, especially those who are more likely to pass on the infection (i.e., those bearing higher viral loads). This aspect is of paramount importance given the ongoing genetic evolution of SARS-CoV-2, a virus that has significantly altered its genome in the first 3 years of the pandemic and will continue to do so for the foreseeable future. The role of laboratory medicine will hence be essential for maintaining the quality of COVID-19 diagnostics throughout the total testing process, i.e., in providing guidance on best preanalytical practices, in continuously monitoring the accuracy of commercially available tests or validating new tests, and in guiding all stakeholders to interpret test results as accurately as possible. To make this possible, however, policymakers and health care administrators should recognize that continued reductions in human and economic resources for clinical laboratories would only exacerbate a situation whose criticality has been plainly established during the last 3 years. Preliminary findings from a questionnaire created by the Task Force: Preparation of Labs for Emergencies (TF-PLE) of the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM) indicate that nearly 50% of laboratory professionals had trouble

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performing all the tests required during the pandemic, and over 70% said they experienced some degree of burnout. This was the predictable outcome of a flawed strategy of restrictions and cuts in healthcare, the negative effects of which have now become glaringly obvious and almost unquestionable.

There is no question that routine vaccination cycles are necessary to maintain adequate immunity levels, and shield the host from novel and possibly dangerous variations, even in the context of safe cohabitation with SARS-CoV-2. By identifying blunted or early diminishing immunity and prioritizing the provision of booster doses of vaccine to those who actually require them, laboratory medicine will play a pivotal role also in this clinical setting (4).

We are all looking forward to a “(new) post-COVID normal”, which means the restoration of a reasonable level of social and private life. Laboratory medicine is also aiming to reach a “new-normal”, that should however take into consideration the lessons learnt during these three years of the pandemic (5). For the WHO, the global health emergency may be finished, but is not over yet for laboratory medicine.

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