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To improve the efficiency of mass screening, China has adopted the sample pooling strategy in three patterns (five, ten, or 20 pooled samples) on the basis of different epidemic periods.<sup>4,5</sup> With the optimisation of sample pooling methodology and development of an electronic information system, this sample pooling strategy ensures both high sensitivity and efficiency.

The cost of routine SARS-CoV-2 testing during hospitalisation and in fever clinics, as well as the mass screening during an epidemic, are covered by basic medical insurance or by the government. These measures enable large cities with a population of 10 million people or more to complete SARS-CoV-2 testing within 24–48 h, without substantially affecting routine clinical services.<sup>6</sup>

The SARS-CoV-2 testing strategy has not only improved the containment of COVID-19 but also contributes to the control of other infectious diseases, such as HIV and human papillomavirus, and non-communicable diseases. China's COVID-19 response has accelerated its diagnostics agenda and testing capacity. To further optimise the COVID-19 detection strategy, China recently decided to supplement the existing strategy with antigen detection, and we will continue to accelerate technological innovation and develop the testing reagents for communities and remote areas. Ensuring universal access to diagnostics via effective and rapid testing is essential for the preparations for future pandemics.

HS is director of the National Clinical Research Center for Laboratory Medicine, which provides technical support for the national strategy of COVID-19 testing. All other authors declare no competing interests.

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## What comes next in the COVID-19 pandemic?

The COVID-19 pandemic is not over, but with collaboration and solidarity, we can transition to a manageable endemic disease state sooner and better mitigate the most severe health and socioeconomic impacts. In this third year of pandemic response, society needs to focus on improved implementation of effective interventions to end the acute phase. Governments and health authorities have the necessary knowledge and tools in hand, in the form of vaccines, diagnostics, and therapeutics, but equitable availability of these tools remains a challenge globally.

Today's decisions and efforts will continue to affect the pandemic's overall health, social, and economic toll. According to Our World in Data, 700 000 deaths were recorded as COVID-19 related between January and March, 2022, and only 14.5% of people in low-income countries have received at least one dose of a COVID-19 vaccine. SARS-CoV-2 variants continue to emerge as trust between governments and their constituents is tested, rendering sustained implementation of broad community-based interventions challenging. In many communities, crucial non-COVID-19 health services are yet to be fully restored to pre-pandemic levels.

The emergency phase of the COVID-19 pandemic will eventually end, but when will be determined by collective actions. Likewise, what is learned and how society grows from this experience can still be influenced. The next pandemic need not catch the world so unprepared.

The extraordinary nature of this pandemic calls for extraordinary analyses at global, national, and organisational levels. Society must reflect on what has been learnt about ourselves, our communities, our governance, and our preparedness and response systems. SARS-CoV-2 has caused too much harm in terms of death, morbidity, careers, relationships, finances, plans, and dreams for us to fall short of rigorous and independent after-action appraisal of the pandemic response. Communities have a right to understand why and how the pandemic response unfolded the way it did and to be assured improvements will be made. National and global leaders must use the knowledge gained from this pandemic and its reviews to ensure more robust multidisciplinary governance and equitable health and public health systems going forward.

A fresh approach to global health security is needed as well as the development of better measures of preparedness, with a greater emphasis

For Our World in Data COVID-19 deaths see <https://ourworldindata.org/grapher/cumulative-deaths-and-cases-covid-19>

For Our World in Data COVID-19 vaccinations see [https://ourworldindata.org/covid-vaccinations?country=OWID\\_WRL](https://ourworldindata.org/covid-vaccinations?country=OWID_WRL)



Published Online  
April 11, 2022  
[https://doi.org/10.1016/S0140-6736\(22\)00580-3](https://doi.org/10.1016/S0140-6736(22)00580-3)

on collaboration and equity. We call for improved funding of partners to enhance both preparedness efforts and alert and rapid response capabilities at both national and international levels. Sustained financing for institutions is necessary to train future leaders and build a global response workforce that embraces multidisciplinary scientific and public health networks as a core component. Immediate operational response needs at the country and local levels must be supported with sufficient resources.

Since its inception in 2000, the Global Outbreak Alert and Response Network (GOARN) has grown to encompass 270 partners and has responded to almost every major national and international outbreak through deployment of more than 3500 experts to over 100 countries. Drawing from this experience, we offer recommendations in the appendix outlining important next steps at this stage of the COVID-19 pandemic that would enable communities to better mitigate the health and societal impacts of the next pandemic.

We declare no competing interests.

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## A plea for reproductive health support amid crisis in Lebanon

Published Online  
March 28, 2022  
[https://doi.org/10.1016/S0140-6736\(22\)00368-3](https://doi.org/10.1016/S0140-6736(22)00368-3)

For the past 2 years, Lebanon has been grappling with social anarchy, political turmoil, and one of the world's most crippling economic crises.<sup>1</sup> The country was then pummeled by the COVID-19 pandemic followed by the third-largest non-nuclear explosion in history that destroyed Beirut in 2020.

Lebanon is hence amid an escalating humanitarian emergency emanating from the synergistic effects of these crises in addition to a collapsing medical sector demolished by mass immigration of health-care workers, severe shortage in crucial hospital supplies including electricity and diesel, and slashing of subsidies on over 1500 medicines making them exhaustively unaffordable, if found.<sup>1,2</sup>

Although most light is shed on addressing chronic illnesses, reproductive health can take a major hit if not adequately tackled. Studies have shown that grave conflicts lead to dismal repercussions on reproductive health culminating in increased morbidity and mortality risks among women.<sup>3</sup> Menstrual poverty is an additional endured struggle with prices of sanitary pads quintupling, forcing women to find sub-optimal substitutes associated with deplorable sequelae including higher infection risks.<sup>4</sup>

Assisted reproduction ranks among the highest on the list of marginalised reproductive health needs with the false perception of being a mere upper-class prerogative. Treatment delay until a glimpse of financial stability arises is not a possible option for many patients. Women with advanced age, poor ovarian reserve, or individuals with cancer do not have the luxury of waiting. Each treatment cycle costs around US\$2500 with the current average wage at less than \$150 per month. Loss of health insurance along with hyperinflation have greatly limited the number of patients attempting any form of assisted reproductive technology.

To provide equitable access to fertility care for all, physicians were compelled to adopt minimal stimulation in-vitro fertilisation protocols and alternative lower-class gonadotropin injections with no proven efficacy to limit the financial burden. These approaches, however, might translate into reduced oocyte

yield and quality with restricted implantation potential, forcing patients to withstand the burden of additional cycles to guarantee treatment success. Although these adjustments were initially implemented to buy time until the economic situation improves, there are no tangible signs of any reforms. On the contrary, the financial crisis is currently ranked as being among the top three most severe crises globally since the mid-19th century.<sup>5</sup> The crisis will inevitably lead to a cascade of calamities, including surges in maternal deaths, sexually transmitted diseases, and delays in cancer detection. This is an urgent plea to fertility societies, drug companies, non-governmental organisations, and UN agencies to aid in supporting patients from deplorable resource paucity, especially those requiring fertility treatment and oocyte cryopreservation with delayed treatment being sorrowfully detrimental. With the help of international support, we can further solidify our stance in helping the reproductive health sector face this raging storm.

We declare no competing interests.

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