COVID-19 after Different Waves of the Pandemic. What is Next?

A Rapid Evidence Review [Nov 15, 2022]

Key Message

COVID-19 imposed huge problem and turned the world into disruption. Now countries are thinking of "learn to live with the virus", with future uncertainties about the disease. The following are messages for the future directions for COVID-19:

- Assuming that COVID-19 is with us and cannot be completely eliminated, two scenarios could emerge (a mild endemic scenario to a dangerous variant scenario). For this the following points are critical:
 - **Managing Uncertainties:** The virus's adaptability suggests that numerous further varieties are inevitable, and some may be even worse than Omicron.
 - **Combating COVID-19 in the long time:** We must shift from emergency mode to the understanding that this is going to be a long-term war.
- Based on the above two critical points, the following four options were identified:
- Focus Areas one: Attempt to guarantee equitable access that goes beyond vaccinations: Over 70% of the grant funding raised to date has been for the development, acquisition, and delivery of vaccinations. While vaccines continue to be a vital tool, having a wider toolbox offers more resilience in the face of various viral evolution scenarios. Multiple lines of defence will be provided by utilizing a comprehensive toolkit.
- ✤ Focus Areas Two: Track of the virus's evolution and regularly update the toolkit: The toolbox should be regularly updated by investments in surveillance, research and development (R&D), manufacturing, and health systems to enable a dynamic response to the virus's evolution.
- Focus Areas Three: Shifting from emergency response to sustainable plan for COVID-19 integrating health and other social priorities: Fighting COVID-19 is now a multiyear task. Further funding for COVID-19 must be balanced with other health priorities, especially those whose mortality and incidence have grown as a result of the pandemic, (for example, tuberculosis, malaria).
- Focus Areas Four: Adopt a coordinated approach to reduce global risks posed by infectious disease: In the near future, it's possible that a large number of animal coronaviruses with unknown transmissibility and lethality may appear. So, the urgent need to improve pandemic preparedness and response capacities remains critical.

What is Rapid evidence Review?

Rapid evidence review addresses the needs of policymakers and managers for research evidence that has been appraised and contextualized to a specific context in a matter of hours or days. This rapid evidence review goes beyond research evidence and integrates multiple types and levels of evidence

For whom is this Rapid Evidence Review for?

This document was created in response to the future situation of COVID-19 pandemic. It aims to provide the best available evidence to program managers and policy makers on the future of COVID-19

HINCluded:

- **Key findings** from the available studies and guidlines

X Not included:

- Recommendations
- Detailed descriptions





COVID-19 after Different Waves of the Pandemic. What is Next?

Introduction

COVID-19 is arguably the most talked-about international health pandemic. The virus has imposed huge problem and turned the world into disruption. So, a unified and coordinated worldwide reaction is necessary. If COVID-19 is present anyplace in the world, it is present everywhere. Countries must shift their attention from COVID-19 disease curve flattening to more all-encompassing strategies to address citizens' primary healthcare needs. By employing the same logic and systems, we cannot control the COVID-19 pandemic and/or prevent a subsequent pandemic. (Ogunleye and Wabiri, 2020).

The impact sparked by COVID-19 on public health crisis is still being felt today. That's because the pandemic brought up a number of problems at once. The delivery of services, the workforce, products, funding, and other issues all occurred at the same time and need to be addressed. They cannot be resolved separately or in a logical order. Instead, when new issues arise and potential solutions are explored, other parts of the healthcare system are impacted. Therefore, it is important to consider how healthcare systems ought to react to COVID-19's shocks (EFPIA, 2021).

In the post COVID-19 pandemic, protection of health gains by minimizing disruptions in the delivery and accessibility of vital health services is critically important. A smooth changeover from informed by and expanding on the COVID-19 response, the pandemic response to recovery will necessitate a renewed focus on developing sustainable, resilient health systems (Pan American Health Organization, 2022).

Due to the persistence of COVID-19 pandemic in every country, health systems ought to have modified service delivery to account for the ongoing conditions. The majority of services had improved compared to the early pandemic months, but not all had reached prepandemic levels (Arsenault *et al.*, 2022).

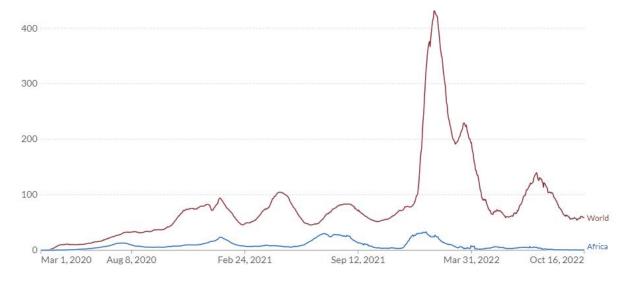
Fifteen months after the pandemic was announced, utilization of the disrupted health services in many nations remained lower than anticipated (Arsenault *et al.*, 2022). Many nations made an effort to continue providing important health services, particularly through non-visit treatment in order to cope with the COVID-19 pandemic. These included home blood pressure monitoring, telemedicine, online prescription renewals, and digital mental healthcare. Other service modifications that supported service continuity during the pandemic includes scheduling visits to prevent overcrowding, providing community drug delivery for people with stable chronic diseases, opening on weekend's services, and organizing special vaccination programs or health days (Arsenault *et al.*, 2022).

In some regions, vaccinations seems reversing the tide, but the global approach to the crisis won't be straightforward. Now countries are thinking of "learn to live with the virus", although there are uncertainties about the disease in the future (Sasse, 2021; Telenti *et al.*, 2021; WHO Europe, 2021). Most low- and middle-income countries have limited ability to track transmission or viral evolution. Having both low vaccination rates and weaker health care infrastructure make these countries difficult to timely respond to the pandemic (Sasse, 2021).

In order to solve the COVID-19 crisis in Africa in a revolutionary way, Africa needs to rethink. Africa has to refocus its policy on inclusive public health care instead of illness management in order to create a robust health system after COVID-19 (Ogunleye and Wabiri, 2020).

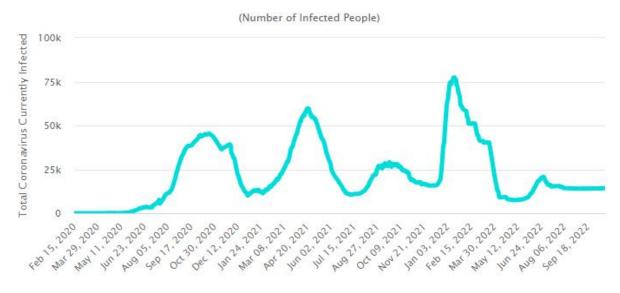
When the reported global cases of COVID-19 are critically analysed, it is significantly reducing. The reduction of cases was recorded after passing through many tides of the COVID-19 as depicted on the following graphs.

COVID-19 trend in Africa compared to the global trend (Worldometer, 2022; Our World in Data, 2022)



Ethiopian situation of COVID-19 from December 30, 2019 to October 17, 2022) (WHO, 2022)

Active Cases



Four Possible Post-Omicron Scenarios and Priorities (Agarwal et al., 2022; WHO, 2022)

	Future Variants with low severity of disease	Potential of future variants with high Transmission/severity of disease
Long	"Mild" Endemic Scenario with	"Injurious" Endemic Scenario

lasting and broader protection from prior infection /vaccinatio n	 Greater Focus on Restoring Livelihoods ✓ Continuous boosting not needed ✓ Prioritize returning economic, schooling and life to normal 	 with Managed Risk to avoid Deaths ✓ Immunosuppressed and older people are at risk ✓ Focus on "test to treat" strategy and increase vaccination and booster
Temporary	"Disruptive" Endemic Scenario	 ✓ Equitable access to antivirals "Dangerous Variant" scenario
Protection	with managed risk to avoid	with greater focus on R&D,
from prior	school/work	surveillance and System
infection/v accination	 ✓ All tools (vaccines, tests, treatments, PPE) are important, need boosters ✓ Prioritize school closures and work disruption when cases surge and managing potential risks ✓ Create regional manufacturing capacity for tools to ensure equitable access 	 ✓ Possibility of a second pandemic emerging ✓ Potentially highly transmissible and/or more deadly variants ✓ All tools (vaccines, tests, treatments, PPE) are important, need boosters ✓ Prioritize R&D investment, strengthening genomic surveillance, and in-country health system ✓ Create regional manufacturing capacity

Contrary to diseases like smallpox, which might be eliminated through mass immunization, and influenza which was kept under control through vaccination, it seems likely that SARS-CoV-2 will never be completely eliminated and will continue to evolve in both human and animal populations. Recognize that COVID-19 is with us for the long term and that there are very different scenarios for how it could evolve, from a mild endemic scenario to a dangerous variant scenario, the following points are important (Sasse, 2021; Agarwal *et al.*, 2022).

- 1. **Managing uncertainty:** The virus's adaptability suggests that numerous further varieties are inevitable, and some may be even worse than Omicron. Based on situations in which this virus evolves to become more contagious and/or lethal, we should control the risk. But the scenarios may play out differently in various regions of the world depending on the geographic area, demographics, or accessibility to vaccines, testing, treatments, and personal protective equipment (PPE), as we have seen in early stages of the pandemic.
- 2. Handling COVID-19 in the long run: We must shift from emergency mode to the understanding that this is going to be a protracted battle. A long-term plan will make it possible to focus on securing a robust recovery as the danger of serious disease and death decreases, especially by weighing ongoing COVID-19 obligations against the numerous other goals.

So based on the above two points mention, the following four focus areas were identified (the first two based on uncertainty about scenario and the last two based on the assumption that we are dealing with COVID-19 for the long term) (Agarwal *et al.*, 2022)

Focus Areas one: Attempt to guarantee equitable access that goes beyond vaccinations: Over 70% of the grant funding raised to date has been for the development, acquisition, and delivery of vaccinations, reflecting the donor response's current heavy leaning in favour of vaccines. While vaccines continue to be a vital tool, having a wider toolbox offers more resilience in the face of various viral evolution scenarios. Making sure that every nation has access to a full COVID-19 package of vaccines, testing, treatments, and PPE is essential. Vaccines should not be viewed as a panacea. Each tool gives a different form of protection but is inherently flawed and has variable levels of protection. Multiple lines of defence will be provided by utilizing a comprehensive toolkit. Many of the capabilities needed for a more thorough approach like oxygen, PPE, improved diagnostic capacity, etc. will be useful for many other illnesses and health risks in addition to COVID-19.

Focus Areas Two: Track of the virus's evolution and regularly update the toolkit: The toolbox should be regularly updated by investments in surveillance, research and development (R&D), manufacturing, and health systems to enable a dynamic response to the virus's evolution. For instances, Omicron spread quite quickly (within a few weeks) and should serve as a warning that whenever a new variation appears, there won't be much time for the world to respond. It is feasible to concentrate more securely and confidently on establishing a robust economic recovery with a solid return to economic, social, and academic lives thanks to ongoing investments in surveillance, R&D, manufacturing, and health systems.

Focus Areas Three: Shifting from emergency response to sustainable plan for COVID-19 integrating health and other social priorities: It is time to coordinate the various priorities. As we get ready for the end of the acute phase of the pandemic, we must progressively switch to a more balanced and demand-driven global response because we are working with limited resources and fighting COVID-19 is now a multiyear task. Further funding for COVID-19 must be balanced with other health priorities, especially those whose mortality and incidence have grown as a result of the pandemic, (for example, tuberculosis, malaria).

Focus Areas Four: Adopt a coordinated approach to reduce global risks posed by infectious disease: We must simultaneously change how we approach thinking about potential threats as we move our focus on combating COVID-19 over the longer run. The urgent need to improve pandemic preparedness and response capacities more broadly, as well as the larger global health agenda, have partly faded from the discourse on the immediate global response to COVID-19. With coronaviruses (both SARS-CoV-2 and other developing and re-emerging sarbecoviruses) now possessing pandemic potential going forward, further mutation of the SARS-CoV-2 virus represents a major risk for the entire world. In the near future, it's possible that a large number of animal coronaviruses with unknown transmissibility and lethality may appear. Accordingly, many of the measures taken to combat COVID-19 will also help lessen the likelihood of the virus undergoing more mutations, future pandemics, and improve our capacity to address other urgent health crises.

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Conflict of interest

• There is no conflict of interest to declare.

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