Reflecting on Diverse Experiences of COVID-19

Kenya’s Experience: Factors Enabling and Impeding the COVID-19 Response

This case study describes the country-level response to the COVID-19 pandemic in Kenya between February 2020 and May 2021. We organize the presentation of COVID-19 response strategies across the five stages of (a) engagement, (b) assessment, (c) planning, (d) action/implementation, and (e) evaluation. We describe the participatory monitoring and evaluation (M&E) process implemented in collaboration with the WHO Regional Office for Africa Monitoring and Evaluation Team. The M&E system was used to organize and make sense of emerging data regarding specific response activities and changing COVID incidence. We share the results of that collaborative sensemaking, with particular attention to our analysis of the factors that facilitated and those that impeded our pandemic response. We conclude with lessons learned and practical implications from Kenya’s experience to help guide future country-level responses to rapidly changing public health crises.

Keywords: COVID-19 pandemic; COVID-19 response: Africa; Kenya; monitoring and evaluation; participatory evaluation; sensemaking; collaboration; global health

Unity is strength, division is weakness.

—Swahili proverb

As the COVID-19 pandemic spread throughout the world, it yielded hundreds of millions of cases and more than six million associated deaths, economic burden, and human suffering (Alwan et al., 2020; World Health Organization, 2022). Beginning in 2020, the rise in COVID-19 was eventually seen in all countries throughout Africa (Ahmad & Ahmad, 2020; Ogunleye et al., 2020). The World Health Organization (WHO, 2020) and its Regional Offices provided technical guidance for countries to respond to the COVID-19 pandemic in their contexts.

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This case study describes the country-level response to the COVID-19 pandemic in Kenya between February 2020 and May 2021. We organize the presentation of COVID-19 response strategies across the five stages of (a) engagement, (b) assessment, (c) planning, (d) action/implementation, and (e) evaluation. We describe the participatory monitoring and evaluation (M&E) process implemented in collaboration with the WHO Regional Office for Africa Monitoring and Evaluation Team. The M&E system was used to organize and make sense of emerging data regarding specific response activities and changing COVID incidence. We share the results of that collaborative sensemaking, with particular attention to our analysis of the factors that facilitated and those that impeded our pandemic response. We conclude with lessons learned and practical implications from Kenya’s experience to help guide future country-level responses to rapidly changing public health crises.

**COVID IN KENYA**

Kenya confirmed its first case of COVID-19 on March 12, 2020. Since then, the number of cases continued to increase to 175,337 cases and 3,410 deaths (as of June 13, 2021). One and a half years into the pandemic, the country had experienced three waves characterized by increased cases and deaths: first wave, during July to August 2020; second wave, from November to December 2020; and third wave, during March to April 2021.

The Ministry of Health (MoH) projected additional waves as mutation and emergence of variants continued to be detected in the country. The fight against COVID-19 required a united and sustained response as infections were continuing to spread. As the government instituted various measures as part of the COVID-19 response, the disease continued to negatively impact the country’s socioeconomic conditions and public health, including straining the health system and the related loss of lives.

**KENYA’S COVID RESPONSE**

Guidance from the WHO included recommended pillars or components of the COVID-19 response (WHO, 2020). These pillars included (a) surveillance (e.g., tracking new cases, deaths); (b) risk communication and community engagement (RCCE; e.g., preventive and protective behaviors); (c) infection prevention and control; (d) case management and health services; (e) laboratory services; and, when available, (f) vaccinations. Illustrative COVID-19 measures implemented in Kenya included (a) active public health promotion of preventive measures including use of face masks, hand-washing with soap, or use of sanitizers; (b) cessation of movement, lockdowns, curfews; (c) imposition of work from home policies; (d) closure of learning institutions and places of worship; and (e) vaccination campaigns (first introduced in June 2021).

**Engagement Approaches Used**

A Public Health Emergency Operations Centre (PHEOC) was fully activated to support coordinated engagement. The PHEOC coordinated response measures as well as provided daily situation reports that informed assessment and planning. The government also established a National COVID-19 Taskforce that brought together various stakeholders including the MoH, other government agencies, UN agencies, development partners, nongovernmental organizations (NGOs), and civil society organizations (CSOs). The Taskforce was key in facilitating mobilization of technical and financial resources to support the MoH and other ministries in implementing the agreed-upon interventions. The office of the Cabinet Secretary released daily news briefs and regularly engaged with the media to provide necessary updates.

In undertaking this response, the Government received support from various development partners including the European Union, World Bank, Department for International Development (DFID), U.S. Agency for International Development (USAID), and UNICEF, among others. Their collective focus was how to mitigate harms from COVID-19, at both national and subnational levels. At the county level, various partners worked closely with the County Departments of Health to enhance engagement of community members. These partners included WHO Kenya, USAID, UNICEF, Centers for Disease Control and Prevention (CDC), AMREF Health Africa, Kenya Red Cross Society, Afya Bora, and the Interreligious Council of Kenya, among others.

**Assessment and Surveillance Approaches Used to Track New Cases**

Laboratory COVID-19 testing was used to detect new cases. This was largely achieved through testing of symptomatic cases seeking treatment and as a prerequisite to obtaining travel clearance that saw international travelers out of the country, incoming passengers at points of entry, and truck drivers being tested. Some counties undertook mass testing amid a shortage of testing kits, and the number of persons presenting themselves for this voluntary testing remained a challenge. Later in the pandemic, with the advent of rapid testing for COVID-19, this led to increased access and addressed the challenge to the turnaround time in obtaining results. This
increase in the use of rapid testing saw an increase in asymptomatic cases being detected. Contact tracing provided an opportunity for identification of new cases.

**Planning Approaches Used**

Following the infectious outbreak in December 2019, Kenya was put on a COVID-19 high alert and prioritized for preparedness by the WHO. In preparation, the country developed the National 2019 Novel Corona Virus Contingency (Readiness & Early Response) Plan in February 2020, and this led to establishment of the National Emergency Response Committee (NERC). Comprised of multiple government agencies, the NERC has the mandate of coordinating the country’s preparedness and response mechanisms to control the spread of the virus and to minimize its impact on health systems in Kenya. The NERC met regularly to provide policy direction on response efforts.

**Action/Implementation Strategies Used in Kenya’s COVID-19 Response**

After the country reported its first known COVID-19 case on March 12, 2020, the government issued a Presidential Order on COVID-19 (March 15, 2020). This put in place multiple measures or response activities including:

1. **Ban on air travel.** Ban was imposed for all incoming flights into and within the country. Only Kenyan citizens and foreigners with valid residence permits were allowed into the country, with the returning passengers placed into mandatory quarantine for 14 days. Local air travel was reopened on July 15, 2020, while the international air travel resumed on August 5, 2020. Following the emergence of the Delta variant, the government suspended flights from India beginning on April 28, 2021.

2. **Imposition of a nationwide curfew.** The initial curfew was between 7 p.m. and 5 a.m. on March 15, 2020 that remained in force until June 7, 2020, when it was revised to 9 p.m. to 5 a.m. This remained in force for some time, with adjustments in curfew hours.

3. **Cessation of movement.** The initial cessation of movement into and out of disease-infected counties was instituted for the larger Nairobi Metropolitan area on April 6, 2020; this was extended to Mombasa, Kwale, and Kilifi counties on April 8, 2020, and later extended to Mandera on April 22, 2020. This was lifted on June 7, 2020. However, in response to the third wave of COVID-19, there was a cessation of movement in and out of five counties deemed disease-infected areas of Nairobi, Kajiado, Machakos, Kiambu, and Nakuru on March 26, 2021 that was lifted on May 1, 2021.

4. **Prohibition of social gathering.** The government banned public gathering and meetings, including at places of worship initially. This was followed by a prohibition of all forms of gathering (especially political rallies) on March 12, 2021 in response to the third wave.

5. **Closure of all primary and secondary schools, beginning March 18, 2020 followed by closure of tertiary learning institutions beginning March 20, 2020.** There was a partial reopening of schools on October 12, 2020 for Grade 4 and Grade 8 (primary school) and Form 4 (final high school class). That was followed by full reopening of schools after the festive season on January 4, 2021 before the schools closed for an end term holiday on March 19, 2021. The schools resumed after 7 weeks on May 10, 2021.

6. **Reducing the number of passengers in public transport.** The carrying capacity of public service vehicles was limited to only 60%.

7. **COVID-19 vaccination.** The country launched initial vaccinations on March 5, 2021. This was rolled out for the population starting with the priority groups—frontline health care workers, uniformed officers, teaching staff, religious leaders, and citizens above 58 years. Distribution was through the 47 County Departments of Health.

These and other response activities drew from a comprehensive strategy and were consistent with the WHO-recommended pillars of a COVID-19 response (WHO, 2020). To illustrate with the RCCE pillar, some achievements during the first year of the response included (a) set up of coordination mechanisms and technical working groups including the Advocacy, Communication and Social Mobilization (ACSM) advisory committee; (b) roll out of the National Communication and Community Engagement Strategy at the county level; (c) roll out of the national campaign on COVID-19 prevention dubbed “Kamesha Korona”; (d) implementation of a COVID-19 communication campaign through various media—radio, TV spots, posters, social media (Twitter, Facebook, among others)—to promote key COVID-19 preventive measures; and (e) development and roll out of the national COVID-19 ACSM strategy on vaccine introduction into Kenya in February 2021.

**PARTICIPATORY EVALUATION AND SENSEMAKING**

The fifth step in the response framework (following action/implementation) is participatory evaluation
and sensemaking. Technical support in monitoring and evaluating the COVID-19 response in Kenya was provided by the M&E team based in the WHO Regional Office for Africa (Phori et al., 2022). By reviewing documents and conducting key informant interviews, the WHO AFRO M&E team documented more than 470 COVID-19 response activities in Kenya during the study period (February 2020 through May 2021). Participatory sensemaking sessions with WHO Kenya country partners helped to identify factors associated with increases or decreases in both new cases and response activities.

The WHO AFRO COVID-19 Response M&E System (Phori et al., 2022) used the M&E system developed by the WHO Collaborating Centre for Community Health and Development at the University of Kansas (Fawcett & Schultz, 2008). It was used to (a) capture or document COVID-19 response activities (i.e., by reviewing documents and reports provided by Kenya partners to identify activities; by describing who implemented the activity/change, what they did, toward what goal, with whom, and how many were affected/reached by the activity/change); (b) code activities using established definitions and scoring instructions (e.g., development activities, community/system changes); (c) characterize attributes of activities (e.g., where it occurred, type of COVID-19 response pillar addressed); and (d) communicate findings through graph displays, sensemaking dialogues, presentations, and reports. All aspects were implemented by staff of the WHO Regional Office for Africa, with technical support from the WHO Collaborating Centre.

The “sensemaking” protocol developed by the WHO CC (Fawcett & Schultz, 2008; Phori et al., 2022) was used to systematically reflect on patterns in the data. This sensemaking protocol guided Kenya partners in using questions to pay particular attention to (a) what they are seeing in the data (i.e., in the pattern of increases or decreases in new cases, displayed in Figure 1, or in COVID-19 response activities over time, displayed in Figure 2); (b) what it means (e.g., what factors may be contributing to increases or decreases); and (c) implications for adjustment (e.g., expanding partnerships for fuller implementation).

Our goal was to assemble data regarding new cases (see Figure 1) and response activities (see Figure 2), to examine and reflect on patterns in the data during the study period, and to identify factors that may have facilitated or impeded the implementation and efficacy of the planned response.

FIGURE 1 Fourteen-Day Moving Average of New COVID-19 Cases in Kenya, and Associated Factors Identified by Kenya Country Partners
RESULTS

Factors Related to the Pattern of New COVID-19 Cases in Kenya

Using the sensemaking protocol, Kenya partners reflected on the data display (Figure 1) to identify factors and key events that they saw as contributing to decreases or increases in new cases of COVID-19 over time.

Figure 1 displays the number of new cases of COVID-19 in Kenya over time, with factors identified by country partners as associated with increases and decreases in cases (shown in boxes). Data are displayed over the time of the study period as both a 14-day moving average and as the cumulative number of cases. Since the detection of the first cases in Kenya (in March 2020) until July to August 2020, there was an increased number of cases that represent the first wave of the pandemic in Kenya. From August 20 to October 20, there was a decreased number of cases. Increased cases were observed again from October to November 2020 representing the second wave, with a downward trend from December 20 to the beginning of January 2021. Another increase in cases was observed beginning in March and continuing through the study period and represents the third wave.

Table 1 provides a summary of factors and key events identified by country partners during sensemaking. They reflect factors seen as contributing to (a) decreases in the number of new cases (e.g., closure of school, travel restrictions) and (b) increases in new cases (e.g., reopening of services, increase in movement).

Factors Related to the Pattern of Response Activities in Kenya

Figure 2 displays the overall pattern of documented response activities in Kenya (N = 364). (Note that this reflects activities captured by reviewing documents and key informant interviews, and likely representing a portion of actual activities implemented.) Activities are displayed as the cumulative number of response activities over time. (In a cumulative graph, each new activity is added to all prior ones: a flat line shows a lower rate of activity, and a steeper line shows a higher rate.) This graph shows initial response activities in April 2020 and a marked increase in response activities starting in August 2020. Response activities were sustained throughout the study period.

Table 2 provides a summary of factors identified by country partners during sensemaking as associated with
### TABLE 1
Factors Identified by Country Partners Associated With Decreases or Increases in COVID-19 Infection in Kenya

| Factors associated with decreases in new cases of COVID-19 | Factors associated with increases in new cases of COVID-19 |
|------------------------------------------------------------|-----------------------------------------------------------|
| • Closure of school (March 2020).                           | First wave: July to August 2020                           |
| • Suspension of incoming travel from other countries (March 2020). | • Reopening of some services (e.g., cafes, restaurants). |
| • Closure of universities and tertiary institutions (March 2020). | • Increase in movements (beginning in June 2020).         |
| • Nationwide curfew, from 7:00 p.m. to 4:00 a.m. (March 2020). | • Resumption of phased reopening of congregational worship |
| • Cessation of movement within highly affected counties (i.e., Kilifi, Kwale, Mombasa; April 2020). | • Resumption of local air travel on July 15.               |
| • Closure of borders with Somalia and Tanzania (May 2020). | • Lifting of restrictions on movement and social gatherings (e.g., social events, weddings, markets; July 2020). |
| • Strengthened RCCE activities with deployment of RCCE consultants (June 2020 to date). | • Limited availability of testing (in July, and from August to October, giving a false sense of improvement in cases). |
| • Adequate resourcing and enhanced implementation of RCCE activities (June–December 2020) especially during the December festive period to promote preventive measures (e.g., staying home, wearing masks) including through religious and community leaders. | Second wave November to December 2020 |
| • Ban on all forms of social gathering including political rallies on March 12, 2021. | • Reopening of schools (partial, October 2020; full, January 2021). |
| • Launch of the vaccination campaign (March 2021). | • Increased political gathering occasioned by the clamor of reviewing the constitution through the Building Brides Initiatives in Kisii, Kisumu, Nyeri, and Nairobi between October 21 and 26, 2020. |
| • Cessation of movement in five counties that were declared disease-infected zones (Nairobi, Kajiado, Machakos, Kiambu, and Nakuru) as from March 26 to May 1, 2021 when a reduction in cases was noticed. | Third wave (March to May 2021) |
| • • Rumors and misinformation about COVID-19 and its causes (throughout the pandemic). |
| • • Fatigue with pandemic and reduced compliance with public health measures. |
| • • Limited funding hindering RCCE response activities from January 2021. |
| • • Vaccine hesitancy amid its introduction followed by vaccine shortages after demand creation. |
| • • Socioeconomic pressure |
| • • Wrong signals sent out when there is relaxation of the containment measures. |

*Note. RCCE = risk communication and community engagement.*

### TABLE 2
Factors Identified by Country Partners as Enabling or Impeding the COVID-19 Response in Kenya

| Enabling factors in the response | Impeding factors in the response |
|---------------------------------|----------------------------------|
| • Establishment of a National Emergency Response Committee to plan and coordinate activities (February 2020). | • Rumors and misinformation about COVID-19 and its causes (throughout the pandemic). |
| • Engagement of RCCE consultants by WHO to cover five regions. | • Fatigue with pandemic and reduced compliance with public health measures. |
| • High-level national daily release of the SITREPS by the Minister for Health and regular presidential address on COVID-19. | • Limited funding hindering RCCE response activities from January 2021. |
| • RCCE plan in place. | • Vaccine hesitancy amid its introduction followed by vaccine shortages after demand creation. |
| • Several learnings from surveys on trends and behavioral tendencies. | • Socioeconomic pressure |
| • | • Wrong signals sent out when there is relaxation of the containment measures. |

*Note. RCCE = risk communication and community engagement.*
implementation of the COVID-19 response in Kenya. They reflect factors seen as (a) enabling or making easier the COVID-19 response (e.g., establishing the NERC) and (b) impeding or making more difficult the response (e.g., vaccine shortages).

CONCLUSION AND DISCUSSION

At the beginning of the COVID-19 pandemic, there was a high compliance with COVID-19 regulations including mask wearing, handwashing or sanitizing, and observance of physical distancing. This can be attributed to people’s fear of this unknown and highly virulent infection. There was also strict enforcement of the containment measures that included quarantining of cases that tested positive. However, when the containment measures were eased, a wrong signal was sent that the infection was no longer a threat. This led to relaxation of measures, including free movement to areas under lockdown and reduced compliance with COVID-19 containment measures. Subsequent waves of increased COVID-19 cases were seen soon after the relaxation of COVID-19 containment measures.

As part of sensemaking and developing a 1-year commemoration report (WHO, Kenya Country Office, 2021), country partners identified several key lessons learned and implications for practice based on the experience in Kenya. First, high-level administrative and political engagement is key to achieving high-level advocacy, social mobilization, and effective RCCE on COVID-19. This was demonstrated by the presidential speeches and engagement of the Office of the President in spearheading the COVID-19 response, as it attracted multigovernment department support and marshaled private sector support. One practice implication is that RCCE should continuously target the high-level political, social, and administrative leadership for increased advocacy of COVID-19 activities including resource mobilization.

Second, the national RCCE strategy and plan was done early to steer the COVID-19 response, but its implementation at national and county levels needed better coordination, capacities, and resources for the intended results. Another practice implication is that there is need for strong RCCE partners’ coordination at national and county levels to facilitate its implementation and financing at national and county levels.

Finally, tracking response activities through M&E is critical. This enables review of implementation status and better identification of gaps for addressing challenges and emerging issues. A practice implication is that having an M&E component in place can make it easier to track progress and inform response decisions and adjustments.

This case study illustrates how a robust M&E system with sensemaking protocols can enable reporting and storytelling about the country experience in tackling a major public health crisis. Drawing on systematic reflection by country partners, this case study yielded lessons learned and recommendations for practice based on the Kenyan experience. Consistent with the Swahili proverb—“Unity is strength, division is weakness”—it supports the call for a unified and sustained response to the COVID-19 pandemic.

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