RMNCAYH-N Services During COVID-19: A spotlight on Ethiopia's policy responses to maintain and adapt essential health services



Key messages

- Ethiopia has experienced some disruptions to reproductive, maternal, newborn, child, adolescent, and
 youth health and nutrition (RMNCAYH-N) services during COVID-19, though the government notably
 did not order significant closures or movement restrictions, which hindered service utilization in other
 countries. As a result, reasons for service declines are primarily demand side, with a fear of COVID-19
 being cited often.
- The Federal Ministry of Health has developed and disseminated strategies that recommend
 maintenance of the nationally defined package of essential health services, which has been
 disseminated to the states. States have been mandated to adapt these national plans to the local
 context and implement them, though it is unclear the extent to which national recommendations are
 being implemented.
- Ethiopia's policies do not suggest substantive adaptations at the point of service delivery, but instead
 focus on adaptations aimed to strengthen the health system, such as more frequent review and use of
 data, intensified demand generation, and strengthened stock forecasting. While health systems
 strengthening is broadly pursued in a non-COVID-19 context, there is limited evidence on the relative
 effectiveness of this approach to maintain services during COVID-19.

Ethiopia's first case of COVID-19 was confirmed on March 13, 2020, and the country has seen just over 99,000 cases as of November 1, 2020.¹ More than 75 percent of cases have been reported in Addis Ababa and its surrounding areas.²,³ According to a confidential Global Financing Facility report shared with our team on Nov 18, 2020, by the Bill & Melinda Gates Foundation, the government of Ethiopia took protective measures in January, even before its first case was reported, such as mandatory quarantine for travelers, communication and advocacy efforts, and a mask mandate. It then declared a federal emergency on April 8, 2020, and set up four new bodies to coordinate the COVID-19 response: (1) National Disaster Risk Management Commission, led by the deputy prime minister's office; (2) Public Health Emergency Management (PHEM), incorporating a multisectorial national task force led by the minister of health; (3) PHEM technical taskforce, managed by the Director-General of Ethiopian Public Health Institute (EPHI); and (4) PHEM Technical Working Group, led by the national incident manager.² In addition, task forces were established in all states with coordination by the Emergency Coordination Center. All are expected to coordinate closely with one another. The Federal Ministry of Health (FMOH) and EPHI also established a surveillance and reporting system.

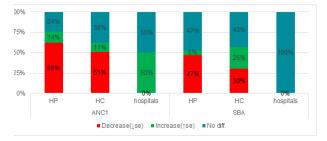
At the beginning of the pandemic, three hospitals in Addis Ababa were designated to house and treat the expected influx of COVID-19 patients—two existing hospitals, St. Paul's Hospital Millennium Medical College and Eka Kotebe General Hospital, and one newly constructed for COVID-19. Regional quarantine centers, generally at medical universities and affiliated hospitals in regional capitals, were also set aside to treat positive COVID-19 cases. While the government introduced several public health and social distancing measures, it notably did not impose a strict lockdown, curfews, or stay-at-home measures.

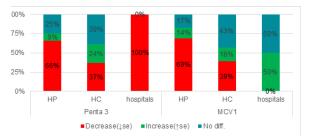
RMNCAYH-N service disruptions during the COVID-19 pandemic

In July 2020, PATH conducted an assessment in 80 health posts, 53 health centers, and five hospitals in PATH's operating areas in Addis Ababa and Amhara, Afar, and Somali regions of essential health services (EHS), including reproductive, maternal, newborn, child, adolescent, and youth health and nutrition (RMNCAYH-N) services. The assessment compared essential health services utilization to data collected in June 2019 (or "baseline"). The PATH assessment illustrates that the pandemic affected utilization of specific services at different facility levels. For first antenatal care (ANC1) visits and skilled birth attendance, both health posts and health centers observed decreases while hospitals did not (Figure 1). Similar decreases were observed for immunizations, specifically for the Penta3 vaccine (third dose of pentavalent vaccine against diphtheria, pertussis, tetanus, hepatitis B, and *Haemophilus influenzae* type B) and MCV1 (first dose of measles-containing vaccine) (Figure 2). This was likely due to the global disruption in vaccine shipments that occurred at the outset of the pandemic.⁴

Figure 1. Proportion of health facilities that had a decrease/increase/no difference in the maternal and newborn health services uptake between the current and baseline periods.

Figure 2. Change in immunization service uptake between current and baseline periods across health facilities.





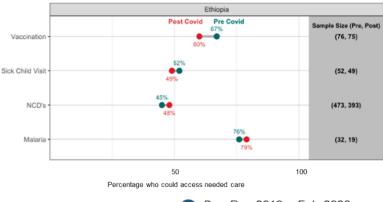
Abbreviations: ANC1, first antenatal care visit; HC, health center; HP, health post; MCV1, first dose of measles-containing vaccine; Penta3, third dose of pentavalent vaccine; SBA, skilled birth attendance; se, standard error. Source: PATH.¹⁰

Decreases in seeking care for common childhood illnesses (pneumonia, diarrhea, malnutrition, and malaria) were also observed.

Premise/Ipsos rapid phone surveys conducted early in the pandemic (March–June 2020) confirm PATH's assessment, as they captured slight decreases in service utilization for vaccinations and sick child visits (Figure 3 below).

UNICEF is conducting periodic facility assessments to monitor the continuity of essential RMNCAYH-N services at 38 primary hospitals (PHs), 130 health centers (HCs), and 80 health posts (HPs) in Oromia; Amhara; Southern Nations, Nationalities, and Peoples (SNNP); and Somali regions. Trends in service utilization (Jan-July 2020) show that most services have recovered to normal levelsa after an initial decrease at the beginning of the pandemic. Treatment for pneumonia is the exception, where there was a severe decline in April, especially in primary hospitals, and numbers have stayed low.

Figure 3. Changes in utilization of health services in December 2019–February 2020 to March–June 2020.



Pre: Dec 2019 – Feb 2020Post: March 2020 – June 2020

Abbreviation: NCDs, noncommunicable diseases. Source: Premise/Ipsos rapid phone surveys.

a. Not accounting for yearly seasonality.

Reasons for RMNCAYH-N service disruptions during the COVID-19 pandemic

The government of Ethiopia did not order health facility closures or impose a strict lockdown or stay-athome order,⁵ which could have affected providers' ability to report to work and patients' ability to reach facilities. This suggests that supply-side reasons for service disruptions are limited, though it is unknown whether facilities closed discretionarily, for example, due to outbreaks among health workers or staff. In addition, some service disruptions may have resulted from designation of certain facilities as COVID-19 treatment facilities in the beginning of the pandemic. When these facilities were fully dedicated for COVID-19 prevention and response, patients were transferred or diverted to other facilities for routine health care, which could have affected access. Referral linkages for all services, including RMNCAYH-N, were required to be fully followed up, but it is unknown whether these were fully realized.

Disruptions in RMNCAYH-N service utilization were more likely due to demand-side factors—that is, patients unwilling or unable to visit a health facility, as facilities at all levels were expected to be open and routine services being provided.⁶ An Ipsos survey in August 2020 found that the most common reasons for low service utilization were fear of catching COVID-19 or worries that the facilities would be too busy or have low capacity.⁷ This was confirmed by the UNICEF facility assessments, where fear of COVID-19 exposure was the number one reason for avoiding care seeking for RMNCAYH-N services. UNICEF's assessments found that the stigma of being labeled as COVID-19 positive was the second most common reason for low demand for services. Movement restrictions also indirectly affected demand for services; for example, public transportation providers were required to operate at 50 percent capacity, significantly lengthening lines and wait times for public transit.⁷

In addition, other concurrent national emergencies significantly affected service delivery: the conflict in Tigray, rise in internal displacements and migration, and upsurge of migratory locusts. While these are not the focus of these briefs, it would be remiss to not mention these other contextual shocks as they affected RMNCAYH-N service delivery alongside COVID-19 in 2020.

Ethiopia's RMNCAYH-N policies during the COVID-19 pandemic

The Federal Ministry of Health is driving the COVID-19 response with developing and disseminating strategies, inclusive of essential health services. These are pushed down to the states, which are mandated with adapting them to the local context and developing guidelines and implementation plans, often in the local language.

We reviewed nine national policies that the government of Ethiopia published in English between April and November 2020 that provided guidance on RMNCAYH-N services during COVID-19, and which were available on the FMOH and national government websites or provided by governments through another public mechanism (see Appendix A for list of policies). We included draft policies if they addressed these health areas.

Specifically, we reviewed national strategies (n = 3), policies (n = 3), operational guidance (n = 1), and guidelines (n = 1). In addition, we reviewed state-level policies for Amhara and Afar states to discern whether state-level directives differed dramatically from the national response. An important distinction from other low-income countries is in Ethiopia, nutrition and immunization are classified together with reproductive, maternal, neonatal, child, and adolescent health services as one of nine major components of the country's essential health service delivery package.

b. State policies were not included in the final review as they did not provide enough specificity on RMNCAYH-N services.

Ethiopia's various plans, guidelines, and strategies align with global guidance that the World Health Organization has issued on maintaining EHS during the COVID-19 pandemic. The target audiences of the policies were primarily regional health bureaus, woreda offices, health facilities, Ethiopian Pharmaceuticals Supply Agency, implementing partners, health workers, and community stakeholders.

On the whole, Ethiopia's policies underscore the importance of continuing EHS delivery and providing RMNCAYH-N services with as little interruption or change in service quality as possible. The policies emphasize the necessity of balancing COVID-19 response strategies with maintenance of EHS and ensuring that preventable deaths do not exceed deaths due to the pandemic. Ethiopia underwent a significant revision and reframing of its *Essential Health Services Package* at the end of 2019, and its COVID-19 response appears to strengthen its commitment to the EHS package with appropriate infection prevention and control (IPC)⁸ rather than significantly adapting services at the point of delivery. The health system was therefore mandated to ensure uninterrupted provision for routine RMNCAYH-N services in all facilities 24/7 with minor adjustments to allow for social distancing and to minimize unnecessary visits to the facilities. The *National Comprehensive COVID-19 Management Handbook* recommends that a designated EHS focal point serve on the COVID-19 Incident Management Team to ensure essential health services—of which RMNCAYH-N is an integral part—are not overlooked in the pandemic response.⁹ At the health post level, one health extension worker is recommended to be dedicated for EHS delivery.⁴

Maintenance of RMNCAYH-N services

The table below summarizes RMNCAYH-N services and activities that were to be provided during the pandemic with recommendations or adjustments to usual service delivery noted.

Table 1. Summary of RMNCAYH-N services and activities during COVID-19.

Health area	Program activity	Recommendation and service status	
Maternal and newborn care	Antenatal care	Adaptation of services: If there is a COVID-19 outbreak in the immediate catchment area, mothers who are low risk can delay ANC clinic visits or have follow-up visits via telephone consults. Or, alternately, one health extension worker may be designated to provide all ANC consultations until the outbreak situation has resolved.	
Labor and delivery	Labor and delivery	Maintenance of services with IPC: Women should continue to deliver at facilities whenever possible.	
Emergency obstetric care and newborn	Emergency obstetric care and newborn	Maintenance of services with IPC: Management of safe delivery, complications, and newborn care should be maintained 24/7, including safe blood transfusions and emergency referral networks to higher-level facilities. Strong hygiene standards for those handling infants should be emphasized, and if an alternate caregiver for the child is needed, the number of alternates should be limited.	
	Postnatal care	Maintenance of services with IPC: In order to minimize visits, postnatal care should integrate services at the point of care and continue to include postpartum family planning service provision.	

Health area	Program activity	Recommendation and service status		
Child health	Immunization	Maintenance of services with IPC: Immunization services should be available at all levels of service delivery throughout the duration of the pandemic with proper protection. Prioritize vaccination activities unless health facility is closed for "COVID-19 management" at facility and RHB level.		
	Vaccination campaigns	Maintenance of services with IPC: Mass vaccination campaigns should be monitored and reevaluated at regular intervals to determine whether they should be delayed.		
	Sick child acute	Maintenance of services with IPC: Specifically encourage parents to seek care for children with symptoms of pneumonia and tuberculosis, as these illnesses have symptoms similar to COVID-19.		
Reproductive Health	Family planning	Maintenance of services with IPC: Continue client-centered counseling for informed choice and make referrals to higher-level facilities, as needed, for longer-term methods. Adaptation of services: To reduce frequency of client visits, provide multiple months of contraceptives, as necessary, for short-term methods. Long-acting methods may be offered in context of full and informed choice.		
	Abortion	Maintenance of services with IPC: Comprehensive abortion services should be offered as usual, including post-abortion care and safe abortion care.		
Nutrition	Preventive care	Maintenance of services with IPC: Keep community mobilization and screening events to fewer than 20 people (ten mother-child pairs). Wash MUAC tapes with soap while washing hands between patients. Mothers who feel sick should send a family member to OTP or TSFP days. Adaptation of services: Change to biweekly visits for OTPs and monthly for TSFPs.		
	Therapeutic care	Maintenance of services with IPC: Ensure availability of HEWs, health workers, staff, and agents (FDAs) at SNF provision points. Adaptation of services: Extend nutrition rehabilitation follow-up from weekly to biweekly for severe acute malnutrition and from biweekly to monthly for moderate acute malnutrition.		

Abbreviations: ANC, antenatal care; FDAs, food distribution agents; HEWs, health extension workers; IPC, infection prevention control; MUAC, mid-upper arm circumference; OTP, outpatient therapeutic programs; RHB, Regional Health Bureau; SNF, skilled nursing facility; TSFP, targeted supplementary feeding programs.

While policy recommendations predominantly focused on maintaining essential health services using IPC, a few adaptations were recommended across different services:

Integration of services at point of care

Ethiopia is already unique in that it integrates nutrition and immunization into the continuum of care for RMNCAYH-N services. As an adaptation to reduce frequency of client visits, the RMNCAYH-N policy recommends further service integration to reduce missed opportunities. Guidance suggests integrating services at facilities between service units (e.g., child health and ANC) and allowing providers to provide a variety of services, thus applying a "one-stop shop" approach to avoid repeat visits to health facilities and minimize COVID-19 infection. Infant and young child feeding activities are also recommended to be integrated into different food, health, and WASH (water, sanitation, and hygiene) platforms, especially in food-insecure areas, to ensure delivery of nutrition interventions. Integrated outreach is also recommended as a way of reaching vulnerable and underserved populations.

Multimonth dispensing or advance provision of pharmaceuticals and nonpharmaceutical commodities

Extended prescribing of medications and other commodities has been adopted by many countries, including Ethiopia, to limit patient visits to the facility while ensuring continuity of prescribed medicines. In particular, Ethiopian policy highlights extending prescriptions for supplies for short-acting contraception (e.g., birth control pills) for three to six months. For victims of rape or gender-based violence, advance provision of emergency contraception is recommended to avoid pregnancy. For ANC provision, guidance requests that health workers provide pregnant women with three months' supply of iron and folic acid supplements at a time. For nutrition interventions, targeted supplementary feeding programs (TSFPs) are recommended from a two-to-three-week provision to a one-month provision maximum.

New IPC guidelines ensure continuity of RMNCAYH-N service delivery

In lieu of adapting services at the point of delivery, Ethiopia's various policies outline social distancing guidelines, specific hygiene practices, and isolation of COVID-19 patients to ensure continued EHS delivery. The following are examples of specific IPC practices suggested to minimize coronavirus transmission.

Physical distancing of patients

- Employ markers to indicate distances of 2 meters (~6 feet) apart.
- Increase physical space between patient beds in facilities to at least 2 meters.
- Consider recruiting additional volunteers to direct patients, especially on nutrition days.

Minimize crowds

- Begin activities as soon as clients arrive rather than waiting for critical mass to gather.
- Redistribute TSFP days over several days rather than one day, or several times in one day rather than
 one set time a day, to minimize crowd size.
- Consider increasing the number of outpatient days at facilities (e.g., from one to three outpatient days a week) to avoid overcrowding.
- Limit visitors and people accompanying clients.

Make hygiene supplies available to clients and providers

- Avail handwashing stations, including liquid soap, safe water, and hand sanitizer.
- Direct clients to handwashing stations and temperature-check stations prior to receiving services.
- Provide clients with suspected, probable, or confirmed COVID-19 with a face mask immediately upon arrival.
- Ensure availability of personal protective equipment (PPE) like gowns, gloves, and surgical masks to providers.

Triage and isolate suspected, probable, or confirmed COVID-19 cases

- At intake, triage and isolate patients that are suspected, probable, or confirmed for COVID-19.
- See suspected, probable, or confirmed clients first.
- Separate suspected/probable/confirmed COVID-19 cases from non-cases (for labor and delivery, cesarean delivery, postnatal care, etc.)

Reconsider daily routines of health workers

- · Providers who are unwell/ill should stay home.
- Minimize the number of different providers that attend to a single client.

In spite of this, these practices were not consistently adopted across health facilities. PATH's assessment report found waiting rooms often overcrowded with little-to-no physical distancing (especially in Addis Ababa), inadequate efforts to minimize contacts between providers and staff, and lack of adequate PPE and IPC supplies, like disinfectants.¹⁰

Questions to consider when evaluating the effectiveness of IPC guidelines:

- What factors facilitated or hindered effective implementation of IPC guidelines (e.g., space, supplies, communication materials, etc.)?
- How does the adoption of IPC guidelines differ between urban centers and rural areas? What are the reasons for any differences in implementation?

Adaptations in health systems building blocks

Many of the policies reviewed acknowledge that the health system may be stretched or overwhelmed during the pandemic response and therefore underscore the importance of strengthening its baseline capacity to ensure uninterrupted EHS delivery. Thus, while Ethiopia has few service-level adaptations (instead focusing on infection prevention control measures during routine service delivery), there are several health systems strengthening adaptations that are recommended. The following health system strengthening interventions are recommended to indirectly support quality provision of care.

Regular data review and data-driven decision-making on service prioritization

Though EHS delivery was expected to continue as normal, the policies recommend that regular reviews of the local burden of disease should occur, with weekly reporting on the performance of essential health services to the FMOH, to help the health system rapidly adapt to the changing nature of the pandemic. Regional Health Bureaus and woreda health offices could remap referral pathways, hire or reassign human resources, designate or repurpose facilities as COVID-19-only institutions, or postpone or suspend routine services depending on the data reviewed. The policies also highlight the importance of transparency and communication of any adjustments with the public—both with regard to the continued availability of EHS but also any changes or suspension in routine services.

Questions to consider when evaluating the effectiveness of data-driven service revision:

- Knowing that COVID-19 has also disrupted some surveillance and reporting systems, is complete and accurate data available in a timely manner to relevant decision-makers?
- Do stakeholders have the authority and autonomy to make decisions based upon the data for their locality, and then implement changes as they see fit?

Intensified demand generation for RMNCAYH-N during COVID-19

Demand generation activities for RMNCAYH-N services were encouraged to continue to both increase demand for RMNCAYH-N services and also to raise awareness of the continued availability of EHS at all levels of the health system. For the latter, demand generation activities were tasked to address fears around catching COVID-19 at facilities, which could depress demand and result in low uptake of EHS, and to highlight the importance of care seeking for EHS. The benefits of family planning, vaccinations, exclusive breastfeeding, etc., were to be communicated using a variety of channels, and the risks of morbidity and mortality from avoiding services utilization emphasized. Parents especially were encouraged to seek services for children with signs of pneumonia and malaria—symptoms that are similar to COVID-19 infection—so that they could be quickly and appropriately treated.

Questions to consider when evaluating the effectiveness of intensified demand generation:

- To what extent was messaging developed to specifically address patients' fears about seeking essential health services? Were there certain services that needed more attention than others and why (i.e., more communication around pneumonia and malaria because symptoms are similar to those of COVID-19)?
- How effective is social and behavior change communications (SBCC) alone in changing patients'
 care-seeking behaviors, given the other factors at play during COVID-19? Was any SBCC done as
 a package of larger interventions, and if so, which interventions?
- Were certain channels more effective than others in communicating the availability and importance of seeking RMNCAYH-N services? Why?

Adjusted stock forecasting

In light of adjusted dosing and prescription to provide pharmaceuticals for multiple months, programs were encouraged to look ahead to identify potential gaps, accelerate procurement (e.g., submit emergency procurement orders), and aim to have least four-months' supply of commodities and supplies on hand. Specifically for family planning programs, including activities addressing gender-based violence, four types of contraceptives were recommended for an emergency order placement:

- 1. Etonogestrel, 68-mg subdermal implant (IMPLANON).
- 2. Levonorgestrel (D-Norgestrel), 0.75-mg tablet.
- 3. Misoprostol, 200-mcg tablet.
- 4. Misoprostol, 25-mcg tablet.

For nutrition interventions, programs were encouraged to pre-position commodities with a buffer stock of two months, including ready-to-use foods, micronutrient supplements, F-100 and F-75 therapeutic milk products, and routine medicinal supplies. Immunization programs were tasked with fast-tracking vaccine procurement.

Questions to consider when evaluating the effectiveness of stock forecasting:

- Did facilities follow the guidelines and place emergency procurement or advance orders? Why or why not? How did advance stock availability affect program activities?
- To what extent is the supply chain system able to handle increased volume of orders? Were there bottlenecks and where? Were there any issues of facilities overstocking and/or products expiring?

Looking ahead

This brief summarizes the policy response to maintaining essential health services during the pandemic, but it does not detail or assess implementation of those policies. Notably, Ethiopia did not experience as many COVID-19 cases as originally feared and has revised its overall approach over the course of the pandemic. For example, the designated, separate COVID-19 facilities were converted back to their regular functions, as quarantine facilities were not needed; they are now treating both COVID-19 and non-COVID-19 patients, and university medical facilities have reverted to teaching functions.

In addition, the FMOH invested time and money into other efforts to assist with the pandemic response that significantly affected health service delivery but are not covered in the official policies. For example, COVID-19 prevention efforts were prioritized above all else, which meant that already scarce financial resources were reallocated to purchase new PPE and other IPC materials. Through the Universal Health Coverage Partnership, there was also an attempt to recruit and onboard 23,000 new health workers to address potential health worker capacity shortfalls. Even though only about 50 percent of health workers were recruited and trained, this infusion of human resources would have affected EHS delivery.

Given the rapidly changing context, further research is needed to understand implementation of policies in maintaining RMNCAYH-N service delivery. Questions for consideration may include:

1. Ethiopia's guidance relies heavily on the maintenance of the previously defined *Essential Health Services Package*. However, the introduction of the EHS package was only undertaken in November

- 2019, just a few months before the pandemic started. To what extent was the EHS package fully introduced and delivered prior to COVID-19, and what have been the implications for a strategy focused primarily on maintenance of that package?
- 2. Despite the focus of Ethiopia's COVID-19 response on maintaining EHS, it appears that this policy guidance has not uniformly reached stakeholders at lower levels. Per PATH's assessment report, "None of the health posts and only 71 percent of health centers reported receiving guidelines from FMOH/RHB on maintaining EHS in the context of the COVID-19 pandemic." How have these policies been disseminated to health facilities, or what management practices have been used to ensure uptake of policy recommendations?
- 3. While policies recommend the maintenance and adaptation of health services, to what degree is this guidance being implemented in health facilities as recommended?
- 4. Given that the COVID-19 burden was not as high as expected and there have been other concurrent emergencies, to what degree have policies been revised, adapted, or customized at the regional level to address local contexts?

Lastly, there is limited research to date on which adaptations are the most feasible, acceptable, and effective in maintaining essential health services during COVID-19. Further examination and study of these adaptations is required to understand which adaptations have the greatest impact; specific questions of interest are noted in the above sections. Lessons learned from Ethiopia's approach to bolstering the health system rather than service delivery—level modifications would have valuable implications for both health systems strengthening interventions as well as future pandemic responses.

References

- John Hopkins University. COVID-19 Dashboard by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University (JHU). https://gisanddata.maps.arcgis.com/apps/opsdashboard/index.html#/bda7594740fd40299423467b48 e9ecf6.
- Zikargae M. COVID-19 in Ethiopia: assessment of how the Ethiopian government has executed administrative actions and managed risk communications and community engagement. *Risk Management and Healthcare Policy*. 2020;13:2803–2810. https://doi.org/10.2147/RMHP.S278234.
- 3. Hussen M, Oljira L, Teji Roba K, et al. Containment of COVID-19 in Ethiopia and implications for tuberculosis care and research. *Infectious Diseases of Poverty*. 2020;9. Article number: 131; Table 2. https://doi.org/10.1186/s40249-020-00753-9.
- 4. Immunization Service continuation and or Mitigation Plan during COVID 19 Draft0.doc https://path.box.com/s/o6aneww8py269g0ua0gyvxrhnivvjipk.
- 5. Ogunleye OO, Basu D, Mueller D, et al. Response to the novel corona virus (COVID-19) pandemic across Africa: successes, challenges, and implications for the future. *Frontiers in Pharmacology*. 2020;11:1205. https://doi.org/10.3389/fphar.2020.01205.
- Harris D. How have COVID-19 and movement restrictions affected poor and vulnerable groups in Ethiopia? Findings from qualitative exploratory interviews with civil society organisations (CSOs) [blog post]. OPM Blog. June 2020. https://www.opml.co.uk/blog/how-have-covid-19-and-movement-restrictions-affected-poor-and-vulnerable-groups-in-ethiopia.

- 7. Partnership for Evidenced-Based Response to COVID-19. *Finding the Balance: Public Health and Social Measures in Ethiopia*. August 19, 2020. https://preventepidemics.org/wp-content/uploads/2020/09/09082020-ethiopia.pdf.
- Ethiopia Ministry of Health (MOH). Essential Health Services Package of Ethiopia. Addis Ababa: MOH; 2019. https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/essential_health_services_package_of_ethiopia_2019.pdf.
- 9. National Comprehensive COVID19 Management Handbook. FMOH, Ethiopia. First edition. APRIL 2020.
- 10. PATH. A Rapid Assessment of Essential Health Services: Utilization and Operational Strategies Employed to Maintain Essential Health Services Amidst the COVID-19 Pandemic in Addis Ababa, Amhara, Afar, and Somali Regions. Seattle and Addis Ababa: PATH; September 2020. https://path.box.com/s/rq6r24nfm8vwuvmri24ecyw5lem5ur4y.
- 11. Implementation Guide to Maintain Essential Health Services duringCOVID-19 Pandemic Volume 1. April 2020. https://path.box.com/s/12z2ymixjlnefz6luivtjdm9s5vbrbd0.
- 12. Universal Health Coverage Partnership website. How Ethiopia prepared its health workforce for the COVID-19 response [article]. December 2, 2019. https://www.uhcpartnership.net/story-ethiopia/.

Annex: Policies reviewed

Policy document title	Date of publish	Hyperlink (if available)
National Comprehensive Covid19 Management Handbook	April 2020	http://www.moh.gov.et/ejcc/sites/default/files/2020 = 04/COVID%2019%20Handbook%20for%20health %20professionals%20FMOH%202020.pdf
Emergency Nutrition Programming Recommendations for COVID-19	April 2020	https://reliefweb.int/sites/reliefweb.int/files/resourc es/emergency_nutrition_covid- 19_recommendations_030420.pdf
Immunization Service Continuation and/or Mitigation Plan during COVID-19	No date	No public link available.
Child Health COVID-19 Response and Impact Mitigation Plan	No date	No public link available.
Preparedness and Response Plan for COVID-19: Scenario 3	No date	https://www.rvo.nl/sites/default/files/2020/05/Nationaal-Actieplan-Ethiopie-COVID-19-ENG.pdf
Ethiopian Health Care Facility COVID-19 Preparedness and Response Protocol	No date	https://www.ephi.gov.et/images/novel_coronavirus /PHEOCFacility-prepardness_COVID-19- _March-2020.pdf
Implementation Guide to Maintain Essential Health Services during COVID- 19 Pandemic	April 2020	No public link available.
Programmatic Guidance and Mitigation Plan for Reproductive, Maternal, Neonatal, Child, Adolescent and Youth Health and Nutrition Services in the Context of the COVID-19 Pandemic	No date	No public link available.
Interim Guidance for management of People Living with HIV (PLHIV) in the context of COVID-19 Outbreak in Ethiopia	March 2020	https://www.differentiatedcare.org/Portals/0/adam/ Content/C5Yw3lbG60aV1uKblq69rw/File/Interim %20Guidance%20for%20management%20of%20 %20PLHIV%20in%20the%20Context%20of%20% 20COVID-19(1).pdf
Afar Regional State Health Bureau Novel Coronavirus (2019-nCoV) Outbreak Preparedness and Response Plan (EPRP)	2020	No public link available.
Call for Emergency Support against Coronavirus pandemic (Amhara State)	2020	No public link available.