



Strengthening infection prevention and control to enhance preparedness and response for COVID-19 emergencies in Ethiopia

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INTRODUCTION

- In Ethiopia, COVID-19 was declared a public health emergency on March 11, 2020, with the first case reported on March 13, 2020.
- As of July 27, 2022, Ethiopia recorded 491,834 confirmed cases of COVID-19 and 7,567 deaths.
- The COVID-19 pandemic threatened national health care systems' capacity to provide essential health care to their populations, which was even worse in fragile, low-resource settings.
- The situation in Ethiopia was exacerbated by existing challenges, including conflict and critical gaps in supplies and a trained workforce.
 - ✓ Severe shortage of critical supplies, such as N95 respirators, gowns, alcohol-based hand rubs (ABHRs), etc.
 - ✓ Lack of isolation space for COVID-19 patients, limited awareness on applying standards and protocols, safe handling of specimens, and rational use of PPE
 - ✓ Absence of capacity, strategies, and tools to prepare for a surge in COVID-19 cases and the lack of risk communication materials
 - ✓ Need to rapidly train a large number of health care workers
- The infection prevention and control (IPC) strengthening efforts of the Ministry of Health (MOH), with support from USAID MTAps since late 2018, have been critical to the overall national response to COVID-19.

METHODS

- As part of improving IPC capacity, MOH worked with USAID MTAps and Global Health Security Agenda funding to build collaboration and coordinate the national- and facility-level efforts to improve IPC.
- MOH established a dedicated national technical working group (TWG) for IPC under the National Multisectoral Antimicrobial Resistance Advisory Committee.
- MOH provided training to 25 hospitals to help them develop and implement IPC action plans.
- MTAps consulted the Ethiopian Public Health Institute (EPHI) and helped conduct rapid situational assessment using WHO COVID-19 IPC assessment tool to provide need-based support that included:
 - ✓ Strengthening the IPC-TWG to guide MOH and EPHI-Emergency Operations Center (EOC) on COVID-19 prevention and control measures
 - ✓ Developing a national COVID-19 IPC training module to build the capacity of health professionals
 - ✓ Developing COVID-19 IPC protocols and guides (supported development of more than 25 such SOPs)
 - ✓ Assigning 9 high-caliber IPC consultants at EPHI and regional health bureaus (RHBS) to support the emergency response to COVID-19
 - ✓ Building the capacity of RHBS to establish regional EOCs for COVID-19 prevention and response
- MOH built capacity of health workers through training on COVID-19 IPC measures using training of trainers and basic training approaches.
- To address the shortage of ABHRs, MOH provided training and SOPs for hospitals to enable them to produce ABHRs.

RESULTS

- An emergency response program was set up rapidly and efficiently.
- The IPC-TWG, along with the National COVID-19 EOC, produced the National Preparedness and Response Plan for COVID-19 and developed training materials for health care workers.
- The TWG also provided technical recommendations to the National Public Health EOC on COVID-19 isolation and treatment centers.
- The health facility preparedness and readiness assessment resulted in the setting up of 19 COVID-19 patient isolation and treatment centers.
- Deployed consultants helped establish regional EOCs and developed 24 guidance documents and SOPs, including surge capacity plans, which contributed to improved IPC practices at health facilities.
- The technical support provided to regions helped strengthen COVID-19 quarantine centers at points of entry in peripheral regions and airports.
- Training was provided to 5,104 health care workers on practical aspects of COVID-19 IPC.
- The 25 hospitals that received training and onsite support had strengthened IPC practices and active IPC committees, enabling them to serve as COVID-19 treatment centers.



Figure 1. Practical training on use of IPC tools and procedures (Photo credit: MTAps)

- Distribution of 5,000 SOPs and subsequent training/mentoring contributed to onsite ABHR production at more than 140 hospitals.
- Apart from addressing their own needs, some hospitals could supply ABHR to surrounding communities at reduced cost, which contributed to improved access to ABHR at the time of severe shortages.
- RHBS also supported distribution of SOPs and onsite mentoring and training for ABHR production.



Figure 2. Compounding of ABHRs at hospitals (Photo credit: MTAps)

LESSONS LEARNED

- Strong multisectoral collaboration provided a wider channel for communication and dissemination of technical approaches and resources.
- Identifying and working with champions and trainers accelerated the scale-up of IPC interventions, which served as a steppingstone for broader IPC and COVID-19 pandemic response.
- In emergencies, local solutions can provide immediate relief to potential disruption of supplies and services.
- Results measurement needs to be built into programs like this from the start.
- Health systems strengthening is foundational for response efficiency, and MOH leadership was key for effective coordination of partners' efforts.

CONCLUSION

The MTAps-supported IPC measures at national and facility levels served as a springboard to enhance the national response to the COVID-19 pandemic in Ethiopia. MTAps technical assistance was particularly valuable in developing technical guidance, capacity building, response planning, and monitoring adherence to standards. This support which reflects the "health systems approach" was critical to effectively deal with the emergency. The IPC-TWG spearheaded implementation of IPC measures at various health system levels and played a critical role in pandemic response. Hospital-based ABHR production was an innovative and cost-effective local solution that addressed immediate needs and contributed to sustaining IPC practices by ensuring continued ABHR supply.

RECOMMENDATIONS

- After the COVID-19 crisis ends, Ethiopia must ensure continuity of these best practices to maintain capacity that enables swift response to potential future pandemics.
- Effective implementation of the key recommendations highlighted in the national guidance resources, such as the IPC policy, guidelines, training packages, etc., should continue with expanded geographic coverage.
- Improve evidence-based decision making through routine generation of data on IPC practices to guide continuous quality improvement.