Conflict, community, and COVID-19: response and implications in Ethiopia

Martin Plymoth¹ | Yidnekachew G. Mogessie,²* | Israa Mohammed³ | Dawit Mengesha⁴ | Mandy Wang⁵ | Shuaibu Saidu Musa⁶ | Bezawit Kassahun Bekele⁷ | Heaven Yeshaneh Tatere⁷ | Mohamed Babiker Musa⁸ | Don Eliseo Lucero-Prisno III⁹

¹Westmead hospital, Sydney, Australia
²St. Paul’s Hospital Millennium Medical College, Addis Ababa, Ethiopia; Johns Hopkins Bloomberg School of Public Health, MD, USA,
³London School of Hygiene and Tropical Medicine, London, United Kingdom
⁴Faculty of Medicine, Saint Paul’s Hospital Millennium Medical College, Addis Ababa, Ethiopia
⁵Department of Women’s and Newborn Health, Westmead Hospital, New South Wales, Sydney, Australia
⁶Department of Nursing Science, Ahmadu Bello University Zaria, Nigeria
⁷Addis Ababa University, Ethiopia
⁸Faculty of Pharmacy, Omdurman Islamic University, Khartoum, Sudan
⁹Department of Global Health and Development, School of Hygiene and Tropical Medicine, Faculty of Management and Development Studies, University of the Philippines (Open University), London, Los Baños, Laguna, United Kingdom, Philippines

Abstract
Community transmission of COVID-19 is currently on the rise in Ethiopia, while availability of diagnostic and treatment services remains limited. Impaired access to essential services is affected by the pandemic’s strain on the health system, and as a consequence of the country’s public health response. The ongoing conflict in the Tigray Region provides another obstacle to accessing and providing care for the local population; and has displaced large numbers of people both within and outside the country.

In this commentary we discuss the impact of the conflict on essential services and argue that a coordinated holistic response is essential to mitigate both short and long-term consequences of the conflict, including increased COVID-19 transmission, acute malnutrition, disruption of education services, displacement of people, and food insecurities. We highlight the important role of community engagement in prevention and early detection of these challenges, and the need for comprehensive interventions in the region.

Keywords: Ethiopia, Tigray, COVID19, conflict, malnutrition, community.

Copyright: © 2022 The Authors. This is an open access article under the CC BY-NC-ND license (https://creativecommons.org/licenses/by-nc-nd/4.0/).
INTRODUCTION

The Coronavirus Disease 2019 (COVID-19) pandemic has had an undeniable impact on people’s livelihood, health, and development in Ethiopia. As of April 30th 2021, Ethiopia has had 257,422 confirmed COVID-19 cases and 3,688 deaths, while experiencing a sharp increase in community transmission during early 2021 (1). With an ongoing conflict and humanitarian crisis in the Tigray Region, the Ethiopian government and aid organizations risk facing a “perfect storm” of healthcare system collapse, malnutrition, population displacement, and an increase in COVID-19 transmission.

Pandemic response

Ethiopia’s response to the COVID-19 pandemic has not followed the same vertical public health approach as seen in several other sub-Saharan countries (2). Instead, focus has been on preventing interruptions to ongoing essential health, economic, and social services. Full-scale lockdown has been avoided by implementing early public health interventions such as airport quarantine, mandatory face mask use, and house-to-house symptom screening using a dense network of local community workers (3). The latter have also been essential in clear and effective communication with the public, overcoming barriers in the form of misinformation, including on social media; language barriers (with over eighty spoken indigenous languages); and illiteracy rates above 30% (4, 5). Nevertheless, preventative measures have not been without controversy.

A five-month state of emergency was declared in April 2020, postponing the expected parliamentary election until June 2021. Furthermore, the pandemic response has led to a significant economic slowdown, with many Ethiopian families at risk of being pushed into extreme poverty (6).

Conflict

The political situation in Ethiopia has remained tumultuous throughout the previous decade. Parties have been split along ethnic lines, creating tension between ethnic groups as minorities often have felt neglected and undermined. The Tigray People’s Liberation Front (TPLF) stayed in power for almost 30 years and has only recently been replaced by the current government of Prime Minister Dr. Abiy Ahmed in 2018. Political tensions between the federal government and the TPLF rose during the second half of 2020 after a regional election considered illegitimate by the government took place. In November, this escalated into an armed conflict. Concomitantly, disruptions of internet and telephone services were implemented in the region, and has since only partially been restored (7).

Impact on health services and humanitarian aid

The ongoing conflict in the Tigray Region has added yet another element of complexity to the country’s pandemic response, with restrictions on humanitarian organizations limiting the provision of essential services and aid to address food shortages for the civilian population. At the same time, the number of people in need of aid in the region has doubled to an estimated 2.3 million (7). Concerningly, it has taken more than five weeks after the onset of fighting for aid workers to be allowed access into the region; while continuing to face severe risks to personal safety, with at least 9 aid workers reported to have been killed since the onset of conflict (8).

As of early 2021, few hospitals and health centres are fully operational. An urgent need for health workers, hospital beds and medical supplies in the region due to the conflict is further exacerbated by the ongoing transmission of COVID-19, as is currently observed in other parts of the country. Between November 2020 and April 2021, COVID-19 surveillance in the region was completely interrupted but has since been re-established. With the increase in Ethiopian cases,

Supplementary information The online version of this article (Figures/Tables) contains supplementary material, which is available to authorized users.

Corresponding Author: Yidnekachew G. Mogessie, St. Paul’s Hospital Millennium Medical College, Addis Ababa, Ethiopia. Email: yidnekachewmogessie@gmail.com
testing capacity is a growing concern and remains limited to certain high-risk groups (1, 7).

As the conflict in the Tigray Region drags on into 2021, the impact on healthcare services, including COVID-19 testing and treatment, will likely be substantial. Similar dragged-out conflicts, such as the civil war in Yemen, have put the healthcare infrastructure on the brink of collapse. Limited water and sanitation services during a prolonged conflict increase the risk of waterborne diseases, including a potentially catastrophic cholera epidemic. Vaccination services are also likely to be interrupted, causing an increased risk of measles and diphtheria outbreaks, and limiting opportunities for a comprehensive COVID-19 vaccination campaign. Combined with malnutrition and other comorbidities (including medication shortages for chronic diseases) this will inevitably also lead to higher mortality rates from COVID-19 (9).

Health of refugees

The large displacement of people both within Ethiopia and to neighbouring countries due to fighting and food shortages has important implications for COVID-19 transmission. Modelling studies of outbreaks in refugee camps have shown that overcrowding, poor sanitation, and frequent contact between camp residents can lead to a rapid transmission of the virus.

Sudan has received more than 63,000 refugees from the Tigray Region, while over 1.7 million people are displaced within the country due to the conflict. It remains essential that measures are put in place to prevent outbreaks in these camps, including consistent use of face masks and adherence to hand hygiene, as well as structural interventions such as dividing camps into subunits combined with effective isolation of positive cases (8, 10).

Malnutrition and food insecurity

The COVID-19 pandemic is predicted to reverse years of progress in fighting malnutrition and lead to over 100,000 news deaths among children younger than 5 years globally (11). The pandemic has further impacted the ability of government and aid organizations to reach out to affected communities. Food insecurity has long been a reality in most Tigrayan households, but has further increased in severity due to recent conflict (7, 12).

Several areas in Tigray Region are facing emergency levels of food insecurity throughout 2021, corresponding to very high levels of acute malnutrition and excess mortality (8). Restrictions, including lack of school meals due to school closure, fears related to COVID-19 transmission, economical despair, and reduced public transport, are likely to delay parents with malnourished children in seeking care until a later stage of presentation (2). These effects can be mitigated by the scale-up of community-based management of acute malnutrition to detect cases early on; however, without safe passage for aid workers, this becomes a formidable challenge. Furthermore, microtransactions to support agricultural workers, including animal feed and cash transfers, could prevent economical despair and secures harvests.

Education

Primary and secondary education (grades 1-12) has remained closed throughout Ethiopia from mid-March; and has since only gradually started to reopen as of October 2020. While some private schools have provided limited forms of remote teaching, the vast majority of students have been unable to access this over a period of nearly seven months. This interruption of education services is likely to be not only detrimental for the growth and development of children, but also places them at increased risk of sexual abuse and/or child labour, including arranged marriages and human trafficking. Furthermore, it may have long-term consequences for the country in the form of reduced human assets and economic opportunities.

As of late November 2020, 90% of schools in the country were reported to have reopened, nevertheless with decreased back-to-school rates. Concerningly, these figures exclude the Tigray Region, where the conflict continues to interrupt essential education services and where re-enrolment is likely to be even lower (4). With one-third of refugees from the ongoing conflict being children, these services
must continue to be provided even in temporary accommodation settings, using approaches such as recruiting and supporting teachers from the refugee population (13).

**Risk communication and community engagement**

Despite the ongoing pandemic, activities to promote community engagement continues to be an essential tool in holistically promoting health globally (14). Since the start of the pandemic, the Ethiopian government has used its decentralized healthcare system to reach and educate communities in order to mitigate the spread of COVID-19 (4). To achieve this, health extension workers (connected to health posts caring for 3,000-5,000 residents) require further training in community engagement, infection prevention, sanitation and hygiene, as well as care for victims of sexual violence (4, 5, 15). With comprehensive training, including the early detection of malnutrition and provision of safe maternity services, these individuals will have key roles in re-establishing essential services in the Tigray Region.

**CONCLUSIONS**

The COVID-19 pandemic and the associated public health response are having a dramatic indirect impact on the wellbeing of the Ethiopian population, despite measures taken to mitigate this. As of early 2021, the humanitarian situation in Tigray Region remains extremely grave. A prolonged armed conflict risks causing a collapse of healthcare services, with internally displaced people and refugees vulnerable to COVID-19 transmission and associated health complications. Therefore, a diplomatic solution to end the armed conflict is required to reduce suffering of the civilian population. Comprehensive interventions by both governmental and non-governmental organizations should include promoting and ensuring safety of local community and healthcare workers, supporting immunization programmes, establishing food security, and re-establishing communication services.

**INFORMATION**

**Funding.** The authors received no financial support for the research, authorship, and/or publication of this article.

**Competing interests.** The authors declare that they have no competing interests.

**Contributions.** All authors contributed to the conceptualization, writing, review, and approval of the final manuscript. All authors fulfill ICJME criteria. All authors have read and approved the final manuscript.

**REFERENCES**

1. Humanitarian Situation Report (Includes Tigray Response). Unicef Ethiopia. 2021;Available from: https://uni.cf/3cOXAE1.

2. Haider N, Osman AY, Gadzekpo A, Akipede GO, Asogun D, Ansumana R. Lockdown measures in response to COVID-19 in nine sub-Saharan African countries. BMJ Global Health. 2020;5(10).

3. Shigute Z, Mebratie AD, Alemu G, Bedi A. Containing the spread of COVID-19 in Ethiopia. Journal of Global Health. 2020;10(1):10369–10369.

4. COVID-19 Situation Report No. 21: November 2020. UNICEF Ethiopia. 2020;Available from: https://uni.cf/3ezr3SY.

5. How Ethiopia prepared its health workforce for the COVID-19 response 2020. Universal Health Coverage Partnership . 2020;Available from: https://www.uhcpartnership.net/story-ethiopia/.

6. Socioeconomic Impacts of COVID-19 in Four African Countries. The World Bank. 2020;Available from: https://bit.ly/3TOcNWii.

7. Ethiopia - Tigray Region Humanitarian Update. UN Office for the Coordination of Humanitarian Affairs. 2021;Available from: https://reports.unocha.org/en/country/ethiopia/.
8. Ethiopia - Tigray Region Humanitarian Update, 12 February 2021. UN Office for the Coordination of Humanitarian Affairs. 2021;(1). Available from: https://reports.unocha.org/en/country/ethiopia/.

9. Looi MK. Covid-19: Deaths in Yemen are five times global average as healthcare collapses. BMJ Clinical research. 2020;370:2997–2997.

10. Gilman RT, Mahroof-Shaffi S, Harkensee C, Chamberlain AT. Modelling interventions to control COVID-19 outbreaks in a refugee camp. BMJ Global Health. 2020;5(12).

11. Headey D, Heidkamp R, Osendarp S, Ruel M, Scott N, Black R. Impacts of COVID-19 on childhood malnutrition and nutrition-related mortality. Lancet. 2020;396:519–540.

12. Birhanu TT, Tadesse AW. Food Insecurity and Mental Distress among Mothers in Rural Tigray and SNNP Regions. Ethiopia Psychiatry Journal. 2019;p. 7458341–7458341.

13. Regional Update #10: Ethiopia Situation (Tigray Region). United Nations High Commissioner for Refugees. 2021;Available from: https://bit.ly/3x36hBi.

14. Gilmore B, Ndejjo R, Tchetchia A, Claro VD, Mago E, Diallo AA. Community engagement for COVID-19 prevention and control: a rapid evidence synthesis. BMJ global health. 2020;5(10).

15. Brown AT, Neill OM, Yoon KY. Cluster coordination in a government-led emergency response in Ethiopia. Field Exchange. 2017;56:20–20.

How to cite this article: Plymoth M., G. Mogessie, Y., Mohammed I., Mengesha D., Wang M., Musa S.S., Kassahun Bekele B., Tatere H.Y., Musa M.B., Lucero-Prisno III D.E. Conflict, community, and COVID-19: response and implications in Ethiopia. Journal of Public Health in Africa. 2022;13:1957. https://doi.org/10.4081/jphia.2022.1957