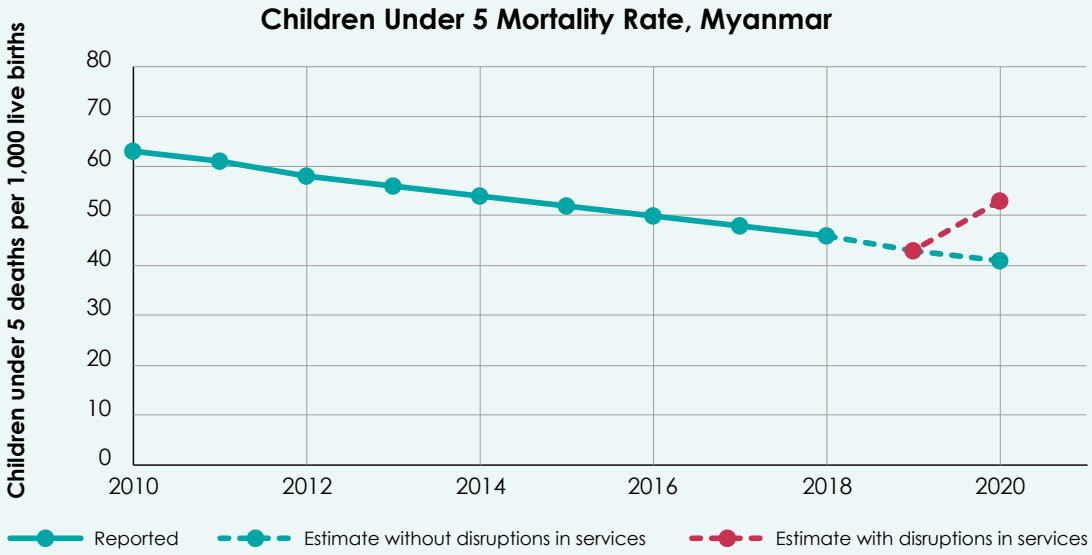
PRESERVE ESSENTIAL HEALTH SERVICES DURING THE COVID-19 PANDEMIC

MYANMAR

GLOBAL FINANCING FACILITY

Key Messages

The COVID-19 pandemic threatens to disrupt the provision of essential services due to barriers to the supply and demand for services. Mathematical models indicate that large service disruptions in Myanmar have the potential to leave 669,200 children without oral antibiotics for pneumonia, 1,092,500 children without DPT vaccinations, 87,300 women without access to facility-based deliveries, and 1,692,600 fewer women receiving family planning services. As a result of disruptions in all essential services, both maternal and child mortality in Myanmar could increase by 22 percent over the next year. Maintaining essential health services during the COVID-19 pandemic is critical to prevent these severe outcomes and protect the gains made over the past years in reducing maternal and child mortality.



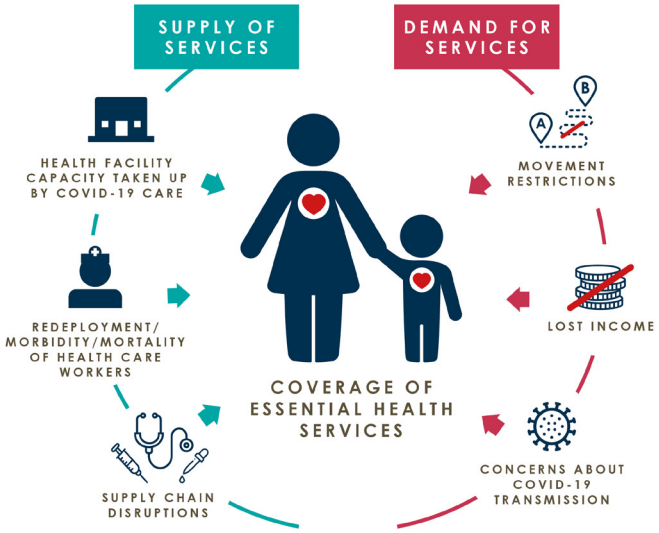
The COVID-19 pandemic is causing widespread disease and death. In addition to mortality and morbidity directly attributed to COVID-19, the pandemic poses a significant risk of indirect morbidity and mortality from other preventable and treatable diseases if the provision of essential health services is disrupted.

Such a disruption could come from both supply and demand-side factors. On the supply side, medical personnel normally providing essential health services could be diverted to respond to COVID-19 and large numbers of health care workers could become ill or die. Health facilities could be overwhelmed by large numbers of COVID-19 patients needing management and treatment. Finally, global supply chains for essential supplies and equipment may be disrupted due to production shifting to COVID-19 related supplies, declines in production due to disruptions in the availability of raw materials, and substantial delays in delivery times due to transport and movement restriction. During the 2014-2015 Ebola outbreak, many vaccine programs were suspended, and in April 2020 the Global Polio Eradication Initiative announced a pause in polio immunizations worldwide to divert personnel and supplies toward the response to COVID-19[1][2]. There is already evidence that COVID-19 is causing high rates of morbidity and mortality among health care workers, leading to further staffing shortages[3]. Many family planning clinics in Asia have reported shortages in modern contraceptives, and UNFPA has reported commodity production shutdowns, delays in procurement and increased prices[4].

On the demand side, people may use fewer essential services during the COVID-19 pandemic due to lockdowns or other mobility restrictions. Income lost due to lockdowns may limit people's ability to pay for services and limit utilization. People may be less likely to seek care due to concern about being exposed to COVID-19. During the 2003 SARS epidemic, a 24 percent decline in outpatient services was observed and was largely attributed to people's fears about the contagiousness of SARS, which made them afraid

to seek health care[5]. During the 2014-2015 Ebola outbreak average health care utilization declined by 18 percent, but declines were larger for maternal and child health services; for example, facility-based deliveries dropped by 28 percent[1][6][7]. In past economic crises, household income declines resulted in decreases in the use of health care services, and these were more extreme for children as compared to adults[8]. Preserving essential health care services is therefore especially important for protecting the health and well-being of mothers and children.

Factors Affecting the Use of Essential Health Interventions during the COVID-19 Pandemic



Potential Impact of COVID-19 Disruptions to Essential Health Services

Modeling estimates using the Lives Saved Tool (LiST) model show that COVID-19-related disruptions could leave many women and children without access to essential services and result in increased maternal and child morbidity and mortality (see methods box). If declines in service utilization similar to those observed in other epidemics occur in Myanmar, as many as 669,200 fewer children would receive oral antibiotics for pneumonia and 1,092,500 fewer would receive DPT vaccinations[9]. There would also be 87,300 fewer facility-based deliveries and 1,692,600 fewer women would access family planning services.

Examples of How Disruptions in Essential Services Would Lead to Fewer People Receiving Services

	Current coverage	Coverage if services disrupted	Fewer people receiving services due to disruptions
Oral antibiotics for pneumonia in children	**59%**	**30%**	**669,200**
DPT vaccine* for children	**91%**	**44%**	**1,092,500**
Facility-based delivery	**37%**	**19%**	**87,300**
Contraceptive prevalence rate (CPR)**	**57%**	**34%**	**1,692,600**

* Diphtheria, pertussis (whooping cough), and tetanus vaccinations.
** CPR includes both modern and traditional methods and is calculated for married women only.

The interventions in the table above are illustrative of how disruptions can lead to fewer people receiving services. If the coverage of all essential maternal and child health interventions in Myanmar decreased in a similar way, the result would be a 22 percent increase in both maternal and child mortality over the next year. Evidence also suggests that the breakdown in primary care service provision during an epidemic can lead to longer-term increases in indirect mortality. In West Africa the Ebola epidemic has continued to have an effect on utilization of essential services, likely due to the lack of trust in the health care system[10].

A Call to Action

Preserving essential health care services is critical to prevent avoidable losses of maternal and child lives during the COVID-19 pandemic and to protect progress in reducing maternal and child mortality achieved over recent years (see box for useful resources). Therefore, strategies to maintain essential health services need to be part of Myanmar's response to the COVID-19 pandemic.

Useful Resources for Countries to Maintain Essential Services During the COVID-19 Pandemic

Operational Guidance from the World Health Organization (WHO): https://www.who.int/publications-detail/covid-19-operational-guidance-for-maintaining-essential-health-services-during-an-outbreak/

Comprehensive list of guidance for maintaining essential services during the COVID-19 pandemic: https://www.who.int/pmnch/media/news/2020/guidance-on-COVID-19/en/

Resources from the Global Financing Facility (GFF): https://www.globalfinancingfacility.org/CoVid19/

Methods

The impact of the decline in the coverage of essential services on child and maternal deaths was estimated using Lives Saved Tool (LiST). LiST is a mathematical model that allows for calculating the impact of changes in a wide range of evidence-based maternal and child health and nutrition interventions on maternal and child mortality, and on various other morbidity- and nutrition-related outcomes. More information on the tool can be found at www.livessavedtool.org

The impact estimates presented in this brief are based on an analysis by Roberton and colleagues at Johns Hopkins University Bloomberg School of Public Health.[11] Based on the estimates of the service coverage reductions observed during the Ebola epidemic, the authors calculated plausible reductions in the utilization of 68 essential maternal and child interventions due to the COVID-19 pandemic. Reductions ranged from 10% to 52%. Roberton and colleagues used LiST to calculate maternal deaths and deaths of children under the age of 5 resulting from those reductions. Analyses were conducted individually for 81 countries and then aggregated to generate global estimates of maternal and child mortality increases. The data presented in this brief are the country-level data used by the authors to generate the global estimates. Estimates are for the scenario with the highest service reductions (scenario 3) under the assumption that disruption in essential services will last 6 months.

The graph comparing the difference between the child (under 5) mortality rate following current trends and under the service disruption scenario was generated by extrapolating the current trend in the under-5 mortality rate (U5MR) from 2010 to 2018, to 2019, to establish the baseline of U5MR in 2019. The data on U5MR was extracted from the World Development Indicators (WDI) database. Then, two estimates for 2020 were generated: one as the linear continuation of the trend through 2020, and another, as a change in the current trend due to service disruptions. The latter was calculated by dividing the 2019 baseline for under-5 deaths plus additional deaths resulting from service disruptions (estimated using the LiST model following the Johns Hopkins team's approach) by the estimated number of live births in 2020. The number of live births was extrapolated to 2020 using the trend in live births between 2010 and 2018. Live births between 2010 - 2018 were calculated by dividing the child deaths data extracted from the WDI by the U5MR, and then multiplying the number by 1,000.

The table of total service reduction due to disruption (for 4 interventions[12]) was calculated by multiplying the percentage point decrease in service coverage by the relevant population – women (15-49), children (0-59 months) or live births – for each intervention. The resulting number was divided by two to reflect the assumption that disruption in essential services will last for 6 months (rather than a fully year). The percentage point decrease in coverage is the difference between the baseline coverage of the intervention, and estimates of reduced service coverage due to disruption used by Roberton and colleagues.

(1) Ribacke KJB, DD Saulnier, A Eriksson, J von Schreeb. 2016. Effects of the West Africa Ebola virus disease on health-care utilization - A systematic review. *Frontiers in Public Health* 4: 1–12.

(2) Global Polio Eradication Initiative (GPEI). 2020. *Call to Action to Support COVID-19 Response: Polio Oversight Board Statement.* http://polioeradication.org/news-post/call-to-action-to-support-covid-19-response/

(3) Brown T. 2020. Healthcare Workers in China Hit Hard by Novel Coronavirus. *Medscape*, February 11, 2020. https://www.medscape.com/viewarticle/925134

(4) WHO, UNFPA, IPPF and Jhpiego. 2020. *Covid-19 and Implications for Family Planning Service Delivery* (Webinar). April 7, 2020 https://www.youtube.com/watch?v=mb8Kv75iklk&t=5s.

(5) Chang HJ, N Huang, CH Lee, et al. 2004. The Impact of the SARS Epidemic on the Utilization of Medical Services: SARS and the Fear of SARS. *American Journal of Public Health* 94: 562–4.

(6) Wilhelm JA, and S Helleringer. 2019. Utilization of non-Ebola health care services during Ebola outbreaks: A systematic review and meta-analysis. *Journal of Global Health* 9(1). DOI:10.7189/jogh.09.010406.

(7) Sochas L, AA Channon, and S Nam. 2017. Counting indirect crisis-related deaths in the context of a low-resilience health system: The case of maternal and neonatal health during the Ebola epidemic in Sierra Leone. *Health Policy and Planning* 32: iii32–9.

(8) Hopkins, S. 2006. Economic stability and health status: Evidence from East Asia before and after the 1990s economic crisis. *Health Policy* 75: 347–357.

(9) Diphtheria, pertussis (whooping cough), and tetanus vaccinations.

(10) Camara BS et al., 2017. Effect of the 2014/2015 Ebola outbreak on reproductive health services in a rural district of Guinea: an ecological study. *Transactions of the Royal Society of Tropical Medicine and Hygiene*, 111(1):22–29,http://dx.doi.org/10.1093/trstmh/trx009.

(11) Roberton T, Carter ED, Chou VB, Stegmuller A, Jackson BD, Tam Y, Sawadogo-Lewis T, Walker N. Early estimates of the indirect effects of the COVID-19 pandemic on maternal and child mortality in low-income and middle-income countries: a modelling study. *The Lancet Global Health*. Published: May 12, 2020. https://doi.org/10.1016/S2214-109X(20)30229-1

(12) The four interventions in the policy brief are oral antibiotics for pneumonia, DPT vaccine, contraceptive prevalence (CPR), and facility-based delivery.