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COVID-19 disrupts vaccine delivery

The impact of the ongoing pandemic of coronavirus 2019 on immunisation campaigns in low- and middle-income countries is concerning. Roxanne Nelson reports.



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Published Online

April 17, 2020

[https://doi.org/10.1016/S1473-3099\(20\)30304-2](https://doi.org/10.1016/S1473-3099(20)30304-2)

As the pandemic of coronavirus disease 2019 (COVID-19) continues to thread its way around the globe, disruptions are occurring in healthcare, commerce, and travel, with countries closing off their borders. One of the less publicised consequences of the pandemic is its impact on the delivery of important health services, including immunisations, to populations residing in low and middle income countries.

“The magnitude of spread is unprecedented and is almost surreal”, said Robin Nandy, Principal Advisor & Chief of Immunizations at UNICEF. “It is stretching the capacity of the healthcare system and we are seeing that in the United States, and it will become more exaggerated as it begins to hit middle and low income countries.”

UNICEF is the world’s largest procurer of vaccines, but the COVID-19 outbreak threatens to disrupt immunisation and basic health services. “Obviously, when you have an outbreak like this and you have a large number of people seeking healthcare services, it does stretch existing capacity, and human and financial resources which are diverted to the response—and appropriately so”, Nandy said. “We have to deal with the emergency staring us in the face.”

That said, Nandy emphasised that other concerns cannot be ignored, and that healthcare systems are being alerted not to let down their guard. “Treatment services for malaria, pneumonia, and diarrhoea, for example, that kill large numbers of children globally, need to be kept up” he said. “We want to make sure the response to COVID-19 also balances out with other health needs.”

But immunisation services will be disrupted due to the interplay of

multiple factors. One reason is that healthcare services are stretched and directed to other priorities, and a second factor is that because of social distancing recommendations, parents are not bringing their children to clinics. Another issue, Nandy explained, has to do with the supply chain, which is under historic strain due to transport disruptions. Flight cancellations and trade restrictions by countries, as well as closing borders, have severely constrained access to essential medicines, including vaccines.

Preventive mass vaccination campaigns can also inadvertently contribute to COVID-19 spread, and UNICEF is recommending that these campaigns be suspended for now. But because immunisation campaigns are being suspended, there will be a need for “catch-up” campaigns, to identify those who missed their immunisations as well as re-establishing community demand. “We have to be mindful of the secondary impact, as twice as many children died of measles than of Ebola, during the last Ebola outbreak”, Nandy said.

Niranjan Bhat, head of Vaccine Impact Research at the Center for Vaccine Innovation and Access at PATH, Seattle, Washington, USA, noted that vaccine disruptions have already been reported. “In Vietnam, there has been a full cessation of immunisations—other than hepatitis B given at birth—across the nation from April 1 to April 15”, he said. “In Ghana, immunisation services have come to a halt in areas where movement restrictions are being enforced, while in other areas session sizes have been reduced, to limit overall group size and because some caregivers are hesitant to show up.”

The partial lockdown in the main urban areas in countries such as Ghana and Zimbabwe has triggered an exodus of people, especially those living in informal settlements, back to their hometowns and other rural areas. As a result, their children are likely to miss their scheduled immunisations, resulting in reduced coverage. The large number of people returning to more rural areas has also put a strain on local health facilities that are less well-equipped to handle an influx of people.

Bhat explained that India has instituted a full lockdown at the national level until at least April 14, and as a result, only essential and emergency medical services are operational for non-COVID19 related care in both public and private health facilities. “Because health personnel are redeployed to COVID-19 activities, no routine immunisations are happening”, he said. “Rumors are also causing disruptions. In Liberia, for example, fear of coronavirus is elevating distrust of health information and about vaccines.”

Catch-up immunisation campaigns will be exceptionally important for countries such as Pakistan, one of the last nations endemic for polio, which is following guidance from the Global Polio Eradication Initiative that all countries should postpone all outbreak response campaigns until June 1. “Immunisation registry data show significant drops in all vaccinations and a 20% absenteeism rate for vaccinators”, he added. “But the bottom line is that it is critical to maintain momentum on immunisation—both to ensure long-term progress toward health equity and to limit the impact of COVID-19.”

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