

How the covid-19 pandemic is making malaria and HIV more deadly

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by Adam Vaughan

The coronavirus pandemic's effects on healthcare for tuberculosis (TB), malaria and HIV could lead to deaths of an order of magnitude similar to those from covid-19 itself in some parts of the world, a new analysis finds.

In a worst-case scenario, malaria deaths were projected to rise by 36 per cent over the next five years as malaria net campaigns are affected in the sub-Saharan countries where the disease is most prevalent. Over the same period, deaths from TB could rise by a fifth as new cases go undetected and deaths from HIV by a tenth as access to life-saving drugs is hit.



Sanitary workers prepare to perform a fumigation in an area in Aden, Yemen, to help prevent insect-borne diseases such as malaria amid the covid-19 pandemic

Although the team behind the research doesn't give absolute figures, such extreme disruption would lead to hundreds of thousands of extra deaths each year.

For countries with high HIV, TB and malaria rates and weak healthcare systems, "this is right up there in terms of a major priority for how we're going to combat and minimise the entire risk that the covid-19 pandemic brings", says Timothy Hallett at Imperial College London, who led the study. "It's not piddly in comparison to covid-19, it's absolutely a priority."

The new warning is one part of emerging evidence revealing the death and hardship that covid-19 could wreak because of its impact on healthcare services vital for preventing and treating other major epidemics. Malaria, TB and HIV kill around 2.6 million people a year combined.

The analysis came up with four hypothetical scenarios, based on different interventions in low and middle-income countries. Hallett points out that these scenarios may not come to pass and it is hard to predict how the covid-19 pandemic will unfold. However, recent history holds precedent for possible knock-on effects. The research was inspired by what was seen during the Ebola outbreak in West Africa between 2014 and 2016, where around half of the deaths were from other diseases as healthcare systems buckled.

The ways in which covid-19 is disrupting health services differ between TB, malaria and HIV, and much of the evidence is anecdotal. Hallett tells of one NGO chartering its own plane from India to bring in generic drugs to Nigeria for HIV treatment, and of drugs stuck in ports globally because customs officials were in lockdown. As early as March, researchers told *New Scientist* of disruptions to supply chains for malaria nets across Africa.

Initial surveys suggest that some health services are struggling. The Global Fund, a crucial financier of programmes to tackle these three illnesses, found in June that 85 per cent of the HIV programmes it funds had seen disruption to delivering their services. For TB programmes, it was 78 per cent, and 73 per cent for malaria programmes.

"I think, at a global level, it's unprecedented," says Katherine Atkins at the London School of Hygiene & Tropical Medicine regarding the setback for HIV treatment, access to which has been increasing globally in recent years. Despite progress, many countries were already struggling to meet the international 2020 targets for HIV. "This is going to make it worse," she says.

Meg Doherty at the World Health Organization (WHO) says that the impact on HIV services has been "profound", largely due to disruption of antiretroviral drugs vital for people with the virus.

Some suppliers aren't delivering on time, while lockdowns and travel restrictions have hampered the drugs' movement between and within countries. Twenty-four nations around the globe have less than three months of the medicines left, says Doherty.

Testing for HIV has also been hampered, meaning an increased risk of transmission because people will be unaware they have it, says Atkins. For TB, which already kills around 4000 people daily, a reduction in diagnosis and treatment is the biggest concern. One study published last month found that without mitigation, there could be more than 200,000 deaths from TB between 2020 and 2024 across China, India and South Africa alone.

A common thread across all three epidemics is that people aren't going to healthcare facilities because they fear catching covid-19 or overwhelming the health system.

"There is a sense of anxiety, there is a sense of concern," says Salim Abdool Karim at the Centre for the AIDS Programme of Research in South Africa, citing a survey that found 58 per cent of people in South Africa were hesitant to attend healthcare facilities because of the coronavirus. "That's a major challenge as we grapple with these combined epidemics," he says.

Campaigns encouraging people to overcome those fears will be one of the key ways to mitigate the pandemic's impact on services for TB, malaria and HIV. Another step is the WHO's call for healthcare providers to issue multi-month prescriptions of antiretroviral drugs. Yet another measure is simply ensuring that diagnostic facilities remain available.

"These things are the things to do. They should have an impact on mitigating. But I don't know the extent to which they're all feasible," says Hallett.