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Examining the relationship between malaria burden and domestic spending on malaria in 106 countries, 2000–2019



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Abstract

Background In 2019, there were 231 million (95% uncertainty interval [UI] 186–290) new malaria cases across the 106 malaria-endemic countries worldwide. Since 2000, malaria control and elimination has been a priority for the international community. This has driven global health leadership to invest in prevention, treatment, and surveillance strategies. However, as countries move from malaria control to elimination, financing sources shift from mainly development assistance for health and out-of-pocket spending to government and prepaid private spending. We aimed to examine the association between malaria burden and spending on malaria prevention and treatment activities.

Methods Malaria incidence, prevalence, and mortality rates were extracted from the 2019 Global Burden of Diseases, Injuries, and Risk Factors Study. We extracted data from 546 data sources on government, out-of-pocket, and prepaid private malaria spending; cost of patient care; and drug prices for malaria-endemic countries from 2000 to 2019. We used panel regression methods to explore the relationship between malaria burden and domestic spending on malaria. We report all spending estimates in inflation-adjusted 2019 US\$.

Findings Our preliminary results suggest a negative correlation between domestic spending and new malaria cases. Additionally, decreases in malaria incidence rates were associated with increases in investment in activities to strengthen health systems and prevent malaria re-introduction. Lastly, out-of-pocket spending had a positive correlation with incidence rates in endemic countries.

Interpretation As countries succeed in reducing the malaria burden, prioritising investments in malaria surveillance and prevention is paramount to strengthen health systems, prevent resurgence, and provide financial protection to people affected by malaria.

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Declaration of interests

We declare no competing interests.

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