Avoiding another lost decade in reducing malaria burden in African infants and young children

In the past 20 years, more than 10 million malaria deaths and 1·5 billion malaria cases have been averted.[1] However, since 2017, data show that global progress has stalled and malaria cases are rising mostly in sub-Saharan Africa.[2] In this region, children younger than 2 years continue to be the group most at risk of malaria illness and death. Two approaches afford opportunities to improve malaria prevention in this age group: chemoprevention in moderate-to-high transmission areas (ie, intermittent preventive treatment of malaria in infants [IPTi], now relabelled as perennial malaria chemoprevention [PMC]) and the RTS,S/AS01 malaria vaccine.

IPTi was developed more than 20 years ago and consists of providing a stat dose of an antimalarial (eg, sulfadoxine–pyrimethamine) to infants, making use of existing patient contacts through the Expanded Program on Immunisation. An analysis of several trials in sub-Saharan Africa showed that IPTi reduced cases of malaria illness by 30%, hospital admissions by 23%, and anaemia by 21% in infants.[3,4]

Although IPTi has been recommended since 2010, few countries have adopted it, probably due to the perception that IPTi had modest efficacy, since the efficacy results referred to the entire infancy, rather than only to the time when children were being protected. Additionally, the widely voiced labelling of sulfadoxine–pyrimethamine as a so-called failed drug was based on the belief that molecular markers associated with reduced efficacy in treating clinical malaria would predict drug failure in preventing infections. A recent review shows that sulfadoxine–pyrimethamine continues to outperform all other antimalarials in preventing the consequences of malaria in pregnancy,[5,6] and continues to be highly effective in combination for seasonal use.[7] Finally, it might also be that the malaria community has historically preferred to operate through vertical approaches rather than to integrate with other elements of the health system. As such, new and more expensive delivery mechanisms were established to deliver malaria prevention tools rather than integrating the delivery into existing health systems. The antenatal care clinic and the Expanded Program on Immunisation scheme access enormous numbers of vulnerable people and yet are inadequately used to deliver the recommended malaria control tools. In contrast to seasonal malaria chemoprevention, an operation organised and delivered by the national malaria control programme of the ministry of health and which reaches more than 30 million children annually, malaria chemoprevention in pregnancy (IPTp) delivered by antenatal care services or IPTi and organised by the Expanded Program on Immunisation, exhibits low coverage.

In June, 2022, WHO released a revised policy recommendation on PMC,[8] reflecting the expansion of the Expanded Program on Immunisation into the second year of life. The new policy recommendations allow countries to adapt to the heterogeneity of malaria patterns and to other existing determinants. A less prescriptive tailoring of interventions is a key approach for the future of malaria control, and in which integration within the health system should be an essential feature.

In October, 2021, WHO recommended the RTS,S/AS01 malaria vaccine in children living in areas of moderate-to-high transmission,[9] which became another tool requiring integration into different parts of the health system. Both IPTi and the RTS,S/AS01 vaccine are most cost-effective if delivered through the Expanded Program on Immunisation and offer the possibility of combination. However, a robust routine immunisation programme is needed to achieve and sustain reductions in mortality and inequity.

To be successful, the fundamental role of the Expanded Program on Immunisation must be recognised. It is time to overcome debates on approaches to strengthening health systems. Recognition of the Expanded Program on Immunisation is more evident in the COVID-19 pandemic context in which prioritisation of investments and urgent action are needed to reverse the negative effects and the pre-pandemic trends of immunisation coverage stagnation, increased malaria incidence, and a stalled decline in malaria deaths.[2]

Finally, we urge governments to implement PMC using the aforementioned evidence and ongoing implementation studies. We cannot lose another decade in preventing malaria in those most vulnerable to the infection.

We declare no competing interests.

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