Commentary

Low coverage of intermittent preventive treatment and insecticide-treated nets for control of malaria during pregnancy in sub-Saharan Africa – what needs to be done?

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Invited commentary on 'Coverage of intermittent preventive treatment and insecticide-treated nets for control of malaria during pregnancy in sub-Saharan Africa: a synthesis and meta-analysis of national survey data, 2009–2011' by van Eijk et al.

Malaria during pregnancy poses substantial risk to the mother, fetus, and neonate, especially in sub-Saharan Africa where the burden of malaria is greatest. Using nationally representative household surveys from 2009 to 2011 to estimate antenatal clinic (ANC) attendance and coverage of insecticide-treated bed nets (ITNs) and intermittent preventive treatment of pregnancy (IPTp) with at least two doses of sulfadoxine–pyrimethamine (SP), van Eijk *et al.* report IPTp coverage of only 21.5% of the estimated 21.4 million malaria-exposed births in 27 countries in 2010.¹ ITN coverage was 38.8% for an estimated 26.9 million births in 37 countries. These figures are well below the 2005 Abuja target of 60% and the 2010 target of 80%. The 2015 target of 100% now appears far from realistic.² On the positive side, ANC coverage was relatively good with 78% of pregnant women attending ANC at least once and 75% at least twice.¹

Several country-level and maternal factors influenced the uptake of these interventions including time between policy adoption and survey, funding for malaria control, age, and gravidity. Notably, younger age, lack of education, lower socioeconomic status, and rural residence were negatively associated with IPTp use, and primigravid women were less likely to use ITNs than multigravid women. While ITN use increased from 18% in 2007 to 42% in 2010, the rate

of increased uptake of IPTp has been much slower, rising from 13% to 21.5% during the same time period. Only the Gambia and Zambia reached national coverage of more than 60% for IPTp, while five countries had ITN use levels of 60–80%. One potential reason for the success of Zambia in the delivery of at least two doses of IPTp is a policy that recommends three doses of SP during pregnancy.³ The new World Health Organization guidelines recommend monthly dosing of SP IPTp.⁴ If adopted and effectively implemented, this approach may result in less confusion about SP dosing among health workers and lead to increased delivery of at least two doses.

There is clear need to improve the use of both ITNs and IPTp to pregnant women in sub-Saharan Africa with a focus on more equitable distribution of these interventions. Another recent analysis recommends improving the quality of ANC services, including health provider adherence to national policy guidelines and improvements in supplies and logistics.⁵ However, the current analysis does not show a correlation between ANC visits and IPTp coverage,¹ so will improvements in ANC service delivery necessarily increase coverage? An alternative option is to consider a greater role for community-based strategies that employ identification of all pregnant women in communities and use community-based agents like trained traditional birth attendants and organizations such as Safe Motherhood Action Groups to deliver IPTp to women without good access to health centers delivering antenatal care.

Strengthened community-based delivery mechanisms, strong supply chain management system with a sustained supply of ITNs and IPTp commodities, and simplified SP IPTp dosing schedules are part of the systems strengthening approach that are likely to improve coverage. At current coverage rates, unless stakeholders take drastic measures, it is highly unlikely that universal coverage of IPT and ITNs during pregnancy will be achieved in sub-Saharan Africa by 2015.

Disclaimer Statement

Conflicts of interest None.

References

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