Malaria and pregnancy

Sir,

We read with interest the letter by McGready *et al.*[1] and their comments on the treatment of *Plasmodium falciparum* malaria in pregnant women. We completely agree that in highly endemic areas parasitaemic women should be treated as early as possible with efficacious and safe medication. But achieving this in tropical Africa is much harder than they imply.

First, it is untrue to claim that due to a paucity of available studies women infected with *P. falciparum* in these highly endemic areas present mild and thus undiagnosed and unreported symptoms. Quality observations have been made over the past 50 years in various African settings by skilled teams. All these show that most parasitaemic women do not present with clinical signs of malaria.

For example, our team showed in a randomised prophylaxis trial (chloroquine versus no treatment) in Burkina Faso in 1985 where 1515 women were followed weekly that 331 of them had at least one parasitaemia during follow up, but only six presented mild hyperthermia (more than 38°C).[2]

More recently, we observed 1609 deliveries in Western Madagascar in two neighbouring highland areas (unstable malaria, $n = 1255$) and lowlands (stable malaria, $n = 354$), where placental infection rates after 1 year of observation were 3.5 and 25.0%, respectively. Women received no prophylaxis. We showed that 12.2% of placental infections occurred among febrile women versus 2.8% among nonfebrile women in the highlands ($P < 10^{-3}$), which was not the case with deliveries taking place in the lowlands (25.8 and 26.3% of placental infections, respectively; $P = 0.96$).[3]

Finally, in a continuing randomised trial of intermittent preventive treatment (IPT) in Benin which started in June 2005, we found that among 52 pregnant women who presented with peripheral parasitaemia before their first intake of IPT, only four had fever ≥38°C (V. Briand, pers. comm.).

All these observations prove that, contrary to areas where malaria is unstable (such as the highlands of Madagascar or South-East Asia), parasitaemic pregnant women in sub-Saharan Africa do not frequently present clinical signs. This is not due to under-reporting.

This means that it is difficult to detect and cure early infections in pregnancy. In the absence of clinical signs, women will not feel the need to consult at a dispensary and will remain untreated. Furthermore, it seems unlikely that asymptomatic women (who have shown in the past poor compliance with weekly prophylaxis) will be sufficiently stimulated to follow a 3-day course of artesunate treatment. For the time being, IPT is probably the most satisfying solution to these problems as demonstrated by Parise *et al.*,[4] who showed in Kenya the superiority of sulfadoxine-pyrimethamine in presumptive treatment over fever case management.

In highly endemic areas of Africa, the main problem in dealing with early or asymptomatic malaria infections in pregnancy is to do with feasibility rather than ethics. This probably explains also why, until now, clinical trials of malaria treatment in pregnant women in Africa have been so scarce. ■

References

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