

## Lancet Review

### Major

It is not clear whether the authors conducted a full meta analyses as presented in the supplemental figures. If so, it is wholly unclear why this is not a major focus, including lack of methods provided for meta-analysis. The manuscript starts by reading as a review and then there are 5 supplemental figures with complex meta-analyses.

Lines 33-35-Things seems like a significant leap. Though malaria is endemic in many of the areas of SSA where these maternal deaths occur, poor access to perinatal care for dystocia, chorioamnionitis, and other causes of maternal mortality are also highly prevalent. Would temper the leap from 333,000 to 40-60,000 attributable to malaria

Page 8-the section on Foetal anaemia needs work. Many of the papers are very old or not well executed eg control for confounders. The first sentence links foetal anaemia to the very downstream effect of adult employment without any reference provided.

Also, authors conflate anaemia with what is likely iron deficiency for outcomes related to neurocognitive development. In reference 60, not clear that this paper considered joint exposure to malaria and micronutrient deficiency of iron in particular when linking maternal malaria to infant malaria.

Page 12 - Lines 374-5-would more clearly say that decreasing malarial global burden of disease may result in lowering “naturally acquired” immunity of mothers and this may result in greater risk to both mother and foetus during pregnancy with each benefitting less from that immunity.

Last sentence-would more clearly state that to avoid the above concern, will need coordinated efforts to decrease maternal and infant risk more aggressively with prevention (bed net/treatment) or active treatment of infections. Currently this idea is lost if this is what authors intend.

### Page 9

Foetal immunity paragraph is not clearly written and foetal immunity is not the correct heading. It is really infant malaria risk/outcomes. Very little is said about foetal immunity per se and this is not measured in studies. Please change.

Needs to be reworked with many awkward sentences and incorrect grammar (lines 265 – 266 for example).

Lines 280-281 also very unclear. If the point is that decreased transfer of antibodies in the context of malarial placental insufficiency increases risk, this is not clearly stated and the next sentence then proposes that antibody may be protective ultimately or just a marker for joint exposure/risk of infection? The authors need to better summarize conclusions of the 7-8 papers, even if conflicting. Currently does not really say much.

Lines 272-3 and 297-9 seem to conflict one another. One states increased malaria in pregnancy increases risk of infant malaria and the section on effects of treatment notes the opposite found in one study. The key piece is that authors better articulate why this might be in each case. They do

not state in the section on treatment that treatment may decrease protection in early infancy due to decreased transfer of relevant malaria antibodies to the foetus if mom is effectively treated.

### **Minor**

Page 3, line 31 – would add “individuals” or “women” world wide.

Lines 57-59-this sentence is unclear. Again, LBW is multifactorial and authors seem to accept the use of LBW as a proxy for placental malaria. In a review, authors need to be careful about accepting and citing this approach as it implies agreement.

Page 3 line 59-consider different word than “outputs.” Surveillance studies?

Page 4 line 86-“in” missing

Page 5, line 127. Would use a more precise word or words than “difficult labour.” I think you are implying deaths that occur during labour and delivery eg from prolonged labor from dystocia or other causes, placental abruption, nuchal cord.

Page 6 line 137- would provide a clearer explanation for the process of IUGR here. For example, LBW is determined by either short gestation (prematurity) or poor growth in utero, independent of length of gestation that is most often due to placental insufficiency, or both.

Page 6 – after line 142 would consider explaining that even in some research settings, it can be hard to determine gestational age without prenatal US or Dubowitz scoring at birth, which is necessary to determine SGA status.

Page 7 line 196 would replace remains with “are” or should be “remain”

Page 7, line 199. Would be more precise than “placental perfusion” since it is specifically transplacental if blood flow to the placenta is increased but intra-placenta flow and MCA are decreased.

Page 11- lines 325 – 6 – would change to “monthly screening interval leaves women infected for periods of time before detection or something like this. Current wording is awkward.

Lines 372-4 should be split.

Line 378-it to he/she