Reviewer’s report

Title: Incidence and serotype distribution of invasive group B streptococcal disease in young infants: a multi-country observational study

Version: 2
Date: 21 October 2014

Reviewer: kirsty le doare

Reviewer’s report:

This is an important topic and one for which data from Resource limited settings is lacking. The manuscript is generally well written and the data is presented in a coherent way. My major questions regard the methodology, where more detail is required to understand the data and the obvious differences between HK and the other sites.

Major essential
1. Methods:
   a) There is no description of the hospitals type of deliveries at each site, number of hospital vs home births, skilled birth attendants or the representativeness of these hospitals with those in the rest of the countries studied. This would help to inform how representative the populations were and so how transferable the data is to other similar settings. For example Hong Kong is a middle income country whereas Bangladesh is a low income country. How was this accounted for in the results?
   b) Sterile sites - I assume this is blood and CSF. Unless the results are also from lung aspirates in neonatal pneumonia? The data regarding this is confusing and needs clarification.
   c) amount of maternal or infant antibiotics prior to admission?
   d) Number of blood cultures taken during study period and number positive? You report some of this in the discussion section but difficult to know how good the case ascertainment is without this.
   e) selective media - which one?
   f) what is the length of follow up, inclusion and exclusion criteria?
2. Results:
   Please clarify why when 108 infants with positive cultures were identified why only 46 blood and CSF cultures were available. Please account for the other positive cultures.
3. Discussion:
   blood culture volumes in neonates have been published, I believe the recommendation is 2-3mL of blood
4. Table 1 - can you split the premature infants by prematurity in the two
hospitals reporting them?
Table 3 and 4 - these are very confusing as they currently stand - see comment above regarding sterile sites. This could all be reported in table 3.
Figure 2- can you comment on why the serotype distribution is different between the two DR hospitals?

Minor essential
1. introduction
line 64 - the incidence of African disease was based mostly on East and South African data in few studies.
line 69 - there is no case detection methodology described in your study
line 61 - incorrect reference (ref. 3)
2. methods:
line111: should read Streptex Iwith ™) and manufacturer
line 134: equation on a separate line
line 141: Wilson score interval?
3. Discussion:
line 204 - reference in incorrect format
line 231: this sentence needs correction (taken twice)
line 257 - as there is no disease the incidence estimate should be 0. This should be made more clear in this sentence.
line 264 - previously stated that all hospitals were urban, please clarify
line 275 - should this be in the results section?
4. References
Please check that all are in the correct format, e.g. reference 15

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:
I declare that I have no competing interests