Author's response to reviews

Title: Low prevalence of methicillin resistant Staphylococcus aureus as determined by an automated identification system in two private hospitals in Nairobi, Kenya: A cross sectional study

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Author's response to reviews: see over
TO:
The Editor,
BMC infectious diseases.

Dear Sir/Madam,

**RE: RESPONSE TO REVIEWERS AND EDITORS COMMENTS**

I have responded to the reviewers comments as follows:

**Major Compulsory Revision**

1. Kindly include the concentration of antimicrobial agents
   
   **Response:** Not possible as the susceptibilities presented were determined using broth dilution
   MICs as determined by Vitek 2 and not disc diffusion

2. Please indicate the antimicrobial resistance pattern of other antimicrobial agents tested on the
   3 isolates resistant to oxacillin but susceptible to cefoxitin in the results section
   
   **Response:** Done. A table has been added and labeled table 2.

3. Lines 165-166: You mentioned “MRSA prevalence of 21% in S.aureus bacteremia isolates
   165 collected between January 2003 and April 2008 at AKUHN” kindly state the method used
   in that study.
   
   **Response:** Done. Was based on retrospective laboratory data that was totally dependent on
   manual methods for identification and susceptibility. Hence the assertion that the apparent
   change in S.aureus susceptibility at AKUHN may merely be an artifact of the transition to an
   automated platform

4. Consider to include these references: Egyir et al., 2013; 2014 to support low
   MRSA prevalence (studies from Ghana (West Africa))
   
   **Response:** Done

5. Line: 235-236: I suggest you support the differences in antimicrobial resistance
   of isolates from the various hospitals include the various antibiotics prescribed in
   the two hospitals. I suggest you correlate MRSA prevalence in the hospitals with
   the usage of antimicrobial agents in both hospitals
   
   **Response:** It would be ideal to correlate with antibiotic consumption but even then, the
   correlation/association would be speculative at best especially given that at this point, we do
   not know whether most of the infections were hospital or community acquired. The paragraph
   made reference to has been modified accordingly.

6. Line 242-244: You mentioned CDC definition? It will be difficult to know if
   isolates were community acquired. From your study, one cannot tell whether
   patients have been exposed to hospital environment or not, and isolates from
   patients at the OPD does not make them community isolates. Some may have
   been hospitalized in the past year. By your study community acquired isolates
   were not differentiated from isolates and hospital acquired isolates? If not,
   consider rephrasing the sentence
   
   **Response:** Statement has been rephrased and part of it deleted.
7. Any limitation such as difficulty in record keeping the lab, which is common in most African labs
   **Response:** We have a laboratory information system that captures all data generated by the automated system. In addition, Vitek 2 has its own software that maintains all susceptibility data for all isolates it analyses.

8. Table 4: is the total number of MRSA 27 or 28??
   **Response:** It is 27. This has been corrected and the percentages corrected accordingly.

9. I suggest you merge Table 2 and 3
   **Response:** Merging the tables will make it difficult to interpret table 2. I can consider deleting table 3 if need be. This analysis was meant to show any statistically significant differences in antibiotic susceptibility between a children’s hospital and a predominantly adult hospital. This can serve as a basis to generate hypothesis and explore it objectively.

**Minor Essential Revision**
1. There are a few typographical errors in the text, kindly use the spelling and grammar check. (example in line 170: ........susceptibility data .A 2010)
   **Response:** Sentence has been reworded so as to make grammatical sense

2. All S. aureus/ Staphylococcus aureus should be in italics
   **Response:** Done

For the Editorial comments, it has been clarified that no funding was available for this study and that there was no one who met the criteria to be acknowledged.

Regards

Geoffrey Omuse