Reviewer's report

Title: Survey of nasal carriage of Staphylococcus aureus and intestinal parasites among food handlers working at Gondar University, Northwest Ethiopia.

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Reviewer: Frieder Schaumburg

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Dagnew and colleagues performed a cross-sectional study on nasal carriage of S. aureus and intestinal colonization/infection with helminthes and pathogenic protozoan parasites in food handlers at Gondar University, Ethiopia. They found a high prevalence of intestinal pathogens and a medium S. aureus carriage rate and conclude that their finding poses a risk for consumers due to a possible transmission of these pathogens via food.

In general, the findings are interesting but major revisions might need to be considered.

Major Compulsory Revisions

Nasal S. aureus carriage is common and can be indeed the source of endogenous infection. However, the authors might explain, how nasal carriage of the food handler poses a risk for consumers. Since virulence factors particularly enterotoxins are not reported in this manuscript for several reasons, it is difficult to argue, why nasal carriage of handlers is a potential source of disease (e.g. gastroenteritis). The conclusion remains speculative if presence of enterotoxins is not reported.

Results of susceptibility testing are not consistent as resistance to penicillin was 51.2% while resistance to ampicillin was 46.3%. According to CLSI, all penicillin resistant isolates are also resistant to ampicillin. Table 4 has to be corrected this way, too.

The authors refer to CLSI guidelines from 1993. However, some breakpoints have been changed in the meantime, for instance for cefoxitin (which is the recommended drug to screen for methicillin resistance, not methicillin). I therefore recommend to screen all isolates for methicillin resistance using cefoxitin and the new cefoxitin breakpoints.

Minor Essential Revisions

In general, there are minor oversights which can be easily corrected when correcting proofs. For instance, use “)” instead of “]” (page 3, third §), write S. aureus instead of S aureus (missing point, page 6, first §), write S. aureus in italics (page 7, first §), always write methicillin instead of methicilin and ampicillin instead of ampicillin, do not use capital letters for antibiotics, do not use different fonts (“food”, page 10, third §). What is “amoxyyclin” (page 8, first §, better use amoxicillin as written in table 4)?
- misspellings in the title: “intestinal” instead of “intstinal” and “university” instead of “univesty”.

- superscript number is missing for Zinaye Tekeste for affiliation and use capital letter (Parasitology and not parasitology for the affiliation).

- whole text: Better use “Strongyloides” instead of “Strongloid”? 

-page 5, §3: The inclusion criteria are the criteria for including a participant in the study. They should be mentioned this way: (i) Food handlers working in the University of Gondar student cafeterias and (ii) informed consent. The exclusion criteria can stay as they are.

-page 5, §6: What is meant by “Hygienic status”, maybe better write “habits of hand-washing”.

-page 6, §4: Write: “The chi-square test was employed to assess the association between variables”. To check, if they are independent, one needs to perform regression analyses.

Write: p-value less than 0.005 was considered to indicate statistical significance (not significant).

-page 7, §1: The authors write: “Study participants found positive for […] S. aureus were treated”. How were they treated? Is a treatment really necessary? Were only MRSA carriers decolonized? A treatment of all carriers does not seem to be necessary as S. aureus is normal flora.

-page 7, §3: write “did not” instead of “didn’t”, “medical check-up” instead of “cheek up”, “significant association” instead of “significance association”, “soap and water” instead of “soap & water”.

-page 8, §2: Delete the third sentence, as it repeats basically the second sentence of this paragraph.

-page 9, §4: “this prevalence was much lower” instead of “this study was much lower”.

Table 1:
- Mention the full title of the university campus (CMHS) or insert a footnote.
- Proportion of female and male at CMHS is more than 100% (90.3 plus 10), please adjust accordingly.

Table 3:
- To mention the p-value only might be sufficient to assess the associations. The line showing the “no” date can be deleted, as these data can be obtained by looking at the “yes” numbers. This will make the table 2 and 3 more readable.
- Use either “water” or “H2O” in the table.

**Level of interest:** An article whose findings are important to those with closely related research interests
Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests