Dear editor,

Journal of BMC Infectious Diseases

Thank you so much for your helpful assessment and comments on our manuscript entitled “Prevalence of Intestinal Parasites and Associated Risk Factors among Inmates of Mekelle Prison, Tigray Region, Northern Ethiopia, 2017”
We are thankful for your great effort, commitment and time spend to review the manuscript. We also appreciated the reviewers for their interest in our manuscript, and for all of their helpful assessments and comments. In addition, we believe that all of your advice and comments are mandatory for our manuscript scientific quality. We have attempted to understand your requested comments and general instructions for the manuscript. So we have revised the paper based on your comments and advice.

Please find below the point-by-point responses and the general corrections for the manuscript.

Sincerely,

Fitsum Mardu Landu (MSc), Corresponding Author

Response to reviewers

José Guillermo Esteban (Reviewer 1):

Comment 1: Perhaps, the most surprising aspect is that the authors find Entamoeba complejo, Giardia intestinalis, as well as E. coli, as protozoan species. Certainly, E. coli can be very easily diagnosed when cysts are concerned as it is very easy to find more than 4 nuclei. However, other species of amoebae (Endolimax, Iodamoeba) and flagelates (Chilomastix, Dientamoeba) are much more difficult to diagnose, due to the reduced size of the trophozoites/cysts, and also due to the size of their own nuclei. Even more surprising is the finding of Chromiste Stramenophiles Blastocystis spp., which is the most abundant intestinal parasite in humans, whether in developed or developing countries. It is quite curious why the authors of the Ms mention that the parasites found have nothing to do with being in prison - a situation making it even more difficult to accept.

Response:

The non-pathogenic Entamoeba species (Endolimax nana, Entamoeba hartmanni, Entamoeba polecki, Iodamoeba buetschlii, Entamoeba dispar) are difficult not only to diagnose but also to differentiate from the morphologically similar pathogenic E. histolytica. As we have tried to state in the limitations section, our intention was to detect Entamoeba species in the specimens without regard to species identification. The flagellates are also difficult to identify from wet mount preparations but we have tried our best to detect these species. Similarly, detection of Blastocystis species by direct microscopy is less sensitive; it is best detected by permanent stained smears and PCR technique. So, our study was generally limited to direct microscopy due to shortage of reagents and materials.
Regarding to your comment on ‘the parasites found have nothing to do with being in prison - a situation making it even more difficult to accept’, we mean that the prison factors assessed do not significantly associated with intestinal parasitic infections among prisoners. However, without detailed information about sanitary condition of the prison, status and practice food handlers, screening of prisoners during sentencing, we could not conclude whether being in prison is a factor. Further comparative study is needed to assess the spectrum of intestinal parasites among the community compared to prison centers.

Comment 2: Another aspect that should be commented on is the fact that they talk about a spectrum of intestinal parasites, it does not matter whether one or a hundred cases are concerned; the important thing is the detection of the parasite spectrum. Perhaps, in this sense, the entire set of the tables has to be taken into account. It can be considered opportune to capture all cases in the entire parasite spectrum; and, therefore, it seems opportune to underline the case of Schistosoma mansoni, or the case of Enterobius vermicularis, or even the case of Trichuris. In this manner, it is not necessary to look at the cases of multiparasitism.

Response: if we understand your intention in this comment, you are referring to multi-parasitism in table 3. In this manner, we calculated the overall prevalence (number of participants infected) irrespective of the number of cases of intestinal parasites in a single participant because prevalence is the number of participants infected, not the number of cases detected. However, to indicate the spectrum of intestinal parasites among the participants, we determine multi-parasitism. On the other hand, when discussing the individual parasites, we counted all cases of the specific parasite species. For example, Entamoeba species were detected among 55 participants in single and among 13 participants in combination with other parasites. So we reported 68 Entamoeba species detected among the study participants. The same is true for S. mansoni, E. vermicularis, and T. trichiura.

Comment 3: And, finally, there are various linguistic errors in the English language, which should be revised by a qualified native speaker.

Response: regarding linguistic errors, we have tried to revise and correct the manuscript repeatedly by referring to free assistance from the journal’s English language tutorial (https://www.springer.com/gb/authors-editors/authorandreviewertutorials/writinginenglish). Unfortunately, we could not get help from a native English speaker.
Khojasteh Sharifi-Sarasiabi (Reviewer 2):

Comment1: I recommended additional statistical review

Response: For socio-demographic and clinical data, we calculated frequencies and percentages of variables. We also determined the proportion of intestinal parasites within each category of independent variable using crosstabs. Then using bivariate analyses, we tested the association of each independent variable with the outcome variable. Finally, to consider possible confounders, we evaluated the independent variables by multivariate regression model. For analyses, we used SPSS version 21 software. We considered p-value less than 0.05 significant at 95 % confidence interval. Therefore, if there are specific statistical problems, we happy to review our manuscript upon your request.

General amendments of the manuscript

We have reviewed our manuscript to check for any English errors. We referred free assistance from your English language tutorial at https://www.springer.com/gb/authors-editors/authorandreviewertutorials/writinginenglish. As a result, we made several changes that do not cause discrepancy with the previous version of the manuscript. The changes were minor tense errors, rephrasing, change from passive to active voice, punctuation, and subject-verb-agreement and so on. Therefore, we want to let you know that we did not write all the amendments here. But Some of the major changes are listed below.

1. We changed the order of table 2 and table 3.
2. Re-write the list of abbreviations under declarations section
3. Rephrase authors’ contributions
4. Rename ‘conclusions and recommendations’ to conclusions
5. Rename Tigray to Tigrai throughout the manuscript
6. We deleted the ‘Ethical clearance’ sub-heading from the methods section because it is repeated in the declarations sections.
7. Re-phrase conclusions section