



SDI Review Form 1.6

Journal Name:	International Journal of TROPICAL DISEASE & Health
Manuscript Number:	Ms_IJTDH_26774
Title of the Manuscript:	Considerable low frequency of soil-transmitted helminths and higher frequency of intestinal protozoa in shanty towns of Libreville, Gabon
Type of the Article	Short Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<u>Compulsory</u> REVISION comments	The MS reviewed is a short report on helminth and protozoa infections diagnosed in Libreville, Gabon, among patients consulting at the Department of Parasitology Mycology of the Université des Sciences de la Santé. It seems that patient selection was skewed: a) patients who consulted at the clinic and b) only those with abdominal symptoms and/or pruritus for whom stool examination was requested, for a total of 101 patients. Any AIDS patients? 2. How was diarrhea described? 3. To give an idea to the reader, how large is the weekly (monthly?) load of patients in that particular clinic? Are stool examinations requested only for those who report symptoms likely associated with intestinal parasites or are the requests in general? 4. In the text the authors state the median age of 40, range 24-50; however, somewhere in the text they quote 13 to 74 years old. What is it? 5. I would like to see a Table containing the sociodemographic characteristics of the population studied. Kindly include ages, sex, education, etc. 6. Were the patients from one shanty town? Different shanty towns? Kindly explain and include in sociodem. Table .	Patient selection is corrected; None of them had AIDS 2. Stool consistency evaluated by technicians 3. In the Department of Parasitology Mycology (DPM), among the forty to sixty patients seen weekly, approximately one half undergo a biological testing due to the presence of clinical signs suggestive of parasitic infection. Patients with a negative diagnosis of filariasis and those with symptoms likely associated with IPIs benefit from stool examination by direct examination or after fixation with 10% formol, MIF coloration, MIF concentration and parasite culture. 4. The youngest patient had 13 years old and the oldest was 74. 24 and 50 represent the 25th and the 75th quartiles respectively. 5. These data appears now in Table 1. 6. The patients came from the same district where shanty towns and slums predominate. 7. The interviewer wrote down the answers



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	7. Lines 73-75: did the interviewer write down the answers or were the answers written by the patient? Were the questionnaires checked before releasing the patient? How about for those with less school years of learning? 8. Line 80: Lugol's solution? Line 81: larvae? 9. Comment: stages of intestinal protozoa can be <u>seen</u> in 10x or 40x; but in order to <u>distinguish</u> morphologic characteristics of all intestinal protozoa, oil immersion (1000 x) is required, which is perfectly feasible in a direct smear of the temporary stained preparation. Therefore, I believe many other species of protozoa, not mentioned in this MS, were totally missed, like the smaller size species. No <i>Iodamoeba bütschlii</i>, no <i>Trichomonas hominis</i>, no <i>Chilomastix mesnili</i>, no <i>Dientamoeba fragilis</i>, no <i>Entamoeba hartmanni</i>? Also, in concentration methods some parasitic material is known to be lost in the debris plug. The best method is iron hematoxylin permanent stain. 10. While STH depend on many conditions to be acquired, intestinal protozoa are known to be transmitted through dirty hands and water not safe for drinking and not previously boiled. Protozoa are an indication of stool contamination due to poor hygienic personal and environmental sanitation. Hand washing with soap is one recommended measure in such cases. 11. No egg counting was performed in the case of STH, therefore, one does not know the intensity of the infection, which is the cause for morbidity. 12. Line 105: <i>Endolimax nana</i>? 13. When naming a parasite for the first time, the name in full has to be written, abbreviation is ok in subsequent	and the questionnaire was checked before releasing the patient. In case of illiteracy, interview was performed in local language with the help of the person accompanying the patient for the consultation, 8. Corrected 9. MIF coloration with lugol has a good sensitivity for the detection, the fixation and the conservation of vegetative forms and cyst of protozoa. It is a simple and faster colouring method. The identification of protozoa is facilitated by the adjunction of iodine and eosin which stain vegetative forms in bright yellow or light brown. Species Identification is carried out as follows. First, the marked cyst or vegetative form is detected at magnification x10 or x40; after perfectly centred and addition of a drop of immersion oil on the slide, the parasite is recognized at magnification x 1000. The nuclear membrane appears in dark brown, the chromatin mass and siderophilic bodies appear by refractive power: free or phagocytized red blood cells appear bright red. Cysts are colourless in a red background. Cysts of <i>Pseudolimax bütschlii</i> were not detected. One sample infected with <i>E. histolytica/dispar</i> had also vegetative forms of <i>Chilomastix mesnili</i>, five samples had cysts or vegetative forms of <i>E.hartmanni</i>, and three of them were also infected with <i>B.hominis</i> and <i>E.coli</i>, two with <i>E. histolytica/dispar</i> and other parasites.
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	citings. Kindly write the name in full of all parasites when first citing them. 14. lines 55 to 59 and 120-122: the guidelines for introducing a deworming program in any country recommend conducting a baseline survey, usually of school-age children, but not exclusively. Schools are used in such cases for convenience and easiness of survey. The results of such surveys form the body of the pre-deworming data. According to the prevalence and intensity of STH found, one then decides with what frequent interval anthelmintic drugs will be administered. Thereafter, similar surveys are conducted every 3-4 years, as way of monitoring and evaluating results of the deworming program and to make necessary adjustments. Nevertheless, any other statistical data is of course welcome. 15. Line 143: <i>Entamoeba histolytica</i>? <i>Entamoeba histolytica</i>/E. <i>dispar</i>? Both have both stages of cysts and trophs. What distinguishes <i>E. histolytica</i> is the presence of phagocytized red blood cells in dysenteric stools. Kindly explain. 16. line 149-150: Kato Katz can be perfectly used in a clinic lab. As a matter of fact, we use it in our lab to detect light helminth infections, and Kato only (without Katz) for <i>Taenia</i> spp. eggs. In regions of schistosomiasis, this method is very useful in a clinical setting as well. 17. Lines 155-157: kindly explain what were the results of other referred papers. 18. I did not see whether <i>Giardia</i> was or not associated with diarrhea. 19. line 150: Really? Is that the observation at your lab? In what age patients? Authors should explain their <i>Trichuris</i> observations in that clinic. Otherwise, the paragraph does	11. The absence of IPI intensity is a limitation of this study. The limits of this study are now included in the paper. Nevertheless, the purpose of this study was to estimate the potential parasite reservoir, understanding that transmission does not necessary depends on the intensity of the infection 12. <i>Endolimax nana</i> 13. Corrected 14. The purpose of the present study was not to induce a decision at country level by policy makers. It was designed as a pilot study performed in an urban city where data are lacking, and in adults which are shown to be a non-negligible parasite reservoir in other settings (Zeukeng, Abdulsalam). Moreover, results of the lab diagnosis performed each week supposed a low frequency of STH which are targeted by deworming programs. The present work, although obtained in a small sample size of symptomatic patients, would represent a pilot study, and would confirm the predominance of protozoan parasites. Further studies in urban and rural areas with higher sample size and in all age populations should be performed. 15. See method section 16. MIF coloration and concentration have a
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	not provide for much discussion. 20. Line 153: medication mentioned for the first time! Was this observation part of the questions asked in the questionnaire? How do the authors know that the 101 participants were not on some kind of anthelmintic Tx or had received it recently? 21. The Discussion could be stronger. Also, the authors do not offer any results from previous rural and semirural surveys or any available statistical data on intestinal parasites from Gabon as compared to theirs. 22. <i>Blastocystis</i> spp. There are other subtypes or species of <i>Blastocystis</i>, not only <i>hominis</i>. 23. Line 131: if carefully analysed, none of the protozoa mentioned were pathogenic; <i>G. intestinalis</i> is found in same percentages in diarrheic as well as control patients; <i>E. histolytica</i>/<i>E. dispar</i> require molecular or immunological methods to distinguish the pathogen <i>E. histolytica</i>; <i>Blastocystis</i> pathology is still in discussion. Again, the accurate identification of intestinal protozoa in this study is questionable. 24. Lines 127-135 require better explanation and proper data citing. What were the findings elsewhere? In Ethiopia and Rwanda? Same with 155-157. 25. Lines 148-152 in need of clearer explanations. In summary, this MS requires a careful revision and improvement in the descriptions (use of English language). I personally am not satisfied and convinced of the accuracy of their diagnosis of intestinal protozoa. The Discussion is poor. The writing of References requires careful revision and correction.	good sensitivity for common STH and protozoan species detection, including schistosomiasis, although kato-katz remains the reference method for <i>Schistosoma mansoni</i> detection and quantification. This species as well as <i>Taenia spp</i> eggs are not endemic in Gabon. 17. Results are provided 18. One sample was diarrheic 19. This is not the purpose of this study. However, we can discuss the experience obtained in the lab and during the field studies performed for 40 years with the reviewer, not for this article as the prevalence of <i>T.trichiura</i> is low compared to several years ago. 20. Self-medication rate is provided in table 1 1. The discussion section has been changed taking into account the majority of suggestions Merthiolate iodine formol staining and concentration is a simply method which is used by more than 90% of the laboratory in France, and in Gabon, without worsening the management of patients or the quality of results.
<u>Minor</u> REVISION comments		
<u>Optional/General</u> comments		