Reviewer’s report

Title: Prevalence of intestinal helminth infections in Jiangsu Province, Eastern China; a cross-sectional survey conducted in 2015

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Reviewer: José Guillermo Esteban

Reviewer's report:

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The Ms deserves publication in BMC Infectious Diseases, although there are some considerations the authors should take into account.

Initially, the title is rather surprising as it mentions the prevalence of intestinal parasitic infections in Eastern China, which seems quite ambitious. Perhaps it would be better to say "in Jiangsu province in Eastern China". This aspect also refers to the Key words where this should be changed, too.

The approach applied in rural sites as well as urban sites seems rather peculiar. Why was the same study of intestinal parasites not carried out in both sites? Why were soil-transmitted parasites in rural and urban sites dealt with as well as other intestinal helminths?; on the other hand, why were protozoans exclusively looked for in rural sites? Why was the prevalence of Clonorchis sinensis in animals assessed, including second intermediate hosts and reservoir hosts in urban sites?

Very surprising is the fact that only one fecal sample per individual was collected but they were not adequately fixed. Only two slides were made for each sample; and, it is clear that they were used to detect helminth eggs, as well as the number of eggs per gram of each species. It is remarkable that C. sinensis, Fasciolopsis buski, and even Hymenolepis nana (the entire egg of this species becomes transparent in Kato Katz) could be diagnosed by means of Kato-Katz. How was F. buski separated from Fasciola, Echinostoma, etc. And, curiously, Paragonimus appears in the explanation concerning the eggs detected (p. 9, lines 187-190)? Certainly, E. vermicularis is not a soil-transmitted helminth (p 14, line 290). For Intestinal protozoans, the Lugol stain was used.
No data with respect to the helminth intensity is provided, and the reference used by the authors of the Ms (nº 29) should be changed to a more precise reference, i.e. the authors who created the guidelines (Montresor et al., 1998). Even more curious is the fact that Blastocystis hominis cyst was only found in one fecal sample. The staff members of The Jiangsu Insitute of Parasitic Diseases should perhaps revise the results obtained in this Ms.

There are tables reflecting the global parasitization of cities (rural vs urban sites) and tables concerning demographic and socioeconomic factors, and even a questionnaire supplied to the participants in rural areas. Nevertheless, there is only one pie-chart presenting the results of the helminths spectrum detected (Figure 1C). Actually, the most significant thing is the intestinal parasite spectrum detected; and, this spectrum should be dealt with in relation to different sites, different areas, different income levels etc.

Finally, the significant fall of the 2015 prevalence detected in this Ms should be related to previous studies (1990 and 2002) and the possible reason for this should be looked for. In fact, they mention that 18 species of human parasites were detected in 1990, but nothing is said about the number of species found in 2002. Also, a reference concerning the species found in the 2015 survey should be made.

Concerning the English language, it seems quite acceptable although there are a few mistakes or expressions that have to be corrected.

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No

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