Reviewer’s report

Title: Giardiasis in children living in post-earthquake camps from Armenia (Colombia)

Authors:

Fabiana Lora-Suarez (Fabisuarez6@hotmail.com)
Carolina Marin-Vasquez (Carola93@hotmail.com)
Nelsy Loango (nelocha@hotmail.com)
Martha Gallego (cibm@uniquindio.edu.co)
Elizabeth Torres (elito@hotmail.com)
Maria M Gonzalez (mome90@hotmail.com)
Jhon C Castano-Osorio (iyuma@yahoo.com)
Jorge E Gomez-Marin (jegomezmarin@hotmail.com)

Version: 5 Date: 12 Feb 2002

Reviewer: Mrs Judy Greig

Level of interest: A paper whose findings are important to those with closely related research interests

Advice on publication: Unable to decide on acceptance or rejection until the authors have responded to the compulsory revisions

Discretionary revisions:
a) Thank you for the hard work and wonderful revisions. The English is excellent and the paper flows well.
Some small changes:
Pg.3: On the 25th of January .................. 6.2 points on the Richter scale........
Temporary housing facilities remained until two years after the disaster, which raised concerns............
Pg. 4: One of the pathological aspects that was studied............... 
During this survey it was found that giardiasis was the most prevalent intestinal parasitic infection.
Pg 5: Interviewers were selected from university biology students........ 
Pg. 6: Stool samples were collected early in the morning in sterile plastic containers.............. 
.......and Giardia trophozoite forms 4.6%
Pg. 7: third paragraph: ...if attendance at school... Also needs changing in the next sentence.
Pg. 8: second line please remove: ...one of the most...
Pg. 8 last sentence of first paragraph: In future, in similar conditions, it will be important to make efforts to guarantee .......and to control the water source by checking for the presence.....
Pg. 9 Giardia survives in chlorinated........
To protect against transmission all drinking water should.............

b) Discretionary revisions:
Title of Table 1: should read ....Parasitic infections....... 
In the third column it would be clearly stated as:
Percent of children sampled 
In fourth column it would be clearer to state:
Number of children also infected with Giardia
Title of table 2: should read ......laboratory findings with the presence of Giardia........

c) Compulsory revisions

In table 2 why are the ORs completely different from the first manuscript and the second and third? Using the same method of reading the data in Table 2 and using Epi Info to calculate odds ratios only 5 are in agreement with the ten sighted. I got the same ORs for mucus, diarrhea, leukocytes, yeast and clean house. The data in the second column of "plastic stock" does not make sense.

Method and results of the ORs in Table 4 appear correct.

Table 3 shows the OR for children not at school as 0.5. Using Epi Info and by doing hand calculations the OR should be 2 with confidence intervals of 0.18 and 25.03. The paragraph on page 7 that deals with Table 3 needs to be changed. As demonstrated in earlier communications the children attending school appears to be a confounding issue. What was different? Attending school or was it the type of water they drank? To analytically control for confounding, as the data are collected concerning the putative factor (water source) and/or disease (Giardia), data are also collected on the presence or absence of the confounding variable (attendance at school). The data should then be divided into strata in a series of 2x2 tables, one for each level of the confounding variable. One is for children at school and whether they had municipal water or water from tanks while the other is for children not at school and their water supply. Using Mantel-Haenszel odds ratio method the OR is 15.13 with confidence intervals of 8.04, 36.43 and a p value of .000000000000. Both the confidence interval and the small p value indicate that the finding is significant and that drinking municipal water was strongly associated with giardiasis even with the confounding variable "school" taken into account.

Page 8, near end of paragraph, statement about water and school: please see comments re Table 3 an interpretation of results.

Competing interests:

None declared.