Reviewer's report

Title: Clusters of hemorrhagic fever with renal syndrome in Liaoning Province, northeastern China

Version: 1 Date: 30 November 2010

Reviewer: Delfina Rosario

Reviewer's report:

1. Is the question posed by the authors well defined? Yes
2. Are the methods appropriate and well described? Yes
3. Are the data sound? Yes
4. Does the manuscript adhere to the relevant standards for reporting and data deposition? Yes
5. Are the discussion and conclusions well balanced and adequately supported by the data? Yes
6. Are limitations of the work clearly stated? Yes
7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished? Yes
8. Do the title and abstract accurately convey what has been found? Yes, but I propose some change.
9. Is the writing acceptable? Yes

Declaration of competing interests:

- Major Compulsory Revisions: None
  The author must respond to these before a decision on publication can be reached. For example, additional necessary experiments or controls, statistical mistakes, errors in interpretation.

- Minor Essential Revisions
  The author can be trusted to make these. For example, missing labels on figures, the wrong use of a term, spelling mistakes.

Title:

The title of manuscript may be more open like this: Clusters of spatial, temporal, and space-time distribution hemorrhagic fever with renal syndrome in Liaoning Province, northeastern China.

Background:
As you referred in the paragraph 4, a previous recent study that analyze the spatial distribution of HFRS in Liaoning Province, China, during 2000 to 2005 using spatial scan statistic method, is important as soon is necessary to say clearly the differences between both studies.

No other studies cited in PubMed have included Liaoning Province in temporal, spatial or space-time clusters of HFRS analysis. This expression no discard partial or total publication of this study in scientific articles that no compiled by PubMed if is the intention of this phrase.

Methods:

5th paragraph: I suggest to use a correct connection between this sentence and the next one: The clusters of disease cases are meaningful only after having adjusted for spatial variations in the density of the background population. SaTScan uses circles and a non-parametric test statistic [18].

Results

I consider necessary to place the labels of figures, an important part of the information placed in the two first paragraphs of Results should be the figure label, and this one will help to the understanding of figures.

The first paragraph of Results say …The annual average incidence ranged from 0.00 to 26.80 per 100 000. And in Methods, first paragraph say …For the fourteen-year period, the average annual incidence was 3.6 cases per 100 000 persons ….

In the 4th paragraph say …with an observed number of cases of 6635 compared with a calculated 1600.94 expected cases… here and in other results the different between the real cases and the expected case, have a important numeric difference. Is possible to explain those differences.

Discussion

In the 4th paragraph say: We can conclude that our result would be more precise than theirs, referred to the first study (reference 19), in my opinion is very category this preliminary conclusion, and is possible to explain more evident different between the two researches, reference 19 and this one article, as the space-time scan statistics analysis.

In the 5th paragraph say Many studies have showed that some factors are related to the high incidence of HFRS such as the environmental factors and climatic factors [21, 22]. Is most exact to say: Some studies have….. because are only 2 references.

Conclusions

In the first line say: The present study only analyses the statistically significant spatial, temporal and space-time clusters of HFRS in Liaoning Province, China,
the word only is not necessary here, exactly these are the objectives proposed in this study.

In the second sentence: The cluster analysis in this study is as an ecological study; therefore some weakness can’t be avoided. This is incomplete idea, is necessary to explain this affirmation.

- Discretionary Revisions

These are recommendations for improvement which the author can choose to ignore. For example clarifications, data that would be useful but not essential.

Please note that both the comments entered here and answers to the questions below constitute the report, bearing your name, that will be forwarded to the authors and published on the site if the article is accepted.

What next?
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Based on your assessment of the validity of the manuscript, what do you advise should be the next step?
- Accept after minor essential revisions (which the authors can be trusted to make)

Level of interest
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My answer is in Black
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- An article whose findings are important to those with closely related research interests

Quality of written English
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which you have noted, choose the second option.
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Statistical review
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Is it essential that this manuscript be seen by an expert statistician?
If you feel that the manuscript needs to be seen by a statistician, but are unable to assess it yourself then please could you suggest alternative experts in your confidential comments to the editors.
- Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests
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I declare that I have no competing interests' below.
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- Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this paper, either now or in the future? No
- Do you hold or are you currently applying for any patents relating to the content of the manuscript? Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript? No
- Do you have any other financial competing interests?
- Do you have any non-financial competing interests in relation to this paper? No