Reviewer's report

Title: The spatial distribution of leprosy in four villages in Bangladesh, an observational study

Version: 2 Date: 11 February 2008

Reviewer: Aparna Pandey

Reviewer's report:

Comments on the article entitled "The Spatial Distribution of Leprosy in four villages in Bangladesh, An Observational Study" sent for review

Introduction
- It is not clear what authors mean by "exposure"? (1st line of 1st para, page 3) Is it close prolonged contact with a case? If so it needs to be clearly stated.
- Further, the objectives of the study are not explicitly stated.
- How the areas with high Incidence (last para of Introduction section, page 3) will be identified is not mentioned.

Materials and Methods
Study population and survey
- "Contact of leprosy patients (COLEP)" needs to be defined and how they were chosen?
- What is meant by 20 groups of 1000 persons is not clear.
- What is about 1000 people were examined (para 2, page 4).
- Sequencing of sentences is not proper, it is more confusing.
- It is also not very clear whether the study subjects were the same as those included for chemoprophylaxis, then what is the use of undertaking the study at all?
- What is the basis for selecting 3 groups from rural and one from urban area, which might otherwise differ from each other considerably?
- How the follow up was undertaken it is not mentioned. The reference quoted (6 in para 1 of page 4 is still in press).

Statistical Analysis
ANNI needs to be defined
For the applicability of Poisson distribution opinion of the statistician may be sought.
- How it was determined that the deceased persons didn't have leprosy it is not clear (para 3, page 6).
Results

Area Characteristics

Study Population
Â· While studying the transmission dynamics, proportion of children needs to be mentioned. Just mention of mean age is not sufficient. Children who are more vulnerable for infection may be not included in the survey, if it is carried out at the time of their schools.
Â· In table and text both it is not clear it is not clear which group belongs to high exposure and which to high prevalence.
Â· â##Cases at intakeâ## (para 2, page 6) how the term case has been used for those who got RFT? As per standard definition after RFT, the treated person no more remains a case.
Â· What efforts have been made to minimize bias, because more than one fourth (265 out of 1000) of the population is lost to follow up.

Discussion
Â· Explanations for the findings are not given. Whatever explanations are given have been contradicted (1st Para). In fact discussion needs to be rewritten, explaining the findings and supporting it with the reference. If references in support are not available then also need to be mentioned and some logical explanation has to be give.

Conclusion
Â· In the conclusion authors need to report their own findings. Rather they have mentioned the other studies, which are having no match with the present one. Hence these donâ##t require mention there

Other General comments
Â· Language needs correction throughout, as it is not clear and coherent. Writings and grammar are not acceptable for publishing any journal of repute. In fact it is altogether written in pieces, that too language is very confusing. It is not at all clear what authors want to say.
Â· Terms Prevalence and Incidence have been used interchangeably quite often in the text (eg para 2 of page 1 under Introduction section and Conclusion section on page 7). Rather for leprosy the term â##Case reporting â## should be used.

Overall impression of the Reviewer ? Advise
The reviewer is unable to decide on acceptance of rejection until the authors have responded to major compulsory revisions