Author’s response to reviews

Title: Incidence of pelvic inflammatory disease in a large cohort of women tested for Chlamydia trachomatis: a historical follow-up study

Authors:

Inger J Bakken (inger.bakken@sintef.no)
Sara Ghaderi (sarag@stud.ntnu.no)

Version: 2 Date: 21 May 2009

Author’s response to reviews:

Dear Editor,

Thank you for the helpful referee comments and for allowing us to prepare a new version of the manuscript. We have listed below, point-by-point, how we have reacted to the referee’s comments after some general remarks.

1. Abstract: Numbers (events and person-years) that gave the elevated hazard ratio is now included in the abstract

2. Background: The abbreviation C. trachomatis is now used throughout the manuscript (“CT” is removed)

3. Background: The reviewer comments that “The rate of one in six Norwegian women being positive for CT by the age of 25 is important data”, and that it would be equally important to further breakdown these data. Our statement however refers to our paper on testing patterns and prevalence of CT that was published in Sexually Transmitted Diseases in 2006. In the results section, we have written a paragraph on the number of positive tests in our study cohort that consists of women born 1970-84 (see below). Also, the reviewer asks how our data (on cumulative incidence rates of CT) compare with data from other countries. Our laboratory database covers an entire population in an area with high testing rates. To the best of our knowledge, such data have not been described elsewhere. We have included a new sentence in the Introduction to point to this particular characteristic of our previous research, which also relates to the present study (Page 3, second paragraph).

4. Methods: The author comments that the change towards more sensitive tests represents a limitation in our study. We agree and have included an new paragraph in the Discussion section (Page 7, Paragraph 3)

5. We removed data collected within a time frame shorter than 60 days from a previous positive test because the routine in Norway is that after a positive test, the patient should return for a control test within 60 days. With our study design, including data within the first 60 days from a positive test would not have affected
the results. To avoid confusion, we have found it most appropriate to remove this information because it is not relevant for interpretation of results.

6. The reviewer asks why pelvic inflammatory disease was not collected from 1990 onwards and later (in the last paragraph of the review) points out that it is not clear from the Materials section that all cases of pelvic inflammatory disease were retrieved from the hospital in- and outpatient registries. All PID diagnoses were retrieved for the entire period 1990-2005 (please see last paragraph of the section Data Sources). Thus, there is a close temporal relationship between CT testing and PID diagnoses. We have included the word “all” to the section Data Sources and hope that this improves the readability of the Manuscript.

7. The reviewer also asks why 20 years of age was selected as the cut-off. The study population consisted of all women born 1970-84. Thus, the oldest women in the study population were 20 years of age when computerized storage of test results was started in 1990. We defined the 1970-84 cohort as our study population because the testing history is nearly complete for these women. What we have missed is testing before the age of 20 for the oldest women. For women born 1971; testing history is complete from the age of 19, for women born 1972; testing history is complete from the age of 18, etc. We have rewritten the Study Population section in the Methods part (please se Page 4) and hope that this important part of the study design is now clearer.

8. We agree that only the most severe cases of PID are measured in this study design and have changed the conclusion, as suggested (Page 8)

9. The study protocol was approved by the Regional Committee of Research Ethics and the Norwegian Data Inspectorate. The Ethics Committee adheres to the Helsinki Declaration, and only study protocols that are in line with the Declaration are approved. This information has been included in the Methods section, as suggested by the referee.

10. We agree that limitations of the current study should have been more clearly stated. We have now included a sentence on the sensitive tests used previously, and changed the text regarding cases treated outside hospitals and asymptomatic cases (Page 7, Paragraph 3). The conclusion has also been modified, as suggested.

We look forward to the response to our revision.

Yours sincerely,

Inger Johanne Bakken