Reviewer's report

**Title:** Infections among pregnant working women: A study in the Danish National Birth Cohort

**Version:** 1  **Date:** 15 August 2010

**Reviewer:** Johanne Sundby

**Reviewer's report:**

1. In the article about possible infection risk and outcome of pregnancy the main finding is that there are some (small) increased risks at the epidemiologic level in this large sample. I assume that the pregnancy outcome variables have a higher validity than the exposure variables.

2. I would therefore advise the authors to modify the ms. somewhat accordingly.

**Abstract:** Re write the background. You have NOT looked at infections, but at risk of exposure to potentially infective agents. There is not a high risk, but an elevated risk. The overall population risk is relatively small.

3. **Background:**

   In the Nordic countries, pregnant women are often employed, but also often on sick leave certificate. The level of exposure is related to type of work, but also presence in the work place. This dilemma is not addressed in this paper. Also: working in pregnancy is also a balance between risk to the fetus and risk to the mother, and discomfort and problems for the mother as well.

4. **Viral infections may be more complicated than bacterial.** In this paper, this is not addressed. Also, differentiate between exposure to infective agents, subclinical infections and manifest infectious disease with symptoms. The risk factor here is elevated potential exposure to infective agents.

5. **Population:**

   Between March and November ......pregnant women in denmark in early stages of pregnancy were invited (it is not the GP who is early pregnant....)

6. **Infection Variables**

   The variables are self reported. Absence is only noted for infections, and does not capture lesser exposure, nor problems with subclinical infections. One possible bias that is not adequately addressed, is that health workers may be more prone to detect infections (urinary tract infections by access to urine stix, for example) and therefore either over-report or more adequately repost levels of infections, while other workers may under-repost.

7. I am also curious to hear how condylomata can be associated with workplace exposures, as it is supposed to be a sexually transmitted infection.
8. Other variables:
you state that: "low" category included unskilled workers.......I would rephrase, as most workers have skills, even if they are not formal skills. I would call them workers with no formal skilled training.

9. Results: I assume the tables and statistics are adequate.

10. Discussion: My above comment on bias may apply here. The study would have been stronger if the infections were observed or diagnosed, but they are not. Thus, the validity of these variables are somewhat questionable and potential biases should be debated. The increased risk, both absolute and relative (odds) is not very high. The job descriptions in this study is also broad and not very specific. Thus, a variety in job tasks can drive results in both directions.

11. The statement on: "exposure to infections during pregnancy ....may be reduced by changing work tasks" is very unspecific. It may be taken out or replaced with a different statement: "Where there is known infection exposure risk, a change in work exposure may have to be achieved to job task rotation or sick leave absence....." OR SIMILAR.

12. The conclusion is wrong. The main finding here is not about exposure to infections, but on outcome of potentially exposed people. Infections have NOT been diagnosed nor verified.

**Level of interest:** An article of importance in its field

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

no conflict of interest