Reviewer's report

Title: Does acute maternal stress in pregnancy affect infant health outcomes? Examination of a large cohort of infants born after the terrorist attacks of September 11, 2001

Version: 1 Date: 5 May 2009

Reviewer: Jana Vignerova

Reviewer's report:

Minor essential revisions:

1. The bad arrangement of the text is evident. Parts “outcome definitions” and “defining exposure and referent populations” is too long. It is very difficult to understand the principle of the problems defined there. There are some sentences which repeat the same information in other words. Please consider the necessity of the diagnoses codes publication.

2. Part “defining exposure and referent populations”: The referent group is twice defined as 1 year prior and 1 year after the exposed group. The part is closed by the sentence “Therefore, alternative analysis limited the referent group to only those infants conceived 1 year prior to exposed group.” I think, that such referent group would be better than reference group defined above (for the reason mentioned by authors - ... “that infants conceived in 2002 would still be “exposed” to the stress of September 11, 2001,...”). Please, consider this alternative.

   In case your analysis will be based on reference group defined as 1 year before and 1 year after 2001, put the explanation why you prefer the first alternative to the discussion.

3. Why are results divided in two parts ... from 0 to 13 weeks, and ... from 0 to 36 weeks? It is not clearly mentioned in methods. It would be better to arrange the results by investigated health problems (sex ratio, birth defects, preterm birth, growth deficiencies).

4. The first paragraph of the part “Infants in utero, from 0 to 36 weeks...” belongs to Methods.

Discretionary Revisions:

5. The legend of the figure: “Male/female sex ratio of infants born to military families after stress.” After stress born children were those exposed in September 2001 only.

6. Tables: 2nd column – “all infants” involves including infants in column 3 (with health problems)? It would be more clear to put in column 2 number of children without problems only.

Level of interest: An article of importance in its field
Quality of written English: Acceptable

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

Declaration of competing interests:
I declare that I have no competing interests below.