Author's response to reviews

Title: Antibodies against Coxiella burnetii and pregnancy outcome during the 2007-2008 Q fever outbreaks in the Netherlands

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Author's response to reviews:

The BioMed Central Editorial Team
ref: MS: 3537752084257166
12 January 2011

To the editor

Dear Sir,

We thank you for considering our revised manuscript MS: 3537752084257166, “Antibodies against Coxiella burnetii and pregnancy outcome during the 2007-2008 Q fever outbreaks in the Netherlands” of W van der Hoek, JCE Meekelenkamp, ACAP Leenders, N Wijers, DW Notermans and CWPM Hukkelhoven.

We feel that we have been able to address the comments of the reviewer. Please find our detailed response to the comments below:

Reviewer: Anna Psaroulaki

The reviewer is still concerned about the diagnostic criteria that we used in our study. In support, she provides the CDC criteria for diagnosis of acute Q fever.

In our view, this emphasises the lack of agreed serological definitions and cut-offs because different laboratories in different countries use different criteria. In this respect, we like to quote reviewer 2 (Conall McCaughey) on the first version of the manuscript that we submitted:

“Serological definitions and cut-offs used seem reasonable to me. Inevitably there will always be criticism from individual referees and correspondents regarding these matters in a paper such as this. However there are no internationally agreed definitions and the approach in this paper should be
In the Netherlands a number of medical microbiology laboratories, including the laboratory of the Jeroen Bosch Hospital where two of the authors work, have built extensive experience in interpreting Q fever serology over the past few years. Recently, the Dutch working group on diagnostics of acute Q fever (an initiative of the National Institute for Public Health and the Environment and the Dutch Association for Medical Microbiology) published a consensus statement: Wegdam-Blans MC, Nabuurs-Franssen MN, Horrevorts AM, Peeters MF, Schneeberger PM, Bijlmer HA. Laboratory diagnosis of acute Q fever. Ned Tijdschr Geneeskd. 2010;154:A2388. [Article in Dutch].

In this consensus statement, a confirmed diagnosis ‘acute Q fever’ if based on serology, requires a seroconversion or significant rise in titre in paired sera, as also stated by the reviewer and in the CDC criteria. A positive IgM result on a single serum sample is categorised as ‘possible acute Q fever’, consistent with the terminology that we used. We also point to the fact that the sera that we analysed were collected in the early stages of the epidemic in the Netherlands and do not include sera from the major 2009 outbreak. In the early stages of the epidemic it was less likely that a positive IgM phase II and IgG phase II serology was due to a past infection rather than an acute infection.

Comment 1
Despite this remaining difference in opinion on interpretation of serological results, we can accept the requirement of the reviewer to replace the word ‘infection’ with presence of antibodies. We have made the necessary changes throughout the paper, including the tables.

Comment 2
We have included a reference to two review reports of seroepidemiological studies.

Comment 3
As indicated under comment 1, the text has been reorganised.

In addition to the changes that were made in response to the comments of the reviewer, we have added reference no. 29, which was indicated as “Munster et al., submitted for publication”, but is now published in BMC Womens Health.

I hope the modifications meet with your approval. We look forward to your positive response.

Sincerely yours,

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