Author's response to reviews

Title: Exposure to the Chinese famine in early life and the risk of anaemia in adulthood

Authors:

Zumin Shi Dr (zumin.shi@adelaide.edu.au)
Cuilin Zhang Dr (zhangcu@mail.nih.gov)
Minghao Zhou Prof (zmh@iscdc.cn)
Shiqi Zhen Dr (cdczsq@163.com)
Anne W Taylor A. Prof (anne.taylor@adelaide.edu.au)

Version: 3 Date: 23 July 2013

Author's response to reviews: see over
23 July 2013
Editor
BMC Public Health

Re:  Revision for manuscript MS:  1614847839914623
"Exposure to the Chinese famine in early life and the risk of anaemia in adulthood"

Dear editor,

On behalf of all the authors, I would like to thank the reviewer for the further constructive feedback. Our response and revisions made are provided below and a revised manuscript attached. We hope that these amendments will be assessed as having improved the quality of the manuscript. Thank you for your further consideration of this work.

With best wishes
Zumin Shi (corresponding author, on behalf of all authors)
Responses to reviewer

The paper has improved but still could be better - for instance, how could selective fertility and mortality have affected the results? Do the authors have any indication of the levels of reduced fertility and increased mortality? Also, give some more consideration to the duration of undernutrition and how pre and postnatal undernutrition affects later risk of anemia.

RE: Based on the literature, there were both reduced fertility and increased mortality during famine. We have commented on the possible bias related to the above two issues. “During famine, there was a significant drop in fertility. In the study area, the total fertility loss during famine was 128.3% ¹. Those who chose to give birth during famine would be those with the capacity to cope with the famine. In the study area, the excess crude death rate was 11.375 per 1000 during the famine period ¹. Because of the long duration of the famine, children born during famine would suffer from both prenatal and postnatal under-nutrition and lead to both anemia and high mortality. Children with worse health condition would be more likely to die from famine than those with better health. Thus, both selective fertility and selective mortality would underestimate the true effects of famine in the population.” See page 12.