Reviewer's report

Title: Associations between social capital and maternal depression: results from a follow-up study in China

Version: 1 Date: 19 May 2017

Reviewer: Lynn Kemp

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The paper addresses an important relationship that provides potential directions for interventions to prevent and/or manage peripartum depression (PPD).

The paper requires editing to improve some English-language expression.

There are a number of issues that need addressing:

1. Page 3, Line 50 states that mothers are the primary caretaker[s] of their babies. Is this always the case - might be more correct to say that mothers are most commonly the primary caretaker[s].

2. The sampling methods require clarification. Page 4, Line 98 states random sample, however, line 103 states consecutive recruitment.

3. Providing the direction of the scoring of the social capital items in the methods. If the item scores positively then the pattern of scores over time seem opposite to the hypothesis (unstated) that mothers would have less social capital in the 'sitting in' period post birth. Note that this hypothesis is not stated in the introduction or the method, but is referred to in the discussion. If the measure is negatively scored then the hypothesis is supported. However, the conclusions support positive scoring (higher social capital - lower PPD at the 2-3 day measure) but this seems counter to the social capital hypothesis. This needs considerable clarification.

4. The cut off of greater than or equal to nine as the indicator for depression is very low for categorizing participants as having PPD. Further justification for using this cut off is needed - see for example Matthey S. Are we overpathologising motherhood? Journal of Affective Disorders 2010; 120(1-3): 263-6.
5. How was introvert/extrovert measured. This measure is not included in the methods section.

6. The authors talk about a 6 month longitudinal study - but the measures are late pregnancy to 6-8 weeks postnatal - approximately 3 months. What is the 6 month follow up?

7. In the Discussion the authors imply a causal direction from the study, concluding that trust relieves depression. It is not possible to infer causation, only association, from the study design: directionality is not possible. For example, it would also be possible to conclude that lack of depression allows greater trust (the opposite causal direction. The authors could more accurately say that the evidence from the other studies cited suggests that having trust may relieve depression, but the data and method do not allow this conclusion.

1. The authors further conclude that 'enough sense of trust is always beneficial to primiparas to relieve their depression. Living in a high social trust level community, primiparas may find it easier to let off steam and get necessary emotional support from their family members, neighborhoods, friends and colleagues'(page 10 lines 285-88). Although supported by a citation, the data do not support the conclusion that 'trust is always beneficial'. Further the study measured individual social capital and not community level, so again not possible to support a conclusion related to 'high social trust level communities'.

8. The study did not measure PPD in multiparous women: what is the evidence for the statement on page 11, lines 310-11 that primiparas are more prone to anxiety.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

No
Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
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I am able to assess the statistics

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Needs some language corrections before being published

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