Reviewer's report

Title: Trajectories of clinical and parenting outcomes following admission to an inpatient motherbaby unit

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Reviewer: Stephanie Ameis

Reviewer's report:

Study reports on an examination of parenting outcomes following admission to an Australian MBU and explores factors associated with trajectories.

This is an interesting research topic and a well written report overall. I have a number of questions/comments for the authors to respond to.

Please clarify the type of patients that would be admitted to a private unit. Would these only be individuals with private insurance and what was their SES.

Important as this is specific to a certain type of population and therefore results may not translate to publicly funded units.

All measures are self report, this is mentioned in the limitations as potentially problematic but this point should be fleshed out further. How could reporter bias influence results?

How could this be resolved?

Latent class growth models were used to look at different trajectories of outcome and predictors of outcome: maternal/infant age, parity, diagnostic group, psychosocial risk, maternal attachment, service engagement. What about other important factors that could help clinically with respect to understanding a woman's potential outcome trajectory following inpatient admission to an MBU: support network, work status, caregiver availability out of hospital?

<19% of admitted had complete data - this is important issue, sample size relatively small for growth analysis. Also suggests that the group lost to follow up may be different. What about missing data strategies - imputation? What about stability of the current result. Could boot strapping be included to look at stability of subgroups?

Given the likely severity of psychopathology at baseline in order to warrant MBU as well as those willing to come in, it is not surprising that symptoms would increase again on a number of measures in certain women post discharge when support would decrease drastically. What were some of the clinical factors that distinguished those with worsening trajectory - more comorbidity, more medications, poorer baseline functioning. It does seem that worse psychopathology at baseline predicted poorer outcomes. This may be highlighted as important clinical factor to follow.

Although subgrouping based on clinical symptoms is interesting, it would be important to highlight the clinical relevance more. Did functioning improve in the women hospitalized?
Were there subsequent emergency visits? What does this work tell us in terms of the need for transitional care for this population?

Other:

Table 1/2. Clarify if length of stay is in days. What about other diagnoses. Would help to understand clinical complexity. How many women had personality disorders, multiple comorbidities, what type of medications?

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

Yes

*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?*
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Yes

*Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?*
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

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