Reviewer’s report

Title: Spatial clustering of fatal, and non-fatal, suicide in New South Wales, Australia: Implications for evidence-based prevention

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Reviewer: Steven K. Dobscha

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The purpose of this manuscript is to describe a spatial analysis of suicide deaths and suicide attempts in New South Wales, Australia. This is an interesting article, and the approach is potentially innovative. It is well written overall and would be of interest to readers of BMC Psychiatry. I do have several comments:

1. It is not clear what this type of analysis specifically adds to the information that is likely currently available regarding suicide death prevalence rates according to region. As I read through the paper, I realized there may be two aspects that likely DO make this approach different and innovative: Clusters don't have to conform to pre-existing boundaries; and Clusters can be smaller than existing pre-defined regions that might have prevalence rates associated with them. Such attributes of spatial analysis (and there may be others) that make spatial analysis unique and added-value did not come through for me in the background section. I would note a lot of work has been done examining regional suicide prevalence rates (at least in the US) that is not mentioned—what does this spatial analysis approach add that was not captured by some of these prior studies?

2. Related to above, I would imagine that an Australian agency has already calculated the prevalence rates of suicide within the various LGA catchment areas. If so, how do the results of the current analysis compare? If not, this is worth emphasizing, as the findings here are even more important in addressing a public health gap.

3. A great deal of information is provided in this paper and it may be hard for readers to digest. I might suggest either turning this into two papers, one on suicides, one on suicide attempts (especially since there is not a lot of overlap in where the clusters are located); OR perhaps having the primary analysis focus on suicides, with a secondary analysis focusing on a combination of suicide attempts plus completed suicides to see how things might change—this might be easier to follow.

4. I think the discussion would benefit from noting that further research to understand what the individuals within the clusters have in common (aside from geography) would be very helpful.

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

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I am able to assess the statistics

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