Reviewer's report

Title: Suicide rates and income in Sao Paulo and Brazil: a temporal and spatial epidemiologic analysis from 1996 to 2008.

Version: 1 Date: 11 February 2012

Reviewer: Gianluca Serafini

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Major Compulsory Revisions

This is in summary an interesting exploratory spatial analysis aimed to investigate mortality data and geographical patterns as well as their social, economic, and cultural correlates in the city of São Paulo from 1996 to 2005. Although interesting and well conducted, the manuscript needs some major revisions to the actual version.

First, within the abstract, the aim is not adequately specified; also, the classical framework put forward by Durkheim has not been adequately presented in the introduction, therefore it results difficult for the reader to follow the conclusion section based on this poor initial background. Moreover, the specific age range of suicide deaths which are analyzed in this exploratory analysis should be specified.

Page 5, the first statement is too generic; many other risk factors for suicide may be mentioned.

Page 6, why the authors did not consider to investigate also suicide attempts and/or deliberate self harms (DSHs) together with suicide rates? Are information about suicide attempts and/or DSHs also available in the SEADE registry?

Section Methods, what is exactly the period in which the search was conducted? How many researchers conducted the search in the SEADE? Additionally, why the authors decided to choose the period from 1996 to 2005 for their investigation? Which kind of classification (e.g., ICD–9, ICD–10) and which codes were used to identify death by suicide? Are all data about the variables which are investigated available?

Page 10, section Discussion, when the authors stated that in Romania it was not found a relationship between marital status and suicide, a more specific explanation must be given. Here, the authors should report more details to adequately inform the reader about the possible reasons of this lack of relationship in contrast with the general notion sustaining that marital status is strongly associated with suicide.

Finally, the authors should be more detailed when describing the limitations of their study. Importantly, misclassification could affect the suicide registration. There is evidence that official suicide rates may be underestimated because of suicide misclassification. Also, whether they have data regarding exclusively the period from 1996 to 2005 in their SEADE registry, this must be reported.
Overall, the manuscript in the current version should be strongly ameliorated in the points indicated in order to be considered for publication.

Minor Essential Revisions
Page 4, as authors reported suicide rates (occurring more frequently in poor areas) in many developed and wealth countries (e.g. United States, Great Britain, Japan, France), I suggest to also include some recent papers reporting suicides rates in Italy to provide more completed data to the reader.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I have no competing interests' below