Reviewer's report

Title: Demographic and circumstantial accounts of fatal burn injuries in Cape Town. A register based cross-sectional study

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Reviewer: Bishara Atiyeh

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Demographic and circumstantial accounts of fatal burn injuries in Cape Town. A register based cross-sectional study.

1- Authors have rightly noted that in LMICs, research that accurately describes the magnitude, risks and costs of burns is available for a number of countries, but often more limited in scope that European or North American high income countries. Adult burn mortality has been a neglected public health issue, in South Africa and across the continent, due to the scarcity or inadequacy of empirical data and the greater emphasis on maternal and child health, which in Africa accounts for the greatest contributions to mortality. Lack of adequate information restrains the development or implementation of interventions to control exposure and burn trauma outcomes. The authors propose to fill this knowledge gap and to provide a comprehensive analysis of burn mortality across all ages in the city of Cape Town.

2- Methods for the study are appropriate and well described. It is unfortunate that the data source (NIMSS – should be spelled out) does not provide information about the exact etiology of the burn injuries.

3- Data source is valid and the manuscript adhere to the relevant standards for reporting and data deposition

4- Discussion and conclusions are what should be expected from an epidemiologic study. In Cape Town fatal burns are concentrated amongst males aged between 25 and 50 years and are above all accidental, occurring most often in the home and in the early hours of the morning. They commonly take place over the weekend and other recreational periods across the year, with the expected concentration in the cold and wet months. Alcohol intoxication is a common denominator of the cases selected for testing. This information should be useful for the implementation of appropriate prevention measures.

5- Authors have noted that this study is not able to clarify whether the excess rates identified compared with others from the region, are a reflection of the adverse conditions in the city (due to a cohort effect) or an artefact of the better capture of cases in the NIMSS. This may need to be followed up more closely in a future study.

6- Manuscript well written though a bit lengthy and somewhat redundant in certain parts.
7- An abstract is lacking. It should be included before the “background” section

Manuscript in general suitable for publication though it may benefit from shortening the discussion by deleting unnecessary information.

**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 declare that I have no competing interests