The manuscript “Demographic and Circumstantial Accounts of Fatal Burn Injuries in Cape Town” presents data that will aid in the development of evidence-based interventions to decrease fatal burn-related injuries in Cape Town, South Africa, as well as other low- and middle-income countries. It has the potential to be a valuable contribution to the literature once the concerns listed below have been addressed.

Major Compulsory Revisions

1. The Abstract is missing. Please write an abstract for the manuscript.
2. Background
   a. The writing style makes it difficult to follow. It does not flow smoothly. This section needs to be rewritten in a crisper, more concise fashion.
   b. The first paragraph should begin by detailing the prevalence of burn-related injuries globally and describe the proportion of these injuries that result in death.
   c. The prevalence of burn-related injuries in low- and middle-income countries should be discussed next.
   d. Please include more details about the previous research that has been done in HICs and LMICs in the second paragraph.
   e. The next paragraph should present the rationale for conducting the study in Cape Town, South Africa.
   f. Start the fourth paragraph by pointing out that LMICs are affected by persisting constraints…. Then use the sentence at the top of p. 3 “An epidemiological basis…” to lead into your rationale for conducting the study.
   g. The concluding paragraph should outline the objectives of the study. These should be stated very concisely, beginning with: The goal of this study was …
3. Materials and Methods
   a. Rewrite this section in a more concise manner.
   b. Start out this section with “Data source”. Next, discuss the NIMSS, and then state that the present study used burn fatality data recorded by the NIMSS for Cape Town, South Africa during the 4-year period, 2001 to 2004.
   c. Delete the “Study site” section.
d. You present data in the Methods section that should be moved to the Results section:

i. Page 5: “The NIMSS data for Cape town from 2001 to 2004 comprises 22,136 records…”

ii. Page 6: “Figure 1 shows the distribution of….”

e. Be consistent with terminology throughout the manuscript: Do you want to use “fatality” or “mortality”? Choose one of these and stick with it throughout the manuscript.

f. Change “Data treatment” to “Data Analyses”

g. Provide further details regarding the statistical analyses performed.

h. State the level of significance for all statistical tests.

4. Results

a. Please report p-values for statistically significant results.

b. Please use more sub-categories: Rates by age group; Rates by gender; Rates by population group, etc.

c. Were specific mechanisms of injury documented for the homicide cases? This would be interesting information to report, if available. Also, any details regarding the suicides would be interesting to add, if available.

d. In the Methods section, it states that “the NIMSS collates burn deaths due to flames, scalding and hot object contact, under a single description”. Is there a comment field that you could use to identify these mechanisms of injury? If so, it would improve the manuscript if you could incorporate these mechanisms of injury into your Results section.

5. Discussion

a. Please address your findings regarding children: younger children have higher rates than older children, the highest rates occur among young black children, etc.

b. Please add suggested interventions to decrease the rate of burn fatalities in Cape Town.

c. The paragraph on p. 14 beginning with “This increased risk of death…” seems out of place and is not directly related to the study findings. Either delete this paragraph, or incorporate some of the information contained in the paragraph with your suggested interventions to decrease the rate of burn fatalities.

d. Please add your findings regarding alcohol involvement and children to your Conclusions section. Also, please specify the age group for the adult male population most at risk.

e. What is the ratio of males to females in the Cape Town population? How does this ratio compare to the ratio of males to females who sustained fatal burn injuries? What about the same comparison using age groups? This might be interesting information that you could include in your discussion.

f. Please put a subtitle in the Discussion section for “Limitations” and move all
text regarding limitations to this subsection.

Discretionary Revisions

1. Please consider adding “South Africa” after “Cape Town” in the title.

Minor Essential Revisions

1. On line 2 in the Background, please spell out “World Health Organization” the first time it appears, and put “WHO” in parentheses afterward.
2. On page 5, line 2 under “Injury data”, please spell out what NIMSS stands for the first time it appears, and put “NIMSS” in parentheses afterward.
3. On page 6, “Denominator data” section, please rewrite the last sentence as follows: “These extrapolations are based … specified by a population model developed by the Actuarial Society of South Africa (ASSA), and was …”
4. On page 7, first sentence under “Injury distribution by age, sex and population”, there is a typo: please insert a space after “per” in the section that reads “A mortality rate of 7.9 per 100 000 person-years….”.
5. On page 15, 2nd complete paragraph that starts with “This study is not able to clarify…” Please revise this sentence so that it reads: “This study is not able to clarify whether the excess mortality rates identified…”.
6. Please define the units for the rates in Table 1.
7. Please widen the column for “Age group” in Table 1 so that “Children” and “All Ages” fit on one line.
8. Please specify the age units in Table 2.
9. Please add, in parentheses, “BAC” following “blood alcohol content” in the title for Table 3.
10. Please widen the “BAC Level” column in Table 3 so that the “<” fits on the same line as the “0.05g/100ml”.
11. Please specify the units for “100 000” in Table 4: 100 000 person-years.
12. Please consider adding months in parentheses for each season in Table 4. It will help to remind readers that the months for each season differ in the northern and southern hemispheres.
13. Please specify the units for “Age” and the units for “100 000” in Figure 1.
14. Please be consistent in terminology: Figure 2 = Hour of fatality, Figure 3 = Day of fatality, but Figure 4 = Month of death.

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

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.