

First of all, I would thank the authors for their work.

Major comments:

Abstract: they said that there is a correlation between occurrence of toxicity and age, gender and geography. Please instead of correlation using the statistically significant difference as chi-square and kruskal wallis do not measure correlation they measure difference.

Introduction is too long and not clear for the aim of the study. Why we start the article about the definition of injury and the difference between intentional and intentional. That will make the reader confused.

The introduction can start from line 65. From line 93 to line 106 they talked about the toxicological effect of kerosene in spite of no tables or figures representing the symptoms or signs of the cases in the study.

Line 134 one of the objectives of the study is talking about kerosine health effects, but in the article, there is no information about the mortality rate or complications rate like chemical pneumonia or the economic burden due to long hospital stays to direct preventable approach.

From line 137 to line 145 is a repeated point of the paragraph lines 130 to 136. No need to repeat it.

From line 146 to line 150 they can put a title of the aim of the study above this paragraph to be clear to the reader.

Material & methods:

The surveillance needs to be detailed. How it was done manual or electronic. Inclusion criteria and exclusion criteria of the surveillance if there. Why does the surveillance take these 3 years? Does the surveillance take all the geographical area of Saudi Arabia? If yes the geographical regions covered by surveillance. The main points taken by surveillance.

Results

The tables and figures are not professional, unfortunately. I suggest making a large table to represent the data difference in the 3 years and column for 2019, a column for 2020, a column for 2021 and a column for total cases and p-value of age, gender, the intention of poisoning, the incidence of chemical pneumonia, geographical distribution, hospital stay and outcome of the patients and a final column for the p-value difference in the 3 years.

In lines 242 to 246, the result of the test is not clear what are the median and quartiles of the compared data to get the Kruskal Wallis test? Kruskal Wallis test is used for numerical data represented in median and quartiles not for frequency variations as you said in line 244.

Keep graph 7 and add the frequency in a table in each month in the 3 different years with the p-value by chi-square test.

No need for Table 1 as you write it in the text. You can do the normality test for the age and according to its normality put it in the table I recommend you do this for the difference in the 3 years with the p-value.

Table two shows the age group differences in each year in addition to the total. P value in the column please write them professionally in the table.

Table 3 and Table 4 same comment as Table 2. I need the frequency in each year in addition to the total and p-value with the test you used.

Discussion

From lines 266 to 268 the paragraph is not clear and needs to be clarified in the tables in the result part.

Please remove the aim of the study in the discussion no need to repeat it. The lines 258 to 260.

Conclusions

The conclusions are well stated only for the epidemiological pattern not for the public health issue in the objectives in line 148.

Lines 336 to 345 put them under title limitation and recommendations.

General comments

The article is very important for Saudi Arabia but if we add the outcome it will affect the international burden of kerosene to compare in the next studies.

Raw data had other available information other than the age, gender, and geographical variation that was not used.

Research questions fill the epidemiological gap only not the public health of kerosene poisoning.

Results need to be represented professionally.

Conclusions are linked to the epidemiological part, not the health burden.

The article in all not so bad and sounds good but needs to be professionally represented to be sounded internationally.

