Reviewer’s report

Title: Burden of Paraquat Poisoning in the Department of Antioquia, Colombia

Version: 0 Date: 05 Nov 2018

Reviewer: Kathleen Job

Reviewer's report:

This manuscript describes burden (in terms of DALYs) of paraquat in Antioquia utilizing the national epidemiological surveillance system. The aims of the study are interesting as previous descriptive studies have used majorly survey data to describe the occurrence and implications of herbicide-related poisonings. Gaining an accurate understanding of these issues is important for informing regulation and/or community initiatives and additional training initiatives. In general, the results from this study are interesting and add to what is known about the national and departmental consequences related to paraquat poisoning. Several improvements, however, do need to be made to this manuscript, including a technical writing review.

Background:

Consider commenting on the regulatory environment of Colombia either here or in the discussion.

Methods:

Line 7: Please check how reference 11 is referred to in the text. Consider including a table similar to Figure 1 in reference 11 that would assist in describing your methods.

Line 28: The reference life tables are almost 25 years old. Do the authors feel that the results will be influenced by differences in life expectancy?

Results:

Line 15: Is there a reason that incidence was higher in 2012? Consider commenting here or discussing in the Discussion.

Discussion:

What regulations currently exist for paraquat or herbicides in general in Colombia? Consider extending this discussion on what type of policies and regulations may be necessary, including an example or of where regulation, and potentially other changes, have improved social outcomes.
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?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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