Reviewer's report

Title: Assessment of the health care waste generation rate and its management system in Hospitals in Addis Ababa, Ethiopia, 2011.

Version: 1 Date: 22 May 2012

Reviewer: Dimitrios Komilis

Reviewer's report:

This is an interesting article (though very lengthy for a research article), since there are no data of medical waste generation rates in Ethiopia. The English should be checked by a native English speaker, since there are occasional expression and grammatical mistakes. Although results are interesting, I believe the study period (2 months) is too short to reach strong conclusions. The manuscript should be shortened by at least 30% - 40%. I believe it merits publication after shortening and inclusion of the following comments.

Introduction

I do not recommend the term “general waste”. Better use “non-hazardous” wastes, or medical wastes with composition similar to municipal solid wastes.

Mention in your discussion that the differences among rates of various countries is mostly due to differences in the definitions of medical wastes and particularly of the hazardous fraction.

I believe the authors should expand their discussion and make comparisons using results from the following articles:


Section 1.5. Better use a title such as “Research goal”. The objective chapter 2, can be included in the introduction chapter (at the end along with the research goal).

I believe your introduction is too extensive. Try to shorten it by 30%.

Methods
Is two months representative to reach safe conclusions? I am afraid not. Can you include a larger database?

You do not need to have so many sub-chapters in 3. Why are chapter titles 3.3.1 and 3.3.2 necessary? Just to write 2 sentences?

No need to have a separate chapter for the ethical considerations. Include it in the methods chapter.

Results and Discussion

You give total number of beds. Do you have occupancy data? Comment on that. Clarify that your results are based on total beds regardless of occupancy rates.

How do you define patients? Are these the outpatients? Are the patients that occupy beds or the ones the may not occupy beds? Is “occupied bed” the same with “patient”. Clarify these issues since they are very important.

Table 2. Write “kg” not “Kg”. Define IQR.

Your methodology has a lot of similarities with an article that recently appeared in Waste Management (Komilis, Fouki, Papadopoulos, 2012, in press). Provide some discussion and make comparisons.

Try to shorten by 50% chapters 5.3 and 5.4. This is a research article that should be not be that extensive. You have 40 pages which are not even double spaced. You have to reduce your manuscript.

Figure 3 is not necessary. Just include info in the text.

No need to include picture of Figure 5.

I believe Table 6 belongs to the introduction section (lit. review). Are values for hazardous medical wastes or for all medical wastes? Clarify that.

Try to reduce the discussion section.

What you mention in chapter 7 has been mentioned in the Methods section (bullet 1). Bullets 2 and 3 can be included in the introduction.

Shorten your conclusion and make them more quantitative. Use a bulleted to present your conclusions.

Shorten your recommendations.

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