Author’s response to reviews

Title: Assessment of occupational injuries among Addis Ababa city municipal solid waste collectors: A cross-sectional study

Authors:

Daniel Bogale Mr (bogaleodo@gmail.com)
Abera Kumie Dr. (aberakumie2@yahoo.com)
Worku Tefera Mr (workutefera2000@yahoo.com)

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Author's response to reviews: see over
Point by point response for reviewer’s comment

Reviewer one

Title: Assessment of occupational injuries among Addis Ababa city municipal solid waste collectors: A cross-sectional study

Version: 2 Date: 7 November 2013

Reviewer: Sk. Akhtar Ahmad

Reviewer's report:

Comments

1. The question posed by authors seems to be well defined.

2. Methods seem to be appropriate and are elaborately described.

3. **Comment 1.** The authors require to state limitations of the work.

   **Response:** the comment is accepted and corrected as follow:

   *At the end of the discussion this is added* ‘This study tried to reduce recall bias by asking occurrence of occupational injury in the last twelve months and one month prior this data collection. However, it is impossible to avoid recall bias totally. In addition to this, cause and effect relationship might not be established due to the cross sectional nature of the study’.

4. Discussion seems to be adequately supported by data.

5. **Comment 2.** Conclusions- ‘Implementation of basic occupational health and safety services including training on occupational health and safety’ not supported by data

   **Response:** the comment is accepted and corrected as follow:

Conclusion

The extent of occupational injuries among Addis Ababa city solid waste collectors is present in a level that needs immediate public health action. Personal protective equipment utilization is the determinant factor for occupational injuries that are arise in this sector. Therefore, implementation of basic occupational health and safety services including the provision of personal protective devices and insuring utilization are highly advisable.
6. **Comment 3.** In the Result section ‘Table=1’ is missing.
   **Response:** the comment is accepted and corrected as follow:

   Eight hundred forty-two (96.1%) of study participants were working 8 hours and below per a day. Six hundred twenty four (71.2%) study participants were female (See table 1).

7. **Comment 4.** The reference section requires a lot of attention. (For example see ref nos 3, 4, 5, 6, 7……………).
   **Response:** the comment is accepted and corrected

   Authors made correction on all of references after BMC public health model papers were observed.

8. **Comment 5.** Going through the manuscript it appears to me that it has been hastily submitted.
   **Response:** the comment is accepted and correction were made accordingly

9. **Comment 6.** It is advisable that the authors should have a look at articles that have already been published in your journal and redo the manuscript.
   **Response:** the comment is accepted and authors redo the manuscript

10. The findings of the article are important to those with closely related research interests.

11. **Comment 7.** Language is a serious impediment to understanding and requires
    **Response:** the comment is accepted and authors consult three colleagues for language editing. Accordingly, better efforts obtained from all of colleagues and it is incorporated.

12. **Comment 8.** Extensive editing before review is redone.
    **Response:** accepted and done

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Not suitable for publication unless extensively edited
    **Response:** three colleagues were consulted for editing this paper and hard copy of this paper was distributed. Generally, authors made best effort to edit this paper.

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**
'I declare that I have no competing interests'
Reviewer two

Version: 2
Date: 1 December 2013
Reviewer: Samar Kumar Hore

Reviewer’s report:

Major Compulsory Revisions: No major comments

Minor Essential Revisions:
The manuscript is well written on important public health issue. However I have some minor comments on it.

Introduction:

1. **Comment 1.** In 5th row of the 4th paragraph, by the following statement “(state the size or volume)” – as if someone reviewed earlier and suggested such. So, please fill as suggested.

Response: the comment is accepted and corrected as follow:
The waste is then manually emptied into a bigger container having a volume of 8 m$^3$ or in to a refuse truck.

Result section:

2. **Comment 2.** About text under heading as “Socio-demographic characteristics of respondents”: Some of the figures are from table-1. If so, please mention about table-1 in text and describe which figures are being described from the table. General description of figures (not shown in table) could be stated at the beginning of the paragraph.

Response: the comment is accepted and corrected as follow:
Eight hundred forty-two (96.1%) of study participants were working 8 hours and below per a day. Six hundred twenty four (71.2%) study participants were female (See table 1).

3. **Comment 3a.** About text under heading as “Occupational safety and behavioral factors”:
a) “No access 72 (83.7%), discomfort 22 (25.6%) and to save time 11 (12.8%) were main reasons mentioned for none use of PPE by the respondents.” – The figures used in this sentence of 3rd row of the 1st paragraph are not clear from the table-2. Also the total percentage exceeds 100 and none of the three values (72, 22 and 11) are found in the table. Please make it clear both in text and table.
Response: the comment is accepted and corrected as follow:

Only 382 (43.6%) of respondents were using some kinds of personal protective equipments (PPE) while they are on a job. Out of these PPE users, 86 (22.5%) of them reported that they were not using it all the time while they are on duty. The main reasons mentioned for none use of PPE by the respondents were no access 72 (83.7%), discomfort 22 (25.6%) and to save time 11 (12.8%). The majority of PPE users, 281 (73.6%) managed to purchase PPEs for themselves and others were supplied from woreda municipality, NGOs and some were picking PPE like glove from health care wastes. Municipality and NGOs provided pre-employment and on-job training for these workers on occupational safety. Only 19 (2.2%) study participants had vaccine for infectious diseases that are risk for cleaning workers. See table 2 for occupational safety and behavioral variables.

It was not mentioned in the table; only by text. Also there were other reasons which may not be significant to mention them here. It has multiple responses why the sum of these figures exceeded 100% (a person may give one or all of the reasons not to use PPE while he or she is on duty).

Comment 3b: Last line of 1st paragraph describes as “Only 19 (2.2%) study participants had vaccine for infectious diseases that are risk for cleaning workers.” No mention about vaccination in table-2. Either delete the statement or incorporate in table-2

Response: the comment is accepted and corrected as follow:

Only 19 (2.2%) study participants had vaccine for infectious diseases that are risk for cleaning workers. See table 2 for occupational safety and behavioral variables.

Comment 3c: In 1st line of 2nd paragraph- the word “hat” should be deleted from text (as it is not in table or questionnaire) and the whole sentence could be replaced from result section to any other relevant section as text

Response: the comment is accepted and corrected as follow:

The common types of protective devices utilized by the study participants were assessed. See figure 1 for the types of protective materials used by the study subjects.

Comment 3d: In last line of 2nd paragraph- please mention the values of all PPE in text. Similarly values could be written in legend within parenthesis against PEP categories of Figure-1.
Response: the comment is accepted and corrected as follow:

The figure is changed from Pie chart to Bar chart because of clarity and appropriateness.
The value of each PPE is written on the top of bars

Note: The sum of PPE users exceeded 382 because a respondent might use more than one type personal protective equipments. It is written bellow figure 1.

3. Occupational injury:
“Workers were ..................... from the ground.” –could be deleted as this is repetition of previous text.

Response:
There is no repeated text

Discussion:

Comment 4. In 5th paragraph, the following sentence “Those who had more children might spend more times on duty to satisfy the need or requirements of their large families which might increase the risk of occupational injuries among this group.” Might be correct it or it might be due to extra thinking about their children making absence mindness of the mother causing injury –the prior statement could be validated by analyzing existing variables. Please do that. If correct, keep the sentence as it is.

Response: the comment is accepted and corrected as follow:

The risk of occupational injury for those who had two or less children was reduced by 79% as compared with those who had five or more children (AOR = 0.21, 95%CI: 0.10-0.44). Similarly, odds of injuries for those who had 3-4 children were reduced by half (AOR = 0.52, 95%CI: 0.30-0.93). The possible explanation for this could be respondents who had more children might be pre-occupied by extra thinking about their children which might increase the risk of occupational injuries among this group. Another possible reason could be those who had large family size might not afford to buy PPE and use it consistently.

Table:

Comment 5.1. In table-3: Injury in the past 12 months was comparatively less than that of past one month. Does it indicate recall bias for previous history? Please make it clear in text, may be in discussion section.

Response: the comment is accepted and corrected as follow:
One of the drawbacks of this study was recall bias which was tried to minimize it by asking the occurrence of injury 12 months and 1 month prior data collection. It is stated as a limitation for this study at the end of discussion:

This study tried to reduce recall bias by asking occurrence of occupational injury in the last twelve months and one month prior this data collection. However, it is impossible to avoid recall bias totally. In addition to this, cause and effect relationship might not be established due to the cross sectional nature of the study.

Comment 5.2. What does the word “Frequency” (in column heading) mean? Is it # of injury or # of injured person? Please create 2 separate column headings for these 2 types of frequency

Response:

Authors think that column one of table 3 indicates number of injured persons in raw one and two, how many times did respondents injured in the last one month in raw three, injured body parts in raw four and types of injuries in raw five. Column two (frequency) indicates number of persons injured. For example: 383 persons were injured in the last 12 months, 232 persons were injured their hand and 221 persons encountered cut injury. Adding column may create confusion.

Figure:

Comment 6. In figure-2, please put the values on the top or body of the bars. So that the reader can understand easily.

Response: the comment is accepted and corrected accordingly (values of each bar is written on the top of the bar).

Discretionary Revisions: Nothing such

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests