Reviewer’s report

**Title:** Work-related pesticide poisoning among farmers in two villages of Southern China: a cross-sectional survey

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**Reviewer:** Yaser Issa

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Manuscript title: 'Work-related pesticide poisoning among farmers in two villages of Southern China: a cross-sectional survey

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Research article

Reviewer 1:

Reviewer report according to the authors responses to the previous comments

Major Compulsory Revisions:

### 1. INTRODUCTION:

Reviewer Response: The authors responded successfully to all comments for introduction part. (2 comments). But it will be more better if the authors mentioned in the last paragraph of introduction as: "In this study we aimed to ……", and omit the subsection "specific aims)."

### 2. METHODS:

#### 1. Study design and sampling:

2-1-1: The author mentioned in the first sentence "convenience sampling..", what "convenience" mean here?#

Reviewer Response: It is ok now.#

2-1-2: The sampling procedure is not clear, how was the 910 participants were selected? And why not more or less #this number, could the author show how this sample size had been calculated?#

Reviewer Response: It is ok now.#

2-1-3: In second paragraph, the second sentence, the author mentioned that the questionnaire was pretested #(pilotted): How this pilotting was performed,
by whom and how many persons interviewed and when (the exact date or period). Also did the persons who participated in piloting were re-interviewed in the formal study?

Reviewer Response: The authors did not reply to this comment, just again (the questionnaire was tested). It is better to say the questionnaire was developed and piloted by the research team at the Southeast University School of Public Health …. Without mentioning personal names.

Also no response to the comment if the pilotted farmers again were interviewed in the formal study. Needed to be answered?

#2-1-4: What kind of help given by the village leader in data collection?

Reviewer Response: It is good but could we consider that the leader group as a focus group?!

##2 Statistical analysis:

Could the authors give some results if other statistical analysis rather than Odd Ratio to find the association was used. If yes is there any differences in associations by using other statistical analysis rather than OR test. I recommend the author to re-analyse the data to give more clear findings mainly among both males and females. I know this is not comparative study between male and female, but the findings should be more clear for readers.

Reviewer Response: it is ok. And it will be better if the authors keep (i.e., not to omit it) the paragraph talking about the controlling for confounding effects which show the basics for controlling for confounders (I recommend this).

##3 RESULTS

###3-1 In the sixth paragraph of the Results mainly the 2nd sentence: author mentioned "after controlling for other variables" what were these variables? Also the same in the 3rd sentence of the same paragraph.

Reviewer Response: covariates which controlling was done for should be mentioned.

###3-2 Results presented in tables:

# The study sample composed of males and females (females consisted of about one third of the total sample size), could the author present results for both genders. Different characteristics of male and females could play a role in receiving symptoms.

#. As an example in table 1, age mentioned is it for male or females? It seems for the total of 910. Results should be for both, also as in education. Also for table 2, it will be better if the author show us the distribution of these symptoms among both males and females. This could be applied for all tables.

###3-3 from table 4 it seems that the number not equal to 910, was there missing cases, if so the author should mention this in the table footnote.

Reviewer Response: It is ok now.
In table 5: First, the author should think more about the reference groups, how it was selected as a reference group such as: why elementary schools not high school or more.....etc for all variables presented in this table. The reference group used to be the normal status or closed to normal such as 65+ age group more affected by pesticide exposure than the young one?!......the normal thing is to find less symptoms among highly educated rather than less educated.....?, or more explanation and rational needed to explain why using like these references groups.
Reviewer Response: It is ok now.

Personal Protective Equipment used should be presented in a separate table by both males and females. If the data available, it will be more interesting if the author present some findings on the PPE used and the association of using these PPE with distribution and prevalence of poisoning.
Reviewer Response: It is ok now.

DISCUSSION
It seems that the discussion part goes with the results and findings of the study.
According to validity, it was mentioned by the author and this is very good, but it is strange to say that according to costs, the study was unable to collect data on types of pesticides used by agricultural workers, intensity and duration. I think like these data should be included in the questionnaire and should be answered by participants at the same interview by which they answered questions on poisonings.
Reviewer Response: It is ok now.

Minor Revisions:

Main manuscript: Introduction:

1-1. It seems that introduction consists of two paragraphs, could the author split the first paragraph (it is long in its current format) for more clearer for readers.
Reviewer Response: It is ok now.

1-2. The last paragraph of the introduction could be as a separate paragraph starting with "the aims of this study....".
Reviewer Response: It is ok now., but without subsection just start as in this study we aimed to......

Methods:

2-1. Could the author replace the word "determine" by the word "investigate" in the last sentence of the second paragraph in the study design and sampling section.
Reviewer Response: It is ok now.
#3. Results:

#3-1: In the footnote of table 5, it is mentioned "Adjusted odds ratio..". Could the author mention adjusted for what variables?
Reviewer Response: footnotes for adjustment should be mentioned.

#3-2: If the data available, could the author present what are the common types of pesticides applied by participants and the percentage of participants for each type or family like insecticides …no%, herbicides…no%…etc.
Reviewer Response: It is ok now.

Discretionary Revisions

Could the author give a foot-note for the figure to be more clear and more explained.
Reviewer Response: It is ok now.

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

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.