Author’s response to reviews


Authors:

Martin Adokiya (mnyaaba11@gmail.com)
Benjamin Baguune (guubeny2k@rocketmail.com)
Joyce Ndago (jdago2000@yahoo.com)

Version: 2 Date: 20 Feb 2017

Author’s response to reviews:

School of Hygiene
Ministry of Health
P. O. Box 88, Tamale
Northern Region, Ghana

20th February, 2017

The Editor
Achieves of Public Health
Dear Sir/Madam,

RE-SUBMISSION OF A REVISED MANUSCRIPT (AOPH-D-16-00104R1)

I herein resubmit our revised manuscript on "Evaluation of Immunization Coverage and its associated factors among children 12-23 months of age in Techiman Municipal, Ghana".

We are particularly grateful to both the Editor and Reviewers. Your comments have been very helpful and it has greatly improved the quality of our manuscript. In addition, we have specifically addressed each of the comments/suggestions from the Editor and Reviewers in the revised manuscript. We have also submitted two documents; the revised manuscript with track changes and the revised manuscript without track changes to facilitate the review process.

With humility, we believe that all the comments have been adequately addressed in our revised manuscript.

Kind regards

Signed

Benjamin Baguune

(Corresponding author)
General Comments from Editor:

Though, it is of interest, we are unable to consider it for publication in its current form. The reviewers have raised a number of points which we believe would improve the manuscript and may allow a revised version to be published in Archives of Public Health.

Response from Authors:

We have revised our manuscript to conform to the journal style from the previous form. The regression analysis has been revised. Tables 4 and 5 in the previous version have been replaced with Table 4 in this current version. In addition, language review has been done. All the track changes are maintained for easy verification.

Comments from Reviewers:

Reviewer #1:

Background and methods:

Comment 1:

In the background section, reference is made on the national immunization coverage of 77% but no mention is made for the region were the study was conducted. This does not help contextualize the problem. This information should be added. Also, this percentage would have been a better estimate for sample size calculation.

Response from Authors:

Thank you for your useful comment. The regional information has been inserted. For specific, see page 5, line 125-126.

Comment 2:

Any particular reason why analysis was carried out using two statistical software packages?
Response from Authors:

Thank you for this comment. Explanation has been provided for using both statistical software packages. For specific, see page 8, line 236-237.

Comment 3:

Ethics: You indicated that the Techiman Municipal Health Directorate gave permission and participants gave informed consent. However there is indication of a competent ethical review committee having reviewed and approved the protocol.

Response from Authors:

Thank you for this comment. The information on Ethics has been revised. For specific see pages 8&9, line 239-257.

Results:

Comment 1:

Improve style of writing! For example on line 182- (Nearly all (97.0%) of the respondents possessed their children’s' child health record cards 183 except the remaining 3.0% (Table 1). It is obvious that the compliment of 97% is 3% so need to mention it

Response from Authors:

Thank you for this comment. The sentence has been revised. For specific see page 10, line 265-266.
Comment 2:

Line 223 & 212: Factors associated with incomplete child immunization status using multivariate (unadjusted) 213 logistic regression analysis. If no control variables were included in the analysis then this can't be referred to as multivariate. Probably meant bivariate analysis. Not addressed

Response from Authors:

We are grateful for these particular suggestions/comments. We have reanalyzed the data using multivariate logistic region (both adjusted and unadjusted). Thus, “tables 4 and 5 in the previous manuscript” have been replaced with the current revised information in table 4.

Comment 3:

Last column, table 2 the title should be Coverage by either card or recall NOT Coverage by card plus recall

Response from Authors:

Thank you for this additional comment. Coverage by either card or recall has been inserted and Coverage by card plus recall deleted. For specific see table 2, page 23, line 759-760.

Comment 4:

It is not clear whether the outcome variable was two are three categories (fully vaccinated, partially and not vaccinated at all). If three categories, binary logistic regression would not work. If the 6 cases that were not vaccinated at all were dropped or regrouped with partial this need to be said explicitly.

Response from Authors:

Thank you for this comment. The variables were regrouped into two categories. The “partially immunized” and “not immunized” were regrouped as one category (not fully immunized). For specific, see page 8, line 228-231.
Comment 5:

A huge odds ratio figure such as AOR=227.81 is a pointer to too small numbers in the cells. You might consider revisiting this - consider collapsing response categories. Not addressed

Response from Authors:

Thank you for your comment. The analysis has been revised. For specific see page 2, lines 21-22; page 11, line 319; and page 26, lines 771-778 (table 4).

Reviewer #2:

Comment 1:

However a few minor mistakes I have pointed out, kindly correct them.

Response from Authors:

Thank you very much for your comments/suggestions. We have taken time to address them as shown below.

Comment 2:

One important thing I want you to mention in your limitations is, that in methodology section you describe that information on immunization was collected by checking the immunization card AND if the mothers have misplaced it, by asking them, which shows recall bias (which you already mentioned in your limitations), just elaborate what recall bias you talk about.

Response from Authors:

Thank you for this comment. The recall bias is a form of systematic error. Elaboration on this has been inserted. For specific, see page 16, line 594-596
Comment 3:

Secondly the ages you covered were between 12-23 months, was there any possibility that a certain vaccine was supposed to be administered at say 15 months and a lot of infants were below this age? Kindly elaborate about how you tackled this issue. What I suggest is that you just include a line or two about that immunization records were checked as per WHO immunization protocol of this age group

Response from Authors:

Thank you very much for this comment. An elaboration on using 12-23 months old children for the study has been inserted. For specific, see page 6, line 176-180.

Comment 1:

Pg #9, LINE 104= The thirty (30) clusters were selected using cluster identification form through the probability proportionate to size simple random method : => DOES NOT MAKE SENSE.plz rephrase

Response from Authors:

Thank you for this comment. The information on sampling has been revised. For specific, see page 6, line 180-182.

Comment 2:

Pg# 10, LINE 119= HAVEN => having

Response from Authors:

Thank you for this comment. “Haven” has been changed to “having” and the sentence is also revised. For specific, see page 7, line 192-193.

Comment 3:

pg#20

This finding may be explained that, mothers who lost their child health record cards were afraid to visit immunization service sites because of the fear that, health care providers may ridiculed
them for not being serious with their child health records. It could also mean that certain immunizations may have been given to those children but because there are no records, mothers could easily forget and recall that no immunizations were given.

369

=> revise paragraph for grammatical mistakes.

Response from Authors:

Thank you very much for this suggestion. The paragraph has been revised. For specific, see pages 15&16, line 522-575.

Comments of the Editor

Comment 1:
Please do a strict language review.

Response from Authors:
Thank you very much for this useful comment. Language review has been done and is shown throughout the entire manuscript.

Comment 2: Table 4 cannot be understood, as the table speaks about “multivariate (unadjusted)” analysis and in a multivariate analysis always has an adjustment for the variables in the model.

Comment 3: Table 4: the OR cannot be interpreted as one do not know what the categories are and what is compared. I would propose to integrate table 4 into table 5 and present the unadjusted and adjusted OR in the same table each with the 95% CI. You may drop the p-values as they have no additional information over and above the 95%CI.

Comment 4: Table 5, when using abbreviations in the Table variable level such as for education JSS, SHS etc. , you should add the full name in the legend.

Comment 5: Table 5: age => I suppose it is the age of the mother or caregiver

Comment 6: Table 5: the fact that the likelihood of being not vaccinated is higher in the highest education group (JSS/Middle school), was this an expected outcome?
Response from Authors on comment 2, 3, 4, 5 &6:

We are grateful for these particular suggestions/comments. We have reanalyzed the data using multivariate logistic regression (adjusted and unadjusted). Thus, tables 4 and 5 in the previous manuscript have been replaced with the revised information and table. The following pages and lines contain the inserted information.

Page 2, lines 17-25, revised results using multivariate logistic regression has been inserted to replace the previous one.

Pages 11, lines 310-333, description of table 4 based on the revised multivariate analysis has been inserted to replace the previous information on tables 4 and 5.

Page 12, lines 348-349, title of current table 4 inserted. This replaces titles of previous tables 4 and 5.

Pages 14-16, lines 464-591 on discussion based on the revised multivariate results has been inserted.

Page 17, lines 633-639 on conclusion has been revised based on the revised analysis.

Page 26, lines 771-778 on table 4 as an additional file has been inserted to replace the previous tables 4 and 5.