Author's response to reviews

Title: Measles Outbreaks in Displaced Populations: A Review of Risk factors for transmission, morbidity and Mortality.

Authors:

Isidore K Kouadio (kouadio_iso@yahoo.fr)
Taro Kamigaki (kamigakit@mail.tains.tohoku.ac.jp)
Hitoshi Oshitani (oshitanih@mail.tains.tohoku.ac.jp)
Emmanuel A Mpolya (emmanuelmpolya@yahoo.co.uk)

Version: 2 Date: 18 October 2009

Author's response to reviews: see over
To
Andrea Bucceri PhD
Scientific Editor BMC –Series Journals

Object: Response to the reviewer’s recommendations regarding our paper entitled: “Epidemiological review of the risk factors of measles outbreaks in displaced populations.”

Dear Andrea Bucceri

Thank you for this opportunity you’re giving us to improve the quality of the article entitled: “Epidemiological review of the risk factors of measles outbreaks in displaced populations.”

From the reviewer’s standpoints, we extensively reworked according to the recommendations as well as additional improvements.

We came up with the revised version; all reviewers’ queries have been considered. In underline and yellow color highlights are the responses of reviewers, in this revised document.

Further research has been made in order to respond to reviewer’s comments, so that additional references were added leading to a new order in the reference list and in the text.

Additional changes (in the titles and in the body of the paper), and corrections were made by the authors by including some interesting aspect into the revised paper.

Copy-editing was done by a native English-speaking colleague.

We trust these improvements meet your approval. We look forward to hearing from you.

Sincerely,

Kouadio koffi Isidore

pp. Hitoshi OSHITANI
Response to the recommendations of the reviewers

I- RESPONSE TO REVIEWER A: Rebecca Grais

- Major Revisions:

1) This is an interesting article which attempts to address the ongoing policy dilemma concerning the appropriate response to measles outbreaks in emergency settings. It is a timely and important contribution, but the manner in which the article is written necessitates a great deal of knowledge of the subject area and policy. The authors need to add:
   a) significant background information on measles control strategies in order for the article to be understood. For example, it is important for the reader to understand that most of the emergencies referred to here are in contexts where there is not a two dose strategy for measles.
   b) all references to burden and global control need to be updated

Response:
Revision was made accordingly to the reviewer’s recommendations in the background (line 72 to line 78). Information regarding the absence of 2 doses strategy was further describe in the results (line 232 to 233) and in the discussion part (line 286-287).
Information on the global effort control of measles was provided see, Background (line 75 to 78).

2) The review itself is limited because the authors restricted themselves to published literature. This needs to be discussed clearly in the limitations

Response:
The discussion related to the limitation due to the restriction to published paper was done line 332-335.

3) Inclusion and exclusion criteria for the search need to be clearly defined. The current manner in which this is described is insufficient. For example, how are the authors defining an emergency? Malnutrition?

Response:
Information related to emergency and malnutrition is provided in the background to set-up the context our study. Please see line 91-100, line 111 to 120. Further information were provided in the method. See, line 158-165

4) MMWR is listed on Pubmed. This is not a separate search. What about the languages searched? References in the articles cross-referenced? Other databases?

Response:
The point indicated by the reviewer is important issue. Since all articles in MMWR are not automatically found in Pub-med. Additional information was added, in the method part (Lines 158-165). Other issues were pointed out in the limitation part (Lines 332-335).
5) The methodology section contains details which need to be placed in the results. For example, the 9 articles contained should not be in the methods section.
Response: The change was made as recommended by the reviewer (results part, lines 181-184).

6) As the mean is potentially less informative as the number of outbreaks is low, the authors should also provide medians.
Response: Information about Medians was added. Please see in results part, lines 208, 222, and line 228 to 233.

● **Additional remarks**

**Level of interest:** An article of limited interest

**Quality of written English:** Not suitable for publication unless extensively edited

Response: Further changes, improvement and English proof-editing were done. We hope the quality of the revised version will fit the reviewer requirements.

II- **RESPONSE TO REVIEWER B: Claude de ville de Goyet**

● **Discretionary: comments 1, 2, 5, 7, 9, 12, 16, 17, 21, 22, 23, 25 and 26**

C1. Would strongly suggest updating to 2008

C7: Grey published literature from UN agencies or NGO formal reports may also be a good source of reliable data. NLM is increasing including these into their database but coverage is still poor. A Google search with “measles outbreak refugees displaced IDP” provides excellent quotable and reliable sources as good as the UNHCR report quoted by the authors.

C9: Try 30 years up to 2008!!!

Response: The latest measles outbreak in displaced populations in our review took place in 2005, but the articles itself was published in September 2006. And, the literature search was perform from October 2007- march 2008. Please, see information provided in Method part, (line 158 to 165). We think that they was not enough published articles on the topic due to the fact that many organizations involved in managing measles outbreaks among displaced populations do not set a high priority on publishing their observations or in addition to the significant drop in measles deaths due to the measles control effort set-up my the measles Initiative Program ( MI). Our limitation may have been to have limited our study to only Published articles, further more on articles with QUANTITATIVE DATA and in english language only (not to include reports from the Grey literature and others). This was discussed in the limitation of our study See Discussion part under Limitations section (line 332 to 335).

C2. 2008 figures available from UNHCR

Response: the update was done accordingly. Please see background part line 117 to 120.
C5: Would be more positive and stronger if you can state that where it has been implemented, morb/mort has been reduced. Data should exist. (WHO or UNICEF)

Response: revision was made (Line 142 to 144). This citation was quoted by references (Ref.24 and 25).

C12: Any indication of similar findings in outbreaks in normal poor population? Is it something specific to refugees/IDP? May be yes or not.

Response: This finding was pointed out because; Measles has always been described to be a disease among under 5 years old children. Even if we can sometimes see measles in older age children in normal poor population, the case of refugees might be more recurrent due to the usual risk factors including over-crowdings, poor vaccination coverage or no prior vaccination due to interruption of vaccination program due to conflict, wild measles infections. The absence of immunity neither prior vaccination, nor prior exposition to measles diseases) may lead to the occurrence of measles in older age. (We believe that this situation is more frequent in refugee’s settings than in the normal situation). (This was discussed in the discussion part also, line 268-269)

C16. Anything more recent?
Response: Since the post disaster Outbreaks reviewed occurred in 1978-2005. We believe that this information may fit to the context period. Therefore no accurate information in the same context was found.

C17: In emergencies or normal circumstances???
Response: Revision was made accordingly. See in discussion part, line 268-269

C21. Did it affect quality and accuracy of data in the reviewed article??/
Response: Ongoing conflicts lead to the disruption of public health and vaccination programs therefore may be an indirect contributing risk factor for diseases morbidity and mortality (including measles) specifically among displaced populations (see revision line 282 to 285). (In the case of our study, the access (even of the public health official) to reach the displaced populations in North Sudan was rejected by the rebels forces, after negotiations failure).

22. Too cautious?
Response: revision was made accordingly see line 287 to 289.

C23 Not realistic to base an immunization campaign on specific surveillance data under emergency conditions.
Response: The idea was clarified. See line 298-299 of the discussion part.
C25 Is it the only recommendation / conclusion of the authors... you did not take a clear position regarding the age... should the age ceiling be reconsidered as a rule?

C26 You did not need a review to reach this conclusion.

Response: Rectifications were done, the sentence was cancelled

Recommendation regarding age ceiling was discussed (line 325 to 327).

- **Major compulsory: 19, 24, 28**

  C19: There are so many situations with overcrowded camps explanation may not be sufficient. Much more likely is the higher AR is an artefact when surveillance is passive and based on hospitals.

  Response: We agree with the reviewer. But our study is an observational study based on the findings of others. And in our observation, overcrowding and high population density has facilitated rapid transmission of measles leading to the increase in attack rate.

C24: Not clear... are the several guidelines referred above distinct from those recommend from WHO and UNICEF. Would be important to know the issuer of the ‘several guidelines’. Some re-writing may help.

Response: The sentence was revised. See line 298-299.

C28. Again, mild statement which is applicable in any circumstances. The following one is better.

Response: further changes were done. See line 344 to 348.

- **Minor essential: comments 1, 3, 4, 6, 8, 10, 11, 13-15, 18, 20, 27 and 29**

  C1 : Would strongly suggest to update to 2008

  Response: already answered. See response of (C1) Discretionary comment above.

  C3. Of an estimated

  Response: revision was made. See line 77

  C4: This is coming out often in past publications. Suggest you provide a few references to strengthen your statement.

  Response: the sentence was revised. See line 79-80.

  C6: Worded as YOUR conclusion not as background. If general consensus in literature sys so and document.

  Response: This sentence was dilated from the background part
C8: Would help to know the exact combination or process as it cannot be duplicated by the reviewer. Were all key words used jointly with “and” “or”???
Response: Further details were provided. See line 158 to 165

C10. Are all readers sufficiently aware of active vs passive surveillance... footnote may be useful for others.
Response: Further description of active and passive surveillance was provided in the background part. (See line 128 to 132).

C11. Spell out first appearance in text
Response: correction was done. See in the results part line 208-209

C13. Target for vaccination
Response: The rectification was done as recommended. See line 237-238.

C14. Repetitive see comment 13. The relation between age of morbidity and vaccine should be in discussion
Response: appropriate rectification was done (see line 238)

C15. Identified by the authors of the reviewed articles?
Response: The sentence was revised accordingly. (See line 240-242).

C18. Failure of vaccination or of vaccination campaigns??? Not the same
Response: Rectification was done. See line 271.

C20: Correct but not clear for most readers. Why is lack of surveillance affecting case fatality rate??
Response: further explanation was provided. See line 279 to 282.

C27. I am not sure whether this should not be at the beginning of the section (discussion)
Response: all authors agreed to leave the limitations of the study at the end of the discussion, and to end with an open suggestion.

C 29. Alphabetic order please
Response: List of abbreviation was put in alphabetic order. See, the abbreviation part.
III- RESPONSE TO REVIEWER C : William Moss

Major compulsory revisions

1. Although the authors state that they conducted a “systematic review”, it is not clear from the description of the methods that the authors followed all of the guidelines for a systematic review. More details should be provided to convince the reader that the authors followed the guidelines for a systematic review. The time period covered for the search is not stated.

Response: additional information was provided. The point related by the reviewer was corrected. (See method part line 158 to 165). See, abstract part, line 34-35.

2. The authors do not account for the progress that has been made in reducing measles incidence and mortality in recent years, particularly in sub-Saharan Africa. This progress has implications for measles mortality in displaced populations. In their analysis, the authors could highlight changes in measles incidence and mortality over time in displaced populations and how this might be related to larger efforts in accelerated measles control.

Response: We totally agree. The reviewer is making a very good point. The different points mentioned by the reviewer were added in the background part (line 75-78), the results parts (lines 228-231) and discuss in the discussion part (lines 322-324).

3. The authors should discuss the potential impact of publication bias on their findings. Many organizations involved in managing measles outbreaks among displaced populations do not set a high priority on publishing their observations and much of this experience probably exists only in the “grey” literature, thus, increasing the likelihood of publication bias toward severe or unusual outbreaks.

Response: The discussion related to the lack of published articles in measles management in emergency settings was discussed in the Limitation of the discussion part, (lines 332-335).

Minor Essential Revisions

1. The statistics on the estimated number of measles deaths in 2000 as presented in the Background is old data. The authors should provide the most recent WHO estimates.

Response: Information on recent data on measles deaths was provided 2007 comparatively to 2000 in the effort to reduce measles mortality worldwide. See Introduction part (lines 75-78)

2. The acronym IMCI does not include “Implementation of”.

Response: Correction was made accordingly. See line 357.
● **Discretionary Revisions**

1. The number of tables could be reduced by combining and condensing some of the information.

   Response: The number of tables has been reduced from 5 to 3. (See tables part)

● **Additional remarks***

Quality of written English: Needs some language corrections before being published

Response: Further changes, improvement and English proof-editing were done.

We hope the quality of the revised version will fit the reviewer requirements.