Author's response to reviews

Title: Yellow fever control in Cameroon: where are we now and where are we going?

Authors:

- Charles Shey Wiysonge (charles.wiysonge@mrc.ac.za)
- Emmanuel Nomo (a_nsina@yahoo.fr)
- Jeanne N Mawo (ngo_ndjian@yahoo.com)
- James Ofal (ofalutia@yahoo.com)
- Julienne Mimbouga (wiysonge@yahoo.com)
- Johnson Ticha (tichajohnson@yahoo.fr)
- Peter M Ndumbe (pndumbe@yahoo.com)

Version: 2 Date: 11 December 2007

Author's response to reviews: see over
11 December 2007

Dr Annabel Phillips
Senior Assistant Editor
BMC-series Journals
BioMed Central

Re: MS: 1825222038162597
Yellow fever control in Cameroon: where are we now and where are we going?

Dear Annabel,

Thank you for the opportunity to re-submit a revised manuscript for consideration. We are happy that one reviewer has recommended acceptance of our manuscript after minor revisions.

We have addressed the reviewers’ comments and formatted the revised manuscript to conform to BMC-series journals’ style.

In the following pages we provide a point-by-point response to the reviewers. We have put the reviewer comments in bold and inside quotation marks, with our response below each comment.

The comments helped to improve our manuscript, for which we are grateful.

We trust that the revision meets the requirements for publication in BMC Medicine.

Yours sincerely,

Charles
Reviewer: Alan D Barrett

A. General comment

1. “This manuscript describes ongoing activities in Cameroon to improve immunization against yellow fever. The manuscript is well-written, informative and provides important information for those with similar plans. I only have a few comments that need attention.”

This is a compliment. Thanks.

B. Major Compulsory Revisions

2. “Results section, line 3. I think more information is needed on how the authors know routine immunization did not involve the same children having more than one immunization.”

We have now provided details on routine immunisation data collection and processing, which we believe clarify this point. Thanks.

3. “Results: surveillance of adverse events following immunization (aefi). The authors say they integrated aefi with paralysis and measles. This may potentially pick up neurological aefi but not viscerotrophic aefi. Aefi is a big issue for yellow fever vaccine at the present time. There have been a significant number of aefi’s reported in non-endemic countries while endemic countries have reported very few cases. Therefore, it is critical that the authors explain in detail how they followed up aefi’s and how can they say there were none.”

We have now provided details on AEFI surveillance during and after the campaigns. Thanks.

4. “Discussion: Please clarify what a “major adverse event is versus a non-major aefi?.”

We now use the term serious AEFI, instead of major AEFI, and have provided the definition. Thanks.

5. “In catch up and mass vaccination campaigns, how do the authors know the same individuals did not receive vaccine on more than one occasion? For example, the Bolivian MoH claimed 90% of the population of Santa Cruz were immunized against yellow fever while a serosurvey found only 30%. It turned out the same children had received multiple immunizations due to conscientious parents.”

It is definitely possible that some people received the vaccine more than once. However, since coverage surveys for previous supplementary activities (SIA) in Cameroon have consistently found the real coverage to be higher than the reported administrative coverage, we assume that only a negligible number of people could have received the vaccine more than once during the same yellow fever SIA. It is worth noting that a vaccination team consists of a vaccinator, the person who records the vaccinations, and a person who mobilises the community. The latter are recruited from the community and tend to know everyone in the area served by a vaccination team. They would turn back a person coming for a second vaccination during the same SIA.
C. Minor Essential Revisions

6. “Introduction, line 5-6: You cannot have “accidental monkey to human transmission” The virus must be transmitted via a mosquito.”

We have re-phrased the sentence. Thanks
Reviewer: Douglas MacPherson

A. General comment

1. “Is the question posed by the authors new and well defined? Yes. Integrated vaccine-preventable disease control programs in endemic zones with infrastructure challenges can provide useful lessons for program design and implementation for other diseases in other situations. This paper focuses on the outcomes.”

   This is a compliment. Thanks.

2a. “Are the methods appropriate and well described, and are sufficient details provided to replicate the work? Yes. Suggestion: rather than just cite the WHO case definitions it would be valuable to state the definitions used during the study period.”

   We have revised the methods section as suggested. Thanks.

2b. “Some description on how the educational and training component of the surveillance strategy was developed and implemented would be valuable as this contributes to the evaluation of program design and implementation; which included the vaccine (control through prevention and outbreak) public health response. Clearly, the sensitivity of suspect clinical case surveillance increased during the study period with larger numbers of cases referred for conformation and fewer being positive for yellow fever IgM antibodies. Some allusion to the difficulties of maintaining control of diseases with increasingly rare outcomes was made, but the sustainability of prevention and control strategies with competing social requirements could be more strongly stated.”

   We have revised the methods section as suggested. Thanks.

3. “Are the data sound and well controlled? Yes. Descriptive public health program and epidemiology methodology was used vs. a case control design, which would have required non-surveillance case matched controls tested for IgM antibodies. Not required in this program design.”

   We take this for a compliment. Thanks.

4. “Does the manuscript adhere to the relevant standards for reporting and data deposition? Yes.”

   This is a compliment. Thanks.

5. “Are the discussion and conclusions well balanced and adequately supported by the data? Yes.”

   This is a compliment. Thanks.

6. “Do the title and abstract accurately convey what has been found? Yes.”

   This is a compliment. Thanks.

7. “Is the writing acceptable? Yes”

   This is a compliment. Thanks.

B. Major Compulsory Revisions

8. “None.”
This is a compliment. Thanks.

9. “Nicely presented – congratulations to the program designers/implementers and authors.”
This is a compliment. Thanks.

10. “Clarity that the mosquito vector is intermediary in the urban “human-human” cycle and the rural “monkey-monkey” cycle with inadvertent human insertion into that cycle.”
We have re-phrased the sentence as suggested. Thanks.

11. “Variance between YF and measles up-take is presented without direction. Was YF vaccine acceptance ever higher than measles? What are the implications for interpreting this variance when both routine childhood immunization and outbreak vaccination strategies are used?”
We have now provided the direction of measles-YF variance. With a few exceptions, the routine measles vaccination coverage was always higher than the yellow fever vaccination coverage.

12. “How did the “flaccid paralysis” surveillance design contribute to the integrity of the YF and measles vaccination programs aside from using the same teams? For example: augmented training, educational attainment within the program assessments, evaluation of team compliance/knowledge management”
We acknowledge that there are bound to be other benefits for integrating surveillance of yellow fever, measles, and other diseases to that of acute flaccid paralysis over and above the ones cited. However, we did not conduct a formal assessment of such benefits.

Many thanks for this recommendation.