Author's response to reviews

Title: Assessment of quality of antenatal care services in Nigeria: Evidence from a population-based survey

Authors:

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Version: 2 Date: 10 September 2015

Author's response to reviews: see over
Assessment of quality of Antenatal care services in Nigeria: Evidence from a population-based Survey

Adeniyi F Fagbamigbe and Erhabor S Idemudia

The Editor, please find below our responses to your comments and the comments of the two distinguished reviewers. Our responses are highlighted in red.

Thank you.

Editors Comments

The Introduction section is too long. Please make an effort to strongly reduce this Section. An Introduction can be written in three paragraphs containing the following: the motifs that lead you to do this study, literature support for your hypothesis and objectives of your study.

We have overhauled the introduction section

In writing your Discussion section please follows the following recommendations: Please find below a scheme to follow in the Discussion section:

Discussion section:
* statement of principal findings of the study. Summarise key results with reference to study objectives
* strengths and weaknesses of the study
* strengths and weaknesses in relation to other studies, discussing important differences in results and what your study adds. Whenever possible please discuss your study in the light of relevant systematic reviews and meta-analyses (eg Cochrane reviews)
* meaning of the study: possible explanations and implications for clinicians and policymakers and other researchers; how your study could promote better decisions
* unanswered questions and future research

These guidelines have been followed in re-writing the discussion section

Please do not make recommendations that are beyond the results of the study. We are asking you to remove all the section Recommendations.

The recommendation section has been removed

Please read carefully the Instructions for authors regarding the references. In those references not coming from journals please provide the link and the date that you accessed the link.

Please avoid using the term etc. like in the abstract.

We have removed such words

Avoid using statements like ?only few studies? without providing an extensive literature systematic review to support your statement.

We have provided relevant references

Please provide in a separate page a legend for the figure given a clear explanation of it.

Ethical approval should be given in this article and not as a reference.

The full ethical approval has been provided
Reviewer's report

Title: Assessment of quality of Antenatal care services in Nigeria: Evidence from a population-based survey

Version: 1 Date: 25 May 2015
Reviewer: Nomita Chandhiok

Reviewer's report:
Assessment of quality of Antenatal care services in Nigeria between 2007 and 2012: Evidence from a population based survey

Comments
The paper addresses quality of antenatal care services in a resource constrained country- Nigeria. Besides increase in coverage of ANC services, improvements in quality of care will have the greatest impact on women accessing these services. This paper is therefore important. Moreover, it provides country wide estimates by analysing data obtained from a population based survey.

Major Compulsory Revisions (which the author must respond to before a decision on publication can be reached)
However, the paper requires extensive modification and editing before it can be accepted for publication. My comments are as follows:

1. English is perhaps not the native language of the authors. The sentences are complex, framed wrongly and with grammatical errors. Sentences should be broken down into simple sentences that clearly convey the meaning. Words have been used wrongly. The English needs to be improved. It is suggested that they take the help of someone who is proficient in the English language or have the paper edited professionally. 
   We have reviewed and did language editing

2. Abstract: since the supply side deficiencies were not analysed in this paper, it would not be appropriate to conclude that “ensure that vaccines, consumables and logistics are provided”
   The phrase was removed and the whole sentence have been modified.

3. Introduction:
   a. 1st sentence 2nd para- “use of ANC is very key to reduction of the ever high maternal mortality ratio in Nigeria”. MMR is impacted by many causes including obstetric, social, cultural and economic and therefore stating that utilization of ANC would lead to reduction in MMR is a sweeping statement.
      The statement has been reworded to read “adequate use of ANC could contribute to reduction of the ever high MMR in Nigeria”
   b. The introduction is long with repetitive sentences
      We have reviewed and shortened the introduction
   c. For the understanding of the reader, some background information pertaining to ANC services in Nigeria should be provided e.g whether free/paid. Since when has the ‘focussed ANC package’ been introduced in the program. Is it implemented all over the country. Did health providers receive any training when it was introduced? A reference may be provided about ‘10 Nationally recommended components of ANC’- training guidelines or manuals
      This has been provided
d. The need for the study and why it was done does not come out in the introduction. What would the study results contribute to and how would the study results be used  
This has been provided

e. There is nothing like a Tetanus injection. It is a Tetanus Toxoid injection  
This has been corrected

4. Methods:
   a. By skilled worker do you mean a skilled birth attendant? Besides ‘doctors, nurse/midwife, ANM’ who are the other health workers authorised to provide ANC  
   Skilled worker refers to the skilled birth attendants. In Nigeria, there is no health worker authorised to ANC beside doctors, nurse/midwife and auxiliary nurses and midwives. All other ones are unauthorised as they are “unskilled” as used in our analysis.

   b. How did you analyse skill of the institution in providing ANC through a survey instrument  
   We relied on the respondents answer to the question “who attended to you during your ANC visit?” In situations where there are more than one response, the most skilled is assumed to have been used

   c. The paper considers good quality ANC when there is receipt of all the 10 components of ANC. However, in program conditions this is desirable but may not be universally achievable. The analysis could be split into ‘desirable’ QoC which includes all 10 components and ‘minimum acceptable’ QoC which could include 7-8 critical components.
   We have extracted those that received the 8 critical ANC component, and classified them as having minimum acceptable QoC. We reported the distributions of having minimum acceptable QoC but we didn’t report the logistic regression for it because the odds are very similar with those of desirable quality.

5. Results:
   a. Only women who had received 1 ANC were included in the study. Of the total sample, 1% did not receive any of the 10 ANC components. The data of this subset should be carefully analysed to understand what they were offered during this ANC visit  
   A further analysis of what the 1% women who received none of the ten components considered in this study showed that they did not receive any other complements and also that they were mostly serviced by unskilled ANC provider and in the “homes”

   b. A very high proportion of women received Iron supplementation (90.8%). Was there a minimum cut off of number of Iron tablets given to woman. E.g in many countries 100 tablets of Iron supplementation during pregnancy is considered the quality of care.  
   We have used a secondary data that did not indicate any cut off. Only number of days for which the drugs were taken were recorded which does not indicate quantity as most responses were not reliable. We relied on respondents answer to the question “During this pregnancy, were you given or did you buy any iron tablets or iron syrup?” This is regarded as a weakness and has been reported as such.
Reviewer's report
Title: Assessment of quality of Antenatal care services in Nigeria: Evidence from a population-based Survey
Version: 1 Date: 19 July 2015
Reviewer: Mary Obiyan

Reviewer's report:
Major Compulsory Revisions
Discussion
L212: Why is measurement of blood pressure and use of Iron supplement important in ANC? It has to be justified here
We have provided the information
L238: “The WHO recommended minimum of four visits to ANC providers in the course of a pregnancy” Was it recommended to ANC providers? Or users?
We have made the statement clearer

Minor Essential Revisions
Abstract
L26: Define ANC at first Use
We have done this
L35: why did the authors choose ten components
Ten components were chose because they are the most essential and also because they have been used in earlier study as duly referenced
Correct some typos
Introduction
L67: what does the authors meant by ““ever high””? We have reconstructed the sentence
L67: capitalise abbrevations of MMR
We have done this
L68: Inadequate ANC….something is missing
We have included the result on adjusted odd ratios in the prose

Methodology
It is not clear from the description whether clustering and sample weights were accounted for in the analysis. Please provide details
This information has been provided at the tail end of the methodology
Results
Adjusted odd ratios in the table were not reported in the prose

Discussion
L234 It is not clear what the authors mean by “higher multiplicative odds”? We have deleted the word “multiplicative”

Discretionary Revisions
The authors need to read the manuscript and correct the typos

**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'