Author's response to reviews

Title: Community-based infant hearing screening in a developing country: parental uptake of follow-up services

Authors:

Bolajoko O Olusanya (boolusanya@aol.com)
Oladele Akinyemi (dele_akinyemi@excite.com)

Version: 2 Date: 8 June 2008

Author's response to reviews: see over
08 June 2008

The Editor
BMC Public Health
BioMed Central
London, UK

Dear Sir,

Revised Manuscript MS: 9229650211913650
Community-based infant hearing screening in a developing country: parental uptake of follow-up services

Thank you for your interest to consider our manuscript further and for the various comments from the reviewers.

The authors’ responses to the specific comments of the reviewers and the actions taken are detailed in the attached document.

We look forward to your final decision in due course.

Yours sincerely

Bolajoko O. Olusanya  MBBS, PhD, FRCPCH
Community-based infant hearing screening in a developing country: parental uptake of follow-up services

REPLY TO REVIEWERS' COMMENTS

Reviewer #1 [Christine Yoshinaga-Itano]: Note: Authors’ responses in red and underlined

1. **Authors should insert the number of babies screened, number referred and percent referred in the Participants’ description.**
   Reply: Done along with additional information on the total population screened as requested by Reviewer 3 has been provided [page 10 para. 1 & 2].

2. Tables 1 & 2 should be referred to within the text and should be included in the section for study results.
   Reply: Done [page 11]. Please note that former Tables 1 & 2 are now Tables 2 & 3.

3. **In the first sentence in Conclusions of the abstract “no” should be replaced with “number”**.
   Reply: Done [page 2].

4. Abbreviations such as PCEHL, BCG, TEOAE should be defined where first cited.
   Reply: Done [page 3, 5 & 8]

5. **The number of children diagnosed with hearing loss out of the 50 that returned should be stated.**
   Reply: Done [page 10, para. 2].

General:
The relevance of this study to the developed world as highlighted by the reviewer has also been reflected in the manuscript [page 18, para. 1].

Reviewer #2: Note: Authors’ responses in blue and underlined
6. The variables examined were not adequate to fully establish factors that may inhibit effective maternal/infant participation.

Reply: The objective of the study as stated in the abstract has been revised to emphasise the focus of this study, which was to identify socio-demographic factors that may be associated with maternal non-compliance with the screening protocol. [see Abstract]. Moreover, the authors are of the view that the number and range of variables included in the study are comparable to similar studies already cited in the manuscript [11,13,14] as well as community-based (as supposed to hospital-based) studies from the developing world [Onah et al. HE, Ikeako LC, Iloabachie GC. Factors associated with the use of maternity services in Enugu, southeastern Nigeria. Soc Sci Med 2006, 63:1870-78; Celik Y, Hotchkiss DR. The socio-economic determinants of maternal health care utilization in Turkey. Soc Sci Med 2000, 50:1797-1806]. In addition, we have provided some background for the selected variables under Methods [pages 7 & 8] as suggested by Reviewer 3, and also noted the need for future studies to examine the possible role of variables not included in this study [page 18, para. 1].

7. The authors should provide further explanation for the association between non-hospital delivery and follow-up default as found in this study.

Reply: We have acknowledged the need for further qualitative studies to establish what additional factors may account for this relationship [pages 12 & 13].

8. Literacy was not reported in the article, and the fact that so few mothers had low education levels means that the variable could not be tested adequately.

Reply: Assessing “literacy” accurately would have required test measures such as the Rapid Estimate of Adult Literacy in Medicine (REALM) which was not the focus of this study. The reference to literacy in the text has therefore been deleted since we did not set out to test “literacy” but to determine if educational attainment correlated with non-compliance consistent with studies in Nigeria for instance linking this variable with maternal health seeking behaviour [e.g. Ikeako et al. Influence of formal

9. The statement referring to health professionals’ limited knowledge about newborn hearing screening should be supported with relevant literature.

Reply: Done. References 24 & 25 added.

10. Since the authors did not test for poverty it may be inappropriate to infer an association between poverty and non-compliance.

Reply: Noted. The statement has been reworded to reflect “ability to pay for services” rather than “poverty”, as the incentives provided were to address the constraint that may be posed by inability to pay for the services or transportation costs [see page 12, para 1]. Although the primary care centres were quite accessible to the populace in line with the country’s health policy to ensure high uptake of services, free transportation was provided under our programme principally to convey mothers and their babies comfortably between the health centres and the diagnostic facility. This clarification has also been added to the text [page 5, para 3].

11. There is no evidence that any of the tested variables supported the conclusion referring to better return rate among the population of infants attending BCG immunisation.

Reply: Noted. This sentence has been deleted as it may distract from the main object of the study.

12. The authors should clarify recommendations based on the data presented and those that are derived from experience and other published reports.

Reply: The conclusions [pages 18 & 19] have been revised accordingly.

General:

Because of the limitations of categorising maternal age which has been previously found to correlate with follow-up compliance, we now compared the mean ages of the mothers using Student’s t-test. As a result, maternal age was found to correlate with return for diagnostic evaluation and this information has now been reflected in the manuscript [page 9, para 2; page 11 para. 3 & page 13, para. 1] and the Abstract. Other minor suggestions as indicated in the original manuscript by word track have been handled appropriately.
13. The effect of newborn hearing screening on parent-infant bonding as well as maternal anxiety should be mentioned briefly in the introduction.
   Reply: Done [page 3].

14. Factors associated with upkeep with newborn hearing screening reported in other studies should be described in greater detail in the introduction.
   Reply: Done [page 4].

15. The list of variables of interest and the rationale for their selection should be provided in the statement of study purpose.
   Reply: Done [pages 7 & 8].

16. The applicability of JCIH 2007 Position Statement should be mentioned.
   Reply: Done [see page 3].

17. A overall description of the participants’ demographic profile as well as background information on the babies should be provided.
   Reply: Done [see page 10, para 1].

18. Further description of the screening programme should be provided for better appreciation of the study.
   Reply: Further details on the participants have been provided [page 10, para 1] to complement the summary of the relevant aspects of the programme like the screening protocol/procedure already provided from the related publication [pages 8 & 9].

19. The authors should possibly explore factor analysis of the variables to determine if a combination of parental characteristics will have some association with non-compliance.
   Reply: This suggestion is outside the scope of the study as we only set out to determine the association of each of the variables of interest and non-compliance as with similar studies. However, it may be worth exploring such analytical approach in a future study that for example adapts the Health Belief Model in evaluating the behavioural dimensions of non-compliance as mentioned on page 18, para 1.
20. What chi-square and Fisher tests were done?
   Reply: Stated on page 9, para 2.

21. What evidence exist that working mothers have great deal of difficulties meeting their appointments?
   Reply: From the authors’ clinical experience in the study location and from the fact that mothers in employment find it difficult to obtain time off work after returning to work from their statutory maternity leave. Further clarification has been provided in the text [page 16, para. 1].

22. The discussion on the effect on superstitious beliefs on non-compliance needs to be supported with evidence.
   Reply: Done [references 19-22].

23. The authors should state that conducting multiple chi-square tests increases the likelihood of finding one significant difference under study limitations.
   Reply: The methods and tests of association used in our observational study are consistent with those of similar studies cited in this paper. We have also analysed all continuous variables with Student’s t-test which has now revealed an association between maternal age and compliance with the diagnostic evaluation [page 9, para 2 & page 11, para 3].

24. The need for a follow-up study to determine the role of socio-cultural beliefs in non-compliance should be stated.
   Reply: Done [page 18, para. 1].

25. Make other minor changes such as change of “no” to “number”, definition of acronyms such as BCG, TEOAE and AABR and others as recommended.
   Reply: Done [pages 3, 5 & 8].