Reviewer’s report

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

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Reviewer: Carole E Johnson

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The article is a valuable contribution to the literature regarding the possible effect of parental factors on compliance and upkeep throughout the stages of a screening program implemented in a developing country. The article has good descriptions of program development and suggestions for program improvements regarding parental education. Some of the weaknesses are in the inclusion of additional background information in the introduction, better development of a rationale, description of the newborn hearing screening program (e.g., false positive rate, etc.) and data analysis.

1. Is the question posed by the authors well defined?
   a. The authors might consider adding a brief mention of the literature regarding the effect of newborn hearing screening programs on parent-infant bonding and upkeep with newborn hearing screening programs. Moreover, the discussion section briefly covers this topic. The notion of maternal anxiety should be introduced in the introduction.

   b. In addition, the introduction should be more well-developed regarding what other types of factors have been associated with poor upkeep with newborn hearing screening programs, both similar and dissimilar to this program. In other words, the rationale should be based on an adequate discussion of previous research. What have studies from other health-care systems found in other countries? How might this relate to this program?

   c. In the statement of the purpose of the study, there should be a listing of all of the variables assessed between groups preceded by a well-developed rationale for inclusion in the investigation.

   d. Some mention of the applicability of the Joint Committee on Infant Hearing Year 2007 Position Statement should be mentioned.

2. Are the methods appropriate and well described?
   a. Some overall demographics of the participants should be described such as age, etc. In addition, information about the babies should be provided too in the participants’ section. The mention of this information doesn't occur until the results section.

   b. The newborn hearing screening program should be described rather than just
referring the reader to a previous publication. The article should be able to “stand
on its own” with regard to a complete description of the program. For example,
what is the typical false-positive rate for this program? What is the percent of
newborns
screened?

3. Are the data sound?
I am not sure from the information provided. Are there some analyses that could
have been completed that would look at interactive effects, such as the effect of
certain patient variables and follow through at various levels or steps in the
screening process (e.g., differential proportions of follow through at screening
versus diagnosis for participants’ variables? Is it possible that some sort of factor
analysis could be completed to see if a COMBINATION OF PARENTAL
CHARACTERISTICS can be associated with non-compliance in follow up?

Conducting individual, multiple chi-square tests decreases the significance of
differences found. For example, if 20 chi-square tests are done on different
aspects of a data set, chances are 1 will be significant. How many chi-square
tests were actually completed?

4. Does the manuscript adhere to the relevant standards for reporting and data
deposition?
a. Somewhat, the justification and details of the data analysis are lacking..
b. What specific chi-square and Fisher tests were done?

5. Are the discussion and conclusions well balanced and adequately supported
by the data? Somewhat.
a. The points about cultural beliefs regarding the stigma of having a child with a
disability being a possible reason for lack of parental compliance are interesting.
b. However the authors should consider that mborn at government facilities
believed may have felt that all of their children’s health needs had been satisfied.
The mothers, however, who had given birth at alternative facilities, may have
been more eager to take advantage of community health services.
c. Pp. 13- How do the investigators know that working mothers have a great deal
of difficulty meeting their appointments?
d. The recommendations for steps needed to improve compliance are quite good
in that they are specific and may be applied by similar developing programs.
e. Although I think that the discussion of superstitions of the culture may relate to
the lack of follow-up, there are no data which support this notion.

6. Are limitations of the work clearly stated?
Yes, for the most part. However, the authors should state that conducting
multiple ch-square tests increasing the likelihood of finding one significant
difference. Was any accounting for this taken into consideration?

7. Do the authors clearly acknowledge any work upon which they are building,
both published and unpublished?

a. Yes, they do, but they should describe the newborn hearing screening program rather than refer the reader to a previous publication (pp. 5).

b. The authors should mention that a follow-up study to the mothers who did not follow through with the program about how their attitudes and folk beliefs affect follow up in newborn hearing screening programs is needed.

8. Do the title and abstract accurately convey what has been found?

9. Is the writing acceptable?

For the most part, the writing is acceptable. However, the following should be considered for change:

a. Abstract: The first line of the conclusions should change “no” to “number”, “Factors other than maternal and infant personal characteristics such as NUMBER of visits, ineffective tracking system and cultural perception of childhood deafness may have a dominant influence on compliance.

b. Define acronyms: PECHL as “permanent early congenital hearing loss” early in the document.

c. Other acronyms to define:

- BCG
- TEAOE
- AABR

d. Participants Section: This line of this section, “for” should be “from”

They were drawn FROM a population of mothers who were enrolled for a three-stage infant hearing screening programme at the time of attending four community health centres to obtain BCG vaccinations for their babies.

e. Pp. 10; second paragraph- May not want to start two consecutive sentences with, “For instance…”

f. Pp. 10; second paragraph- The following sentence seems rather long and confusing:

“Despite the assurances given to mothers when the screening results were communicated to them by the screening staff and the uncertainty of the diagnostic outcome at this stage, a referral at any stage for some mothers may provoke some anxiety about the possibility of a hearing loss and the associated consequences in an apparently normal child which they are afraid of or reluctant to face at such an early age”.

g. There are sentences through the manuscript that could benefit from commas that separate clauses from the main subject and predicate.