Reviewer's report

Title: Hearing screening for school children: Utility of noise-cancelling headphones

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Reviewer: Bolajoko O. Olusanya

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General Comments
This manuscript seeks to validate the superiority of more advanced noise-cancelling headphones over the existing TDH 39 headphones for hearing screening among school children.

The subject-matter is important in establishing the hearing status of school children who have been reported to fail on account of minimal hearing impairment. The authors rightly justified the need for more effective school testing by highlighting the difficulties of the current TDH39 headphones to accurately measure 500 Hz low frequency tones due to the relatively high ambient noise levels frequently associated with school environments. The difficulty in detecting minimal hearing loss in this very important group of children and at a time when it is most amenable to timely intervention should receive priority attention especially in the developing world.

As rightly observed by the authors, noise cancellation headphone technology is not new to the music industry but currently they are not widely used.

Overall, the paper is quite detailed and perhaps unduly lengthy. The authors may therefore consider reducing some sections of the manuscript such as the introduction and discussion to make the key messages more succinct and apparent to readers.

Minor Essential Revisions
1. Abstract: The objective of the study should be stated in the background information.
2. Abstract: From the results of the study it will be necessary for the authors to change the concluding sentence to: “NC headphones show some promise as possible replacements for conventional earphones in school screening programs”.
3. Since audiometer manufacturers now provide insert ear phones as an option, it will be useful to have a discussion comparing attenuation levels and the cost of insert earphones with NC headphones.
4. Table 1 should be deleted and replaced with additional citations in the text
5. Citations
- The following references: 41-44, 46 & 51, were not cited in the text
- Ref 45 & 47 were cited for the first time after Ref 53.
6. Check grammar throughout the manuscript.

**Level of interest:** An article whose findings are important to those with closely related research interests

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

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**
I declare that I have no competing interests.