

Letter to the Editor

Effects of the Mobile Phones on the Hearing Function of the Users

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Dr Jaffar Al-Bareeq
Chief Editor
Bahrain Medical Bulletin

Dear Sir

I read with Great interest the article by Dr Khayria A. Al-Abduljawad about "Effects of the mobile phones on the hearing function of the users". Nevertheless, as I went through the paper carefully, I was very disappointed.

Methodology:

1. She should make sure that all girls use cell phones with direct effect on the ears (not using measures to minimize exposure).
2. It is much better, less time consuming, practical and easier to use the other ear (not used ear) as control what she did, but she did not mention it in the methodology or results.
3. As long as she used the second non-used ear of the same candidate as a control, there was no need to assign an extra control group.
4. She is supposed to use statistical analysis equation for P-value reporting of her results.
5. She is supposed to test the hearing of the candidate not only at 500Hz - 4000Hz but also the higher frequencies (suppose to be earlier affected by noise than the lower frequencies).

Results:

1. How it is possible to have these big numbers of girls(48) for two years, and get them 3 time (every 8 months) for F.U. without a single dropout; unbelievable!!.
2. She compared her results in group 1 and group11 with the non-used ear of the same candidate but she did not use her control group as comparison at all. Why? What happened?

Conclusions:

She was not entitled to draw these conclusions. Our findings showed that there is a limited high degree hearing loss, which could be associated with long-term use of mobile phones.

Sincerely yours
Prof. Abdul Aziz Ashoor
P O Box 40181
A-Khobar
Kingdom of Saudi Arabia
June 9, 2008

Author's Comment

Dear Sir

I would like to thank Professor Ashoor for his valuable comments, and indeed express a degree of concurrence with some of these views.

I wish that he did not use emotional language, when he said, "I was very disappointed". He can say that he disagree and specify his disagreements in objective scientific language.

P- Value has little or no value anyway it merely describes the probability whether a particular result has occurred by chance or not and provides little or no information on the 'effect' i. e. its strength direction and range within which the true effect is likely to reside. I would agree that perhaps confidence intervals (CI) would have been more appropriate.

The girls are using the cell phone with direct effect and no minimization measure. Nevertheless, the result showed that there is exposure effect. For his suggestion, it would be difficult to control the possible confounding factor.

As far as using the other ear as control, he is right; but control group will eliminate the suspicion of the candidates using their ears alternately at some occasions, which happens with many people and we cannot control that or observe the candidate 24 hours a day.

He said, "She is supposed to test the hearing of the candidate not only at 500Hz - 4000Hz but also the higher frequencies (suppose to be earlier affected by noise than the lower frequencies)". He used the term "supposed to be affected", which means in scientific concept not necessarily. However, our result shows the effect and it is up to other researchers to expand on what we have achieved; in this way science progresses.

With regard to 'losses to follow up' 'unbelievable!!', again, he is using the emotional negative language, which does not suit the situation. We always keep our raw data and references in a safe place in case they are needed for the future, according to Vancouver recommendations. I would be happy to provide the IPD for independent verification if requested.

However, the limitations of observational studies are well documented in the literature and clearly the somewhat conservative conclusions reached in this study reflect our observations and those of others and which, in any event, should not be considered definitive until large sample, methodologically sound cohort studies or randomized controlled trials have been conducted.

The conclusion has been very conservative and I believe it matches the limited data that is available.

A researcher is entitled to draw her/his conclusion from the finding of his research. It does not mean that other researcher would not find something different. Professor

Ashoor said, “Our findings showed that there is a limited high degree of hearing loss”; it would have been very useful for the readers, if he has provided his finding in his letter to the editor.

With due respect, it does not suit a researcher and scientist to use an abusive language when criticizing other research, even if she/he disagree with it. Let us remember that nothing is sacred in science; a scientific finding of yesterday can be revoked by a new research evidence of today.

Finally, I would admit that I learned from professor Ashoor comment and I suggest that he expands on my study or we cooperate in doing a major randomized controlled trial. We may add small bloc in scientific progress. Scientists may disagree, but if they do, they go back to basic to find the truth.

Yours faithfully
Dr Khayria A. Al-Abduljawad