Author's response to reviews

Title: Short GSM mobile phone exposure does not alter human auditory brainstem response

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Author's response to reviews: see over
Dear BioMed Central Editorial Team,

Please find enclosed the second revised version for manuscript (MS) entitled:

Stefanics G., et al.: **Short GSM mobile phone exposure does not alter human auditory brain stem response.** (MS: 4876010601424942)

Thank you again for considering our data of interest for BMC Public Health. As the suggestions of the referees were contradictory regarding the length of the Introduction section, we decided to keep it unchanged in the revised MS. We believe that the Introduction section contains necessary background information for understanding the present study. Prof. Ugawa found our explanation for the discrepancy between the results of our current and previous pilot studies not convincing. Since there are at least two major differences between the two protocols of these studies (duration of exposure and the number of subjects involved), we believe that we have done our best to explain the discrepancy by emphasizing these differences. In our present study, we had to adhere to the protocol of the GUARD project, this is why we could not exactly repeat the previous pilot study. As our reviewers did not raise further concerns, we did not make modifications in the MS.

We hope that our response below will be an appropriate answer to the comments of Prof. Ugawa and our MS in the present form will be suitable for publication in BMC Public Health.

Best regards,

Istvan Hernadi
Response to Mariola Sliwinska-Kowalska

- We thank Prof. Sliwinska for valuable comments on the manuscript.

Response to Yoshikazu Ugawa

- We would like to thank Prof. Ugawa for valuable comments on the manuscript. The criticisms greatly helped us to improve the quality of the communication of our results.
- We totally agree with Prof. Ugawa that not all paragraphs are essentially important to those readers who are experts in this field. We also believe that a short introductory review on the current state of this line of research can be useful and informative to all readers of BMC Public Health journal. In addition, one of the reviewers found that we made a good review of the literature and, in fact, suggested us to provide more supplementary information in the Introduction section. After taking into account and carefully considering these opposing suggestions, we concluded that the Introduction contains the amount of background information about the current state of this line of research which is necessary and enough for understanding the present study.
- The current study did not aim to replicate the previous pilot study. We believe that the situation would be clearer if the protocols of the former and the current studies were the same, but in the current study we had to adhere to guidelines of the GUARD project, which had previously specified 10 min irradiation time. The duration of irradiation in the previous pilot study was 50% more than in the current study (15 vs. 10 minutes). We honestly believe that the 50% more energy absorbed in the head of the subjects in the previous study is a major difference between the studies and can be a plausible explanation for the discordant results. Nevertheless, as statistics is not an infallible method, the chance to erroneously reject the hypothesis of no effect is higher in the case of ten than in 30 subjects. In summary, we discussed these two major differences between the protocols in the manuscript (page 10, lines 6 and 10), but no more inference can be drawn from them regarding the effects of EMF irradiation on human auditory brainstem potentials. As results are still contradictory and research in this field follows the “precautionary principle”, we are rather planning to exactly replicate our previous pilot study before rejecting those results.

Response to Thomas Lenarz

- We thank Prof. Lenartz for valuable comments on the manuscript.
- The aim of the study is stated in the Abstract’s Background section (page 2, line 5).
- The Discussion section has been amended during the review process, highlighting the differences to other related studies (page 9, line 19).
- We adhered to the guidelines of the GUARD project when we set the exposure parameters. It is stated in the manuscript (page 7, line 13).