Comment to the Letter to the Editor: Subjective Symptoms Related to GSM Radiation from Mobile Phone Base Stations: A Cross-sectional Study in Reply to the Comments by Seyed Mohammad Javad Mortazavi

Gómez-Perretta C. J.*, Navarro E. A., Segura J., Portolés M.

Dear Editor,

Mortazavi SMJ [1] has some concerns about the results of our recent work: “Subjective symptoms related to GSM radiation from mobile phone base stations: a cross-sectional study [2].

Dr Mortazavi criticizes that authors started the introduction of their paper with a political frightening historical event, the verification that the US embassy in Moscow was being subjected to such radiation from 1953 to May 1975 [3], being its frequency and intensity quite different from those of mobile base stations.

However, since that episode has historical significance, being a pioneer in the studies of the area of Western influence about the possible causality of exposure to radio frequencies, the radar at that time, a preliminary mention is usually considered essential.

Dr Mortazavi also states that we only cited a review that “showed in 8 of the 10 studies evaluated there were increased prevalence of adverse neurobehavioral symptoms or cancer in populations living at distances <500 m from base stations but simply ignored contradictory reviews such as the review published by Röösli and Hug in 2011”.

However, an important work of Röösli [4], which Dr Mortazavi erroneously contends that we have not mentioned in our work, appears in our literature as the principal motivation of our new article.

Dr Mortazavi also claims that the study of Gómez-Perretta et al. in fact is a repeat of the paper previously published by Navarro et al. in 2003 [5]: “This study has been performed in La Nora, a small city in Spain, with a population of 20,000 people. This paper has some severe methodological flaws. Gómez-Perretta’s data was initially obtained with a significant bias in selection of the participants”. Firstly, this is not a replica of the previously published study since crucial considerations has been introduced in the present article. Thus, this current article adds new elements that were not expressed in the work of 2003 [5] precisely following the guidelines of Roosli [4]. Thus, a robust statistical analysis (simple binary logistic regression and adjusted binary logistic regression with variables such as the use of mobile or computer and concern for the erection of the antenna, was now performed.

Moreover, Dr Mortazavi seems contradictory when indicates a significant bias in selection of the participants while cites our paragraph indicating that selection was randomly performed: “Some 215 questionnaires were randomly distributed through 17 streets representing practically the entire village. The houses were selected using a street map of the village. Therefore, if the distribution was random Dr Mortazavi should have understood that thereafter a blind procedure was used to select the houses on the street map. Also, if Dr Mortazavi looks again the text carefully, he should verify that La Nora hasn’t a population of 20,000 people, but this town (around 2000 habi-
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...tants in 2003) represents cities in Spain below the cutoff of 20000.

Also, Dr Mortazavi criticizes the final sample, 88 subjects, and hypotheses that the majority of these 88 responders were those who were possibly strongly concerned about the risk of living in the vicinity of mobile base stations.

However, he did not mention that the new selection of the sample was performed to avoid possible bias from the initial analysis in 2003, since thirteen of the participants included in the original study were eliminated: 2 participants were eliminated (one regarding alcohol abuse and another regarding pregnancy) to increase the requirement on health criteria and 11 participants were eliminated to increase the homogeneity of the RF EMFs measurements because there was a change (it was raining) in the usual dry weather conditions when the respective broadband measurements were registered.

Finally, he omits that concerns about microwave exposure was asked in 66 out of 88 subjects about their feelings when the masts were erected, revealing no concern in about 40.9% and some or totally concern in the remaining 59.1%. Also, Dr Mortazavi did not mention that worry about the microwave exposure was introduced as variable in the statistical analysis.

Therefore, the statement of Dr Mortazavi that concerns to microwave exposure is the cause to find a clear relationship between exposure and any subjective symptoms seems unfair, since multivariate analysis revealed that the contribution of radiofrequency exposure on some health related items was independent of such worries.

However, limitations about our results are recognized and expressed in our study.

Conflict of Interest

None

References

1. Mortazavi SMJ. Subjective Symptoms Related to GSM Radiation from Mobile Phone Base Stations: a cross-sectional study. *J Biomed Phys Eng*. 2014;4:39-40.

2. Gómez-Perretta C, Navarro EA, Segura J, Portolés M. Subjective symptoms related to GSM radiation from mobile phone base stations: a cross-sectional study. *BMJ Open*. 2013;3:1-9. doi: 10.1136/bmjopen-2013-003836. PubMed PMID: 24381254; PubMed Central PMCID: PMC3885815.

3. Lilienfeld AM, Tonascia J, Tonascia S, et al. Foreign service health status study: evaluation of health status of foreign service and other employees from selected Eastern European posts. Baltimore: Department of Epidemiology, Johns Hopkins University; 1978.

4. Röösli M, Frei P, Mohler E, Hug E. Systematic review on the health effects of exposure to radiofrequency electromagnetic fields from mobile phone base stations. *Bull World Health Organ*. 2010;88:887-96. doi: 10.2471/blt.09.071852. PubMed PMID: 21124713; PubMed Central PMCID: PMC2995180.

5. Navarro EA, Segura J, Portolés M, Gomez-Perretta C. The microwave syndrome: a preliminary study in Spain. *Electromagn Biol Med*. 2003;22:161-9. doi: 10.1081/JBC-120024625.