http:// ijp.mums.ac.ir
Letter to Editor (Pages: 6143-6144)

Comments on "Study of Bacterial Contamination of Mobile Phones and Stethoscopes in Neonatal Intensive Care Unit"

*SMJ Mortazavi[1]

[1]Department of Diagnostic Imaging, Fox Chase Cancer Center, 333 Cottman Ave, Philadelphia, PA 19111, USA.

Dear Editor-in-chief,

This letter is regarding the article by Daoudi et al. entitled "Study of bacterial contamination of mobile phones and stethoscopes in Neonatal Intensive Care Unit" published in International Journal of Pediatrics DOI: 10.22038/IJP.2017.25504.2170 (1). The authors have evaluated the microbial contamination of mobile phones and stethoscopes used by medical and paramedical staff. They reported that 100% of mobile phones and stethoscopes studied by their team showed bacterial contamination. Based on their findings, Daoudi et al. suggested that medical staff should wash their hands with care and use hydro-alcoholic solutions after using mobile phones and stethoscopes.

Although the paper authored by Daoudi et al. addresses a challenging issue, it has at least one major shortcoming. The main shortcoming of this paper comes from this key point that the authors were unaware of the effects of electromagnetic fields generated by mobile phones on bacterial resistance against antibiotics which can strongly worsen the bacterial contamination of mobile phones and make it a life-threatening problem. Over the past decade, we have studied the health effects of exposure to different sources of electromagnetic fields such as mobile phones (2-6). While in some cases exposure to mechanical waves such as diagnostic ultrasound could make the antibiotic-resistant bacteria susceptible (7), we showed that bacteria can become more resistant to antibiotics after a pre-exposure to ionizing electromagnetic (8), or non-ionizing electromagnetic radiation (9). In this light, not only bacterial contamination of mobile phones of physicians and medical/paramedical personnel is of great importance, the increased resistance against antibiotics induced by exposure to mobile phone radiation strongly increases the risk of nosocomial infection.

Key Words: Bacterial contamination, Mobile phones, Stethoscopes, Neonatal Intensive Care Unit.

*Please cite this article as: Mortazavi SMJ. Comments on "Study of Bacterial Contamination of Mobile Phones and Stethoscopes in Neonatal Intensive Care Unit". Int J Pediatr 2017; 5(11): 6143-44. DOI: **10.22038/ijp.2017.25690.2186**

Corresponding Author:

SMJ Mortazavi, Ph.D, Visiting Scientist, Fox Chase Cancer Center, Philadelphia, PA 19111, USA. Address: Fox Chase Cancer Center (FCCC), Doss Lab R-432, 333 Cottman Avenue, Philadelphia, PA 19111, USA. Fax: (215) 728-5664.

Email: S.M.Javad.Mortazavi@fccc.edu

Received date: Aug.19, 2017; Accepted date: Aug. 22, 2017

REFERENCES

1. Daoudi A, Bennaoui F, Alaoui MM, Maoulainine FMR, Soraa N, El Idrissi Slitine N. Study of bacterial contamination of mobile phones and stethoscopes in neonatology. International Journal of Pediatrics. 2017. (Article in press)

2. Mortazavi SM, Ahmadi J, Shariati M. Prevalence of subjective poor health symptoms associated with exposure to electromagnetic fields among university students. Bioelectromagnetics. 2007 May;28(4):326-30. PubMed PMID: 17330851. Epub 2007/03/03. eng.

3. Mortazavi SM, Mahbudi A, Atefi M, Bagheri S, Bahaedini N, Besharati A. An old issue and a new look: electromagnetic hypersensitivity caused by radiations emitted by GSM mobile phones. Technology and health care : official journal of the European Society for Engineering and Medicine. 2011;19(6):435-43. PubMed PMID: 22129944. Epub 2011/12/02. eng.

4. Mortazavi G, Mortazavi SM. Increased Mercury Release from Dental Amalgam Restorations after Exposure to Electromagnetic Fields as a Potential Hazard for Hypersensitive People and Pregnant Women. Reviews on environmental health. 2015;30(4):287-92.

5. Mortazavi SM, Atefi M, Kholghi F. The pattern of mobile phone use and prevalence of self-reported symptoms in elementary and junior high school students in shiraz, iran. Iranian journal of medical sciences. 2011 Jun;36(2):96-103. PubMed PMID: 23358105. Pubmed Central PMCID: Pmc3556746. Epub 2011/06/01. eng.

6. Mortazavi SA, Tavakkoli-Golpayegani A, Haghani M, Mortazavi SM. Looking at the other side of the coin: the search for possible biopositive cognitive effects of the exposure to 900 MHz GSM mobile phone radiofrequency radiation. Journal of environmental health science and engineering. 2014;12:75. PubMed PMID: 24843789. Pubmed Central PMCID: Pmc4004454. Epub 2014/05/21. eng.

7. Mortazavi SM, Darvish L, Abounajmi M, Zarei S, Zare T, Taheri M, et al. Alteration of Bacterial Antibiotic Sensitivity After Short-Term Exposure to Diagnostic Ultrasound. Iranian Red Crescent medical journal. 2015 Nov;17(11):e26622. PubMed PMID: 26732124. Pubmed Central PMCID: PMC4698328. Epub 2016/01/07. eng.

8. Mortazavi SMJ, Zarei S, Taheri M, Tajbakhsh S, Mortazavi SA, Ranjbar S, et al. Sensitivity to Antibiotics of Bacteria Exposed to Gamma Radiation Emitted from Hot Soils of the High Background Radiation Areas of Ramsar, Northern Iran. The international journal of occupational and environmental medicine. 2017 Apr;8(2):80-4. PubMed PMID: 28432369. Epub 2017/04/23. eng.

9. Taheri M, Mortazavi SM, Moradi M, Mansouri S, Hatam GR, Nouri F. Evaluation of the Effect of Radiofrequency Radiation Emitted From Wi-Fi Router and Mobile Phone Simulator on the Antibacterial Susceptibility of Pathogenic Bacteria Listeria monocytogenes and Escherichia coli. Dose-response: a publication of International Hormesis Society. 2017 Jan-Mar;15(1):1559325816688527. PubMed PMID: 28203122. Pubmed Central PMCID: PMC5298474. Epub 2017/02/17. eng.