



I urge strenuous efforts to prevent any requirement for V2X (vehicle-to-vehicle (V2V), vehicle-to-infrastructure (V2I), and vehicle-to-pedestrian (V2P)) communication, – indeed, I urge denial of permission for it – for the health of many.

Evidence documents that many people are already experiencing life altering symptoms and health problems from existing sources of nonionizing radiofrequency/microwave radiation (RF/MW), from cell towers, smart meters, wifi, etc, and in some cases also from extremely low frequency radiation (power line type). Though the fraction affected is small, the number affected is large. Each added source of RF/MW has created a new group of impaired individuals, and further curtails the freedom of movement of those already affected.

“Oxidative stress” (free radical injury) is a strongly documented mechanism of injury with even low intensity RF/MW (and also extremely low frequency radiation (ELF), well below exposure limits¹). This affects proteins, lipids, DNA and RNA, among other substances in the body – is an irrefutably documented mechanism of toxicity for *low level, nonionizing* RF/MW – affirmed in numerous studies. For instance, **Yakymenko** et al.² assessed 100 studies that evaluated whether low level RF/MW caused oxidative stress: 93 showed that it did. **De Luca** et al. assessed whether genetic variants that lead to less avid protections against oxidative stress, are tied to reported effects from RF/MW (and other electromagnetic radiation)³. They were. People cannot manipulate their genes by suggestibility: this is powerful evidence that the symptoms are from the oxidative-stress causing radiation. **Belpomme** et al. in France showed that affected people consistently have low levels of a metabolite of melatonin⁴.

Melatonin is a critical antioxidant, shown in scores of studies to protect against free radical injury from RF/MW⁵⁻¹⁷ (as well as ELF¹⁸, and every other kind of radiation – ultraviolet, x-ray, gamma ray...) – and also many, many chemicals.

RF/MW can itself depress melatonin, and its function¹⁹ in some settings²⁰⁻²⁴. So, more consistently, can ELF²⁵) (Low enough levels – for that person – may cause other injury, but upregulate antioxidant defenses²⁶.)

RF/MW can also reduce levels of other critical antioxidant defenses made by the body (such as glutathione²⁷⁻³¹, glutathione peroxidase³¹⁻³³, catalase³³, and superoxide dismutase^{32, 33}) – as can ELF³⁴⁻³⁶. (**Melatonin supports other antioxidant levels³⁷**.)

The oxidative stress reaction varies. “Low” levels of prooxidants, causing upregulation of antioxidant defenses, can be net antioxidant in some – but not in people whose defenses are already maximally upregulated, where they are prooxidant. The level that produces prooxidant effects varies, which is among a number of factors that can produce the appearance of inconsistent effects. This is likely a major reason that some individuals are progressively affected by levels of radiation that cause no problems in others.

Oxidative stress leads to many secondary causes of injury – to different degrees in different people. These include damage to mitochondria, the energy producing parts of cells (damage to mitochondria also produces oxidative stress), membrane damage, impaired blood flow (via so-called “endothelial dysfunction”), blood-brain barrier impairment, brain swelling, histamine elevation, cell death, and activation of clotting systems. Each of

these mechanisms are supported in studies, and/or in persons who experience “radiowave sickness”⁴. Oxidative stress also modifies substances in the body in a way that makes them more vulnerable to autoimmune attack. And subsets of those with radiowave sickness show antibodies to myelin^{4, 38}. Symptoms and signs in those who are affected match – qualitatively and quantitatively – with those of the “mystery illness” of diplomats in Cuba and China – which evidence ties to pulsed RF/MW³⁹. Though a smaller fraction are affected, by the lower intensity exposures used in communications, the features of illness, once present, are the same.

Combining different frequencies of radiation leads to synergistic toxicity, according to US government reports (like a Defense Intelligence Agency report on health effects of radiofrequency radiation⁴⁰) citing Russian studies. Russian exposure limits are 1 ten-thousandth of what ours are – Russia is doing a far better job of protecting their people. Adding V2X communication to existing radiation sources^{41, 42} is thus expected to synergistically increase injury.

Moreover, by depressing antioxidant defenses, RF/MW, especially combinations, can increase chemical toxicity⁴³⁻⁴⁵ (as may ELF^{46, 47}).

Therefore, proper testing of health impact must include other drugs and chemicals to which some may be exposed.

Because of this, V2X communication will likely magnify the burden of chronic diseases with a tie to oxidative stress and mitochondrial injury – conditions like hypertension, obesity, diabetes, autism, dementia, autism, amyotrophic lateral sclerosis (ALS), and chronic multisymptom illnesses like chronic fatigue syndrome.

Studies show women are more vulnerable than men, and other factors influence vulnerability. The most vulnerable among us deserve protection, too. Based on our preliminary data, other factors tied to greater risk of health problems with RF/MW include history of major electric shocks, past exposure to drugs/chemicals that cause damage through oxidative stress and toxicity to “mitochondria” (when damaged, these produce more oxidative stress; and vice versa), medical conditions tied to oxidative stress and mitochondrial injury – and family history of autoimmune disease. Higher body metal levels, which are tied to oxidative stress, may also increase risk⁴⁸.

Several factors suggest the best and brightest may be especially affected. Many ways of being very bright are at the expense of high energy demand, and oxidative stress impairs cell energy supply. (It is the chasm between these that determines the level of injury.) Indeed, autism, a condition tied to oxidative stress and mitochondrial impairment (and for which RF/MW might be a risk factor), has been tied to a genetic pattern that in others, is linked to higher intelligence⁴⁹.

Affected physicians among many include Dr. Gro Harlem Brundtland, former 3 time Prime Minister of Norway, and former Director General of the World Health Organization⁵⁰; Dr. Erica Mallory-Blythe who founded Physicians Health Initiative for Radiation and Environment (PHIRE); Dr. Scott Eberle, who published his experience as a case history⁵¹; and Dr. Roy Fox, Medical Director of the Capital Health Integrative Chronic Care Service in Halifax, Nova Scotia⁵². Arthur Firstenberg was young, just a medical student when affected; he heads The Cellular Phone Task Force and wrote *The Invisible Rainbow: A History of Electricity and Life*⁵³. Affected Techies include Matti Niemela, former Chief Technology Officer at Nokia⁵⁴; Per Segerbäck, former software designer at Ericsson⁵⁵; and from Silicon Valley, Jeromy Johnson, who has given a TED Talk on the subject⁵⁶; and Peter Sullivan, former Stanford graduate and millionaire software designer for Excite, Silicon Graphics, and Netflix⁵⁷. Affected lawyers include former Miami Organized Crime prosecutor Alan Bell – in whom blinded experiments documented seizure activity with exposure⁵⁸, and Dafna Tachover, who founded *We Are the Evidence* (Wireless Technologies Injury Advisory Group) and has argued related issues before the Israeli Supreme Court. Many other scientists and engineers are affected. So are teachers⁵⁹⁻⁶¹, and, sometimes tragically, children⁶².

Our preliminary survey data indicate that, among those employed at the time they become affected, fully half have been forced to leave their job, because the impairment that develops is not only to the new source of radiation, but individuals develop new problems with previously tolerated sources of radiation.

Newly adverse societal attitudes are leading to repercussions decades later, for behaviors adverse to women that were accepted at the time. Attitudes may in future be adverse to persons who contribute to decisions harmful to a subset of the populace, despite being apprised of the potential repercussions.

Just as diplomats in Cuba and China experience cognitive loss, hearing loss, sleep problems, headaches, anxiety, dizziness, and irritability – most likely due to pulsed RF/MW, and with brain swelling, and brain imaging that looks like traumatic brain injury – so do segments of the public, from communication sources of RF/MW³⁹. One who communicated with us, who has social security disability for his “electrosensitivity” – damage from communication sources of radiation – reported that his brain swelling was so severe it reportedly pushed his eyeball out of the orbit.

You will hear parties stating that there are no health problems, or that adverse findings are not consistent. Such denial of harms, in this^{63, 64} as in other industries with profitable products with potential for harm, is tied to industry conflicts of interest, known or in some cases unrevealed^{65, 66}.

“5G” (mm wave) communications for use in V2X have been claimed to be inherently safe due to their relatively high frequency, so allegedly shallow depth of absorption (so presumably just causing cataracts and melanoma, including ocular melanoma – both of which do occur with frequencies on either side of 5G – uv light is higher frequency, shallower penetration). A Russian report declassified in 2012 by the CIA shows otherwise. Mitochondria throughout the body – the energy powerhouses of cells – are damaged by mm waves, causing injury to the brain, heart, liver, kidneys, spleen, as well as nerve and blood systems⁶⁷.

This has not considered mounting evidence that RF/MW can increase brain cancer^{68, 69}, melanoma⁷⁰⁻⁷², breast cancer^{73, 74}, and hematological malignancies (leukemia-lymphoma)^{75, 76}.

In short, V2X communication will lead new people to be disabled. It will cause health problems, and magnify the debilities of a large number of those already suffering.

Sincerely,

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Comment: My assistant may have mistakenly uploaded early notes on this topic.

References

1. Yurekli AI, Ozkan M, Kalkan T, et al. GSM base station electromagnetic radiation and oxidative stress in rats. *Electromagn Biol Med* 2006;25:177-88.
2. Yakymenko I, Tsybulin O, Sidorik E, Henshel D, Kyrylenko O, Kyrylenko S. Oxidative mechanisms of biological activity of low-intensity radiofrequency radiation. *Electromagn Biol Med* 2015;35:186-202.
3. De Luca C, Chung Sheun Thai J, Raskovic D, et al. Metabolic and genetic screening of electromagnetic hypersensitive subjects as a feasible tool for diagnostics and intervention. *Mediators Inflamm* 2014;2014:924184.
4. Belpomme D, Campagnac C, Irigaray P. Reliable disease biomarkers characterizing and identifying electrohypersensitivity and multiple chemical sensitivity as two etiopathogenic aspects of a unique pathological disorder. *Rev Environ Health* 2015;30:251-71.
5. Sokolovic D, Djordjevic B, Kocic G, et al. Melatonin protects rat thymus against oxidative stress caused by exposure to microwaves and modulates proliferation/apoptosis of thymocytes. *Gen Physiol Biophys* 2013;32:79-90.
6. Oksay T, Naziroglu M, Dogan S, Guzel A, Gumral N, Kosar PA. Protective effects of melatonin against oxidative injury in rat testis induced by wireless (2.45 GHz) devices. *Andrologia* 2012.
7. Oktem F, Ozguner F, Mollaoglu H, Koyu A, Uz E. Oxidative damage in the kidney induced by 900-MHz-emitted mobile phone: protection by melatonin. *Arch Med Res* 2005;36:350-5.
8. Ozguner F, Oktem F, Armagan A, et al. Comparative analysis of the protective effects of melatonin and caffeic acid phenethyl ester (CAPE) on mobile phone-induced renal impairment in rat. *Mol Cell Biochem* 2005;276:31-7.
9. Ozguner F, Bardak Y, Comlekci S. Protective effects of melatonin and caffeic acid phenethyl ester against retinal oxidative stress in long-term use of mobile phone: a comparative study. *Mol Cell Biochem* 2006;282:83-8.
10. Naziroglu M, Celik O, Ozgul C, et al. Melatonin modulates wireless (2.45 GHz)-induced oxidative injury through TRPM2 and voltage gated Ca(2+) channels in brain and dorsal root ganglion in rat. *Physiol Behav* 2012;105:683-92.
11. Xu S, Zhou Z, Zhang L, et al. Exposure to 1800 MHz radiofrequency radiation induces oxidative damage to mitochondrial DNA in primary cultured neurons. *Brain Res* 2010;1311:189-96.
12. Sokolovic D, Djindjic B, Nikolic J, et al. Melatonin reduces oxidative stress induced by chronic exposure of microwave radiation from mobile phones in rat brain. *J Radiat Res* 2008;49:579-86.
13. Koylu H, Mollaoglu H, Ozguner F, Naziroglu M, Delibas N. Melatonin modulates 900 Mhz microwave-induced lipid peroxidation changes in rat brain. *Toxicol Ind Health* 2006;22:211-6.
14. Ayata A, Mollaoglu H, Yilmaz HR, Akturk O, Ozguner F, Altuntas I. Oxidative stress-mediated skin damage in an experimental mobile phone model can be prevented by melatonin. *J Dermatol* 2004;31:878-83.
15. Lai H, Singh NP. Melatonin and a spin-trap compound block radiofrequency electromagnetic radiation-induced DNA strand breaks in rat brain cells. *Bioelectromagnetics* 1997;18:446-54.
16. Tok L, Naziroglu M, Dogan S, Kahya MC, Tok O. Effects of melatonin on Wi-Fi-induced oxidative stress in lens of rats. *Indian J Ophthalmol* 2014;62:12-5.
17. Meena R, Kumari K, Kumar J, Rajamani P, Verma HN, Kesari KK. Therapeutic approaches of melatonin in microwave radiations-induced oxidative stress-mediated toxicity on male fertility pattern of Wistar rats. *Electromagn Biol Med* 2014;33:81-91.
18. Liu DD, Ren Z, Yang G, Zhao QR, Mei YA. Melatonin protects rat cerebellar granule cells against electromagnetic field-induced increases in Na(+) currents through intracellular Ca(2+) release. *J Cell Mol Med* 2014;18:1060-70.
19. Girgert R, Hanf V, Emons G, Grundker C. Signal transduction of the melatonin receptor MT1 is disrupted in breast cancer cells by electromagnetic fields. *Bioelectromagnetics* 2010;31:237-45.
20. Singh S, Mani KV, Kapoor N. Effect of occupational EMF exposure from radar at two different frequency bands on plasma melatonin and serotonin levels. *Int J Radiat Biol* 2015:1-9.

21. Belyaev IY, Koch CB, Terenius O, et al. Exposure of rat brain to 915 MHz GSM microwaves induces changes in gene expression but not double stranded DNA breaks or effects on chromatin conformation. *Bioelectromagnetics* 2006;27:295-306.
22. Qin F, Zhang J, Cao H, et al. Effects of 1800-MHz radiofrequency fields on circadian rhythm of plasma melatonin and testosterone in male rats. *J Toxicol Environ Health A* 2012;75:1120-8.
23. Wood AW, Loughran SP, Stough C. Does evening exposure to mobile phone radiation affect subsequent melatonin production? *Int J Radiat Biol* 2006;82:69-76.
24. Kumar S, Behari J, Sisodia R. Impact of microwave at X-band in the aetiology of male infertility. *Electromagn Biol Med* 2012;31:223-32.
25. El-Helaly M, Abu-Hashem E. Oxidative stress, melatonin level, and sleep insufficiency among electronic equipment repairers. *Indian J Occup Environ Med* 2010;14:66-70.
26. Morabito C, Rovetta F, Bizzarri M, Mazzoleni G, Fano G, Mariggio MA. Modulation of redox status and calcium handling by extremely low frequency electromagnetic fields in C2C12 muscle cells: A real-time, single-cell approach. *Free Radic Biol Med* 2010;48:579-89.
27. Megha K, Deshmukh PS, Banerjee BD, Tripathi AK, Ahmed R, Abegaonkar MP. Low intensity microwave radiation induced oxidative stress, inflammatory response and DNA damage in rat brain. *NeuroToxicology* 2015;51:158-65.
28. Esmekaya MA, Ozer C, Seyhan N. 900 MHz pulse-modulated radiofrequency radiation induces oxidative stress on heart, lung, testis and liver tissues. *Gen Physiol Biophys* 2011;30:84-9.
29. Aydin B, Akar A. Effects of a 900-MHz electromagnetic field on oxidative stress parameters in rat lymphoid organs, polymorphonuclear leukocytes and plasma. *Arch Med Res* 2011;42:261-7.
30. Mailankot M, Kunnath AP, Jayalekshmi H, Koduru B, Valsalan R. Radio frequency electromagnetic radiation (RF-EMR) from GSM (0.9/1.8GHz) mobile phones induces oxidative stress and reduces sperm motility in rats. *Clinics (Sao Paulo)* 2009;64:561-5.
31. Koyu A, Ozguner F, Yilmaz H, Uz E, Cesur G, Ozcelik N. The protective effect of caffeic acid phenethyl ester (CAPE) on oxidative stress in rat liver exposed to the 900 MHz electromagnetic field. *Toxicol Ind Health* 2009;25:429-34.
32. Ceyhan AM, Akkaya VB, Gulecol SC, Ceyhan BM, Ozguner F, Chen W. Protective effects of beta-glucan against oxidative injury induced by 2.45-GHz electromagnetic radiation in the skin tissue of rats. *Arch Dermatol Res* 2012;304:521-7.
33. Zothansiyama, Zosangzuali M, Lalramdinpuii M, Jagetia GC. Impact of radiofrequency radiation on DNA damage and antioxidants in peripheral blood lymphocytes of humans residing in the vicinity of mobile phone base stations. *Electromagn Biol Med* 2017;36:295-305.
34. Martinez-Samano J, Torres-Duran PV, Juarez-Oropeza MA, Elias-Vinas D, Verdugo-Diaz L. Effects of acute electromagnetic field exposure and movement restraint on antioxidant system in liver, heart, kidney and plasma of Wistar rats: a preliminary report. *Int J Radiat Biol* 2010;86:1088-94.
35. Sharifian A, Gharavi M, Pasalar P, Aminian O. Effect of extremely low frequency magnetic field on antioxidant activity in plasma and red blood cells in spot welders. *Int Arch Occup Environ Health* 2009;82:259-66.
36. Goraca A, Ciejka E, Piechota A. Effects of extremely low frequency magnetic field on the parameters of oxidative stress in heart. *J Physiol Pharmacol* 2010;61:333-8.
37. Chuffa LG, Amorim JP, Teixeira GR, et al. Long-term melatonin treatment reduces ovarian mass and enhances tissue antioxidant defenses during ovulation in the rat. *Braz J Med Biol Res* 2011;44:217-23.
38. Heuser G, Heuser SA. Functional brain MRI in patients complaining of electrohypersensitivity after long term exposure to electromagnetic fields. *Rev Environ Health* 2017;Jul 5.
39. Golomb BA. Diplomats' Mystery Illness and Pulsed Radiofrequency/Microwave Radiation. *Neural Computation* 2018;30:1-104.
40. Adams RL, Williams RA. Biological effects of electromagnetic radiation (radiowaves and microwaves) - Eurasian Communist Countries: Defense Intelligence Agency; 1976 March.
41. Markov M, Grigoriev YG. Protect children from EMF. *Electromagn Biol Med* 2015;34:251.
42. Markov M, Grigoriev YG. Wi-Fi technology – an uncontrolled global experiment on the health of mankind. *Electromagnetic Biology and Medicine* 2013;32:200-8.

43. Buldak RJ, Polaniak R, Buldak L, et al. Short-term exposure to 50 Hz ELF-EMF alters the cisplatin-induced oxidative response in AT478 murine squamous cell carcinoma cells. *Bioelectromagnetics* 2012;33:641-51.
44. Kostoff RN, Lau CGY. Chapter 4. Modified health effects of non-ionizing electromagnetic radiation combined with other agents reported in the biomedical literature. In: Geddes CD, ed. *Microwave Effects on DNA and Proteins*: Springer; 2017.
45. Bolen SM. Radiofrequency/microwave radiation biological effects and safety standards: a review: Rome Laboratory; 1988 June. Report No.: RL-TR-94-53.
46. Regoli F, Gorbi S, Machella N, et al. Pro-oxidant effects of extremely low frequency electromagnetic fields in the land snail *Helix aspersa*. *Free Radic Biol Med* 2005;39:1620-8.
47. Sanie-Jahromi F, Saadat Z, Saadat M. Effects of extremely low frequency electromagnetic fields and cisplatin on mRNA levels of some DNA repair genes. *Life Sciences* 2016;3205:30588-4.
48. Zmyslony M, Politanski P, Rajkowska E, Szymczak W, Jajte J. Acute exposure to 930 MHz CW electromagnetic radiation in vitro affects reactive oxygen species level in rat lymphocytes treated by iron ions. *Bioelectromagnetics* 2004;25:324-8.
49. Clarke TK, Lupton MK, Fernandez-Pujals AM, et al. Common polygenic risk for autism spectrum disorder (ASD) is associated with cognitive ability in the general population. *Mol Psychiatry* 2015.
50. Woolston C. Victims of electrosensitivity syndrome say EMFs caused symptoms. *Los Angeles Times* 2010;Feb 15:<http://articles.latimes.com/2010/feb/15/health/la-he-electromagnetic-syndrome1-feb15>.
51. Eberle S. What's the diagnosis, doctor? *The Bulletin* 2016;22.
52. Fauteux A. Electrosensitivity caused by chronic central nervous system arousal - Dr. Roy Fox. *La Maison du 21e siècle Magazine* 2012;Mai 01.
53. Firstenberg A. *The Invisible Rainbow: A History of Electricity and Life*. Washington, DC: AGB Press; 2017.
54. Nikka A. Former Nokia Boss: Mobile-Phones wrecked my health. (Translated from Finnish by Henrik Eriksson). *Satakunnan Kansa* 2014; Translation posted on: <http://betweenrockandhardplace.wordpress.com/2014/10/18/former-nokia-technology-chief-mobile-phones-wrecked-my-health>.
55. Nordström G. *The Invisible Disease*. New York, USA: O Books; 2004.
56. Johnson J. Wireless Wakeup Call. TEDx Berkeley <https://www.emfanalysis.com/tedx-wireless-wakeup-call/>.
57. Harkinson J. This former techie owes his fortune to electronic devices. Now he thinks they're dangerous. *Mother Jones* 2017;Jan 28.
58. Bell A. *Poisoned: How a Crime-Busting Prosecutor Turned his Medical Mystery Into a Crusade for Environmental Victims*. New York: Skyhorse Publishing 2017.
59. Math teacher raises concerns about WIFI comparing the effects to a concussion. North Kingston School Committee Meeting - Rhode Island USA May 13, 2014 2014;<https://www.youtube.com/watch?v=QbgIdyhAXfM>:Posted February 11, 2016 by Parents for Safe Technology. Download date Feb 14, 8.
60. Math teacher asks school to protect children from Wi-Fi. North Kingston School Committee Meeting - Rhode Island USA Feb 10, 2015 2015;<https://www.youtube.com/watch?v=UqrW4ZJb5Uc>:Posted Feb 11, 2016 by Parents for Safe Technology. Download date Feb 14, 8.
61. Brinchman S. Living Nightmare: How SDG&E led to headaches, hearing loss. lamesapatchcome/blog_posts 2011;Aug 14.
62. Bender RG. Teen allergic to Wi-Fi commits suicide, parents say. *Yahoo* 2015;Dec 1:<https://www.yahoo.com/news/teen-allergic-to-wifi-commits-suicide-parents-say-223912154.html>
63. Huss A, Egger M, Hug K, Huwiler-Müntener K, Rössli M. Source of Funding and Results of Studies of Health Effects of Mobile Phone Use: Systematic Review of Experimental Studies. *Environ Health Perspect* 2007;115:1-4.

64. Alster N. Captured Agency: How the Federal Communications Commission is Dominated by the Industries it Presumably Regulates. Harvard University, Edmond J Safra Center for Ethics 2015;www.harvard.ethics.edu.
65. Smith R. Conflicts of interest: how money clouds objectivity. *J R Soc Med* 2006;99:292-7.
66. Golomb BA. Conflict of Interest in Medicine
<http://thesciencenetwork.org/programs/beyond-belief-candles-in-the-dark/beatrice-golomb>: Sponsored by The Science Network (tsntv.org), Salk Institute. La Jolla, CA. Oct 5; 2008.
67. Zalyubovskaya NP. Biological effects of millimeter radiowaves. *Kiev Vracherbnoye Delo* {translated from Russian} Declassified by the CIA in 2012 1977;3:116-9.
68. Carlberg M, Hardell L. Evaluation of Mobile Phone and Cordless Phone Use and Glioma Risk Using the Bradford Hill Viewpoints from 1965 on Association or Causation. *Biomed Res Int* 2017;2017:9218486.
69. Hardell L, Carlberg M. Mobile phone and cordless phone use and the risk for glioma: Analysis of pooled case-control studies in Sweden, 1997–2003 and 2007–2009. *Pathophysiology* 2015;22:1-13.
70. Hardell L, Carlberg M, Hansson Mild K, Eriksson M. Case-control study on the use of mobile and cordless phones and the risk for malignant melanoma in the head and neck region. *Pathophysiology* 2011;18:325-33.
71. Behrens T, Lynge E, Cree I, et al. Occupational exposure to electromagnetic fields and sex-differential risk of uveal melanoma. *Occup Environ Med* 2010;67:751-9.
72. Hallberg O, Johansson O. Melanoma incidence and frequency modulation (FM) broadcasting. *Arch Environ Health* 2002;57:32-40.
73. Balekouzou A, Yin P, Afewerky HK, et al. Behavioral risk factors of breast cancer in Bangui of Central African Republic: A retrospective case-control study. *PLoS ONE* 2017;12:e0171154.
74. West JG, Kapoor NS, Liao SY, Chen JW, Bailey L, Nagourney RA. Multifocal Breast Cancer in Young Women with Prolonged Contact between Their Breasts and Their Cellular Phones. *Case Rep Med* 2013;2013:354682.
75. Peleg M, Nativ O, Richter ED. Radio frequency radiation-related cancer: assessing causation in the occupational/military setting. *Environ Res* 2018;163:123-33.
76. Rösli M, Rapp R, Braun-Fahrlander C. [Radio and microwave frequency radiation and health--an analysis of the literature]. *Gesundheitswesen* 2003;65:378-92.