

Joel Moskowitz comments in Medscape on Simon Chapman's study.

[in](#)

**Joel's comments, 14 May 2016:** This study seems designed to serve as propaganda for the public debate about whether cell phone radiation is a cancer risk factor. The study's lead author, Simon Chapman, published an opinion piece online (see below) in which he accused Devra Davis of being an "alarmist" for her position in this debate. Yesterday, Medscape, a website that "offers specialists, primary care physicians, and other health professionals the Web's most robust and integrated medical information and educational tools," published a story about the study. The article cited Simon Chapman and John Boice, Jr. who supported the study's conclusions, and Lennart Hardell who raised concerns. Since I have concerns about the study and do not believe the Medscape article was balanced, I sent Medscape my comments.

**Don's note: As the Medscape article is copyrighted only Joel's comments are reproduced below. One would need to subscribe to [Medscape](#) in order to access the article.**

I (Joel Moskowitz) strongly encourage scientists with expertise on EMF health effects to share their knowledge about the science with reporters. In my experience over the past seven years, most reporters are trying to write an accurate story. I realize that it is often inconvenient to talk to them, but it is the only way we can overcome the ignorance and bias promoted by scientists who have a vested interest in protecting the status quo.

**Don's note: The Chapman paper as copied in the Moskowitz posting is omitted here**

Following is a story about the study that appeared in Medscape. My comments appear in red. (Bold here) I sent my comments to the author of the article and the editor-in-chief of Medscape. The article is copyrighted so do not post it on the internet.

Study: No Link Between Brain Tumors, Cell Phones; Expert: But...

Roxanne Nelson, Medscape, May 12, 2016

**This statement is misleading: 1) this Australian study only examined malignant brain tumors (i.e., brain cancer); non-malignant brain tumors are more common; 2) the study had no measure of actual cell phone use; it relied on the industry reports of the number of cell phone subscriptions over time; 3) the study found a large increase in brain cancer rates among men and women 70-84 years of age as well as a small, but statistically significant increase, in brain cancer among all men (age-standardized) during a period when there was rapid adoption of cell phones in the population.**

**Excellent point. Brain cancer (glioma) incidence increased in the frontal and temporal lobes over time in England. Also, the incidence of high-grade gliomas (i.e., glioblastoma multiforme) in these two lobes has increased over time in the U.S. The current study did not examine types of brain cancer or location of tumors.**

**There was also a small but statistically significant increase over time in brain cancer among all men (age-standardized)**

**Yes, but not before the introduction of cordless phones which is associated with an increased risk of brain cancer according to Hardell's case-control studies.**

**But not until recent years were there many long-term, heavy cell phone users.**

**It may require several decades to see the effects of heavy cell phone use in tumor registry data as not everyone is a heavy user and it often requires several decades of exposure before a solid brain tumor is diagnosed. Increases in brain cancer incidence over time have been reported in the following countries: Norway and Finland (all adults); Australia and New Zealand (adults over age 70). England (in frontal and temporal lobes of all adults), an Increase in glioblastoma multiforme in Denmark (all adults), and in the U.S. (frontal and temporal lobes of all adults).**

**This is false. A recent review paper found that exposure to low-intensity radiofrequency (i.e., non-ionizing) radiation caused oxidative stress in 93 out of 100 experimental laboratory studies. Oxidative stress disrupts cell signaling and can lead to free radical production, DNA damage, and cancer. The study did not measure when individuals of each sex first adopted cell phones or their amount of cell phone use so there is no basis for Chapman's assertion.**

**Yes, but it could be explained by the introduction and widespread adoption of cordless phones which preceded cell phone adoption.**

**Virtually all published epidemiological studies that have examined long-term, heavy cellphone use has found an increased risk of brain tumors — malignant and non-malignant.**

**This statement is false. The scientific literature discusses several biologic mechanisms and provides supporting empirical evidence.**

**There is also considerable evidence of increases in brain cancer in various countries (see above). In the U.S. there has also been an increase in non-malignant brain tumors over time.**

**One of the two prospective studies, the Danish Cohort Study, has been criticized in the literature for having serious methodologic flaws (e.g., the study did not measure the amount of cell phone use; many early cell phone users were considered non-users in the analysis because their phones were purchased by businesses). The other study had a crude measure of cell phone use; nonetheless, it found a significant association between cell phone use and acoustic neuroma, a rare non-malignant brain tumor on the nerve from the ear to the brain.**

**Dr. Hardell is arguably the leading researcher in the world in this area. He has published the most peer-reviewed epidemiologic papers on brain tumors and wireless phone use. His assertions in this article are backed by his published papers.**

**The modeling exercise employed in this paper requires many questionable assumptions; hence, the estimates of expected incidence rates seem highly unrealistic.**

**The amount of cell phone use was very light for many years. The lag between exposure to a carcinogen and brain tumor diagnosis can be several decades. The authors did not report the funding sources for this study so the reader must trust the authors that there were no conflicts of interests. How was the study funded?**

**<http://www.medscape.com/viewarticle/863222>**

**Joel M. Moskowitz, Ph.D., Director  
Center for Family and Community Health  
School of Public Health  
University of California, Berkeley**

**Electromagnetic Radiation Safety**

**Website: <http://www.saferemr.com>**

**Facebook: <http://www.facebook.com/SaferEMR>**

**News Releases:** <http://pressroom.prlog.org/jmm716/>  
**Twitter:** @berkeleyprc