



## Does EMF exposure lead to behavioural disorders of children?

The authors of an online published<sup>1</sup> paper about an epidemiological study performed in Denmark concluded that

“Exposure to cell phones prenatally — and, to a lesser degree, postnatally — was associated with behavioral difficulties such as emotional and hyperactivity problems around the age of school entry. These associations may be noncausal and may be due to unmeasured confounding. If real, they would be of public health concern given the widespread use of this technology.”<sup>2</sup>

It is important to note that in the paper, the authors clearly pointed out:

1. that RF “exposure reaching the fetus (...) was likely to be extremely low” and cell phone use of 7-year old children was so “infrequent and short term that the casual effect due to these exposures seems unlikely”,<sup>3</sup>
2. that their study results should be interpreted with caution,<sup>4</sup>
3. that bias may explain the associations<sup>3</sup> and
4. that the observed associations may be non-causal and due to unmeasured confounding.<sup>4</sup>

Despite these cautions from the authors, some media have reported the conclusions as proven. The scientists themselves have emphasized that their results only *suggest* that cell phone use *could* be a potential risk factor and “need to be replicated”.<sup>3</sup> There were also some balanced media reports about this important issue.<sup>5</sup>

In general, study results need to be interpreted by taking the existing body of evidence into account. Parents seeking more information should also refer to EMF literature reviews<sup>6</sup> such as the one performed by the Irish Government Expert Group in 2007, which clearly stated that “there are no data available to suggest that the use of mobile phones by children is a health hazard.”<sup>7</sup> Furthermore, to help anyone to understand whether media reports of scientific information are appropriately balanced, the publication “Weighing scientific evidence in EMF health research”<sup>8</sup> may be helpful.

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<sup>1</sup> Prenatal and Postnatal Exposure to Cell Phone Use and Behavioral Problems in children, <http://www.epidem.com/pt/re/epidemiology/abstract.00001648-900000000-99879.htm>

<sup>2</sup> page 1

<sup>3</sup> page 6

<sup>4</sup> page 5

<sup>5</sup> <http://abcnews.go.com/Health/ReproductiveHealth/story?id=4890097&page=1;>

<http://www.nhs.uk/news/2008/05May/Pages/Mobilepregnancyscareinconclusive.aspx>

<sup>6</sup> <http://www.gsmworld.com/health/links/independent.shtml>

<sup>7</sup> Irish Department of Communications, Marine and Natural Resources, “Health effects of electromagnetic fields“, 2007

<sup>8</sup> <http://www.mmfai.org/public/docs/eng/080515%5Fweighing%5FEMF%5Fscience%5Fevidence%5Ffinal%2Epdf>