

ASA Ruling on Electrosensitivity-UK

- Upheld

- Poster

- 04 April 2018

- Electrosensitivity-UK
Ad description

A poster for a charity Electrosensitivity-UK, seen in May 2017 at Kings Cross Station, included text which stated “Worth the risk? It’s your call. More and more research is starting to show potential health risks from mobile and cordless phones, WiFi and other electromagnetic fields”. Below the text was an image of a mobile phone which displayed a variety of on-screen apps. These app icons were titled “Damaged immune system; Electrosensitivity; Skin Disorder; Cancer Risk Raised; Heart Palpitations; Headaches; Memory Loss; Fatigue; Brain Tumour; Sleep Disorders; Dementia; Tinnitus; M.S; Damaged Sperm Count; Depression”.

Issue

Three complainants challenged whether the implication in the ad that electromagnetic radiation and associated products posed a risk to health was misleading and could be substantiated.

Response

Electrosensitivity UK said they considered that the ad suggested a reader may wish to continue reading about the potential risk, or not. They believed everyone now knew that low-level exposure to electromagnetic radiation carried a risk; that was why all mobile phones came with warnings about keeping the phone a sufficient distance from the body to reduce the known risk. They said that the UK government and other organisations such as the World Health Organization (WHO) and International Commission on Non-Ionizing Radiation Protection (ICNIRP) have published numerous documents since the 1970s and 1980s, advising the public about the risks of electromagnetic exposure, and that these organisations’ websites dealt extensively with the issue. They did not consider it was misleading to refer to that known risk. They said the information in the ad explained that known risk by giving further information about the ever-increasing number of peer-reviewed scientific studies they understood to have shown the potential risk for a number of adverse health outcomes. They said the use of the question format gave the reader full control over how the reader reacted to the further information.

They said that by providing very basic information, which alluded to what they understood was the current state of scientific research, the reader was then able to exercise their own choice. They said to say that there was no potential risk, or to say that there was no or reducing evidence, was inaccurate. They said the use of the additional term “potential” deliberately reinforced the notion that the information provided was nuanced with appropriate caveats to cover every case, and they considered that all members of the public would see the ad in that light.

As to the specific health claim regarding mobile phones, they understood that all recent mobile phones had: cellular transmitters with radiation and signals operating at RF and ELF frequencies; Wi-Fi transmitters with radiation and signals that operated at RF and ELF frequencies; and powerful batteries with magnetic fields, in addition to GPS receivers. They considered mobile phones therefore involved magnetic, ELF and RF frequencies and signals, and therefore all health studies on any of these frequencies and signals were relevant. They considered since the same type of frequencies and signal patterns were used by Wi-Fi, mobile phones, mobile phone base stations, baby monitors, cordless phones, smart meters, etc., all health studies relevant to those devices were also relevant to mobile phones. For those scientific reasons, they said the ad was deliberately not and could not be limited to just one device. They considered mobile phones were the best example of common devices using such a wide range of EM field and radiation patterns and signals.

They said there was a potential health risk associated with exposure to mobile phone radiation. They understood that some experts believed there were now some 20,000 relevant peer-reviewed studies. They said the list of 15 symptoms and health outcomes associated with low-level electromagnetic exposure were just a proportion of perhaps 80 known symptoms and 30 conditions which could have been listed with the support of peer-reviewed studies. They believed all governments and regulators accepted that this was the case, which was why many groups regularly updated their safety guidelines, including the UK, which last introduced new EM regulations under a year ago. They believed that position was supported by 200 involved scientists who had signed the International EMF Scientists Appeal to the United Nations and the World Health Organization to recognise the majority science which showed increasing health risks. They believed that the UK did not have any NHS centre of excellence in that health area and thus there were no researchers except psychologists investigating the Electrophobia, and the published list of health experts used by the ASA did not have expertise in health effects of bioelectromagnetics.

They considered that the WHO sheet 193 (a WHO fact sheet regarding electromagnetic fields and public health) was not relevant to the wording of the ad because they believed there was overwhelming evidence of adverse effects on health and well-being from low-level electromagnetic exposure. They considered that WHO sheet 193 was wrong, that it was not peer-reviewed, was out of date and there were major conflicts of interest within the WHO. Further they understood that the AGNIR (Advisory Group on Non-Ionising Radiation) 2012 Report (a report produced by an independent scientific advisory group that reported to Public Health England (PHE)) was not peer-reviewed. This report declared all low-level electromagnetic exposure safe in practical terms, including the public’s exposure to mobile and cordless phones, masts, Wi-Fi and wireless smart meters, even though the advertiser believed in some areas about 80% of studies showed harm. They

considered that such sheets were worthless for scientific purposes and suited those regulators and governments wishing to continue with high levels of wireless irradiation of the general population. They considered supporters of the wireless industry exerted pressure to ensure that this type of news was not reported in the mainstream media.

They considered that the WHO/ICNIRP and PHE/AGNIR still clung to the out-dated 1953 thermal hypothesis. Instead, they understood that until the last decade, many possible mechanisms and pathways had been established and showed low level EM exposure caused health risks, but few were accepted universally. They believed that changed when it became clear that the fundamental mechanism inherent in VGCCs was sufficient to explain many, if not most, biological consequences downstream; at the same time, they believed it was becoming apparent that most outcomes could be linked in some way to oxidative stress. They believed the latter point was supported by numerous studies showing reduced risks when antioxidants were used and, similarly, earthing achieved a reduction in health risks. They also believed there were many other established mechanisms and pathways whereby low-level electromagnetic exposure could give rise to risks of biological reactions in addition to that mechanism. Regarding the specific conditions referred to in the ad, the advertiser believed that risks from mobile phones for that set of symptoms, in addition to the evidence from VGCCs and oxidative stress was able to be substantiated.

They believed electromagnetic hypersensitivity (EHS) was a condition that affected about 3.1–3.8% of the general population according to surveys listed by the WHO. Further, they believed about 30–40% of the general population were subliminally or slightly electrosensitive (ES) and as they believed bio-effects of EM exposure were cumulative, where such people remained in high levels of man-made EM exposure they had a greater risk of developing EHS. They believed headaches, tinnitus (the microwave hearing or a clicking sound in the ears) and similar effects on the hearing, skin disorders, dementia and related conditions such as Alzheimer's, damaged sperm count, depression and related effects, along with similar outcomes such as anxiety, irritability, stress, nervousness and suicide had long been recognised as a specific symptom of low-level electromagnetic exposure as from mobile phones. In many surveys they understood headaches appeared as the leading or within the top three of specific symptoms. They said that memory loss had long been recognised as a specific symptom of low-level electromagnetic exposure as from mobile phones, and had also been described as forgetfulness, cognitive disturbance, reduced cognition, reduced concentration, confusion, word loss, or poor learning. Similarly, they believed damage to the immune system, fatigue, heart palpitations, including heart rate, HRV, cardio-vascular effects, sleep disorders, including sleep disturbance and insomnia had been recognised as specific symptoms of low-level electromagnetic exposure, as from mobile phones. They also believed that since 1974 it had been known that EM exposure could affect demyelination and produce the symptoms of M.S. (Multiple Sclerosis).

They also understood that from 1984 radio frequency radiation and ELF fields as from mobile phones had been confirmed as having a risk for cancer. Further, they understood the WHO in 2011 classified mobile phones and all radio frequencies as

raising the risk of cancer, when its IARC classified radio frequency as a 2B human carcinogen.

By way of substantiation, they provided over 500 references to studies, including full annotated papers, in support of the claims.

Assessment

Upheld

The ASA considered consumers would understand the claims “Worth the risk? It’s your call. More and more research is starting to show potential health risks from mobile and cordless phones, WiFi and other electromagnetic fields” to mean that there was emerging robust scientific evidence that demonstrated negative human health impacts caused by mobile and cordless phones, WiFi and other electromagnetic fields. We considered the term ‘emerging’ in this context meant there had been some, potentially limited, robust reputable scientific evidence that had been recently published. We acknowledged the use of qualifying terminology in the claims such as “risk” and “potential” and the use of the rhetorical question. However, we considered the overall impression of the ad was the strong implication such risk to human health had been objectively demonstrated. We considered this impression was supported by the use of the app icons which featured serious medical conditions such as “Cancer Risk Raised” and “Brain Tumour”. We further considered that consumers would understand the use of the app icons to mean that those specific conditions and health risks had been shown to be caused by exposure to mobile and cordless phones, WiFi and other electromagnetic fields.

We considered the advertiser needed to hold that emerging robust reputable scientific evidence that demonstrated negative impact to human health from mobile and cordless phones, WiFi and other electromagnetic fields in order to substantiate the claims, including, but not limited to, longitudinal studies with human participants.

We noted the advertiser’s view that the WHO sheet 193 was not accurate and the WHO/ICNIRP and PHE/AGNIR held out-dated views. We understood the WHO’s position as set out in the WHO Sheet 193 was that no research had yet demonstrated adverse health effects being caused by mobile phone use. We understood that position was shared by the NHS who had, in 2016, stated current research had reported that mobile phones did not have any detectable effects on brain function and there were no reported specific adverse effects of TETRA signals. We considered those various official bodies had formed their position based on extensive scientific examination of the area and the research available. For example, we understood the position was based on large comprehensive longitudinal studies including those undertaken by AGNIR, the Mobile Telecommunications and Health Research Programme and the Million Women Study. Therefore, we considered any evidence to the contrary likely needed to meet the same or a similar threshold of quality, such as authoritative reports, reputable guidelines or other published material that represented or reflected general scientific opinion, in order to undermine the position of such bodies.

In support, the advertiser provided various statements and articles. Two articles were described by the advertiser as demonstrating scientific corruption and conflicts of interest over low-level electromagnetic exposure involving the WHO/ICNIRP and a critique of the inaccuracies in the UK government's AGNIR 2012 Report, on which the UK government had based its rationale for declaring the current high levels of radiation exposure as safe. We did not consider that material adequately supported the position that the fact sheet was inaccurate or out-dated, or that the view was held by a significant proportion of the scientific and medical community, so as to undermine the WHO/ICNIPR or NHS position.

We considered the evidence provided in support of the claims in the ad. A significant proportion of the evidence supplied dated back as early as 1962. We considered that such evidence did not amount to emerging evidence and, further, was likely to be out of date due to the scientific, technological and medical developments that had since been made. We considered research cited before 2014, when the WHO sheet 193 had been last updated, was also likely to be out of date and did not amount to emerging research.

A number of the articles were not studies but reviewed the current context of research in the area. Of those, some concluded with broad generalisations advocating for the acknowledgement of the biological effects of electromagnetic radiation and the existence of electromagnetic radiation hypersensitivity as a physiological phenomenon. For example, one article concluded the mechanism of action of microwave electromagnetic frequencies (EMF/s), the role of the VGCCs in the brain, the impact of non-thermal EMFs on the brain, extensive epidemiological studies performed over the past 50 years, and five criteria testing for causality, all collectively showed that various non-thermal microwave EMF exposures produced diverse neuropsychiatric effects. However, although the article referenced studies that reported such positive effects, there was little detail or any methodological information included to corroborate such conclusions. A number of studies, similarly, did not contain enough information about the study or methodological design in order for the ASA to consider them to be robust.

We assessed the studies provided. We considered a number of articles were not adequate because they concerned animal experiments (particularly on rats and mice), rather than studies concerning human health. Some articles concerned human participants and reported positive effects. However, those pieces of research did not take place under conditions we considered would be sufficiently robust in terms of study design. For example, several studies lacked randomisation, control groups and/or single or double blinding; we considered those study design limitations meant the research was unlikely to be robust enough to substantiate claims concerning human health. In some studies, concerning human subjects, a number of participants had not been diagnosed with any of the specific conditions but had self-reported experiencing electromagnetic radiation hypersensitivity and were regarded as appropriate candidates because of this. We considered that the practice of self-reporting of symptoms without clinical diagnosis would impute bias into a study design. Further, a number of the studies did not feature large representative sample sizes that would indicate that recorded effects could be generalised to the general population. We also had concerns about how some of the data had been presented; a number of the studies neither appeared in reputable, peer-reviewed journals nor

had data therein that had been objectively reviewed by a suitably qualified individual possessing relevant expertise before being submitted to us.

We therefore did not consider that the evidence demonstrated that electromagnetic radiation and associated products posed a risk to health, specifically that there was robust scientific evidence emerging that showed negative human health impacts or risks caused by mobile and cordless phones, WiFi and other electromagnetic fields.

For the reasons set out, we concluded the ad was misleading.

The ad breached CAP Code rules [3.1](#) (Misleading advertising) and [3.7](#) (Substantiation).

Action

The ad must not appear again in the form complained of. We told Electrosensitivity-UK to ensure they did not make claims that implied there was robust scientific evidence emerging that demonstrated negative human health impacts caused by mobile and cordless phones, WiFi and other electromagnetic fields or that specific medical conditions had been shown to be caused by exposure to mobile and cordless phones, WiFi and other electromagnetic fields, unless they held adequate substantiation for such claims.

CAP Code (Edition 12)

[3.1](#) [3.7](#)



**Worth the risk?
It's your call.**

More and more research is starting to show potential health risks from mobile and cordless phones, WiFi and other electromagnetic fields.

Know the risks.
For more information visit: www.es-uk.info
f /ElectroSensitivityUK

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