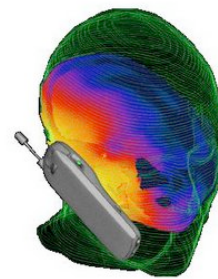


Electro Pollution: An invisible killer

Electro-pollution is an invisible but very real threat facing us all today. Since we are constantly surrounded by electronic gadgets, electro-magnetic waves follow us everywhere.

With hi-tech and hi-touch lifestyles in the cities of India influencing the young and old and, electro-pollution is correspondingly increasing from electronic gadgets such as mobiles, laptops, computers, Wi-Fi, air conditioners and other modern electric and electronic equipments. These instruments produce Electro-Magnetic Frequencies (EMF) that cause stress related problems¹. The results are lack of concentration, poor work performance; sleep disorders and major health problems such as brain damage, cancer and heart diseases.



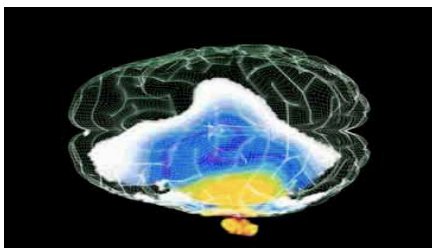
Electro-pollution - What research says?

A recent study conducted at the Post-graduate Institute of Medical Sciences, Chandigarh states that if a person uses a mobile for more than one hour a day, it can cause sensorineural deafness². In a study of animals, Indian scientists have found that radiation emitted from mobile phones causes DNA damage; low sperm count leading to infertility and also a reduction in the testis size in rats. In fact, Gulam Nabi Azad, our union health minister, has issued a warning to Indians, to reduce the usage of mobile phones to less than an hour a day³. Sadly, no one is paying attention to the dangers of electro-pollution.

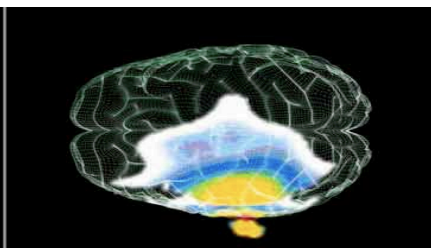


Recently, Mumbai Mirror, a popular newspaper in Mumbai, along with a New Delhi based organization conducted a survey on the emission of electro-pollution from the cell towers of the city and observed alarming levels of radiation in various parts of the city. Since we cannot actually see radiation, people discount its existence and often blame other factors for their illnesses. Today, if a person goes to the doctor with complaints as listed below, the diagnosis will often be stress or anxiety:

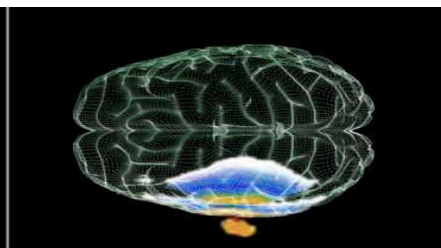
- sleep disturbance • fatigue • depression • headaches • restlessness • irritability • difficulty concentrating • forgetfulness • learning difficulties • difficulty finding words • frequent infections • sinusitis • lymph node swellings • joint and limb pains • nerve and soft tissue pains • numbness or tingling • allergies • tinnitus • impaired balance • visual disturbances • eye inflammation • dry eyes • episodic hypertension • hormonal disturbances • thyroid disease • night sweats • frequent urge to urinate • weight increase • nausea • loss of appetite • nose bleeds • skin complaints



5 year old



10 year old



Adult

Electro-pollution - Dangers to reckon with

- 25% increase in risk of brain cancer
- 21% increase of risk of brain tumor in children
- 40% increase of risk of brain tumor in adults
- 50% increase of risk of testicular cancer
- 35% less sperm count in men
- 30% increase of risk of sensorineural deafness

Wi-Fi - An enticing threat

Wi-Fi has taken the world by storm and threatens to soon become the asbestos of the 21st century. Unfortunately, most are unaware of the health risks that wireless communications pose. Hope is on the horizon, however, as some countries have taken steps to address this insidious threat. In the United Kingdom, Sir William Stewart, Chairman of the International Commission on Electromagnetic Safety and former chief scientific adviser to the Government also issued warnings and public statement on mobile phones. In Austria, Dr. Gerd Oberfeld of the Public Health Department in Salsburg advised the non-use of WLAN or cordless phones in schools. The Austrian Medical Association also petitioned against the deployment of Wi-Fi in schools. In Ireland, the Irish Doctors Environmental Association urged its government to fully assess the dangers of EMF. In September 2006, more than 30 scientists from around the world signed the Benevento Resolution issued by the International Commission on Electromagnetic Safety, which stated the evidence for adverse health effects from microwave and electromagnetic field exposure⁴.



The World Health Organization also declared that all appliances using electricity are the main sources of ELF fields. Computer screens, anti-theft devices and security systems are the main sources of Intermediate Frequency Fields. Radio, television, radar, cellular telephone antenna and microwave ovens are the main sources of RF fields.

EHS (Electro Hypersensitivity) - A case study

Sarah Dacre, was a high flying career woman running her own television company in North London. She is allergic to Electromagnetic Fields, and has symptoms such as palpitations and skin numbness. She found it difficult to stand up straight and was falling over a lot. Dacre deduced that she was suffering from something invisible and silent in her home. On investigating, Dacre's house was found to be a hive of electromagnetic radiation. Given her condition, she has to put on a headgear, similar to a beekeeper's headgear, to protect her from electromagnetic radiation in the atmosphere.⁵

According to complementary medicine specialist Dr. David Dowson, Dacre's allergy is known as electro-hypersensitivity or EHS. *"It is a condition where some people seem to be hypersensitive, over reactive to levels of exposure to electromagnetic radiation."* *"It's rather like an allergy to electromagnetic field,"* he explains.⁶

With Wi-Fi spreading to airports, cafes and classrooms, and electricity power lines going up all the time, EHS is

becoming a hot topic in some sectors of the medical community. Scientists say that the average home with a laptop, stereo and microwave has relatively low levels of electromagnetic radiation, but warn that if people are close to Wi-Fi equipment, levels can jump up to a hundred times higher.

Combating electro-pollution in India

The International Commission on Non-Ionizing Radiation Protection (ICNIRP) and the Telecommunication Engineering Centre (TEC), a core technical wing of the Department of Telecommunications, Government of India, recently issued a statement, which says, "*setting up a cell tower on a school or hospital campus is not good.*"⁷ But most companies are looking at their own benefits and are not bothered about the health hazards awaiting their customers.

At present, India has around 400 million cell phone users. By the end of 2010, India is estimated to have 500 million cell phone users. A major cause for concern is that majority of these cell phone users will be **youngsters**. It is imperative that they reduce the usage of cell phones and other gadgets, which emit electromagnetic radiation. The government, non-government organizations (NGOs) and parents need to take action in this regard.

Since we cannot avoid the usage of electronic gadgets, we have to look for alternative products that can reduce the effects of harmful radiation. Recently, companies like Fusion Excel have introduced devices that can protect our body from radiation. The use of such devices seems to be the answer to the problems posed by electro-pollution.

- Dr. K. B. Jacob

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