

## Are You too Swamped in the World of the Wired and Wireless?



Our life today is inextricably entwined with electronics. It is next to impossible to conceive a day without access to devices such as cell phones, laptops, tablets, televisions, LEDs etc. We rely heavily on these gadgets for entertainment and for communication with friends, family, and at school and work. Many of us are vaguely aware of these devices emitting Electromagnetic Radiations (EMR).

### **So, what exactly are Electromagnetic Radiations (EMR)? Are they bad for us?**

Today we live in a sea of diverse electromagnetic (EMF) fields. These EMFs are physical energy fields produced by electrically charged objects that emit EMR. EMR are waves of energy moving through space. EMR includes radio waves, microwaves, infrared, visible light, ultraviolet, X-rays and gamma rays. A cursory look around the home or workplace will throw up EMR emitting devices by the dozen. The FM radio, Cell phones, Tablets, fitness bands, the ubiquitous microwave oven, Wi Fi and Bluetooth devices, TV, remote controls emitting Infrared waves are the closest to us at all given moments. Limit as much as we would want, EMR (Infra-red waves) are here to stay in crucial applications, such as night vision goggles, medical diagnostic instruments and machinery, security scanning at airports and shopping malls, radars and the list goes on.

### Coming to the bad part...

Consistent exposure to high levels of EMR has been observed to be detrimental to human health. When any electric or magnetic field acts on conducting materials, they affect the distribution of electric charges on their surface. Similarly, when low-frequency electric fields pass through human body, they influence it just as they influence any other material made up of charged particles. ***In human body they disturb the electrically charged sphere of various organs of the body causing harmful effects.***

Several studies have been conducted recently to evaluate and establish the harmful effects of electromagnetic radio frequency field (EMF) on human health. Mobile phones usage has become imminent and is now an essential part of our daily life. The increasing usage has raised public concerns and thus controversy about the potential health effects of the EMF emissions from it. Studies have indicated neuropsychiatric effects of EMF exposure in people residing near mobile phone towers. These complaints are of non-specific parameters of ill-health such as sleep disorder, constant stress and headache, along with alarming rise in specific ones like anxiety, depression, autism and Alzheimer's. Dr Martin Pall, has put forth conclusive evidences in his 2016 paper that can be accessed at <https://www.ncbi.nlm.nih.gov/pubmed/26300312>

### Solution Needed

Not using the innovations and technology advancements will be a far-fetched and impractical thought. We need a solution which can be imbibed in our day to day lives to reduce the EMR level at our residences and workplace while we continue or even decrease the use of these devices. But how?

### Hypothesis

Yagya has been considered as a non-conventional solution in Indian scriptures to save from harmful cosmic waves. To test the hypothesis and extending it on the above problem statement, Yagya was conducted as an intervention to find its impact on the indoor EMR flux and 5 case studies were performed in NCR Delhi.

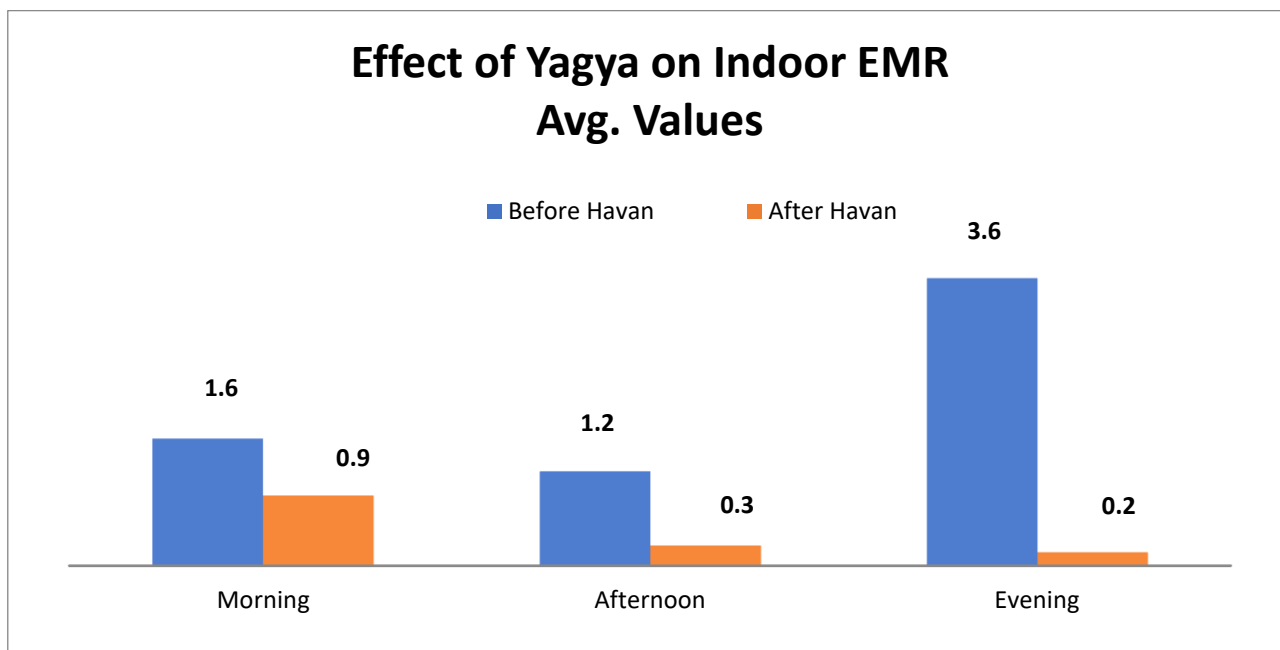
### The Experiment

Standard Yagya was performed with *Hawan Samagri* (herbal mixture) and measurement of the radiations was taken at different distance and time before and after the Yagya. The data was recorded by GM3120 Electric Magnetic Radiation Detector, a meter that can test Electric field radiation and Magnetic field emissions. The procedure of Yagya was as described in the book '*Saral Aur Sarvopyogi Gayatri Yagya Vidhi*'. The procedure of Yagya starts with *Shatkarm* and finishes with *Visarjanam* as described in the book. The substances offered in the yagya were wood (*samidha*), herbs (*samagri*)

The details about the samagri is given in the journal link shared at the end of this article, but to give a brief idea – there have been a lot of studies conducted earlier regarding the radioprotective potential of plant and herbal extracts (Click for reference in [NCBI](#) and [DRDO](#))

### What were the findings

The results indicated that not only Yagya reduced level of indoor EMR from medium to long indoor distances but also it maintained the reduced level for up to 24 hours. Yagya also reduced short-distance EMR from indoor radiation sources. From the study it can be inferred that **Yagya has a positive impact on the EMR inside the house and reduces its intensity to a level which is safe**. Below are a few graphs that depict the effect of yagya measuring the EMR values of magnetic flux (in  $\mu$  Tesla).



The average EMR values of magnetic flux in  $\mu$  Tesla in the study conducted in Gautam Nagar, New Delhi

To read the full paper along with details, graphs, data and references, please [click here](#)

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