

**GOVERNMENT OF INDIA
HEALTH AND FAMILY WELFARE
LOK SABHA**

UNSTARRED QUESTION NO:2202

ANSWERED ON:12.08.2011

ADVERSE EFFECTS OF MOBILE RADIATION ON HEALTH

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Will the Minister of HEALTH AND FAMILY WELFARE be pleased to state:

(a) whether the Government has taken note of various studies conducted by international agencies including a recent study of the World Health Organisation (WHO) which warn of possibility of cancer and other diseases caused by radiation emanating from mobile phones and towers;

(b) if so, the details thereof alongwith the facts in this regard;

(c) whether the Government has conducted/proposed any study to ascertain the adverse effects of radiation from mobile phones and towers on human health in the country;

(d) if so, the details of such studies conducted/being conducted/proposed alongwith the findings thereof; and

(e) the corrective measures taken/proposed by the Government in this regard?

Answer

THE MINISTER OF STATE FOR HEALTH & FAMILY WELFARE (SHRI SUDIP BANDYOPADHYAY)

(a) & (b): Yes. The international Agency for Research on cancer (IARC), a part of the World Health Organization (WHO), in its press release dated 31.05.2011 has classified radiofrequency electro-magnetic fields as possibly carcinogenic to humans (Group 2B), based on an increased risk for glioma, a malignant type of brain cancer associated with wireless phone use.

However, WHO has further stated that a large number of studies have been performed over the last two decades to assess whether mobile phones pose a potential health risk. To date, no adverse health effects have been established as being caused by mobile phone use. WHO will conduct a formal risk assessment of all studied health outcomes from radiofrequency fields exposure by 2012.

(c) & (d): To study adverse effects of cell phone, Indian Council of Medical Research (ICMR) has initiated a study in Delhi to examine whether use of cell phone creates risk of neurological, cardiological, cancer, ENT and reproductive discords. Efforts will also be made to measure specific absorption rate, power density wave length and frequency of RFR emitted from various types of cell phones and cell phone towers under this study.

Apart from the above, some of the studies conducted in this regard are as follows:

(i) An animal study (2005-08) supported by ICMR to find out the effect of RFR (Radio Frequency Radiation) on male reproduction at Jawaharlal Nehru University suggested that decrease in sperm count and increase in apoptosis may be a causative factor due to mobile radiation exposure leading to infertility.

(ii) A study conducted by PGIMER (Post Graduate Institute for Medical Education & Research), Chandigarh (2010) reported long term and intensive mobile phone use may cause inner ear damage.

(iii) In one of the studies conducted by the Department of Human Genetics, Guru Nanak Dev University, Amritsar (2007) a correlation between mobile phone use and DNA and chromosomal damage in lymphocytes of individuals using mobile phones was observed which may have long term consequences in terms of neoplasia and/or age-related changes. Another study(2005) reported cytogenetic damage in tissues of some individuals using cell phones over a period of time.

(iv) In another study (2010) a significant increase in peak heart rate, serum total cholesterol, VLDL, Cholesterol and triglycerides concentration were noticed in acute RFR exposed male studies in comparison to control students.

(v) Evidence have been provided by an animal study (2011) indicating continuous exposure to low intensity microwave radiation may have an adverse effect on the brain function by altering circadian system and rate of DNA damage.

(e): Various measures have been taken/proposed to be taken in this regard:-

(i) Indigenous manufactures of mobile handsets have been instructed to comply with ICNIRP (International Commission on Non-

ionization Radiation Protection) guide-lines and furnish self-certificate;

(ii) Mobile handsets manufacturers have been instructed to indicate the level of radiation on the product itself and to clearly communicate the potential danger of mobile phone radiation and exposure;

(iii) To regulate indigenous as well as imported mobile phone, Bureau of Indian Standard (BIS) has been requested to frame standards for all mobile phones under BIS Act 1986;

(iv) Based on media reports and public concerns, Department of Telecommunications (DoT) constituted a committee on 24.08.2010 consisting of representatives from DoT, ICMR, Ministry of Environment & Forest and Department of Biotechnology to examine the various studies on the effect of radiation from mobile tower and mobile phones. The report of the Committee so received was placed on DoT website for stakeholders' comments. The report of the Committee is being examined by the Government for appropriate action in the matter.