GOVERNMENT OF INDIA
COMMUNICATIONS AND INFORMATION TECHNOLOGY
LOK SABHA

STARRED QUESTION NO:33
ANSWERED ON:22.07.2015
Impact of Radiation from Mobile Towers/Handsets
Reddy,Kotha Prabhakar;Tripathi Shri Sharad

Will the Minister of COMMUNICATIONS AND INFORMATION TECHNOLOGY be pleased to state:

(a) whether the Government has conducted any study on adverse impact of radiations from mobile towers and mobile handsets on human health and environment;

(b) if so, the details and the outcome of such study including the reaction of the Government thereon;

(c) whether the Madras High Court has urged the Government to avoid erection of towers within human settlements and evolve alternative technologies being followed abroad and if so, the details thereof and the stand of the Government thereon;

(d) whether the cell phones reportedly emit more radiations when the signals are weak in the absence of mobile towers around; and

(e) if so, the details thereof and the remedial action taken by the Government to address the issue?

Answer

THE MINISTER OF COMMUNICATIONS AND INFORMATION TECHNOLOGY
(SHRI RAVI SHANKAR PRASAD)

(a) to (e) A Statement is laid on the Table of the House.
STATEMENT TO BE LAID ON THE TABLE OF THE LOK SABHA IN RESPECT OF PARTS (a) TO (e) OF LOK SABHA STARRED QUESTION NO.33 FOR 22nd July, 2015 REGARDING "IMPACT OF RADIATION FROM MOBILE TOWERS/HANDSETS".

(a) & (b) Madam, an Inter-Ministerial Committee (IMC), setup in 2010 to examine the effect of Electro Magnetic Field (EMF) Radiation from base stations and mobile phones, after examining various national and international studies on the environmental and health related concerns due to EMF, had, inter-alia, indicated that most of the laboratory studies were unable to find a direct link between exposure to radio frequency radiation and health; and the scientific studies as yet have not been able to confirm a cause and effect relationship between radio frequency radiation and health.

Based on the recommendations of IMC, Department of Telecommunications (DoT) had made the norms for exposure limit for the Radio Frequency Field (Base Station Emissions) ten times more stringent by reducing them to 1/10th of the existing limits prescribed by International Commission on Non Ionizing Radiation Protection (ICNIRP) and recommended by World Health Organization (WHO). Also, the Specific Absorption Rate (SAR) level for Mobile Handsets were also revised to 1.6 Watt per Kg averaged over a mass of one gram human tissue. These limits were reviewed in 2014 based on recommendation of a committee that was setup at the behest of High Court Allahabad, Lucknow bench. The Committee comprised of members from Indian Institutes of Technology (IITs) Kharagpur, Kanpur, Delhi, Roorkee, Bombay and from other scientific institutions of the country including Indian Council of Medical Research (ICMR) and All India Institute of Medical Science (AIIMS) Delhi. This Committee has also referred to various studies carried out in this regard and has observed that the Department of Telecom has taken adequate steps to impose stricter precautionary limits for EMF radiation from mobile towers as well as from mobile handset/phones. After due consideration of the human health concerns on account of EMF radiation being raised in public and the Report of the Committee, the Government has decided in February 2014 that the present prescribed precautionary EMF safe exposure limits are adequate and need no further change at this stage.

In addition, a joint initiative has been launched by Science and Engineering Research Board (SERB), a statutory body under Department of Science & Technology and DoT, to study possible impact of EMF radiation exposure from mobile towers and handsets in the non-ionizing band (300MHZ to 3 GHZ) on life. i.e. Humans, Living Organisms, Flora & Fauna and Environment. Nineteen research studies have been initiated in 2015.

It would also be pertinent to mention that World Health Organisation (WHO) has referred to approximately 25,000 studies, conducted around the world over past 30 years, and based on an in-depth review of scientific literature, has concluded: "current evidence does not confirm the existence of any health consequences from exposure to EMF radiation". Since the effects on human beings are to be studied over a long period of time, further studies are going on around the world.
Contdâ€¦3/-

(c) Principal Bench of Hon'ble Madras High Court disposed of about 50 petitions along with W.P.Nos.24976 of 2008 on 05-03-2015, inter-alia, stating:
"10. â€¦.There being no materials atleast as on date, which can finally suggest any health hazards from these towers and the solution thereof, the Court would not venture into unchartered territory of technical expertise to determine the area where it should be installed.

â€¦â€¦.

11. We are of the view that no further directions are required in these matters, other than to say that the concerned authorities would continue to analyse the materials as and when it emerges to look into the concern raised by the petitioners, especially, in view of the fact that there is no final view as yet on these aspects. Science grows and evolves and one does not know what may happen tomorrow. It is, in this context, we have made these observations"

In another case, Hon'ble High Court of Madras, Madurai bench has disposed of the writ petition W.P. No. 5249 of 2010 on 22-04-2015, inter-alia, stating :

"2. We may, however, state that it is given to understand that there are different technologies now available in some countries, whereby necessity of erecting towers can be dispensed with either taking cable underground or otherwise. This is a matter for the Telecommunication Regulatory Authority of India, Government of India, to examine. We thus request the said Authority to look into this aspect and the possibility of the same in India."

In this regard, Telecom service providers in India are already using In-building solutions which are used to extend and distribute the cellular signal of a given mobile network. Such systems are provisioned by the service providers as per the coverage considerations and feasibility. The provisions for promoting In-Building Solutions (IBS) have also been made in National Telecom Policy (NTP)-2012. However, these technologies are meant for coverage in a very small/confined area. These may reduce the emission in that confined area but will not be able to provide the coverage that is sustained through outdoor base transceiver station (BTS)/mobile tower for providing seamless mobile connectivity. For street coverage, BTS is the desirable option.

(d) & (e) Mobile phones are designed for adaptive power control whereby they automatically adjust for transmitted power level to maintain a quality connection. Transmitted power of mobile phone increases when signal strength from the mobile towers around is weak. However, the mobile phones typically operate well below the maximum permissible level. As a remedial action, DoT has already fixed maximum SAR value of mobile handsets as 1.6 W/Kg averaged over one gram human tissue which places limit on the maximum power transmitted from the handset.

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