

Omelchenko E.V., Trushkova E.A., Zhizhin K.S.

Russia, Rostov-on-Don, Academy of construction and architecture of the Don state technical university

INFLUENCE OF MOBILE PHONES ON HEALTH OF THE PERSON

Summary: Information on harm of use of means of communication is provided in article. The analysis of impact of an electromagnetic field on health of the person and an etiology the emergence thus of diseases is provided.

Keywords: Mobile phone, electromagnetic fields, etiology, communication, environment.

Communication, today, became the integral and everyday occurrence in our life. Irrespective of age, sex, material welfare and a national identity there is an intensification of rates of introduction and use of various communication means.

The problem of biological effect of an electromagnetic field (EMF) arose in the late fifties of the XX century. Development of a radio communication, broadcasting, a radar-location and television, led to increase in the EMP general level of various frequency intensive, ranges, the generation modes in environment.

The analysis of statistical data which is carried out by us, allowed to draw a conclusion that in recent years total electromagnetic intensity of an anthropogenous origin on different grounds increased in comparison with a natural background from two to five orders, especially, near high-voltage power lines of a medical and household purpose, radio - and TV stations of various power and power-intensive installations, industrial means of a radar-location [1-4]. As a result - potential danger and risk to health of a general population sharply increased.

The problem of electromagnetic safety especially increased in connection with mass introduction in everyday life of various electric electronic products of a medical and household purpose recently: TVs, mobile means of space and radiotelephone communication, personal computers. Today, according to Ministry of Health of the Russian Federation technogenic electromagnetic fields can play etiologically large role in epidemiology of mental, oncological, ophthalmologic, cardiovascular, and many other diseases, making dangerous impact on genetic structures, endocrine and immune functions of an organism, function of reproduction, posterity. There are data on increase of sensitivity of pregnant women, children, and sick people to EMF even small frequency [2].

In this connection, the World Health Organization (WHO) included electromagnetic pollution of the environment in number of the most important problems for which decision efforts of scientists around the world are directed. It is established that immune, endocrine and nervous systems of a human body are most sensitive to EMF.

From nervous system it is worth expecting manifestation of the following symptoms at the repeating resonant influences of EMF: memory impairment, frequent headaches, dystrophic manifestations from nervous cages, a lateral atrophic sclerosis, development of different types of neuroses [4].

It is scientifically proved: only long stay in a radius about 30 meters across from a base station can be hazardous to health, and in this radius for a signal there should be no hindrances (for this purpose stations and put on higher points, i.e. roofs of buildings). Electromagnetic radiation is perfectly extinguished by roofs of houses (power decreases by 100-1000 times), walls, any other protective overlappings, even a usual protective dusting on glass (we will remember filters on our computers). Scientists of Denmark made a number of experiments and found out that, headaches, causeless irritability and constant drowsiness - signs of users of cell phones. In a human body there is a reaction of tension of immune system because of influence of harmful electromagnetic fields. The Hungarian researchers provided materials about the reasons of development in users of cell phones of a tumor of a brain. They established connection between development of a tumor of a brain in people from 20 to 29 years which used cellular from children's age. It is established that if the person talks by the mobile phone daily more than 45-60 minutes, not to avoid a headache. Researches of the Swedish scientists in 2003 confirmed, what even two-minute conversation on the cellular causes damage of a hemobrain barrier, which isn't restored even in an hour after the end of conversation. In 2006 the Italian scientists reported, people with easy excitability of brain cages have mobile phones, can cause epileptic blow, exciting a cerebral cortex. The Swedish physics proves that the electromagnetic radiation of mobile phones can break red blood little bodies – erythrocytes and described the phenomenon of "thermal shock", the effect from which remains 72 hours after influence of EMF [5].

The idle mobile phone lying near a bed is capable to do much harm and prevent to sleep. Even in a waiting mode the electromagnetic radiation of the mobile phone influences adversely the central nervous system, breaking changes of phases of a dream.

Thus, the phone conversation is carried on more long, the greater influence is made. Perhaps, on health makes impact not only radiation of cell phones, but also a complex of factors: for example, wrong way of life.

References

1. Persons of T. Mobile communication and health человека.//Mobile telecommunications. – 2004.-№1.
2. Rumyantsev G. N. Analysis of the pathogenic importance of radiations mobile телефонов.//Bulletin of the Russian Academy of Medical Science. – 2004.-№6.
3. Zaharenkov V.V. Ocenka professional'nogo riska dlja zdorov'ja rabotnikov promyshlennyh predpriyatij na osnove medicinskoj tehnologii / V.V. Zaharenkov, A.M. Oleshhenko, I.P. Danilov, D.V.

Surzhikov, V.V. Kislicyna, T.G. Korsakova // Akademicheskij zhurnal Zapadnoj Sibiri. - 2013. - T. 9. - № 2 (45). - S. 8.

4. Andreeva E.E. K ocenke riskov dlja zdorov'ja rabotnikov pri klassifikacii ob#ektov sanitarno-jepidemiologicheskogo nadzora i planirovanii proverok (na primere g. moskvy) / E.E. Andreeva // Analiz riska zdorov'ju. - 2016. - № 2 (14). - S. 84-92.

5. Kislicyna O.A. Nezashhishhennost' v sfere truda rabotnikov v Rossii kak faktor riska plohogo zdorov'ja i povedenija s riskom dlja zdorov'ja: gendernyj aspekt / O.A. Kislicyna // Upravlenie zdravoohraneniem. - 2015. - № 1 (43). - S. 66-77.