



Radiofrequency Radiation Emitted From Mobile Phones on Brain

Prof. Dr. Süleyman Daşdağ

Department of Biophysics, Medical School of Istanbul Medeniyet University,
Uskudar, Istanbul

Abstract

Since 1995, cell phones which are widely used in our country are now indispensable for daily life. This habit has come so far that human beings have met with a new "Fear": Nomophobia (No Mobile Phone Phobia). We are afraid today lose our mobile phones in anywhere. However, the health effects of wireless communication technologies were always ignored while enhancing the comfort of life. The sad thing in our country is to be the first in the European Countries in terms of mobile phone and wireless communication usage, which is announced by the Information Technologies Authority (BTK) every quarter of the year. The worst of all is that children are under ten year's old use of smart mobile phones frequently. Mobile phones or other wireless communication devices produce both "Radiofrequency radiation (RFR)" and "Extremely Low Frequency magnetic field (ELFMF)" in the environment when they are working. However, these two physical factors were already accepted as "Possible carcinogen" and classified as "2B" by the World Health Organization (WHO). Studies on the relationship between ELFMs and childhood cancers have been made towards the end of the 1970s, and the issue has been addressed. However, the studies on the health effects of RFRs used in wireless communications were initially focused on the brain and followed by other organs. Epidemiological studies provided supportive evidence of increased risk for head and brain tumors. Therefore, the most important reason of the classifications of RFRs as 2B by WHO is high population of the studies that state relation between brain tumors and RFRs emitted from mobile phones or other wireless equipment. The animal and human studies we are still pursuing demonstrate that RFR and ELFMF are not as innocent as they seem. On the other hand, one of the eye-catching topics is the screen time of children. Due to the fact that researches on the screen time have been linked to various diseases, developed countries brought new legal regulations for the prohibition of the

interaction of the children under the age of two. Relevant institutions recommend that screen time should not exceed two hours / day for children and adolescents (until the age of 18). In our country, these subjects are still not even discussed sufficiently. The attention of the public opinion to this issue is essential, and danger bells are stealing for our children. The attention of the public to this issue is essential, and danger bells are ringing for our children.

Keywords: Mobile phones, wireless communication, brain, screen time, diseases