

# POTENTIAL RISKS OF DEVELOPING PATHOLOGIES WHEN USING MOBILE PHONES

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**Introduction.** Today, the role of a mobile phone in human life is difficult to overestimate. Using this compact device, we can at any time quickly contact our relatives and friends, work colleagues to find out the information we are interested in. Over the past few years, cell phones have become an integral part of our lives. And this is not surprising, because the high rhythm of life, the implementation of everyday goals and objectives dictates to us the need to always be in touch and have the faithful assistant on hand. The widespread use of mobile phones, household appliances - emitters of electromagnetic fields puts the question of their impact on the human body in the spotlight. Moreover, the human body cannot adapt to electromagnetic technogenic radiation, since the body does not have the corresponding sensory systems that would perceive and analyze the received signals, it does not have the corresponding adaptation mechanisms. To measure the potential health risks associated with radiation, scientists have proposed a unit of measure - the specific absorption rate (SAR) of electromagnetic energy. This is an indicator of the electromagnetic energy that is absorbed in the tissues of the human body while using a mobile device. The issue of the safety of using mobile phones is widely discussed in the scientific literature [1, 2, 3].

**The aim.** To assess the potential risks when using mobile phones among young people 17-21 years of age.

**Materials and methods.** To assess the potential risks of using mobile phones among young people, a pilot study was conducted.

Based on the works [1, 2, 3], a questionnaire was compiled, which included questions about the frequency and duration of use of a mobile phone. During the study, 270 young people (students of a medical university) aged 17 to 21 years were interviewed. The study involved 90 male students and 180 female students.

**Results and discussion.** It was found that 100% of the surveyed students use a mobile phone daily. 51 (18.5%) people use it for calls lasting more than 30 minutes while traveling in transport. 77% of respondents use it for calls in vehicles lasting less than 10 minutes. 4.5% do not use the phone at all in transport. 136 people (50%) use the phone for games that require constant access to the Internet. It is known that during the movement of vehicles the radiation generated by the phone increases, as there is a constant search for the network. At the same time, the degree of exposure to that area of the body near which the telephone is located increases. In addition, electromagnetic fields generated by different sources can mutually reinforce each other, causing negative effects in living systems. From literature data it is known that when a mobile phone is radiated, a change in biochemical parameters and a change in the hormonal spectrum of the blood occur, which can lead to changes in the functioning of the nervous, endocrine and immune systems [4, 5].

**Conclusions.** It can be assumed that a lack of awareness among young people may be a risk of early pathologies in the body and the development of the so-called “diseases of civilization”.

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