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Influence Of Mobile Telephones And Gadjets On The Vision Of Children Of School Age

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Abstract The article deals with the problem of the influence of mobile phones and gadgets on the visual acuity of schoolchildren. It was revealed that schoolchildren who actively use the phone have a decrease in the quality of vision and the development of myopia.

Keywords: cell phones, computer, gadget, school, Information Technology, nervous system, sensory organ, electromagnetic radiation, cataracts, internet, psychological dependence.

The eye is the most important human sensory organ. Vision accounts for 90% of the information that comes to the nervous system from the outside world. At one time, one of the main factors affecting the deterioration of vision was traditionally considered to be the reading of many books. In the modern world, in connection with the development of technologies, computers and smartphones have become the first in terms of their detrimental effect on vision function. One of the most is currently problems with working at a computer, using cell phones, gadgets. Introducing modern schoolchildren to information technology is developing rapidly every year. At the same time, the computerization of education, the active use of mobile communications, in addition to advantages, has a number of negative aspects that can negatively affect vision at any age stage of life and the human body as a whole. Information technology has become an integral part of our life and continues to expand the scope of its existence in all areas of activity. According to the US Centers for Disease Control and Prevention, the average child watches electronic screens for about 8 hours a day. As they get older, the use of gadgets also increases. Somipam R. In a review of an article by Shimray and others [28], data from various researchers indicate that the use of information technology is growing rapidly around the world. Nearly 91% of U.S. adults and 60% of adolescents own mobile devices and spend an average of 144 minutes a day communicating with the phone for 16 hours [22]. In India, as of December 2013, one in 120 of the total population of the country was a tablet user, one in 10 was a mobile Internet user, one in 13 was a social network user, and one in 6 was an Internet user. During the same time, the "online population" in India reached 73.9 million [4].

The Chinese population is moving in this direction at a rapid pace. According to the 35th statistical report on internet development in China, in December 2014, the number of Internet users reached 649 million and the number of mobile internet users was 557 million (85.8%) [6].

A study of demographics in 960 primary and secondary school students (ages 10-19) of Hong Kong schools found that nearly 86% of those surveyed used smart devices every day [19]. In West Bengal, 87% of students spend too much time on social media [24].

According to the foundation for internet development (2014), 91% of Russian schoolchildren aged 10-17 have access to the internet at any time and anywhere [3]. This is due to an improvement in the quality indicators of electronic devices, as well as the emergence of new forms of interaction with users. Gadgets

have become familiar in the form of a clock, a ring on the head, game consoles with glasses, etc. A new camera appeared that can take pictures from two angles at once, there is a musical sleep mask, an adjustable gaming mouse, a new type of Electronics - between a computer and a tablet. The latest news: it is a foldable tablet and the new, first smartphone in the world that has a full monolithic case, neither a speaker, nor a button, nor a charge connector. The word "Gadget" itself means a device, a technical device, which increases functionality, but has limited capabilities. Its attributes are: portability (the weight of ordinary gadgets is not 300 g, and the dimensions allow you to fit into the clothes pocket); functionality (except for the expected functions - additional); limited capacity (most do not have the ability to expand the function by assimilating additional modules; they are often equipped with enough capacity batteries) [14]. Today, the most popular gadgets: smartphone, laptop, iPod, clock, radio receivers with additional functions, portable game consoles scientists from all over the world are engaged in studying the problem of the impact of cell phones on human health. Research is carried out in many European countries, in the USA. In Russia, the appeal to this problem by the scientific community is also high. Currently, there are some scientific studies confirming the connection between cancer, nervous system disorders and electromagnetic radiation from a cell phone. Analysis of visual impairment of children of school age shows a stable increase in vision decline by the time they graduate from school, and this is due not only to non-compliance with hygiene standards when working with a computer, reading, low physical activity, but also to the influence of a cell phone. The main types of visual impairment in children are myopia, often caused by excessive tension of the eye apparatus, spasm, conjunctivitis, cataracts " [3].

The relevance of the problem has determined the topic of our study "the impact of cell phones on the health of children of school age". To date, the number of mobile subscribers around the world is 1.9 billion. In our country, almost one in two people has a cell phone. Its effect on a person using a cell phone is not felt until 15 seconds. If the timing of speech and use increases, then a pronounced change is felt, since alpha waves worsen brain activity and begin to manifest their wave properties. The most influential part of the human body to electromagnetic radiation is the head, and it is in this area that eloquence is carried out. Therefore, he will again increase the acceleration of the radiation process in a person. When experts measure a person's blood pressure in the colloquial process, it has been found that pressure rises in people of different ages.

We conducted a study on the effect of cell phones on the vision of schoolchildren. The survey involved a total of 100 students in grades 6.8.10 from school No. 5 in her hometown of Farg. They were asked the following questions of the survey we made

Question!

1. How many years have you used a cell phone?
2. How much time do you spend talking to your friends during the day?
3. How much time do you spend playing on the phone?
4. How far is the phone when you sleep?
5. Is the Internet connected to the phone?
6. Do you have vision problems?
7. How much time do you spend on social networks connected to your mobile phone (Vkontakte, Instaram, etc.)?
8. Do you think you have psychological dependence on the phone?

The research we conducted allowed us to come to the following conclusions: Students in grades 6-8, 10 are active users of cell phones and spend a long time with them. The results of the survey showed that more than 60% of 8th grade students used a cell phone for 8 years. Most importantly, 6th graders talk to friends on a cell phone (more than 1 hour a day), as well as many children (more than 85% of all age groups) have access to the internet from their phones and, as a result, use it not only to learn and communicate.not only for social networks, but also for games. Thus, children experience the effects of electromagnetic radiation for

several hours during the day. As a result, they complain of headaches, physical inactivity, the formation of psychological dependence and impaired vision. According to our survey, more than 46% of children have vision.

Vision of surveyed children, When we analyzed the downward trend in vision for students in grades 6 through 10, only 20% of 15-year-olds were not diagnosed with visual impairment. The problem of poor vision is due not only to an increase in training load, but also to the active use of gadgets and mobile phones. Research by scientists shows that if earlier diseases of the organs of vision were diseases of older people (60-75 years old), now doctors note a sharp decrease in the age of patients – these are children, adolescents

Frequent use of a cell phone leads to poor vision, since even the most modern phone has a small screen, and you need to squeeze the visual apparatus to see the image on the phone screen. This increases the risk of myopia, cataracts, reduces the ability to concentrate.

Medical scientists have found that microwave radiation emitted by cell phones causes eye tissue to bubble. This phenomenon occurs before the appearance of cataracts, and also reduces the ability to concentrate. Professor Levi Schachter, who led a team of Israeli researchers, says, "the results we get show that microwaves can cause severe eye damage. Our tip: If you have the opportunity to use a landline phone, avoid using mobile" [2].

To the question: "how much time do you spend on social networks (Vkontakte, Instanram, etc.)?"we received the following information: VK has the lowest number of sixth-graders-an average of 1 hour and 30 minutes, perhaps they are more susceptible to parental control. But students in grades 8 and 10 spend a lot of time on social networks that are connected to their mobile devices, have a psychological dependence on phones and gadgets.

The level of psychological dependence on the next cell phone. Overall, a survey of schoolchildren found that 99% of them believed that the loss of phones, their breakdown, was a major disaster.

Having studied the problem of the impact of cell phones on the health of children of school age, we came to the conclusion that, like all electronic technologies, cellular means affect the health of the population. This problem is controversial all over the world. Scientists from different countries are trying to determine the degree of damage to the human body as a whole by means of mobile communications based on ongoing research. " [1]. In our study, we examined only some aspects of the problem, summarizing information about the harm of cell phones to the vision of children of school age. We believe that this problem should be studied on aspects of psychological dependence, disorders of the upper nervous system and systemic diseases of the body.

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