



THE IMPACT OF TECHNOLOGY ON THE HUMAN BODY

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Introduction. In 2020, the world faced the new type of Coronavirus, which led to a quarantine period that is still persisting today. In the Republic of Moldova, many institutions have closed due to the COVID-19 pandemic and started the online mode. Teachers and students had to double the time spent at the computer. Thus, the negative impact of information technology on the body has become more pronounced. It is highly important to educate the public on the correct use of technologies to prevent diseases.

Material and methods. The present study is based on the analysis of major aspects on the impact of information technologies on humans. The analysis was conducted on 21 researches from different universities around the world (Republic of Moldova, Romania, Russia, USA, etc.), published over the last 5 years.

Results. The data study proved that computer activity has a negative impact on brain development and functioning. This is due to the fact that the left brain hemisphere, which is suppressed when looking at the screen, does not develop normally, thus, resulting in deficiency of logical and analytical thinking, speech, sentence formation, writing and reading skills amongst the young people.

As a consequence, the prefrontal cortex that distinguishes the human brain from that of an animal one might be impaired and lead to low level of concentration, weak motivation and risky behaviors like bulimia, aggression and sexual urges. The visual and auditory stimuli occurring on the screen are so aggressive and following one another so fast, that they exceed the brain's ability to control them. The inevitable effects will result in the inhibition of important mental processes. Screen viewing is a critical factor in generating passive behavior. A decrease in overall alertness is proportional to the time spent viewing. There is an obvious decrease in perseverance, readiness and desire to actively solve the problem. Neurologically, the researchers refer this phenomenon to the brain activity or alpha rhythms, the cortical activity to which people get used during thousands of hours spent on screen viewing.

The first symptoms of excessive computer overuse are the stinging pains and blurred vision. Ophthalmologists say that people with myopia and farsightedness develop an earlier and a more pronounced fatigue.

Computer users may experience signs like tremor, itching, and finger tingling. Often these symptoms occur a few hours after the work is completed. The underlying cause of this syndrome is long duration of uniform hand movements, including fingers. In adolescence, the skeletal system also changes. The bone growth in children and adolescents might be affected due to a bad computer posture thus resulting in poor posture and scoliosis.

Conclusions. Information technology is essential in everyday life, thus, despite its multiple benefits, improper long-term use can lead to negative health consequences. Negative effects can be prevented, so users should be properly educated on both the effects causing health disorders, as well as the preventive means, appropriate workplace arrangement, break-period compliance and time of use.