



## THE IMPACT OF COMPUTERS ON CHILDREN'S HEALTH

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**Keywords:** *health, extreme temperatures, climate change, heat wave, cold wave.*

**Introduction.** In modern society, the old technological process is replaced by new technologies, namely, computerization. In 1990, computers formed the basis of the training system within the educational institutions at different levels. Using the computer, the teacher obtains additional possibilities for personality development, for the creative search and organization of work, as well as a unique possibility to communicate with colleagues from all over the world. The use of computers offers children the opportunity to work more easily with text documents and to attend lessons of outstanding scholars and teachers. The use of computers, in most cases, contributes to increasing success, to raising the effectiveness of independent work, offers new possibilities for creating, obtaining and strengthening professional skills. The computer provides a feedback of the learning process and its individualization, as well as allows searching for information from a wide range of sources. Considering the aforementioned, there is a question arising: does the computer have only positive effects on children? *The purpose of the study* was to analyze the bibliographic sources and to establish the impact of the computers on children's health.

**Material and methods.** The information presented is a literature review study of 34 sources (scientific articles, WHO, IPPC, WMO reports, monographs) from the Republic of Moldova, Romania, Ukraine, USA, Canada, and Portugal.

**Results.** Most of the bibliographic sources studied mentioned the development of the first stage of fatigue (excitation stage) in children who sit for a long time in front of the computer, which leads to irritability, nervousness, insomnia, decreased attention span. The computer can become a source of infection if you work on it every day without being cleaned at least once a week. The findings of some studies show that computer keys are soaked with bacteria, including *Staphylococcus aureus*, *Escherichia coli*. The sensation of "sand in the eyes", tears, blurred/double vision, stinging or pressure sensation, tired eyes, dry eyes, irritation, difficulty adjusting, headache, dizziness may be the warning signs of Computer vision syndrome. The tense position at the computer, the bent neck, the bent spine, the incorrect position of the hands and the way children hold their forearms on the table can affect their health, causing joint diseases. While working on the computer, the nerve endings of the finger pads are hit by constantly pressing the keyboard, thus, finger numbness, weakness and tingling occurs through the finger pads. This can cause damage to the joint and ligaments of the wrist, and later the disease can become chronic. Paresthesia is a pain, which appears on the dorsal side of the first three and a half fingers of the fourth finger, as well as on the distal palm are symptoms of Carpal tunnel syndrome. The sitting position at the computer can be complicated by venous stasis in the organs of the small pelvis and legs, varicose veins, and deep vein thrombosis. Dermatitis, changes in the cardiovascular system (especially increased frequency of heart contractions, blood pressure), etc. may also occur.

**Conclusions.** In order to benefit from the advantages of using a computer and to avoid unfavorable consequences, it is necessary to arrange correctly the workplace on the computer, to follow the recommended breaks and the activity time depending on the child's age, to consult regularly the ophthalmologist and other specialists to determine early signs on time.