



IMPACT OF EXCESSIVE COMPUTER USE ON GLOBAL HEALTH STATE

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Abstract

The computer has become indispensable for many of us, but together with all the advantages that it offers longtime staying in front of a computer can cause various health problems.

Work at the computer without breaks, with an incorrect posture of the spine, which is not compensated by other movements, it is a hard request for the spine. Another negative effects of computer addiction often lies in vision problems, varicose veins, obesity and intestinal tract disorders. In case you are forced to stay several hours at the computer, you should do a few steps every half hour to relax the muscles and activate circulation in the limbs. There are recommended stretching movements of the arms, back and legs.

Keywords: *helth, posture, computer, movement*

JEL classification: *110, 120*

Introduction

In the 1970s radios easily made their presence felt in people's homes. In the 1980s television entered in each family. In 2000 DVDs, stereos, PCs and mobile phones forcefully entered in each person's life, and now smartphones and laptops become devoid of personal objects of any individual, just like a toothbrush or hairbrush. Technological development has led to the use of computers and gadgets for almost the entire current generation of young adults and professionally active people.

Even if used in professional activity, as an information tool, or as a way to spend our free time, the computer is more increasingly part of our lives. The reality is that it has become indispensable for many of us, but together with all the advantages that it offers longtime staying in front of a computer can cause various health problems. Working on computer or using a smartphone involves the adoption of certain postures, which reflects a specific request on the muscles, eyes, spine, joints, circulation and bowel. All these are due to sedentary lifestyle involved in frequent and lasting use of technological gadgets.

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Content

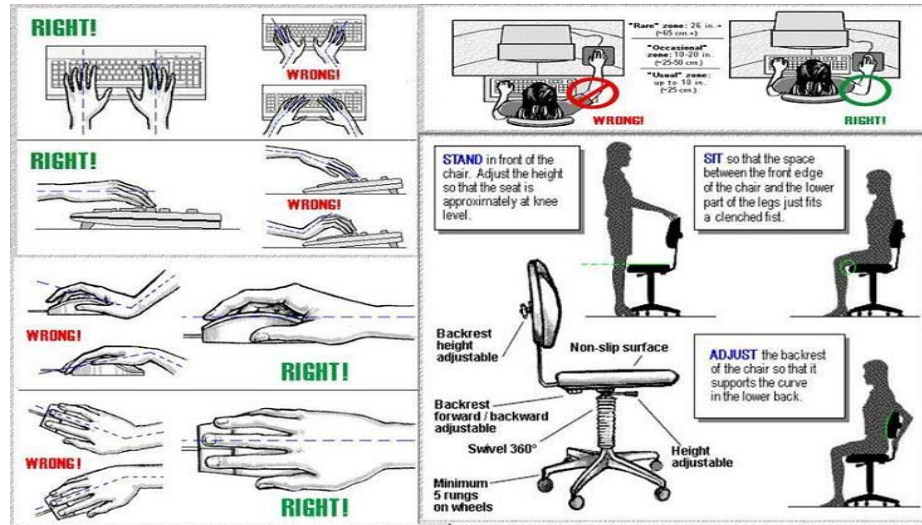
A study conducted on 460 students have concluded that:

- 100% of them have a personal computer;
- 100% of them have Internet access;
- 100% of them are working on PC;
- 98% have social networking accounts;
- 87% of them play different computer games;
- 63% spend more than 6 hours in front of a computer;
- 96% spend 1-3 hours daily on the Internet;
- 94% consider surfing the internet a method of relaxation;
- 21% do various sports activities in their leisure time.

If we are forced to spend long hours in front of the computer, we must adopt a proper posture in any other situation. Work at the computer without breaks, with an incorrect posture of the spine, which is not compensate by other movements, it is a hard request for the spine, which will result primarily in pain. The pain may be accompanied by changes in its natural curvature (thoracic kyphosis, scoliosis thoraco-lumbar, increased lumbar lordosis), herniated disc - according to some authors, the risk increases by 60-70%, osteoporosis - favored by prolonged sedentary activities such as: prolonged sitting at the desk, bad posture. After most studies, lumbar discopathy is the most common benign condition in adult. While over 90% of adults during their lives experience at least one episode of back pain requiring treatment and anti-inflammatory painkiller and limiting work, it's good to know that about 5% of these people could get to surgery.

But spinal suffering doesn't consist only in pain, although it may have very high intensity parameters. Spinal cord issues can also mean other types of nerve disorders that address to upper or lower limbs.

CDT (Cumulative Trauma Disorder) is a syndrome caused by the rigid position of arms beside the body during data entry on keypad. Vessels and nerve compression results in the pectoral area, with local pain or sores. One form of CDT is carpal tunnel syndrome, a consequence of median nerve compression of the carpal tunnel because of swollen flexor tendons of the hand. Carpal tunnel syndrome was recently recognized in the Netherlands as occupational disease arising as a result of the intensive use of the keyboard. The main causes of carpal tunnel syndrome are a too high position of the keyboard, hitting the keys with too much power and prolonged work without breaks. Untreated, the condition can even lead to paralysis of the fingers. Similarly, there may be other affections: cubital tunnel syndrome, tendinitis or thumb extensor tenosynovitis, and lateral epicondylitis.



(Deepshikha M., 2015)

Because sedentary implied in online activities, the risk of obesity increases highly. More than 7-8 hours per day spent in front of computer implies, automatically reducing or even exclusion of physical activities. Also, those who work daily in front of a monitor are tempted to consume various foods while working, usually unhealthy foods in terms of nutrition, which leads to weight gain over time. In respect of children and teenagers, the American Academy of Pediatrics warns parents to limit time spent by children in front of the computer and guide them towards sports.

Another negative effect of computer addiction often lies in vision problems. Those who sit a lot in front of the screen may experience certain symptoms, such as headache, disturbance in attention, eyestrain and blurred vision. One of the most serious visual disturbances is glaucoma (a disease that causes atrophy of the optic nerve and visual field), often associated with increased intraocular pressure.

Sitting extended hours also leads to varicose veins and intestinal tract disorders.

Improving issues

The correct posture in front of the computer is essential for reducing degenerative diseases

- It is recommended a 5-minute break every half hour working on computer, breaks to perform stretching movements.
- The look must fall exactly on the monitor, the head should be slightly higher than the monitor. Occasionally should be made head rotation movements to prevent



cervical spine degenerative changes.

- Office furniture should be chosen with care to avoid muscular tensions. The seat height should be adjusted so that when you sit at your desk, elbows and knees to form right angles. Positioned too low or too high in relation to the floor, overburden leg muscles, causing varicose veins. It is better to choose for a chair with handles to support the elbows. It is very important that the seat is wider, not to block blood flow, thereby causing varicose veins. Also the material of which the seat is made has its importance for the comfort state in front of the desk. Recommended seat materials are fabric or leather. The desk itself on which the computer sits must be sufficiently wide to enable us to support the arms and to keep the keyboard at a distance from the edge. The edge is ideal to be slightly rounded to not block blood flow to the forearms. Office should be equipped with an additional platform, adjustable in height, on which to be placed keyboard and mouse.

- When you sit on the chair back should be straight and feet flat on the floor, with your knees to touch the edge of the seat or it is recommended positioning legs at an angle of 30 degrees, which provides maximum relaxation. Classical working posture in the office is most used, but prolonged sitting posture with feet on the ground causes venous return disorders, with a feeling of heavy legs and swollen. It is recommended to raise the legs so as to avoid prolonged latch position.

- Propping elbows on the handlebars eliminates permanent tension in the muscles of the arms and back.

- During work, the keyboard must be perpendicular to the forearms and hands and forearms must rest on the desk. This way it can be prevented carpal tunnel syndrome.

- To remove muscle tension in the neck, the mouse should be placed as close to the keyboard.

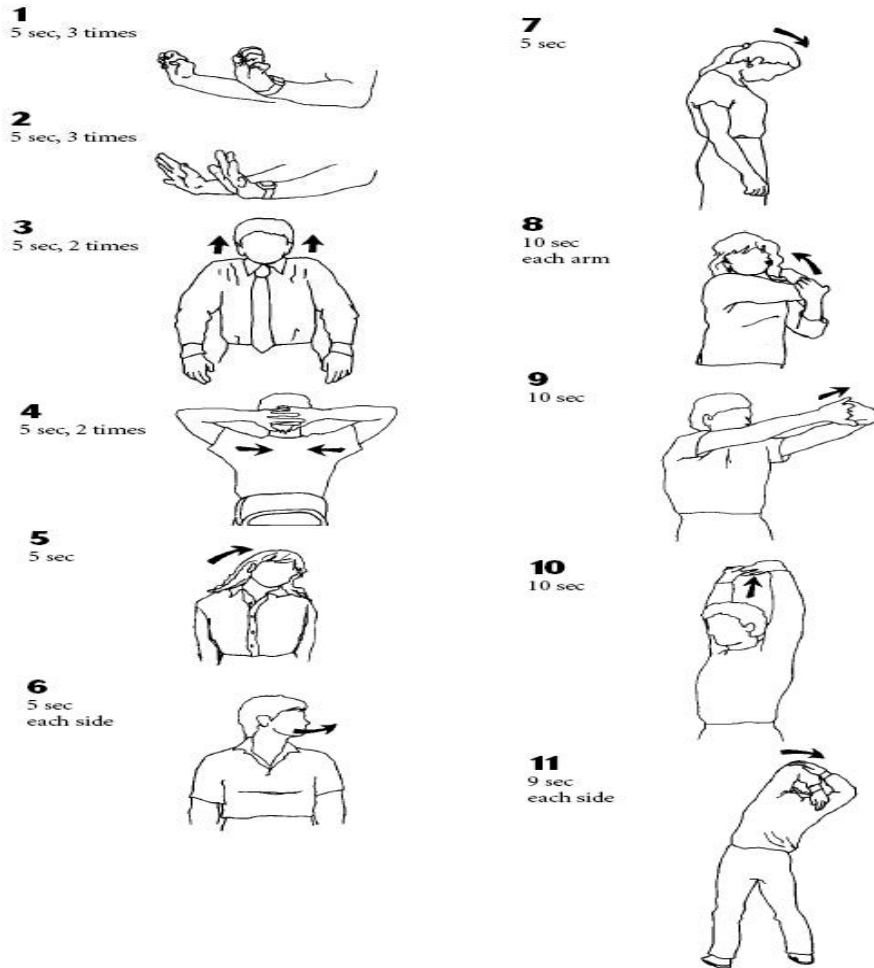
- It is necessary to more often use the keyboard than the mouse, so you can avoid pathology targeting muscles and nervous system of hand

- The keyboard and mouse should be at the proper height, so that, when used, forearms make a right angle with your arms.

- The screen should be placed at a distance of 45-50 centimeters from the eyes. When you are seated, top of the screen should be at eye level and be slightly tilted backwards.

Conclusions

In case you are forced to stay several hours at the computer, you should do a few steps every half hour to relax the muscles and activate circulation in the limbs. There are recommended stretching movements of the arms, back and legs.



<http://www.entendencia.com/stretching-exercises>, 2012

Walk as often as you can, at least 30 minutes twice a week. Walking involves an increased number of muscles and increases metabolic processes.

Pilates exercises are an enjoyable and relaxing leisure. Pilates strengthens back muscles, increase mobility and reduce muscle stress.

People who spend long hours in front of computer become isolated, introverted, give up their friends, relationships and social life and believe that any exercise is useless. They can be considered dependent on this object. Such behavior can have negative consequences on the physical, psychological and cognitive development,



social relationships and interactions. It is recommended that any child to be involved in sports and any teenager or older person to participate in organized sport activities.

Swimming and athletics are the best and most accessible sports for strengthening the muscles of the spine.

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