Why changes in principles of teaching in IT-related courses of studies are necessary

Christof Pabinger¹,², Claudia Heu¹,², Martina Hackenauer²

¹ Orthopädisches Zentrum Graz, Austria
² Medical University of Graz, Austria

pabinger@opz.at  Heu@opz.at

**Background:** More and more people spend most of their professional life sitting in front of the computer. A variety of orthopaedic problems can be found in IT-related workers, named as the „sitting disease“. On the opposite there is a huge number of health promoting measures, which, due to qualifications of the people concerned, counteract these risk factors.

The aim of this study is to find out, if there is a requirement for health promotion topics in the education of IT-students. Therefore, at first knowledge about potential risks and health promoting measures to offset these risks is necessary. Moreover investigation of the target group IT-students in regard to their state of health and existing know-how concerning the display workstation is needed to answer the question.

**Methods:** Reviews, studies, scientific articles and specialist literature have been used for conducting literature research. Assessment tool is a questionnaire with the focus on general health situation, general movement behaviour, know-how and wishes of students in IT-related degree programmes.

**Results:** Exemplarily, 217 students from IT-related degree programmes of an University of Applied Sciences and an University were surveyed, gender-specific differences indicated. 70% have an excellent to very good subjective health situation. Only 24% of the persons surveyed have preliminary knowledge on ergonomics and prevention concerning display workstations due to lectures, 69% have dealt with these topics on their own. More than a quarter of the students spend more than 8 hours a day sitting in front of the PC, another 40% between 6 and 8 hours a day. Only 9% follow the recommendation for high intensity movement of 75min/week, 60% the recommendation for moderate intensity movement of 150min/week. A great number of students are already suffering seldom to frequently from afflictions caused by screen handling, also in high pain intensity (VAS>5/10). Nearly 70% of the students surveyed wish to learn more about health promotion on display workplace, 60% wish this to be treated in terms of lectures. Perspectives of implementation are multifarious and reach from accomplishing awareness about these themes among teachers to free guest lectures of health experts or to cooperation with physiotherapy study courses.

**Conclusion:** A recommendation for an integration in the curriculum can be declared. For the ability to make more valid statements about the concerned target group more comprehensive investigation would be necessary. We recommend to implement orthopaedic teaching and learning contents into IT related studies.