

Abstract

Title: Legal aspects of artificial intelligence, augmented reality and virtual reality in medicine

The thesis deals with selected legal problems that arise in connection with the use of artificial intelligence, virtual and augmented reality in medicine. The introduction defines what these relatively new terms mean and what is their use in the field of medicine. Furthermore, it deals with the legal nature of these technologies, i.e. why are they a thing in legal sense, how they meet the definition of a product, and that under certain conditions they can also be considered medical devices.

The next part is devoted to patients' rights and obligations in connection with the use of artificial intelligence and virtual and augmented reality in the provision of health services. In particular, it is stressed that under certain circumstances the health service provider will be obliged to communicate that a particular technology is used in patient care. It also explains why patients today cannot regard the use of these technologies as their right which can be claimed. Finally, patients may refuse the use of these technologies in certain situations.

The second major legal problem that is addressed in the context of the use of artificial intelligence, virtual and augmented reality in medicine is the obligation of prevention. Given the unpredictability and complexity of the operation of these technologies this obligation must be fulfilled, therefore the thesis deals with its concrete form. In the case of only partial artificial intelligence, or virtual and augmented reality, the prevention obligation will be quite “easy” to grasp, but the problem arises in the case of complex artificial intelligence. The subject that will be obliged to fulfil this obligation will depend mainly on who will be responsible for the conduct of such artificial intelligence.

The last and most extensively described problem is the question of liability for the above-mentioned technologies. In particular, this chapter deals with specific types of liability, ranging from liability for damage caused by an animal to liability for damage caused by advice or information. Each subchapter then explains why I believe that it is not possible to apply this existing legislation, especially in the case of complex artificial intelligence. At the end of this chapter, there is also proposed a framework for the emergence of a new type - liability for damage caused by artificial intelligence.

Key words: artificial intelligence, virtual reality, augmented reality, liability, prevention