



## Application of artificial physiotherapy methods with machine learning for patients with injuries of the lower extremities

**Andriy Hospodarsky**

*Horbachevskyy Ternopil National Medical University, Ternopil, Ukraine.*

The use of artificial intelligence (AI) has a major role in the implementation of telemedicine technology. The overarching theme of this paper is to discuss implementation of the telemedicine technology with machine learning algorithm for rehabilitation of patients with injuries of the lower extremities.

A total of 148 subjects with lower extremity injuries were enrolled in the study. 52 patients from the control group underwent traditional rehabilitation procedures. A total of 96 subjects were enrolled in the telerehabilitation group and were trained with a set of exercises. Home remote monitoring for the 96 test subjects included use of Prototype device with Axis-sensor, temperature. Based on the machine learning algorithm, rehabilitation doctor created an individualized rehabilitation plan for each subject, containing an



Andriy Hospodarsky has completed his PhD at the age of 27 years from Ternopil Medical University and postdoctoral studies from Lviv Medical University. He is the associate professor of general surgery department. He has published more than 90 papers in reputed journals. He is co-author of two books on surgery for medical student He was invited as a

1. Telemedicine was able to catch up with the trends in using artificial intelligence but there are still some challenges to be solved. The implementation of these researches will be the most important contribution, which is why it is also important to begin researching on how this technology can be made more cost effective so it can be used in rural areas and

[International Conference & Expo on Novel Physiotherapy, Physical Rehabilitation & Sports Medicine October 14-15, 2020](#)

[International Conference & Expo on Novel Physiotherapy, Physical Rehabilitation & Sports Medicine October 14-15, 2020 & Journal of Osteoporosis and Physical Activity](#)