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### **Editorial Note**

## 3<sup>rd</sup> International Conference on Healthcare Informatics and Wellness May 11-12, 2020 Webinar

We had a huge success with the completion of **3rd International Conference on Healthcare Informatics and Wellness** on May 11-12, 2020. The significance of the meeting was achieved due to the accumulation of all the related group of spectators of research scientists to share their Knowledge, Research work, Technologies, and furthermore trade of worldwide Information towards the correct crowd at ideal time. Webinar has received a generous response from all over the world. This has been organized with the aim of endorsing the development of new perceptions and ideas for investigating the high level of knowledge reached by scientific community in the field of Healthcare Management.

The conference was organized around the theme "A Step towards better Healthcare Systems for control of Covid-19". The congress entrenched a firm relation of future strategies in the field of Healthcare and Healthcare Informatics.

We would like to thank all the participants and following Speakers:

- Andriy Hospodarskyy, Ternopil Medical University, Ukraine
- Andriy Tsvyakh, Ternopil Medical University, Ukraine
- Ismaeel Almakrami, Health Management and Informatics Consultant Najran Health Affair, Najran, Saudi Arabia
- Amandeep Kaur, research scholar at Panjab university, India

We would like to thank each participant of Healthcare IT 2020 webinar to make this a huge success. And special thanks to media partners for the promotion of our event.

The **Conference Series** Healthcare Conferences aim to bring together the prominent Researchers, academic scientists, and research scholars to exchange and share their experiences on all aspects of Healthcare. It is conjointly a knowledge domain platform for researchers, practitioners and educators to gift and discuss the foremost recent advances, trends, and issues in addition as sensible challenges and solutions adopted in the fields of Healthcare.



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# An application of artificial intelligence for telerehabilitation of patients with injuries of the lower extremities

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Abstract

The continuous development of technology that paves the way

towards the expansion of connections through the internet and the growth of the capacity to process data have created greater possibilities of the development of telemedicine. The increase of telemedicine has shown the rise of possible artificial intelligence (AI) application. 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. Fiftytwo patients from the control group underwent traditional rehabilitation procedures. A total of 96 subjects were enrolled in the telerehabilitation group. Home remote monitoring for the 96 test subjects included use of a prototype device with axis-sensor, temperature and volume sensor, which were fixed to the injured limb. Software with machine learning was developed in the Ternopil Medical University and permits the monitoring of exercise time, local temperature, the frequency of active movements of the injured limb with algorithm of machine learning. Based on the patient's individual condition and machine learning algorithm, the rehabilitation doctor created an individualized rehabilitation plan for each subject, containing an activity plan. Patient satisfaction was higher for the telerehabilitation with machine learning algorithm (78.3%, SD:12.6) than for the traditional rehabilitation (36.7%, SD:7.3). The telerehabilitation system with machine learning algorithm can be used in complex rehabilitation of patients with injuries of the lower extremities.



#### **Biography:**



Andriy Hospodarskyy has completed his PhD from Ternopil Medical University

and Postdoctoral studies from Lviv Medical University. He is the Associate Professor of General Surgery Department and has published more than 90 papers in reputed journals. He is a Coauthor of two books on Surgery for Medical Student, and he was invited as a speaker of several International Congresses of American Telemedicine Association.

#### Speaker Publications:

1."Innovative approaches in the organization of telemedicine care, its means and prospects of development"; vol 23.

2. "The choice of surgical tactics in victims with skeletalabdominal trauma, taking into account the immunological status"; Hospital surgery. vol 3

3."Telerehabilitation of patients with injuries of the elbow joint of the upper extremities"; Telemedicine and e-Health vol 23 no.12

4."Surgical tactics in patients with skeletal and abdominal trauma according to immunological status"; published in 2018 5."Imbalance of cytokine regulation in patients with polytrauma"; Immunology and allergology: science and practice vol 2.

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